

OLIVE BOULEVARD
DESIGN GUIDELINES

University City, MO



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Olive Boulevard Design Guidelines

University City, MO



INTRODUCTION

CHAPTER - 1



PREFACE

The City of University City requires property owners and developers to use the information and guidelines attached as a planning tool to assist with the design of property improvements. The guidelines are to be used in conjunction with development proposed and planned along the Olive Boulevard corridor between Skinker Boulevard to the east side of the I-170 interchange and apply to all new development and any substantial redevelopment. For the purpose of these guidelines, substantial redevelopment means one or more of the following

- increase of twenty-five (25) percent or more in the gross floor area of any building
- Significant upliftment of the façade aesthetics by paint and or addition or replacement of façade elements
- Restoration of historic structures
- Significant changes in site design ex- landscaping, lighting ingress/egress etc.

It is intended that these guidelines will supplement and work with existing city documents such as Zoning Code, Comprehensive Plan and any other applicable standards. These guidelines are a required part of the building permit process.

DESIGN GUIDELINE GOALS

The intent of the guidelines is to encourage economic development, preserve historic buildings, and create useful and lasting improvements that attract new market interest and private investment. Further, the guidelines provide a framework for defining the scope of projects during preliminary planning and direct attention to those issues that impact development along the corridor. Specific goals include:

- Correct or Incorporate Infrastructure Improvements Within Streetscape Designs
- Maintain or Improve Mass and Space Relationships
- Enhance Pedestrian Experience
- Enhance Individuality within the Districts

HOW TO USE THIS DOCUMENT

This document is composed of the following Chapters:

- Chapter 1: Introduction
- Chapter 2: Streetscape and District Guidelines
- Chapter 3: Building Types and Signage Guidelines
- Chapter 4: Review Process
- Appendix A: Landscape Sections

Chapter 1 – establishes the goals of the document and sets out parameters for use and access to information related to the guidelines.



Chapter 2 – outlines streetscape guidelines and establishes and defines four districts along the corridor. These districts are defined by certain market strengths and physical conditions that are imposed on various locations throughout the corridor. These districts are defined within the document. All guidelines stated in this chapter are subject to approval by MoDOT and St. Louis County for any planning and improvements that may occur along the right of way within MoDOT's and St. Louis County's jurisdiction respectively.

Chapter 3 – outlines various building types and signage guidelines that are anticipated along Olive Corridor.

Chapter 4 – outlines the review process related to permitting along the corridor.

Appendix A – outlines various planting material for each landscape section based on landscape section Map (also included in the appendix).

The following is a point by point reference for use of this document:

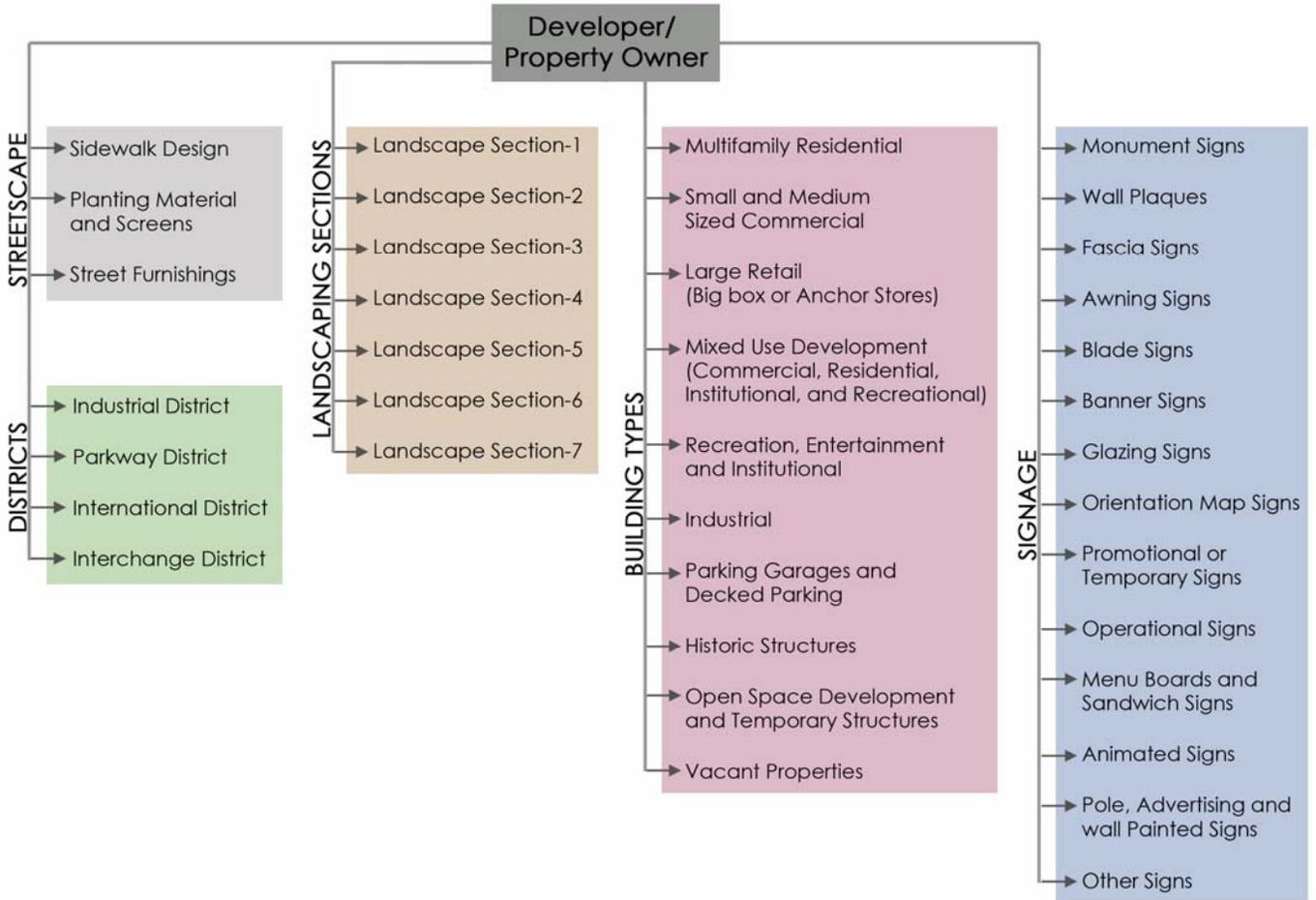
1. *Determine the District in which the development is to occur (Use Map VIII at the end of the Document).*
2. *Refer to Chapter 2 (Streetscapes and District Guidelines) to read specific guidelines for the determined District.*
3. *Determine the amount of Streetscape elements to be included in each project as required by the City.*
4. *Refer to Chapter 2 (Streetscapes and District Guidelines) to read specific guidelines for streetscape elements.*
5. *Determine the Landscaping Section in which the development is to occur (Use "Landscape Sections Map" in Appendix A).*
6. *Refer to the Landscaping Sections Table in Appendix A to determine the permitted plant species and plant types required for the landscaping and Planting Material and Screens section in Chapter-2 (Streetscapes and District Guidelines) for planting guidelines.*
7. *Determine the building type to be constructed.*
8. *Refer to Chapter 3 (Building Types and Signage Guidelines) to read specific guidelines for the determined building type.*
9. *In addition refer to the General Principles established in the beginning of Chapter-3 (Building Types and Signage Guidelines) for all building types.*
10. *Determine the types of signage desired for the development.*
11. *Refer to Chapter 3 (Building Types and Signage Guidelines) to read specific guidelines for signage needs.*



12. Refer to Chapter 4 – Review Process to read specific requirements related to the review process.

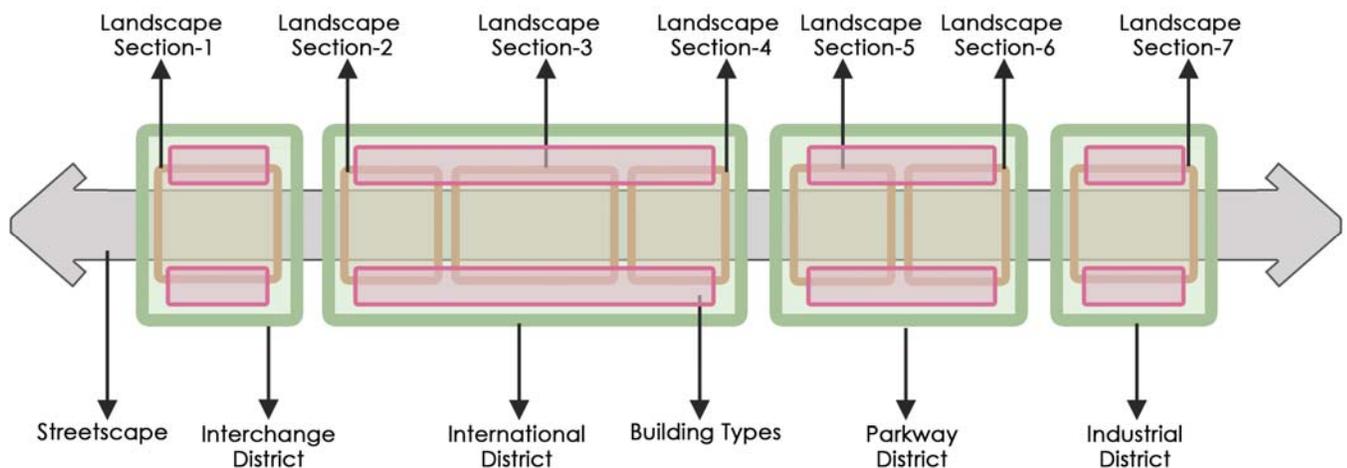
Please refer to the Table of Contents provided at the beginning of the document to read specific sections that apply to the Development as listed above.

Figure 1.1: Flowchart- How to use this document



Source: Arcturis

Figure 1.2: Conceptual Corridor Plan



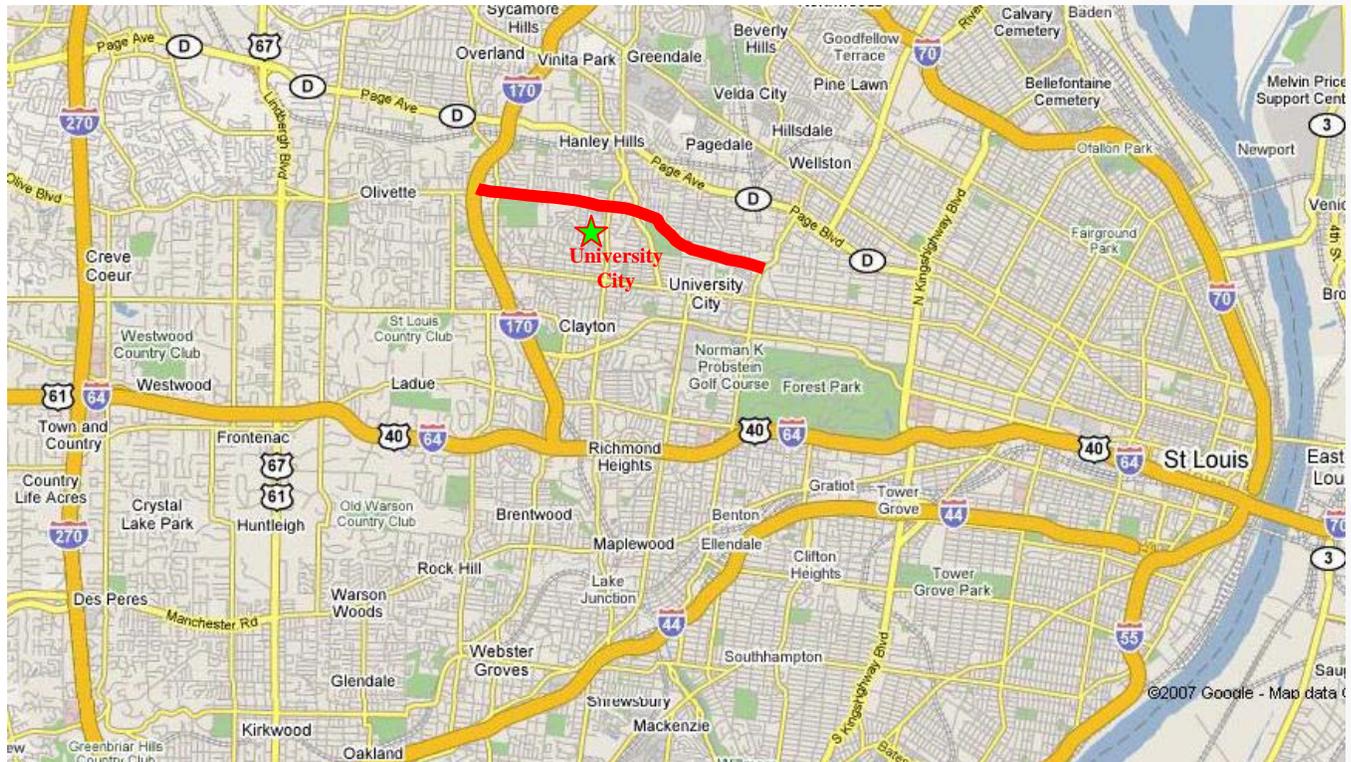
Source: Arcturis



DESIGNATED AREA

The Olive Boulevard corridor is a major arterial road stretching approximately four miles from Skinker Boulevard on the east to the east side of the interchange at I-170 on the west (See Map 1.1). The subject corridor is maintained by the Missouri Department of Transportation (MoDOT) from Ferguson Avenue westward to I -170 while the eastern portion of the corridor from Ferguson Avenue to Skinker Boulevard is maintained by St. Louis County.

Map 1.1: Site location in the Region



Source: Google Maps

The approximate traffic count along the corridor is 21,000 cars per day. The count varies depending upon access, use, and road configuration.

The City has begun implementation of a consistent “streetscape” program coordinated by the Department of Public Works (“DPW”) and pursuant to the “Olive Boulevard Standards”, an internal document created by the City that sets out certain guidelines for planning and development of corridor improvements. This manual prescribes use of pedestrian scale lighting; a consistent sidewalk section; screening and buffering for new parking areas, and landscaping.

Olive Boulevard Design Guidelines

University City, MO



STREETSCAPE
AND DISTRICTS
GUIDELINES
CHAPTER - 2



STREETSCAPE GUIDELINES

The term “Streetscape” refers to the public improvement elements located within the right of way. It does not include building aesthetics or elements present on private property¹. All guidelines stated below are subject to approval by MoDOT and St. Louis County for any planning and improvements that may occur along the right of way within MoDOT’s and St. Louis County’s jurisdiction respectively. Elements included in the streetscape guidelines pertaining to Olive Boulevard are listed below:

1. Overall Streetscape Design Concepts
2. Street Design
 - Lanes
 - Stormwater channels
 - Medians
 - Line of sight
3. Sidewalk Design
 - Sidewalk Zones
 - Sidewalk Paving
 - Tree Grates
 - Curbs and Gutters
 - Accessible Sidewalk Ramps
 - Traffic Calming Measures (in areas applicable)
 - Crosswalks
4. Planting Material and Screens
 - Street Trees and Plantings
 - Other Supplemental Plantings
5. Street Furnishings
 - Benches
 - Recycling/ Trash Containers
 - Bollards
 - Bicycle Stands
 - Bus Shelters
 - Fences
 - Planter Boxes
 - Signage
 - Lighting
 - Public/Community Art
 - Utility Equipment and Poles

University City has adopted certain guidelines related to streetscapes and has begun implementing these guidelines along the four-mile alignment of Olive Boulevard. These design guidelines are intended to capitalize on existing guidelines for the overall enhancement of the Olive Boulevard corridor.

¹ These will be discussed in the next chapter- Land Use and Districts Guidelines



OVERALL STREETScape DESIGN CONCEPT

The main goals of these guidelines include:

1. Achieve a memorable pedestrian experience.
2. Achieve business stability, retain existing businesses and attract new business.
3. Attract new and repeat customers.
4. Preserve and improve infrastructure.

A well designed, attractive and inviting streetscape is important to achieving the above mentioned goals. While the architecture, massing and type of buildings may vary from parcel to parcel, it is the Olive Boulevard streetscape that creates continuity along the corridor. As described in this document, several “districts” have been identified based upon their market composition and infrastructure configurations.

An example of a typical street design layout is shown in Figure 2.2

STREET DESIGN

Intent

Street design focuses on efficient parking, access and circulation. An effective design provides for the safe, efficient, convenient and functional movement of multiple modes of transportation both on and off the street, taking into consideration ingress and egress, circulation, and parking locations on property immediately adjacent to the corridor. Additionally, effective street design minimizes pedestrian, bicycle and vehicle conflicts and provides for alternate modes of transportation, including public transit, sidewalks and trails. All street design plans shall be approved by the agency having jurisdiction over that stretch of street such as MoDOT, St. Louis County or City of University City.

Lanes

- There shall be two (2) lanes in each direction.
- The road design, lane widths, construction and quality of materials and construction techniques shall follow the guidelines established by the agency having jurisdiction over that stretch of street such as MoDOT, St. Louis County or City of University City.

Medians and Refuge Islands

As mentioned in the existing conditions report, an analysis of crash data in seven states demonstrates that raised medians reduce vehicular crashes by over 40 percent in urban areas. A study of median treatments in the State of Georgia found that raised medians reduced pedestrian involved crashes by 45 percent and fatalities by 78 percent, compared to two-way left-turn lanes.



- Medians shall be at least twelve (12) feet wide and act as a turning lane at intersections. However, the width and length of medians shall be approved by MoDOT and/or St. Louis County.
- Turning lanes shall accommodate three automobiles at a minimum longitudinally. However traffic studies shall be required to support the length of queue storage for major traffic generators such as a shopping center.
- Plantings in medians shall be placed so that visibility of drivers and pedestrians is not obstructed at anytime. (See P-2.1)
- Medians shall act as resting areas for people crossing the street and shall be spaced along the corridor with maximum attention to safety. (See P-2.2)
- Refuge Islands at street intersections shall display a continuation of median landscaping. (See comparative pictures in P-2.3, showing what can and cannot be done in such spaces)
- Median designs shall complement each district characteristics. For example, the "Parkway District" may be complemented with water features in the medians or the "International District" may display certain public art elements that further define the district's unique business qualities. (See P-2.4 and 2.5)

P-2.1: Median planting- Doesn't obstruct views



Source: <http://www.pedbikeinfo.org/index.htm>

P-2.2: Median as resting place



Source: Context Sensitive Solutions- ITE Guidelines

P-2.3: Refuge Islands at the intersections: planted continuing the character of the street



Source: <http://www.pedbikeinfo.org/index.htm>

UNACCEPTABLE

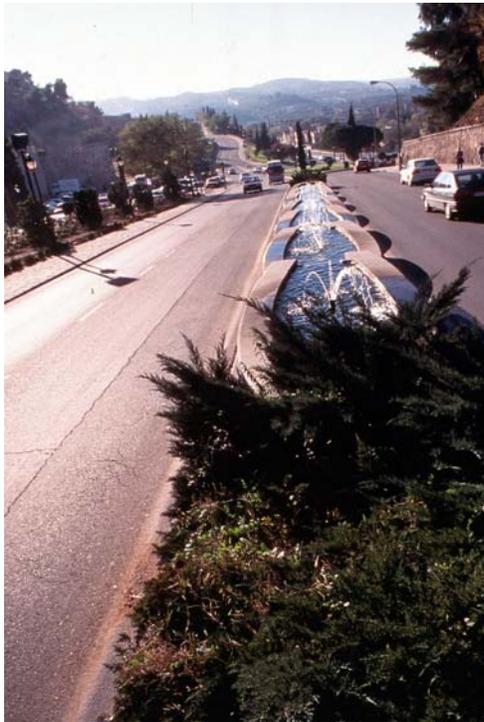


Source: <http://www.pedbikeinfo.org/index.htm>

ACCEPTABLE



P-2.4: Example of median for Parkway District- Water used as a distinct element



Source: <http://www.pedbikeinfo.org/index.htm>

P-2.5: Example of median for International District- Sculptures used as a distinct element



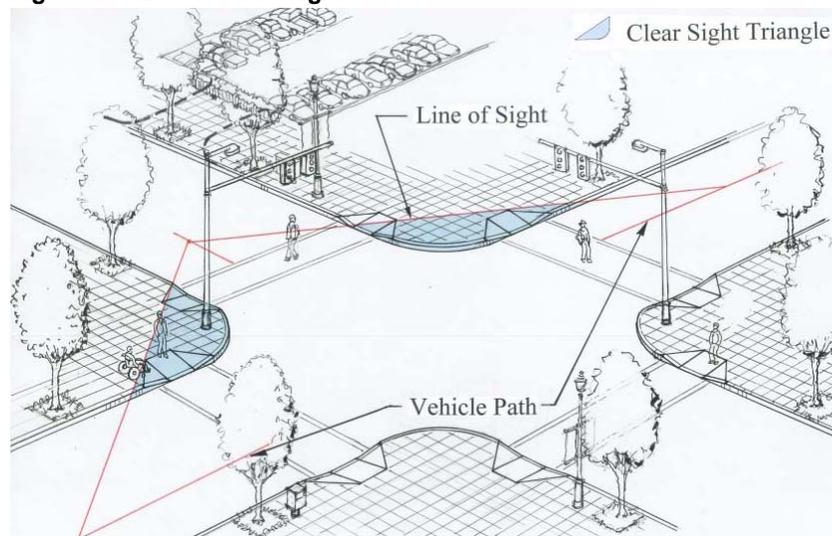
Source: <http://www.cabe.org.uk/default.aspx?contentitemid=1976&aspectid=23>

Line of Sight

It is important to establish a clear line of sight for drivers.

- A clear line of sight shall be established as shown in Figure 2.1. Line of sight is the stopping sight distance for braking distance required for a driver to stop the vehicle after sighting an object on the roadway. The line of sight distance shall be approved by MoDOT.
- Crosswalks shall be unobstructed by any structure, sculpture, plant(s), or public furniture or amenities.

Figure 2.1: Line of Site diagram



Source: Unknown- internet

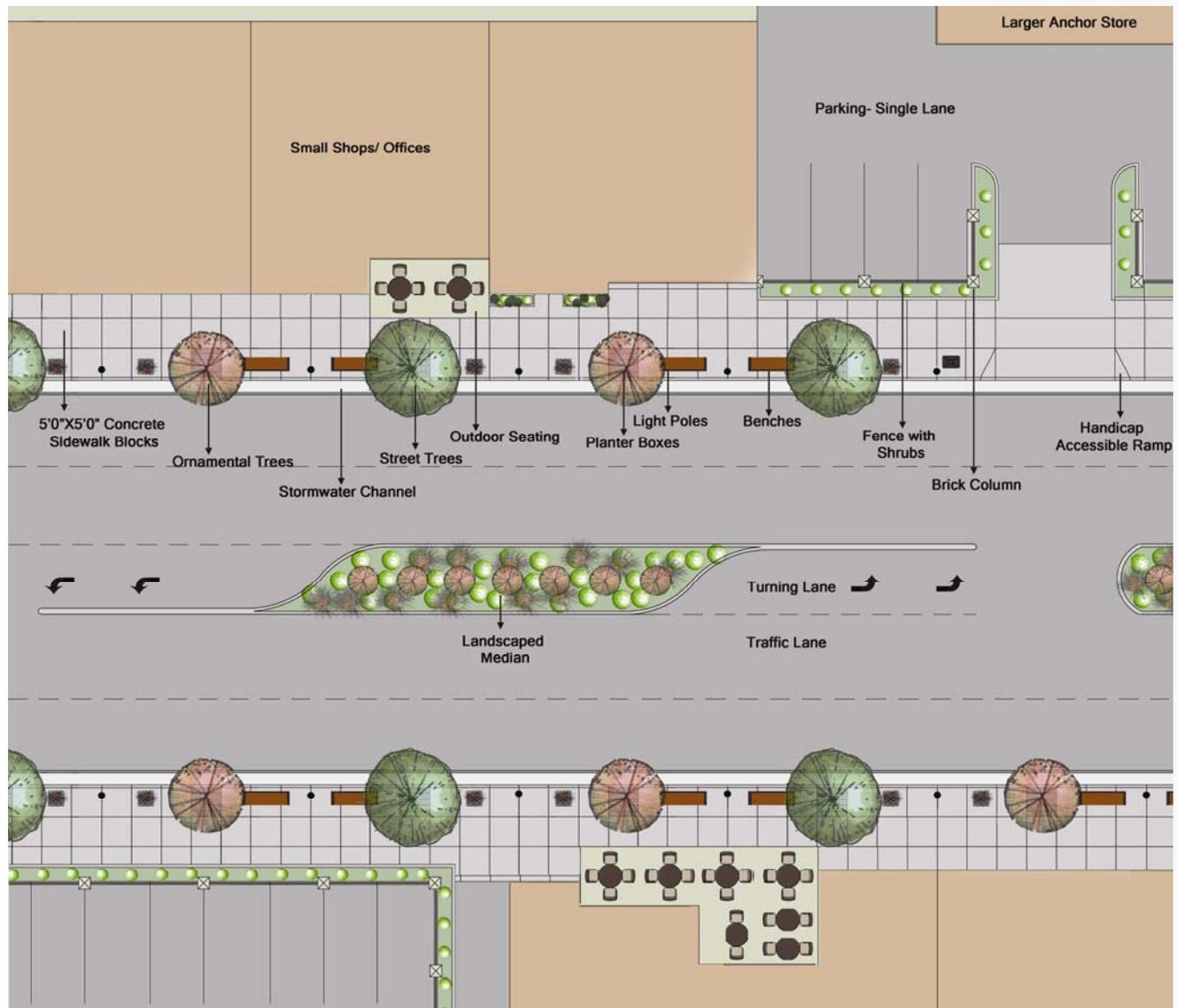


SIDEWALK DESIGN

Connectivity between buildings, land use areas and adjacent development both existing and new can be achieved by site sensitive design of pedestrian areas such as sidewalks. These elements may be integrated into the street design and cohesively designed to connect residential, office and retail/commercial areas and transit stops.

Sidewalks and right-of-ways shall be paved to promote the safety of the users. Sidewalks and right-of-ways shall be constructed of concrete and located along Olive Boulevard and side street(s), without exception. Sidewalks and right-of-ways are also to be in accordance with the specifications established by the Director of Public Works, City of University City, the Missouri Department of Transportation (MoDOT) or St. Louis County pursuant to the jurisdictional authority responsible for the infrastructure.

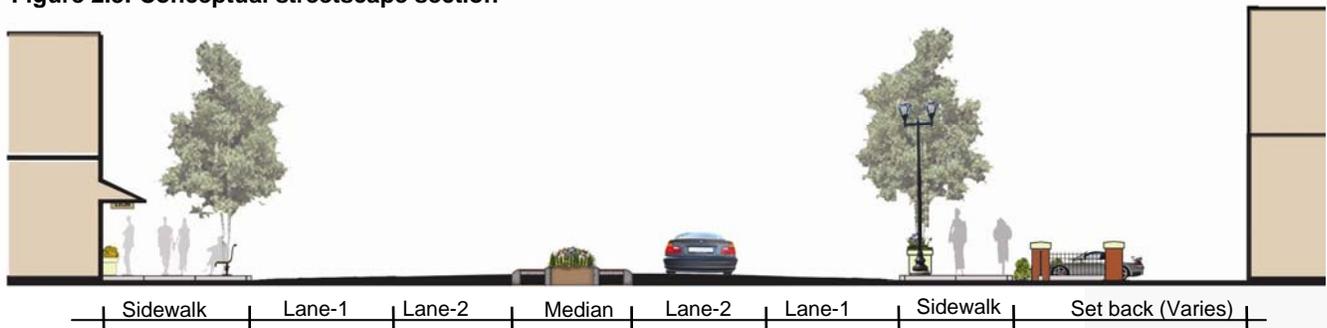
Figure 2.2: Conceptual plan for Sidewalk and Streetscape



Source: Arcturis



Figure 2.3: Conceptual streetscape section



Source: Arcturis

Design guidelines related to the construction, curing and technology used for the installation of sidewalks follows the existing “Olive Boulevard Standards” established by University City. However, guidelines related to the width of the sidewalks and their design specified below pre-empts “Olive Boulevard Standards”.

Sidewalk Zones

- Sidewalks are divided into three (3) zones (See Figure 2.4)
 - Streetscape Zone- Minimum five (5) feet
 - Pedestrian Zone - Minimum five (5) feet
 - Spillway Zone - Varies
- Streetscape Zone is defined as the area of the sidewalk appropriate for planting trees and the placement of street furniture such as trash receptacles, benches and light poles.
- Pedestrian Zone is defined as the area of the sidewalk that may be utilized for moving pedestrians along the corridor. The width of this zone is to be a minimum five (5) feet.
- Spillway Zone is defined as the area of the sidewalk between the property lines and the pedestrian zone. The width of this area varies and may be combined with setbacks to provide additional land. The spillway zones may be used in a variety of ways such as outdoor dining areas, locations for public art, fountains, planter boxes, or for pedestrian space for window shopping, festive decorations or small kiosk areas.
- The sections in Figure 2.4 show buildings with varied setbacks as provided in Chapter 3 of this document. When setbacks are less than eight (8) feet, they shall be used as a continuum of sidewalk (spillway zone). When the setbacks are used for parking purposes, planting, screening or fencing shall be used as explained in the Building Types and Signage Guidelines in Chapter 3 of this document.

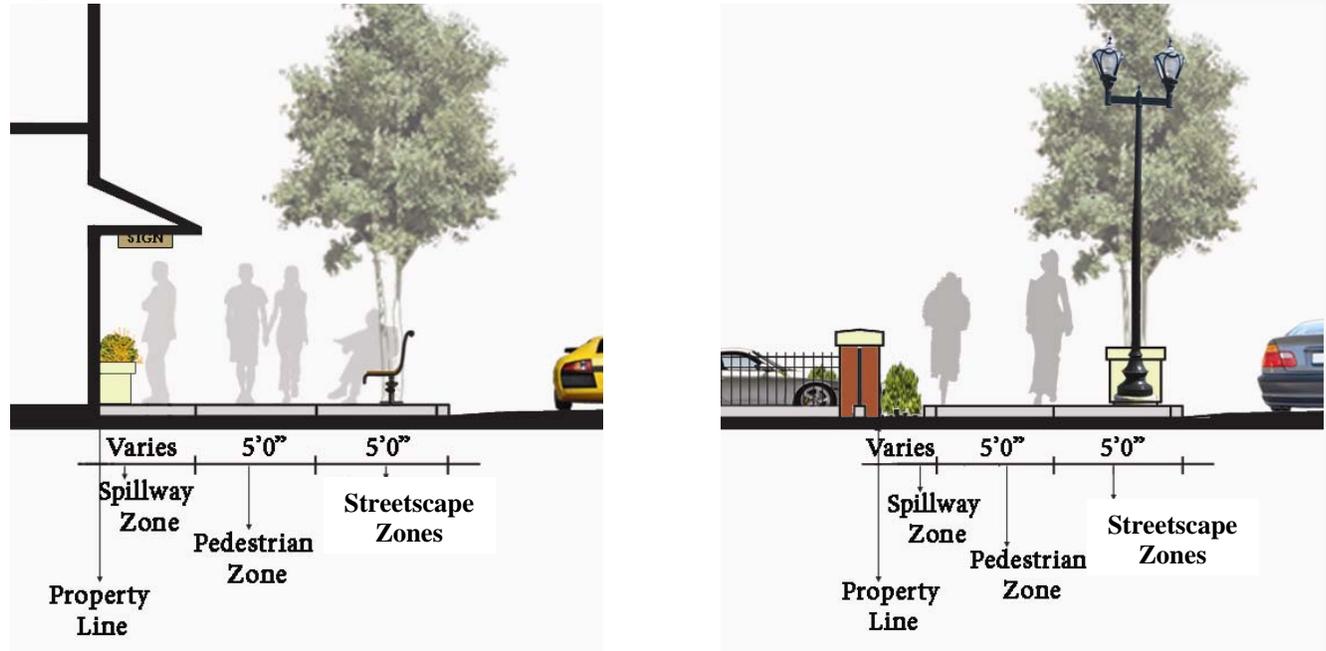
P-2.6: Examples of using Outdoor Excess Land





- Excess Land, appropriate for the placement of outdoor seating and gathering places (as shown in the P-2.6 “Outdoor Excess Land”) shall be treated as additional sidewalk space. As stated above, these areas may be combined with setbacks and building zone areas.

Figure 2.4: Sidewalk Zones



Source: Arcturis

Sidewalk Paving

- Elements such as engravings, inlays, embeddings, mosaic work and other types of public art elements installed within the above described concrete sidewalks is encouraged. These design elements shall be assessed on an as submitted basis and will be required to meet federal, state and city requirements for height, width and quality of materials.
- Concrete mix shall match MoDOT standards for five (5) inch pavement with any color addition being approved by the City.

P-2.7: Examples of sidewalk paving embellishments



Source: <http://www.urbanphoto.net/blog/category/canada/vancouver/>



- Expansion joints shall be placed between the sidewalk slabs and road shoulder, and between the road shoulder and curb, and are to be sealed with a sealer approved by the City, as follows:
 - Expansion joints to be placed every twenty (20) feet. An expansion joint is an assembly designed to safely absorb the heat-induced expansion and contraction of various construction materials.
 - Control joints to be placed every five (5) feet transversely. A control joint is a groove cut into the surface of the concrete that allows some cracking to occur in the joint and not be readily visible.
- Refer to the “Olive Boulevard Standards – “Sidewalks and Paving” under “Public Right-of-Way Requirements” for additional construction details.

Tree Grates

- Existing grates in areas with expected bicycle traffic shall be retrofitted as soon as practicable.
- Refer to the “Olive Boulevard Standards – for approved grate designs.

Curbs and Gutter

Curbs are defined as the edge where a raised pavement/sidewalk/footpath, road median, or road shoulder meets an un-raised street or other roadway².

- Follow MSD specifications and requirements for storm water management. Low impact development is alternative method of stormwater management and is highly encouraged. LID is used to decrease surface runoff in developed areas by increasing permeability and seeking opportunities to store or utilize stormwater on site (e.g. underground storage, rain gardens, downspouts that empty into landscaping instead of streets, use of native plant material etc.).
- The size of the curb cross section shall be 6”X6” and level with the sidewalk.
- Joints of curbs shall be aligned with the sidewalk joints. (See Figure 2.5)
- Catch basins shall be designed and installed in accordance with American Association of State Highways and Transportation Officials (AASHTO) Guide for Development of Bicycle Facilities.

Accessible Sidewalk Ramps

- All sidewalks shall be handicap accessible pursuant to ADA standards.

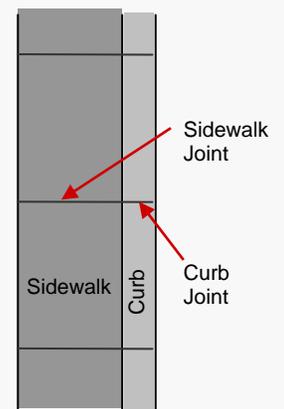
² <http://en.wikipedia.org/wiki/Curb>.

P-2.8: Proposed



Source:
<http://www.biocleanenvironmental.net/stormdrain/product/s/curbinlet/curbinlet.htm>.
Accessed December 12, 2007

Figure 2.5: Curb and Sidewalk joints aligned



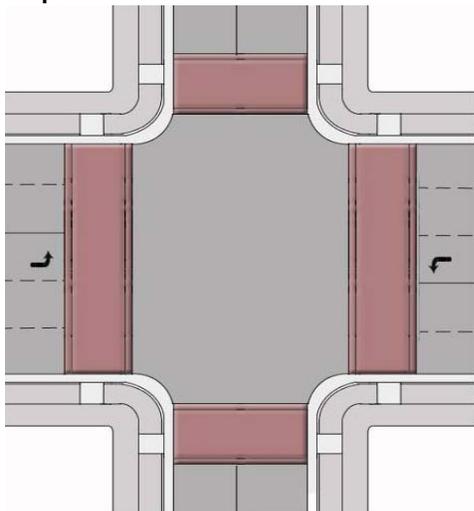
Source: ARCTURIS



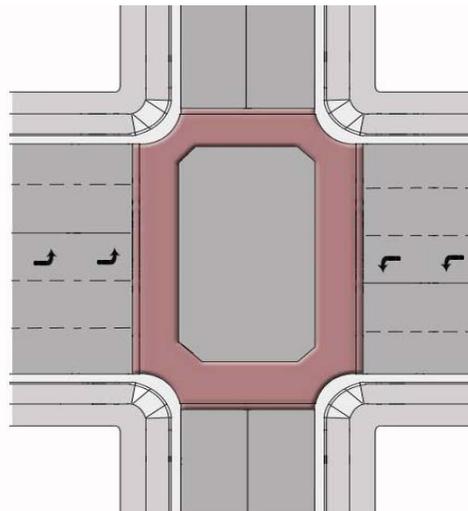
- Ramps at corners, mid-block or driveways shall have a slope of two (2) percent or less.
- The slope of roads or gutter surfaces immediately adjacent to curb ramps shall not exceed five (5) percent.
- The transition between ramps and gutters to road surface shall be smooth.
- Curb lines shall be continued at the edge of ramp.
- Major intersections shall be treated as shown in Figure 2.6 Option A.
 - Kingsland Avenue at Olive Boulevard
 - Midland Boulevard at Olive Boulevard
 - Hanley Road at Olive Boulevard
 - McKnight Road at Olive Boulevard
 - Pennsylvania at Olive Boulevard
 - 81st Street at Olive Boulevard
 - 82nd Street at Olive Boulevard
 - Skinker at Olive Boulevard
- Minor intersections shall be treated as shown in Figure 2.6 Option B. Some of them are listed below:
 - Coolidge Drive at Olive Boulevard
 - North and South Road at Olive Boulevard
 - Purdue Avenue at Olive Boulevard

Figure 2.6: Ramps and Crosswalks

2.6 Option A- Signalized and 4-way stop intersection



2.6 Option B- All other intersections



Source: Arcturis



STREETSCAPE MATERIALS AND SCREENS

Intent

The selection of streetscape and screening materials within these design guidelines intends to provide a framework for landscape development in order to create a memorable experience for pedestrians and others who pass by. Creating an aesthetic statement consistent throughout the development enhances market appeal and adds value to investments along the corridor.

Through the choice of plant materials these guidelines create distinct identity to each district while being environmentally sensitive by choosing native plant varieties wherever possible. Most plant varieties chosen for Olive Boulevard create water-conserving landscape patterns and need relatively low or no maintenance once established.

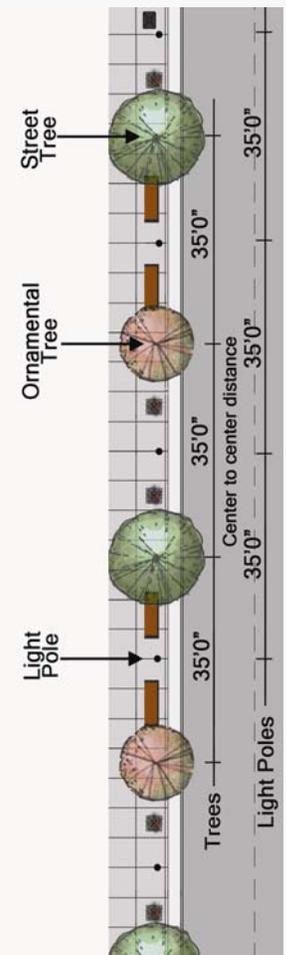
Seven “Landscaping Sections” have been created (See Landscaping Sections Map in Appendix A) to enhance the characteristics of districts. The planting for each Landscaping Section is specified in Appendix A. The relationship between Districts and Landscaping Sections is as follows:

- Interchange District: consists of Landscaping Section-1
- International District: consists of Landscaping Sections-2,3 and 4
- Parkway District: consists of Landscaping Sections-5 and 6
- Industrial District: consists of Landscaping Section- 7

Planting Guidelines

- Planting palettes vary by “Landscaping Sections”. (See Landscaping Sections Map in Appendix A for the extent of each Landscaping Sections and Landscaping Sections Table in the same Appendix A for the lists of various planting material to be used by each Section specifically)
- Each Landscaping Section has a specific “Street Tree” (shade tree) and an “Ornamental Tree” chosen for that particular Section. (See Appendix A)
- The Street Trees shall be planted at seventy (70) feet with an ornamental tree in the center of two (2) street trees. (See Figure 2.7)
- All new trees shall have at least a two (2) inch caliper trunk when planted.
- Tree cages shall be installed to protect trees from vandalism.
- Younger trees shall be watered and maintained per tree needs. The City shall initially be responsible for the maintenance of the trees. However, this maintenance shall be passed on to Olive Link Business Association in future.

Figure 2.7: Spacing of Trees and light poles



Source: Arcturis



- Plantings in the decorative containers shall be installed and maintained as specified by Landscaping Section. (See Appendix A)
- If the owner decides to plant in the spillway zone then such plantings shall be chosen and maintained by property owners and may vary from property to property.
- Hedges and green-screens (or other planting screens) shall be placed as specified in Appendix A and are specifically required to conceal areas such as parking lots, utilities and air-conditioning units and shall be maintained by the property owner.
- Maintenance of any owner installed plant material and/or artwork shall be the responsibility of the property owner.
- Evergreen shrubs shall be used in front of fenced areas. Evergreen shrubs are to be a maximum three (3) feet in height.
- Planting within the median as specified in the Appendix A shall be designed so as not to obstruct views of the passing vehicles.



STREET FURNISHINGS

Street furnishing has a significant aesthetic impact on the streetscape. Therefore, attention shall be paid to all street furnishings to maintain consistency along the corridor. Examples of street furniture include:

- benches
- trash bins
- telephone booths
- water fountains
- recycling/ trash containers

City guidelines have established a palette for street furnishings. Currently, a specific light pole design and fence design have been identified. The City shall select a design palette for each street furnishing item listed below based on the current established palette. The selected designs shall be simple, functional, easily maintained, sturdy and of good commercial grade quality.

The pictures shown here are suggestions only and must not be considered as the final product pick. All lighting placement must be approved by MoDOT or St. Louis County

Lighting

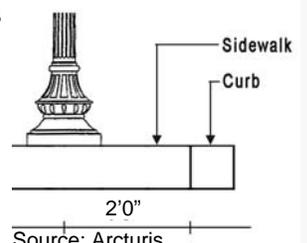
- Decorative street lights shall be provided at each intersection and along street frontage between intersections.
- Decorative street lights shall be installed at thirty-five (35) feet on center (See Figure 2.7) and the light pole location is subject to the final approval of the City.
- Lights are to be located between the Streetscape Zones at the sidewalks. The center of pedestal shall be placed twenty four (24) inches (2'0") from the end of the curb line. (See Figure 2.8)
- Height requirements shall not be less than fourteen (14) feet above final grade and the pedestal shall be installed at a maximum height of six (6) inches above final pavement elevation.
- One photocell shall be installed to activate an entire group of decorative lights.
- For complete details of the specified lighting requirements, please follow the "Olive Boulevard Standards", available at the City Or online on City's website.

P-2.9: Decorative lighting as specified by "Olive Boulevard Standards"



Source: Photo- Arcturis

Figure 2.8: Light pole Location



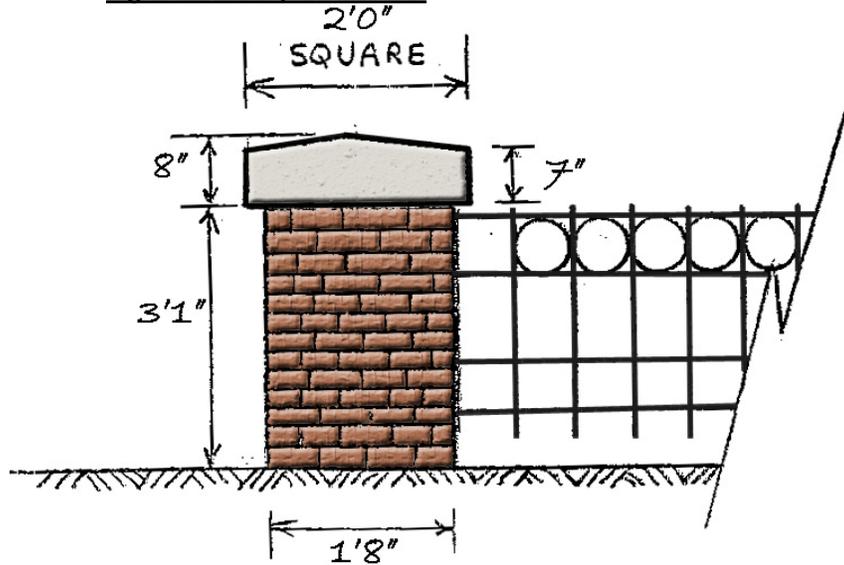
Source: Arcturis



Decorative Fences

- Decorative Fencing consists of brick pedestals with sloped cast stone caps, connected by decorative, painted, wrought iron fencing. (See Figure 2.9- Fence)
- Evergreen shrubs shall be planted adjacent to decorative fencing (Refer to Appendix A) between brick pedestals.
- An example (existing condition) of this wall, fence, and shrubs may be found at the Aldi's Store at the intersection of North and South and Olive Blvd, in University City, Missouri.

Figure 2.9: Proposed Fence



Source: Olive Design Standards

Benches

- Benches shall be placed within Streetscape Zones between ornamental tree and street trees. (Refer Figure 2.2)

P-2.10: Examples of Benches



Source of pictures from left to Right

<http://www.flickr.com/>

<http://www.flickr.com/>

<http://www.landscapeforms.com/en-US/PhotoLibrary/Pages/Presidio.aspx>

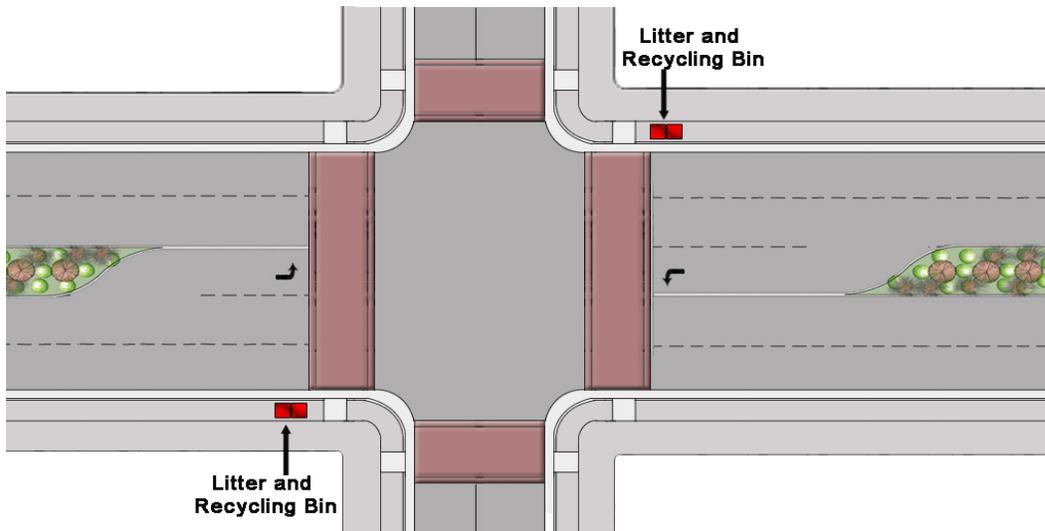


- Benches shall be approximately six (6) feet in length with final approval of the size, construction, and maintenance of the benches to be determined by the City.
- If the selected bench design contains a back-rest, it shall be placed in such a way so as to face the shops and not the street
- Benches are to be maintained by property owners.

Recycling/ Trash Containers

- Recycling and trash containers shall be placed in the Streetscape Zone in line with benches and other street furnishing.
- There shall be at least one litter and recycling bin on each block that is less than two hundred (200) feet wide.
- These bins shall be placed at the eastern end of east bound sidewalks

Figure 2.10: Litter and recycling bins locations



Source: ARCTURIS

P-2.12: Side-by-side arrangement for collecting recyclables and non-recyclables



Source: <http://www.kettlecreek.com/>



Source: <http://www.flickr.com/>

P-2.11: Litter bin Example



Source:
<http://www.landscapeforms.com/en-US/Products/Pages/Presidio>



and the western end of west bound sidewalks on each block that is less than two hundred (200) feet in length. (See Figure 2.11)

- There shall be additional recycling and trash containers for blocks more than three hundred (300) feet. The locations of these additional bins will be determined by the City staff based on pedestrian traffic.
- Every trash container shall be accompanied by a recycling container. Side-by-side arrangements for collecting recyclables and non-recyclables is encouraged wherever possible. (See examples in P-2.12)
- Recycling and trash containers shall also follow a similar palette as other street furniture elements.
- Recycling containers shall have an easily visible recycling symbol and shall clearly spell out the items that may or may not be recycled.
- Recycling and trash containers shall be maintained by the property owner.

Bicycle Racks

- Bicycle racks shall be placed as needed in the Streetscape Zone and shall be installed between street trees, planter boxes and other street furnishing.
- Racks shall be located so that an average of two bicycles may be parked every two hundred (200) feet.
- Maximum distance between any two rack locations is not to exceed six hundred (600) feet.
- Bicycle stands shall complement the streetscape design, material and color pallet within the area. (See P-13)

P-13: Examples of Bicycle Racks



Source of pictures from left to Right

<http://www.landscapeforms.com/en-US/products/pages/Accessories.aspx>, Accessed January 07 2008

<http://www.cyclesafe.com/innovation.tab.aspx>, Accessed January 07 2008

http://www.pilotrock.com/bike_racks_parking/bollard.htm, Accessed January 07 2008



Bollards

- Bollards shall be used as accent features in certain areas such as excess land places, enclosure areas, and in medians.
- Bollards can be luminary or non luminary.
- The City shall have final approval of style, construction, installation and maintenance of bollards.
- Bollards shall be used as public art and may be varied in their design and style subject to the final approval of the City.

P-14: Examples of Bollards



Source of pictures from left to Right

<http://www.reliance-foundry.com/ornament.htm>

<http://www.landscapeforms.com/en-US/products/pages/Accessories.aspx>, Accessed January 07 2008

P-15: Bollards as an art feature



Source of pictures from left to right

<http://www.enviroelements.co.za/client%20designs.htm>

<http://bollards.org.uk/images/st-malo.jpg> ,

<http://www.nyscience.org/pressroom/article/solarwalk>



Signage

Public signage includes road signs, way finding, and other standard MoDOT signage. Specific Districts, retail and commercial signage is discussed in [Chapter 3- Building Types and Signage Guidelines](#).

Bus Shelters

Bus shelters shall be ADA compliant and placed in strategic locations as specified by the City based on Metro bus routes. Currently, Olive Boulevard is a designated bus route and frequent bus stop locations are located throughout the Olive Boulevard corridor.

Planter Boxes

- Planter boxes shall be aligned with and placed between the light poles and street trees in the Streetscape Zone. (Refer Figure 2.2)
- Planter boxes shall be constructed of sturdy, easy maintenance materials such as cast stone or granite.
- Planters shall be anchored to the ground to assure the safety of the public and to minimize damage from regular maintenance activities.
- Plantings are defined in Appendix A.
- Planter designs shall be varied from District to District to complement the character within each District. (See P-2.16)

P-2.16: Low planter box- Parkway district



Source of pictures from left to right
<http://www.metrotrees.com.au/projects/OliveOleaeuropaetaTolley>
[sUprightprojects.html](http://www.nedhikeimages.org/)
<http://www.nedhikeimages.org/>

Other Street Amenities

Apart from regular street design, streetscapes shall provide for periodic “surprise element” in the form of public art. These elements may be stand alone structures or interactive art pieces, gateway elements or artistic gathering places. “Surprise elements” not only play an important role in attracting the public, but also help



P-2:17: Public art- standalone pieces and gateway elements



Source : http://www.unrulyimages.com/publicart/community/bigdaddy/localtotems10_bg.html
<http://www.pedbikeimages.org/>
<http://dpcoastalarts.org/news.html>

P-2.18: Public art as gathering or seating spaces



Source : <http://www.pedbikeimages.org/>



create an identity within each District. Some pictures of such elements are shown in P-2.17 and P-2.18.

Post boxes are also desired on the street. These structures shall be integrated with the overall design of the streetscape and their locations shall be decided by U.S. Postal Service.

Utility Equipment and Poles

Utility equipment is frequently placed in the public right-of-ways. This equipment may result in unsightly sidewalks, creates conflicts with pedestrian traffic, and may cause congestion during utility maintenance of the equipment. Utility boxes mounted at street corners may block pedestrian traffic.

- New utility upgrades and service to development parcels shall be installed below ground.
- Above ground support for utility service shall be placed to avoid clutter within the streetscape and must be approved by the department of public works in coordination with MoDOT and St. Louis County
- Utility connections and support shall be located to avoid conflict with pedestrian movement in the right-of-ways.
- Utility lines (wires) shall be placed underground in the public right-of-ways.



P-2.19: Before and After Pictures of Streetscape



Source ARCTURIS



DISTRICT GUIDELINES

Olive Boulevard enjoys a wide variety of architecture; commerce and culture that can be enhanced and perpetuated by design guidelines that acknowledges this diversity. Recognizing the strength of this diversity resulted in the concept of “districting” the corridor in an effort to define the unique and distinctive “personality” of the area investments and markets. These “Districts”, or neighborhoods, are categorized based on similarities in land use patterns, economic similarities, density, road conditions, and in general the perceived “theme” of the area. Acknowledgement of the strengths of each district allows for market driven redevelopment opportunities to emerge, adding strength to the corridor and the commercial market generally. The Corridor shall be divided into four (4) districts as listed below: (Refer Map-VIII)

1. Industrial District – Skinker Boulevard to Kingsland Avenue
2. Parkway District – Kingsland Avenue to Midland Avenue
3. International District – Midland Avenue to Grant Avenue
4. Interstate Commercial District – Grant Avenue to I-170

Based on the uniqueness of each district, guidelines to enhance and complement each distinct market are listed below.

INDUSTRIAL DISTRICT

The “Industrial District” extends from Skinker Boulevard to Kingsland Avenue. This area is presently developed as light industrial warehouse. Although some older residences and retail stores are scattered through the area, the industrial uses are most prominent and will remain the dominant market use. The industrial properties

P-2.20: Pictures from Industrial District showing current conditions related to edge treatment, accessibility and massing, historic structures, green spaces etc.



Source: Arcturis



shall use design elements related to screening, signage and buffering that benefit industrial type development and planned office and warehouse parks.

Many of the existing structures are single story, pre-engineered and block buildings, typical of office/warehouse construction. Due to the business of the area, there is considerable truck traffic making circulation, access and visibility key issues in this area.

The older structures are located on small lots situated close to the street giving this area the feel of a “downtown” with narrow streets, zero setbacks and one and two story buildings. Many of the structures are in need of rehabilitation although recently, there has been some reinvestment activity.

Guidelines

- Incorporate public art into streetscapes and on private property that imitates industrial district activities and reflects the commercial aspects of the land uses in this District.
- At ingress and egress points, plant low hedges and screening plants to improve visibility, define access points and add interest to the streetscape.
- At the triangular intersection of Sutter, Maple and Westgate, create a green space or small urban park including the use of public art and amenities to enhance the streetscape.
- Any street modifications or enhancements in this area shall take into consideration the heavy commercial truck traffic generated by the industrial developments. Street design will provide for wider turns, heavy duty asphalt, concrete aprons at all entrances and concrete products for street, sidewalks, and curbs.

PARKWAY DISTRICT

The “Parkway District” extends from Kingsland Avenue to Midland Avenue and is substantially dominated by Heman Park on the south side of Olive Boulevard. Other development within this district includes residences, commercial and light industrial uses.

p-2.21: Building placement creating triangular areas



Source Arcturis



Parcel orientation along this section of the corridor changes from zero to forty five degrees angle alignment, creating odd shaped lots. Angled building placement creates unusual triangulated parcel configurations that can obstruct visibility and impede ingress and egress safety.

Guidelines

- Streetscape and public amenities shall be installed that create an “urban park like” appearance and facilitates pedestrian traffic as well as vehicular traffic movements in the area.
- Master plan and development of a farmer’s market to stimulate gathering places and pedestrian movement.
- Create small “pocket parks” on land remnants.
- Any redevelopment plans shall include zero angle frontages along Olive Boulevard.
- Stormwater retention shall include rain gardens, bio-swales and other water management designs that translate into visual planted areas along the right of way and makes use of triangulated remnants and land.
- Create consistent banner and signage graphics that suggest “Parkway District” activities.
- Development of decked parking to alleviate vehicular congestion and allow for more dense development on existing parcels shall be considered for all development and redevelopment submittals.

INTERNATIONAL DISTRICT

The “International District” extends from Midland Avenue to Grant Road. This portion of Olive Boulevard is primarily commercial, including shopping centers; free standing buildings, industrial uses and large floodplains. A diverse mix of international ownership and tenancy adds excitement to this District and advances international interest with a variety of Asian, Latin, and African American shops, restaurants and stores. This massing of ethnic foods and services represents an important opportunity for the creation of a regional market force and a distinctive sense of place.

The River Des Peres floodplain impacts this District by prohibiting development of permanent structure on any land within the 100 year floodplain elevations. (See Map-II) Use of this restricted land may be used for parking, temporary structures, and as a park land area or public gathering place.

Guidelines

- Use of public art that complements international diversity.

P-2.22: Herman



Source Arcturis

P-2.23: Choice of elements that emphasize ethnic diversity





- Use floodplain areas as locations for open market areas, community gathering places, parking and parkland development.
- Create small plazas, seating areas, and outdoor dining areas along the corridor.
- Olive Boulevard medians shall be designed with landscaping, public amenities, and art work that reflect the international influence in the area.
- Flags of various countries used as public art and identification of diversity shall be strategically installed as part of the public art.
- Use of unique signage that creates interest and identifies the ethnic appeal of the district shall be installed.
- Use art work on sidewalks, landscaping, walls, and other structures that identify the international diversity of the district.

INTERCHANGE DISTRICT

The “Interchange District” extends from Grant Avenue to the east side of I-170 interchange and includes a mix of new and older office/warehouse space; uses ranging from self-storage units to carpet and lumber stores. Some of the buildings in this area are older and represent an excellent opportunity for redevelopment. Parcels are somewhat larger in size and assembly of land for large mixed use commercial development may be possible. The Interstate 170 east quadrants at this location have not been developed as densely as possible therefore, the possibility of hotel, office, and office warehouse mixed use and planned development is possible at this location.

P-2.24: Highway visibility can be used to promote businesses that need transient traffic



Source Arcturis

Guidelines

- A planted streetscape including public amenities and art work that define the District shall be constructed.



- A master plan of the two east quadrants of I-170, including the preparation of an implementation strategy and finance plan that identifies incentives and options for city participation in development activities, shall be prepared prior to re-parceling and subdivision of this area.
- Encourage the redevelopment of the area by working with existing land owners and future developers to plan and implement larger, denser commercial development.
- Consistent signage throughout the District shall be implemented.

Olive Boulevard Design Guidelines

University City, MO



BUILDING TYPES AND SIGNAGE GUIDELINES

CHAPTER - 3



BUILDING TYPE GUIDELINES

Pursuant to the Future Land Use Plan (Refer Map-IV), adopted by the City as part of the Comprehensive Plan Update 2005, these guidelines identify various building types that are suitable for the Olive Boulevard corridor. Structures that fall into a certain “building type” categories will follow the guidelines for that particular category.

The categories covered in these guidelines are:

1. **General Principles**
2. **Multifamily Residential**
3. **Small and Medium Sized Commercial**
4. **Large Retail** (*Big box or Anchor Stores*)
5. **Mixed Use Development** (*Commercial, Residential, Institutional, and Recreational*)
6. **Recreation, Entertainment and Institutional**
7. **Industrial**
8. **Parking Garages and Decked Parking**
9. **Historic Structures**
10. **Open Space Development and Temporary Structures**
11. **Vacant Properties**

GENERAL PRINCIPLES

The following principles shall be applied to all future land use categories along Olive Boulevard as shown on Map-IV:

- Slopes greater than fifteen (15) percent are not to be developed except for trails and park facilities.
- Civil engineering shall conform to the natural contours of the site eliminating the need for extensive cutting, filling or terracing.
- When grading is necessary, contours shall emulate the topography of the existing slope and shall not be sculpted into exaggerated slopes or flat sites.
- Hydric soils¹ are good for drainage of stormwater while the cost of transforming hydric soils into compacted developable land is high, therefore these soils, when found on site, shall be documented and protected.
- Valuable view sheds shall not to be obstructed, therefore, buildings shall be sited to maximize view potential.
- New building sites and infill sites are to be prepared at similar elevations to existing structures to insure continuous façade elevations.
- The historic elements of the City and its structures shall be preserved and respected when impacted by new or re-developed improvements within their environments.

¹ **Hydric soils:** Soils that are wet frequently enough to periodically produce anaerobic conditions, thereby influencing the species composition or growth, or both, of plants on those soils. Available at <http://www.dnr.state.md.us/criticalarea/glossary.html#h>, Accessed April 02, 2007.



- Natural and cultural resources shall be protected and preserved.
- Site planning shall integrate mature and native trees and existing vegetation into site plans and building designs.
- Indigenous species are preferred in landscaping while invasive species shall be avoided.
- All planning concepts shall be accompanied by implementation planning and finance strategies to assure market driven and financially feasible development on a timely basis.
- All redevelopment shall take into consideration traffic flow and infrastructure alignment to assure maximum connectivity to major connector roads.
- Use of green buffers such as green screens, evergreen shrubs or trees shall be installed between non-complementary land uses
- Structured development, whether new or redeveloped, shall advance the characteristics of the District and preserve the unique identity of the District.
- Environmentally responsive development shall be encouraged.
- Green building strategies are encouraged to develop sites in a sustainable fashion. A checklist of minimum areas of green building practices follows:
 - Promote efficiency in energy usage through appropriate building orientation, materials and equipment selection
 - Efficient use of water through landscaping, creative water management techniques and paving choices
 - More dense, compact development is encouraged

Principles for Design and Storm Water Management

Low Impact Development (LID)² techniques that allow neighborhoods to develop in a sustainable fashion are encouraged. LID is an approach to site design and storm water management that seeks to maintain the site's pre-development rates and volumes of runoff, which is accomplished through the minimization of impervious cover, strategic placement of buildings, pavement and landscaping, and the use of small-scale distributed runoff management features that are collectively called "Integrated Management Practices" (IMPs).

The suggested management features here relate to such water control methods as "bio-retention areas," "permeable paving," and "vegetated roofs" that may be appropriate for consideration areas along Olive Boulevard.

Bio-retention: Bio-retention is an integrated stormwater management practice that uses the chemical, biological, and physical properties of plants, microbes, and soils to remove or retain pollutants from stormwater. These retention areas are usually designed as shallow depressions with planting soil mix and a variety of plant material. In addition, they are usually designed as a conveyance system.

² **Low Impact Development (LID):** Refer <http://www.epa.gov/owow/nps/lid/> for detail information on site development using Low impact techniques. Accessed April 02, 2007.



Applications include:

- Individual lots for rooftops, driveways and other site impervious surface infiltration
- Shared facilities located in common areas
- Land areas within loop roads and cul-de-sacs
- Shared public alleyways
- Landscaped parking lot islands
- Right-of-ways
- Common landscaped areas in apartment complexes or other multi-family housing locations
- Integration into garden areas
- Integration into large institutional facilities such as hospitals, large industrial sites, airport(s) and university campus sites

Permeable Paving is the preparation of site surfaces that accommodate pedestrian, bicycle, and vehicular traffic while allowing infiltration, treatment, and storage of stormwater. These methods are applicable to various levels of development and may be applied as a standard for the City associated with stormwater maintenance and overall City aesthetics.

Applications include:

- Open-grated concrete or hot-mix³ asphalt pavement
- Aggregate or plastic pavers
- Plastic grid systems
- Sidewalk scoring

Massing and Orientation

The architectural style and location of structures needs to be fully understood in terms of building massing, proportions and details that contribute to the authenticity of the building style and function. The designation of an architectural style requires total commitment to that style in the design of all components of the structure. In those cases in which an architect develops a unique style or a composite of established styles, a consistent application of rules and logic of the building design shall be clear and invariably evident.

Any new development shall consider the following design elements to assure any new investment is compatible with adjacent property development:

MULTI-FAMILY RESIDENTIAL DEVELOPMENTS

- | | |
|--|------------------------------------|
| ▪ Form | ▪ Placement and Style of Windows |
| ▪ Scale | ▪ Building Material |
| ▪ Design and Function | ▪ Decoration |
| ▪ Mass | ▪ Roof Style and Pitch |
| ▪ Height | ▪ Parking Layout and Location |
| ▪ Finished Floor Height | ▪ Landscaping and Public Amenities |
| ▪ Types and Location of Doors or Storefronts | |

³ Hot-mix is similar to standard asphalt except that the aggregate fines are reduced, leaving a matrix of pores that conduct water to the underlying aggregate base and soil (Cahill, et al., 2003).



Development requirements for this land use category include:

- Townhouses
- Duplexes
- Live-work units⁴
- Apartments
- Condominiums
- Planned unit development

More compact than low-density development, these subdivisions produce higher volumes of commuter traffic.

Examples of block layouts are shown in Figure 3.1. A half (1/2) acre parcel has been considered in these diagrams. Guidelines for this category are listed below:

Density and Height

- The minimum allowable density in this category will be 15 units per acre.
- These dwelling units shall be stacked vertically.
- Buildings shall be at least two and a half (2.5) stories high but will not be more than seven (7) stories high.
- Building height may include parking at ground level or within a parking garage.
- The modulations in density shall not be abrupt.
- An increase of not more than fifty percent (50%) of adjacent density shall be considered to ensure that the changes in density are gradual.
- Commercial activities shall be allowed and encouraged in this category when the density is more than thirty (30) units per acre or when the units are specifically designed as live-work units.

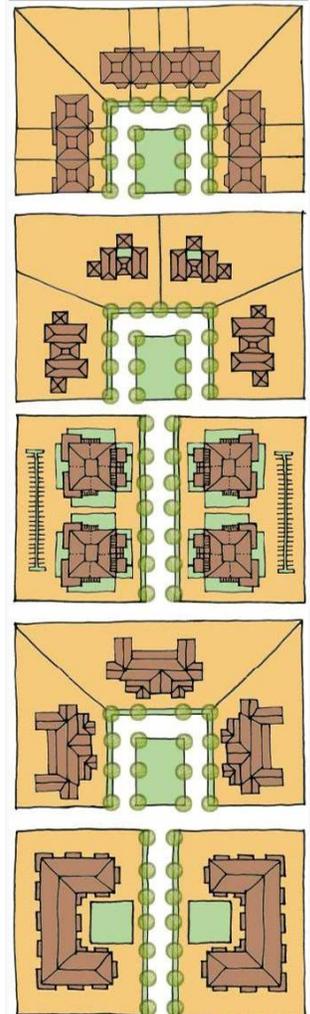
Building Massing and Orientation

- Structures on corner lots shall have no blank walls facing the street and shall incorporate pop-outs, a variety of building massing techniques, and appropriate window placement and other design features working in scale and harmony with the configuration of any given corner lot dimensions.
- Facades shall be designed as pedestrian friendly and shall make walking a pleasurable and safe experience.
- Homes shall be oriented in such a manner that the majority of primary living space receives direct sunlight.

Parking

⁴ The term “live-work” effectively describes accommodations that are specifically designed to enable both residential and business use. This differs from ordinary “work from home conditions” in its nature and in the intensity of business use that may be involved. While in “work from home”, the work use of a unit is small scale and usually secondary to the domestic use, in a “live-work” unit amount of space devoted to the work use or that the work element is designed to accommodate more workers than just the resident and may be designed in a flexible form to encourage business expansion. Available at <http://www.rics.org/Environmentalandlandconsultancy/Sustainability/Sustainabledevelopment/liveworkarticle040906.html>, Accessed on April 04, 2007

Figure 3.1.: Example of site layouts for multi-family or condo type units



Source: ARCTURIS



- Parking shall be off street and not visible from the street.
- Surface parking or decked parking shall be sensitive to street character and shall not result in large blank facades.
- Parking garage design shall be incorporated into the overall building design to enhance aesthetic conditions for passers by.
- Shared garages and decked parking shall be at the rear of buildings unless otherwise permitted by the City.
- Garages, decked or underground parking shall be used for all buildings exceeding 20 units per single structure.

Architectural Guidelines

Entry elements

- The principle entry shall be parallel to the street, and at least one pedestrian entrance shall be clearly visible from the street to ensure safety.
- Building design shall respond to the Midwest's snowy winters and hot summers and shall include dual doors to avoid abrupt climate changes.
- Porch like structures (enclosed or open) or other innovative entry elements shall be designed and proportioned to be in harmony with the structure.
- Porches, when serving as a main entry element to the structure, are to follow principles as shown below:
 - Minimum depth of ten (10) feet is required
 - At least 30% of the horizontal length of the facade or fifteen (15) feet clear, whichever is maximum, shall be covered by a porch
 - Roof form over the porch to be consistent with building style
- Porches or other entry elements for all residential buildings shall be accessed directly from public street(s) at the frontal façade of the structure or pedestrian easement and must be visible from that street.
- Porches may extend six (6) feet into the setback of the front façade if in proportion to the overall architectural style of the building.
- Front porches are to have a minimum depth of six (6) feet.

Windows

- While overall design composition plays an important role in the location of windows, varieties in shape, size and detailing may provide important design characteristics and aesthetic value to structures.
- Light and vistas directly relate to the health and welfare of people and shall be considered in any residential design.
- Other elements, including choice of material, overhang and weather protection shall be considered in window design.
- Recessed windows (at least 6" from the façade surface) may create an interesting massing composition created by the play of light and shadow while providing weather protection and shall be considered as a design element for structures.



- Window size and location shall be placed to allow visual access to the surrounding area.
- Window placement shall consider privacy for the subject property and adjacent properties.
- All windows shall be energy efficient and no single pane glass shall be used within structures.
- All street facades shall have windows covering at least 25% of the facade area.
- Overhangs, awnings and trellises which allow the low winter sun to penetrate the structure while blocking the high summer sun shall be considered during the design process and shall be considered in the overall design and massing of structures.
- Trim molding, lintels and window sills shall be used to express a level of detail on the façade, consistent with the façade design and the overall design of the building.

Materials and Colors

Exterior building materials and colors make a strong contribution to the quality and richness of buildings and constitute a significant visual impact to dwellings. Therefore, building colors shall be selected to provide aesthetically pleasing and compatible detail to materials used in the construction of structures on adjoining properties as follows:

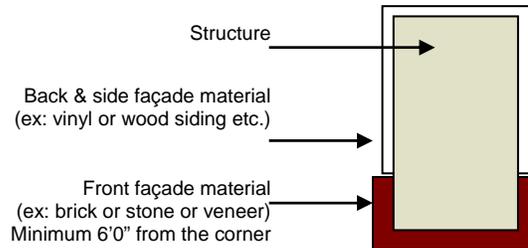
- Select appropriate materials that are compatible in quality, texture and color with neighboring structures.
- Material and color selections infill developments shall be selected to maintain and preserve the characteristics of neighborhoods.
- Materials of quality and longer lifespan shall be selected to reduce the environmental impact and, if used within manufacturer's guidelines, add to the character and style of the structure. Life span of materials depend on the following factors⁵:
 - The material; its physical structure and chemical composition
 - Quality of construction; where and how materials are used
 - Local environment; the climatic, physical and chemical conditions
 - Long term maintenance and management
- Building materials and architectural finishes shall possess physical properties that respond to the climatic condition of the central Mid-western region and allow for appropriate and convenient maintenance procedures that ensure a long lifespan for the selected materials.

⁵ Bjoern Berg, Howard Liddell, Bjørn Berge, Filip Henley. 2001. Ecology of Building Materials. Pg-9, Architectural Press.



- Material changes are not to occur abruptly at the external corners and a minimum of six (6) feet from the corner of the structure shall be required before any change in material occurs.

P-3.2: Material changes at the corners



Source: ARCTURIS

- The use of natural materials is encouraged and the manner in which a material is applied shall be consistent with its physical properties.
- Use of rapidly renewable and/or recycled materials is encouraged.
- The choice of materials shall be properly scaled to the overall proportions of the structure.
- Building materials are not to be individual components of a building, but shall be incorporated into the larger design palette consistent with the style of the structure.
- The physical properties of materials, such as texture, color and weight, shall maintain an aesthetic and stylistic relationship to each other, other materials used, and the architectural design of the structure.
- Building trim and accent areas may feature brighter colors, including primary colors, however, trim and accent areas shall be part of an appropriate palette representing cooperative color palettes that blend and complement other colors used on the structure and within the neighborhood area of development.

Roofs and Eaves

- The height of the façade and its proportional relationship to the roof are principle components of various architectural styles, therefore, the façade and roof line shall communicate with the style of the building.
- Roofs have three principle shapes, including gabled (gambrel is modified gable roof), hipped (mansard is modified hip roof), or flat-built up.
- Each of these roof designs have many variations and shall be designed to be consistent with the overall design of the structure.
- Eaves are a critical component at the junction between the wall plane and the roof plane. Building elements shall be considered in the detailing of eave design for residential structures, including overhang dimensions, shape and proportion of the structure and rain gutter placement and configuration.
- All residential buildings shall have hipped or gabled roofs.
- Flat roofs shall be used only when appropriate to the architectural style of the structure.
- Overhang dimensions of eaves shall be designed to provide required weather protection for the building.



- Rain gutter placement and their configuration along the eaves shall be designed specifically to carry rainwater runoff and snow melt from the roof.
- Cornices shall be used as structural trim and not merely as decorative elements and their design shall be consistent with the architectural style of the structure.

Landscaping and Edge Treatment

Front yard enclosures such as fences, berms and landscaping shall be used to communicate values, aesthetic enhancements, protection of property and regulation of neighborhood interaction. Front yard landscaping is a means to express individual taste and render design diversity to the neighborhood, thus making walking, biking, and other forms of interaction with the property a pleasurable experience as follows:

- Landscape features shall exhibit a range of colors that is complementary to both buildings and the settings.
- Use of low-impact techniques such as rain gardens is encouraged.
- Use of indigenous species rather than invasive species is preferred.
- Edge treatment such as fences, low height hedges and flower beds shall be used to create privacy by blocking direct view into structures.
- Edge treatments shall be continuous on both sides of streets whenever possible.

Rear Elevations

- At least 30% of the rear façade of structures shall include doors or windows to allow light and ventilation into the structure and to provide safe egress from the structure.
- Use of patios and decks in backyards are encouraged.

Additional Guidelines for Multi-Family Residential

When developing larger tracts of land under this land use category, a mix of housing types follow:

- Townhouses
- Duplexes
- Villas
- Live-work units
- Apartments
- Condominiums

Guidelines for large tract development follow:

- Development of more than fifteen (15) acres but less than forty (40) acres shall provide at least two (2) housing types.
- Development of more than forty (40) acres but less than seventy (70) acres shall provide at least three (3) housing types.



- Development of more than seventy (70) acres but less than one hundred (100) acres shall provide at least four (4) housing types.....
- Residential Development above one hundred (100) acres shall be developed as mixed density and mixed-use planned development.

Facilitating the development of mixed housing densities and building styles creates greater housing choices for residents including first time homebuyers and seniors. Developers are encouraged to provide a range of housing types to promote diverse community characteristics including family composition, income levels and age groups.

Housing types shall vary by lot size and form. However, homes shall be well-integrated and share some commonality in design elements. Diversity in housing types break the monotony of singular design patterns, add value to the land and create a sense of “place” to the neighborhood.



SMALL AND MEDIUM SIZED COMMERCIAL STRUCTURES

This classification includes small and medium sized businesses and service establishments along Olive Boulevard. These commercial locations shall allow for a pedestrian-friendly environment.

- Small sized commercial developments are defined as retail stores, restaurants, offices, daycare facilities and other business establishments that shall have a maximum footprint of 5,000 SF.
- Medium sized commercial developments are defined as retail stores, restaurants, offices, daycare facilities and other business establishments that shall have a footprint of more than 5,000 SF but less than 10,000SF.

The presence of smaller retail stores creates a "friendlier" appearance by providing variety, breaking up large expanses of parking and open land, and exhibiting the extent of the site's retail opportunities. Windows and window displays (transparencies) of such stores shall contribute to the visual interest of exterior facades.

Lot coverage, Setbacks and Height

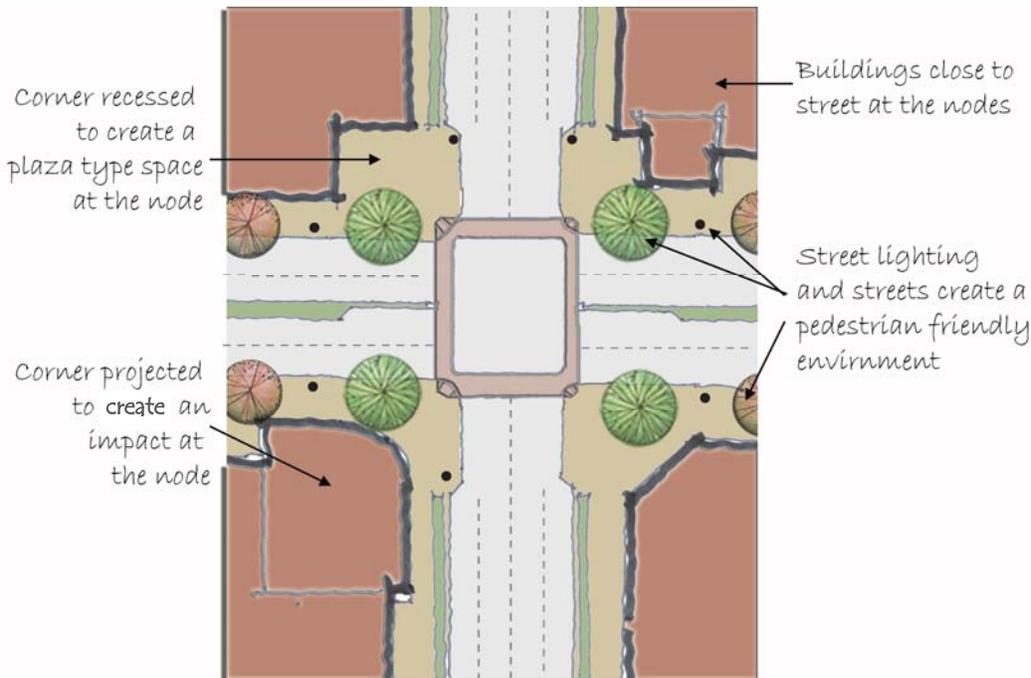
- A maximum of 100% lot coverage shall be allowed in this category, however, the lot coverage shall not be less than 60%.
- Commercial establishments in this category shall have zero (0'0") feet to a maximum of eight feet (8'0") setbacks from the property line.
- Set back areas shall be used in a variety of ways including, but not limited to, outdoor dining areas, placement of public art, landscaping, planter boxes, fountains, pedestrian movement such as window shopping, festive decorations such as holiday decorations.
- Small courtyards created by building envelopes may become public gathering places for bands, artists display areas, restaurant or coffee shop seating.
- For establishments that are more than 7,000 SF, the setback variance of 50' shall be granted at the discretion of the City to create a single row of parking.
- Courtyard areas shall have a maximum depth and width of 20' and shall be adorned with some type of temporary structures such as kiosks, bollards or similar innovative treatment to demarcate the area.
- Buildings within this type of land use shall be at least 60' in depth to accommodate retail users' space needs.
- Removal of trash and the delivery of goods and merchandise shall occur behind building structures to avoid congestion, noise, litter, and unsafe conditions at the storefronts.
- Building structures shall be one (1) to seven (7) stories in height. Structures less than two stories though allowed are discouraged.
- The density of these structures shall increase by 25% but less than 50% at corners, nodes.
- Various corner treatments as shown in Figure 3.3 shall be incorporated in the design of these structures.

P-3.1: Examples of outdoor spillover spaces





Figure 3.3.: Corner/ Nodal Retail areas

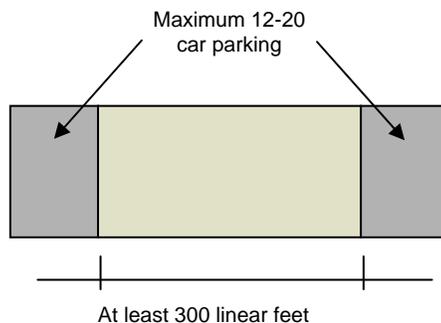


Source: ARCTURIS

Parking

- Parking shall be provided as decked parking garages or surface lots (Refer to *Parking Garages and Decked Parking* for more information on these structures).
- In case of surface lots, groupings of not more than two rows of parking shall be visible from the street and additional parking required shall be provided behind structures.
- Parking lot spaces shall be at least 300 linear feet away from the nearest secondary street or other grouped parking spaces. (See Figure 3.4)
- Parking areas are to be separated from sidewalks by decorative parapet walls, landscaped flowerbeds, fences or designed common area elements all planned to enhance the property but they shall not impede visibility of buildings, signage and storefronts.

Figure 3.4: Grouped Parking



Source: ARCTURIS



Architectural Guidelines

Building Massing and Details

- Building style that contributes to scale, commercial variety, and additional investment opportunities for commercial entities is encouraged.
- Buildings shall provide a distinct “base” through the use of materials, texture or massing.
- Architectural style shall maintain the small retail building character with adequate detailing.
- Design elements shall consider, but are not limited to, providing offsets or bays, strong base materials, varying storefront treatments, multi-pane windows, and varying the bulkhead treatment.
- Buildings shall provide generous amounts of windows, skylights, or similar natural-light-producing products to create ground floors with a “transparent” quality and to enhance the use of natural light and reduce energy consumption.
- No window shall consist of reflective glass
- Buildings shall have architectural features and patterns that provide visual interest at a pedestrian scale, reduce massive visual effects, and recognize local character.
- Continuous architectural elements for establishments that have a frontage of less than 60’ shall be provided.
- Horizontal elements shall be located at the joining of base and sill, awnings, parapet coping and other similar locations and shall include various material, texture, projecting surface, molding or other similar methods of structure detailing.
- For commercial establishments that have more than 60’ of street frontage, the expression of architectural or structural bays shall be created through changes in plane no less than 1’ in width, such as an offset, reveal, or projecting rib at a minimum of every 60’.
- Other techniques used to break the monotony of frontages that are more than 60’ wide include but are not limited to the following:
 - Color change
 - Texture change
 - Material module change
 - Wall plane change

Materials and Colors

Exterior building materials and colors comprise a significant part of the visual impact of a building. Therefore, materials shall be aesthetically pleasing and compatible with materials and colors used in adjoining properties as follows:

- Facade colors shall have low reflectance, be subtle, and blend well with the environment and not cause abrupt changes.
- Building trim and accent areas may feature brighter colors, including primary colors, but neon tubing shall not be an acceptable feature for building trim or accent areas unless specifically approved by the City.



- Front facades or facades visible from public streets that are not screened or abutting any form of public connectivity (walkways) shall not include blank walls (a wall without windows, showcases, displays, pedestrian entries) in any first-floor building wall except as required for the structural integrity of the building.
- Predominant exterior building materials shall be constructed with high quality materials such as:
 - Brick masonry
 - Large wood timbers
 - Sandstone
 - River rock and other native stone
 - Tinted, textured, concrete masonry units
 - Recycled and ecologically friendly materials
 - Other similar high-quality building material

Roofs and Awnings

- Buildings shall provide protection for pedestrians from adverse weather conditions and utilize overhangs, marquees, and awnings at entrances, along pedestrian pathways, and at transportation waiting areas.
- Variations in roof lines shall be used to add interest and to reduce the massive scale of larger buildings.
- Roof features shall complement the character of adjoining neighborhoods.

P-3.2: Use of Color texture, massing, various architectural details and signage elements that create a pedestrian friendly Streetscape



Source: ARCTURIS



- When possible roof structures shall utilize sources of natural light (skylights) to increase energy efficiency and occupants' well being.
- Roof design shall contribute to the reduction of stormwater runoff by managing water where it falls or accumulates.
- Parapet walls shall conceal flat roofs and rooftop equipment such as Heating, Ventilating, and Air Conditioning (HVAC) units from public view. .
- When roofs are used as expanded business areas (roof top or terrace seating for restaurants or expanded space for offices) they shall be constructed to protect occupants and be integral to the structural integrity of the entire building structure.
- Awnings shall extend no longer than a single storefront or one (1) awning per tenant if appropriate to the overall design, functions, and appearance of the storefront.
- Matching, retractable, fire-retardant awnings shall provide thematic character providing for creative and consistent signage and other branding, as well as shelter from climatic conditions.
- Fabric awnings are encouraged; canvas awnings with a matte finish are preferred.
- Awnings with high gloss finish are discouraged.
- Illuminated, plastic awnings are prohibited.
- Awning colors shall be compatible with the overall color scheme of the façade from which it projects.
- Solid colors or subtle striped patterns are preferred however, unique patterns designed for specific retail users that tastefully represent a logo or protect shall be considered by the City.
- Awning structures shall be mounted at a consistent height of seven (7') to seven and a half (7.5') feet above the sidewalk.
- Awnings are temporary structures and are exempt from setback requirements although their placement, material, and color shall be approved by City.

Entry and Windows

- Ground floor storefronts shall have a minimum of 60% transparency, between the height of 2' and 7' above the grade of the walkway enabling visibility into stores and display windows.
- Entries and windows shall be designed at a human scale consistent with street characteristics and shall enhance visitor interrelationship with goods and services presented by the various retailers.
- Window will not consist of reflective glass or dark tinted glass that obstructs visual connection.
- For uses that do not have visual appeal for pedestrians, less transparent surface ratios may be used if approved by the City.
- Innovative designs for breaking the monotony of such facades that go beyond these guidelines in the massing and detailing section above, shall be at the option of the developer and shall be considered by the City.

Signage

- Signage shall follow the signage guidelines provided in this section



LARGE COMMERCIAL ESTABLISHMENTS

The buildings in this category include larger business and service establishments along Olive Boulevard. These commercial locations shall allow for visual interest, identity and character. The intent is to create an environment, human in scale, where structures blend into the totality of their environment. The entire site shall have an overall pleasing appearance in scale and aesthetic composition.

Large commercial developments shall be sensitive to adjacent property and will take into consideration all residential development in nearby neighborhoods in respect to noise, traffic, circulation, lights, trash pick up, and any other conditions related to larger building imposing their conditions on residential structures. Large commercial buildings include, but are not limited to:

- large grocery stores
- power centers
- big box stores
- retail stores
- pharmacy
- hotels and motels
- car sales
- home care centers
- fast food restaurants
- fine dining
- banks and ATMs
- office buildings
- medical office parks
- office buildings
- entertainment venues
- large retirement facilities

Retail stores (grocery, pharmacy, big box, anchor stores, and entertainment venues) are anticipated to be single story structures with their own distinguishing architecture and will be referred to as “principal structure” buildings. These principal structure buildings support smaller businesses that may be constructed on the same parcel or near the larger store (known as outparcel development). Smaller retail stores, in this configuration, are near the street and share parking, utilities, ingress and egress and signage with the principal structure.

Other structure uses that fall into this category are office buildings, medical buildings, hotels, some entertainment venues, and banks. These uses may be more than single story and are architecturally more flexible blending into surrounding development. These buildings may have superior architectural designs and become landmark venues in the area.

Lot Coverage and Height

- Maximum lot coverage of 80% or more shall be allowed in this category.
- Lot coverage shall not be less than 60%.
- Buildings within this land use category shall be at least 60' or greater in depth to accommodate retailer parameters.
- Buildings that have more than a 20,000 SF footprint shall act as principal structure with ancillary, smaller commercial uses (less than 5,000 SF) located closer to sidewalks (as described under small and medium sized commercial).
- Ancillary building placement shall take into consideration their visual impact on the principal structure(s) and will not impede that visibility. (See Figure 3.5)



- For retail developments containing multiple tenancy, common wall adjacency shall be required to create a continuous, undisturbed façade providing for aesthetic appeal and safety to pedestrians by limiting structure separation with drives and loading dock areas.
- Height and number of story requirements shall vary by use of building as follows:

Type and examples of buildings	Minimum number of stories	Minimum height
Retail structure <ul style="list-style-type: none"> ▪ large grocery stores ▪ big box stores ▪ retail stores ▪ pharmacy ▪ car sales ▪ fast food restaurants ▪ fine dining 	One (1) floor	14 ' plus parapet
Office type uses <ul style="list-style-type: none"> ▪ hotels and motels ▪ entertainment venues ▪ banks and ATMs ▪ office buildings ▪ medical office parks ▪ office buildings 	Two and a half (2.5) floors	30 ' plus parapet

Access and Buffering

- One entry from Olive Boulevard shall be allowed for ingress and egress. However this entry must be approved by MoDOT or St. Louis County
- The primary point of ingress and egress shall include wide curb cuts designed to accommodate truck traffic.
- A secondary point of ingress and egress shall be provided for rear entry deliveries, trash removal and service trucks.
- The primary point of ingress and egress shall be landscaped and shall be a location for water retention designed to serve as an aesthetic visual feature or as bio-retention and landscaped areas.
- Commercial uses shall be buffered from residential development with a transitional buffer zone consisting of green space and the use of greenways, trails or heavily landscaped areas.

Setbacks and Parking

- Front set back shall not be less than 40' or more than 80' allowing for two rows of parking in the property.
- Extra parking areas shall be provided at the side or back of buildings.
- Side setbacks shall not to be more than 80' allowing for 2 rows of parking.
- If set backs are more than 80', ancillary small commercial businesses shall be constructed within an approved master plan concept to utilize large, vacant parking lot areas.



- Parking shall be provided by decked parking garages or surface lots. (Refer to *Parking Garages and Decked Parking* for more information on these structures)
- Zoning requirements related to acceptable parking requirements shall be applied to the development area unless overwritten by these guidelines.
- Extensive parking areas shall be hidden from vehicular and pedestrian traffic views using hedges per Landscaping Section Map and Table in Appendix A.
- Parking areas shall be set back 8' from property lines and used for placement of landscaping using hedges, decorative parapet walls, landscaped flowerbeds, fences or designed common area elements.
- Parking areas shall be well landscaped to minimize the starkness of extensive parking lots.
- Parking lots shall be designed to avoid erosion damage to creeks, adjacent development and surrounding landscaping.
- Whenever possible, permeable paving systems shall be evaluated and installed.
- Larger parking lots shall be designed in smaller blocks as shown in Figure 3.5.
- Parking lots with more than fifty (50) parking spaces shall have curbed planting areas.
- Planting areas in parking lots shall be placed at each end of parking lane rows.
- No parking lane row shall contain more than thirty (30) contiguous parking spaces without a curbed planting area or bio-retention cell.
- Bio-retention cells shall include trees to a minimum height of 20' with a diameter of 10".
- Bio-detention cells shall be designed to contribute to the water management of stormwater runoff in parking lots.
- Parking lots shall incorporate methods for stormwater management utilizing low impact development (LID) techniques. These include but are not limited to the following:
 - End-of-island, bio-retention cell(s) with under-drain(s) and landscaping
 - Bio-retention cells or bio-filtration swales located around the parking perimeter
 - Breached curb drainage inlets (or curb cuts) in the end-of-island bio-retention cells and bio-retention strips to collect runoff
 - Bio-retention cells shall be installed between lines of parking stalls to increase the total treatment surface area of these systems
- Shared side and rear parking and points of ingress and egress are encouraged to reduce infrastructure costs and long term management of developed areas.
- When parking is integrated with buildings in a single structure, the floors dedicated to vehicular parking shall not be counted within the total height requirement of the structure.
- Traffic calming techniques shall be required for pedestrian safety within parking lots.



- Drive-through windows shall be included within setback requirements if consistent with the design and safety management characteristics of the structure.

Figure 3.5.: Elements of site planning for a big box store or large anchor store



Source: ARCTURIS

Lighting

- Night lighting shall be provided for all pedestrian walkways and at stairs and curbs near pedestrian pathways, ramps and crosswalks.
- Landscaping and architectural lighting shall be used to illuminate building facades, building entrances, water features and courtyard spaces.
- All exterior lighting fixtures in parking lots and driveways shall utilize cutoff shields or other appropriate measures to conceal the light sources from adjacent development and right-of-ways.
- All light fixtures shall be designed to avoid spillover glare beyond the site boundaries.
- For those parking lots that are adjacent to residential neighborhoods, the maximum height of light posts shall not exceed 18'.
- Lighting reduction and energy-efficient timer systems shall be required after normal business hours except for lighting that is mandated for general safety and security.
- Total "black out" of lighting in parking lots and structures is prohibited.



Pedestrian Safety Measures

- Walkways at least 8' in width shall be provided along all sides of any parcel that abuts a public street.
- Human-scale lighting shall be provided to create a safe and attractive pedestrian atmosphere.
- Continuous internal pedestrian walkways, no less than 8' in width, shall be provided from any public walkway or right-of-way to the customer entrances of all buildings.
- Walkways shall be designed to connect pedestrian activity such as, but not limited to, transit stops, street crossings, buildings and store entry points, and activity centers and community gathering places.
- Walkways, no less than 8' in width shall be provided the full length of any structure featuring a customer entrance and along any facade abutting public parking areas.
- Walkways shall be designed to abut a minimum 6' wide planting area, except where features such as arcades or entryways are part of the façade.
- All pedestrian crosswalks, internal to any specific development, shall be distinguished by the use of durable, low maintenance surface materials such as pavers, bricks, stamped asphalt, or scored concrete to enhance pedestrian safety and comfort, designed to add to the attractiveness of the walkways and meet American Disabilities Act (ADA) guidelines.
- Bicycle paths shall be provided, where appropriate, at ingress and egress routes and shall be consistent with standards identified and adopted by the City.
- Commercial parking lots shall be furnished with trash receptacles and bicycle racks at strategic locations.
- All pedestrian amenities shall meet ADA guidelines.

Unsightly Necessities

- Provide for the removal of trash and the delivery of goods and merchandise behind building structures or on the side structures with appropriate screening.
- No areas for outdoor storage, trash collection or compaction, loading, or other such uses shall be located within 20' of any public street or walkway.
- Loading docks, truck parking, outdoor storage, utility meters, HVAC equipment, trash collection, trash compaction, and other service functions shall be incorporated into the overall design of the building and illustrated in the landscaping plan so that the visual and acoustic impact of these functions are screened and out of view from adjacent properties and public streets.
- No outdoor storage in designated parking spaces or exterior walkways shall be allowed.
- Noise attenuation techniques shall be utilized.
- Customer loading and unloading zones shall be provided at loading dock areas.



Architectural Guidelines

Building Massing and Details

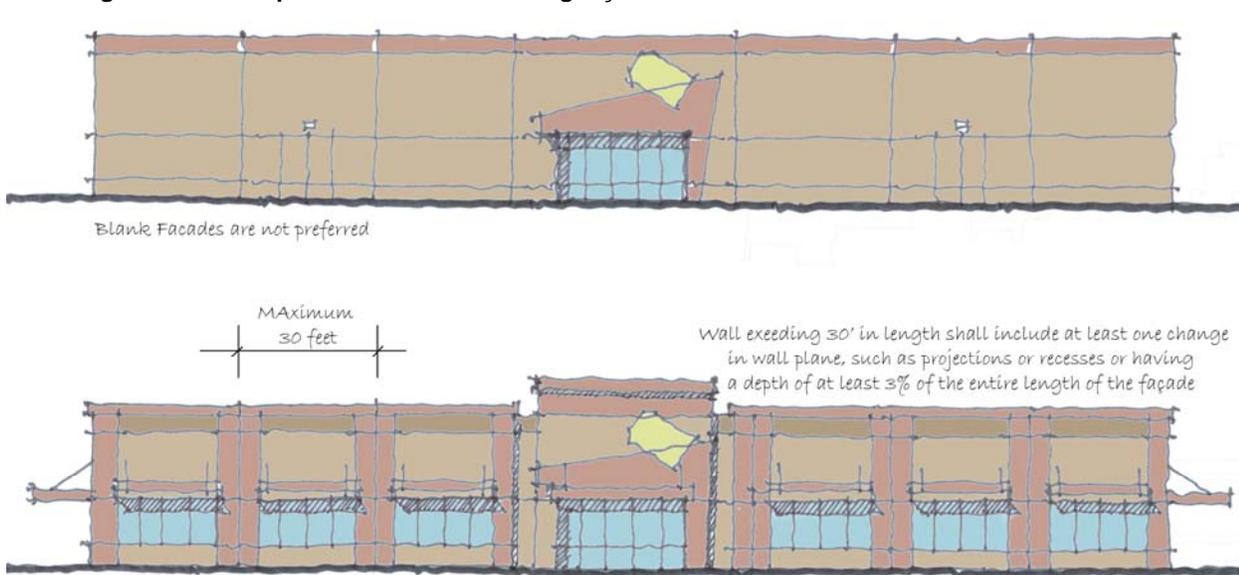
- Building style that adds scale, commercial variety, and additional investment opportunities to commercial entities shall be encouraged.
- Buildings shall have architectural features and patterns that provide visual interest, at the scale of the pedestrian, reducing massive visual effects, and recognizing local character.
- For commercial establishments that have more than 100' of street frontage, expression of architectural or structural bays shall be created through a change in plane no less than 1' in width, such as an offset, reveal, or projecting rib at a minimum of every 60'.
- Suggestions to enrich building frontages that are more than 100' wide include, but are not limited to the following:
 - Color change
 - Texture change
 - Material module change
 - Wall plane change
- Building design that creates or adds to the visual interest of a streetscape and a pedestrian scale is an essential element of infill and redevelopment.
- Building height, scale, and massing shall be used to emphasize important corners, designated points of entry, and to create a visible roofline silhouette.
- The primary mass of structures shall include a secondary projection that reduces the apparent scale, creates visual interest, and promotes compatibility with adjacent uses.
- Building design shall be compatible with adjacent development.
- New projects within existing developed areas with an established pedestrian scale and character shall be compatible with or complement the established proportions and building mass of adjacent developments.
- Buildings adjacent to residential uses shall consider building massing and shall create a transition from the edges of a commercial center inward.
- Smaller and lower building masses shall be located near edges of the any retail center where adjacent buildings are smaller or more residential in scale.
- All building walls shall have architectural interest and variety to avoid the effect of a single, long or massive wall(s).
- There shall be no blank, unarticulated building walls exceeding 30' in length.
- All building walls shall include a building bay or structural building system that is a maximum of 30' in width.
- Bays shall be visually established by architectural features such as columns, ribs or pilasters, piers, changes in wall planes, changes in texture or materials, and fenestration patterns no less than 12" in width.
- All building walls shall include materials and design characteristics consistent with those on the front façade.



- Any wall exceeding 30' in length shall include at least one change in wall plane, such as projections or recesses, having a depth of at least 3% of the entire length of the façade and extending at least 20% of the entire length of the façade.
- The above standards may vary if the owner can demonstrate an alternative building design that significantly articulates a wall plane and with City approval.
- Walls that face public streets, connecting walkways, or adjacent development will meet the following standards (See Figure 3.6):
 - Facades shall be subdivided and proportioned using features such as windows, entrances, arcades, arbors, awnings, trellises with vines, or alternate architectural detail that defines human scale, along no less than 60% of the entire façade.
 - A minimum of 30% of the entire façade area shall be composed of transparent materials, unless the City rules that such transparency would be inconsistent with the operational requirements of the building.
 - The lowest edge of any transparent material shall be no higher than 4' above the finished floor elevation.
 - All downspouts shall be concealed from view.
 - No exposed downspouts shall be used.
 - Any multi-story building shall provide a distinctive, quality, consistent, architectural character and style, that avoids monotonous and featureless building massing and design characteristics.
 - Building architecture shall clearly represent the use of the building (office, retail, entertainment hospitality).
 - The composition of any building shall present a clearly recognizable base, middle, and top, or a clearly defined alternative building composition.



Figure 3.6.: Example wall treatment for long façade



Source: ARCTURIS

Entrances, Roofs and Awnings

Doors, storefront windows, and awnings are examples of building features that add to the character of the streetscape and contribute to the pedestrian-oriented character of public places. These elements will improve the visual interest of larger commercial projects as follows:

- Building façades facing a primary access street shall have clearly defined, highly visible customer entrances that feature:
 - Canopies or porticos
 - Overhangs, recesses/projections
 - Arcades
 - Raised corniced parapets over the door
 - Distinctive roof forms
 - Arches
 - Outdoor patios
 - Display windows
 - Integral planters or wing walls that incorporate landscaped areas and places for sitting if safe and appropriate for the public

- When possible, buildings adjacent to residential uses shall incorporate rooflines of similar height or rooflines shall be stepped down to a similar height to enhance compatibility with nearby residential areas. In addition, roofs shall have no less than two (2) of the following features:
 - Parapets concealing flat roofs and rooftop equipment such as HVAC units from public view are appropriate.
 - The average height of such parapets shall not exceed 15% of the height of the supporting wall and such parapets shall not at any point exceed one-third (1/3) of the height of the supporting wall.



- Parapets shall feature three dimensional cornice treatment unless not consistent with the architectural integrity of the building design, and shall be the primary means of screening roof top equipment.
 - Overhanging eaves, extending no less than 3' beyond the supporting walls
 - Sloping roofs that do not exceed the average height of the supporting walls, with an average slope greater than or equal to 1' of the vertical rise for every 3' of horizontal run and less than or equal to 1' of vertical rise for every 1' of horizontal run; or
 - Three (3) or more roof slope planes
- Awnings shall be no longer than a single storefront.
 - Matching, retractable, fire-retardant awnings shall provide thematic character providing for creative and consistent signage and other branding, as well as shelter from climatic conditions.
 - Fabric awnings are encouraged; canvas awnings with a matte finish are preferred.
 - Awnings with high gloss finish are discouraged.
 - Illuminated, plastic awnings shall be prohibited.
 - Awning colors will be compatible with the overall color scheme of the façade from which it projects.
 - Solid colors or subtle striped patterns are preferred.
 - Awnings for major structures shall be mounted at a consistent height of 7' and maximum height 9' above walkways.
 - Ancillary structures shall follow the guidelines as specified under small and medium sized commercial.
 - Awnings are temporary structures and exempt from setback requirements although their placement, material, and color shall be approved by the City.
 - Awnings for openings shall be simple, shed shapes.

Building Materials and Colors

The exterior materials and colors used in a building's design create impressions of not only the individual building, but of the image of the corridor. The intent of this section is to ensure the use of high-quality materials and colors to ensure compatibility with other development in the area. Applicants shall submit a color palette and building materials board as part of their development plan application.

- All buildings, including parking garages, shall be constructed or clad with materials that are durable, economically maintainable, and of a quality that will retain their appearance over time including, but not limited to, the following:
 - natural or synthetic stone
 - brick
 - stucco
 - textured or glazed concrete masonry units
 - high-quality, pre-stressed concrete systems



- water-managed Exterior Insulation Finish Systems (EIFS)
- Exterior building materials shall not include the following:
 - Split shakes, rough-sawn or board and batten wood
 - Vinyl siding
 - Smooth-faced gray or stained concrete block, painted concrete block
 - Field-painted or pre-finished standard corrugated metal siding
 - Barrier-type EIFS
- Natural wood or wood paneling shall not be used as a main structure exterior wall material unless the developer displays significant proof that such material will be of long-lasting quality and fire resistant.
- Durable synthetic materials with the appearance of wood may be used if approved by the City.
- Exterior building material shall be continued down to within 9" of finished grade on any elevation.
- Exterior masonry materials shall be continued to the top of grade.
- In selecting exterior building materials, consideration shall be given to the appropriateness of the materials and to the scale of proposed building.
- Color schemes shall unite all building elements, relate separate (freestanding) buildings within the same development, and enhance the architectural form of each building.
- All building projections, including, but not limited to, chimneys, flues, vents, gutters, and downspouts, shall match or complement the permanent color of the surface from which they project.
- Façade colors shall be low reflecting, subtle and neutral.
- Intense, bright, black, or fluorescent colors are prohibited.
- Variations in building material and color may be required for specific corridors, as approved by the City.



MIXED USE (COMMERCIAL + RESIDENTIAL)

Mixed use (commercial and residential) areas are generally transitional zones between residential and commercial uses or “investment nodes” that are economic development opportunity locations created by the intersection of major or minor streets along the Olive Boulevard corridor. These areas are meant to augment larger commercial areas and businesses preferring to locate at major intersections or investment nodes due to ease of access and high visibility. Buildings enjoying corner retail and commercial space provide an opportunity to improve the character and continuity of retail into residential neighborhoods. The planning and overall design of these commercial areas shall remain sensitive to access, visibility, and traffic flow issues within established neighborhoods.

Development within this category will include small or medium sized (preferably not more than 10,000 SF) commercial uses at the ground floor and residential use above. These uses shall be mixed vertically. However, if a larger commercial development (such as anchor stores greater than 10,000 SF) is developed within this category, this concept shall be well integrated with the residential characteristics of the neighborhood impacted.

Lifestyle centers shall require that mixed uses are both horizontally and vertically integrated and may require more than two (2) to three (3) acres of land assembly to satisfy City zoning requirements. This type of development shall be based on a master plan approved by the City.

Ties to Other Land Uses

- All site layout and architectural guidelines that apply to *Small and Medium Sized Commercial Uses* shall apply to the ground floor structures within this land use unless overwritten in this section.
- All site layout and architectural guidelines that apply to *Multi-Family Residential Developments* shall apply to the ground floor structures within this land use unless overwritten in this section.

Setbacks and Height

A maximum 90% lot coverage is allowed in this category. The lot coverage shall not be less than 60%

- Mixed use developments may have zero setback from the property line.
- Density of mixed use development shall be higher than the average density in a quarter (1/4th) mile radius area from the center of each node.

Minimum height for commercial buildings shall be twelve feet (12') in height and there shall be at least one (1) floor of residential use above commercial uses in those structures having two (2) stories. Housing above street level may have setbacks for the creation of balconies, porches, patios, or other structural elements that add interest and marketability to the building and its zoned use.



Parking Requirements

- Parking for residential and commercial uses shall be strictly separated.
- Parking counts shall depend on the current zoning requirements for the particular land use.

Landscaping and Entry

- Due to zero setback requirements, landscaping opportunities may be minimal along the sidewalk and right-of-way.
- However, window planters, pots or similar plantings are encouraged to give warmth and render interest for the pedestrians and vehicular traffic.
- A clearly marked entrance(s) shall be maintained for residential structure on the upper floors.
- Corner lot buildings are encouraged to provide building ingress and egress from side streets and not from Olive Boulevard.

Architectural Guidelines

Those uses (or businesses) that have their own style of architecture and signage are to modify their “corporate” images shall confirm with the existing architectural character of the area (for example, fast food chains such as McDonalds and Subway).

P-3.3: Example of nodal mixed use development with commercial at ground level and residential above - Orenco Station, Portland, Oregon



Source: <http://www.planetizen.com/node/92>, May 24, 2007

P-3.4: Example of infill, mixed-use development with commercial uses at ground level and residential above



Source: Great Planned Communities, by Jo Allen Gause



RECREATIONAL, INSTITUTIONAL AND PUBLIC UTILITY STRUCTURES

Building structures under this category include institutional structures such as schools, churches, hospitals, public facilities such as sewer and water treatment plants, stormwater facilities, post offices, and recreational uses such as community centers, gymnasiums etc. All design guidelines, unless overwritten below, shall be consistent with either Small and Medium Sized Commercial Use or Larger Commercial Establishments depending on the size of the development. Any developer or agency developing an institutional or public utility building shall refer to the above mentioned guidelines in conjunction with the guidelines specified below.

Ties to Other Land Uses

- All site layout and architectural guidelines that apply to Small and Medium Sized Commercial Use shall apply to institutional buildings of sizes less than 10,000 SF unless overwritten below.
- All site layout and architectural guidelines that apply to Larger Commercial Establishments shall apply to institutional buildings of sizes greater than 10,000 SF unless overwritten below.

Setbacks, Height and Parking

- Setback requirements shall be the same as Small and Medium Sized Commercial Use including structures that have a footprint of more than 10,000 SF.
- Larger setbacks shall be allowed to accommodate landscaping, plaza type uses or public gathering places, but not for parking purposes.
- Building structures shall be at least two and a half (2.5) stories but less than ten (10) stories.
- All parking for institutional and public utility structures shall be provided away from the direct view of the public.
- Parking lots similar to Small and Medium Sized Commercial Use with side and rear parking requirements shall be applied to these uses.
- For institutional structures, such as churches, that have peak parking demand limited to a few days per week, shared parking agreements with adjacent properties within a five minute walking distance shall be encouraged.
- Larger institutional structures, such as hospitals, shall be encouraged to integrate basement, decked parking or garage structures within building architecture.
- When parking is integrated within building floors dedicated parking shall not be counted towards total height requirement.
- Other parking requirements shall be the same as Small and Medium Sized Commercial Use and Larger Commercial Establishments depending upon building size.



Access and Buffering and Other Site Requirements

The requirements for access and buffering shall be the same as *Small and Medium Sized Commercial Use* and *Larger Commercial Establishments* depending upon building size.

Architectural Guidelines

Architectural guidelines related to building massing, details, entrances, roofs, building materials and colors shall be the same as *Small and Medium Sized Commercial Use* and *Larger Commercial Establishments* depending upon building size.

However, guidelines for elements such as awnings and other design elements, which are used to enhance the retail characteristics of buildings, shall be avoided unless City officials agree these elements support the use and function of the building. Institutional building design shall convey the institutional character of the proposed use of the building.



INDUSTRIAL STRUCTURES

Industrial development typically consists of single-story structures of tilt up or pre-engineered building quality and may include the outside storage of material, equipment and employee parking. Due to its use and purpose, industrial development areas may produce conditions that are incompatible with adjacent uses. Therefore, industrial areas (light and heavy industrial) shall be separated from adjacent retail and commercial investments by landscaped buffer zones, which may include greenways and trail development.

Heavy truck traffic resulting in high traffic volumes, increased vehicular traffic during shift changes, and increased customer and vendor traffic common at industrial sites must be addressed in any Development Plan approval process.

Guidelines for future planning around industrial use of the land include the following:

- Use of Low Impact Design (LID)⁶ such as pervious surfaces through innovative stormwater management and landscaping is encouraged.
- Required building and site lighting shall enhance the perception of safety.
- Monotony of design in single or multiple building projects shall be avoided.
- Variation in detail, form, and site design shall be used to provide visual interest.
- Loading dock areas designed within the architecture shall face away from the main point of Olive Boulevard.
- Landscaping shall be used to complement and enhance building design, color and material.
- Exterior mechanical, electrical, rooftop equipment and other exterior equipment shall be placed so that it is screened from highway, street, and any residential development along adjoining streets.
- Screening material shall be compatible with building material and installed at a height that is equal to or slightly exceeds the height of the roof mounted mechanical equipment.
- Greenscreens⁷ or other type of screen as permitted by City officials shall be used to visually hide any unpleasant structures or equipments.
- Shared use of single point ingress and egress is encouraged and is to include streetscape improvements.
- Access management techniques shall be used for truck movements and truck interaction with automobiles.
- Landscaping to frame all curb cuts adjacent to planted areas shall protect landscaping from truck movements.

⁶ **Low Impact Development (LID):** Refer <http://www.epa.gov/owow/nps/lid/> for detail information on site development using Low impact techniques, Accessed April 02, 2007.

⁷ **Greenscreen:** A Greenscreen is a landscape trellis system for fencing, wall-mounted applications or freestanding enclosures. When combined with a variety of vines, green screen becomes living wall that can provide privacy, shading cooling, security and spatial definition. The main component of this system is a 3 dimensional welded wire trellis panel. Available at <http://books.google.com/books?vid=ISBN1568985630&id=lhSfzEqb--cC&pg=PP66&lpg=PP66&ots=Yzyp1liPRz&dq=green+screen+landscape+definition&sig=rzdLU99bmPpGLm7WbbeP-pe9d3M>, Accessed April 02, 2007.



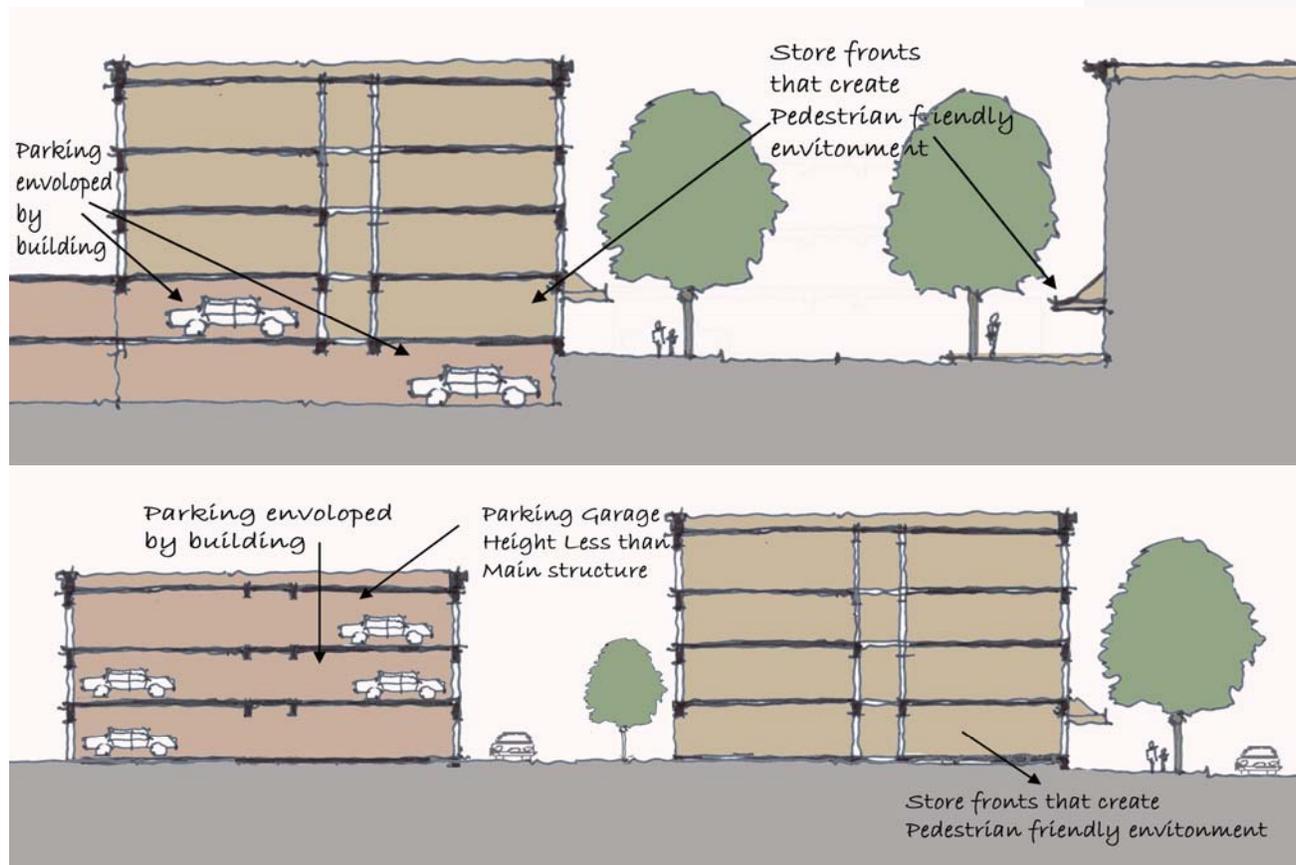
- Site development design guidelines shall follow the larger commercial establishments guidelines in terms of setbacks, access and parking.
- Lot coverage and safety requirements shall follow the zoning code for industrial usage and City zoning requirements.



PARKING GARAGES

- Locate parking garages underground or at the interior of parcels.
- Envelope parking garages with retail or other uses, (See figure 3.7).
- If parking garage abuts the sidewalk along Olive Boulevard such parking garage design shall have tenant space activities such as retail at the ground level.
- Retail storefronts included within parking structures shall incorporate clear glass to provide visual interaction with pedestrian and vehicular traffic.
- First floor retail activities within parking structures shall be subject to the guidelines for *Small and Medium Sized Commercial*.
- Building heights shall be equal to or lower than surrounding buildings unless parking requirements for the primary development use of the site warrants additional parking.
- Building architecture, materials and colors shall be similar to those of nearby structures.
- Stairs and elevators shall be designed to fit within the boundaries of the garage, rather than on the exterior, as an attached stair or elevator tower unless City regulations require exterior exiting due to the configuration of the site or building.
- Design entries shall be designed to avoid conflicts between vehicles and pedestrians are minimized.
- Vehicular entries will be clearly marked.
- Parking structures shall conceal views of vehicular storage from public

Figure 3.7: Parking Garage/ deck placement (Attached and Detached)



Source: ARCTURIS



streets and public spaces.

- Parking structures shall incorporate innovative design ideas, especially related to façade treatment, signage, public safety, mitigating landscape, and covered walkways.
- Openings to parking areas other than garage doors shall be limited to those required by the Building Code for ventilation.
- Signage and light sources internal to the parking structure shall not be visible from outside the parking structure.
- Lighting, particularly on parking decks, shall not illuminate or produce glare onto adjacent properties.
- Setbacks from the property line are permitted to accommodate landscaping and other buffer features subject to design review.
- Aisle width, individual parking space dimensions, and handicap parking requirements are subject to City approval.
- All garage designs shall be consistent with ADA guidelines.



HISTORIC STRUCTURES

Structures that fall under this category refer to buildings built prior to 1941 and may be classified as contributing and noncontributing structures.

- Contributing Structures are those determined to be of historic significance.
- Noncontributing Structures are those that have no historic significance or may be in need of rehabilitation.
- A noncontributing building built within the period of significance but substantially altered may be reclassified as a contributing building; however, it must be brought into compliance with its original historic facade by means of restoration.

Contributing Structures

- Additions, alterations to, and rehabilitation of contributing buildings shall retain and preserve the historic character of the buildings along Olive Boulevard frontage.
- Additions at the rear of rehabilitated structures may be designed to include modern materials such as glass, brick, and wooden wall systems.
- The removal, alteration, or replacement of features on the facade of an historic building must not alter the character of the building.
- Removal of original materials or alteration of features and spaces that characterize a property shall be avoided.
- Where severity of deterioration of the structure requires replacement of a distinctive feature, new features shall imitate the original design, color, texture, pattern and other visual qualities.
- New balconies shall be prohibited on primary facades and rooftop additions unless otherwise permitted by the City.
- Rooftop additions shall have a compatible and proportional relationship to the historic building and shall not change the original architectural character of the structure.

P 3.5: Before and after images of preserved Contributing Structures



Source: <http://www.state.il.us/hpa/PS/mainstreet.htm>

- Additions shall be no higher than 20' above the roof deck of the building.
- Rooftop additions shall step back a minimum of 15' from the facade of the building.



- The design of awnings and materials used during renovation shall be related to the style and use of the building.
- Where traditional retail storefronts exist or will be replaced, canvas awnings shall be used.
- Historic wall signs shall be preserved.

Noncontributing Structures

- Additions to and alterations of noncontributing buildings shall be designed to harmonize with the original building.
- Additions to noncontributing buildings shall be sympathetic and subordinate to the original design of the building.
- Additions shall complement the finished use intended for the building.

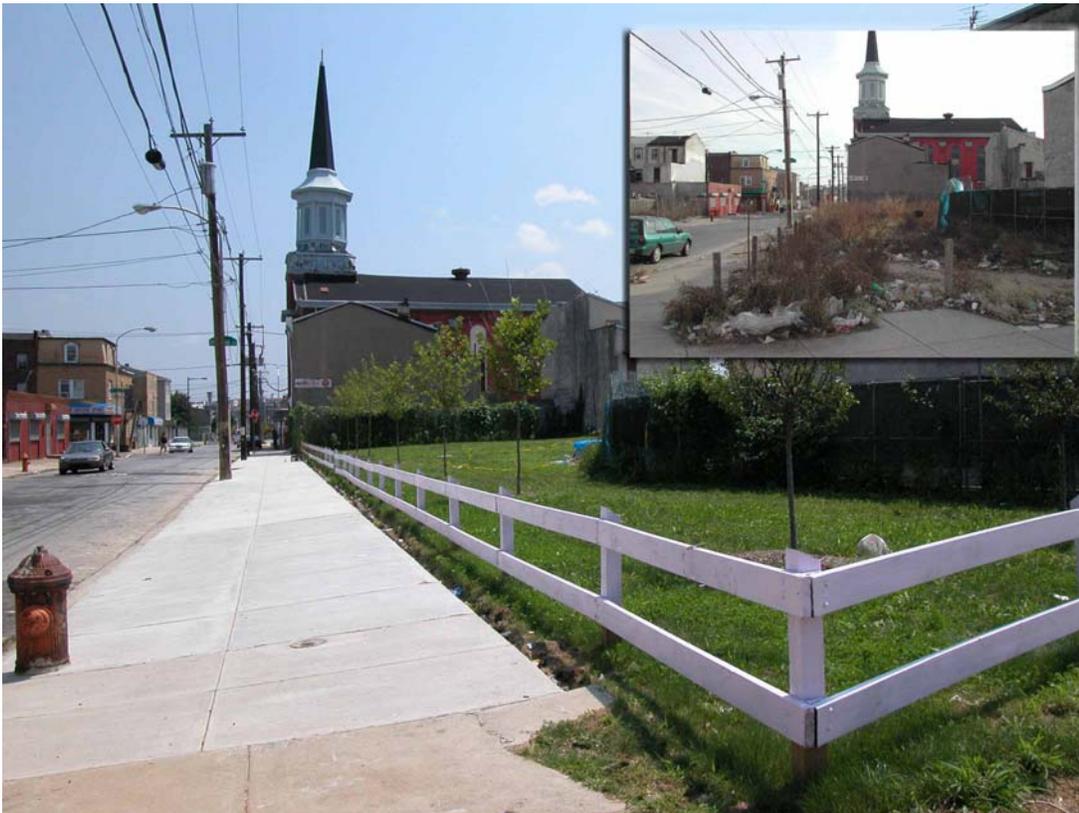


VACANT BUILDINGS AND VACANT LAND

Vacant Building” means any residential or nonresidential building, or any part thereof, which is not occupied and has not been occupied for at least the preceding ninety (90) days by a person who has a legal right to be on the premises. Vacant land is defined as a property that does not have a built structure and does not fall in “Parks Recreation and Open Space” category as per Proposed Land Use Plan per City’s Comprehensive plan Update of 2005.

- Vacant buildings shall be registered within 30 days in accordance with Municipal code Chapter 8.28 Section 113 “Vacant Building Registration and Maintenance”.
- Vacant or abandoned properties shall be maintained by the owner(s), including, but not limited to, buildings, stormwater management, parking lots and structures, landscaping, local environment, and the visual impact along Olive Boulevard.
- Maintenance shall include watering, trimming and pruning landscaping, promptly repairing any damage to buildings and site improvements, and the prompt removal of graffiti.
- Signage shall be removed immediately upon vacation of the property.
- Any covering of glass surfaces shall be installed to blend in with the building and will be maintained by the owner of the property.

P-3.6: Vacant property maintenance



Source: <http://www.cooperativeconservationamerica.org/viewproject.asp?pid=999>

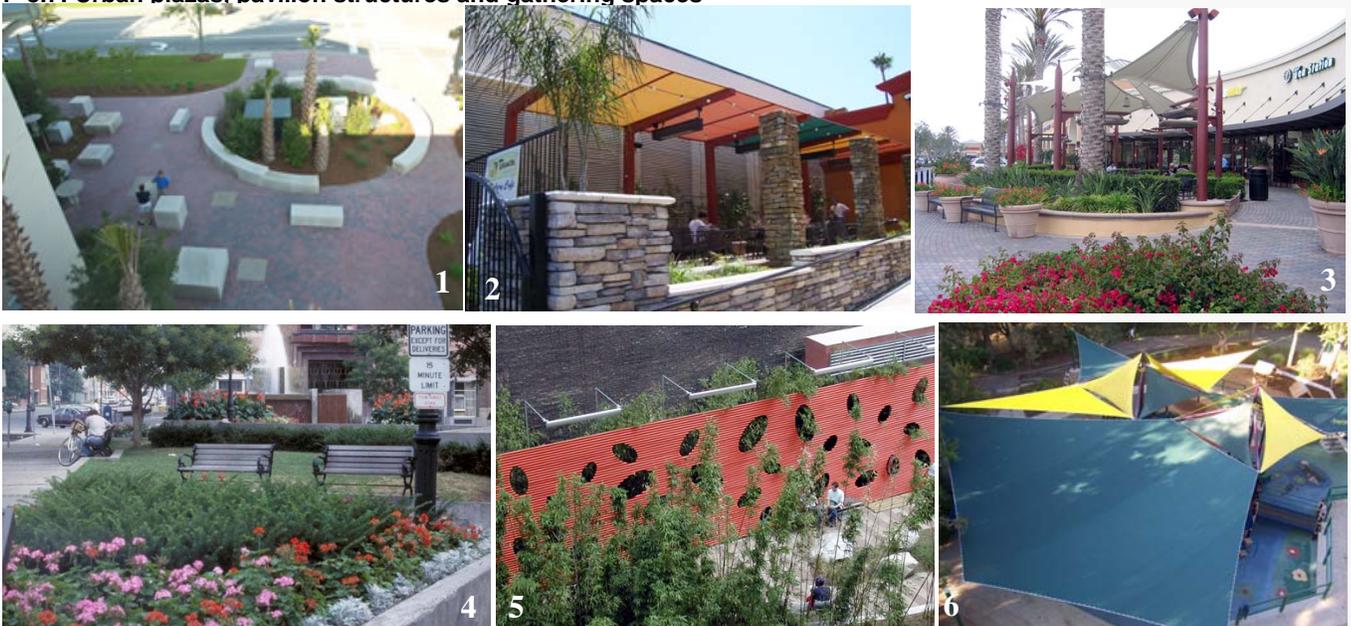


PAVILIONS, PLAZAS AND OTHER OPEN SPACES

Open spaces, plazas, and public gathering places are excellent locations for temporary structures such as open sided pavilions, market stalls, and kiosks. These structures, within an open plaza environment provide “vertical infrastructure” and may be used for a variety of activities such as band stands, farmers markets, kiosk spaces, outdoor sale areas, outdoor dining, artist exhibits, street plays and performances.

- Structure and space design within this category is encouraged to use maximum flexibility and creative design and placement of structures, subject to City approval.
- Design shall be evaluated based on the proposed use and functional needs of the structure.
- All material used for temporary structures will be of high grade material, suitable for the safe and convenient use of the public.
- Pavilion design shall be flexible and built to standards that allows for public occupancy.
- Temporary structures shall be designed to pedestrian scale and shall reflect the character of District in which the structure is located.
- Access to any pavilion shall comply with ADA Guidelines.
- Plant material shall be native to this region.
- If lawn/turf is used in open spaces regular mowing of turf will be required so as not to exceed a height of four (4) inches from the ground in addition to additional maintenance per species needs.
- Use of water features and public art is encouraged.
- Individual creative expression is subject to City approval.

P-3.7: Urban plazas, pavilion structures and gathering spaces



Source: 1- <http://www.hlinc.com/ProjectsMixedUse.htm>, 2&6- <http://www.aworldofawnings.com/AwningStyles.htm>, 3- <http://www.irvinehousingblog.com/tag/windwood>, 4&5- http://www.tbany.com/projects_cat.php?categoryid=1,



SIGNAGE GUIDELINES

Signage shall be creative, appropriate to the business establishment, and installed to City standards. Signage graphics shall not be jarring, cluttered or competitive. Signage must be designed to City standards and constructed of durable, quality material. The city intends to provide owners and tenants with the opportunity to express their identity through signage. These design guidelines essentially classify all signage into two categories, primary and secondary signage.

- Primary Signage includes the primary identification signage for any establishment. It is intended to identify the operations within the structure by name at the main public point of entry. For larger establishments with extensive street frontage, more than one primary sign may be permitted.

Primary signage types include monument signs facing Olive Boulevard, wall plaques, fascia signs, awning signs, and exterior blade signs at main public entry doors when there is no monument sign. Primary signage may be illuminated from within the sign element or by exterior lighting directed onto the sign face. See individual sign types below for the types of illumination that are permitted. All illuminated signs must be fabricated and installed in compliance with all applicable building and electrical City Codes.

- Secondary Signage is intended to give direction and necessary information in addition to the main identification provided by Primary Signage. Multiple types of secondary signage serving a single purpose is not permitted; i.e. a fascia sign and a wall plaque at the same entry door.

MONUMENT SIGNS

- More than one monument sign may be permitted for a development, however only one sign per each two hundred (200) linear feet of frontage is permitted up to a maximum of two (2) signs on each property facing Olive Boulevard.
- Maximum width permitted: six (6') feet for Small and Medium Sized Commercial and eight (8) feet for Larger Commercial or as approved by the City.
- Maximum height permitted: four (4') feet for Small and Medium Sized Commercial and eight (8') feet for Larger Commercial or as approved by the City.
- Landscaping is required around monument signs and shall be submitted with the monument sign as part of a unified design.
- Landscaping around monument signs will be selected as to growth height, watering requirements, and long term care requirements.
- Illumination: Internally illuminated graphics routed in an opaque field are permissible when the graphics are limited to no more than 25% of the total field area
- Illumination shall be subdued and not garish.



- Illuminated translucent panels may be permitted for larger commercial signs only.

P-3.8: Examples of Monument Signs



Source: <http://www.sac-ace.ca/contact/Banners/free.html>, <http://www.easternsigntech.com/2/complete.html>, <http://www.signsbytomorrow.com/manassas/>, <http://www.taylor signs.ie/For%20Signs%20Ireland-Contact%20us.html>

WALL PLAQUES

- Wall plaque signs must be applied to solid walls on which the plaque will be no more than 40% of the rectangular wall area to which it is applied.
- Plaques will not exceed twelve (12) square feet and must be proportional to the wall to which they are installed.
- Plaques will be mounted at eye level and individual letters shall not exceed a height of ten (10”) inches.
- When the wall plaque is the primary signage for a commercial establishment, the sign may be illuminated.
- Internally illuminated graphics routed in an opaque field are permissible when the graphics are limited to no more than 25% of the total field area
- Illumination shall be subdued and not garish.
- Externally illuminated plaque signs shall be allowed.

P-3.9: Examples of Plaque Signs:



Source: <http://www.halecustomsigns.com/signs.htm>, <http://www.tilecanvases.com/steve.htm>, http://www.tikibosko.com/tikicarve_custom.html



- Any kind of lighting used for external illumination will be placed no lower than seven (7') feet to avoid vandalism.
- Exposed neon is prohibited due to possible vandalism at this mounting height.
- When the plaque sign is secondary signage, it shall not be illuminated.

FASCIA SIGNS

- Fascia signs are horizontal signs mounted on building fascia or eaves.
- When the fascia sign is the primary signage for the structure, the sign may be illuminated.
- Internally illuminated graphics routed in an opaque field are permissible when the graphics are limited to no more than 25% of the total field area
- Fascia signs may incorporate neon designs and lettering or may be externally lit.
- Secondary fascia signs shall not be illuminated.

P-3.10: Examples of Fascia Signs:

Use of Neon



Internally illuminated



Externally illuminated



Source: http://www.mplbusinessimages.com/shopfront_signage.htm
<http://www.prestigesigns.net/products.aspx?catid=2>

- Fascia signs shall be mounted a minimum of seven (7') feet above grade from the bottom of the sign or six (6') feet above awnings and shall not exceed twelve (12') feet in length or two (2') feet in height.

AWNING SIGNS

- Storefronts utilizing awnings as a design element have the option of including signage as part of the awning concept.
- Lettering and logos shall be proportional to the awning face and shall be located on the front face of the awning.
- Awning signs may be illuminated by remote accessory lighting only.
- Light fixtures may be located above the awning only and shall be fully integrated with the building façade.
- In no case shall awnings be enclosed on the underside and internally illuminated in such a manner that the awning functions as internally illuminated signage.



P-3.11: Examples of Awning Signs:



Source: <http://www.allbritesigns.com/signs.html>, <http://www.december.com/places/mke/album/photopanera.html>

BLADE SIGNS

Blade signs are currently not permitted by the City. Hence a zoning code change shall be required to permit this kind of signage. If this happens following guidelines shall be followed along Olive Boulevard

- Blade Signs are double sided signs that project perpendicularly from the face of a building.
- Blade Signs may incorporate neon as the illumination source or they may be designed to be externally lit.
- Signs may not exceed four (4) square feet with a maximum dimension of two (2') feet in any direction.
- These signs shall be of a distinctive shape with three-dimensional character where possible.
- Blade Signs shall extend out over public walkways to a maximum of two (2') feet and shall be installed at a height of nine (9') feet above grade.
- The sign must be soundly suspended from the building's structural façade.
- All transformers, ballast, and conduit shall be concealed.
- Any changes in size and mounting of blade signs shall be subject to the approval of the City.

P-3.12: Examples of Blade signs



Source: <http://www.prestigesigns.net/products.aspx?catid=2>, <http://www.thesignfactoryusa.com/Products.htm>, <http://www.fingerlakessandbox.com/b2evolution/index.php?blog=1>



BANNER SIGNS

- Single and double sided banner signs shall project perpendicularly from the face of a building.
- Banners applied to the wall shall not be allowed.
- Banner signs shall be made of fabric, canvas or other similar material with a sturdy support system adhered to the facade of the building.
- Banner signs shall be externally lit with lighting fixture placed above or below the banner.
- Signs may not exceed twelve (12') feet in height and two and one half (2'6") inches wide.
- Banner signs shall be mounted so that the bottom of the banner is no less than seven and one half (7'6") inches above the sidewalk elevation.
- Any changes in size and mounting of banner signs shall be subject to the approval of the City.

P-3.13: Examples of Banner Signs:

Banner placement



Up-lighting



Not allowed



Source: <http://www.prestigesigns.net/products.aspx?catid=2>

GLAZING SIGNS

- Glazing Signs are secondary signs applied directly to the inside surface of storefront glass and include metal leaf, painted lettering, and etched, cut and sandblasted lettering.
- Glazing signs shall display the store name or logo only.
- Glazing signs may not exceed 25% of the total glazed area.
- These signs shall not create a cluttered look at the storefront.

P-3.14: Examples of Glazing signs



Source: <http://www.thefarmonadderley.com/contact.htm>, <http://www.topstitchin.com/>, <http://news.medill.northwestern.edu/chicago/news.aspx?id=62585>,



- Glazing signs are permitted only for signage subject to the approval of City.
- Any changes in terms of area usage, and display graphics other than logo and store name, shall be approved by the City.

ORIENTATION MAP SIGNS

- Exterior orientation maps are permitted for the Olive Boulevard corridor and may be placed in strategic, landscaped areas along the corridor.
- These signs will complement the distinctive characteristics of the districts.
- Maps may be designed as interactive or static.
- Maps shall be designed as easy to read and graphics shall be clear and easily understood.
- Maximum width permitted: six (6') feet or as approved by the City.
- Maximum width permitted: four (4') feet or as approved by the City.
- Illumination: Illumination shall be subdued and not garish.
- Illuminated translucent panels may be permitted for larger commercial signs only.

P-3.15: Examples of Orientation Signs



Source: http://www.stradallc.com/show_project.php?52, <http://www.eire.com/2005/01/16/new-map-of-dublin-at-talbot-bridge/>, <http://www.waymarking.com>

PROMOTIONAL OR TEMPORARY SIGNS

- Temporary Signage may be approved for promotional sales such as grand openings, promotional merchandise sales events, arts and crafts shows, and other promotional activities related to the economic growth of the corridor.
- These signs shall not create a cluttered look at the storefront.
- Promotional sales event signage approval shall be approved by the City for a maximum period of forty (40) days.
- Promotional signage requested for a period of over forty (40) days shall be subject to approval of the City.



OPERATIONAL SIGNS

- Establishments may utilize no more than five percent (5%) of their storefront area for promotion of products or services offered, rate or schedule boards, professional or business organizational affiliation, and tour maps.
- Sign messages shall be attached to the interior of the window glazing and may not be illuminated.
- Signs indicating hours of business and emergency phone numbers are permitted, one at each building entrance or service door.
- Operational signs at public entrances shall not exceed one square foot (1') in size.
- At no time shall operational signs generate a cluttered look to the storefront.

MENU BOARDS AND SANDWICH SIGNS

- Glass covered, fixed menu boards displaying the printed menu of the restaurant or cafe may be displayed within the main entry alcove or lobby
- Maximum size for menu boards shall be four (4') feet.
- Portable Sandwich boards are prohibited from use per City's Municipal Code

P-3.16: Examples of Menu signs and Sandwich Boards

Fixed Menu Boards



Sandwich boards



Source: <http://members.virtualtourist.com/m/a2cca/71211/2/>, <http://barscigarsandbrew.com/shop/odds-ends.html>, <http://www.discountdisplays.co.uk/html/sandwich-board-signs.html>,

ANIMATED SIGNS

Animated signs create considerable distraction to traffic flow. Therefore, they are permitted to be used only on location that are not disruptive to traffic flow. The placement, size, colors displayed, level of illumination created, and speed of graphic change shall be approved by the City.



POLE SIGNS, ADVERTISING SIGNS, WALL PAINTED SIGNS

These sign types may create a cluttered look to the streetscape if not strategically placed and creatively expressed. These signs may also create considerable distraction to traffic flow. While they are permitted to be used, their placement, size, height, colors displayed and level of illumination created, and speed of graphic change (if any) will be subject to City approval.

OTHER SIGNS

Any other type of signage not covered in this section or signage using newer technology not covered by these guidelines will be evaluated based on their design and functional merit and will be subject to approval of the City. Such signage shall be consistent with District character and shall be safe for pedestrians; consumers' access the property on which the sign is located and any traffic movement in the area.

Olive Boulevard Design Guidelines

University City, MO



REVIEW PROCESS

CHAPTER - 4



REVIEW PROCESS

A “Design Review Process” has been established in order to ensure that all development within the defined corridor is consistent with these Design Guidelines. The process outlined here is a part of the building permit application. All plans, including any site improvements and special requirements, will be subject to review and approval by the City of University City prior to any construction. All guidelines stated in Chapter-2 (Streetscape and Districts Guidelines) are subject to approval by MoDOT and St. Louis County for any planning and improvements that may occur along the right of way within MoDOT’s and St. Louis County’s jurisdiction respectively. This review process covers site planning, landscape design, architecture character, signage, exterior lighting, site furnishings and all other elements mentioned in these Design Guidelines as applicable to the particular site. The City of University City is responsible for receipt of “Development Plan Applications” and review and the processing thereof.

Informal Vision Sharing- OPTIONAL

Prior to or during procurement of any site for redevelopment, the developer may meet with the City to discuss land use ideas. At this time the City may discuss the collective make up of the corridor or any specific district(s) within the corridor to communicate the Design Guidelines to the developer and to answer any questions the developer may wish to discuss.

It is the intent of this process to supplement the established review process now in used by the City, as referenced here:

- Article 10 of the Zoning Code
- Article 11 of the Zoning Code
- Section 34-40 of the Zoning Code

The purpose of this supplemental process is to alert developers of the Design Guidelines and to assure that improvements along the corridor are consistent and in keeping with the Design Guidelines overall.

Developments Subject to Site Plan Review

- The site plan review shall apply to all development occurring along Olive Boulevard.
- Additions to nonresidential buildings, or new accessory nonresidential buildings, when the addition or new accessory building is less than twenty-five (25) percent of the existing principal building; the addition or new accessory building does not exceed one thousand (1,000) square feet in gross floor area (unless the structure is greater than ten feet higher than the principal structure, or unless the structure could be considered a tower of any type); no new curb cuts are required; and when such new construction does not reduce existing parking or significantly modify existing on-site circulation as determined by the Zoning Administrator.



- Canopies constructed over existing walkways, loading docks, or pump islands, when such new construction does not reduce existing parking or significantly modify existing on-site circulation as determined by the Zoning Administrator.
- The above exceptions to site plan review in no way relieves any other requirements for submission of plans as may be required by the “University City Building Code” or other regulations requiring certain plans. (Ord. 6401 § 1 (part), 2002; Ord. 6139 § 1 (Exhibit. A (part)), 1997).

Site Plan Submittal Requirements

The site plan submittal shall contain the following information:

- Name, address and telephone number of the property owner and, if different, the person or firm submitting the plan.
- Location map of the subject property.
- Site Plan, north arrow and plan scale. The plan scale shall be one (1”) inch equals twenty (20’) feet to one (1”) inch equals fifty (50’) feet in any increments of ten (10’) feet on one or more sheets not less than eight and one-half (8-1/2”) inches by eleven (11”) inches or greater than thirty-six (36”) inches by forty eight (48”) inches in size. The Zoning Administrator may authorize a different plan scale, except that any plan scale shall be in ten (10’) foot increments..
- An out-boundary survey of the subject site, including all dimensions and bearings, both linear and angular, radii and arcs, and St. Louis County Locator number(s) necessary for locating the property and boundaries of the subject site.
- Calculation of the subject site in square feet and acres.
- Location and identification of all easements (existing and proposed).
- The Zoning District classification of the subject site..
- Location of existing buildings to be retained and proposed buildings to be developed, including the proposed use of the building(s) and the distances, in feet, from the property line(s) and right-of-way line(s).
- Location of off-street parking spaces, including itemization of the number of spaces required and proposed.
- Illustrate typical dimensions for parking stalls, circulation aisle widths, parking bay widths, angle of stalls, and location and dimensions of handicapped parking stalls to be developed on the subject site.
- Illustrate the location and dimensions of all existing and proposed pavement, curbing, and right-of-way width adjacent to the subject site.
- Include grading, storm drainage and erosion control plans, in accordance with the requirements of Section 16.12.090, of the University City Municipal Code. The Zoning Administrator may waive this requirement where little or no grading is required, however, any waiver by the City does not relieve the owner of compliance with any plan and permitting requirements of the Metropolitan Sewer District (MSD) or its successor or assigns.



- Illustrate a landscape plan identifying existing and proposed landscaping locations, including the name and size of plant material and site, elevations.
- Include details of any man-made screening material to be used pursuant to this chapter (e.g., required fencing between residential and non-residential uses, and required screening of mechanical equipment and trash containers).
- Location, type, dimensions and size of all existing and proposed signs on the subject site.
- Provide an exterior lighting plan for all parking and common pedestrian areas.
- Provide architectural renderings or elevation drawings including the type, texture and color of exterior finishes, floor elevation(s) and building height including cross-section drawing(s) indicating upper-story floor elevations for all multi-story buildings.
- Additional information, beyond the requirements listed above, may be requested by the Zoning Administrator or the City Council when additional information is determined to be necessary for evaluating the proposed development. (Ord. 6139 § 1 (Exhibit. A (part)), 1997).

Site Plan Submission and Distribution

- Submission by Applicant: The applicant shall submit twelve (12) copies of the information required (as listed in Site Plan Submittal Requirements) to the Zoning Administrator
- Completeness of Submittal: Upon receipt of the site plan and associated information, the Zoning Administrator shall review the documents to determine compliance with City requirements.
- When the submittal is determined by the Zoning Administrator to be complete, the submittal shall be date stamped.
- Distribution: After the site plan has been accepted for review, the Zoning Administrator shall distribute copies of the plan, or relevant portions thereof to the Director of Planning and Development and other city staff as appropriate. (Ord. 6139 § 1 (Exhibit. A (part)), 1997)

Staff Review

- Staff Comments: City staff responsible for site plan review shall provide the Zoning Administrator with written comments within ten (10) working days of receipt of the plan or other applicable information. City staff may recommend changes to the site plan that may improve the functionality of the site or mitigate potential impact on neighboring properties.
- Staff Report: The Zoning Administrator shall compile staff comments into a Site Plan Review Report. This report shall identify any deficiencies with respect to compliance with these Design Guidelines, the Zoning Code, or other applicable regulations. This report shall be completed within sixty (60) days of acceptance of the site plan. A copy of this report shall be forwarded to the applicant and to the City Council. (Ord. 6139 § 1 (Exhibit. A (part)), 1997).



City Council Review

- In conducting its review, the City Council shall consider staff comments pursuant to the site plan and any documentation attached.
- Assure the plan complies with all applicable provisions of these Design Guidelines and Zoning Code.
- Agree site location and site plan contributes to and promotes community welfare and economic wellbeing of the community.
- Agree site plan and intended land use will add value to subject site and surrounding land.
- Agree the site plan is consistent with the comprehensive plan, neighborhood development plan (if applicable), Olive Boulevard Design Guidelines and any other official planning and development policies of the City.
- Agree that off-street parking and loading areas are in accordance with the standards contained in these Design Guidelines and Article 7 of the Zoning Code.
- In determining that any submittal supports the conclusions required by the Zoning Code and these Design Guidelines, the City Council shall consider the review criteria established as follows:
 1. The proposed use(s) complies with the standards of the Zoning Code and these Design Guidelines including performance standards, and the requirements for motor vehicle oriented businesses, if applicable.
 2. The impact of projected vehicular traffic volumes and site access is consistent with and enhances existing traffic flow, public access, pedestrian safety and accessibility of emergency vehicles and equipment.
 3. The proposed use will not restrict public services such as police and fire protection, schools and parks.
 4. The site plan provides for adequate utilities, drainage and other necessary facilities existing or required in the development area.
 5. The proposed use is compatible with the surrounding area.
 6. The proposed use will not adversely impact designated historic landmarks or districts.
 7. Should a proposed site plan contain possible adverse components, sufficient measures will be required by the owner to negate, or reduce to an acceptable level, those potentially adverse impacts. Such measures may include, but are not necessarily limited to:
 - a. Improvements to public streets, such as improved turning lanes, the installation of medians, traffic control devices, and other alignment enhancement approved by the Missouri Department of Transportation and the City.
 - b. Limiting vehicular access to avoid conflicting turning movements, ingress and egress points of entry and increases in vehicular traffic through nearby residential areas.
 - c. Provision of cross-access agreement(s) and paved connections between the applicant's property and adjacent property(ies) which would help mitigate traffic on adjacent streets.



- d. Provision for additional screening and landscape buffers, pursuant to the Zoning Code and in compliance with these Design Guidelines.
 - e. Strategic location of accessory facilities such as trash storage, loading dock areas and drive-through facilities to limit potentially adverse impact on adjacent properties while maintaining appropriate access to accessory facilities and without impeding internal traffic circulation.
 - f. Consideration of other site or building design elements that may be appropriate for site development and neighborhood compatibility.
- The City Council shall consider the extent to which each submittal demonstrates compliance with City criteria.
 - It shall be the responsibility of the owner to clearly establish that the review criteria are met. (Ord. 6139 § 1 (Exhibit. A (part)), 1997)

City Council Action

- The City Council shall approve, disapprove or conditionally approve the site plan.
- City Council approval may be pursuant to certain conditions and restrictions related to the site plan.
- City Council approval shall specify the specific conditions and requirements to be included in the site plan.
- The City Council may modify the standards set forth in the Zoning Code or these Design Guidelines by a factor of twenty (20) percent, when it finds that such adjustment, whether more or less restrictive, would be equivalent to such standards or more effective in achieving the spirit and intent of such standards.
- The City Council may delegate to the Zoning Administrator the authority to approve the site plan when the Zoning Administrator determines that the prescribed conditions have been met. (Ord. 6139 § 1 (Exhibit. A (part)), 1997).

Minor Changes

Minor changes to the approved site plan may be permitted upon the express written consent of the Zoning Administrator. No change, which may be authorized under this paragraph, shall result in any of the following conditions:

- Approval of any site plan which does not conform with the Zoning Code, these Design Guidelines, Title 16, "Subdivision and Land Development Regulations," or other applicable codes or regulations.
- A change in use or market character of the development.
- An increase in building site coverage.
- A reduction in approved buffer areas and landscaped areas.
- Changes in traffic circulation, either on or off-site, that impacts Olive Boulevard, contiguous property or traffic circulation within adjunct residential neighborhoods.



- The Zoning Administrator may seek the concurrence of appropriate City staff prior to rendering a decision on approving minor changes to the site plan. (Ord. 6139 § 1 (Exhibit. A (part)), 1997)

Site Plan Amendments

Any changes to the site plan, other than minor changes authorized by the Zoning Administrator, shall require the submission of a new plan. The procedures for review of a new or revised plan shall be the same as for the initial application.

Conditional Uses

The review process for all conditional use submittals shall be in accordance with Article 11 of Zoning Code. Conditional uses are those types of uses requiring special consideration by the City. Condition use submittals are required to have no impact on the following:

- have little or no generation of increased traffic volumes that alter turning movements, increase unsafe conditions for vehicular traffic and pedestrian movement, impact traffic movement on property contiguous to the subject development site seeking conditional use consideration.
- have operational characteristics that impose a detrimental impact on adjacent or nearby properties, or
- have other characteristics which may impact public health, safety, or the economic welfare of the area.

Conditional use permitting, is allowed pursuant to the provisions of the Zoning Code. Conditional uses are listed for each Zoning District (see Article 4 of Zoning Code) and include motor vehicle oriented businesses (MVOB) as defined in Article 2 of Zoning Code(Ord. 6139 § 1 (Exhibit. A (part)), 1997).

Planned Development Districts

The review process for all Planned Development Districts shall be in accordance with Division 34-40 of the Zoning Code. The purpose of the Planned Development Districts (Districts) is to provide a means to achieve greater flexibility in land development in a manner not always possible in conventional zoning districts; to encourage a more imaginative and innovative design; to promote a more desirable community environment; and to increase economic development options and increased market participation in the area.

The City Council, upon review by the Plan Commission, may authorize a Planned Development District by an ordinance. The authorization approval is similar to the process followed for rezoning of property. Districts are considered for those projects or use requiring greater flexibility, or density. District regulations are not intended to allow excessive densities, or the development of incompatible land uses, either within the development, or as the development relates to the general neighborhood. The City Council may, upon submittal by the owner, approve a planned development to facilitate the use of flexible techniques of land development and site design, by providing relief from conventional zoning standards in order to achieve one or more of the following objectives:



- Site planning that better adapts to site conditions and its relation to surrounding properties that would not otherwise be possible or would be inhibited under the regulations applicable to the property.
- Functional and beneficial uses of open space areas.
- Preservation of natural features.
- Creation of a safe and desirable living environment for residential areas characterized by a unified building and site development program.
- Efficient and effective traffic circulation, both within and adjacent to the development site. (Ord. 6530 § 1 (part))

Variances and Modifications Allowed

Variances: The Board of Adjustment may grant variances from the standards contained in these Design Guidelines based on design merit, economic development opportunity (ies) and site conditions

Deviations: The Plan Commission or City Council may grant deviations from the standards contained in these Design Guidelines under the terms of an approved plan for development.

Modifications to Allow Alternative Compliance: In addition, the Zoning Administrator or the Director of Community Development may waive or modify any design standard(s) contained in these Design Guidelines to encourage the implementation of alternative or innovative practices that implement the intent of the standard(s) and provide equivalent public benefits without significant adverse impacts on surrounding development.

Conditions of Approval: In granting a variance, deviation, or modification, the Board of Adjustment, the City Council or Plan Commission, Zoning Administrator or the Director of Community Development and Development Services may require conditions that will substantially secure the objectives of the modified standard and that will substantially mitigate any potential adverse impact on the environment or on adjacent properties, including but not limited to additional landscaping or buffering.

Modification of Design Guidelines

The Plan Commission may modify these Design Guidelines herein upon written finding that such modification is warranted. Circumstances that shall warrant modification of the guidelines may include, but are not limited to, physical constraints such as the location of existing buildings or changes in grade between adjacent properties, excessive cost associated with public infrastructure, or failure to obtain an agreement or permit that is required for the implementation of the guidelines. In reviewing any proposed modification, the Plan Commission shall consider whether granting the modification will be consistent with the purposes of these Design Guidelines, locally adopted plans, and the following principles:



- The general design and character of the proposal is in harmony with the neighboring properties in the area.
- The scale of the development in relation to the site and neighboring properties.
- The similarity of building materials, their color and texture in relation to those found in the surrounding district.
- The visual compatibility of the proposal with surrounding properties, including height, setbacks, roof shape, window and door arrangements, and the orientation of the building in relation to the street.

Recognizing the substantial investment, planning, and infrastructure integration required for the creation of these Design Guidelines, the City will not adopt, promulgate, effect, or pass any ordinances, rules, regulations, interpretations, policies, recommendations, or guidelines that may materially impair, be inconsistent with, supersede, or conflict with this document.

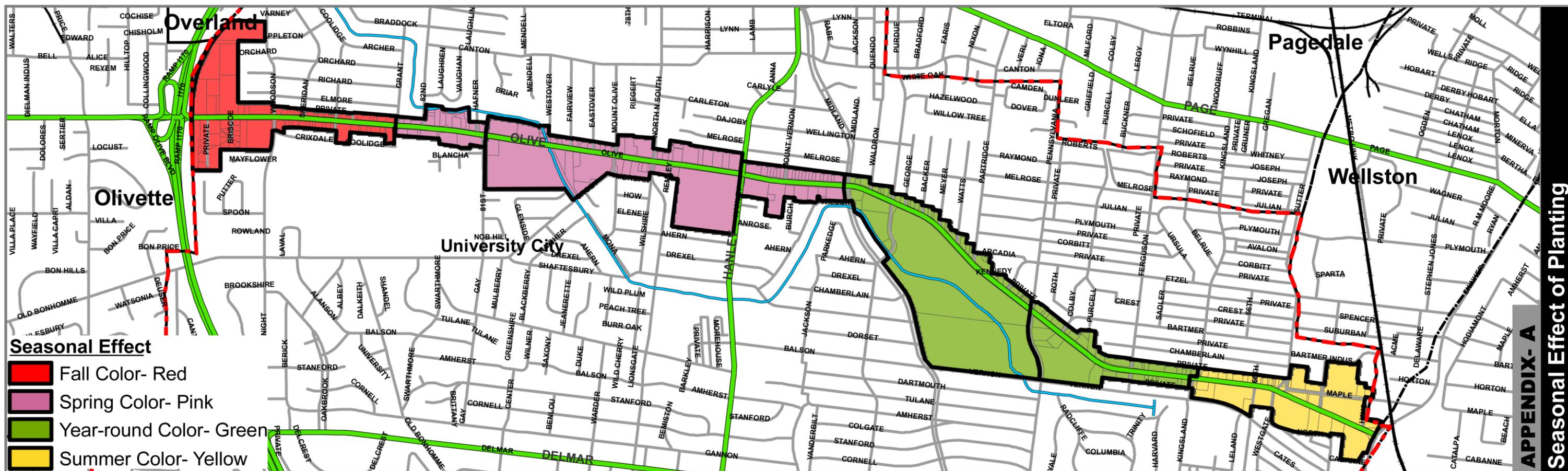
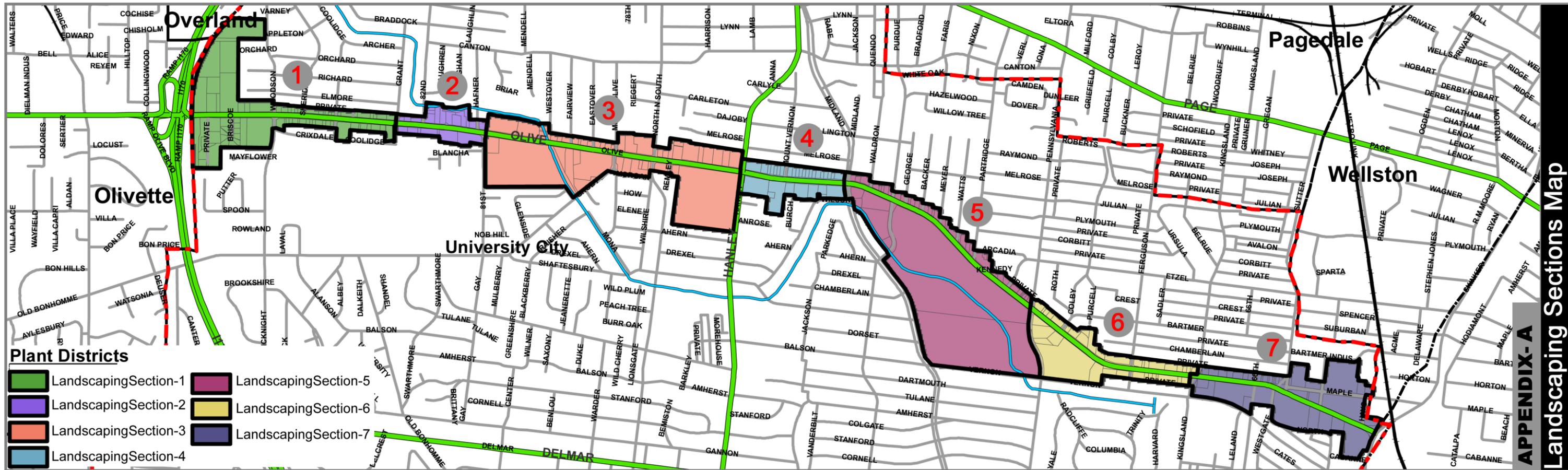
Olive Boulevard Design Guidelines

University City, MO



LANDSCAPING SECTIONS

A P P E N D I X - A



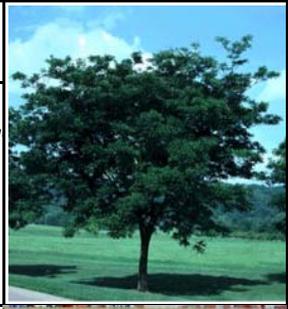
Appendix-A: Olive Boulevard Plant List By Landscaping Sections

Street Tree/ Ornamental Tree	Type	Botanical Name	Common Name	Maintainence Factor	Growth rate	Height	Width	Picture	
Hedging/ Planters/ Shrubs/ Medians	Type	Botanical Name	Common Name	Picture	Type	Botanical Name	Common Name	Picture	
Interchange Commercial	Landscaping Section-1	Street Tree	<i>Acer x freemanii 'Armstrong'</i>	Armstron/ Bowhall	Low	Fast	50'- 60'	15'- 20'	
		Columnnar with fastigate branching, widening to narrow oval with maturity. Very heat tolerant, Hybrid between Red and Silver maples. Adaptable over a wide range of climate and soil conditions. Will tolerate partial shade.							
		Ornamental Trees	<i>Crataegus viridis</i>	Winter King Hawthorn	Low	Moderate	25'- 35'	25'- 35'	
		Easily grown in average, dry to medium, well-drained soil in full sun. Drought tolerant. Moist, rich fertile soils may encourage unwanted succulent growth. Excellent spring flowering tree for lawns and streets. Good fall color and persistent fruit help provide year round interest. Pollution tolerance makes it a good candidate for urban plantings. One of the most disease-free hawthorns. As with most hawthorns, there is some susceptibility to rust (rust stage of cedar hawthorn rust where eastern red cedars are present in the area) and fireblight, but this cultivar is noted for its good resistance to both diseases.							
Hedging/ Screening (6 feet)	<i>Juniperus x Spartan</i>	Spartan Juniper		Shrubs	<i>Euonymus alata</i>	Burning Bush			
Hedging/ Screening (3 feet)	<i>Juniperus chin. Pfitzer</i>	Compact Juniper			<i>Berberis thun.</i>	Barberry			

International District		Planters	<i>Hemerocallis x</i>	Daylilies		Medians	<i>Gaillardia Kobold</i>	"Goblin" Blanket Flower	
	Landscaping Section-2	Street Tree	<i>Ginkgo biloba</i>	Ginko "Princeton Sentry"	Low	Fast	50'- 60'	20'- 30'	
	Landscaping Section-3	Street Tree	<i>Prunus yedoensis</i>	Yoshino Cherry	Medium	Fast	30'- 40'	30'- 40'	
	Landscaping Section-4	Street Tree	<i>Ginkgo biloba</i>	Ginko "Princeton Sentry"	Low	Fast	50'- 60'	20'- 30'	
		Ornamental Trees	<i>Prunus 'Kanzan'</i>	Flowering Cherry	Medium	Moderate	25'- 30'	25'- 30'	
	Hedging/ Screening 6 feet	<i>Juniperus chin. torulosa</i>	Hollywood Juniper			<i>Syringa meyeri</i>	Korean Lilac		

Landscaping Sections- 2,3 & 4	Hedging/ Screening 3 feet	<i>Ilex glabra compacta</i>	Compact Inkberry		Shrubs	<i>Weigela</i>	Rubidor Weigela	
	Planters	<i>Viola spp</i>	Red Pansy			<i>Spiraea x</i>	Pink Parasols Spiraea	
		<i>Rosa x Magic</i>	Carpet Rose		Medians	<i>Sedum x</i>	Garnet Brocade	
		<i>Chrysanthemum</i>	Dark Triumph			<i>Sedum x</i>	Purple Emperor	
		Street Tree	<i>Tilia tomentosa</i>	Silver Linden "Sterling"	Low	Medium	50' - 60'	30- 40'
	The Silver Linden is a wonderful shade tree with a pleasing form and lustrous dark-green leaves. This tree produces yellowish white flowers that are very fragrant and attractive against the dark green leaves. It is widely grown as an ornamental tree throughout its native range in Europe.							
Landscaping Section-5	Ornamental Trees	<i>Cercis canadensis</i>	Redbud	Medium to Low	Fast	15'-20'	15'-20'	
		Redbud is native to the southeastern and central United States, from New Jersey south. It has small, clustered, sessile dark brown floral buds swell to purple-lavender buds in early Spring, slowly opening to pink-lavender flowers, prominently displayed in April before the foliage emerges and persistent for two to three weeks						

Parkway District	Landscaping Section- 6	Street Tree	<i>Gymnocladus dioicus</i>	Kentucky Coffee Tree "Espresso"	Medium to Low	Fast	50'- 60'	40'- 50'	
			Kentucky Coffee Tree is a hardy native tree commonly found on moist bottom lands and moist slopes. The bark and winter habit are very attractive, however, only male (fruitless) named varieties should be used. E.g. "Espresso", "Stately Manor".						
		Ornamental Trees	<i>Amelanchier spp.</i>	Serviceberry	Medium	Moderate	15'- 25'	10'- 20'	
			Serviceberry (<i>Amelanchier spp.</i>) is a small deciduous tree or shrub with attractive white spring blossoms. graceful, airy trees or shrubs provide year-round ornamental interest in the landscape, with nice fall color ranging from yellow to red.						
	Landscaping Sections- 5 & 6	Hedging/ Screening 6 feet	<i>Myrica pensylvanica</i>	Bayberry		Shrubs	<i>Aronia melanocarpa</i>	Chokecherry	
			<i>Pinus mugho mugho</i>	Dwarf Mugo Pine			<i>Viburnum trilobum</i>	Alfredo Viburnum	
		Planters	<i>Rudbeckia x</i>	Black Eyed Susan		Medians	<i>Muhlenbergia capillaris</i>	Pink Muhlygrass	
			<i>Liriope muscari</i>	Silvery Sunproof					

Industrial	Landscaping Section- 7	Street Tree	<i>Zelkova serrata</i>	Zelkova	Low	Fast	50'- 70'	40'- 50'		
			Zelkova is one of the two best large shade trees with a vase shape, with a rapid growth rate and stately appearance that, coupled with its other ornamental features of Summer/Autumn foliage, fine texture, and attractive bark, make it a truly underutilized tree in modern landscapes. Good shade tree; easy fall cleanup; tolerant of heat, drought, wind, and urban conditions.							
		Ornamental Trees	<i>Maackia amurensis</i>	Amur Maackia	Low	Moderate to Fast	25'- 30'	25'- 30'		
			An attractive summer-flowering tree. Shows excellent adaptability to extremes of soil conditions. Tree is a slow growing tree that will give multi-season interest to broad streetscapes. Eventually, it will grow to 10m tall, with an irregular, intricately-branched canopy, elegant pinnately-compound foliage and upright racemes of white flowers in the summer. The bark exfoliates in multi-colored plates, and becomes very interesting on mature trees.							
		Hedging/ Screening 6 feet	<i>Juniperus scopulorum "Gray Gleam"</i>	Rocky Mountain Juniper		Shrubs	<i>Rhus aromatica</i>	Gro-lo Sumac		
Hedging/ Screening 3 feet	<i>Ilex glabra compacta</i>	Inkberry var. "Nordica"		Medians	<i>Coreopsis verticillata</i>	Moonbeam Coreopsis				
Planters	<i>Pennisetum al.</i>	Dwarf Fntn Grass								

Olive Boulevard Design Guidelines

University City, MO



EXISTING CONDITIONS

A P P E N D I X - B



CORRIDOR CHARACTERISTICS

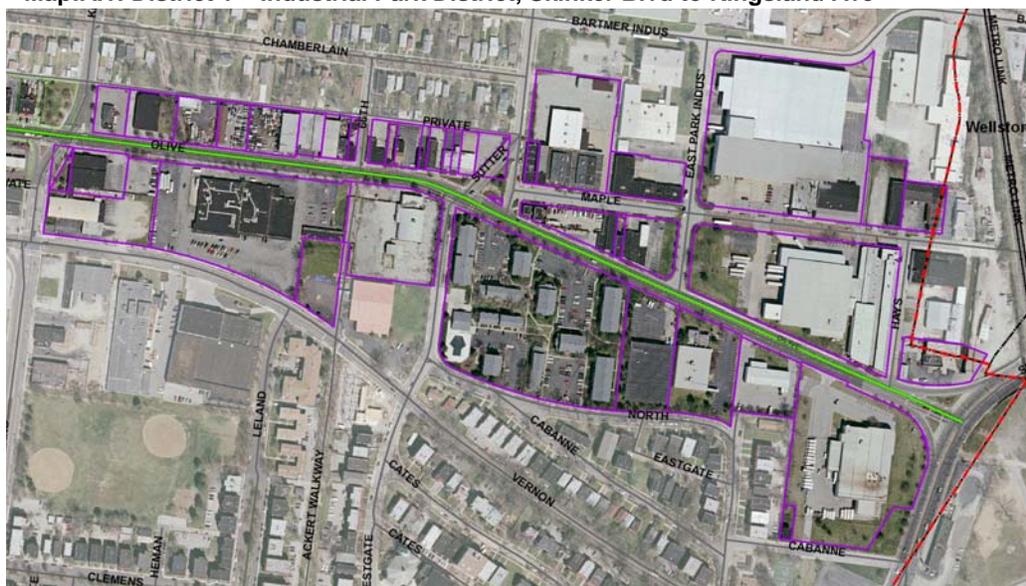
As discussed in the *Chapter 1- Introduction*, the Olive Boulevard corridor characteristics are diverse; therefore the proposed “Design Guidelines” are divided into various “Districts”. These “Districts” or commercial neighborhoods are categorized based on:

- Adjacency
- Similarities in land use patterns
- Density
- Street Configuration
- Perceived “theme” of the area (such as industrial areas, international restaurants, City Park, etc)
- Historic relevance

Development along Olive Boulevard follows traditional investment patterns as the alignment extends westward from the City of St. Louis into St. Louis County. Development along Olive Boulevard within the City occurred during the 1920’s and 1950’s to Hanley Boulevard. During the 1960’s and 1970’s larger commercial development began to occur and finally, during the 1980’s, strip centers and other low density commercial development extended westward to I-170.

District 1 – Industrial Parks: Early development contained small homes close to the street, later converted to office space and other commercial uses. An industrial park located near the intersection of Skinker and Olive Boulevards near the eastern terminus of the subject corridor extends to Kingsland Avenue. It appears that smaller, residential type structures were demolished to stimulate the industrial investment which included the creation of larger development parcels through the assembly of multiple parcels of land. This assembly allowed for larger building configurations, internal street circulation and traffic control, control of density within the defined area, and specific zoning applicable to the stated purpose of the development.

Map:A.1: District 1 – Industrial Park District, Skinker Blvd to Kingsland Ave



Source: St. Louis County GIS and Univercity City



District 2 – Parkway District: Development along this sector of the corridor is characterized by small residential and commercial properties integrated into a typical 1940's to 1960's urban fabric. Uniquely, many of the land parcels are

Map A.2: District 2 – Parkway District



Source: St. Louis County GIS and University City

placed diagonal to the street creating a slightly skewed neighborhood pattern on the north side of the street. The south side of Olive Boulevard within this proposed district is characterized by a super market and strip center at Pennsylvania Avenue and a series of small commercial uses. An architecturally interesting fire house is located in front of the supermarket on the southeast corner of Olive Boulevard and Pennsylvania Avenue. However, the distinguishing characteristic of this district includes Heman Park. The park is bifurcated by River Des Peres and its floodplain and includes a community center, soccer arena, ball fields, a public works facility, and a trash transfer station operated by the City.

District 3 – International Commercial District: This section of Olive Boulevard

Map A.3: District 3 – International Commercial District



Source: St. Louis County GIS and University City



extends from Midland Boulevard to Grant Road and is characterized by small, independent commercial buildings and small strip centers, a large portion of which contain ethnic restaurants, groceries, services, and banking. On the southwest corner of Hanley Road and Olive Boulevard an historic Jewish Cemetery provides a shaded and park like presence.

The predominant feature of this District however is the floodplain and floodway created by the main channel of River Des Peres. Portions of this river are piped, while in this area the river is at grade as it creates the east and west boundaries of this proposed District. Due to these floodplain conditions, redevelopment of this area will be challenging and will impact land use, zoning, and financing of new investment.

District 4 – Interchange District: The construction of a new interchange at I-170 and Olive Boulevard will change the characteristics of this proposed district to the extent that access and visibility have been altered which may prompt planning and redevelopment of land in this district. Small strip centers and independent standing structures characterize the eastern side of this district which gradually phase into larger more industrial and heavy commercial buildings closer to the actual interchange alignment.

Map A.4: District 3 – International Commercial District



Source: St. Louis County GIS and University City

NATURAL CHARACTERISTICS ALONG OLIVE BLVD

Soils Hydrology and Composition: The study area is basically made-up of soil belonging to the Urban Land Harvester Complex and Fishpot series (Refer Map-1). Urban Land Harvester Complex is urban man-made soil considered to be of good quality for development purposes. Fishpot series is another type of soil that can be found along river channels and is made up of poorly drained soils with



moderately slow permeability and is not considered as desirable for development.

Hydrology in the Olive Boulevard area is dominated by the main channel of River Des Peres, along with several of its tributaries, the Southwest Branch, and the West Fork Creek. These streams, along with their associated floodplain and floodway conditions thread through this length of Olive Boulevard (Refer Map-II). Historically, this corridor was subjected to heavy flooding from the river and its tributaries and the original “farm-to-market” road (Olive Boulevard) was constructed as a “corduroy” or plank road, with logs sunk in the roadbed to allow wheeled traffic to pass when the road was muddy or otherwise impassable.

The floodplain conditions prohibit extending the shallow depth of many of the existing commercial properties along the corridor resulting in limited redevelopment options for those projects requiring deeper parcels. Also, due to the location and size of existing floodplain areas along the alignment, any existing buildings now located within these areas will become restricted development land if vacated and/or demolished.

Topography: Overall the topography of the subject site is flat except for man-made berms and other landscape features. A portion of the study area is within floodplain which is characterized by low areas and relatively flat ground which slopes to river bank conditions (Refer Map-I).

EXISTING LAND USE

The Existing Land Use Map-III illustrates the general location of various land use categories along the corridor. It is used to evaluate current patterns of land use and assess needs for future growth. University City currently has ten (10) land use categories ranging from residential to commercial and industrial uses. The parcels contained in the study area fall under any one of the seven (7) categories listed below:

- Single family
- Multi-family
- Commercial
- Institutional
- Industrial
- Parks and Recreation
- Vacant

The Olive Boulevard corridor is primarily commercial in land use character, and includes retail shops, wholesale businesses, restaurants, big box developments, offices, and certain warehouses. Industrial uses are primarily concentrated at the east and west termini points of the corridor at Skinker Boulevard on the east and I-170 on the west. The residential uses are medium to high density structures scattered throughout the corridor. Institutional uses are spread throughout the area and important landmarks along the corridor include an historic cemetery, a large city park, a city owned day care center, a city public works facility and several schools.



P-A.1: Examples of commercial land use



P-A.2: Examples of Residential land use



P-A.3: Examples of Industrial land use



Source: Arcturis

EXISTING ZONING

University City currently has eleven (11) zoning districts ranging from residential to commercial and industrial uses. The parcels contained in the design guidelines fall within any one of the five (5) zoning districts listed below.

General Commercial: The General Commercial category (GC) accommodates a wide range of commercial land uses, including limited manufacturing and warehousing uses which can be developed at a scale and density that is compatible with adjacent properties:

- Minimum Lot Size: 12,500 SF
- Minimum Right-of-Way Setback: 35 feet
- Minimum Property Line Setback: 25 feet
- Site Coverage: 70 % (May be increased on a scale of 1 to 10 based on conditional permit)

High Density Residential: The purpose of the High Density Residential "HR" category is to protect and conserve areas of predominantly multi-family apartments, encourage increased density, and provide for the construction of new high density residential developments commonly referred to as townhouse apartments, garden apartments, and condominiums:

- Minimum lot size: 20,000 SF
- Minimum Right-of-Way Setback: 20 feet
- Minimum Property Line Setback: 10 feet



- Typical Floor Area Ratio (FAR):1.0 (Buildings with elevator(s) FAR changes with the area to be developed meaning that if lot area is one (1) acre FAR may be increased to 2.0 and if a lot is three (3) acres in size FAR may be 3.0)

Medium Density Residential: The purpose of the Medium Density Residential (MR) category is to protect and conserve areas of predominantly multifamily apartments built at medium density and to provide for the construction of new medium density residential developments commonly referred to as townhouse apartments, garden apartments and condominiums:

- Minimum Lot Size: 20,000 SF
- Minimum Right-of-Way Setback: 20 feet
- Minimum Property Line Setback: 10 feet

Industrial Commercial: The Industrial Commercial (IC) category is intended to encourage light industrial, light manufacturing, warehousing, office, and retail development. The land uses within this designation are intended to be developed at a scale and density which does not impact adjacent property such as noise, vibration, smoke, dust, toxic or noxious emissions or byproducts, explosive hazard or increased truck traffic. Expressly prohibited uses in this district include heavy industrial operations such as, but not limited to, foundries, refineries, incinerators, tire and rubber reclamation facilities, and processing of flammable liquids, gases, explosives, caustic and hazardous chemicals:

- Minimum Lot Size: No minimum required lot size (lot area and dimensions are to be sufficient to meet parking and other requirements)
- Minimum Right-of-Way Setback: 35 feet
- Minimum Property Line Setback: No building setback is required from a property line other than from a right-of-way line

Public Activity: The Public Activity (PA) category is intended to encourage those uses and groupings of uses which are distinctly public in character and to encourage the retention of certain properties in relatively undeveloped condition, such as public recreation uses or semi-public cemeteries:

- Minimum lot size: while there is no minimum lot size required it should be able to accommodate minimum setback
- Minimum Right-of-Way Setback: 15 feet
- Minimum Property Line Setback: No building setback is required from a property line other than from a right-of-way line

FUTURE LAND USE

The City of University City has updated its comprehensive plan in 2005. As a part of the plan, a Future Land Use plan was proposed. Map-IV illustrates the general location of various proposed land use categories along the corridor as per comprehensive plan update. The parcels contained in the study area fall under any one of the seven (7) proposed categories listed below:



- Single family
- Multi-family
- Commercial
- Mixed use/ Transit oriented development
- Institutional
- Parks, Recreation and open space
- Industrial

INFRASTRUCTURE AND COMMUNITY FACILITIES

The corridor west of Ferguson, within the maintenance of the Missouri Department of Transportation, currently includes an approximate 75' right-of-way with an ultimate maximum allowed right of way of 90'. The current travel way varies, but is typically 2 travel lanes in each direction, with a center turning lane at major intersections. Many of the intersections include electric traffic signals.

East of Ferguson, the alignment is maintained by the St. Louis County, and includes two travel lanes in each direction (See Map-V). The alignment becomes more restricted in this area due to the reduction in the number lanes and a series of medians along the entire extent of this portion of the roadway. Buildings tend to be closer to the street and more industrial uses add heavier vehicular traffic to the traffic movements.

Connections: In addition to Skinker Boulevard and I-170, other important intersections along Olive Boulevard include:

- Warson Road
- North and South Boulevard
- Hanley Road
- Pennsylvania Avenue
- Kingsland Avenue

In some cases these major intersections have a moderate impact on access and market enhancement due to their interrupted alignments and lack of connectivity to other economic markets in the area.

Utilities: Olive Boulevard is a major utility corridor with electric, water, storm sewers, telephone and cable lines and natural gas service. Overhead lines include electric and telephone wires on poles running the full length of the corridor creating visual clutter and distracting from any aesthetic investment.

Public Transportation: Public transportation is provided by Metro Bus, #91-Olive, with connections to the Delmar Metro Station to the east and Chesterfield Mall to the west. Bus stops are located at approximately 10 to 15 minute walking distance between stops with major stops at Midland Avenue, Hanley Road, North South Boulevard, and near the Woodson/McKnight intersection.

Community Facilities: Community facilities along or adjacent to the corridor include the Heman Park and Centennial Commons recreational complex, as well as Ruth Park and the Ruth Park Golf Course (set off the corridor, just south of

P-A.4: Utilities



Source: Arcturis



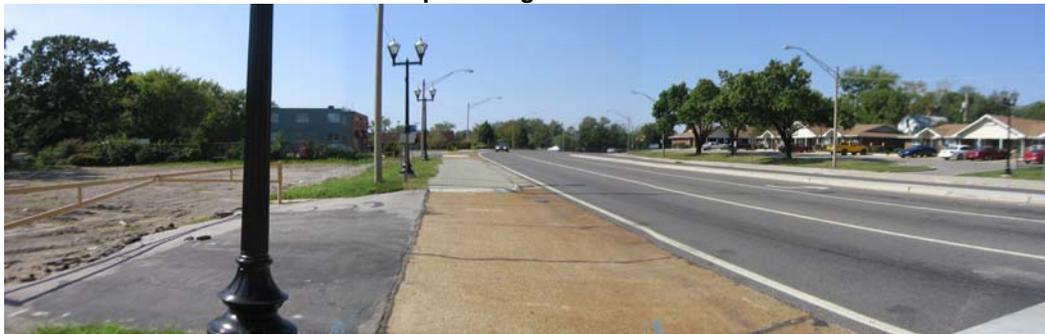
the new I-170 and Olive Boulevard interchange). There are also several private community facilities such as schools, daycare, churches and a cemetery and certain public facilities (See Map-V).

STREETSCAPE TREATMENT

The streetscape consists of elements along the street right-of-way that define its appearance, identity, and functionality, including land uses, building facades, street furniture, landscaping, trees, sidewalks, signage, and pavement treatments.

The streetscape along Olive Boulevard varies widely and ranges from areas that have no sidewalk or landscaping to more planned streetscapes and public amenities.

P-A.5: Variation in current streetscapes along Olive Blvd



Source: Arcturis

The City has developed requirements for the corridor which are administered by the Department of Public Works and include such streetscape amenities and enhancement elements as:

- Pedestrian Scale Lighting
- Sidewalks Finishes and Paving on the Public Right-of-Way
- Decorative Fencing and Walls
- Trees, Shrubs and Tree Grates

These requirements are enforced for new developments (see picture below: “New Streetscape Elements”) requiring that investors install landscape elements



in the right-of-way along Olive Boulevard where applicable. The design guidelines contained herein are meant to enhance and complement existing requirements and are not intended to assert immediate action for those improvements in place at the time of their adoption.

P-A.6: New Streetscape Elements



Source: Arcturis

Median: Currently raised medians are sporadically located along Olive Boulevard. The street alignment is five lanes wide, two on either side of the centerline, and including one turning lane. The Missouri Department of Transportation (MoDOT) does not have restrictions related to the construction and landscaping of medians as long as their presence does not interfere with traffic flow. If designed and installed at key locations and well placed turning points, medians can help improve traffic flow and enhance pedestrian access at intersections and other predetermined street crossings.

The safety benefits of median improvements have been the subject of numerous studies. Studies of both particular corridors and comparative research of different types of median treatments indicate the significant safety benefits from access management techniques. According to an analysis of crash data in seven states, raised medians reduce crashes by over 40% in urban areas and over 60% in rural areas. A study of corridors in several cities in Iowa found that two-way left turn lanes reduced crashes by as much as 70% and improved the level of service by one full grade in some areas while increasing lane capacity by as much as 36%.

A study of median treatment in the State of Georgia found that raised medians reduced pedestrian involved crashes by 45% and fatalities by 78%, compared to two-way left-turn lanes¹.

According to an analysis of crash data in seven states, raised medians reduce crashes by over 40 percent in urban areas. A study of median treatments in the State of Georgia found that raised medians reduced pedestrian involved crashes by 45 percent and fatalities by 78 percent, compared to two-way left-turn lanes

¹ "Benefits of Access Management Brochure", Available at http://www.ops.fhwa.dot.gov/access_mgmt/docs/benefits_am_trifold.htm, Accessed November 01, 2007



Landscaping: Presently, landscaping is not uniform and includes multiple species and planting layouts in multiple areas along the corridor. In some areas tree locations block pedestrian movement and vehicular visibility and signage.

The “Olive Boulevard Design Standards” lists fourteen (14) trees that form the “plant pallet” for the corridor. Additionally, there are four (4) tree grate designs from which new and redevelopment owners may select as part of their landscape options.

It is recommended that the following issues be included in any new projects:

- create planting pallets by choosing specific trees and grates that vary within districts
- classify trees, meaning street trees, accent trees and canopy trees for each district
- create landscape design possibilities that include number of trees, type of grate, surface plantings and water detention options as required

As with buildings, plantings range in age from newly planted to older and more deteriorated stock. Some of the individual plants appear to be stunted or deformed, dead or dying.

Lighting: Lighting is provided both by vehicular-scale cobra head lights (Required by MoDOT at every street intersection), as well as lower level, pedestrian scale decorative lights, installed as required by the “Olive Boulevard Design Standards”. However, there are locations that have inconsistent spacing of street lights and, when coupled with overgrown plants, results in inadequate lighting and lack of streetscape continuity.

Some properties lacking tenants or owner occupancy have little or no lighting resulting in “black out” areas along the corridor. This condition creates real and perceived safety issues and discourages pedestrian access to the corridor at these locations.

Curb Gutter and Sidewalk: Age, land use, and varied design criteria create a wide variety of curb and gutter sections including straight curb and gutter, mountable curbs, and open, uncurbed areas that allow automobiles to park directly in front of buildings.

Sidewalk finishes include: asphalt infill, stamped asphalted concrete, and concrete. In several locations sidewalks are in poor conditions and in need of maintenance. The width of these walks varies from less than 2’ up to 6’. A few sidewalks are as wide as 10’ in newly developed areas.

P-A.6: Landscaping



Source: Arcturis

P-A.7: Lighting



Source: Arcturis



Currently sidewalks are required to be at least 5' in width. Pictures P-A.8 & A.9 show examples of old sidewalk conditions compared to new concrete sidewalk construction installed per regulation.

Gutter design (both placement and types) varies greatly throughout the corridor. Pictures P-A.8 & A.9 illustrate typical curb and gutter conditions at stormwater inlets.

P-A.8: Sidewalks and curbs



P-A.9: Gutter Detail



Street Furniture: Street furniture includes seating, public convenience elements such as bike racks and water management systems that not only control water run-off, but are designed to add interest and visual appeal using water features. Therefore, the term “street furniture” typically includes:

- seating and benches
- trash reciprocals
- bike racks
- newspaper and magazine boxes
- water fountains
- planters

Currently there is no particular pallet for street furniture.

Views: The predominant views along the Olive Boulevard corridor include the street alignment, elements along the corridor such as curbs, signage, and



median design, and secondarily, landscaped areas between the street and development sites, including parking lots, lighting, and building facades, storefront design and architectural details.

OTHER STREETScape ELEMENTS

Public Art: The term public art refers to works of art and specific design elements along the corridor and in the median that are planned and installed with the specific intention of being viewed by the public. Public art often responds to site specificity, community involvement and collaboration. Some forms of public art are designed to encourage public interaction or intended to be whimsical while other art forms contribute to the overall aesthetic appeal of streetscapes. Public art can give unique identity to any space and can create activities that encourage people to gather and participate. Appropriately designed kiosks can also contribute to the overall streetscape aesthetics and create economic opportunities for small business owners and unique, one of a kind products. Presently, there is no significant or purposeful art along the Olive Boulevard corridor.

Water features: Landscape architecture includes a full range of fountain, pool, pond, cascade, waterfall, and stream design elements that can enhance the aesthetic quality of an environment as well as provide important water quality and retention areas. Although this corridor is significantly impacted by the River Des Peres floodplain, presently there are no water features or water related design features along the Olive Boulevard corridor.

ARCHITECTURE, TENURE AND AGE OF STRUCTURES

Architecture: Architecture along the corridor consists of small, design obsolete, single story buildings in varying degrees of repair. In some locations, small single family homes have been converted to commercial uses and strip centers with out parcel buildings are punctuated by newer, suburban style shopping centers, as well as isolated two-story mixed use buildings (see pictures P-A.1, A.2 7 A.3). There are a few historically significant buildings, such as the firehouse at Olive Boulevard and Pennsylvania Avenue that reflect interest architectural details.

A variety of materials and architectural styles have been used to construct buildings along the corridor. Although diversity in architecture creates vibrancy along the corridor, design guidelines need to address market demand, safety, and a cohesive environment that can foster investment and market access. Elements such as height, setback, transparency, and customer amenities are important to the overall unified vision of the corridor while protecting the individuality and architectural integrity of structures.

Age of structures: Most of the structures along the corridor were constructed from 1950 to 1970 (Refer Map-VI) and many of these properties are characterized by surface parking lots in front of single story structures. Other structures built before 1930 are shown in orange on the map and although considered older structures within the City's overall municipal fabric, only a few



structures, such as the old fire station mentioned above, are historically significant. Others are in a deteriorated condition and need to be replaced or renovated depending on their structural condition.

Parking: Most structures are served by parking lots located in the front or to the side of the individual buildings. Therefore, building frontage along the corridor is primarily dominated by parking lots with set backs extending from the Olive Boulevard right-of-way to the building walls. Newer suburban-style shopping centers are usually served by large parking lots along the right-of-way presenting an expansive, open view to vehicular and pedestrian traffic along the corridor.

P-A.10: Parking Conditions along Olive Blvd



Source: Arcturis

Owner vs. Rental of Properties: Many of the structures along Olive Boulevard are rental properties (Refer Map-VII). Typically, buildings occupied by tenants tend to be less maintained and the constant renewal or releasing of tenant space places excessive wear and tear on the structures. Some of the poor maintenance conditions observed along the corridor are associated with the constant removal and re-installation of signage along the cornice and fascia areas. Exceptions to this overall private ownership issue are properties owned and maintained by public entities such as city parks, institutional use, and cemeteries.

SIGNAGE

Signage along Olive Boulevard is extremely varied with no uniformity of design. For example, internally illuminated neon signs are used on the western sector of the corridor while painted and unlighted signs are concentrated on the eastern sector of the corridor. Individual buildings and multi-tenant buildings have signage that complements or creates a uniform and cohesive appearance due to single tenancy, however, strip centers with multiple tenancies have such a wide variety of signage that they compete and add confusion to the overall appearance of buildings. Typically, color and size of font establishes a unified appearance and creates a more commercial environment overall.

More uniform signage can enhance the overall visual appearance of the corridor and provide continuity and interest to the various commercial activities along Olive Boulevard.



P-A.11: Signage along Olive Boulevard



Source: Arcturis

COMMERCE ALONG OLIVE BOULEVARD

As suggested by the proposed designation of districts along Olive Boulevard, commerce, aesthetics, public elements and advertising can also be implemented based on defining existing and future economic opportunities within various sectors of the corridor.

The Industrial Park District commerce is mainly represented by light industrial uses, such as warehousing, distribution, and auto related goods and services. These uses are classified as “business to business” rather than “business to consumer” establishments.

For example:

- Cunningham Business Park
- Cintas
- Matheny Heating and Cooling

These uses require heavy use of large trucks and need to be accessible to streets and highways for safe, efficient transport of goods. Several of the businesses, however, have alternate locations on streets either to the north or the south. These uses contribute to the commerce along Olive Boulevard, but because they are “business to business”, they may be less visible to the general public.

The Parkway District includes commercial uses that serve local residents, and their uses are typical of general and convenience store operations in the St. Louis area. A partial list would include:

- Schnucks Supermarket
- Walgreens Drugstore
- Aldi's Market

The University City Olive Link is a 3 mile stretch of commerce & culture located on Olive Boulevard between Interstate-170 and Skinker Rd. in University City. There are over 310 restaurants and businesses in the area. It is the purpose of the Olive Business Association (OBA) to create, enhance, and promote commerce within the University City Olive Link





- Pete's Shur-Sav Market
- Jack in the Box Fast Food Restaurant

The patrons of these establishments are generally near by neighborhoods, also including neighborhoods to the east and in the City of St. Louis.

The "International Commercial District" has a diverse mix of restaurants, retail stores and services that generate traffic from throughout the St. Louis Metropolitan area. These specialties include (not an inclusive list):

- Apothecaries (doctors and dentists) offering traditional Chinese medicine
- Jamaican, East African and Ethiopian markets and restaurants
- Asian, Latin and Philippine markets, groceries and restaurants
- European seafood, delicatessens, and butchers
- There is a heavy concentration of Asian, Latin, and African restaurants, markets and gift stores that draw not only from the St. Louis Metropolitan area and beyond.

The preponderance of Asian establishments here are represented not only by the business associations mentioned above, but also by the Chinese Chamber of Commerce in Greater St. Louis. This organization provides assistance to business owners throughout the St. Louis area.

It is important to note that in all the proposed districts, there are also thriving businesses that cater to local neighborhoods. These businesses include department stores, grocery stores, fast-food, clothing and shoe stores, as well as service businesses such as banks, salons, appliance and computer repair, laundries and dry-cleaning. Professional services provided in the area include insurance companies, attorneys, accountants, and estate planning companies.

The "Interchange District" includes a mix of wholesale, retail, warehouse and storage, as well as corporate offices. Mercantile sale of home products and installation services in this area attract buyers regionally from throughout the greater St. Louis area. These goods and services are conveniently located near the intersection of Olive Boulevard and Interstate I-170 allowing easy accessibility to the region's highway systems. The merchants and owners in this area are represented by the Olive Business Association and the "Olive Link".

Olive Boulevard Design Guidelines

University City, MO



PUBLIC PARTICIPATION

A P P E N D I X - C



The use of citizen participation is an essential component in reaching a public consensus or “common philosophy” within the community. Planners, regardless of their personal talents and capabilities, working in isolation and apart from the client, will not be able to craft design guidelines that will be accepted to the community. Engaging the community in conversation can strengthen the preparation of guidelines for Olive Boulevard by utilizing local knowledge of the various stakeholders. A collaborative process that includes various methods of public engagement provides a more open, inclusive, and interactive way of involving citizens in the total planning process.

The public engagement process in developing the Olive Boulevard Design Guidelines included business owners along the corridor, public agencies providing infrastructure and utility information, the public at large, and City officials. This was accomplished using three (3) methods:

1. Electronic Community Survey – Available to All
2. Discussion with MoDOT
3. Focus Group Session

COMMUNITY SURVEY

An interactive survey containing questions based on a variety of topics was posted on University City’s homepage and made available to the general public. This survey allowed citizens to respond to specific questions from the comfort of their homes. Refer to Appendix-D to read the survey questions.

The expected time for completing the survey was 10-15 minutes and it contained carefully selected questions prepared by the consultants and reviewed by the City officials. The intent of the survey was to use technology to reach a large number of citizens and to receive input related to a unified vision for the Olive Boulevard study area. Those that lacked access to computers were encouraged to fill out a paper survey and return it to the City. Business owners and residents along Olive Boulevard were also mailed surveys for their use. A total of 152 responses were received by the end of the survey period (October 15th to November 16th, 2007).

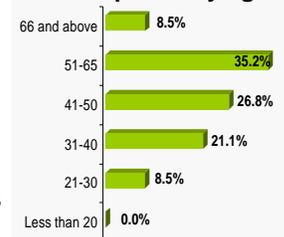
The participants of the public survey belonged to various age groups as shown below:

- 35% of the participants were ages ranging from 51 to 65 years
- 48% of the participants ages ranging from 31 to 50 years
- 0% of the participants were under 20 years

Respondents were asked to identify if they lived, worked or owned a business along Olive Blvd:

- 73% of the respondents live in the City
- 13% work on Olive Boulevard
- 11% own a business or commercial establishment on Olive Boulevard.

**Graph B.1:
Participation by age**



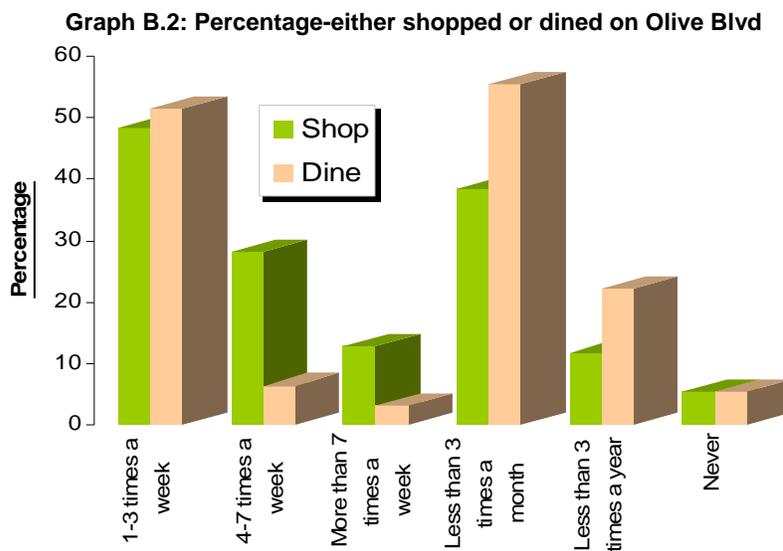
Source: Arcturis &
www.zoomerang.com



Participants were asked how often they shop or dine on Olive Boulevard:

- 35% participants shop or dine 1 to 3 times a week
- 35% participants shop or dine less than three times a month

Graph B.2 shows the percentage of participants that shopped or dined in the study area. Results showed that among the people who participated in the survey, more people dine on Olive compared to those who shop



Survey showed that among the people who participated in the survey, more people dine on Olive compared to those who shop...

The survey participants were asked to list three (3) things that they like and disliked about Olive Boulevard. Table B.1 summarizes the responses below:

Table B.1: Likes and Dislikes about Olive Blvd

Like about Olive Blvd	Dislike about Olive Blvd
<ul style="list-style-type: none"> ▪ Access to 1-170 & close to Metro Link stations ▪ Asian stores & restaurants ▪ Central location ▪ Convenience ▪ Diversity of peoples, cultures, businesses, restaurants, products & services ▪ Eclectic flavor and ethnic feel ▪ Convenient parking ▪ Heman Park facility and centennial commons ▪ Historic character ▪ The remaining street front buildings ▪ Olive Boulevard's Farmers' Market ▪ Proximity to home & work ▪ Schnucks, Aldi's and Walgreens ▪ The old style lights up and down the street ▪ The center turn lane 	<ul style="list-style-type: none"> ▪ 4-way stop before Skinker (need to add full light & sensor) ▪ New and old streetscapes especially sidewalk treatment ▪ Abandoned and unkempt properties ▪ Poor signage and advertising ▪ Businesses spaced too far apart ▪ Disjointed and unrecognizable theme with inconsistent building designs ▪ Unsafe for pedestrians & bikes ▪ Characterless strip malls ▪ No landscaping & cluttered look ▪ Criminal events ▪ East Olive Boulevard is too industrial ▪ Lack of a large anchor stores ▪ Shops not visible due to trees ▪ Lack of police visibility ▪ Accessibility in and out of parking lots and hard to make turns ▪ Parking and asphalt surfaces



<ul style="list-style-type: none"> ▪ Traffic moves smoothly and at a good pace ▪ University City banners 	<ul style="list-style-type: none"> ▪ Poor business configuration ▪ Circulation and parking around shops ▪ Boulevard not lighted at night
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Source: Arcturis & www.zoomerang.com

In order to understand the demand of goods and services in the area, the survey participants were asked to list three (3) new stores or other businesses that would interest them to visit the corridor more often. The businesses range from restaurants to various boutique retail stores to larger anchor stores. Some of the most repetitive and interesting responses are listed below:

- Local or chain hardware or home improvement stores like Home Depot or Lowes
- Health and whole food stores like Trader Joes
- Furniture stores similar to IKEA or Good Works
- Antiques, resale store
- Multi-culture medical and gifts shops
- Art supply hobby stores and classes
- Local artists' paintings
- Ethnic grocery store
- Restaurants like Applebee's/ Bread Company/ Olive Garden/ Red Lobster
- Bakery/ café/ coffee shops/ bars/ donut shops/ ice-cream parlor
- Local or chain bookstores like Borders
- Big box stores similar to Sams, Costco, Wal-mart, Target, K-mart, Kohl's
- Clothing and shoe stores for men, women and children
- Grocery store and department stores
- Florist, gardening stores and nursery
- Electronics store
- Saloons, gymnasiums yoga classes
- Movie theatre and video stores
- Pet store

The participants were also asked to rate various elements that make up a streetscape as obtained from conversations with various participants regarding Olive Boulevard redevelopment. The rating ranged from very good to very bad. Graph B.3 below gives a summary of the participants rating of these elements

Some of the negative elements rated by participants included overall streetscape, pedestrian safety, image and character of buildings and identity of the corridor (gateways, light poles, banners, public art) along Olive Boulevard. Respondents rated traffic flow and adequate lighting positively. Of the fourteen (14) elements listed on Graph B.3, six (6) received positive rating and 8 receive negative rating. Table B.2 below lists the same:



Graph B.3: Rating of various elements along Olive Blvd

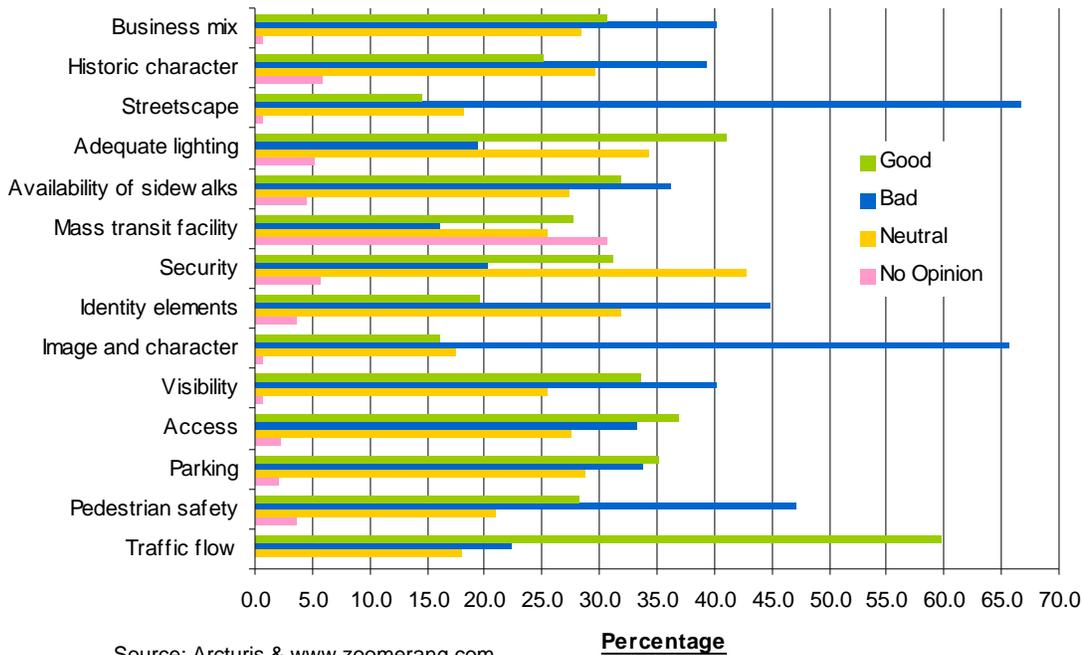


Table B.2: Elements with positive & negative rating

More positive than negative	More negative than positive
<ul style="list-style-type: none"> ▪ Traffic flow ▪ Availability of parking ▪ Access (in and out of the driveways) ▪ Security (personal and store safety) ▪ Mass transit facility (location and spacing of bus stops) ▪ Adequate lighting 	<ul style="list-style-type: none"> ▪ Pedestrian safety ▪ Adequate visibility (visibility of retail stores and signage) ▪ Image and character of the boulevard ▪ Identity elements (gateways, light poles, banners, portals, etc.) ▪ Availability of sidewalks ▪ Streetscape (aesthetic appeal of the street) ▪ Historic character ▪ Business mix

Source: Arcturis & www.zoomerang.com

Participants were also asked to identify redevelopment areas in the study area. The majority of the respondents answered that the entire Olive Boulevard corridor is in need of redevelopment. Every intersection was listed by one person or the other several times as being in need of upgrade. Major intersections, such as those formed by Skinker, Ferguson, Kingsland, Midland, Pennsylvania and McKnight were repeatedly referred by citizens. The now vacant “Value City” lot, strip malls, parcels across from Heman Park, and several parcels east of I-170 were also suggested as redevelopment areas.

Participants were asked to list activities they would like to see within these redevelopment areas. The responses had many suggestions ranging from



commercial to entertainment to residential. Most of the suggestions included businesses and stores similar to those identified on previous pages. Other suggestions included:

- Parking lot with shuttles
- Metrolink train station at Olive and I-170
- Street maintenance and wider sidewalks
- Clean up vacancy between Skinker and Pennsylvania
- Mixed Use, live work units, condos, a lifestyle center
- Outdoor farmers' market
- Outside pedestrian mall for shopping and dining
- Businesses with regular hours
- Community gardens, small parks and green space
- More community engagement programs
- Music festivals at Heman Park
- Annual ethnic festivity and culture events
- "Taste of "..." Festivals (taste of the "world", taste of "University City")
- Yearly business festivals for business promotions
- Support your Neighborhood Day or "Neighborhood Night Out" celebrations
- Street fair and live music
- Officially pronounce or designated as a "China Town"
- Artists selling their work on the street (Like Soho in New York)

Participants were asked to list any streets in the St. Louis area that can act as model streets for the consultants in formulation of design guidelines. The suggestions are listed below. Most of the streets chosen were pedestrian friendly streets with compact or dense development. Many of the streets were selected due to their historic characteristics.

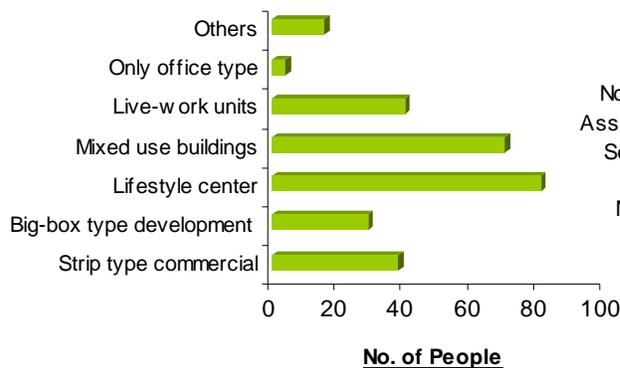
- Olive Boulevard in Creve Coeur
- Olive Boulevard in Olivette
- Forsyth Boulevard in Clayton
- Maryland Avenue in St. Louis
- South Grand Boulevard in St. Louis
- Washington Ave between Tucker & 20th Street in St. Louis
- The Delmar Loop area in University City
- Manchester Road in Maplewood
- Kirkwood Road in Kirkwood
- Main Street in St. Charles
- Manchester Road in Rock Hill
- Manchester in Ballwin
- Florissant Road in Florissant
- Big Bend Boulevard in Webster Groves
- The Promenade in Brentwood
- Forest Park Parkway east of Kingshighway in St. Louis
- Park Avenue in St. Louis

Finally, participants were asked to select those residential and commercial developments that they would like to see developed in the study area. The most

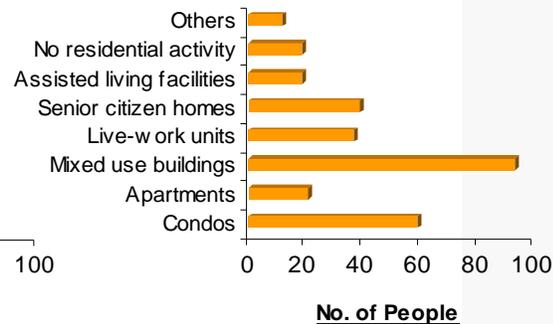


popular choice in the commercial category was lifestyle centers¹ and mixed use buildings². Live-work³ units were also welcomed as ideas for commercial development (See Graph B.4). In response to residential needs, respondents mentioned mixed use buildings and condo units. Live-work units and senior citizen homes were also chosen as other residential structures that would be desirable along Olive Boulevard (See Graph B.5).

Graph B.4: Commercial Dev Ideas



Graph B.5: Residential Dev Ideas



Source: Arcturis & www.zoomerang.com

DISCUSSION WITH MISSOURI DEPARTMENT OF TRANSPORTATION

Missouri Department of Transportation (MoDOT) has jurisdiction over the Olive Boulevard alignment from Ferguson Avenue on the east to I-170 on the west in the study area. The alignment boundaries generally extend from the property line of adjacent parcels on both sides of the boulevard. This section of Olive Boulevard is considered a major collector road and as such may not be obstructed with design details such as:

- On street parking
- Bump-outs or other similar traffic calming design elements
- Design elements that span the width of the alignment such as archways
- Any change in access from the street to parcels will need to be approved by MoDOT

Design elements that may be incorporated along the alignment include:

- Portal elements installed outside the right-of-way that add interest and identification to locations and special districts
- Medians that are landscaped and located at major intersections

¹ **Lifestyle center:** An outdoor shopping center or mixed used commercial development that serves the traditional retail functions of a shopping mall but with leisure amenities oriented towards upscale consumers

² **Mixed use** with retail below and residential or offices above

³ **Live-work units** are specifically designed to enable both residential and business use. While in “work from home”, the work use of a unit is usually secondary to the domestic use, in a “live-work” unit the amount of space devoted to the work use is designed to accommodate more workers and may be designed in a more flexible space layout to encourage business expansion needs.

P-B.1: Landscaped Medians will be permitted by MoDOT



P-B.2: Design elements spanning across the street will not be permitted by MoDOT





- Paved or decorative crosswalks at major intersections that project visual interest and create safe passage to pedestrians
- Creative signage installed outside the right-of-way that can identify special districts and add interest to the corridor

FOCUS SESSION

Typically a focus session consists of pre-screened individuals to ensure that each group member is representative of the relevant target population and an authentic subgroup of the study area. There are usually six (6) to ten (10) citizens in the focus groups, and the sessions usually last for 1-1/2 to 2 hours. A moderator leads the group through discussions based on topics that affect the subject study area.

The discussions are loosely structured, and the moderator encourages the free flow of ideas. The moderator provides a list of objectives to the participants in order to establish topics of conversation pertinent to the study area. He/she generally has only a few specific questions prepared prior to commencement of the focus group. These questions serve to initiate open-ended discussions. The discussions for Olive Boulevard were recorded in writing.

Olive Boulevard Business Owners' Focus Session: A total of seven (7) business owners attended the focus session. The session began by dividing the participants in two groups. Each group was then assigned a task to identify three (3) positive and three negative aspects of Olive Boulevard. As the individual groups completed their assignment, they were brought together to discuss the issues in greater depth. The subjects discussed are listed below:

Positive aspects

- Cultural diversity
- Centrally located
- Lots of people

Negative Aspects

- Shallow parcels
- Appearance of Buildings
- Spot Zoning
- Crime
- Parking lighting

Summary of Focus Group Topics and Comments

- Diversity along Olive Boulevard was the first subject discussed as a group. All participants agreed that the area businesses are diverse resulting in a lack of "identity" for the corridor. Business owners agreed, in order to attract more business and repetitive business, an identity for the corridor needs to be determined and advertised.
- Olive Boulevard has a concentration of ethnic restaurants including Chinese and Vietnamese. The Chinese Chamber of Commerce representative told the participants that their organization has been



instrumental in providing advice to many Asian restaurant owners and has recently begun language assistance to assure their success in communicating with diners and in the operation of their businesses. However, this group of business owners does not typically concentrate on marketing their establishments. Since customers are usually not Asian, these owners need to rapidly learn English and the importance of marking their businesses.

- The Asian grocery stores primarily attract Asian populations. The concentration of food and services provided by these businesses add to the market strength of the corridor.
- When asked if the business owners' support preparing design guidelines for the corridor subject to specific "districts" based on the physical and market characteristics of the corridor, the concept was well a received idea. Understanding the existing conditions and market strength of each district may also allow for specific incentives to be identified for future application and enhancement of the corridor.
- It was the opinion of the group that business owners need to become involved in the implementation of the design guidelines and any future planning and implementation of improvements. In the past there have been attempts to designate a section of Olive Boulevard as "China Town". However, this idea was strongly opposed by the surrounding community. It was felt that the identity and diversity of the entire community was being ignored and in order to create a "Special Ethnic District" all cultures need to be represented. The concept of an American "melting pot" of goods and services that caters to all ethnic groups is more acceptable and could facilitate festivals and other publicity events that will assist in growing businesses along the Olive Boulevard corridor.
- The lack of depth prevalent in existing parcel configurations was discussed during the session. Shallow lots tend to limit redevelopment and prohibit the development of larger retail and commercial investment without the acquisition of buildings and land adjacent to the proposed redevelopment areas. The consultants discussed off setting this condition by development of strategically placed parking decks throughout the corridor that satisfies parking requirements while allowing for more dense development of structures to occur on existing parcel sizes. By understanding land use and the strategic placement of parking decks within a commercial environment, traffic and pedestrian traffic can be predicted. Garages may be developed to include retail and commercial space within the structure to add to the overall "streetscape" within the retail and commercial areas of the corridor.

Maintenance of buildings and store fronts were discussed with the business owners. Many owners felt that new buildings, if not maintained, begin to look old and out of place. Overgrown trees and poorly designed landscaping hides signage and retards the visibility for customers. It was suggested that many of the poorly maintained structures are owned by individuals and agencies not occupying the space and the costs associated with the long term maintenance of



property is left to the tenants. The owners suggested the following recommendations:

- Enforce Codes
- Educate business owners about the codes and their purpose
- Establish recommended landscape layouts that respects retailer signage and its importance to their success
- Landscape those properties that have no investment in green space along the corridor
- Plant small decorative trees along the street and maintain the tree stock
- Design distinct landscape elements that reflect the land uses along the corridor
- Crime along Olive Boulevard was discussed by this group and it was their consensus that crime has escalated over the past few years. There is more shop-lifting in summers probably due to summer breaks. Car break-ins, vandalism, pan handlers, homeless people sitting and sleeping along the corridor, and drug sales have all increased. The business owners acknowledged that these increases have occurred in spite of a strong police presence along the corridor.

The “loop district” in University City was discussed as an important model for the Olive Boulevard corridor. The “loop district” is a special taxing district and enjoys other incentives as well. Business owners in loop district have agreed to tax themselves an additional assessment which is used for landscaping, signage and other amenities that provide stability and aesthetic treatment for the common areas. It was the consensus of this focus group that Olive Boulevard also needs to take a visionary approach to managing this corridor, including the possibility of establishing a special tax district.

A potential obstacle for change and implementation of new ideas is the River Des Peres floodplain. There are currently buildings in the floodplain area and when demolished these buildings will probably not be rebuilt. While steps can be taken to build in floodplain, the construction cost of raising land above the elevation of the floodplain is costly and long term.

Discussion related to aesthetic appeal and maintenance of the corridor resulted in a series of suggestions documented below:

- Move utilities underground
- Buildings to be developed as two and three story structures
- Keep building and parking lot lighting on during the night
- Improved landscaping
- Hold owners accountable for the upkeep of their buildings
- Address the visual condition of the Skinker Boulevard intersection with landscaping and appropriate signage

Olive Boulevard Design Guidelines

University City, MO



ONLINE SURVEY FORM

A P P E N D I X - D

APPENDIX- D



Olive Boulevard Redevelopment Plan: Citizen Survey- 2007

Please take a few minutes to complete this survey in order to provide valuable input for **Olive Boulevard Redevelopment Plan** now underway. Your response will help create a vision for future development of the area. Please mark the boxes that best represent your opinion for each item. If a particular item does not apply to you, mark the "no opinion" box.

Please do not stop the survey in between. Your survey results will be saved only if you click the **"next"** button at the end of the survey and are finally redirected to the City's web page at the end of the survey.

Although your response to this questionnaire will be kept confidential, the information collected from all respondents will be used collectively to determine community vision within the Redevelopment Plan.

Please use the map below to refer to the project area



Extent of project area

1 How often do you shop on Olive Boulevard?

- 1-3 times a week
- 4-7 times a week
- More than 7 times a week
- Less than 3 times a month
- Less than 3 times a year

Never

2 How often do you dine or take lunch in any of the restaurants on Olive Boulevard?

- 1-3 times a week
- 4-7 times a week
- More than 7 times a week
- Less than 3 times a month
- Less than 3 times a year
- Never

3 Suggest three new (3) stores/ businesses that might make you go more often to Olive Boulevard?

- 1)
- 2)
- 3)

4 What three things do you like most about Olive Boulevard?

- 1)
- 2)
- 3)

5 What three things do you like least about Olive Boulevard?

- 1)
- 2)
- 3)

6 How do you rate Olive Boulevard in relation to the elements listed below?

	1 Very Good	2 Good	3 Neither Good nor Bad	4 Bad	5 Very Bad	No Opinion
Traffic flow	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pedestrian safety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Availability of parking

1 2 3 4 5

Access (in and out of the drive-ways)

1 2 3 4 5

Adequate visibility (visibility of retail stores and signage)

1 2 3 4 5

Image and character of the boulevard

1 2 3 4 5

Identity elements (gateways, light-poles, banners, portals, etc.)

1 2 3 4 5

Security (personal and store safety)

1 2 3 4 5

Mass transit facility (location and spacing of bus stops)

1 2 3 4 5

Availability of sidewalks

1 2 3 4 5

Adequate lighting

1 2 3 4 5

Streetscape (aesthetic appeal of the street)

1 2 3 4 5

Historic character

1 2 3 4 5

Business mix

1 2 3 4 5

7 Would you like to expand on any of the items that you marked “very good” or “very bad”, in the previous question?

8 Please suggest three (3) areas on Olive Boulevard that you think are in need of redevelopment.

1)

2)

3)

9 What activities would you like to see in these areas?

1)

2) _____

3) _____

10 Are there any streets in St. Louis area that you perceive to be a model for Olive Boulevard redevelopment?

1) _____

2) _____

3) _____

11 What type residential development(s) would you like to see on Olive Boulevard in future?

 Condos Apartments Mixed use with residential above and retail below

Live-work units (specifically designed to enable both residential and business use. While in “work from home”, the work use of a unit is usually secondary to the domestic use, in a “live-work” unit amount of space devoted to the work use is designed to accommodate more workers than just the resident and may be designed in a flexible form to encourage business expansion.)

 Senior citizen homes Assisted living facilities No residential activity Other, please specify _____

12 What type commercial development(s) would you like to see on Olive Boulevard in future?

 Strip type commercial Big-box type development

Lifestyle center (an outdoor shopping center or mixed-used commercial development that serves the traditional retail functions of a shopping mall but with leisure amenities oriented towards upscale consumers)

 Mixed use with retail below and residential or offices above

Live-work units (specifically designed to enable both residential and business use. While in “work from home”, the work use of a unit is usually secondary to the domestic use, in a “live-work” unit amount of space devoted to the work use is designed to accommodate more workers than just the resident and may be

designed in a flexible form to encourage business expansion.)

- Only office type development
- Other, please specify

13 Additional comments

14 Please select your age range:

- Less than 15
- 15-20
- 21-30
- 31-40
- 41-50
- 51-65
- 66 and above

15 Please select the answer(s) that applies to you the most

- I work with one of the businesses/ agencies/ commercial establishments located on Olive Boulevard
- I own a business/ agency/ commercial establishment on Olive Boulevard
- I live in University City
- I live in a community other than University City in St. Louis County/ St Louis City
- None of the above

next

Survey Page 1

Olive Boulevard Design Guidelines

University City, MO



IMPLEMENTATION STRATEGY & FUNDING

A P P E N D I X - E



INTENT

The purpose of these design guidelines is to establish parameters for public and private improvements that enhance the aesthetic, market, and land values along the Olive Boulevard Corridor from I-170 eastward to Skinker Boulevard. Within this stated corridor, implementation of the guidelines includes:

- Acknowledgement of property ownership and responsibilities
- Recognition of the relationship between infrastructure and economic development opportunities
- The desire to set design standards that reflect the image and quality of life within the City
- Establishment of a process of submittal and review to facilitate preservation of existing investment and to stimulate new

PROPERTY OWNER RESPONSIBILITIES

It is the responsibility of the owner of any property, improved or unimproved, to maintain the exterior areas of the property and adjacent rights of way in a manner that complies with the requirements listed below. Maintenance of property enhances the entire corridor and encourages investment by others consistent with the design guidelines presented within this document:

1. Holes, tanks, and child traps: Remove, or fill where filling will abate the nuisance, all holes, cisterns, open cesspools, open or unsanitary septic tanks, excavations, open foundations, refrigerators, freezers, or iceboxes with unlocked attached doors and any other similar substance, material or condition which may endanger neighboring property or the health or safety of the public or the occupants of the property
2. Unsecured structures: Board over or otherwise secure, and keep boarded over or otherwise secured, all open or broken exterior doors, windows, or apertures of any structure so as to prevent access by unauthorized persons through such openings
3. Rat harborage: Remove or repair, and keep removed or repaired, any condition that provides a place where rats gain shelter, feed, or breed
4. Emergency access routes: Remove and keep removed all brush, vines, overgrowth and other vegetation located within 10 feet of a structure or within 10 feet of a property line which is likely to obstruct or impede the necessary passage of fire or other emergency personnel
5. Thickets that conceal hazards: Cut and remove and keep cut and removed all blackberry vines and other thickets when such growth is found to be:
 - a. Concealing trash and debris
 - b. Creating rat harborage



- c. Creating harborage for people involved in criminal activity or for products used for criminal activity
- 6. Overgrown Lawn Areas: Cut and remove and keep cut and removed all weeds and grass that are located in lawn areas and have a prevailing height of more than 10 inches
- 7. Trash and debris: Remove, and keep removed, unless specifically authorized by ordinance to do otherwise
 - a. All garbage, offal, dead animals, animal and human waste, and waste materials (All garbage shall be stored in appropriate containers)
 - b. Accumulations of litter, glass, scrap materials (such as wood, metal, paper, and plastics), junk, combustible materials, stagnant water, or trash will be collected and appropriately disposed of
 - c. All dead bushes, dead trees, and stumps with the exception of such material which:
 - 1. Is being maintained as part of a landscaped area
 - 2. Does not result in a nuisance as, and
 - 3. Is located on a property which is otherwise substantially in compliance with City ordinances
 - d. All trees which are dying and are determined by the City to require removal in order to safeguard people or property
 - e. Accumulations of dead organic matter and yard debris, with the exception of small accumulations of such material in a maintained compost area on the property and only if such material does not result in a nuisance, such as creating rat harborage, or other conditions described above
 - f. Accumulations of clothing and any other items not designed for outdoor storage
- 8. Storage of non-trash items: Remove, and keep removed, unless specifically authorized by ordinance to do otherwise:
 - a. Accumulations of wood pallets
 - b. All firewood that is not stacked and useable. "Useable" firewood has more wood than rot and is cut to lengths that will fit an approved fireplace or wood stove on the property
 - c. Accumulations of vehicle parts or tires



- d. All construction materials except those that are stored in a manner to protect their utility and prevent deterioration and are reasonably expected to be used at the site on which they are stored
 - e. All appliances or appliance parts except for storage of appliances that are reasonably expected to be used at the site and are stored in a manner to protect their utility and prevent deterioration
 - f. All indoor furniture except that which is stored in a manner to protect its utility and prevent deterioration and is reasonably expected to be used at the property on which they are stored
 - g. All recycling materials except for reasonable accumulations (amounts consistent with a policy of regular removal) that is stored in well-maintained containers
 - h. All other non-trash items which:
 - 1. Are of a type or quantity inconsistent with normal and usual use; or
 - 2. Are likely to obstruct or impede the necessary passage of
9. Disabled vehicles: Neither store nor permit the storing of a disabled vehicle for more than 7 days unless the vehicle is enclosed within a legally permitted building or unless it is stored by a licensed business enterprise dealing in junked vehicles lawfully conducted within the City
10. Obstructions to sidewalks, streets, and other rights of way: Keep the adjacent rights of way free of anything that obstructs or interferes with the normal flow of pedestrian or vehicular traffic, unless specifically authorized by permit or ordinance to do otherwise. This responsibility includes, but is not limited to, removal of earth, rock, and other debris, as well as projecting or overhanging bushes and limbs that may obstruct or render unsafe the passage of persons or vehicles
- a. *Sidewalks:* All sidewalks must be clear of obstructions by earth, rock, or vegetation from edge to edge and to an elevation of 7-1/2 feet above sidewalk level. For example, bushes that encroach on or over any part of a sidewalk area must be cut back or removed and limbs of trees that project over the sidewalk area at an elevation of less than 7-1/2 feet above the sidewalk level must be removed
 - b. *Improved streets:* All improved streets must be clear of obstructions to vehicle movement and parking from edge to edge and to an elevation of 11 feet above street level. For example, bushes that encroach on or over any part of a street must be cut back or removed; limbs of trees that project over a street at an elevation of less than 11 feet above street level must be removed;



and no wires or other installations shall be maintained over the street level at any elevation less than 11 feet

- c. *Alleys and unimproved rights of way:* All alleys, unimproved streets, and other public rights of way must be clear of obstructions that may hinder the normal flow of traffic or render the right of way unsafe for its current and necessary use

ENCOURAGE ECONOMIC DEVELOPMENT

“Economic development project” include any properties, real or personal, used or useful in connection with a revenue producing enterprise. “Economic development project” also includes multiple unit residential housing development, commercial and retail development, land within a designated urban renewal or redevelopment area, land within an area designated as a Housing and Community Development target neighborhood pursuant to the Housing and Community Development Act of 1974, or projects which benefit low or moderate income tenants, or address slum and blight as defined by the 1974 Housing and Community Development Act.

“Qualified historic project” shall mean a project which includes the restoration or rehabilitation of a structure or structures designated as a City of University City Landmark. Such rehabilitation or restoration shall require the approval of the City of University City Landmarks Commission to assure conformance with the Secretary of the Interior’s standards for historic preservation projects.

POSSIBLE FUNDING OPTIONS

In order to address the diverse and varied investment along the Olive Boulevard corridor contained within the Olive Boulevard Design Guidelines, four (4) Districts are described:

- Industrial District – Skinker Boulevard to Kingsland Avenue
- Parkway District – Kingsland Avenue to Midland Avenue
- International District – Midland Avenue to Grant Avenue
- Interstate Commercial District – Grant Avenue to I-170

The City and its consultants are capable of attracting various funding sources based on the strategic planning of specific locations along the corridor. A plan that demonstrates the concepts, need, and cost of median design for instance can be achieved through this process. Or, the concept, need, and costs associated with streetscape may facilitate a statutory overlay district appealing to the land owners and the State of Missouri. The creation of public/private partnerships is of special interest to funding sources at this time due to the budgetary conditions in the State.

Therefore, the following sources of funding provided here are a reference point and represent possible funding sources which may be applied toward a concept



and strategic plan for various corridor development plans. In summary, in order to implement projects the following elements must be in place along this corridor:

- a. A desire by the City to plan and implement corridor improvements
- b. Participation of stakeholders, including specifically land owners and tenants willing to work with the city through various tax districts to improve their own property and the corridor
- c. The assembly of a small team, including the City, assigned land owners and planners capable of strategic planning to create financial proforma concepts, prepare costs, and present to State and Federal funding resources
- d. Identification and meetings with those political leaders capable of interpreting of the plan and willingness to work with the City as a team member to get funding sources secured for the City

The City may be able to attract various funding sources based on strategic planning of specific locations along the corridor. The suggestions provided here represent possible funding sources which may be applied toward streetscape improvements along the corridor.

Streets (Medians and Crosswalks)

The City of University City will participate with MoDOT to seek funding for the design, acquisition of land and easements and construction of alignment improvements

Sidewalks (Sidewalk Paving, Tree Grates, Curbs and Gutters, Accessible Sidewalk Ramps)

Public monies, private funding and donations may be used for sidewalk improvements. University City may elect to enact a special assessment fee which would be collected from each individual Property Owner at the time the Owners' development plan is approved to contribute towards the cost of the improvements.

Planting Material and Screens

Street trees will be planted by the City of University City as a part of any Streetscape improvement program. The City may initially be responsible for the maintenance of trees along the street. However, maintenance may be passed on to The Olive Link Business Association in the future.

Other planting materials, such as, shrubs and flowers in planter boxes shall be planted and maintained by the individual Property Owner. However, the selection of the planting material will be in accordance with the Design Guidelines as approved by the City.



Street Furnishings (Benches, trash containers, bicycle stands, light poles, planter boxes)

All street furnishing material listed above shall be installed by the City of University City as a part of the Streetscape improvement program. A special assessment fee will be collected from each individual Property Owner at the time the Owners' development plan is approved to contribute towards the cost of the Street Furnishings. The City shall initially be responsible for the maintenance of the street furniture. However, this maintenance may be passed on to Olive Link Business Association in the future.

Street Furnishings (Fences, Bollards, Signage)

All street furnishing material listed above shall be installed by individual Property Owner in accordance with the design guidelines.

Public/Community Art

Donations and creative sources, such as, partnership with local art and architecture schools, competitions, etc.; may be used for installation of public/community art.

Utility Poles and Equipment

The City of University City will meet with Ameren UE to develop a plan and strategy for the installation of utilities.

Property improvements

Individual Property Owners will be responsible for all property improvements on private property. Property Improvement Plans are subject to review by the City Planning Department and must be in compliance with all established codes and design guidelines.

PUBLIC FUNDING SOURCES

Federal Funding Opportunities

SAFETEA-LU

The Safe, Accountable, Flexible and Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU) is a six-year \$286.4 billion program in place at this time and scheduled for expiration September 30, 2009 or similar and future programs

Reference website: www.fhwa.dot.gov/legregs/legislat.html

Community Development Block Grant Program – CDBG



The Community Development Block Grant (CDBG) program is a flexible program that provides communities with resources to address a wide range of unique community development needs. Beginning in 1974, the CDBG program is one of the longest continuously run programs at HUD. The CDBG program provides annual grants on a formula basis to 1180 general units of local government and States.

Reference

<http://www.hud.gov/offices/cpd/communitydevelopment/programs/>

website:

State Funding Opportunities

Industrial Development Revenue Bonds

The City of University City economic development revenue bonds may be sold at public or private sale and the bonds may mature at any time or times within the useful life of the project. For public sales, special approval may be required.

Any bonds authorized which are to be sold by public sale must be rated by a nationally recognized rating agency as Investment Grade however; bonds sold through a private sale do not require rating. The City does not guarantee the bonds and is not subject to any liability for their payment although the buyer of the bonds must have the concurrence of the City.

Industrial Development Revenue Bonds are applicable to the development of residential rental property as well as commercial development however, construction of the project must begin nine months from the date of the bond issuance which means that the land, the plan, and the commitment to proceed must be in place and all permits issued prior to bond issuance.

Small Business Incubator Tax Credit Program

Small Business Incubator Tax Credit Program, Section 620.495 of the Missouri Revised Statutes proposed to generate private funds to be used to establish a “protective business environment” (incubator) in which a number of small businesses can collectively operate, fostering growth and development during business start up. The overall maximum amount of tax credits in one calendar year is \$500,000. Tax credits are sellable and carry forward for 5 years.

Quality Jobs Program

Missouri Quality Jobs Program, Section 620.1875 to 620.1900 of the Missouri Revised Statutes proposed to facilitate new quality jobs by targeted business projects. To qualify, the average wage of the new job being generated must equal or exceed the county average wage and the company must offer health insurance and pay at least 50% of the premium. To qualify, the company must create a minimum number of new jobs at the project facility prior to the “deadline” date, based on the type of project being developed.



Tax Incremental Financing

Tax Incremental Financing, Chapter 99 of the Missouri Revised Statutes provides for a portion of local property and sales taxes to assist funding the redevelopment of certain designated areas within a community. Areas eligible for TIF must contain property classified as “Blighted”, “Conservation”, or an “Economic Development” is or a combination of these categories.

Transportation Districts and Transportation Corporations

The establishment and maintenance of a Transportation District or Corporation is complicated and requires legal advice in doing so. The application along portions of the Olive Boulevard may however be worth considering. A district is created to fund, promote, plan, design, construct, improve, maintain, and operate one or more projects.

Whenever the creation of a district is desired, not less than fifty (50) registered voters from each county partially or totally within the proposed district may file a petition requesting the creation of a district. There are specific rules for the establishment and long term management of the district.

Local Funding Opportunities

Great Rivers Greenway District

The Great Rivers Greenway District was established in November 2000 by the successful passage of the Clean Water, Safe Parks and Community Trails Initiative ("Proposition C") in St. Louis City, St. Louis County and St. Charles County, Missouri and is funded on a yearly basis by a 1/10th of 1 cent sales tax.

Great Rivers Greenway (GRG) application for funding will be pursuant to a plan submitted by the City of University City and acknowledged by GRG as a project to be funded within their normal fiscal funding cycle.

GRG's interest in funding is usually comprehensive and although they are interested in trails, they also participate in funding for planning, water management projects such as rivers, lakes, and streams, infrastructure enhancement, lighting, and other enhancements that support and compliment trail projects.

Banking Consortium

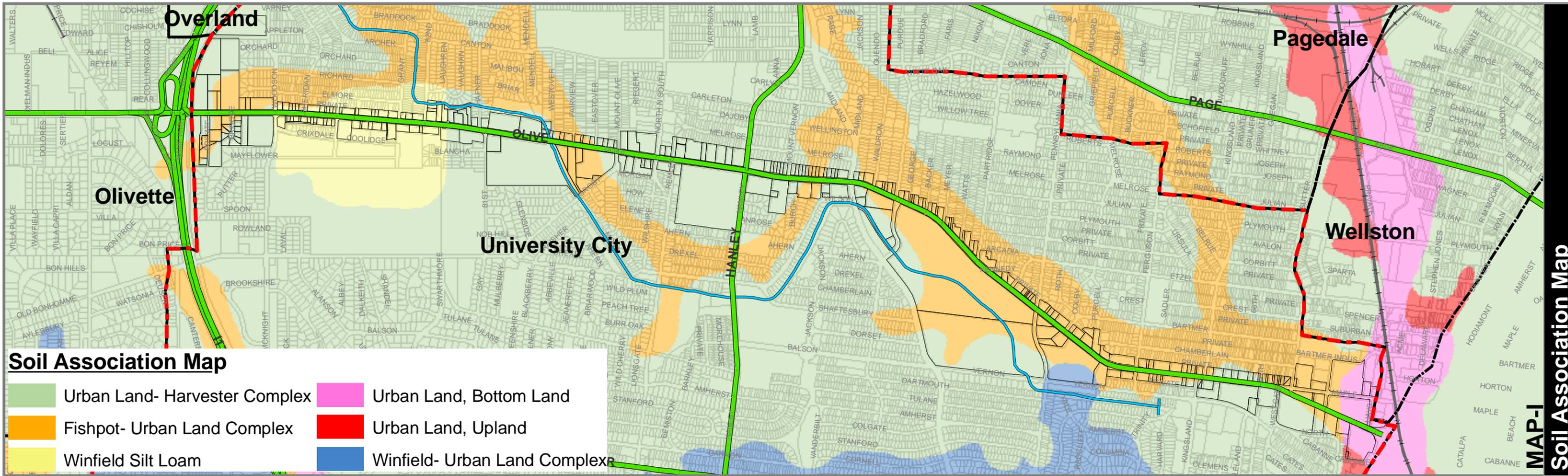
Banks, insurance companies, and other lending institutions may be interested in community redevelopment and enhancement of existing conditions along the Olive Boulevard corridor in association with a well planned and strategically viable development and investment planning. The creation of a bank consortium of local, regional, and state banking institutions would have significant influence in creating development opportunities along the corridor and add to the quality and time required to implement new investment.

Olive Boulevard Design Guidelines

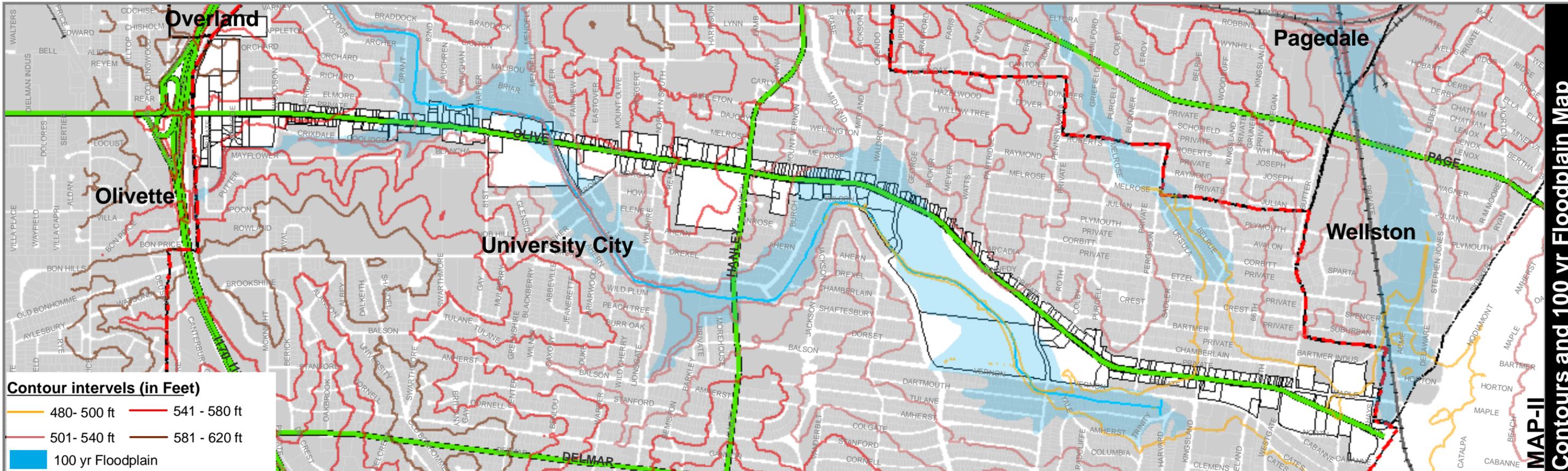
University City, MO



MAPS



MAP-I
Soil Association Map

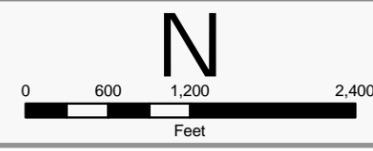


MAP-II
Contours and 100 yr Floodplain Map

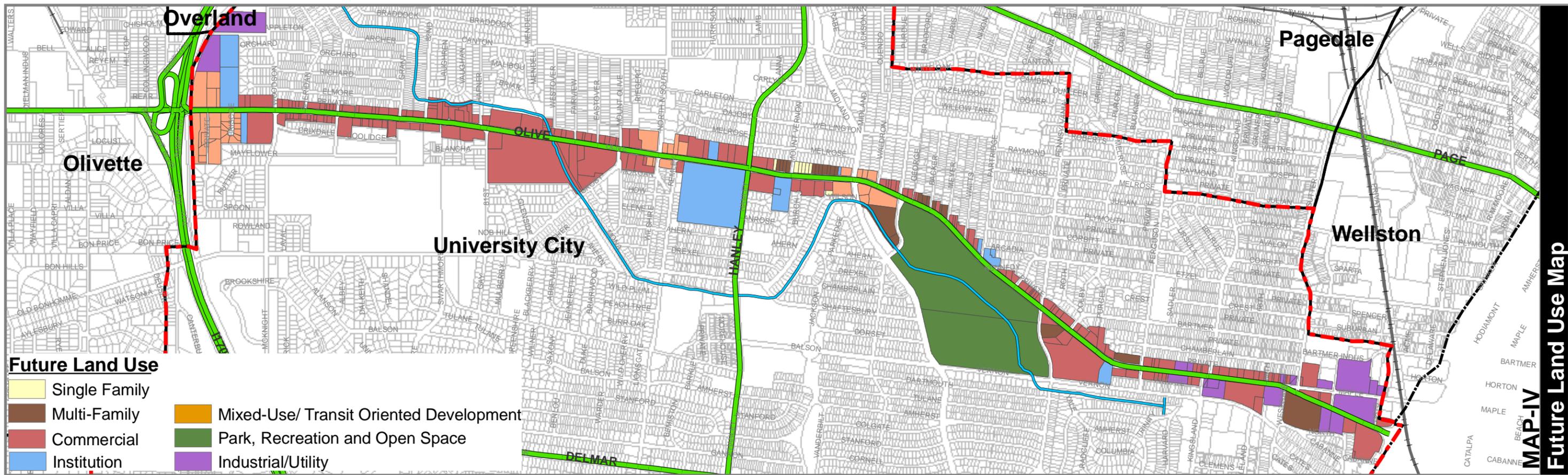
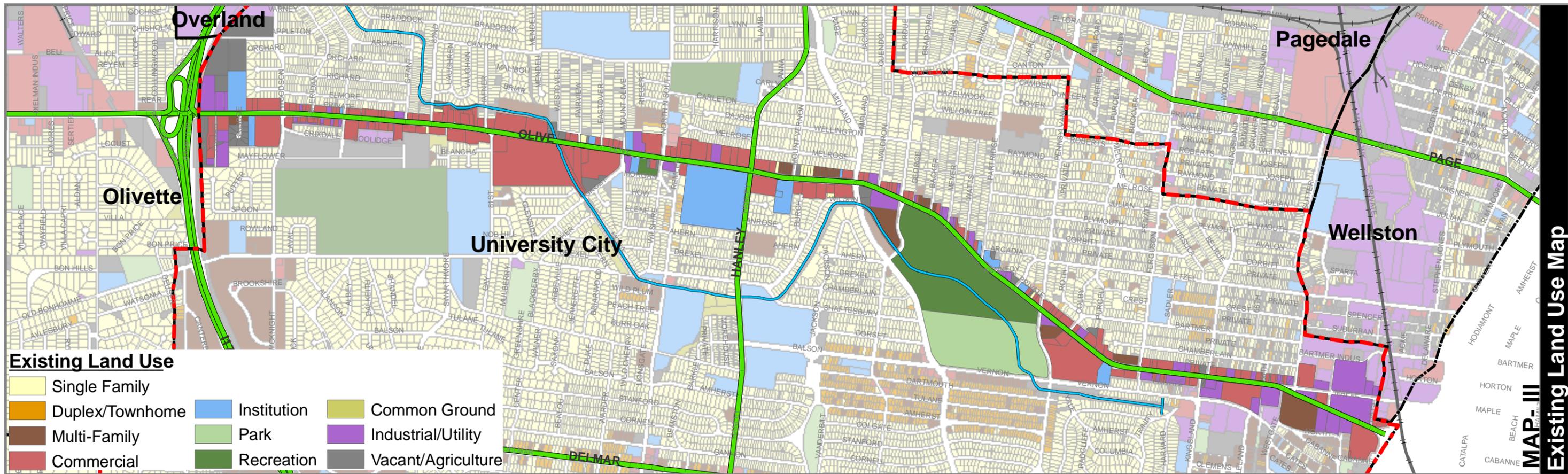


Olive Boulevard Design Guidelines
University City, MO

- City Limits- University City
- Neighboring Municipalities
- River DesPeres
- Metro track
- Major Roads



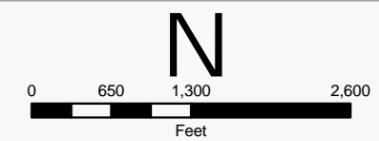
Source: St. Louis County GIS
University City, MO
Created by: **ARCTURIS**
Date: January 2009



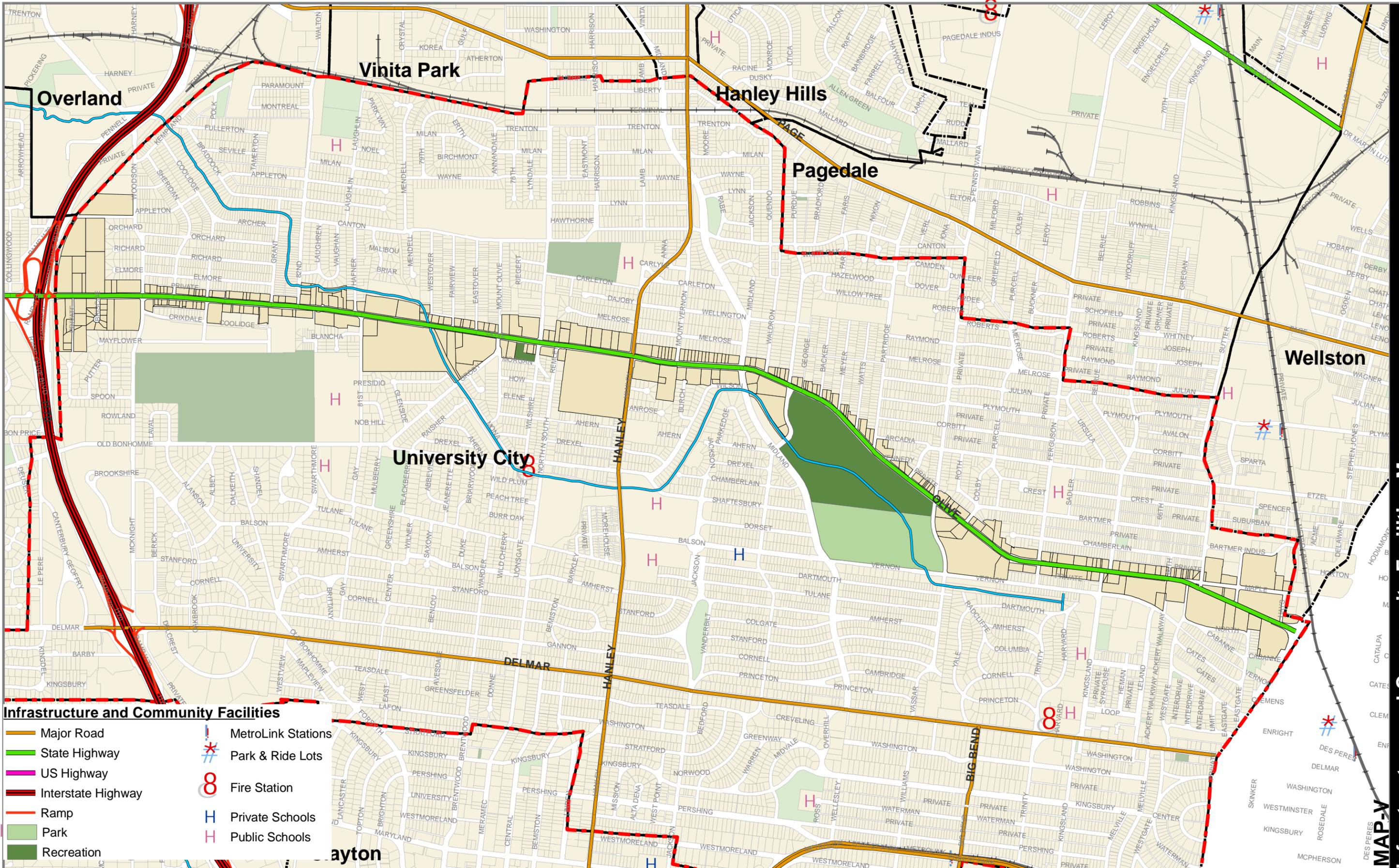
Olive Boulevard Design Guidelines

University City, MO

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University City, MO
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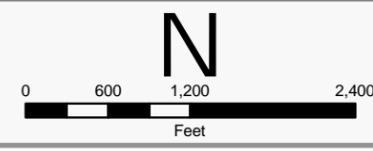


Infrastructure and Community Facilities

- Major Road
- State Highway
- US Highway
- Interstate Highway
- Ramp
- Park
- Recreation
- MetroLink Stations
- Park & Ride Lots
- Fire Station
- Private Schools
- Public Schools

Olive Boulevard Design Guidelines **University City, MO**

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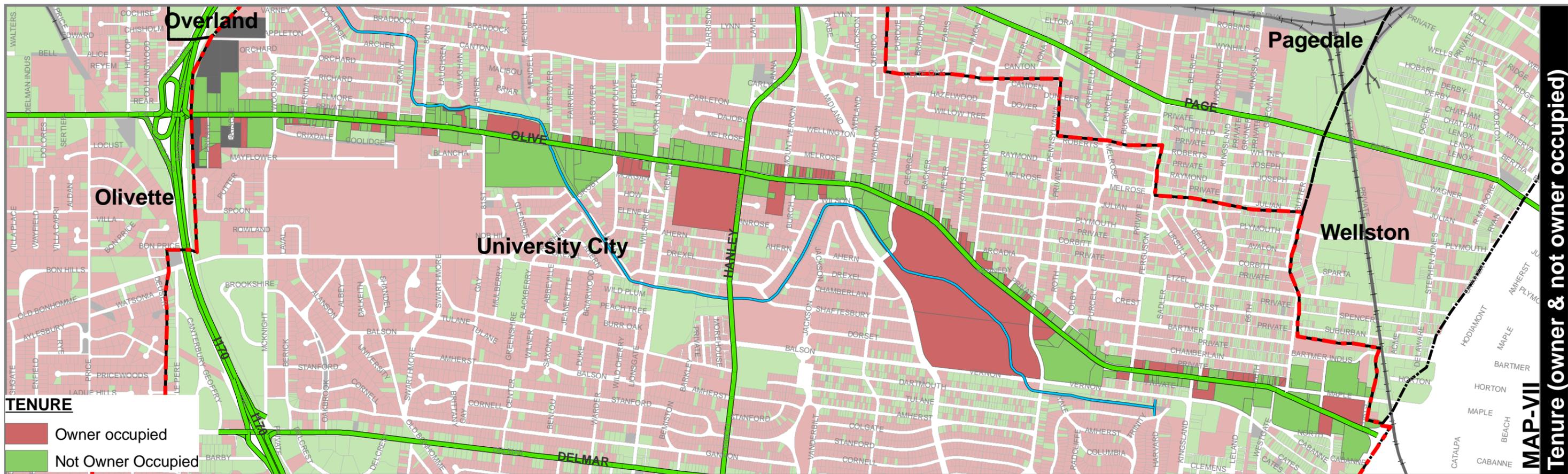


Source: St. Louis County GIS
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MAP-V Infrastructure and Community Facilities Map



MAP-VI
Year structure built & significant landmarks

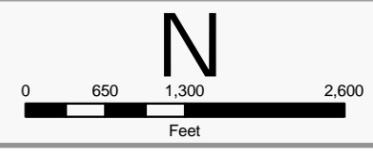


MAP-VII
Tenure (owner & not owner occupied)

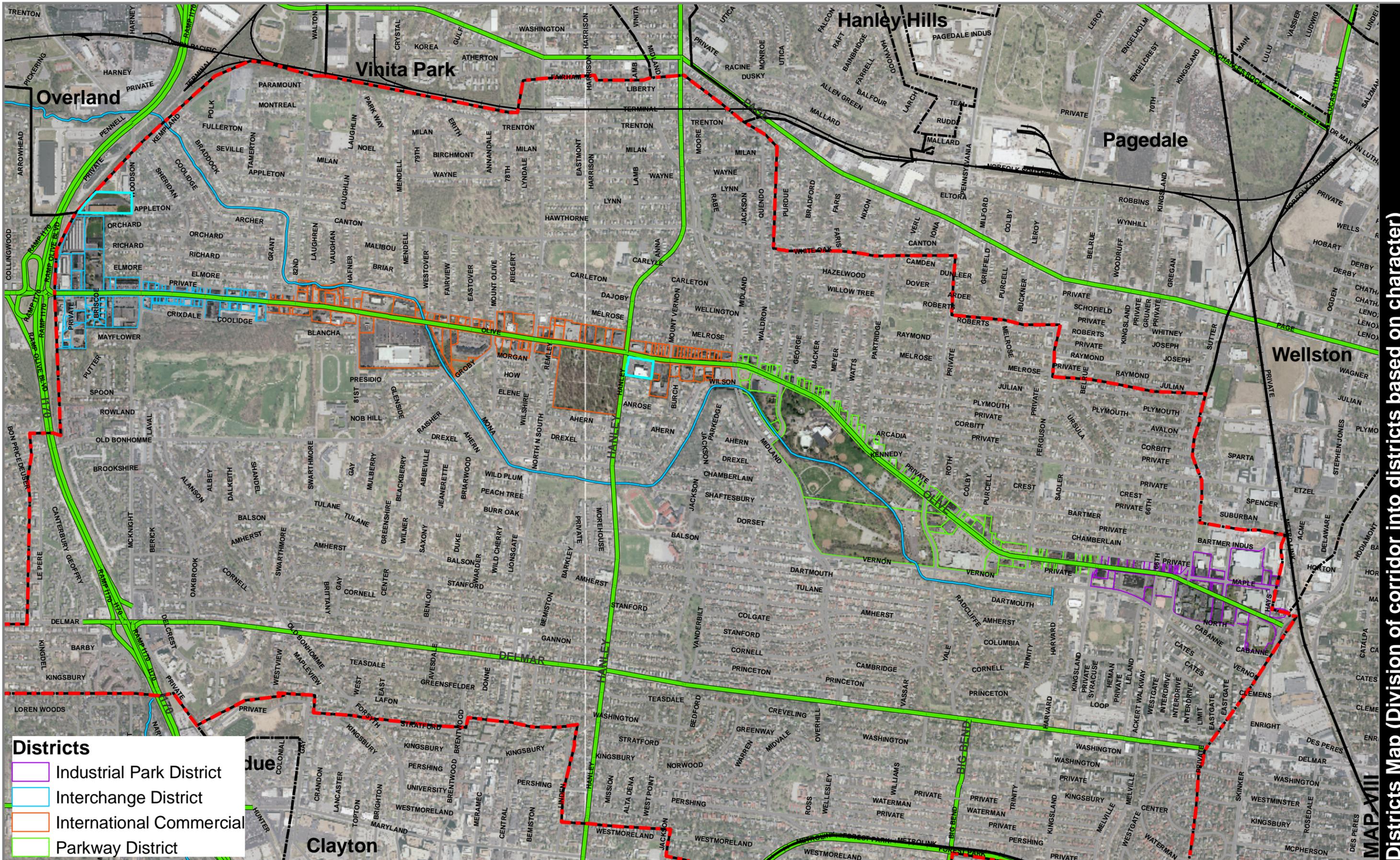


Olive Boulevard Design Guidelines
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- City Limits- University City
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- Metro track
- Major Roads



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Districts

- Industrial Park District
- Interchange District
- International Commercial
- Parkway District

Olive Boulevard Design Guidelines
 University City, MO

- City Limits- University City
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- River DesPeres
- Metro track
- Major Roads

N

0 650 1,300 2,600

Feet

Source: St. Louis County GIS
 University City, MO
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 Date: January 2009

MAP VIII Districts Map (Division of corridor into districts based on character)