CITY OF MURFREESBORO

GATEWAY STREETSCAPE MASTER PLAN

Streetscape Improvement Guidelines for New Development along Roadways within the Murfreesboro Gateway

Murfreesboro Planning Department
111 W. Vine Street
Murfreesboro, TN 37130
615.893.6441
www.murfreesborotn.gov

Original Document prepared by Lose & Associates October 28,2005
Updated by Murfreesboro Planning Staff July 21, 2010

I. ACKNOWLEDGEMENTS

Special thanks is due to Rob Lyons, City Manager, the Murfreesboro City Council, members of the Murfreesboro Gateway Streetscape Steering Committee and the Murfreesboro Planning Commission for their contributions, cooperation and efforts in the development of this document.

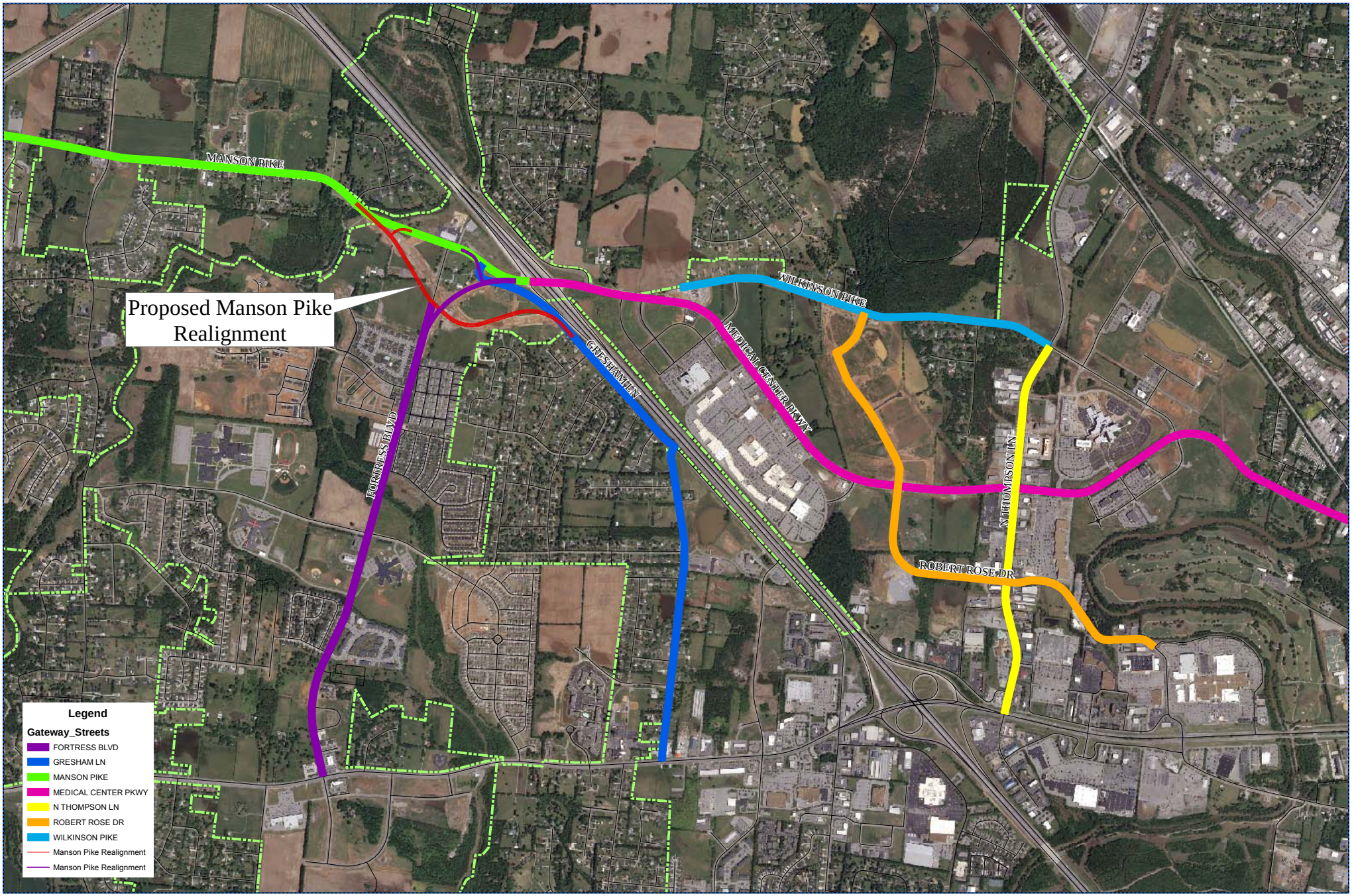
Murfreesboro City Council
Tommy Bragg, Mayor
Chris Bratcher, Vice Mayor
Toby Gilley
Shane McFarland
Madelyn Scales Harris
Ron Washington
Doug Young

Murfreesboro Planning Commission
Bob Lamb, Chair
Doug Young, Vice Chairman
Toby Gilley
Ken Halliburton
Kathy Jones
Tom Clark
Howard Wilson

The Original Murfreesboro Gateway Streetscape Steering Committee Members
Rob Lyons, City Manager
Joseph Aydelott, Planning Director
Dana Richardson, Traffic Director
Chris Griffith, City Engineer
Cynthia Holloway, Urban Environmental Director
Joe Kirchner, Murfreesboro Water and Sewer Department
Mark Kimball, Murfreesboro Electric
David Gray, MTSU
Toby Gilley, City Council
Bob Lamb, Planning Commission Chair

This revision of the Murfreesboro Gateway Streetscape has been created by
Joseph Aydelott, Planning Director
Shannon Logan, Principal Planner
Kathy Jones, Planning Commissioner

TABLE OF CONTENTS



G:\planning\Gateway_Streetscape_Master_Plan\Gateway Streets.mxd - 6/9/2010 @ 3:32:03 PM

Gateway Streetscape Master Plan

0 250 500 1,000 1,500 2,000 2,500 3,000 3,500 4,000 4,500 5,000 Feet

N
W E
S

City Of Murfreesboro
111 W. Vine Street
Murfreesboro, Tennessee 37130
(615) 893-6441
www.murfreesborotn.gov

II. INTRODUCTION

Foreword

In order to develop the Murfreesboro Gateway Streetscape Master Plan, the design team and collaborators conducted an extensive research process that included analyses of the City of Murfreesboro's historical and current characteristics, evaluation of similar cities' gateway planning and envisioning of the gateway streetscapes of tomorrow. This process included roadway development and historical analysis to determine the needs of the growing city to enhance roadway corridors along major thoroughfares within the Murfreesboro Gateway and beyond. A tour of the Gateway area with the Gateway Streetscape Steering Committee along with an in-dept study of the roadways within it was critical in creating a roadway hierarchy by which the city could address streetscape improvements.

Public input played a major role in the development of the Murfreesboro Gateway Streetscape Master Plan. Through feedback from multiple meetings with the steering committee and public, the design team addressed issues regarding the city's incorporation of the Master Plan and gained insight into the needs of current property holders who would be affected it its requirements. With careful planning and anticipation of city needs and future desires, concepts and guidelines were incorporated into this document to create the Murfreesboro Gateway Streetscape Master Plan.

Purpose of the Guidelines

Murfreesboro's Gateway area has been planned and designed for new commerce and living, setting standards for the city's future development. The I-24/Manson Pike Interchange accessing the Gateway has given Murfreesboro a new face and will serve as a pivotal point for the Gateway. This Gateway will instill a welcoming feeling of pride where residents of Murfreesboro live and work and will create a sense of presence for visitors and potential commercial investors entering the City. The design guidelines presented in this master plan will give developers clear direction for complying with the Gateway Streetscape and will ensure a consistency of image and detail throughout the defined area.

A Gateway is defined as "something that serves as an entrance or a means of access." The new Medical Center Parkway (leading east) interchange at I-24 is now viewed as the front door to the city of and city's area of future development. The character of this parkway provides the impact the city's visionary direction.

Although Medical Center Parkway is considered a major thoroughfare, several other streets in the Gateway play a significant role in connecting the Gateway to other important areas of the city. The extension of Manson Pike to the west of the I-24 exchange plays a key role in connecting the Gateway to the proposed SR-840/Manson Pike Interchange.

Although the property along to the Manson Pike corridor is relatively undeveloped and remains unincorporated, the city's future plans envision commercial and residential uses along this corridor making streetscape improvements to Manson Pike an integral part of the consistency of the plan. The plan for this area will be consistent with assumptions outlined in the previously conducted Blackman Land Use Study.

Thompson Lane is another roadway having a key impact of Gateway connectivity. The corridor of Thompson Lane is heavily developed and composed of both small and large commerce. It provides connectivity from Old Fort Parkway north to Medical Center Parkway, Wilkinson Pike and eventually Memorial Boulevard. Thompson Lane gives key access to the Oaks Shopping Center and the Stones River National Battlefield.

In addition to its commercial and residential uses, the Gateway is important for access to the Stones River National Battlefield and many key Civil War sites of interest. Wilkinson Pike is currently a smaller thoroughfare paralleling a portion of the Stones River National Battlefield, connecting adjacent residential properties. Although it is a smaller roadway, its connection through the Gateway from Medical Center Parkway to Thompson Lane provides a route with historical importance and potential for access to the battlefield. The extension of Robert Rose Drive will also serve as a critical roadway within the Gateway area.

The importance of these roadways and their impact of the Gateway area and City of Murfreesboro makes it necessary to enhance the roadway systems with aesthetic, environmental and historical significance. By carefully planning and implementing guidelines for future development along all of these principal thoroughfares, the impact of the Murfreesboro Gateway will define the character of the city's image for many years. All of these elements combine to create the Murfreesboro Gateway Streetscape Master Plan.

Goals and Objectives

Throughout the planning process of the Murfreesboro Gateway Streetscape Master Plan, input was gathered through multiple meetings with the Gateway Streetscape Steering Committee and the public. These meetings established common goals and objectives of the city and public for future improvements.

Goals:

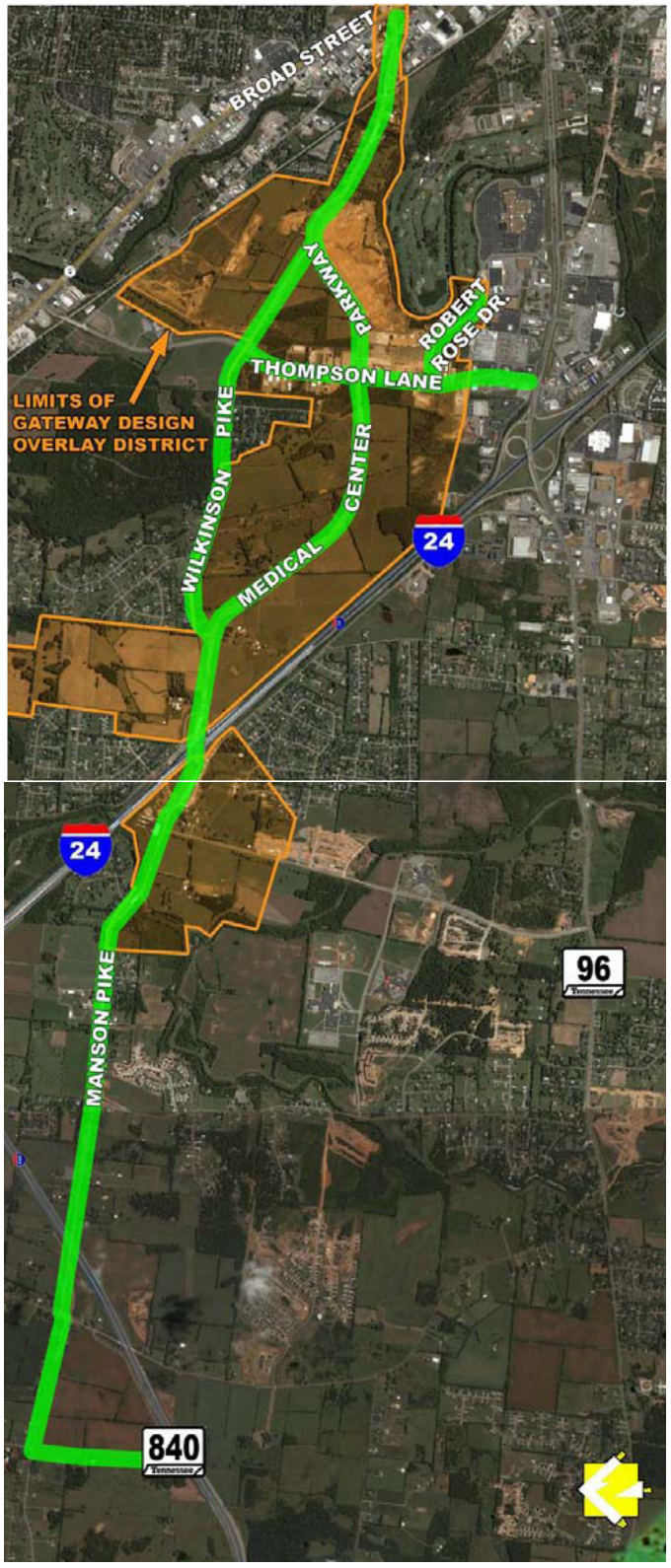
- **Develop a vision for future improvement projects within the Gateway and formulate an effective implementation strategy.**
- **Emphasize Medical Center Parkway between I-24 and Thompson Lane.**
- **Develop a Gateway Streetscape that will enhance the visitor's experience or a resident's commute through the city's Gateway and associated adjacent areas; that will produce favorable views, whether walking or driving; and that will create a "sense of place."**
- **Produce an aesthetically pleasing environment that is friendly to pedestrian use and encourages walking.**
- **Create connectivity between the Gateway and surround districts such as the greenway, golf course, restaurants, etc.**
- **Identify land uses and discern where differing softscapes or hardscapes may apply.**
- **Incorporate aesthetic improvements for Chaffin Place into the overall plan.**
- **Determine the appropriate rights of way width necessary to accommodate all desired streetscape elements.**
- **Determine possibilities for implementing streetscape elements into the existing hardscape of Thompson Lane to make it more inviting.**
- **Introduce a smaller percentage of streetscape elements of Robert Rose Drive and Broad Street at intersections.**
- **Retain the historic character of Wilkinson Pike (formerly Manson Pike) with its proximity to the Stones River National Battlefield.**
- **Recognize and support the historic significance of the Stones River National Battlefield and other related areas and minimize the negative impacts of development in their vicinity.**
- **Emphasize a Gateway to the whole community.**
- **Make the Gateway attractive to tourists.**

Objectives:

- **Decorative street lighting**
- **Heavy use of plant materials and canopy street trees in masses**
- **Use of earth berms to mask unsightly areas and parking areas**
- **Meandering tree line**
- **A minimum of six feet for street tree planting space**
- **Consistency in plant material use without a repetitive appearance**
- **Decorative traffic signalization as well as street signage**
- **Paving patterns and decorative pedestrian crosswalks**
- **Serpentine sidewalks, where right of way allows**
- **Straight sidewalks for ease of maintenance**
- **Formal pedestrian walkway connectivity points**
- **Sidewalk tie-in points for adjacent individual parcels**
- **Right of way identification and acquisition, if necessary**
- **Provision and coordination of underground utilities**
- **Visual reduction of the impact of water and sewer hardware (meter, cleanouts, etc.)**
- **Requiring backflow preventers to be out of sight or installed inside buildings.**
- **Thorough and continuous irrigation, making use of the city's re-purified water source**
- **Allowing for the extension of utility lines to existing crossings**
- **Signage creating a sense of place**
- **Decorative way-finding signage throughout the Gateway**
- **Banner signage for continuity throughout the Gateway**
- **Historical markers denoting significant Civil War sites within the Gateway**

III. EXISTING CONDITIONS

Overall Included Roadway Plan



The Gateway Streetscape Master Plan predominantly addressed areas of roadway contained within the Murfreesboro Gateway; however, there are several sections that are outside of the designated Gateway area, not included in the Gateway Design Overlay District. It is the intent of this master plan to implement streetscape strategies for those roadways that are most influential within the Gateway area. Afterwards, the same guidelines may be implemented along other roadways within the city.

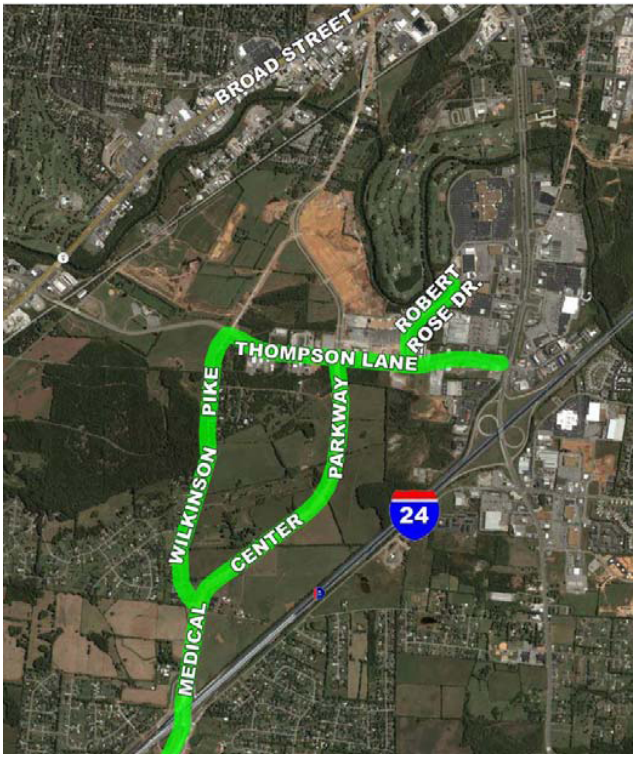
Although major roadways within the Gateway (west of Thompson Lane) will be addressed first, all roadways within the Gateway Design Overlay District will be subject to streetscape implementation at the time of adjacent property development. See appendix A for the list of roads to be included.

As the figure to the left shows, the roadways being impacted immediately include, but are not limited to:

- Medical Center Parkway (I-24 to Thompson Lane)
- Manson Pike (I-24 to Beesley Road/SR-840)
- Thompson Lane (Old Fort Parkway to Wilkinson Pike)
- Future west extension of Robert Rose Drive
- Wilkinson Pike (Medical Center Parkway to Thompson Lane)

Medical Center Parkway (I-24 to Thompson Lane)

The completion of Medical Center Parkway has made a change in the way people travel to and through the City of Murfreesboro. It will continue to have a great impact as development expands throughout the Gateway. However, as it exits, Medical Center Parkway is a four-land roadway, constructed with double drive lanes on each side of a 33'-wide center median, with appropriated left turn lanes and openings. The approximate width of the existing right of way is 128 feet. To date, this roadway has had no streetscape improvements, and the adjacent properties are largely undeveloped. This "front door" to the city offers great opportunity to property owners along its right of way. Not only does Medical Center Parkway have an impact on city connectivity, but it also plays a vital role in providing internal connections within the Murfreesboro Gateway. Medical Center Parkway serves as a transportation staple not only for the Gateway but also for downtown Murfreesboro and other important properties adjacent to the Gateway.



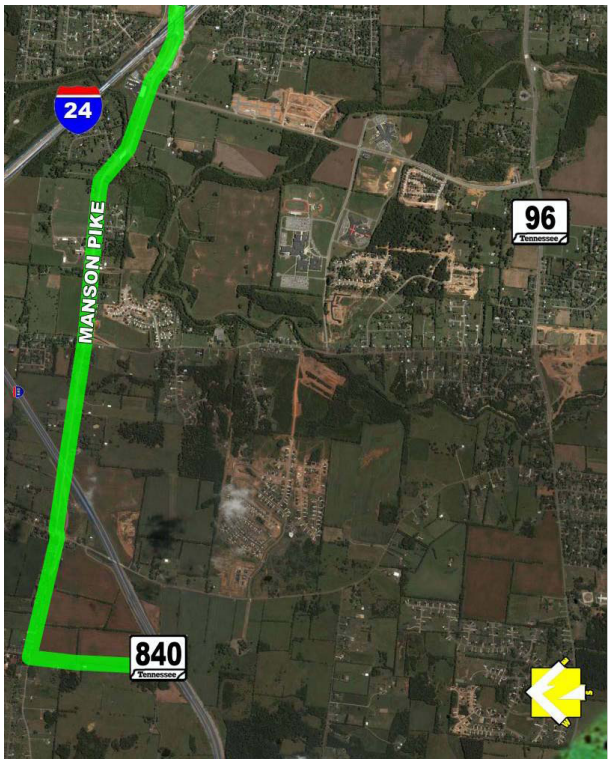
ABOVE: AERIAL PHOTOGRAPH OF THE NEW PORTION OF MEDICAL CENTER PARKWAY.

TOP RIGHT:EXAMPLE OF THE STREETSCAPE PLANTINGS THAT HAVE BEEN INSTALLED ALONG MEDICAL CENTER PARKWAY SINCE 2005.

BOTTOM RIGHT: THE WIDE CENTER MEDIAN ALONG MEDICAL CENTER PARKWAY HAS PLENTY OF SPACE FOR LARGE AMOUNTS OF LANDSCAPE MATERIAL AND BERMING. THIS PICTURE IS ALSO A GOOD EXAMPLE OF THE DECORATIVE STREETSCAPE ELEMENTS THAT HAVE BEEN INSTALLED ON MEDICAL CENTER PARKWAY.

Manson Pike (I-24 to SR-840/Beelsey Road Interchange)

Mansion Pike is recently improved roadway that will serve as a connector from the Murfreesboro Gateway to the SR-840/Beesley Road Interchange. Once the interchange is complete, the corridor from SR-840/Beesley Road to Medical Center Parkway will become an important area for the city's expansion. Having direct interstate access as well as direct state route access should create a high demand for development in this section of roadway. Much of the land adjacent to Mansion Pike is vacant and/or farmland that is as yet undeveloped and unincorporated. To date, the roadway has had no street improvements with the exception of five-foot sidewalks that were constructed with the roadway. Manson Pike currently consists of three lanes, two drive lanes with a center turn lane. There is a two-foot grass strip between the back of the curb and the sidewalks on both sides of the road. The roadway has an approximate right-of-way width of 82 feet.



TOP: AERIAL VIEW OF MANSON PIKE FROM THE I-24 INTERCHANGE TO THE BEESLEY ROAD/SR-840 INTERCHANGE.

TOP RIGHT: EXISTING MANSON PIKE FROM I-24.

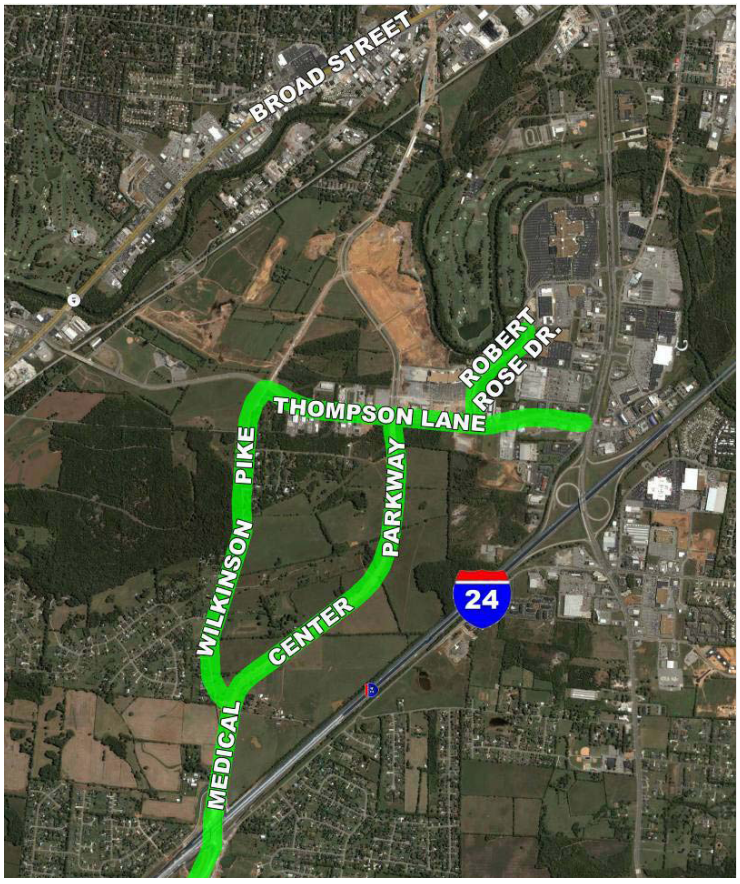
BOTTOM RIGHT: MANSON PIKE UNDER CONSTRUCTION TO REALIGN WITH FORTRESS BOULEVARD.

Thompson Lane (Old Fort Parkway to Wilkinson Pike)

Thompson Lane is a roadway that stretches from Old Fort Parkway north to Broad Street, then to Memorial Boulevard. It serves as a major internal connector for the west side of Murfreesboro. The section of Thompson Lane between Old Fort Parkway and Wilkinson Pike greatly impacts the Murfreesboro Gateway. It serves many existing adjacent businesses as well as the Oaks Shopping Center and Stones River National Battlefield.

TOP LEFT: EXAMPLE OF PROPERTY OWNERS THAT HAVE IMPROVED THEIR PROPERTY THROUGH THE GATEWAY STREETSCAPE MASTER PLAN.

TOP RIGHT: AREA ALONG THOMPSON LANE AT THE INTERSECTION OF MEDICAL CENTER PARKWAY THAT SHOWS IMPROVEMENTS.



Thompson Lane consists of five lane roadway with no median and virtually no streetscape elements, with the sporadic exception of a few newer adjacent developments that have been responsible for providing sidewalks and plant material. The existing right-of-way width is approximately 86 feet. Improvements along Thompson Lane will be more challenging since the potential for new development is limited. As it exists, Thompson Lane is vehicular oriented and lacks sidewalks, making it unfriendly to pedestrian use. The abundance of above-ground utilities is unsightly and greatly detracts from the city's character.

IV. DESIGN CONCEPTS AND ILLUSTRATIVES

During the planning and review process, the design team analyzed existing conditions and held multiple meetings to gain input from the Gateway Streetscape Steering Committee, the Planning Commission and the public. Throughout the duration of the design stage, illustrations were presented with conceptual design elements portraying the image of the Gateway Streetscapes. Discussions addressed all of the streetscape elements to be included along with implementation strategies. Final presentations were made to the Planning Commission and the City Council. The following is the final collection of illustrative concepts, including a breakdown of individual responsibilities, developed through these collaborative efforts. The finalization of these concepts was a pre-determining factor in formatting the Murfreesboro Gateway Streetscape Master Plan.

Medical Center Parkway

Design Overview

The first phase of Medical Center Parkway built by the city established a set of design standards for improvements that evolved into development of the Murfreesboro Gateway Streetscape Master Plan. The city's commitment to roadway development standards led to the current goal of establishing continuity between areas within the Gateway, providing a smooth transition with consistent elements as travelers progress from the more rural area of the SR-840/Beesley Road Interchange to the more commercial Medical Center Parkway. The importance of Medical Center Parkway to the success of the Murfreesboro Gateway as well as its connection to downtown makes streetscape definition vital along this roadway. Proper introduction of streetscape elements is necessary to for an in inviting entrance corridor and set the standard for other gateway connectors.

An allee of large canopy trees should be installed along the corridor of Medical Center Parkway in an uninterrupted pattern to frame the corridor, giving spatial definition to the roadway. Along with the canopy trees, understory and ornamental trees with accent shrub plantings should be placed around the areas of signalized intersections to help define these spaces. Such plantings will minimize the impact of large amounts of asphalt. In addition to the framing and plant materials, large swaths of greenspace should be established along the parkway to give a sense of mass to the streetscape and create a true parkway environment.

Because the area surrounding this section of Medical Center Parkway will serve as a commercial and retail center, it is also important to plan for pedestrian and vehicular movement through and around the area. Sidewalks should be placed toward the back of the right of way defining spatial buffering between pedestrian and vehicular uses. To enhance safe pedestrian connections, signalized, four-way crosswalks should be placed at signalized intersections. Because of the parkway's size, crosswalks along this roadway should be extra wide and have textured stamped asphalt. Standard crosswalks should be

placed at any un-signalized intersection for pedestrian safety but only on secondary access streets, not on the main thoroughfare. At signalized intersections, pedestrian plazas should be created making a safe waiting place for pedestrian crossings. Inclusion of decorative brick paving, seat walls, signage and lighting in these plazas will further enhance intersections.

Although there are differing street types within the Gateway area, consistent elements should be incorporated to integrate the streetscape theme. Major Gateway signage should be added at strategic entry and exit points of Medical Center Parkway for definition. Continuity can be maintained along Medical Center Parkway by adding smaller Gateway monuments that echo the architecture of major signage. The addition of decorative pedestrian-scale lighting will also create continuity as it can be repeated in numerous areas. Banners can also be added to these lights for permanent or seasonal signage markers. As an additional benefit, pedestrian-scale lighting will enhance both the streetscape and pedestrian safety during non-daylight hours. With potential access from Medical Center Parkway to work, retail and amenities such as the Stones River Greenway extension, it is important to provide a safe environment for pedestrian activity.

The Medical Center Parkway right of way (I-24 to Thompson Lane) is approximately 128 feet wide, varying in some locations. In evaluating the streetscape improvements in terms of the amount of space necessary for future plans, a total amount of 145 feet was determined to be ideal. A 145-foot right of way provides space for an initial landscape are of 19 feet between the back of curb and sidewalk, creating a parkway setting, yet allows sufficient width for future roadway expansion. Although the city's Major Thoroughfare Plan does not recommend the widening of Medical Center Parkway, the right of way, with acquisition area, does allow for possible future expansion if necessary. The design intent for streetscape elements along this roadway is to plan for the possible future roadway expansion while making the initial streetscape aesthetically pleasing. To do so, the streetscape elements should be proposed outside the boundaries of the possible future construction area.

With the inclusion of the streetscape elements along Medical Center Parkway, it is important to adjust utility locations to help prevent loss or damage to these elements. By dedicating a 20-foot utility corridor outside of the public right of way, installation and revisions of utility mainlines and connections can be accomplished without hindering the streetscape. Through implementation of these streetscape elements, Medical Center Parkway can be improved as a strong central corridor for Gateway development and expansion.

MEDICAL CENTER PARKWAY

Developer's Responsibilities For Streetscape Improvements

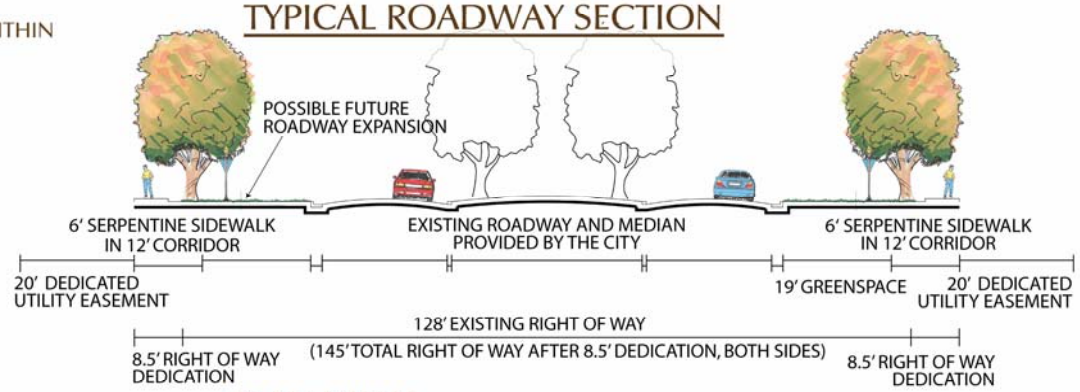
GATEWAY Streetscape Master Plan
Murfreesboro, TN

(I-24 to Thompson Lane)

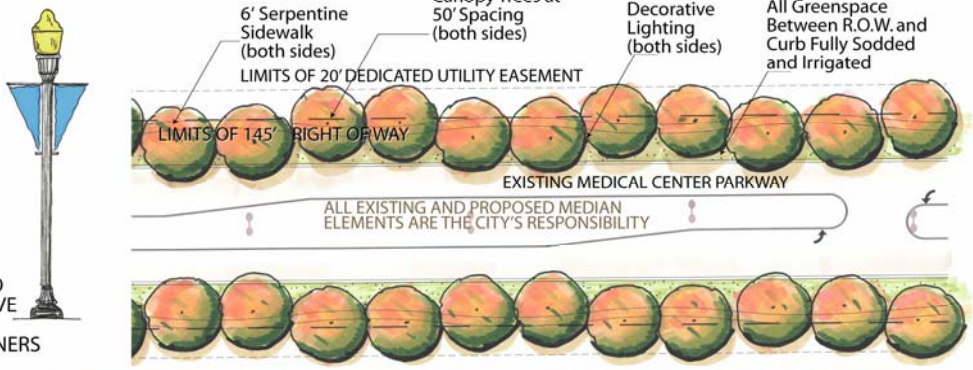
DEVELOPER TO PROVIDE WITHIN THE RIGHT OF WAY:

- 8.5′ Right of Way Dedication to City
- 20′ Utility Easement Dedication
- Canopy Trees at 50′ Spacing
- Understory Trees (where applicable)
- Accent Planting at Signalized Intersections
- Continuous Decorative Street Lighting with Banners
- Gateway Sign/Seat Wall at Signalized Intersections
- 15′-wide Brick-paved Pedestrian Plaza at Signalized Intersections
- 15′-wide Stamped Asphalt Crosswalk at Signalized Intersections
- Decorative Traffic and Pedestrian Signalization
- Decorative Street Signage
- Continuous Sod and Irrigation

TYPICAL ROADWAY SECTION



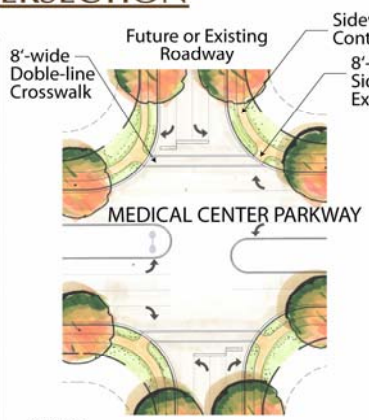
PLAN VIEW



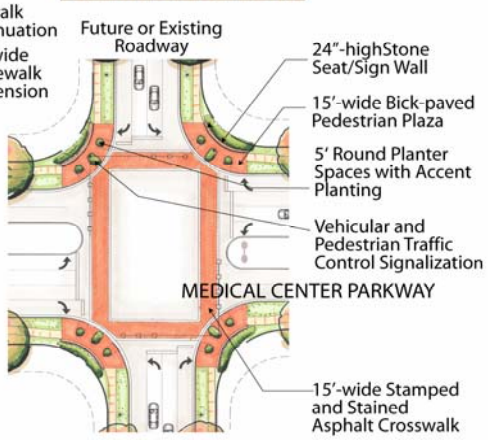
STANDARD DECORATIVE LIGHTING WITH BANNERS

STAMPED ASHPHALT EXAMPLE

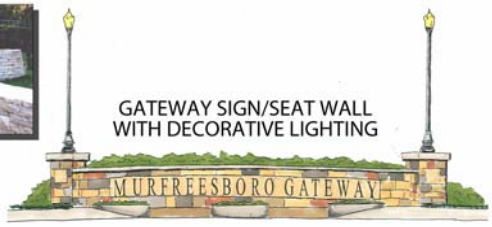
TYPICAL NON-SIGNALIZED INTERSECTION



TYPICAL SIGNALIZED INTERSECTION



STONE EXAMPLE



LOSE & ASSOCIATES, INC.
LANDSCAPE ARCHITECTURE • ARCHITECTURE • ENGINEERING • PLANNING

City of MURFREESBORO TENNESSEE

MEDICAL CENTER PARKWAY

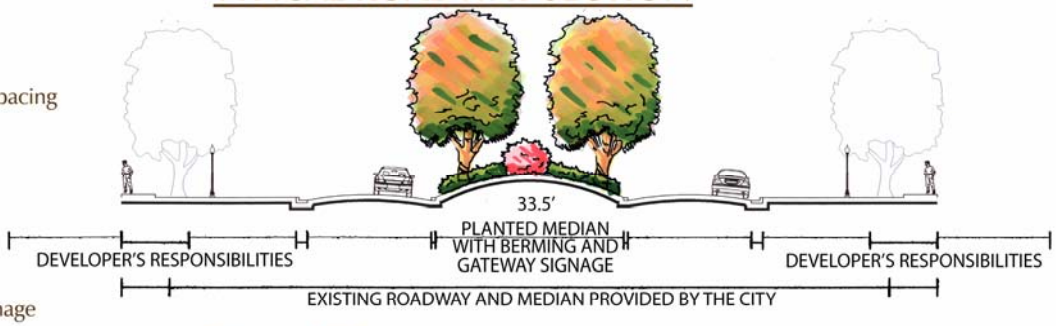
City's Responsibilities For Streetscape Improvements

GATEWAY Streetscape Master Plan
Murfreesboro, TN

TYPICAL ROADWAY SECTION

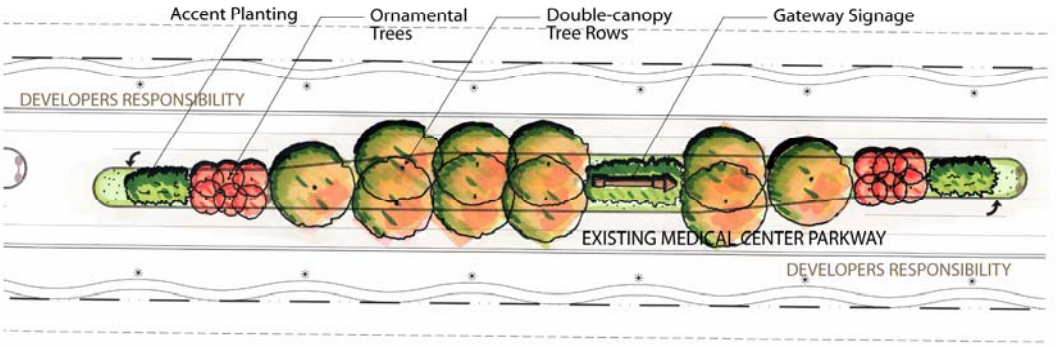
CITY TO PROVIDE WITHIN THE MEDIAN:

- Canopy Tree Massing at 50' Spacing
- Ornamental Trees
- Accent Planting
- Berming
- Gateway Signage
- Gateway Monolith Markers
- Sod and Irrigation
- Decorative Pedestrian and Vehicular Wayfinding Signage

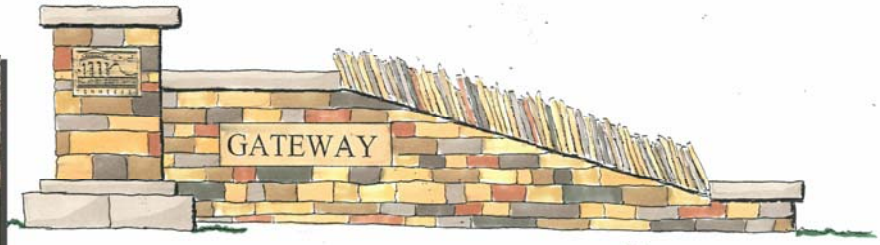


PLAN VIEW

HEAVILY-PLANTED LANDSCAPE MEDIAN



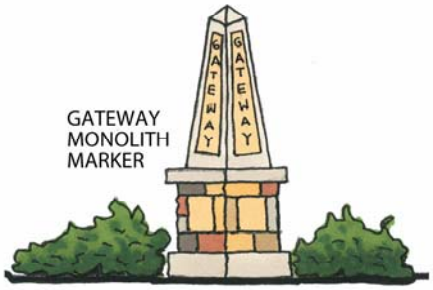
GATEWAY SIGN



STONE EXAMPLE

PEDESTRIAN DECORATIVE WAYFINDING SIGNAGE

GATEWAY MONOLITH MARKER



LOSE & ASSOCIATES, INC.
LANDSCAPE ARCHITECTURE • ARCHITECTURE • ENGINEERING • PLANNING

City of MURFREESBORO TENNESSEE

Manson Pike

Design Overview

Manson Pike plays a key role in the future expansion of the City of Murfreesboro. The addition of the SR 840/Veterans Parkway Interchange connection gives Manson Pike enhanced significance for connections to the Murfreesboro Gateway and downtown Murfreesboro. Since the original Gateway Streetscape Master Plan document was adopted four years ago, the Medical Center Parkway/Manson Pike interchange on I-24 has seen significant development. The continued growth and development at the interchange continues, and the City expects this growth to move west of I-24. The property along Manson Pike at I-24 has been zoned as a planned development for commercial growth, and unlike a few years ago, The City believes that Manson Pike will develop with a more intense commercial development pattern than previously expected, due to the success of the Gateway area. However, the City still believes this commercial node will transition nicely into residential areas along Manson Pike and the newly-aligned Fortress Boulevard. The streetscape design for Manson Pike should focus on improvements that will enhance its use while allowing the road to serve as an arterial roadway for the west side of Murfreesboro.

In 2009, the City of Murfreesboro recognized the significance of Manson Pike and its ability to provide additional avenues for continued development at this interchange. The City decided to invest $9 million dollars into realigning Manson Pike and Fortress Boulevard to provide an adequate street network that would help to facilitate the traffic and adequately support additional development. Even in the current economic conditions, the City has several parties expressing interest in development along Manson Pike. The design intent for streetscape elements along this roadway is to allow for the widening project of Manson Pike to five-lanes, without having to acquire additional right-of-way, other than what has been donated, while still making the streetscape aesthetically pleasing and providing a defining edge to the roadway.

Although Manson Pike is not yet intensely developed, the City has seen a steady increase in the traffic along this roadway, and Manson Pike should be framed as a main corridor into the City. Canopy trees are a must for providing a central corridor along this roadway and should be installed continuously to form a broad allee. These trees should be placed back away from the roadway to diminish possible damage or loss due to utility conflicts or accidents. Because of the remaining above-ground utilities, understory trees may be substituted in some areas but they must maintain the look of the corridor. Accent plantings should be provided at intersections to provide the driver with a sense of space and arrival.

With anticipated expansion of commercial services, pedestrian activity should be proposed along Manson Pike. Sidewalks do exist along this roadway, located two feet from the back of the curb, and up to five feet along portions of the new roadway. These walks will provide pedestrian access along this road and to connecting streets. At areas of existing or future signalized intersections, pedestrian plazas should be installed to enhance pedestrian use and safety. These plazas should be slightly smaller in scale to those proposed on Medical Center Parkway but should be detailed with stamped concrete and planters. Plaza areas will serve as small pedestrian hubs and connection points from sidewalks to crosswalks. Signalized crosswalks should also be provided for safe pedestrian crossing at signalized intersections. Since Manson Pike is a main corridor, the crosswalks should be wider than normal and textured, using a stamped asphalt product, to make an impact.

Decorative pedestrian scale lighting should also be provided at signalized intersections to enhance the plaza and give a sense of pedestrian scale. Furthermore, the City is recommended installing a continuous row of decorative, pedestrian scale lighting along Manson Pike. The pedestrian lighting will also help to define the edge of roadway. Banner signage may also be utilities to maintain the theme of the Gateway area. In addition to decorative lighting, decorative traffic signals, pedestrian signals, and street signage should be provided.

THIS DRAWING WILL CHANGE IF APPROVED BY PLANNING COMMISSION

MANSON PIKE

Developer's Responsibilities for Streetscape Improvements

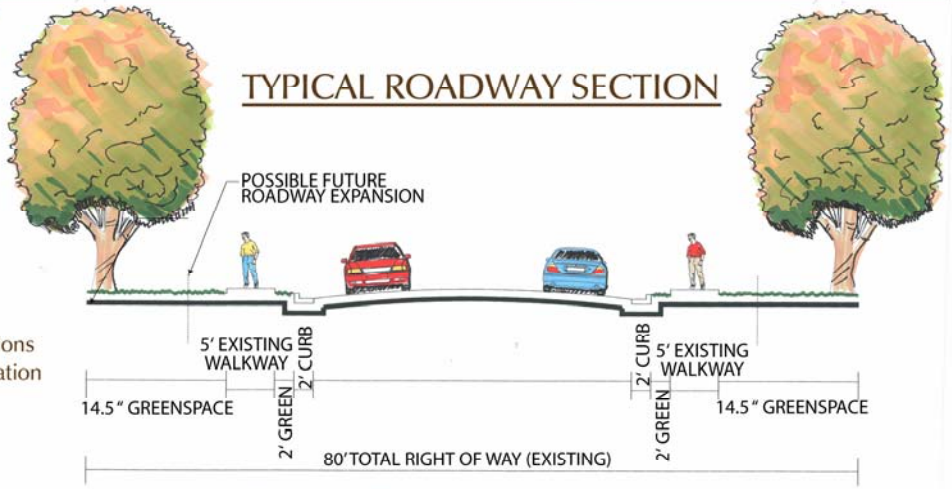
GATEWAY Streetscape Master Plan
Murfreesboro, TN

(I-24 to SR-840/Beesley Road Interchange)

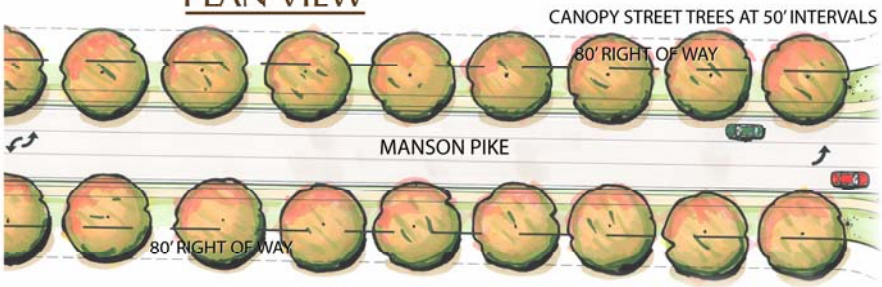
DEVELOPER TO PROVIDE WITHIN THE RIGHT OF WAY:

- Canopy Trees at 50' Spacing
- Understory Trees (where applicable)
- Accent Planting at Signalized Intersections
- Decorative Lighting on Stone Pedestals at Intersections
- 10'-wide Brick Paved Pedestrian Plaza at Signalized Intersections
- 8'-wide Standard Crosswalks at Intersections
- Decorative Traffic and Pedestrian Signalization
- Decorative Street Signage
- Continuous Sod and Irrigation

TYPICAL ROADWAY SECTION

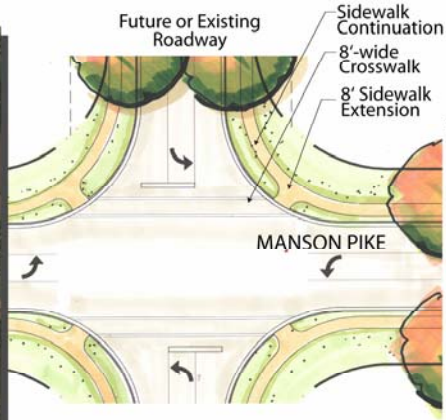


PLAN VIEW

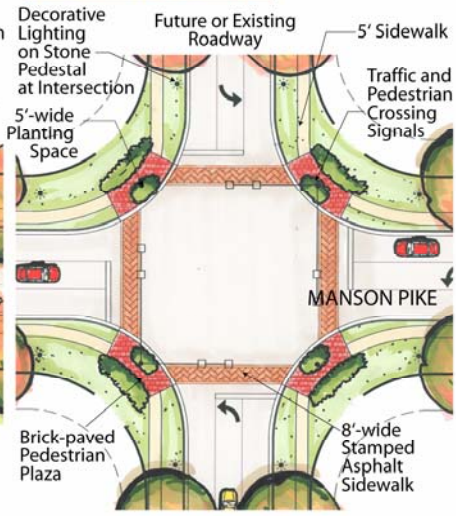


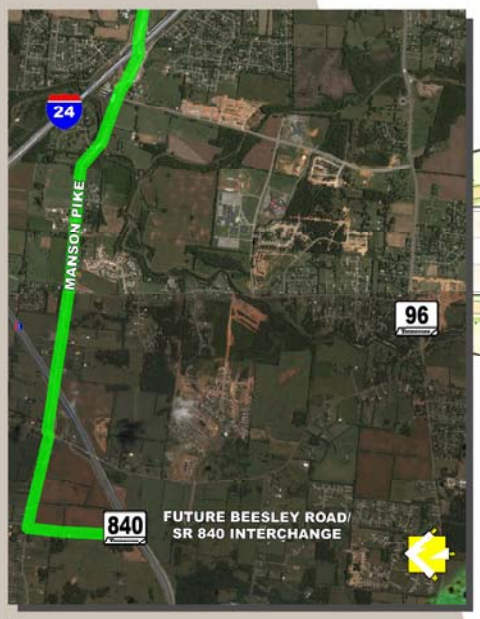
DECORATIVE LIGHTING ON STONE PEDESTAL WITH BANNERS AT SIGNALIZED INTERSECTIONS

TYPICAL NON-SIGNALIZED INTERSECTION



TYPICAL SIGNALIZED INTERSECTION





STAMPED ASPHALT CROSSWALK

BANNER EXAMPLE

LOSE & ASSOCIATES, INC.
LANDSCAPE ARCHITECTURE • ARCHITECTURE • ENGINEERING • PLANNING

City of MURFREESBORO TENNESSEE

Thompson Lane

Design Overview

With much of Thompson Lane being already developed, continuity of streetscape improvements will be harder to achieve. Nevertheless, improvements are necessary to make Thompson Lane more inviting and friendly to pedestrian use. Existing development along Thompson Lane is fairly established, and many of the adjacent buildings are in close proximity to the road which makes expansion of the right of way nearly impossible. Although limited, the existing right of way provides enough space to add much-needed sidewalks and plant materials.

Utility conflicts, especially above-ground electrical lines, prohibit the use of canopy trees along most sections of Thompson Lane. However, a softening and continuity of the gateway identity may be achieved without utility conflicts through the use of smaller trees planted in masses.

Thompson Lane is a heavily traveled roadway, dangerous to pedestrian crossing or use; therefore, it is necessary to provide sidewalks and signalized crosswalks for safe pedestrian access along and across the road. Because of the roadway's size, crosswalks should be standard in nature but wider than normal for signalized intersections. These sidewalks and crosswalks should also be linked with a pedestrian plaza at signalized intersections. Since the Thompson Lane environment is different from that of Medical Center Parkway or Manson Pike, streetscape elements will, of necessity, be different while maintaining continuity with the other streets. Pedestrian plazas should have scored concrete for a commercial image with decorative bollards for protection from large trucks entering retail development.

Decorative pedestrian-scale lighting should also be provided at signalized intersections for a pedestrian atmosphere. It is not proposed at this time that continuous pedestrian-scale lighting be utilized along Thompson Lane; however, the pedestrian lighting proposed at intersections should be detailed with stonework for greater impact. Banner signage may also be utilized to maintain the theme of the Gateway area. In addition to the lighting, decorative traffic signals, pedestrian signals and street signage should be provided.

THOMPSON LANE

Developer's Responsibilities For Streetscape Improvements

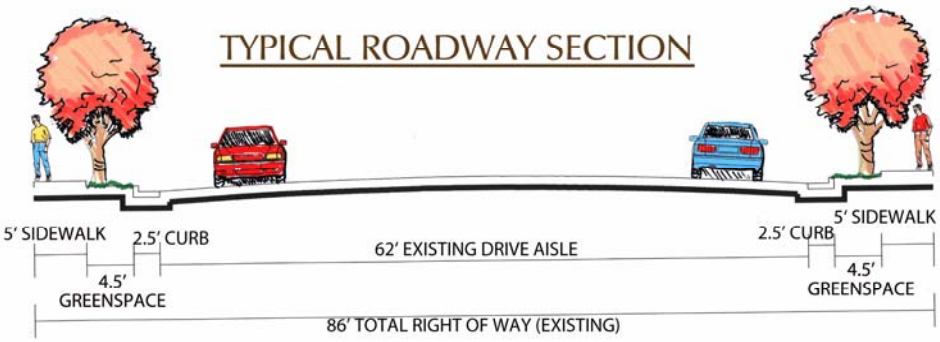
GATEWAY Streetscape Master Plan
Murfreesboro, TN

(Old Fort Parkway to Wilkinson Pike)

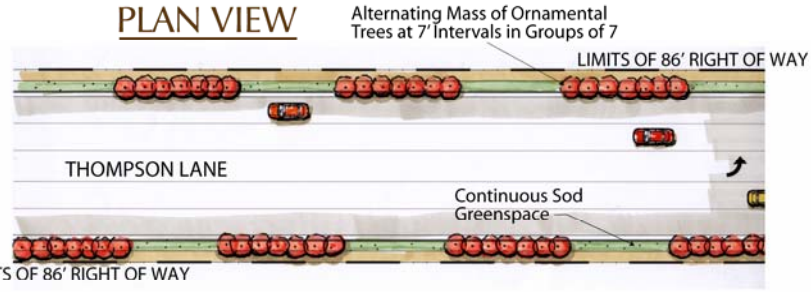
DEVELOPER TO PROVIDE WITHIN THE RIGHT OF WAY:

- Alternating Ornamental Tree Masses
- Decorative Lighting on Stone Pedestals at Intersections
- Pedestrian and Vehicular Traffic Signalization
- Decorative Street Signage
- Scored Concrete Pedestrian Plazas at Intersections
- Continuous Sod and Irrigation

TYPICAL ROADWAY SECTION

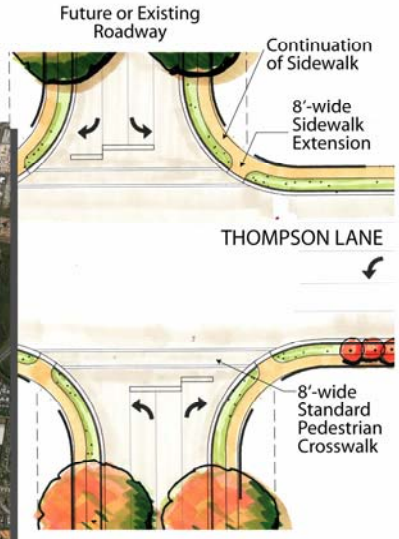


PLAN VIEW

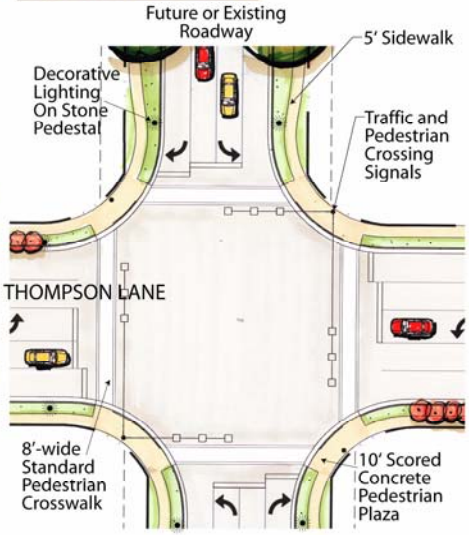


DECORATIVE LIGHTING ON STONE PEDESTAL WITH BANNERS AT SIGNALIZED INTERSECTIONS

TYPICAL NON-SIGNALIZED INTERSECTION



TYPICAL SIGNALIZED INTERSECTION



GATEWAY BANNER EXAMPLE

LOSE & ASSOCIATES, INC.
LANDSCAPE ARCHITECTURE • ARCHITECTURE • ENGINEERING • PLANNING

City of MURFREESBORO TENNESSEE

Fortress Boulevard

Design Overview

Fortress Boulevard is being realigned to serve as a southern connection to Manson Pike. Fortress Boulevard will connect Manson Pike/Medical Center Parkway to Hwy. 96/Franklin Road. At the northern and southern most ends of Manson Pike, commercial nodes of development are planned, and at Fortress Boulevard and Franklin Road, commercial development is already underway in the Victory Station PUD. Several residential subdivisions and developments exist along Fortress Boulevard, as does Blackman High School. Fortress Boulevard is being widened to a five-lane roadway to accommodate the increase in traffic and transport residents to I-24 and SR 840. In addition, Fortress Boulevard serves as a good transition roadway from commercial, to multi-family, to single-family. Two of the most active subdivisions in Murfreesboro, Blackman Farms and Puckett Station, feed into Fortress Boulevard.

In 2009, the City of Murfreesboro recognized the significance of Fortress Boulevard and that most of the residential growth occurring in Murfreesboro was located off of Fortress Boulevard. Also, Fortress Boulevard has the potential to continue to see significant residential growth in the coming years. The City decided to invest $9 million dollars into realigning Manson Pike and Fortress Boulevard to provide an adequate street network that would help to facilitate the traffic and adequately support additional development. The design intent for streetscape elements along this roadway is to allow for the widening project of Fortress Boulevard to five-lanes, without having to acquire additional right-of-way, other than what has been donated, while still making the streetscape aesthetically pleasing and providing a defining edge to the roadway.

Because of the limited right-of-way at the Fortress Boulevard and Manson Pike intersection, the grass strip between the curb and the sidewalk, in some areas, is as small as three feet. The City still desires to see a manicured, landscaped look along Fortress Boulevard, but with the limited grass strip area, canopy and ornamental trees are not the best options for this area. The small growing area will inhibit their development, and it will cause long-term maintenance issues for the City. Rather, the City believes a more acceptable alternative is to look at low growing shrubs to be planted in this area. The shrubs would ideally reach a height of 18 inches at maturity. These plantings would still allow for a defined edge and would provide a pretty "carpet" look to the right-of-way, while not interfering with driver site distance

visibility. However, it will be imperative that the species selected minimize the maintenance responsibilities of the Urban Environmental Department.

As the right-of-way widens out along Fortress Boulevard moving southward past the Manson Pike intersection, canopy trees should be installed to provide a central corridor along this roadway and should be installed continuously to form a broad allee. Additionally, understory trees should be installed on the private property behind the sidewalk to provide additional tree presence. The ornamental trees should be limbed up to provide adequate height for pedestrians along the sidewalks. These ornamental trees will help to define the sidewalk areas, and they will tie into the existing pattern of tree plantings and landscape design established as part of the Victory Station PUD at the intersection of Hwy 96 and Fortress Boulevard. Accent plantings should be provided at intersections to provide the driver with a sense of space and arrival.

The proposed plan for Fortress Boulevard includes the installation of both bike lanes and five-foot sidewalks to provide this area with alternative modes of transportation. At areas of existing or future signalized intersections, pedestrian plazas should be installed to enhance pedestrian use and safety. These plazas should be slightly smaller in scale to those proposed for Medical Center Parkway but they should be detailed with stamped concrete and planters. Plaza areas will serve as small pedestrian hubs and connection points from sidewalks to crosswalks. Signalized crosswalks should also be provided for safe pedestrian crossing at signalized intersections. Since Fortress Boulevard is anticipated to become a main collector for the west side of Murfreesboro, the crosswalks should be wider than normal and textured, using a stamped asphalt product, to make an impact.

Decorative pedestrian scale lighting should also be provided at signalized intersections to enhance the plaza and give a sense of pedestrian scale. Furthermore, the City is recommended installing a continuous row of decorative, pedestrian scale lighting along Fortress Boulevard that will match the existing ornamental lights being used by the City on Manson Pike, and the same lights installed by the developer of the Victory Station PUD. The pedestrian lighting will also help to define the edge of roadway. In addition to decorative lighting, decorative traffic signals, pedestrian signals, and street signage should be provided.

Additional Roadways

Design Overview

For all other roadways within the Gateway area included in the Master Plan (Wilkinson Pike, Robert Rose Drive, Chaffin Place and all future streets) a template of typical streetscape elements shall apply. Along these roadways, right-of-way and roadway configurations may differ, but the same template will apply.

The template for these roadways shall include a grass strip, sidewalk and canopy trees. On all future roadways, or applicable existing roadways, a minimum of six feet of greenspace should be provided adjacent to the back of the curb. The remainder of the right of way should be adequate for the sidewalk and construction allowance. Outside of the right of way, a 15-foot utility corridor should be dedicated to maintain utility mainlines and connections.

Along all included roadways, standard four-way crosswalks should be provided at all signalized intersections. Decorative pedestrian crossing signals should also be provided at those intersections, along with decorative traffic signals. For all roadways, standard crosswalks should be included on secondary streets for sidewalk continuation, along with decorative street signage.

ADDITIONAL ROADWAY
Developer's Responsibilities For Streetscape Improvements

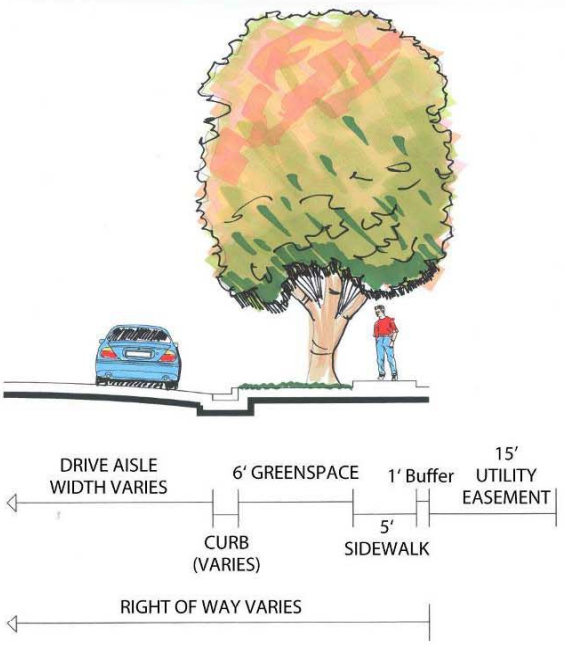
GATEWAY Streetscape Master Plan
Murfreesboro, TN

(Robert Rose Drive, Chaffin Place, Wilkinson Pike and Other Adjacent Roadways)

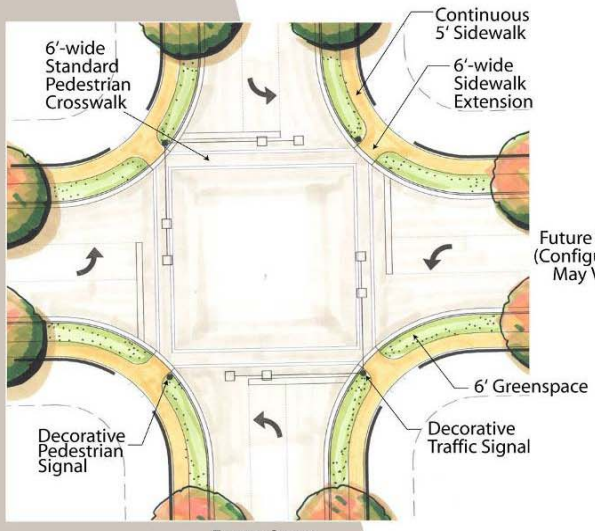
DEVELOPER TO PROVIDE WITHIN THE RIGHT OF WAY:

- Canopy Trees at 50′ Intervals
- 6′ Greenspace
- 5′ Sidewalks, Both Sides of Road
- Vehicular and Pedestrian Traffic Signalization at Intersections
- Possible Right of Way Dedication for a Minimum of 12′ from Back of Curb
- Decorative Standard Street Signs
- Dedication of 15′ Utility Easement Adjacent to Right of Way
- 5′-wide Standard Crosswalks
- Continuous Irrigation and Sod

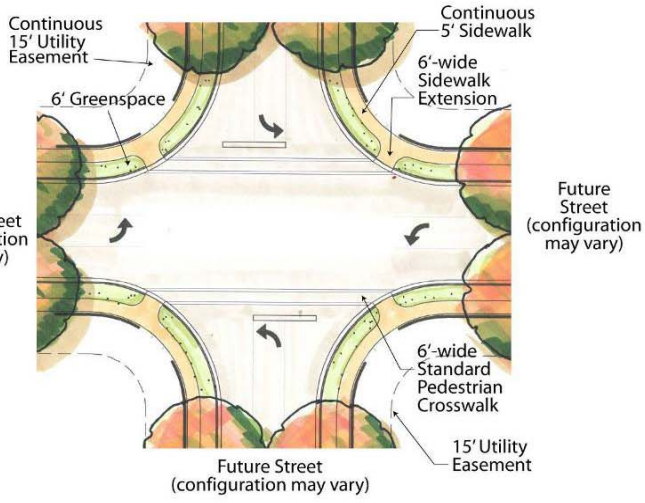
TYPICAL STREETSCAPE SECTION



TYPICAL SIGNALIZED INTERSECTION



TYPICAL NON-SIGNALIZED INTERSECTION



LOSE & ASSOCIATES, INC.
LANDSCAPE ARCHITECTURE • ARCHITECTURE • ENGINEERING • PLANNING

City of MURFREESBORO TENNESSEE

V. DESIGN GUIDELINES

Developer's Responsibilities

Along those roadways included in this master plan, individual developers (or those property owners who are responsible for development) shall have certain responsibilities for providing and/or installing Gateway streetscape elements. Those responsibilities are outlined in this section (see appendices for details).

A. Medical Center Parkway (Thompson Lane to I-24)

Right of Way Dedication

To achieve the ideal 145-foot right of way, dedication requirements from developers will be set along all sections of Medical Center Parkway. For any new development abutting Medical Center Parkway where the existing right of way equals 128 feet in width, an eight-and-one half-foot (8.5) strip of right of way abutting the edge of the existing right of way shall be dedicated to the City of Murfreesboro for streetscape improvements and possible roadway expansion. This dedication width and requirement applies to each side of the road if the development encompasses both sides. In the event that the width of the existing right of way abutting new development less than or greater than 128 feet, the developer shall be responsible for dedicating the difference of the right of way to equal a total of 72 ½ feet from the centerline of the existing roadway along the entire property. The dedication of the required right of way shall take place prior to the submittal for building permit or subdivision plat, or as deemed necessary by the City of Murfreesboro Planning and Engineering Department.

Utility Easement Dedication

If possible, it is recommended that utility services and connections be routed to the rear of properties/structures which are not adjacent to the public right of way. In cases where this is not possible along Medical Center Parkway, it has been determined that a twenty-foot wide (20') utility easement corridor would be adequate to accommodate the necessary utilities.

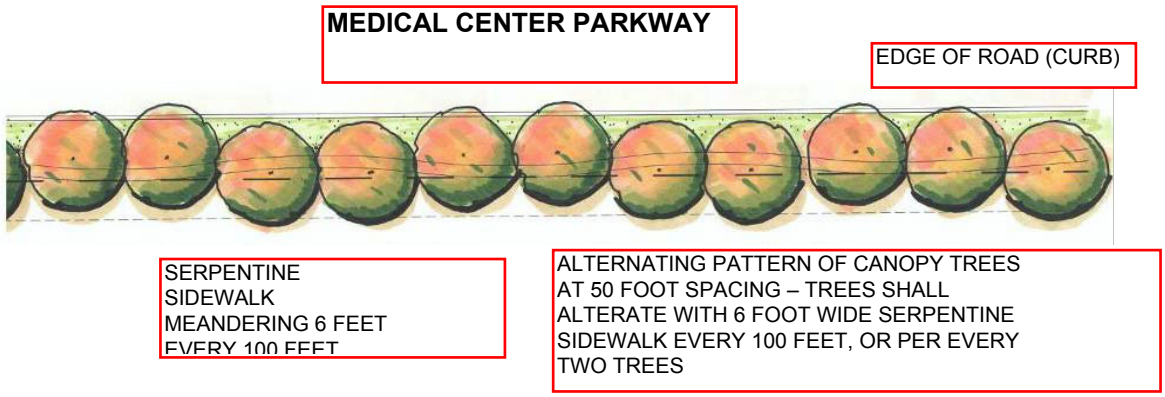
Along all sections of Medical Center Parkway between Thompson Lane and I-24, developers shall be responsible for dedicating a twenty-foot-wide (20') utility easement for the use and expansion of all water, sewer, gas phone, cable and electric services. The dedication of this easement shall be performed in coordination with the city's water and sewer department as well as other applicable utility companies prior to construction.

Canopy Trees

Canopy trees shall be provided and installed by the developer within the right of way along the frontage of property to be developed. The Street Tree Master Plan (Appendix B) outlines the size and specimen of trees that must be provided. The street trees shall be

installed in an alternating pattern intertwining with the six-foot-wide sidewalk every two trees or 100 linear feet.

In areas where permanent utilities will remain in conflict with the planting of canopy trees, understory trees may be used as a substitute, but only through the width of right of way affected by said utilities and only with approval of the city horticulturist. In the event that understory trees must be used, the tree spacing shall be reduced to 30 feet on center with the understory trees installed in an alternating pattern intertwining with the 6 foot wide sidewalk every 3 trees or 100 linear feet. The Street Tree Master Plan (Appendix B) outlines understory options for size and specimen of trees that must be provided in these cases.



Sidewalks

Sidewalks shall be installed within the right of way adjacent to property being developed. These sidewalks shall be meandering in form at a width of six feet. The six-foot sidewalk shall meander six feet in a serpentine pattern every 100 feet within a 12-foot-wide corridor at the back of the right of way in coordination with other streetscape elements and utilities.

Pedestrian Plaza and Gateway Sign/Seat Wall

Developers shall be responsible for installing the pedestrian plaza with its components at adjacent signalized intersections. The material types and general design of each pedestrian plaza must match one another, carrying the same theme throughout the Gateway.

The pedestrian plaza shall consist of a 15-foot-wide, brick-paved area with three five-foot-wide planter spaces (having 12-inch wide X 12-inch-tall raised, mortared brick sides to match pavers) and a two-foot-wide Gateway sign/seat wall with decorative lighting. The vehicular and pedestrian traffic signals shall be located at the edge of the center five-foot planter space, with full handicap accessibility. The sidewalks shall tie into the brick-paved plaza as shown in figure below. The brick paved plazas shall have ramps on both sides of the central planter for handicap access to crosswalks. The handicap rams shall be paved with brick pavers having a raised truncated dome tactile warning surface. Handicap accessible ramps shall be required at all signalized intersections.

At the back of the pedestrian plaza, a 24-inch-tall X 24-inch-wide seat/sign wall shall be installed (see appendix F for details). Exact lengths of the brick-paved plaza and Gateway sign/seat wall are dependent upon the intersecting roadway configuration and corner radii.

BELOW: TYPICAL PEDESTRIAN PLAZA AT SIGNALIZED INTERSECTIONS ALONG MEDICAL CENTER PARKWAY

EXISTING MEDICAL CENTER PARKWAY

Accent Planting

Property owners developing parcels adjacent to signalized intersections will be responsible for providing accent plant masses near and around the intersection (see Appendix C for a list of approved plant species that may be used). The location, size and type of all accent plantings to be provided must be approved by the City of Murfreesboro's Urban Environmentalist prior to installation. The accent plantings must also be provided in conjunction with other required streetscape elements.

Crosswalks

With expectations of commercial and retail growth within the Gateway and surrounding areas, it is important to allow for pedestrian movement. Future growth will spur a need for pedestrian access points. It is expected that people would use sidewalks within the area along Medical Center Parkway not only for local access but also for connections to points of interest such as the Stones River Greenway. Inclusion of signalized and emphasized pedestrian crossings will make this area friendly to the pedestrian user. All crosswalks shall be handicap accessible from adjacent sidewalks.

Developers shall be responsible for providing crosswalks at signalized intersections. Crosswalks traversing Medical Center Parkway shall be a minimum of fifteen feet (15') in width and shall be constructed of stamped and stained asphalt. In areas where existing roadway is present prior to development, the existing pavement may be reconditioned with such a crosswalk. If the roadway is built at the time of development, crosswalks shall be added at the time of road construction.

Decorative Lighting

Along Medical Center Parkway, developers shall be responsible for providing a fee, assessed by the City of Murfreesboro, for each decorative light to be built along the right

of way fronting their development. The city shall be responsible for having the lights installed and coordinated with the existing lighting configuration at the time of construction. The number of lights required is dependent upon property location. Typically lights shall be provided at a spacing of approximately one hundred fifty feet (150') in coordination with the street lighting in the median. See Appendix E for decorative street light specifications.

Decorative Traffic and Pedestrian Signals

Developers shall be responsible for providing decorative poles, supports and signals for traffic signals, pedestrian signals and standard street signage. The City of Murfreesboro shall be responsible for installing these signals and signs. At the time of development, the City of Murfreesboro shall assess a fee for the number of signals and/or signs and supports that are required for the improved site. All signals to be used by pedestrians shall have full handicap accessibility according to the Americans with Disabilities Act. See appendices F and G for details.

Manson Pike Design Guidelines

Utility Easement Dedication **If possible, it is recommended that utility mainlines and connections be routed to the side of properties/structures which are not adjacent to the public right of way. In cases where this is not possible along Manson Pike, it has been determined that a fifteen-foot-wide (15') utility corridor would be would be adequate to accommodate the necessary utilities.**
Along all sections of Manson Pike, developers shall be responsible for dedicating a fifteen-foot-wide (15') utility easement for the use and expansion of all water, sewer, gas, phone cable and electric power lines. The dedication of this easement shall be performed in coordination with the city's water and sewer department as well as other applicable affiliations prior to construction.

Utilities are being addressed with the realignment plans, and all necessary easements have been acquired where necessary.

Canopy Trees **Canopy trees shall be provided and installed by the developer within the right of way along frontage of property to be developed. The Street Tree Master Plan (Appendix B) outlines the size and specimen of trees that must be provided. The street trees shall be installed three feet inside the right-of-way limits.**

In areas where permanent utilities will remain in conflict with the planting of canopy trees, understory trees may be used as a substitute but only through the width of right of way affected by said utilities and only with approval of the City Horticulturalist. The Street Tree Master Plan (Appendix B) outlines understory options for size and specimen of trees that must be provided in these cases.

Accent Planting **Property owners developing parcels adjacent to signalized intersections will be responsible for providing accent plant masses near and around the intersections (see Appendix C for a list of approved plant species that may be used). The location, size and type of all accent plantings to be provided must be approved by the City of Murfreesboro's Urban Environmentalist prior to installation. The accent plantings must also be provided along with other required streetscape elements and shall not be installed as to hinder the line of sight from the adjacent intersection. This vision triangle must remain clear of any obstruction.**

Pedestrian Plaza **Developers shall be responsible for installing the pedestrian plaza with its components at adjacent signalized intersections. The material types and design of each pedestrian plaza must match one another along the roadway.**

The pedestrian plaza shall consist of a 10-foot-wide, stamped concrete area with a 5-foot X 10-foot planter space (having 12-inch-wide X 12-inch-tall raised brick sides). The decorative vehicular and pedestrian traffic signals shall be located at the back edge of the central planter space. Exact lengths of the stamped-concrete plaza are

dependent upon the intersecting roadway configuration and corner radii. The sidewalks shall tie into the stamped concrete plaza. The stamped concrete plazas shall have ramps on both sides of the central planter for handicap access to crosswalks per the Americans with Disabilities Act and the City of Murfreesboro Engineering Department. The handicap ramps shall be stamped concrete having a raised truncated dome tactile warning surface (rubber pavers in black are preferred). Handicap accessible ramps shall be required at all signalized intersections.

<u>Decorative Traffic and Pedestrian Signals</u> Developers shall be responsible for providing decorative poles for traffic signals, pedestrian signals and standard street signage. The City of Murfreesboro shall be responsible for installing these signals and signs. At the time of development, the City of Murfreesboro shall assess a fee for the number of signals and/or signs and supports that are required for the improved site. All signals to be used by pedestrians shall have full handicap accessibility according to the Americans with Disabilities Act and the City of Murfreesboro Engineering Department. See appendices F and G for details.

EXAMPLE OF PEDESTRIAN PLAZA EXPECTED TO BE CONSTRUCTED ALONG THE NEW MANSON PIKE

C. Thompson Lane

Sidewalks

Sidewalks, 5 feet in width, shall be installed to the back of the right of way. A minimum 4 ½-foot-wide greenspace shall be maintained between the back of the curb and edge of the sidewalk. The greenspace and sidewalk will consume the remainder of right of way outside of the curb (approximately 9 ½ feet).

Ornamental Tree Masses

Small masses of ornamental trees shall be provided and installed by the developer within the right of way along frontage of property to be developed. The Street Tree Master Plan (Appendix B) outlines the size and specimen of trees that must be provided. The ornamental tree masses shall be planted n increments of eight and shall alternate along both sides of the roadway for maximum impact. The spacing of these trees shall be eight feet on center.

Accent Planting

Property owners developing parcels adjacent to signalized intersections will be responsible for providing accent plant masses near and around the intersections (see Appendix C for a list of approved plant species that may be used). The location, size and type of all accent plantings to be provided must be approved by the City of Murfreesboro's Urban Environmentalist prior to installation. The accent plantings must also be provided along with other required streetscape elements and shall be not be installed as to hinder the line of sight from the adjacent intersection.

Decorative Lighting with Stone Pedestal

Decorative pedestrian-scale lighting with a stone pedestal base shall be provided by the developer whose property abuts a signalized intersection. The developer shall be responsible for providing and installing the stone pedestal, and the developer shall be assessed a fee by the City of Murfreesboro to have each pedestrian-scale light installed atop the pedestals. Construction of the stone base shall be coordinated with the city and/or utility entity involved to ensure proper precautions are taken for the decorative lighting to be installed on top. The location of the pedestal and light shall be approximately 150 feet for adjacent intersections. A total of eight lights will be installed per intersection, one light of each side of an intersecting road. See Appendix I for decorative street light specifications.

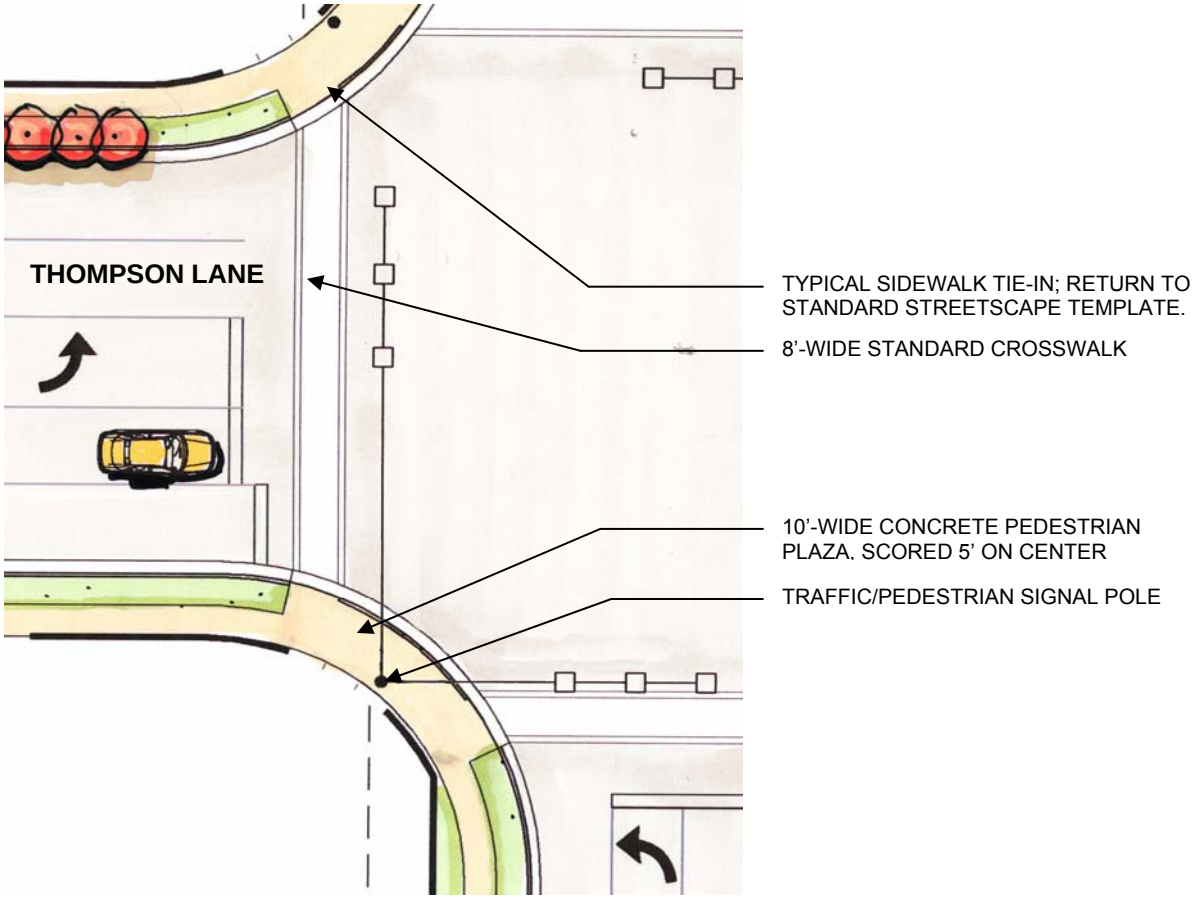
Decorative Traffic and Pedestrian Signals

Developers shall be responsible for providing decorative poles for traffic signals, pedestrian signals and standard street signage. The City of Murfreesboro shall be responsible for installing these signals and signs. At the time of development, the City of Murfreesboro shall assess a fee for the number of signals and/or signs and supports that are required for the improved site. All signals to be uses by pedestrians shall have full handicap accessibility according to the Americans with Disabilities Act and the City of Murfreesboro Engineering Department. See appendices F and G for details.

Pedestrian Plaza

Developers shall be responsible for installing the pedestrian plaza with its components at adjacent signalized intersections. The material types and design of each pedestrian plaza must match one another along the roadway.

The pedestrian plaza shall consist of a 10-foot-wide scored concrete area. The decorative vehicular and pedestrian traffic signals shall be located three feet from the back of the curb and shall be centered in the plaza. Exact lengths of the pedestrian plaza are dependent upon the intersecting roadway configuration and corner radii. The sidewalks shall tie into the pedestrian plaza as shown in the figure below. The concrete plazas shall ramp down to street level for handicap access to crosswalks per the Americans with Disabilities Act and the City of Murfreesboro Engineering Department. The handicap ramps shall be paved having a raised truncated dome tactile warning surface. Handicap accessible ramps shall be required at all signalized intersections.



ABOVE: TYPICAL PEDESTRIAN PLAZA AT SIGNALIZED INTERSECTIONS ALONG THOMPSON LANE

Fortress Boulevard Design Guidelines

Utilities Utilities are being addressed with the realignment plans, and all necessary easements have been acquired where necessary. The City of Murfreesboro Engineering Department is working with the Murfreesboro Water and Sewer Department and Consolidated Utility District on utility placement.

Canopy Trees Canopy trees shall be provided and installed by the developer within the right of way along frontage of property to be developed. The Street Tree Master Plan (Appendix B) outlines the size and specimen of trees that must be provided.

In areas where permanent utilities will remain in conflict with the planting of canopy trees, understory trees may be used as a substitute but only through the width of right of way affected by said utilities and only with approval of the City Horticulturalist. The Street Tree Master Plan (Appendix B) outlines understory options for size and specimen of trees that must be provided in these cases.

In addition, where the right-of-way is inadequate to support tree growth, small growing shrubs should be installed. The options for the shrubs are being determined, and will be outlined in Appendix B.

Accent Planting Property owners developing parcels adjacent to signalized intersections will be responsible for providing accent plant masses near and around the intersections (see Appendix C for a list of approved plant species that may be used). The location, size and type of all accent plantings to be provided must be approved by the City of Murfreesboro's Urban Environmentalist prior to installation. The accent plantings must also be provided along with other required streetscape elements and shall not be installed as to hinder the line of sight from the adjacent intersection. This vision triangle must remain clear of any obstruction.

Pedestrian Plaza Developers shall be responsible for installing the pedestrian plaza with its components at adjacent signalized intersections. The material types and design of each pedestrian plaza must match one another along the roadway.

The pedestrian plaza shall consist of a 10-foot-wide, stamped concrete area with a 5-foot X 10-foot planter space (having 12-inch-wide X 12-inch-tall raised brick sides). The decorative vehicular and pedestrian traffic signals shall be located at the back edge of the central planter space. Exact lengths of the stamped-concrete plaza are dependent upon the intersecting roadway configuration and corner radii. The sidewalks shall tie into the stamped concrete plaza. The stamped concrete plazas shall have ramps on both sides of the central planter for handicap access to crosswalks per the Americans with Disabilities Act and the City of Murfreesboro Engineering Department. The handicap ramps shall be stamped concrete having a

raised truncated dome tactile warning surface (rubber pavers in black are preferred). Handicap accessible ramps shall be required at all signalized intersections.

<u>Decorative Traffic and Pedestrian Signals</u> Developers shall be responsible for providing decorative poles for traffic signals, pedestrian signals and standard street signage. The City of Murfreesboro shall be responsible for installing these signals and signs. At the time of development, the City of Murfreesboro shall assess a fee for the number of signals and/or signs and supports that are required for the improved site. All signals to be used by pedestrians shall have full handicap accessibility according to the Americans with Disabilities Act and the City of Murfreesboro Engineering Department. See appendices F and G for details.

EXISTING TRAFFIC SIGNALS ON FORTRESS BLVD.

PROPOSED TRAFFIC SIGNALS MAST ARMS FOR ALL STREETS

D. Additional Roadways

Utility Easement Dedication

If possible, it is recommended that utility mainlines and connections be routed to the rear of properties/structures which are not adjacent to the public right of way. In cases where this is not possible, it has been determined that a fifteen-foot-wide (15') utility corridor would be adequate to accommodate the necessary utilities along the roadway.

Along all sections of new included roads, developers shall be responsible for dedicating a fifteen-foot-wide (15') utility easement for the use and expansion of all water, sewer, gas phone, cable and electric power lines. The dedication of this easement shall be performed in coordination with the city's water and sewer department as well as other applicable affiliations prior to construction.

Sidewalks

Sidewalks, five feet in width, shall be installed to the back of the right of way. A minimum six-foot wide greenspace shall be maintained between the back of the curb and edge of the sidewalk. An additional foot of space shall remain between the sidewalk and right of way for construction. This will require developers to maintain a minimum of 12 feet from the back of the curb for streetscape improvements on all new and improved roadways included. Minimum eight-foot-wide sidewalk extensions shall be provided at all intersections to access crosswalks. Handicap access shall be provide to all crosswalks per the Americans with Disabilities Ace and City of Murfreesboro Engineering Department. The handicap ramps shall be concrete having a raised truncated dome tactile warning surface. Standard six-foot-wide crosswalks shall also be provided at all intersections.

Canopy Trees

Canopy trees shall be provided and installed by the developer within the right of way along frontage of property to be developed. The Street Tree Master Plan (Appendix B) outlines the size and specimen of trees that must be provided. The street trees shall be installed so that the truck is a minimum of four feet from the back of the curb.

In areas where permanent utilities will remain in conflict with the planting of canopy trees, understory trees may be used as a substitute but only through the width of right of way affected by said utilities. The Street Tree Master Plan (Appendix B) outlines understory options for size and specimen of trees that must be provided in these cases.

Decorative Traffic and Pedestrian Signals

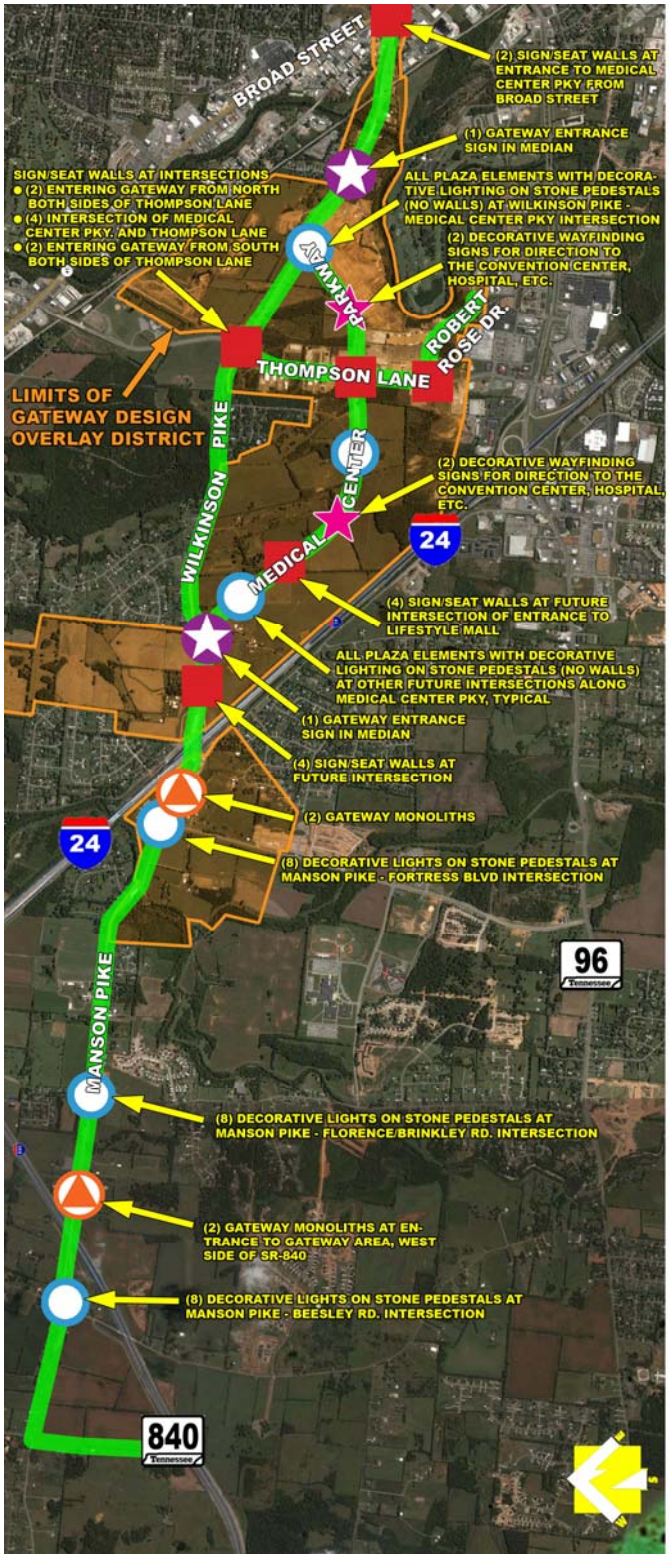
Developers shall be responsible for providing decorative poles for traffic signals, pedestrian signals and standard street signage. The City of Murfreesboro shall be responsible for installing these signals and signs. At the time of development, the City of Murfreesboro shall assess a fee for the number of signals and/or signs and supports that are required for the improved site. All signals to be used by pedestrians shall have full handicap accessibility according to the Americans with Disabilities Act and the City of Murfreesboro Engineering Department. See appendices F and G for details.

City's Responsibilities

Along those roadways included in this master plan, the city shall have certain responsibilities for providing and/or installing Gateway Streetscape elements. Those responsibilities are outlined in this section.

Gateway Signage

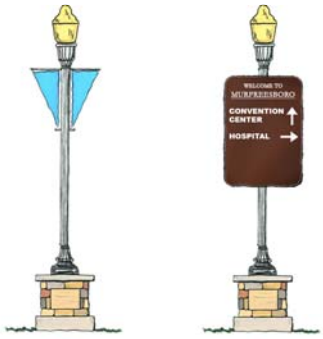
The city shall be responsible for providing Gateway signage and signage monoliths along Medical Center Parkway and Manson Pike. The locations below are diagrammatic.



GATEWAY ENTRANCE SIGN

GATEWAY SIGN/SEAT WALL

GATEWAY MONOLITH



DECORATIVE LIGHTING WITH STONE PEDESTAL

WAYFINDING SIGN

In order to give the Gateway area a sense of place, Gateway entrance signage should be installed at key locations of intersections entering Medical Center Parkway, including Thompson Lane and Broad Street. Other areas should be highlighted with Gateway monolith markers. Those markers would be placed at the north side of the SR-840 overpass for entrance notification and along Medical Center Parkway in each median to continue the streetscape theme.

Mass Median Planting

Along Medical Center Parkway the City of Murfreesboro shall be responsible for providing and installing masses of canopy trees, understory trees and ornamental trees within the median. The city shall also be responsible for providing accent planting masses within the median. See Appendix C for approved plant species.

VI. IMPLEMENTATION

Approval Process

It shall be the responsibility of the developer to account for the required streetscape improvements with any conceptual design or site construction plans rendered for new development along roadways included in this master plan. The developer shall be responsible for all streetscape improvements within the public right of way abutting said developer's property.

Prior to the installation or provision of any streetscape elements, the developer, or person(s) responsible for development, shall submit plans showing the location, content, materials and final construction drawings for required streetscape improvements. Such plans may be called Gateway Streetscape Improvement Plans and shall be included as separate pages within the submitted site plan or subdivision plat. The Gateway Streetscape Improvement Plans should include only those improvements which are within the public right of way.

Site plan submittal requirements may vary depending upon the city's process for site plan approval for each specific site. Regardless of the approval process, Gateway Streetscape Improvement Plans must be included in the site plans at the time of site plan submittal for city approval. The location of all plant material must be coordinated and approved by the City of Murfreesboro's Urban Environmentalist prior to installation.

Construction

After the city's acceptance and approval of the Gateway Streetscape Improvement Plans, construction of the streetscape elements shall be coordinated in a timely manner. The City of Murfreesboro Planning, Engineering, and Urban Environmental Departments shall retain the ability to require or provide construction observation and approval of installation prior to the release of construction bonds. Construction bonds and handling thereof shall be the responsibility of the city if applicable. Those improvements to be provided by and installed by the developer shall be completed within one (1) year from the date of building permit issue.

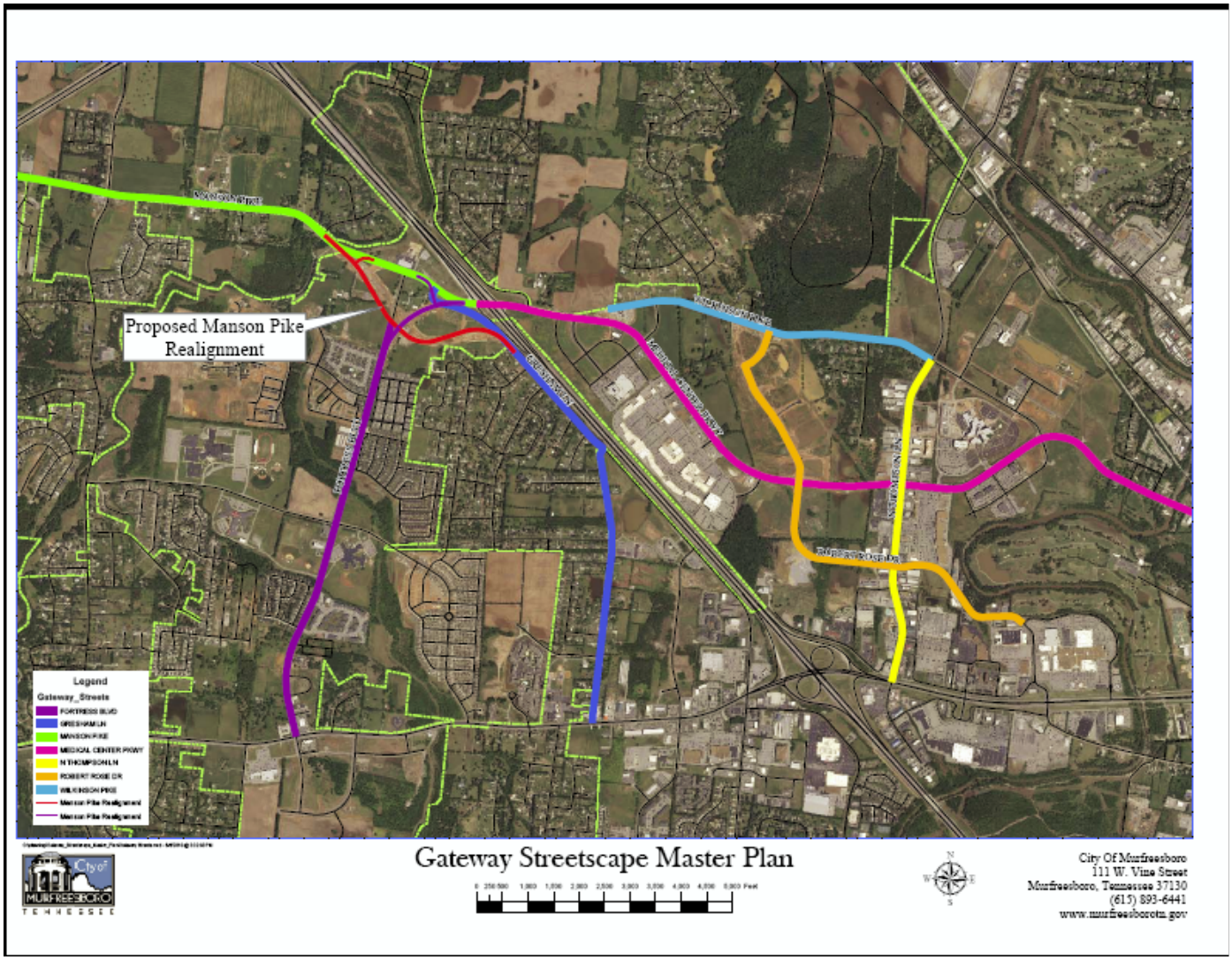
Maintenance

After installation and city approval of all streetscape elements provided by the developer, the developer, or the current property owner, shall be responsible for maintaining all installed streetscape elements for a period of three (3) years. Afterwards, maintenance of R.O.W. elements shall be responsibility of the city.

Statutory Authority

The City of Murfreesboro retains the statutory authority to change, modify or alter the regulations for approval and/or the process by which this document is implemented and used. They City of Murfreesboro shall be the responsible for the regulation of this document and all information included herein.

VII. APPENDIX



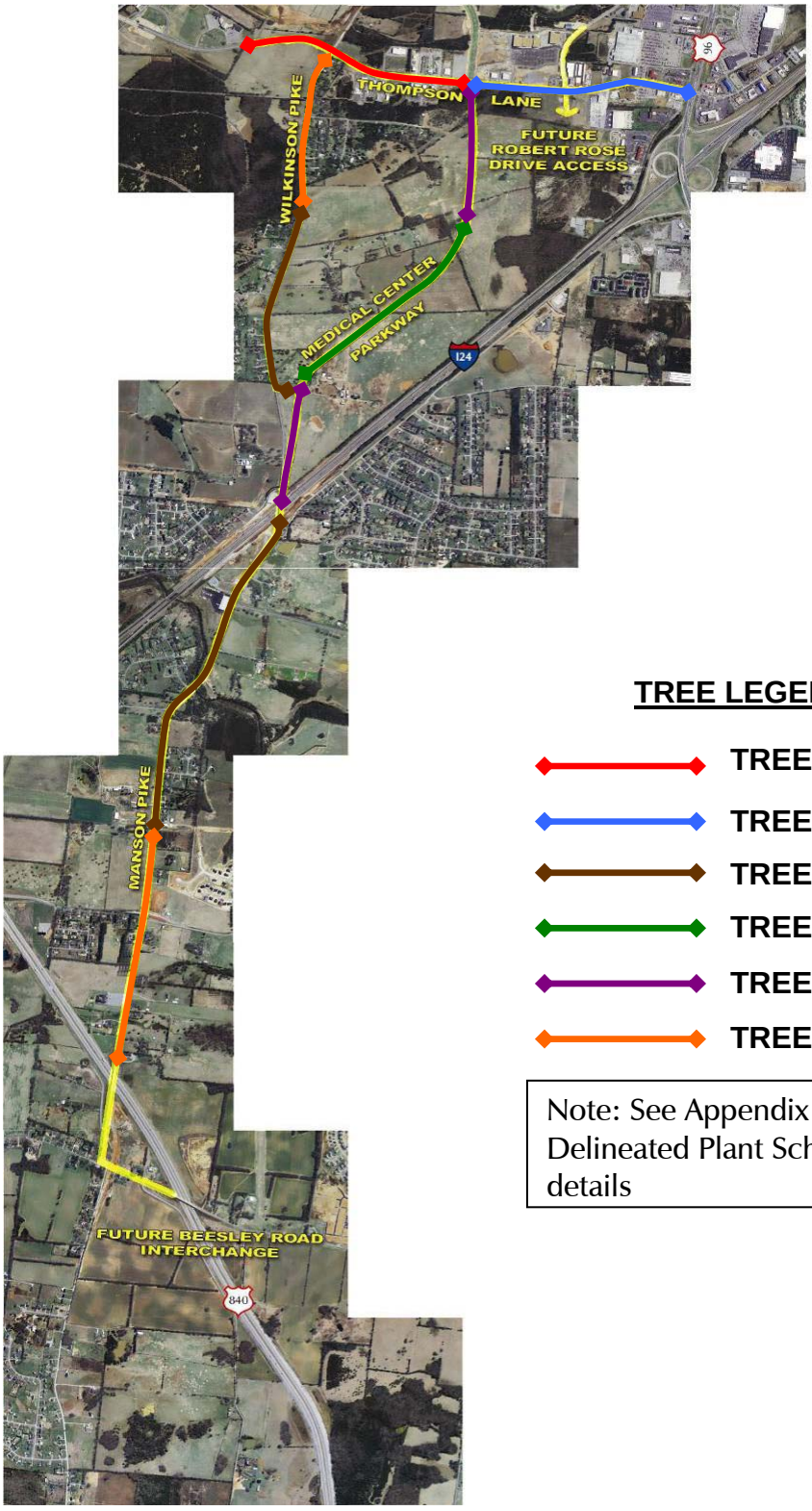
Murfreesboro Gateway Streetscape Requirement Checklist

	Medical CenterParkway	Manson Pike	Thompson Lane	Wilkinson Pike	Robert Rose Ext.	Fortress Blvd.	Gresham Lane	All Future Proposed Streets
Additional Right of Way Dedication				▲				
20' Utility Easement Dedication Adjacent to R.O.W	▲							
15' Utility Easement Dedication adjacent to R.O.W.			▲					▲
Canopy Trees @ 50' Spacing	▲	▲		▲	▲	▲	▲	▲
Understory Trees @ 30' Spacing (only where canopy trees are inapplicable)	▲	▲		▲	▲	▲	▲	▲
Ornamental Trees @ 8' Spacing			▲					
Groundcover/bushes to be inserted in grass stip five feet or less						▲		
Accent Planting at Signalized Intersections	▲	▲		⬢		▲		
Continuous Decorative Lighting		⬢		⬢	⬢	⬢	⬢	⬢
Decorative Lighting with ~~Stone Pedestal~~ at Intersections		⬢	⬢			⬢	⬢	⬢
Gateway Sign / Seat Wall with Decorative Lighting at Signalized Intersections	⬢							
15'-wide Brick Paved Pedestrian Plaza at Signalized Intersections	▲							
10'-wide Brick Paved Pedestrian Plaza at Signalized Intersections		▲				▲		
8'-wide Min. Scored Concrete Pedestrian Plaza at Signalized Intersections			▲	▲			▲	▲
15'-wide Stamped Asphalt Crosswalk at Signalized Intersections (8' Min.)	▲							
8'-wide Stamped Asphalt Crosswalk at Signalized Intersections		▲				▲	▲	
8'-wide Standard Double Line Crosswalk at Signalized Intersections			▲					
8'-wide Standard Double Line Crosswalk at Non-signalized Intersection				▲	▲	▲	▲	▲
8'-wide Standard Double Line Crosswalk at All Intersections								▲
Decorative Traffic Signal, Mast Arm and Pole (if applicable)	⬢	⬢	⬢	⬢	⬢	⬢	⬢	⬢
Decorative Pedestrian Crossing Signal and Pole at Signalized Intersection	⬢	⬢	⬢	⬢	⬢	⬢	⬢	⬢
Standard Street Signage on Decorative Pole	⬢	⬢	⬢	⬢	⬢	⬢	⬢	⬢
~~Way finding Signage with Decorative Mount~~								
~~Gateway Sign Monument~~								
~~Gateway Monolith Marker~~								
~~Historical Marker with Decorative Mount~~								
~~Decorative Bollards at Signalized Intersection~~								

▲ **Developer's Responsibility** ⬢ **Developer's Responsibility/City to Build**

B. Street Tree Master Plan

In order to distinguish a streetscape pattern throughout the Gateway area, a street tree master plan is necessary to determine the size and types of trees to be planted. The following plan determines the types of trees to be planted within the right of way.



TREE LEGEND

- **TREE TYPE "A"**
- **TREE TYPE "B"**
- **TREE TYPE "C"**
- **TREE TYPE "D"**
- **TREE TYPE "E"**
- **TREE TYPE "F"**

Note: See Appendix C, Delineated Plant Schedule, for details

C. Delineated Plant Schedule

The following chart explains the species, size, height and spacing for those plants to be installed for streetscape improvements. The "Type" column explains which trees should be planted along specific areas of roadway. See Appendix B.

Botanical Name	Common Name	Type	Size/Height/Spacing
CANOPY TREES			
Quercus phellos 'QPSTA'	Hightower Willow Oak	C	3" Cal., B&B, 50' O.C.
Ulmus parvifolia 'UPMTF'	Bosque Lacebark Elm	D	3" Cal., B&B, 50' O.C.
Zelkova serrata 'Green Vase'	Green Vase Zelkova	E	3" Cal., B&B, 50' O.C.
Acer x freemanii 'Autumn Blaze'	Autumn Blaze Maple	F	3" Cal., B&B, 50' O.C.

1. Note: Canopy Trees to be installed shall have a minimum 12 foot height. Canopy Trees shall have a strong, straight, central leader trunk with a minimum of 7 feet clearance between the lowest limbs and finished grade (or top of root ball). All trees must be approved by The City of Murfreesboro Urban Environmental Director in accordance with Section VI, Implementation, of this Master Plan. All trees must have streetscape quality.

UNDERSTORY TREES			
Chionanthus virginicus	White Fringetree This will change		2" Cal., B&B, 30' O.C.
Betula nigra 'Heritage'	Heritage River Birch	D	2" Cal., B&B, 30' O.C.
Prunus 'Snow Goose'	Snow Goose Cherry	E	2" Cal., B&B, 30' O.C.
Cladrastis lutea	Yellowwood Tree This will change		2" Cal., B&B, 30' O.C.

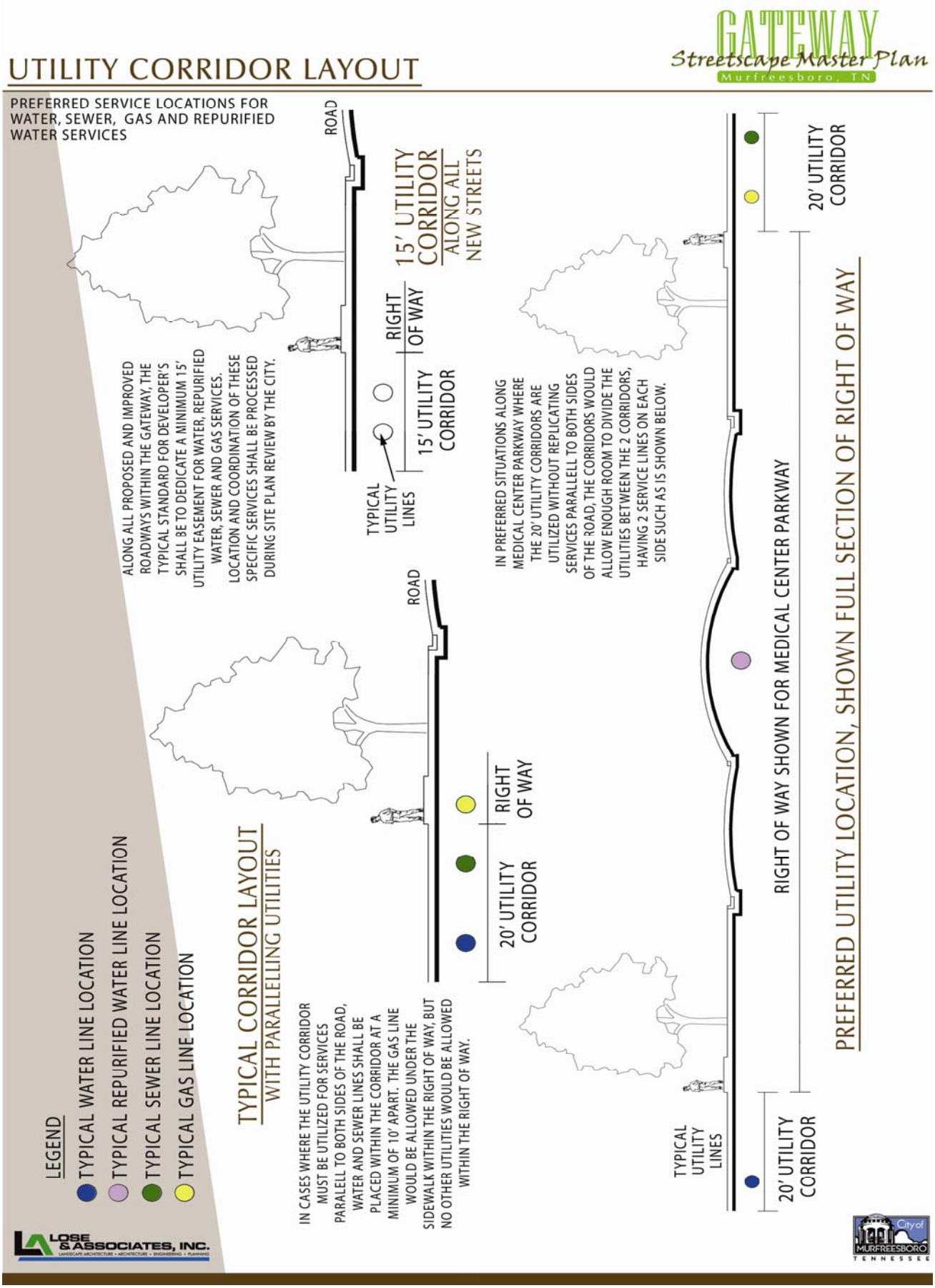
2. Note: The use of Understory Trees shall only be allowed in specific locations where above ground utilities, such as overhead electrical lines, would conflict with the height of Canopy Trees. In all other areas Canopy or Ornamental Trees shall be required as stated in this master plan. Underground utility conflicts do not apply. Applicable locations for the use of Understory Trees must be determined and approved by the City of Murfreesboro Urban Environmental Director, in accordance with Section VI, Implementation, of this master plan. Understory Trees to be installed shall have a minimum 10 foot height. Understory Trees shall have a strong, straight, central leader trunk with a minimum of 6 feet clearance between the lowest limbs and finished grade (or top of root ball). Multitrunk specimens shall not be acceptable for streetscape applications. All trees must have streetscape quality.

ORNAMENTAL TREES			
Lagerstroemia 'Natchez'	Natchez Crapemyrtle	A	1 1/2" Cal., B&B, 8' O.C.
Lagerstroemia 'Tuscarora'	Tuscarora Crapemyrtle	B	1 1/2" Cal., B&B, 8' O.C.

3. Note: Ornamental Trees to be installed shall have a minimum 8 foot height with a strong, straight, central leader trunk. Multitrunk specimens shall not be acceptable for streetscape applications. All Trees must have streetscape quality.

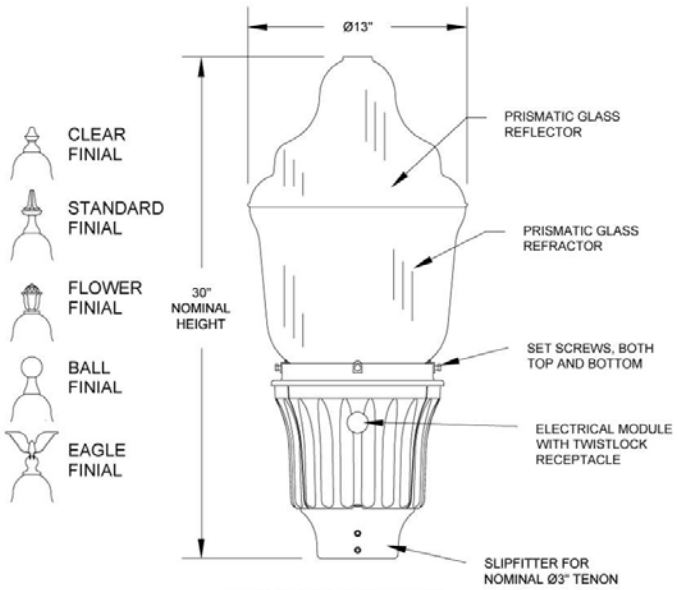
SHRUBS			
Abelia grandiflora	Glossy Abelia		#5 Cont., 3' O.C.
Fothergill major	Large Fothergilla		#5 Cont., 3' O.C.
Hydrangea arborescens 'Annabelle'	Annabelle Hydrangea		#5 Cont., 3' O.C.
Ilex vomitoria 'Shillings'	Shillings Holly		#5 Cont., 3' O.C.
Juniperus chinensis 'Pfitzeriana'	Pfitzer Juniper		#5 Cont., 3' O.C.
Prunus laurocerasus 'Otto Luyken'	Otto Luyken Laurel		#5 Cont., 4' O.C.
Taxus x media 'Brownii'	Brown's Yew		#5 Cont., 4' O.C.
GROUNDCOVER These are being re-evaluated			
Helleborus orientalis	Lenten Rose		#1 Cont., 2' O.C.
Juniperus conferta	Blue Pacific Juniper		#1 Cont., 2' O.C.
Liriope muscari 'Big Blue'	Big Blue Liriope		#1 Cont., 1' O.C.
Vinca minor	Littleleaf Periwinkle		#1 Cont., 1' O.C.

4. Note. All Canopy Trees, Understory Trees, Ornamental Trees, Shrubs and Groundcover shall be full, matched and uniform. All plant materials to be used shall be approved by the City of Murfreesboro Urban Environmental Director in accordance with Section VI, Implementation, of this Master Plan.


GATEWAY
Streetscape Master Plan
Murfreesboro, TN
UTILITY CORRIDOR LAYOUT
PREFERRED SERVICE LOCATIONS FOR WATER, SEWER, GAS AND REPURIFIED WATER SERVICES
ROAD
ALONG ALL PROPOSED AND IMPROVED ROADWAYS WITHIN THE GATEWAY, THE TYPICAL STANDARD FOR DEVELOPER'S SHALL BE TO DEDICATE A MINIMUM 15' UTILITY EASEMENT FOR WATER, REPURIFIED WATER, SEWER AND GAS SERVICES. LOCATION AND COORDINATION OF THESE SPECIFIC SERVICES SHALL BE PROCESSED DURING SITE PLAN REVIEW BY THE CITY.
15' UTILITY CORRIDOR
ALONG ALL NEW STREETS
RIGHT OF WAY
15' UTILITY CORRIDOR
TYPICAL UTILITY LINES
IN PREFERRED SITUATIONS ALONG MEDICAL CENTER PARKWAY WHERE THE 20' UTILITY CORRIDORS ARE UTILIZED WITHOUT REPLICATING SERVICES PARALLELL TO BOTH SIDES OF THE ROAD, THE CORRIDORS WOULD ALLOW ENOUGH ROOM TO DIVIDE THE UTILITIES BETWEEN THE 2 CORRIDORS, HAVING 2 SERVICE LINES ON EACH SIDE SUCH AS IS SHOWN BELOW.
20' UTILITY CORRIDOR
RIGHT OF WAY SHOWN FOR MEDICAL CENTER PARKWAY
TYPICAL UTILITY LINES
20' UTILITY CORRIDOR
PREFERRED UTILITY LOCATION, SHOWN FULL SECTION OF RIGHT OF WAY
TYPICAL CORRIDOR LAYOUT
WITH PARALLELLING UTILITIES
IN CASES WHERE THE UTILITY CORRIDOR MUST BE UTILIZED FOR SERVICES PARALELL TO BOTH SIDES OF THE ROAD, WATER AND SEWER LINES SHALL BE PLACED WITHIN THE CORRIDOR AT A MINIMUM OF 10' APART. THE GAS LINE WOULD BE ALLOWED UNDER THE SIDEWALK WITHIN THE RIGHT OF WAY, BUT NO OTHER UTILITIES WOULD BE ALLOWED WITHIN THE RIGHT OF WAY.
ROAD
20' UTILITY CORRIDOR
RIGHT OF WAY
LEGEND
TYPICAL WATER LINE LOCATION
TYPICAL REPURIFIED WATER LINE LOCATION
TYPICAL SEWER LINE LOCATION
TYPICAL GAS LINE LOCATION
LOSE & ASSOCIATES, INC.
City of MURFREESBORO TENNESSEE

UTILITY GRANVILLE® SERIES LUMINAIRE

MAXIMUM WEIGHT - 48 lbs.
MAXIMUM EFFECTIVE PROJECTED AREA - 1.38 sq. ft.



ORDERING INFORMATION

EXAMPLE: *GVU 050HP 12 B 3 N N U*
GVU **N**

BALLAST TYPE (MOGUL BASE)	VOLTAGE	HOUSING COLOR	OPTICS	NO DECORATIVE OPTIONS
050HP = 50W HPS 070HP = 70W HPS 100HP = 100W HPS 15AHP = 150W 55V HPS 175MH = 175W MH 100MV = 100W MV 175MV = 175W MV 250MV = 250W MV	12 = 120 VOLT 20 = 208 VOLT 24 = 240 VOLT 27 = 277 VOLT 48 = 480 VOLT MT = MULTITAP (120, 208 240, 277 VOLT)	B = BLACK Z = BRONZE N = GREEN A = AS SPEC	3 = IES TYPE III DISTRIBUTION 4 = IES TYPE IV DISTRIBUTION 5 = IES TYPE V DISTRIBUTION	N = NONE

BALLAST TYPE (MEDIUM BASE)
50DHP = 50W HPS
70DHP = 70W HPS
10DHP = 100W HPS
15DHP = 150W 55V HPS
70DMH = 70W MH (NOT AVAIL. W/ 480V)
10DMH = 100W MH (NOT AVAIL. W/ 480V)
15DMH = 150W MH (NOT AVAIL. W/ 480V)
17DMH = 175W MH

FINIAL	TRIM FINISH
N = NONE C = 3"CLEAR S = 5" STANDARD F = FLOWER B = BALL E = EAGLE P = PAWN	U = NO TRIM USED B = BLACK Z = BRONZE G = GOLD N = GREEN A = AS SPEC.

OPTIONS
P = PROTECTED STARTER FOR HPS UNITS ONLY
H = PHOTOCONTROL RECEPTACLE
T = PROTECTED STARTER FOR HPS UNITS ONLY, AND PHOTOCONTROL RECEPTACLE

ACCESSORIES
LAMP = SHIP APPROPRIATE LAMP AS A LINE ITEM. SEE LAMP SHEET
GV1ASDXX = INTERNAL SHIELD, XX = 90, 120, OR 180 DEGREES OF HOUSE SIDE CUT-OFF
GVBANDX = AN OPTIONAL DECORATIVE BAND KIT ADDED TO GLASS ASSEMBLY. FIELD INSTALLED (FOR X INSERT B, Z, N, OR A)

Specifications

GENERAL DESCRIPTION
The Utility GranVille is designed for ease of maintenance with the plug-in electrical module common to each of the luminaires in Holophane's Utility Luminaire Series. The traditional acorn shaped luminaire, while reminiscent of the 1920's, contains a precision optical system that maximizes post spacings while maintaining uniform illumination.

OPTICAL SYSTEM
The optical system consists of a precisely molded thermal resistant borosilicate glass refractor and top reflector. The glass top reflector redirects over 50 % of the upward light into the controlling refractor while allowing a soft uplight component to define the traditional acorn shape of the luminaire. The lower refractor uses precisely molded prisms to maximize pole spacings while maintaining uniform illuminance. Three refractors are available, designed for I.E.S. type III, IV, and V distributions.

LUMINAIRE HOUSING
The luminaire housing, cast of aluminum, provides an enclosure for the plug-in electrical module. Four uniquely designed stainless steel spring clips enclosed in a clear polyvinyl chloride sleeve and adjusted by hex head stainless steel 1/4-20 bolts securely cradle the prismatic glass refractor. The nickel plated lamp grip socket and three station incoming line terminal block are prewired to a five conductor receptacle for ease in connection the electrical module. The slipfitter will accept a 3" by 2-7/8" to 3-1/8" O.D. tenon.

LUMINAIRE HOUSING / DOOR
Cast of aluminum, the housing / door is removable without the use of tools and is retained by a stainless steel aircraft cable. For units with an E.E.I.-N.E.M.A. twist lock photocell receptacle, the door contains an acrylic "window" to allow light to reach the cell.

ELECTRICAL MODULE
The ballast components are mounted on a steel plate that is removable without the use of tools. A matching five conductor plug connects to the receptacle in the luminaire housing to complete the wiring. Where a starting aid is required, it is provided with a separate plug-in connector and can be replaced without the use of tools. For photoelectric operation, the electrical module is provided with an E.E.I.-N.E.M.A. twist lock photocell receptacle.

BALLASTS
(Refer to Ballast Data Sheet for specific operation characteristics)
50 watt 120 volt High Pressure Sodium (HPS) ballasts are High Power Factor Reactor type. All other HPS ballast are High Power Factor Autotransformer type. 175 watt Metal Halide (MH) ballasts are Peak Lead Autotransformer type. 70 and 100 watt MH units are available only with High Power Factor High Reactance type ballast.
All Mercury Vapor (MV) ballasts are High Power Factor Constant Wattage Autotransformer (CWA) type.

FINISH
The luminaire is finished with polyester powder paint applied after a seven stage pretreatment precess to insure maximum durability.

ARCHITECTURAL OUTDOOR ORDER #:

TYPE:

DRAWING NO: US-2590

HOLOPHANE
LEADER IN LIGHTING SOLUTIONS
Holophane
A Division of National Service Industries, Inc.
214 OAKWOOD AVENUE - NEWARK, OHIO 43055

SCALE: N/A
DRAWN: RAF
APP'D:
DATE: 11-22-00

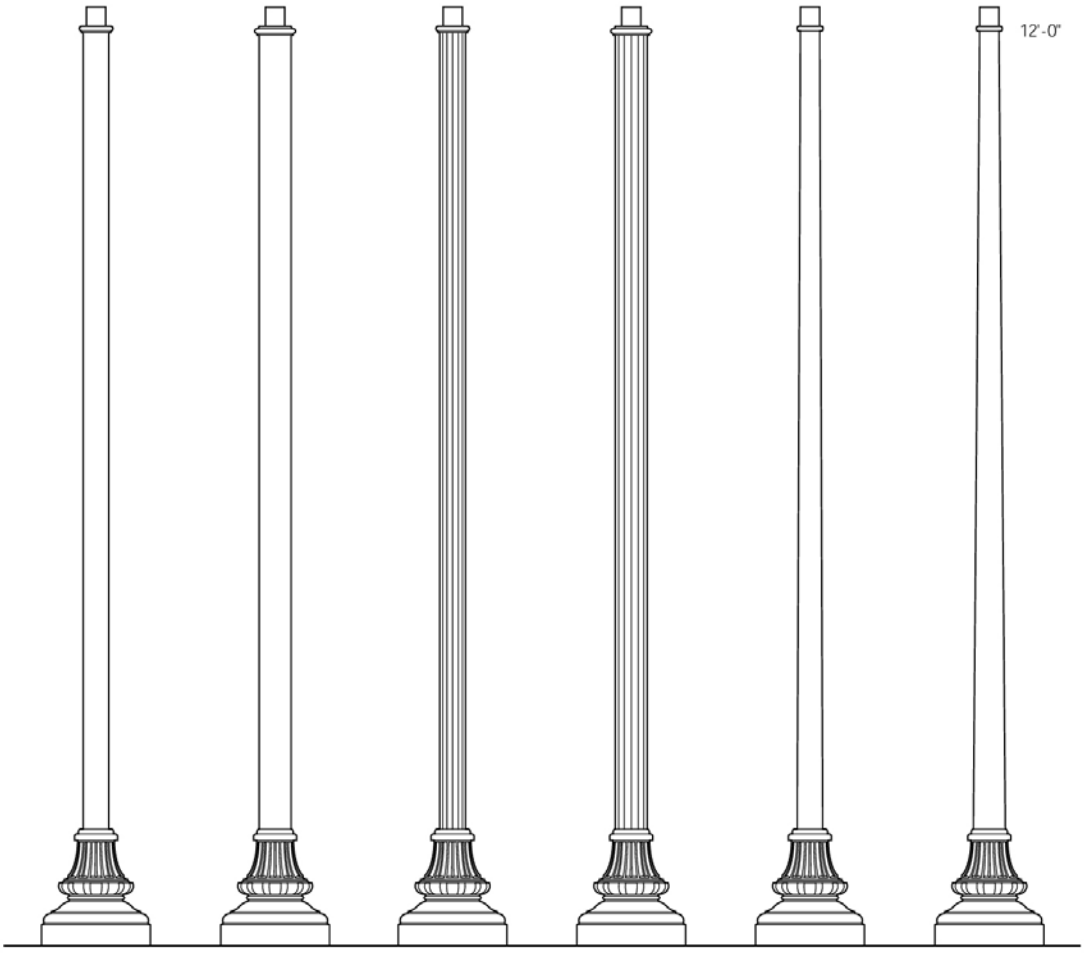
Product Number: GVU175MHMTB3NSBH

Product Description: Utility Granville, 175 Watt Metal Halide, Mogul Base Socket, Multitap (120, 208, 240 and 277), Factory Wired for 120V UL Only, Black Finish, Asymmetric, Type III, No Ribs and Bands, Standard Finial, Painted Cast Aluminum, Black Trim Finish, NEMA Twistlock Photocontrol Receptacle for 120-480 Voltages. Photocell not included. Sylvania (M175/U) 175MH Clear Mogul Base "E" Lamp.

E. Decorative Pedestrian Scale Lighting Details – Decorative Pole Style

Cast Aluminum Posts
extruded shafts

WADSWORTH Series
17" dia. base



W12S4/17-CA/*finish*
4" dia. smooth shaft
8',10',12',14'

W12S5/17-CA/*finish*
5" dia. smooth shaft
10',12',14',16'

W12F4/17-CA/*finish*
4" dia. fluted shaft
8',10',12',14'

W12F5/17-CA/*finish*
5" dia. fluted shaft
10',12',14',16'

W12T4/17-CA/*finish*
3"- 4" dia. tapered shaft
8',10',12',14'

W12T5/17-CA/*finish*
3"- 5" dia. tapered shaft
10',12',14',16'

SPECIFICATIONS

DESCRIPTION The lighting post shall be all aluminum, one-piece construction, with a classic double-tapered and fluted base design. The shaft shall be _____.*(insert shaft options from back page)* The post shall be Unique Solutions' catalog number W*XXXX*/17-CA/*finish*.

MATERIALS The base shall be heavy wall, copper free, cast aluminum produced from certified ASTM 356.1 ingot per ASTM B-179-95a or ASTM B26-95. The straight shafts shall be extruded from aluminum, ASTM 6061 alloy, heat treated to a T6 temper. The tapered shaft shall be extruded from aluminum, ASTM 6063 alloy, spun to a tapered shape, then heat treated to a T6 temper. All hardware shall be tamper resistant stainless steel. Anchor bolts to be completely hot dip galvanized.

CONSTRUCTION The shaft shall be double welded to the base casting and shipped as one piece for maximum structural integrity. The shaft shall be circumferentially welded inside the base casting at the top of the access door, and externally where the shaft exits the base. All exposed welds below 8' shall be ground smooth. All welding shall be per ANSI/AWS D1.2-90. All welders shall be certified per Section 5 of ANSI/AWS D1.2-90.

DIMENSIONS The post shall be *X*'- *XX*" in height with a 17" diameter base. The shaft diameter shall be *XX*". *(see back page)* At the top of the post, an integral 3" O.D. tenon with a transitional donut shall be provided for luminaire mounting.

INSTALLATION The post shall be provided with four, hot dip galvanized L-type anchor bolts to be installed on a 12" diameter bolt circle. A door shall be provided in the base for anchorage and wiring access. A grounding screw shall be provided inside the base opposite the door.

For finish specifications and color options, see **"Finish"** section in catalog.

HOLOPHANE UNIQUE SOLUTIONS
515 McKinley Avenue • Newark, Ohio 43055 • (614) 349-4160 • Fax 1-800-346-5923

SCALE : .5"=12"

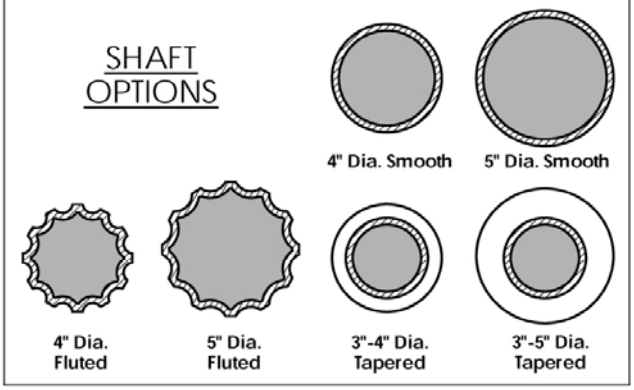
US-1639

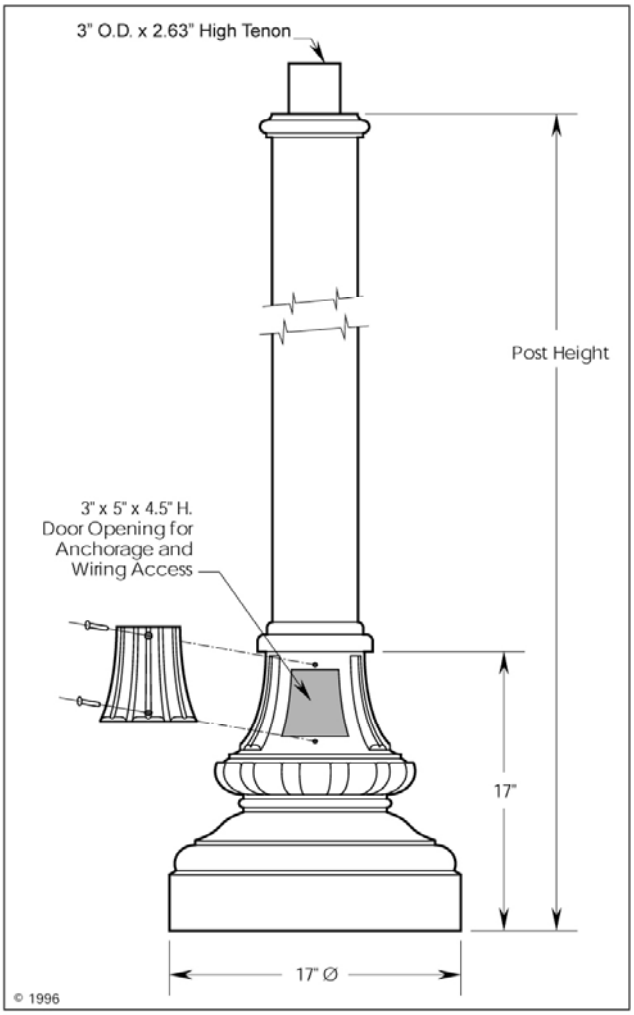
Product Number: W12F517CABKH (Medical Center Parkway only)
Product Description: Wadsworth, Extruded, Cast Aluminum Post. 12 foot Height, 5 inch diameter, fluted shaft. Black Finish. (see page 8)

Product Number: W12T517CABKH (Standard for all other Streets)
Product Description: Wadsworth, Extruded, Cast Aluminum Post. 12 foot Height, 3-5 inch tapered diameter, smooth shaft. Black Finish. (see page 8)

WADSWORTH Series
Cast Aluminum Posts

SHAFT OPTIONS





HOLOPHANE UNIQUE SOLUTIONS
515 McKinley Avenue • Newark, Ohio 43055 • (614) 349-4160 • Fax 1-800-346-5923

ORDERING GUIDE

sample catalog number

W12S4/17	-	CA/BK	-	WPRT
Post	-	material/finish	-	options
WADSWORTH 12' Smooth 4" shaft 17" dia. base	-	Cast Aluminum Black	-	Weatherproof Receptacle at Top (of post)

Post (check appropriate boxes, add height in blank)

Catalog #	Shaft Type	Heights
❑W_ _S4/17	4" dia. smooth	8', 10', 12', 14'
❑W_ _S5/17	5" dia. smooth	10', 12', 14', 16'
❑W_ _F4/17	4" dia. fluted	8', 10', 12', 14'
❑W_ _F5/17	5" dia. fluted	10', 12', 14', 16'
❑W_ _T4/17	3"- 4" dia. tapered	8', 10', 12', 14'
❑W_ _T5/17	3"- 5" dia. tapered	10', 12', 14', 16'

Material/Finish

Catalog Suffix	Description
❑-CA/BK	Cast Aluminum/Black *(std.)*
❑-CA/DG	Cast Aluminum/Dark Green
❑-CA/DB	Cast Aluminum/Dark Bronze
❑-CA/PP	Cast Aluminum/Prime Painted
❑-CA/CC	Cast Aluminum/Custom Color

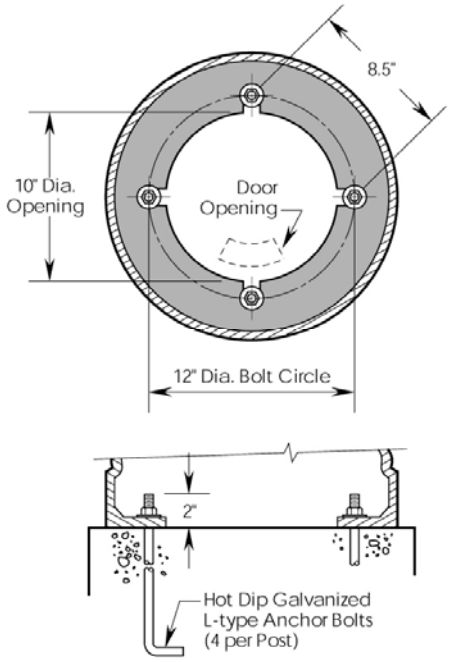
*(for complete finish and color options, see **"Finish"** section in catalog)*

Optional Equipment

Catalog Suffix	Description
❑- _____	Receptacles (see Accessories section)
❑- _____	Banner Arms (see Accessories section)
❑- _____	Flag Pole Holders (see Accessories section)
❑- _____	Custom Logos (see Accessories section)
❑- _____	Signage (see Signage section)

(for optional equipment not found in catalog, consult factory)

ANCHORAGE GUIDE



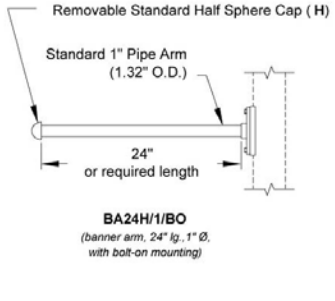
SCALE : 1.25"=12"

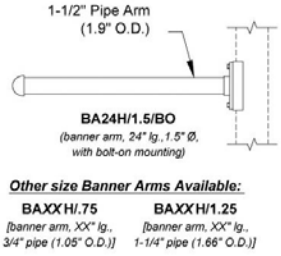
US-1639

Note: All poles shall have 120V receptacle access at the top, below the luminaire.

E. Decorative Pedestrian Scale Lighting Details – Banner Arm

Banner Arms
Cast Aluminum





Other size Banner Arms Available:

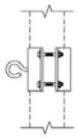
BAXXH/.75 *[banner arm, XX" lg., 3/4" pipe (1.05" O.D.)]*

BAXXH/1.25 *[banner arm, XX" lg., 1-1/4" pipe (1.66" O.D.)]*

OTHER MOUNTING OPTIONS

BA24H/1/CO
(banner arm with clamp-on mounting)

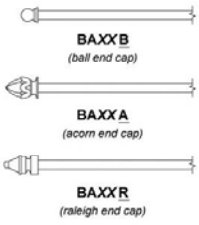
-EB/BO
(eyebolt mounted to post for securing banner bottom



-EB/CO
(eyebolt with clamp on mounting for securing banner bottom)

OTHER OPTIONS

BBA24H/1/BO
(break-away banner arm)



CUSTOMS

BA24H/1/BO/2EB
(two eyebolts on arm)

BA24H/1/BO/S/2EB
(decorative scroll & two eyebolts on arm)

Banner arms can add substantial wind loading to the post you select. Please coordinate the correct post size and style with the factory.

SPECIFICATIONS

DESCRIPTION
The banner arms shall consist of a round, extruded aluminum pipe and a removable cast aluminum end cap. Bottom eyebolts and banner arms with breakaway couplings, are optional and recommended because of the wind load from the banner.

CONSTRUCTION
The banner arm shall be welded to a mounting plate or a post clamp. All welding shall be per ANSI/AWS D1.2-90. All welders shall be certified per ANSI/AWS D1.2-90 Section 5.

MATERIALS
The end caps shall be, cast aluminum produced from certified ASTM 356.1 ingot per ASTM B-179-95a or ASTM B26-95. The banner arm, mounting plate and post clamp shall be aluminum, ASTM 6061 alloy, heat treated to a T6 temper. All hardware shall be stainless steel.

INSTALLATION
The bolt-on banner arm shall bolt to a mounting channel provided on the side of the post with four stainless steel screws. Eyebolts shall screw into the post or clamp on. All clamp-on mountings shall clamp around the post, secured with four 3/8" hex head bolts. (Post dia. at mounting point must be specified.) A minimum mounting height of 10 feet is recommended for the bottom banner arm. (Arms are not designed for pedestrian interference.) (For information on specifying orientation and mounting heights see **"Orientation Guide"** in the back of the Accessories section of catalog.)
(Banners to be provided by others.)

DIMENSIONS
The banner arms shall be available in 1.05", 1.32", 1.66" or 1.9" O.D. and to the specified length.

For finish specifications and color options see **"Finish"** section in catalog.

HOLOPHANE
LEADER IN LIGHTING SOLUTIONS
An AcuityBrandsCompany
214 OAKWOOD AVENUE - NEWARK, OHIO 43055

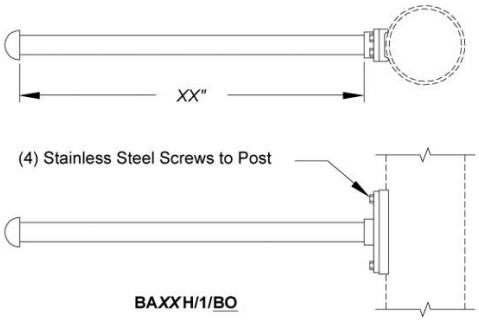
US-2400

Product Number: BA24H/1.25/BO/R (Top Arm)
Product Description: 24 inch length, 1 ¼ inch diameter, bolt on mount, raleigh end cap.
Product Number: BA6H/1.25/BO/R (Bottom Arm)
Product Description: 6 inch length, 1 ¼ inch diameter, bolt on mount, raleigh end cap.
Note: It is the responsibility of the City of Murfreesboro to design and install the banners on the banner arms provided by the developer. The size of the banner shall be approximately 24 inches wide at the top and 6 inches wide at the bottom, with a total height of 36 inches. The top of the banner shall be mounted 24 inches from the top of pole.

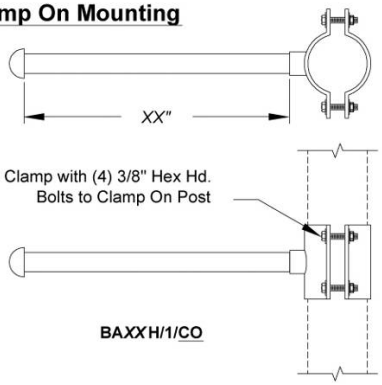
Banner Arms Cast Aluminum

MOUNTING DETAILS

Bolt-On Mounting

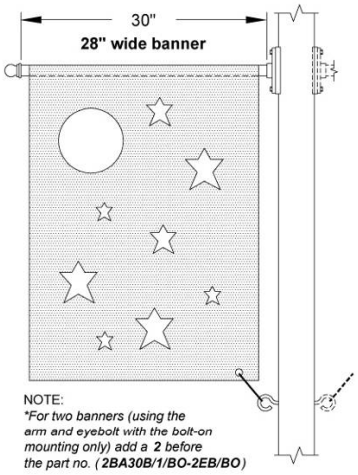


Clamp On Mounting



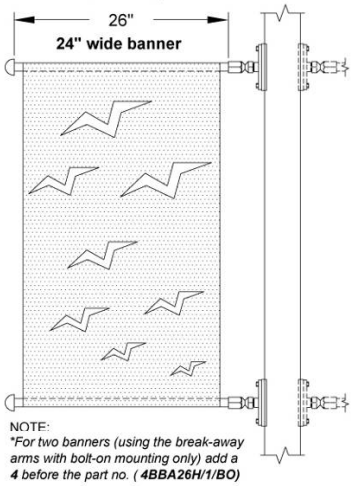
SUGGESTED BANNER ARM USAGE

BA30B/1/BO*
(Banner Arm, 30", Ball end cap / 1"Ø / Bolt On)



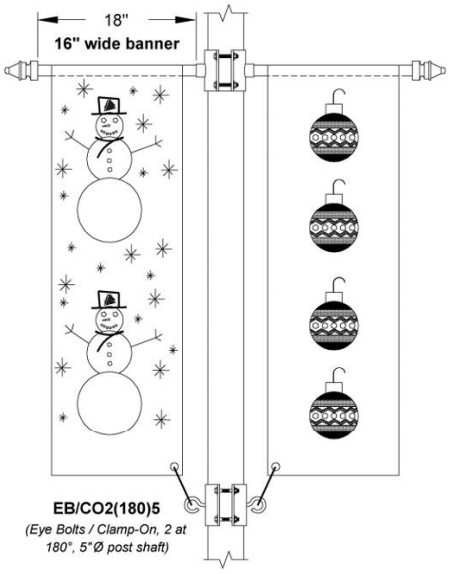
NOTE:
*For two banners (using the arm and eyebolt with the bolt-on mounting only) add a **2** before the part no. (**2BA30B/1/BO-2EB/BO**)*

2BBA26H/1/BO*
(2 Break-away Banner Arms, 26", Half sphere end cap / 1"Ø / Bolt On)



NOTE:
*For two banners (using the break-away arms with bolt-on mounting only) add a **4** before the part no. (**4BBA26H/1/BO**)*

BA18R/1.25/CO2(180)5
(Banner Arms, 18", Raleigh end cap / 1.25" Ø / Clamp On, 2 arms at 180°, 5" Ø post shaft)



EB/CO2(180)5
(Eye Bolts / Clamp-On, 2 at 180°, 5"Ø post shaft)

NOTE:
* For information on specifying orientation and mounting heights see **Orientaion Guide** in the back of the Accessories section in the catalog. A minimum mounting height of 10' is recommended for the bottom banner arm.
* Banners not furnished by Holophane.

ORDERING GUIDE

sample catalog number	banner arm,	end cap	/	Arm Ø	/	mounting option	-eyebolt	-material / finish
2BBA24H/1/BO-2EB/BO-CA/BK	**2BBA24**	**H**	**/**	**1**	**/**	**BO**	**-2EB/BO**	**-CA/BK**

Banner Arms (check appropriate boxes)
(fill in _ _ with desired arm length in inches)
- ☐ **BA _ _** Std. Banner arm
- ☐ **BBA _ _** Break-away Banner arm

Banner Arm End Caps
- ☐ **H** Std. Half Sphere Cap
- ☐ **B** Ball Cap
- ☐ **A** Acorn Cap
- ☐ **R** Raleigh Cap

Banner Arm Diameters
- ☐ **/.75** 3/4" Pipe (1.05" O.D.)
- ☐ **/1** Std.1" Pipe (1.32" O.D.)
- ☐ **/1.25** 1-1/4" Pipe (1.66" O.D.)
- ☐ **/1.5** 1-1/2" Pipe (1.9" O.D.)

Mounting Options
(fill in _ _ with diameter of post shaft, at clamp, in inches)
- ☐ **/BO** Bolt On *(Bolts onto Post)*
- ☐ **/CO _ _** Clamp On (Clamps around Post)
- ☐ **/CO2(180) _ _** Clamp On (two arms at 180°)
- ☐ **/CO2(90) _ _** Clamp On (two arms at 90°)
- ☐ **/CO3(90) _ _** Clamp On (three arms at 90°)
- ☐ **/CO4(90) _ _** Clamp On (four arms at 90°)

Options
- ☐ **/2EB** Two Eyebolts on Arm
- ☐ **/S/2EB** Decorative Scroll & Eyebolts on Arm

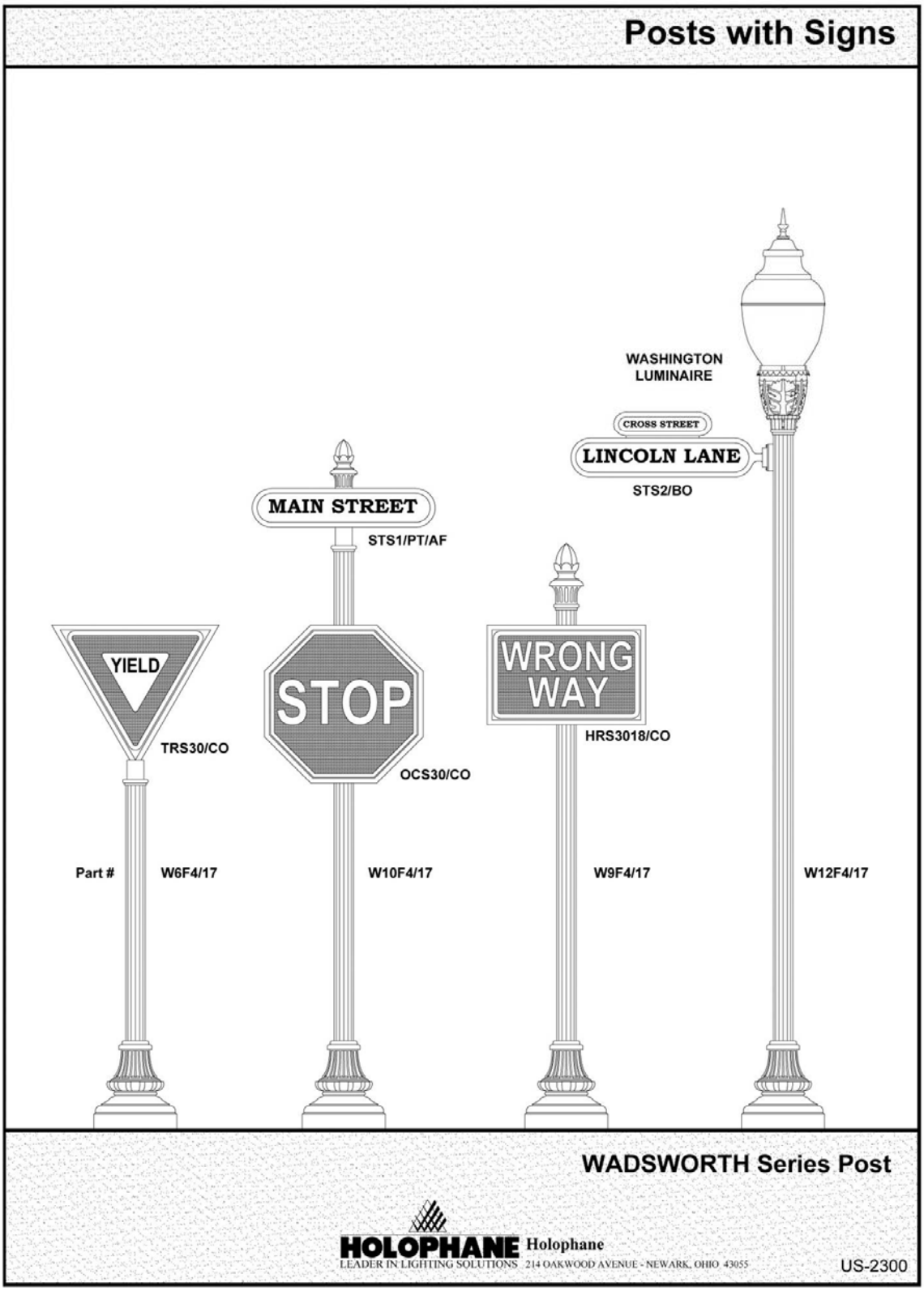
Eyebolts *(for securing banner bottom)*
(fill in _ _ with diameter of post shaft, at clamp, in inches)
- ☐ **-EB/BO** Bolt On Eyebolt *(Bolts onto Post)*
- ☐ **-EB/CO _ _** Clamp On Eyebolt (Clamps around Post)
- ☐ **-EB/CO2(180) _ _** Clamp On Eyebolt (two arms at 180°)
- ☐ **-EB/CO2(90) _ _** Clamp On Eyebolt (two arms at 90°)
- ☐ **-EB/CO3(90) _ _** Clamp On Eyebolt (three arms at 90°)
- ☐ **-EB/CO4(90) _ _** Clamp On Eyebolt (four arms at 90°)

Material / Finish
- ☐ **-CA/BK** Cast Alum./Black *(Std.)*
- ☐ **-CA/DB** Cast Alum./Dark Bronze
- ☐ **-CA/DG** Cast Alum./Dark Green
- ☐ **-CA/CC** Cast Alum./Custom Color
- ☐ **-CA/PP** Cast Alum./Prime Painted

HOLOPHANE LEADER IN LIGHTING SOLUTIONS An AcuityBrandsCompany 214 OAKWOOD AVENUE - NEWARK, OHIO 43055

US-2400

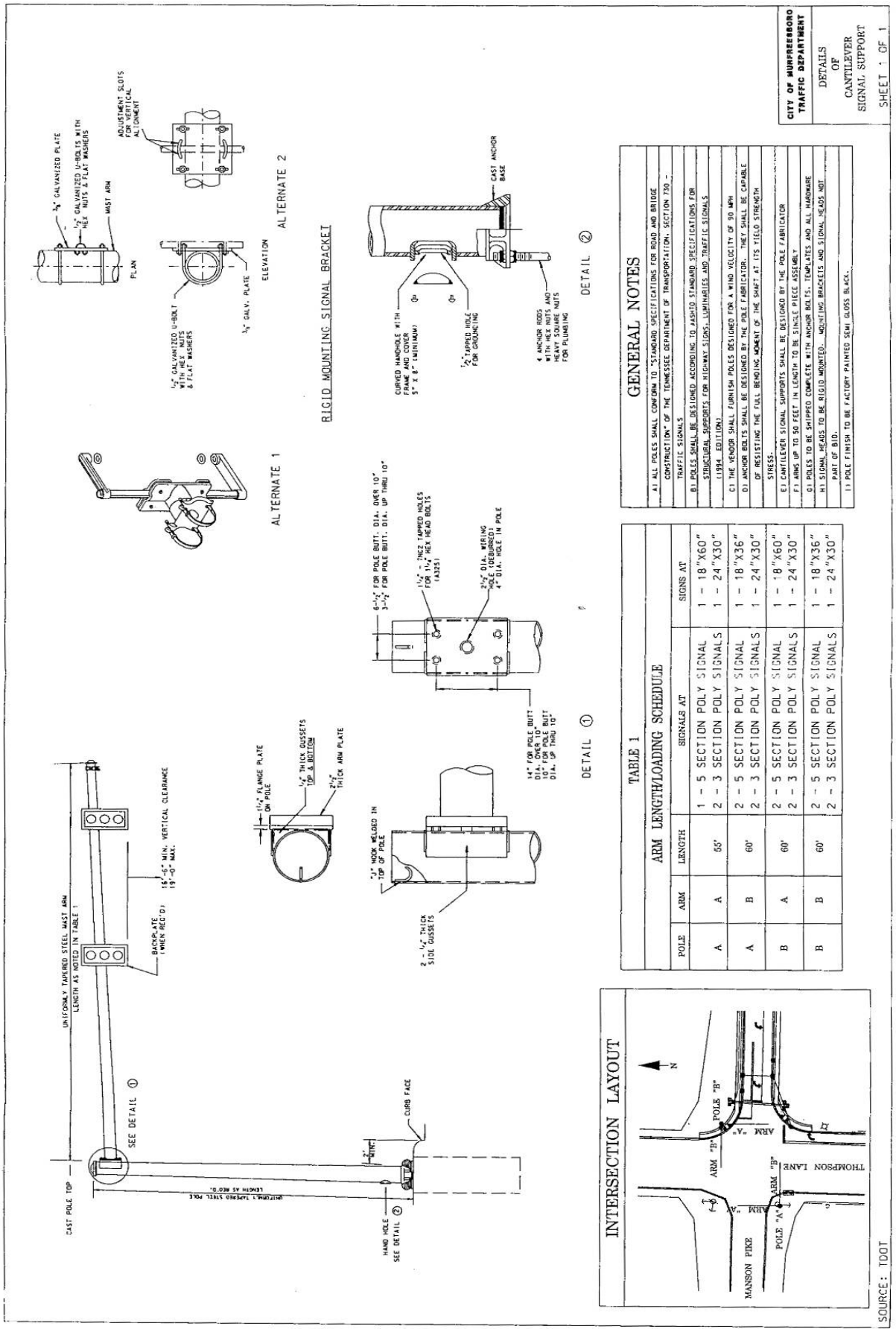
F. Decorative Standard Street Signage Details – Standard Street Signage



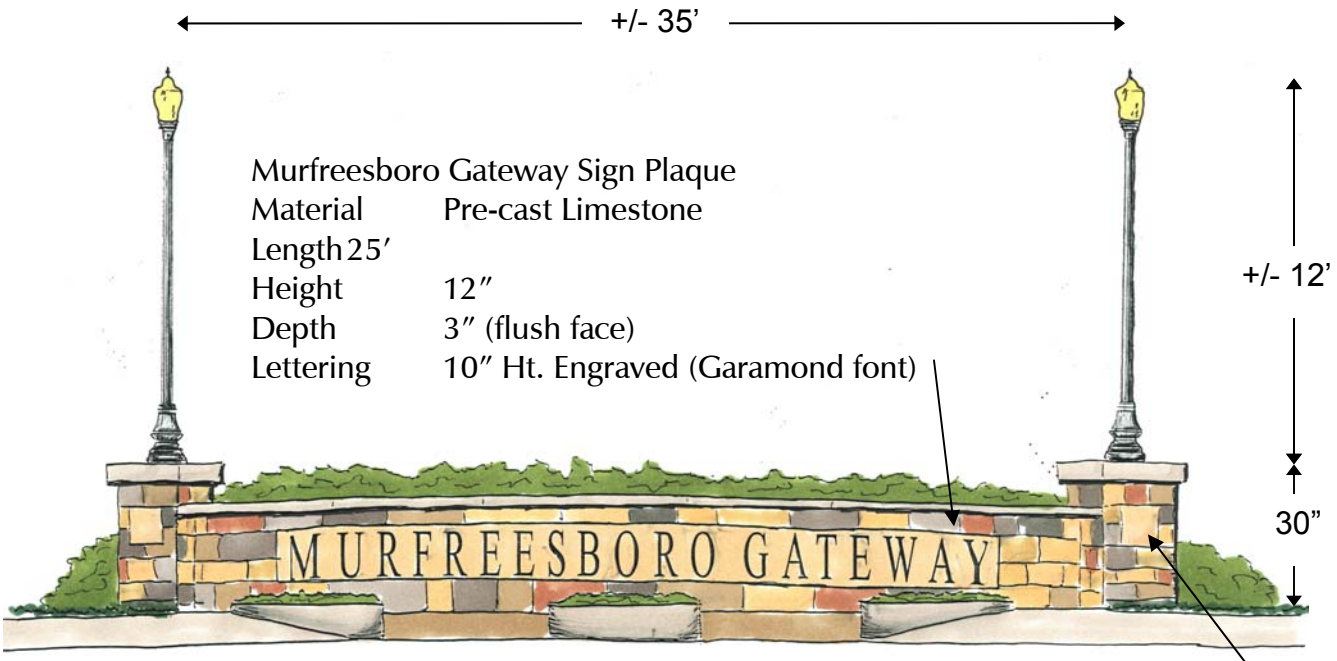
Product Number: See Product Numbers above for signage to be mounted on Wadsworth Pole.

All street and traffic control signage shall be coordinated with and approved by the City of Murfreesboro Planning and Engineering Department.

G. Traffic Signal Details



H. Gateway Sign/Seat Wall Detail (with lighting)



<u>Overall Dimensions:</u>
Wall:
Material Stacked Limestone
Length 35' (varies)
Width 24"
Height 24" (total)

Wall Cap:
Material Limestone
Length 35' (varies)
Width 28"
Height 3"
Overhang 2"

Columns:
Material Stacked Limestone
Sides 30" Triangular
Height 30" (total)

Column Cap:
Material Limestone
Side 34" Triangular
Height 3"
Overhang 2"

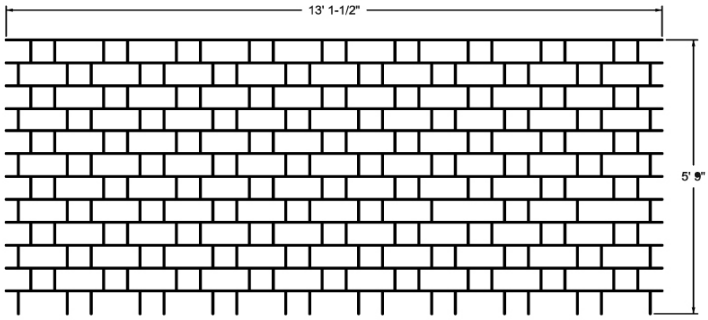
Note: Lighting to match other pedestrian scale lighting along Medical Center Parkway

City of Murfreesboro Logo Plaque (2 total)
Material Cut Limestone
Length 12"
Height 12"
Depth 3" (flush face)
Graphic Engraved Murfreesboro Logo

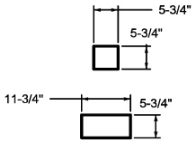
Note: Proposed Signage is conceptual. All dimensions and materials proposed are nominal and are subject to modification.

Frisco Cobble

+/- 12’

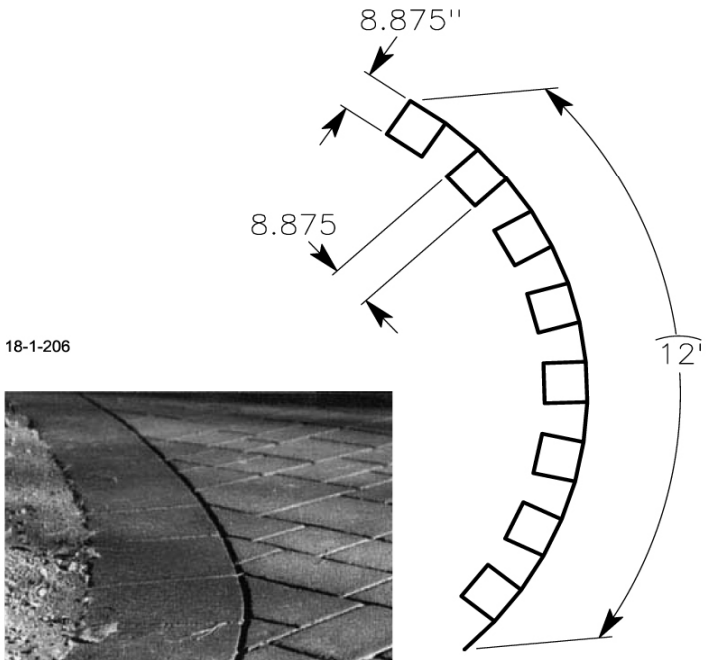


15-1-152



Note: Asphalt at crosswalks shall be stamped and installed as pattern describes above. Specific Color of Stain shall be chosen by the City of Murfreesboro Planning Commission in coordination with the City of Murfreesboro Planning and Engineering Department.

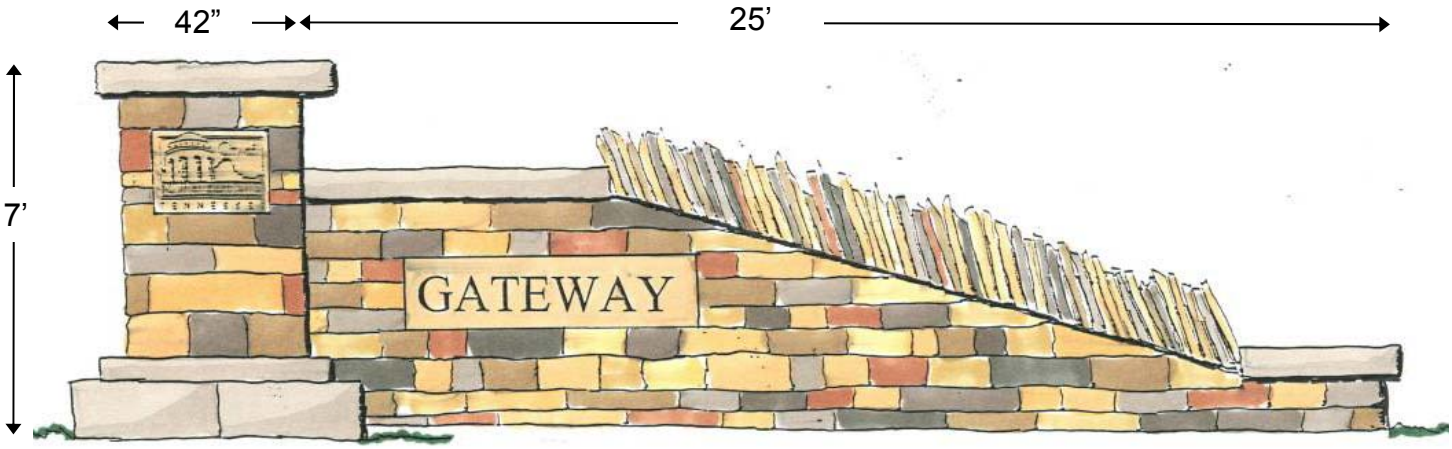
Flexible Texas Cobble Border



18-1-206

Note: Asphalt Borders at crosswalks shall be stamped and installed as pattern describes above. Specific Color of Stain shall be chosen by the City of Murfreesboro Planning Commission in coordination with the City of Murfreesboro Planning and Engineering Department.

K. Gateway Entrance Sign Detail



Overall Dimensions:
Wall:
Material Stacked Limestone
Length 25’
Width 24”
Height 60” tapering to 18”

Top Wall Cap:
Material Limestone
Length 8’
Width 28”
Height 4”
Overhang 2”

Stone Wall Accent Cap
Material Stacked Vertical Limestone
Length 15’
Width 24”
Height +/-12”

End Wall Cap:
Material Limestone
Length 26”
Width 28”
Height 4”
Overhang 2”

Gateway Plaque
Material Cut Limestone
Length 8’
Height 16”
Width 4”
Lettering 12” Ht. (Garamond font)

Column:
Material Stacked Limestone
Sides 42” Triangular
Height 84” (total)

Column Cap (top and bottom):
Material Limestone
Sides 46” Triangular
Height 4”
Overhang 2”

Column Base:
Material Limestone
Sides 62” Triangular
Height 12”
Overhang 8”

City of Murfreesboro Logo Plaque:
Material Cut Limestone
Length 12”
Height 12”
Depth 3” (flush face)
Graphic Engraved
Murfreesboro Logo

Note: Proposed Signage is conceptual. All dimensions and materials proposed are nominal and are subject to modification.