# SOUTH LOOP

## STREETSCAPE MASTER PLAN AND LINDAU LINK STREETSCAPE PROJECT


## City of Bloomington

March 12th, 2013

CITY OF
BLOOMINGTON
MINNESOTA

# South Loop District Master Plan

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# Purpose and Intent CHAPTER 1

Purpose & Intent
Study Area
Process

# South Loop Streetscape Master Plan and Lindau Link Streetscape Project

## Purpose and Intent

The purpose of this document is to describe the design intent behind the South Loop Streetscape Master Plan and Lindau Link Streetscape Project as it relates to the City of Bloomington's vision, guiding principles, and goals. The document will cover means and methods to achieve these goals, as well as discuss the design guidelines that will lead to the implementation of the City's vision

As described in the South Loop District Plan, adopted August 2012, the vision is "to transform the South Loop from a dispersed, suburban commercial area into a walkable urban neighborhood that attracts residents, office tenants, hotel guests and shoppers by virtue of its unique characteristics and assets." In order to accomplish this, the South Loop District Plan set five main goals: build on the district's assets, mitigate the disadvantages of the district, transform the district from suburban to urban, accelerate development of the district, and create a sustainable district.

The district's main assets include urban and natural resources, commerce, and connectivity. There is ample opportunity for urban development in the South Loop, and the Minnesota Valley National Wildlife Refuge (MVNWR) is a valuable natural resource that offers visual and recreational opportunities. The district is also home to the Mall of America (MOA) and Bloomington Central Station, and is highly connected to outlying areas via light rail, bus rapid transit, regional freeways, and the Minneapolis/St. Paul International Airport. The main disadvantages of the district are noise and zoning restrictions on uses and structure height due to its proximity to the airport, as well as access limitations due to freeway structures and the river valley that borders the district to the south and east.

The proposed streetscape Master Plan builds on the South Loop's assets and works to transform the district from suburban to urban by proposing a hierarchy of complete street design concepts. These concepts propose streetscape amenities that enhance the pedestrian experience, increase safety, and establish clear and distinct wayfinding systems. The Master Plan also identifies a design framework for active and visually identifiable public open spaces that include opportunities for public art installation. In addition, an interconnected network of parks, trails, and open spaces will enhance the overall design, allowing people to move fluidly from the urban environment to the MVNWR.

The selection of streetscape materials proposed in the Master Plan as well as their location, orientation, and function are rooted in sustainability. Sustainable design features such as LED lighting, pervious pavement, recycled materials, native landscape plants, and stormwater infiltration are incorporated into the Master Plan design. These elements will assist in the branding of the district as a place for sustainability and quality. To support the goal of sustainability it is crucial that resources be committed to maintain the function and appearance of public spaces. Establishing a maintenance district to enhance and protect this investment in public improvements would be prudent.

The City of Bloomington has already begun implementing the first phase of the South Loop District Plan including the Lindau Lane grade separation between TH 77 and 24th Ave, and the Lindau Link Complete Street between 24th and 30th Avenues. The Master Plan will take into consideration as well as influence the design of these project areas.

## Study Area

The South Loop District is bordered by Interstate 494 on the north, TH 77 on the west, and the Minnesota Valley National Wildlife Refuge on the South and East. The Minneapolis/St. Paul International airport abuts its northern edge. Within its boundaries are the Mall of America, Bloomington Central Station, and four Light Rail Transit stations, all important areas of commerce or transit in the Twin Cities metro area.

## Process

A series of four workshops, several technical meetings, and review meetings with property owners and neighborhood participants were held over the course of several months to gather input for the Master Plan design. Additional City of Bloomington reviews of the draft Master Plan took place to affirm design direction for the strategies within South Loop District. These workshops and meetings took place with stakeholders internal to the City of Bloomington on the following dates:

- July 11, 2012 - Workshop #1
- July 25, 2012 - Workshop #2
- August 1, 2012 - Stormwater and Lighting
- August 8, 2012 - Workshop #3
- August 22, 2012 - Public Art, Wayfinding, Placemaking, and Construction/Maintenance
- August 29, 2012 - Public Space
- September 6, 2012 - Wayfinding
- September 27, 2012 - Workshop #4
- October 15, 2012 - Neighborhood Open House
- October 22, 2012 - MOA Design Workshop
- December 3, 2012 - City Council Work Session
- December 4, 2012 - Port Authority Work Session
- December 6, 2012 - Planing Commission Work Session

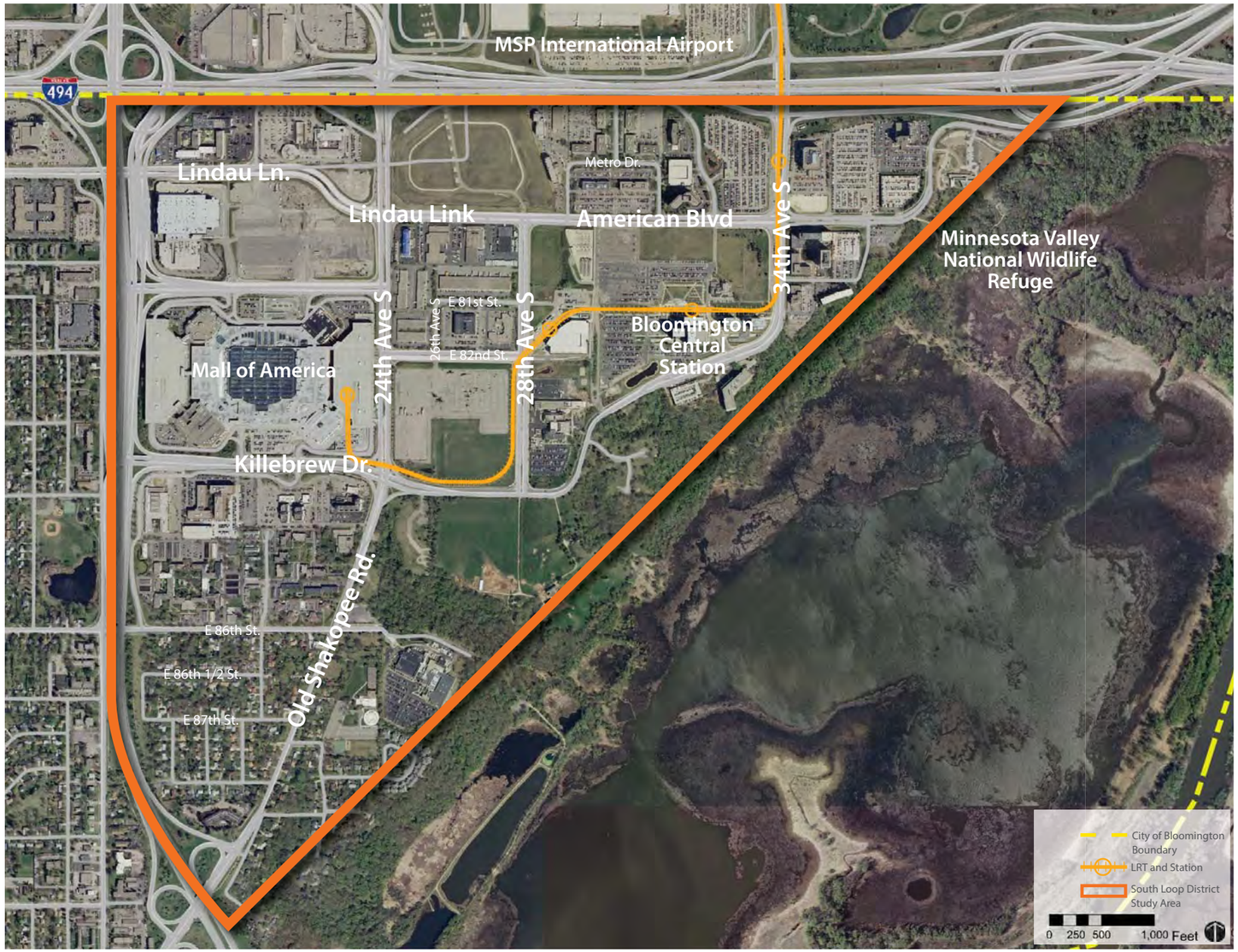



*Figure 1.1 Study Area Map, South Loop District, City of Bloomington*


*Figure 1.2 Study Area Map within the City of Bloomington Boundaries*


# Goals and Objectives CHAPTER 2

Guiding principles & Design
Previous Study Area Plans

# Goals and Objectives

## Guiding Principles and Design

The Master Plan addresses the South Loop District's Plan goals through various design interventions:

- **A new pedestrian sidewalk network** will provide trees, lighting, and other amenities to increase pedestrian comfort and improve aesthetics.
- **Distinct gateways at major intersections** will incorporate public art to improve the appearance of the district and create identity
- **Green infrastructure** will be integrated into the South Loop through the creation of open spaces, which will be connected by tree-lined landscaped boulevards.
- S**tormwater will be managed through low-impact design techniques** such as rain gardens, green roofs, rain water harvesting and reuse. Pervious materials will be utilized where practical to allow for on-site infiltration of rainwater. These low impact techniques will focus on a slow-spread-soak approach based on the characteristics of the watershed, the goals being to reduce the quantity of water that runs off development sites, controlling peak flow, and improving water quality prior to off-site discharge.

These design interventions are evident in specific areas throughout the Master Plan. The Lindau Link 'Complete Street' will have the character of a greenway, inviting pedestrians as well as accommodating bicyclists, drivers, and mass transit. This street will connect the Mall of America (MOA) and Bloomington Central Station BCS) and will foster storefront and sidewalk level activity, incorporating sustainable design and stormwater practices.

This greenway-like character will also be evident on 28th Avenue and American Boulevard east of 34th Avenue, where there will also be an entrance to the Minnesota Valley National Wildlife Refuge MVNWR headquarters and Visitor's Center.

The 24th Avenue corridor will provide pedestrian and streetscape enhancements, locating new buildings, trees and landscaping near the street edge to create a pedestrian scale, as well as utilizing infiltration features to filter and reduce stormwater runoff.

There will be plazas on 24th Avenue and Lindau Lane, 28th Avenue and Lindau Lane, and BCS, as well as distinct gateways near the intersection of 34th Avenue and American Boulevard and 24th Avenue and American Boulevard. Where feasible, all will feature public art and will function as visual gateways to both the MOA and Lindau Link.

The overall design vocabulary will be contemporary, timeless, and classic, and will serve as the underlying theme that ties each of these areas together. Materials will meld with a variety of architectural styles so that they are relevant over time. Furnishings will be made of light metals with durable finishes, and will be easy to replace if they become damaged.

The South Loop District Plan identifies a Land Use framework intended to:

**Establish South Loop as a place for sustainability, quality, comfort, and safety, with a clear sense of place**

- Create a safe, attractive walkable environment that makes it easy to get around on foot and bicycle
- Commit resources to maintain the function and appearance of public spaces
- Promote energy conservation and low-impact site design techniques and district-scale alternative energy systems

**Build on the District's densities and character from suburban to urban**

- Preserve and enhance existing residential neighborhoods
- Protect natural and cultural resources by applying best management practices
- Make strategic public investments that foster place-making and leverage private investments

**Transform the District's densities and character from suburban to urban**

- Foster denser, mixed use development near transit stations

## Land Use Framework

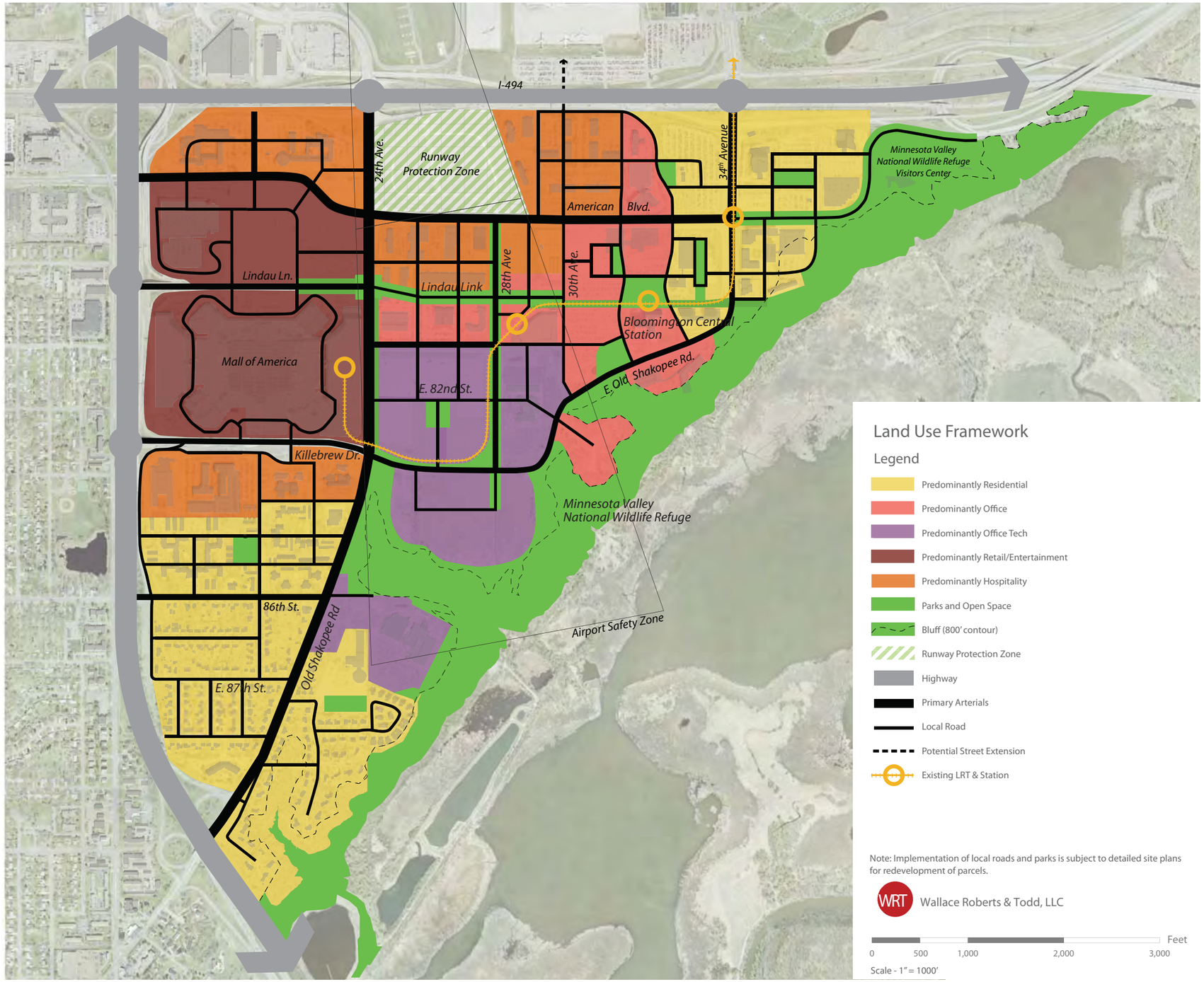



*Figure 2.1 Land Use Framework, South Loop District Plan*

# Goals and Objectives

## Circulation and Movement Framework

### 34th and 28th Avenues

- Create a greenway-like character
- Enhance the entrance to MVNWR headquarters and visitors center

### Lindau Link "Complete Street"

- Invite pedestrians
- Accommodate bicyclists, drivers, and transit
- Greenway-like character
- Foster storefront and sidewalk-level activity
- Incorporate sustainable design and stormwater practices
- Connect the Mall of America and Bloomington Central Station
- Provides space that can be used for events

### 24th Avenue Corridor

- Locate new buildings, trees and landscaping near the street edge to create pedestrian-scale along the corridor
- Utilize infiltration features behind the curb to filter and reduce stormwater runoff
- Provide pedestrian and streetscape enhancements

### Distinct Gateways

- Located at major intersections
- Incorporate public art to improve the sense of place in the corridor
- Create identity

### Pedestrian Sidewalk Network

- Provide trees, landscaping, lighting, and site furnishings to increase pedestrian comfort
- Improve aesthetics
- Contribute to stormwater management

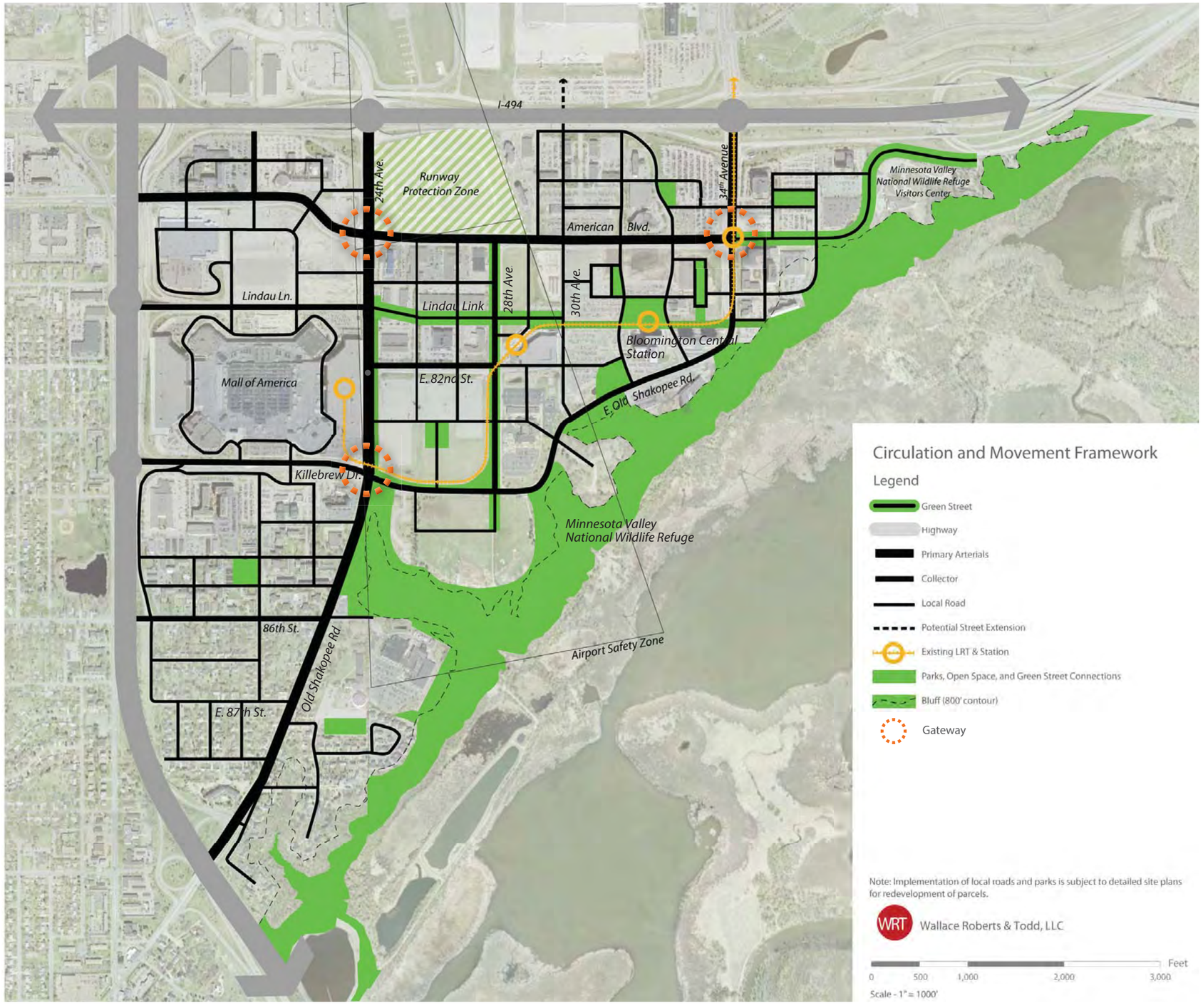



*Figure 2.2 Circulation and Movement Framework, South Loop District Plan*

**Integrated Green Infrastructure into South Loop**

- Create open spaces, such as parks and playgrounds
- Provide green connections between open spaces, such as tree-lined, landscaped boulevards
- Use pervious materials where practical to allow on-site infiltration of rainwater

**Plazas**

- Located along Lindau Link
- Feature sculpture or public art
- Function as visual gateways to both the MOA and Lindau Link

**Minnesota River Valley Access**

- Access that invites public use
- Create trail loops that give walking and biking options

**Stormwater Low-Impact Design Techniques**

- Rain gardens
- Green roofs
- Rain water harvesting and reuse
- Permeable pavements that slow down and filter stormwater
- Underground storage

**Stormwater Management Goals**

- Reduce the quantity of water that runs off development sites
- Control the peak flow rates of runoff
- Improve water quality on-site prior to off-site discharge
- "Slow - spread - soak" approach based on the characteristics of the watershed


*Figure 2.3 Parks and Open Space, South Loop District Plan*

# ADA Compliance CHAPTER 3

Guidelines
Examples

# ADA Compliance

## Guidelines

All elements of the streetscape should be consistent with the current Americans with Disabilities Act (ADA) and Public Right-of-Way Accessibility Guidelines (PROWAG). Representative elements that should comply with accessibility guidelines include the following:

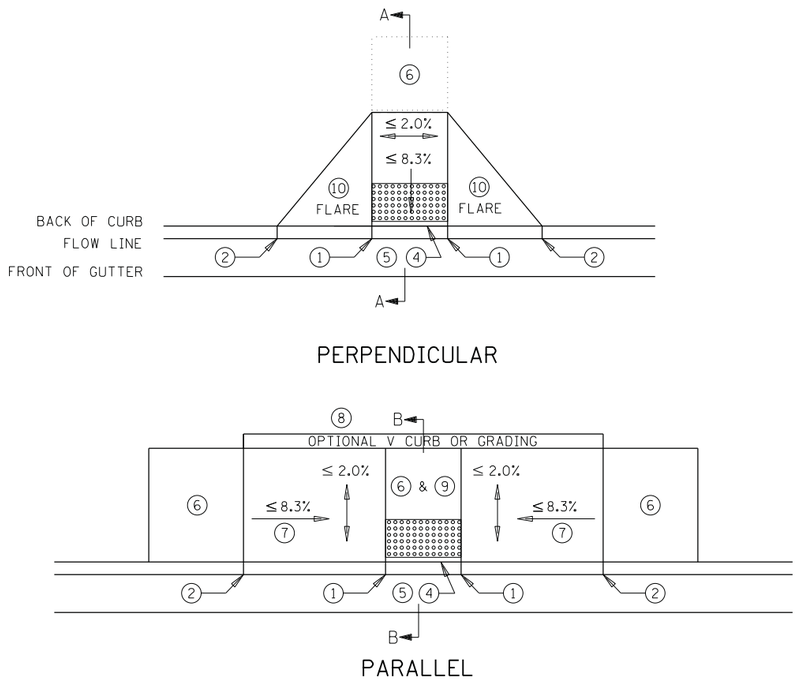
•Sidewalks

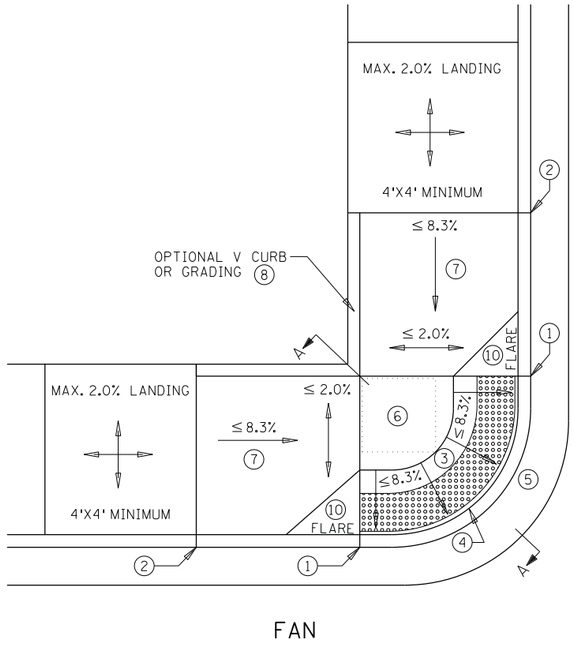
•Benches

•Pedestrian Signals

•Curb Ramps

Sidewalk improvements should maintain consistent, unobstructed pathways that provide the minimum recommended clear widths. Future trees, signage and light poles should be placed within a tree lawn/amenity corridor along the back of curb so as not to interfere with the clear accessible route. Placement should also minimize roadside hazards for errant vehicles. Benches should include arms. Pedestrian signals should be identified and placed properly to allow for ease of access to buttons and pedestrian crossings. Curb ramps should have the proper gradients and geometries include detectable warning devices (truncated domes) as required by the Americans with Disabilities Act (ADA) guidelines.



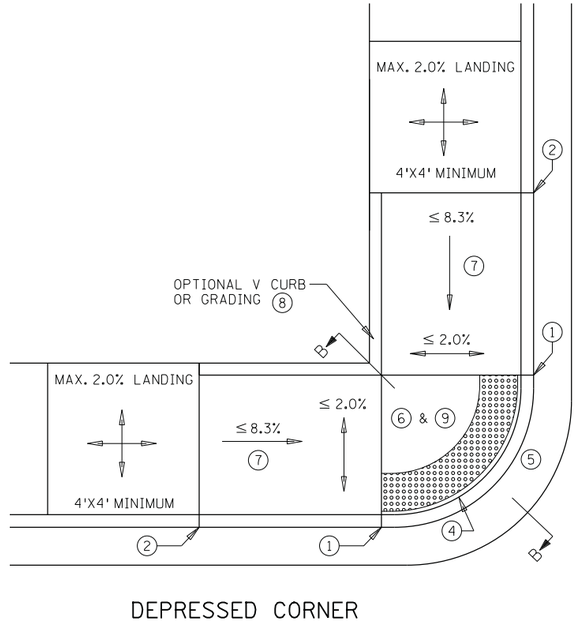
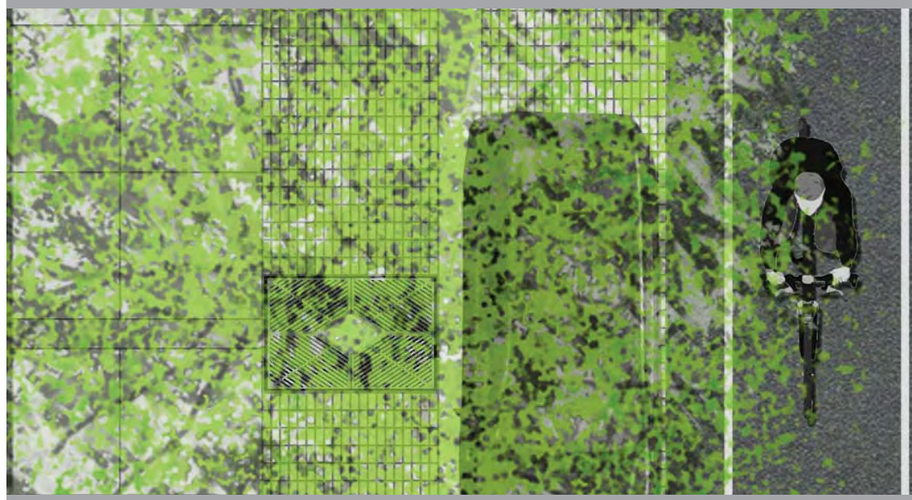




*Figure 3.1 Pedestrian ramp typical details*



*Figure 3.2 Curb, ramp, and signal placement examples*



# Streetscape Hierarchy CHAPTER 4

Introduction
Streetscape Level of Treatment
Streetscape Hierarchy Design Elements Matrix
Representative Cross Sections/Plans

# Streetscape Hierarchy

## Introduction

Within the South Loop there is a streetscape hierarchy that is broken down into five categories: primary arterials, collectors, commercial roads, residential roads and green streets. This network of streets services parcels with differing setback and access requirements that influence right-of-way design. Streetscapes range from wide right-of-ways with multi-lane roadways to tree-lined streets with bike lanes, planted medians, and on-street parking. These wider roadways are dominated by vehicular use, while the narrower local roads and green streets cater to pedestrian and bicycle movement as well as stormwater mitigation.

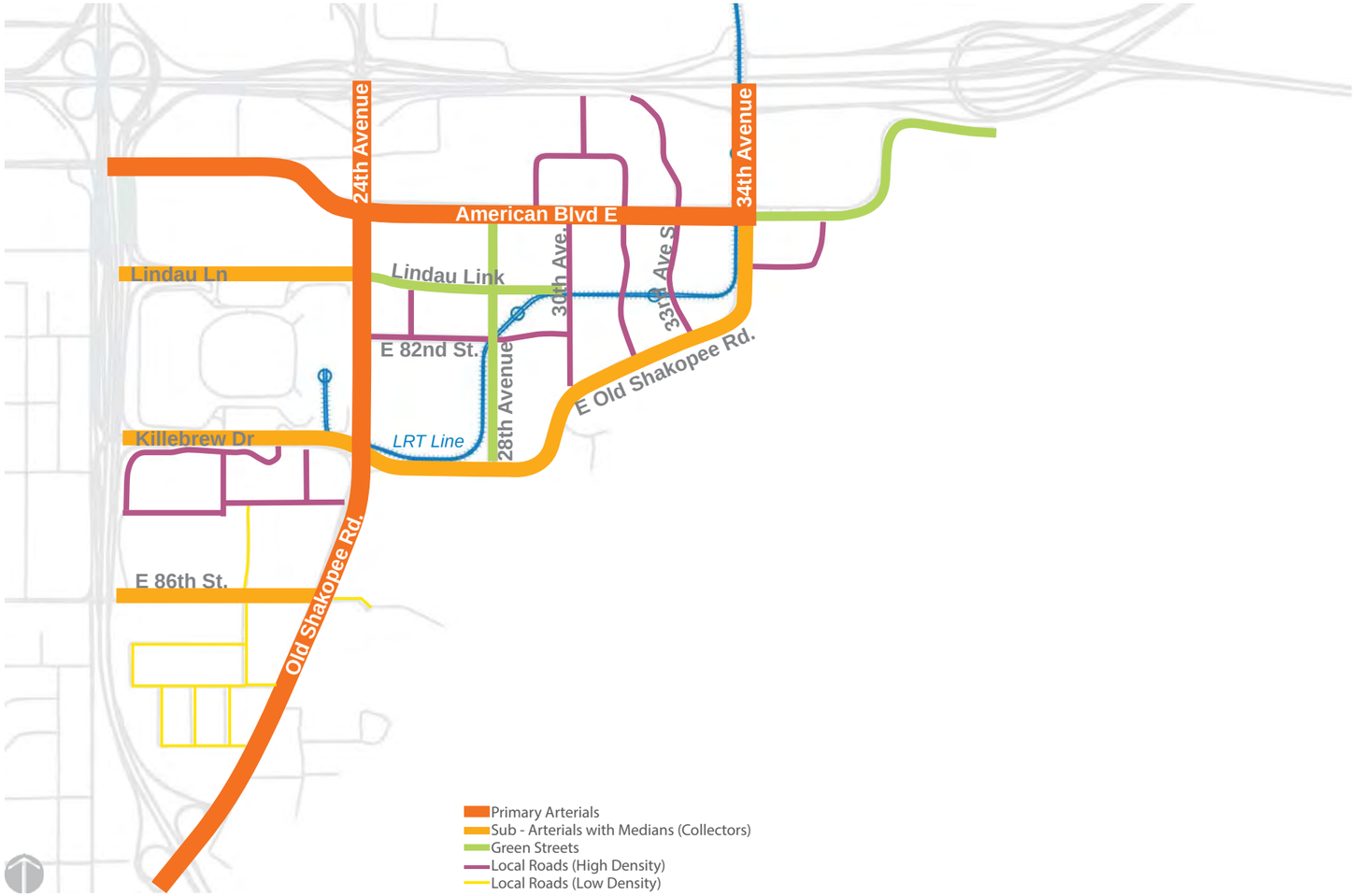
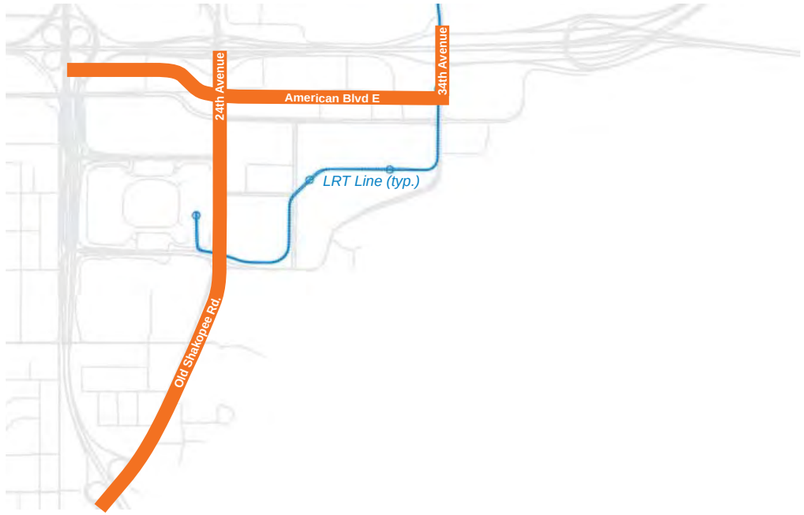
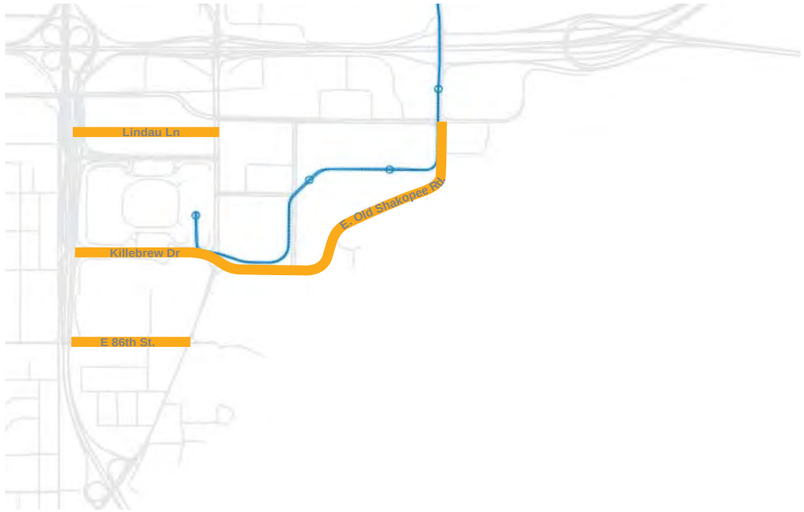



*Figure 4.1 Streetscape Hierarchy Diagram*




Category 1: Primary Arterials (No On - Street Parking)

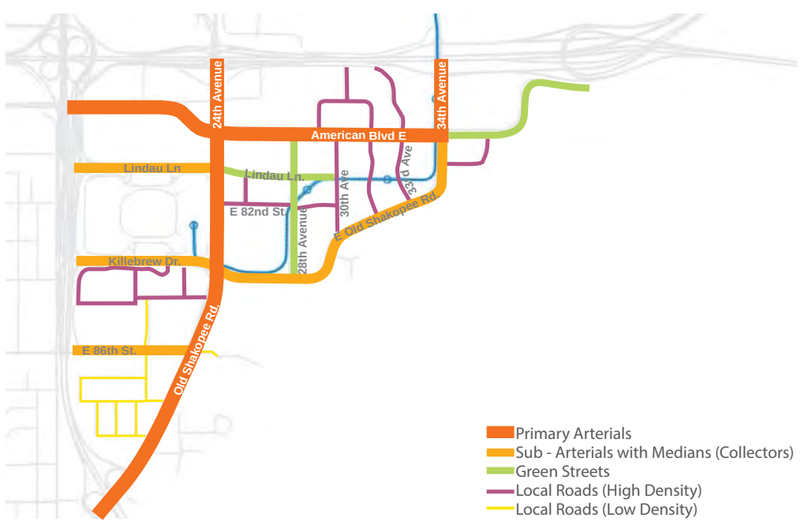



Category 2: Collectors/Sub - Arterials (No On - Street Parking)


Category 3: Local Roads (High Density)


Category 4: Green Streets


Category 5: Local Roads (Low Density)




Streetscape Hierarchy (Composite)

*Figure 4.2 Streetscape Hierarchy Categories Diagrams*

# Streetscape Hierarchy

## Streetscape Hierarchy Design Elements Matrix

The figure and table below identify proposed land use district boundaries and provide set back guidance.

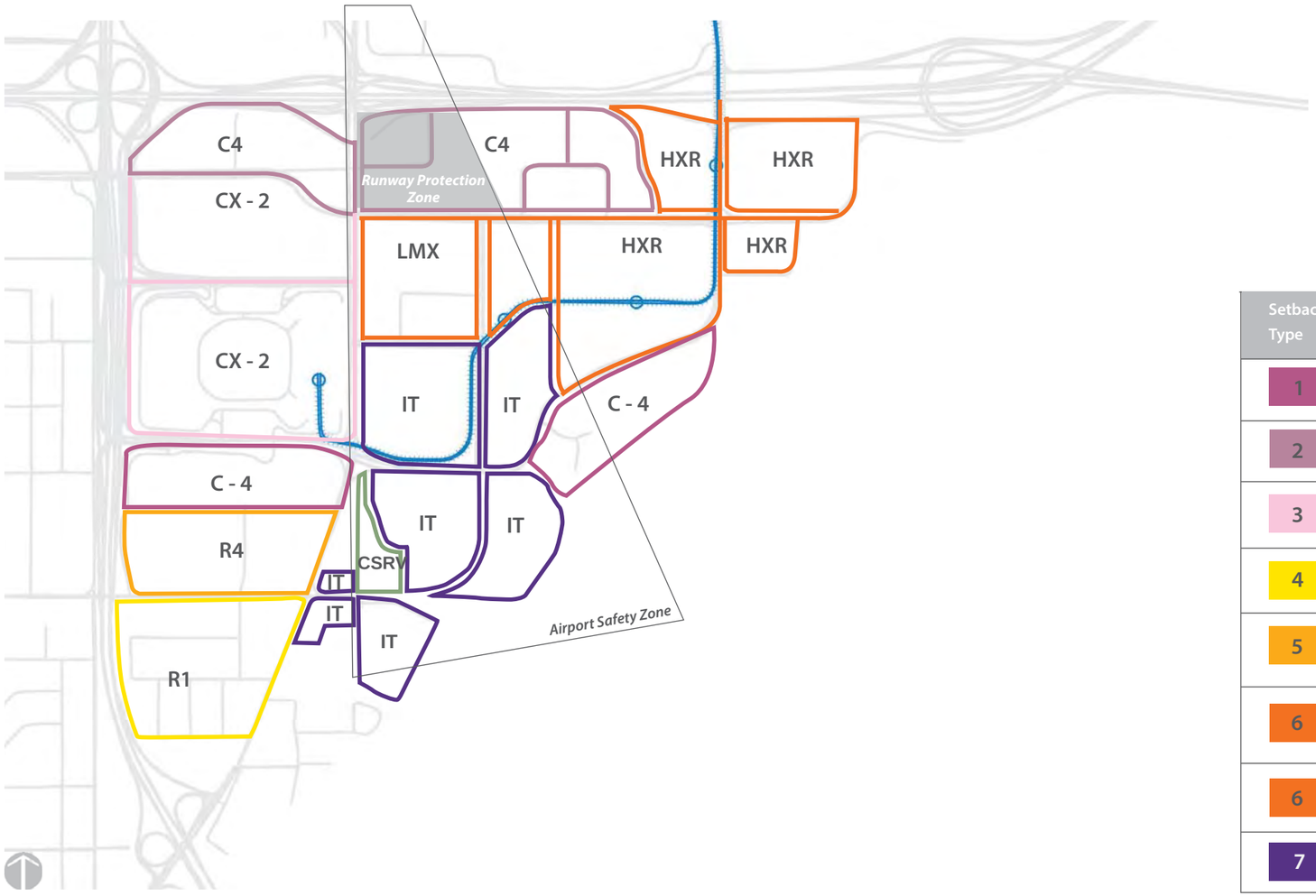



*Figure 4.3 Building Setbacks Diagram*

| Setback Type | Land Use | Zoning (Proposed) | Min Distance from R.O.W. |
|---|---|---|---|
| 1 | Hospitality | C - 4 | 35 feet |
| 2 | Hospitality/Office | C - 4 | 35 feet |
| 3 | Retail | CX - 2 | 20 feet |
| 4 | Single Family Residential | R1 | 30 feet |
| 5 | Multiple Family Residential | R4 | 40 feet |
| 6 | Lindau Mixed Use | LMX | 10 feet |
| 6 | Lindau Mixed Use | HXR | 0 feet |
| 7 | Innovation & Technology | IT | 30 feet |

*Table 4.1 Building Setbacks*

**Streetscape Hierarchy Design Elements Matrix**

This matrix summarizes the various design treatments as they correspond to the street hierarchy.

**Streetscape Hierarchy Design Elements Matrix**

| | Lighting | Pavement | Stormwater | Boulevard Trees | Street Furniture | Landscaping | Quadrants/Intersection | Banners |
|---|---|---|---|---|---|---|---|---|
| **Primary Arterials (24th Ave/34th Ave)** | Combined Road and Pedestrian Lighting | Concrete Broomed and Scored | Tree Trench | Trees in the Boulevard | Mid Block and Rest Stop | Median Planting 10' Wide or Greater | Crosswalk Vertical Elements | Light Poles to be Banner Ready |
| **Primary Arterials (American Blvd)** | Combined Road and Pedestrian Lighting | Concrete Broomed and Scored Permeable Boulevard | Tree Trench | Trees in the Boulevard | Mid Block and Rest Stop | Median Planting 10' Wide or Greater | Crosswalk Vertical Elements | Light Poles to be Banner Ready |
| **Collectors (Sub - Arterials)** | Combined Road and Pedestrian Lighting | Concrete Broomed and Scored | Tree Trench<br>Tree Planter<br>Bioretention Basin<br>Infiltration Trench | Trees in the Boulevard | Mid Block and Rest Stop | Median Planting 10' Wide or Greater | Crosswalk Vertical Elements | Light Poles to be Banner Ready |
| **Local Roads (High Density)** | Combined Road and Pedestrian Lighting (Separate for 30th Ave) | Concrete Broomed and Scored | Bioretention Basin<br>Permeable Pavers<br>Boulevard Swale | Trees in the Boulevard | Mid Block and Rest Stop | NA | Crosswalk Bump-out | Light Poles to be Banner Ready |
| **Green Streets** | Roadway Lighting<br>Pedestrian Lighting<br>Special Area Lighting<br>Seasonal Lighting Provisions<br>(Combined Road/Ped Lighting at 28th Ave) | Concrete Broomed and Scored<br>Colored Concrete Accents<br>Pavers | Tree Trench<br>Tree Planter<br>Bioretention Basin<br>Permeable Pavers<br>Infioltration Trench | Trees in the Boulevard<br>Multiple Plantings | Benches and Trash Receptacles<br>Newspaper Corrals | Median Planting<br>Mid Block Accents<br>Planters<br>Buffers | Crosswalk<br>Bump-out<br>Vertical Elements<br>Planters<br>Landscape Pots | Light Poles to be Banner Ready |
| **Local Roads (Low Density)** | Road Only | Concrete Broomed and Scored | Bioretention Basin<br>Permeable Pavers<br>Boulevard Swale | NA | NA | NA | NA | NA |

*Table 4.2 Streetscape Hierarchy Design Elements Matrix*

# Representative Cross Sections/Plans

## Primary Arterials

American Boulevard is the primary arterial running east-west, while 24th Avenue and 34th Avenue are the primary arterials running north-south. These arterials carry large amounts of traffic and are characterized by wide right-of-ways, multi-lane roadways and medians. There is typically a narrow boulevard between the sidewalk and the road, and trees are planted in either the boulevard or the median. Boulevards will also have permeable pavers. These arterials will all have sidewalks, contributing to pedestrian circulation, as well as street furniture at midblock locations. There is no on-street parking. Lighting fixtures will serve both the road and the pedestrian space, with banners that contribute to site identity.

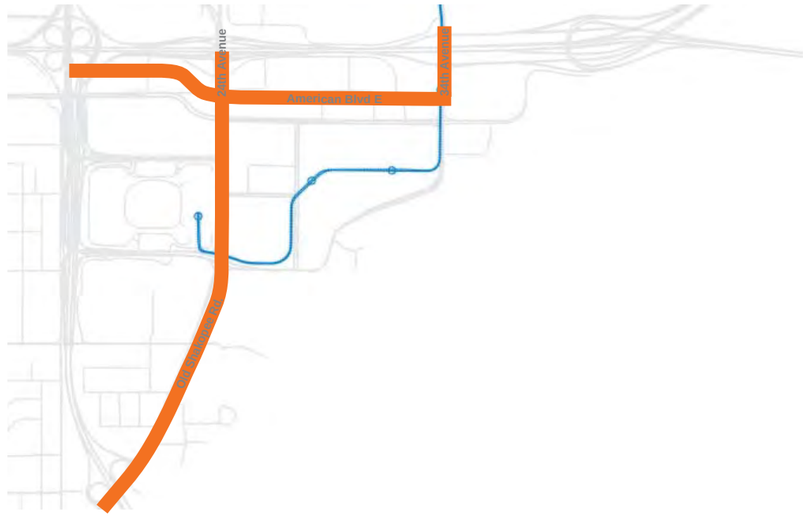
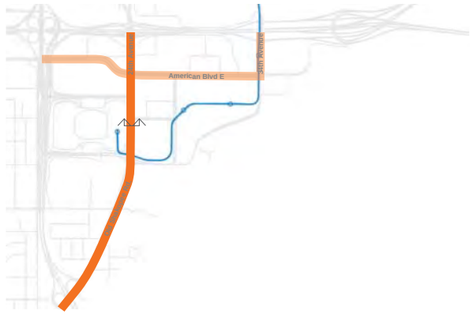



*Figure 4.4 Primary Arterials Category Diagram*


*Figure 4.3 View of 24th Avenue Transit Station*

## 24th Avenue - South of 82nd. Street



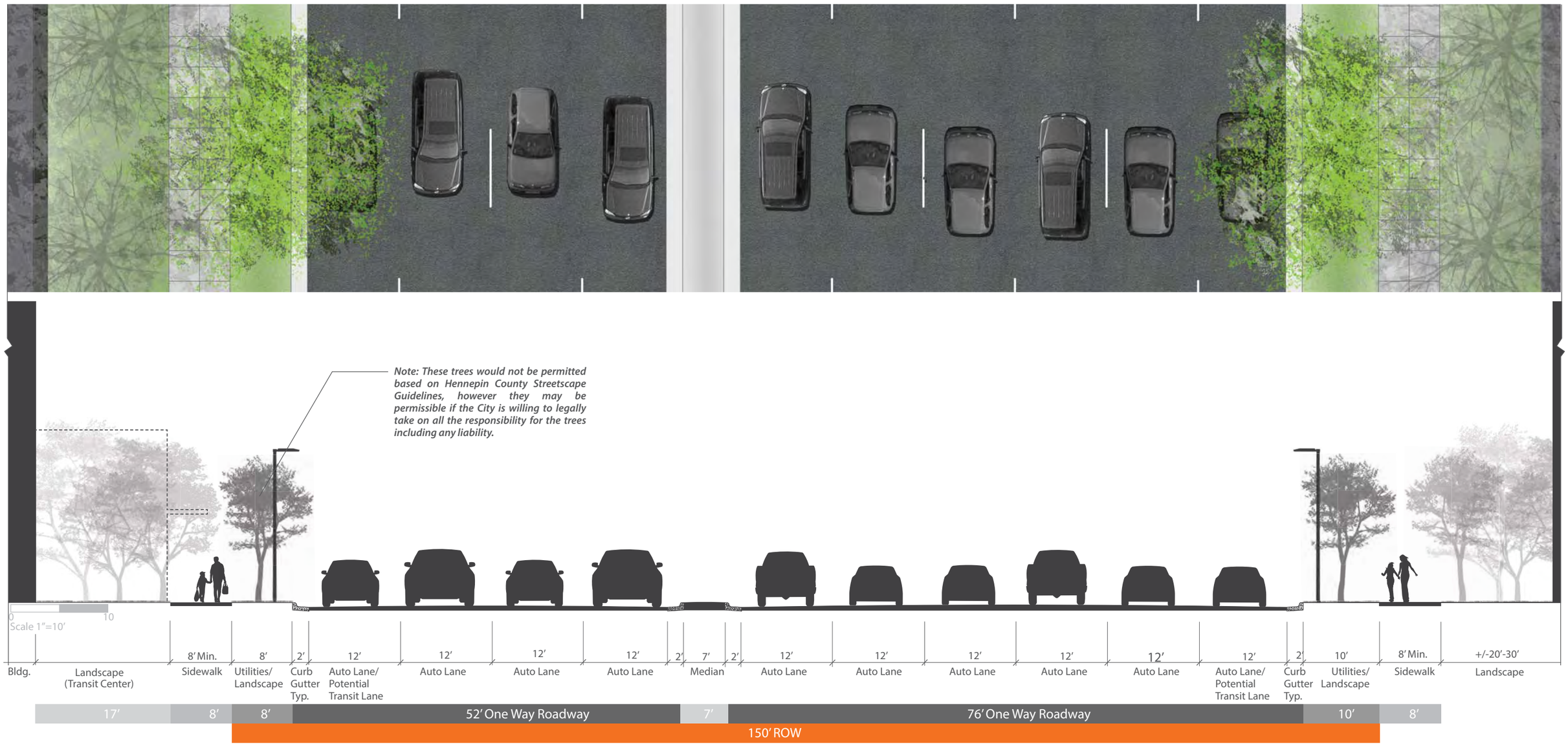




*Figure 4.5 24th Avenue Plan and Cross Section*

# Primary Arterials

## American Boulevard - West of 24th Avenue

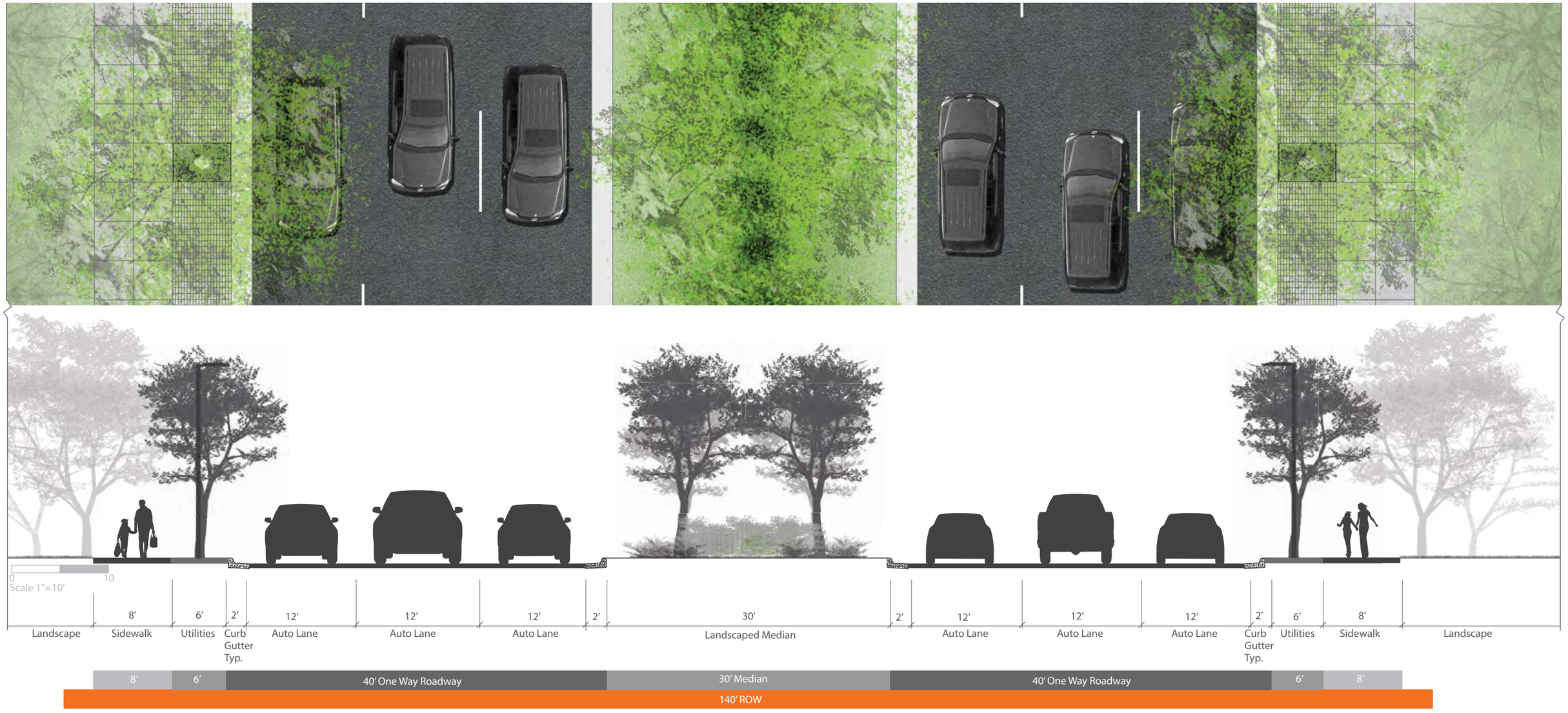




*Figure 4.6 American Boulevard (West of 24th) Plan and Cross Section*

## American Boulevard - East of 24th Avenue

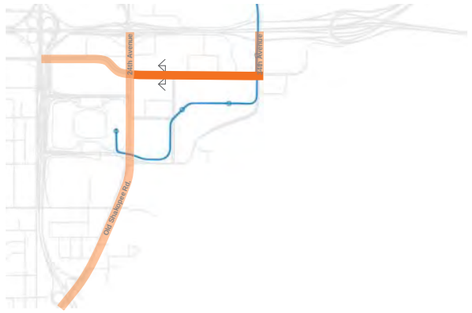




*Figure 4.7 American Boulevard (East of 24th) Plan and Cross Section*

# Representative Cross Sections/Plans

## Collectors (Sub - Arterials)

Collectors, or sub-arterials, include Lindau Lane west of 24th Avenue, Killebrew Drive, and East 86th Street running east-west, and East Old Shakopee Road running north-south along the bluff. These collectors serve to connect arterials to local streets, and are characterized by multiple travel lanes, a boulevard between the road and sidewalk, and street trees. There is typically no on-street parking, and sidewalks contribute to the pedestrian network. Lighting fixtures will serve both the road and the pedestrian space, with banners that contribute to district identity. Medians will be planted where feasible, and there will be street furniture at midblock and rest stop locations.

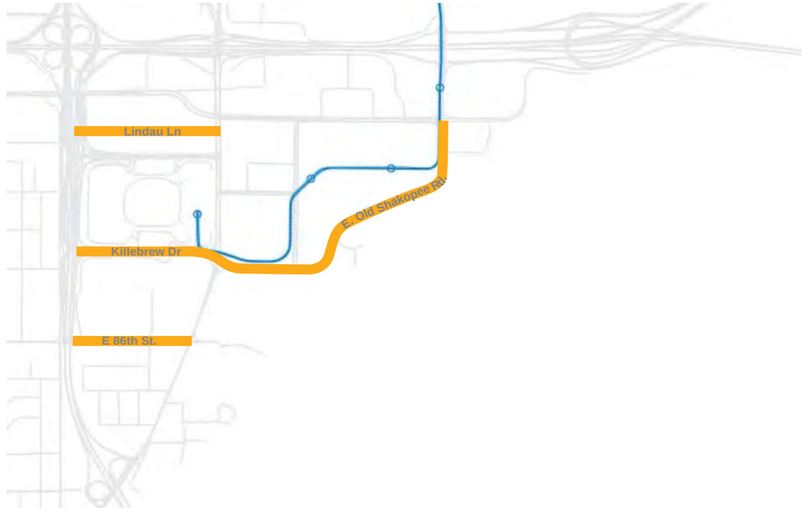



*Figure 4.8 Collectors (Sub-Arterials) Category Diagram*

*Figure 4.8 View of East Old Shakopee Road*

## E. Old Shakopee Road - East of 24th Avenue

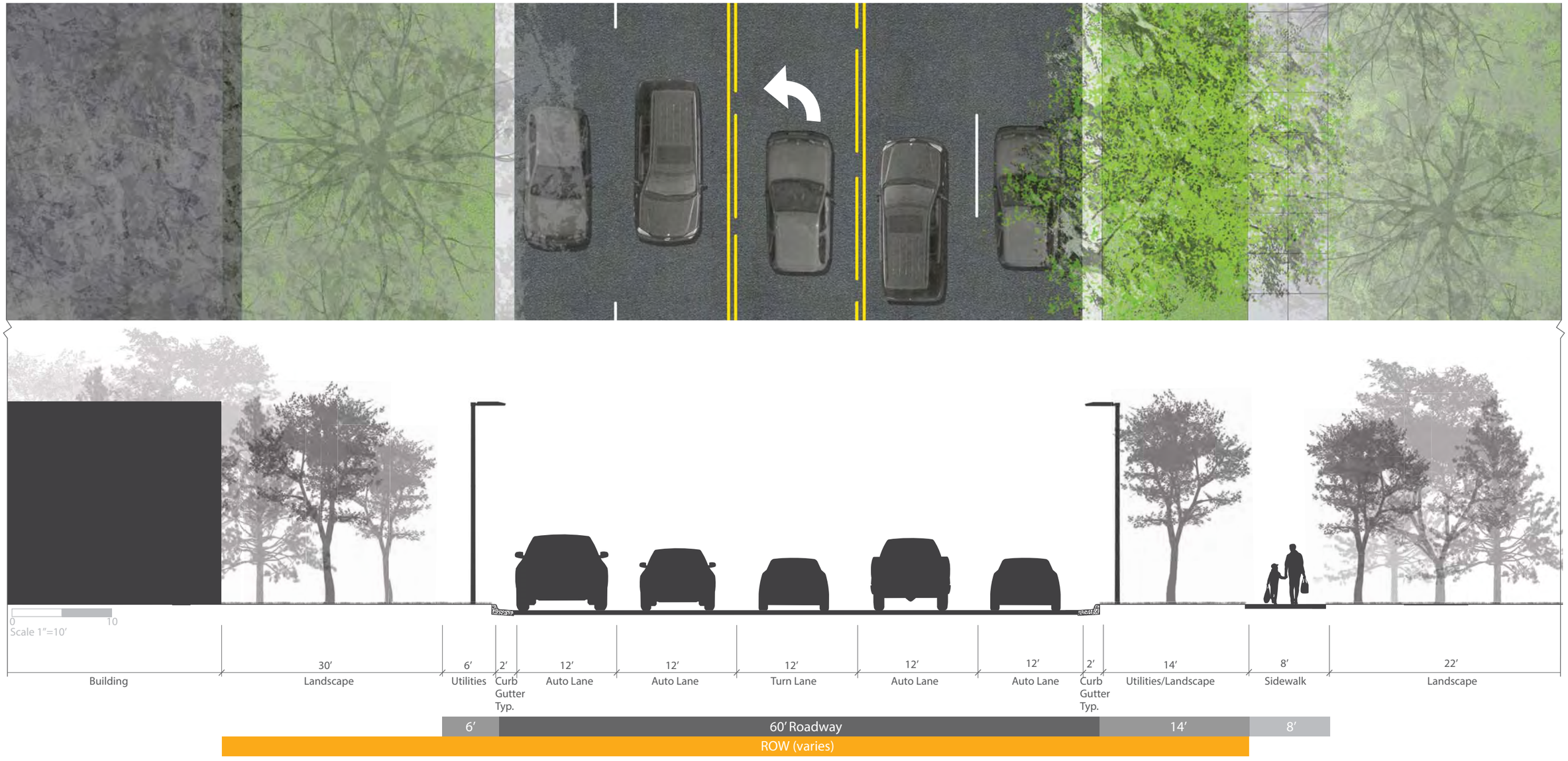




*Figure 4.9 E. Old Shakopee Road Plan and Cross Section*

# Representative Cross Sections/Plans

## Local Roads (High Density)

Local high density roads include East 82nd Street, 28th and 33rd Avenues South in addition to several others. These existing streets typically have narrow right-of-ways, on-street parking, and one or more through-lanes in each direction. The Master Plan proposes that sidewalks be added to these roads where they do not exist to expand the pedestrian circulation network. Setbacks vary; these roads sometimes abut commercial development and other times residential areas. Lighting fixtures will serve both the road and the pedestrian space, with banners that contribute to district identity. There will be street furniture at midblock and rest stop locations.


*Figure 4.11 Local Roads (High Density) Category Diagram*


*Figure 4.10 View of Metro Drive Road*

## Metro Drive Road

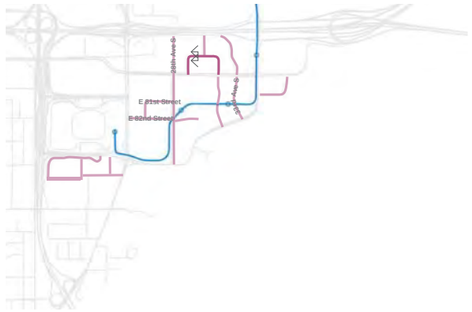




*Figure 4.12 Metro Drive Road Plan and Cross Section*

# Representative Cross Sections/Plans

## Green Streets

Portions of Lindau Link , 28th Avenue, and the far east end of American Boulevard will serve as green streets, characterized by planted medians, on-street parking, bike facilities, bus stops, permeable paving in parking bays and boulevard trees. The South loop Distirct Plan also identifies a segment of American Boulevard from 34th Avenue to the Minnesota Valley Natural Wildlife Refuge Visitor Center as a green street. This street type is a 'Complete Street,' balancing the needs of the pedestrian with that of the bicyclist and vehicle driver. Narrow setbacks allow buildings and transit to be close to the street itself, creating a human scale spatial envelope. Lighting fixtures will serve both the road and the pedestrian space, with outlets at light poles and trees. Banners will contribute to district identity, and planted pots will occupy curbs and bumpouts. These bumpouts will also have benches, trash receptacles, and newspaper corrals.


*Figure 4.14 Green Streets Category Diagram*

*Figure 4.13 View of Lindau Link*

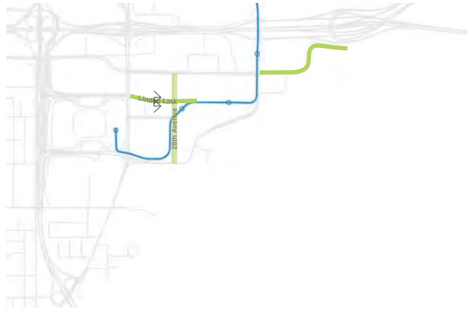



*Figure 4.15 Lindau Link Proposed 2030 Plan and Cross Section*

## Lindau Link Proposed 2050


*Figure 4.16 Lindau Link Proposed 200 Plan and Cross Section*

*Figure 4.17 Lindau Link Night Scene*

# Representative Cross Sections/Plans

## Local Roads (Low Density)

Local low density roads include existing streets that typically have narrow right-of-ways, on-street parking, and one through-lane in each direction. The Master Plan proposes that sidewalks be added to these roads north of 86th Street, so that pedestrians can easily connect to the overall circulation system. Setbacks vary, though these roads typically abut landscaped yards.


*Figure 4.19 Local Roads (Low Density) Category Diagram*

*Figure 4.18 Image showing 86 1/2 Street*

## 86th 1/2 Street

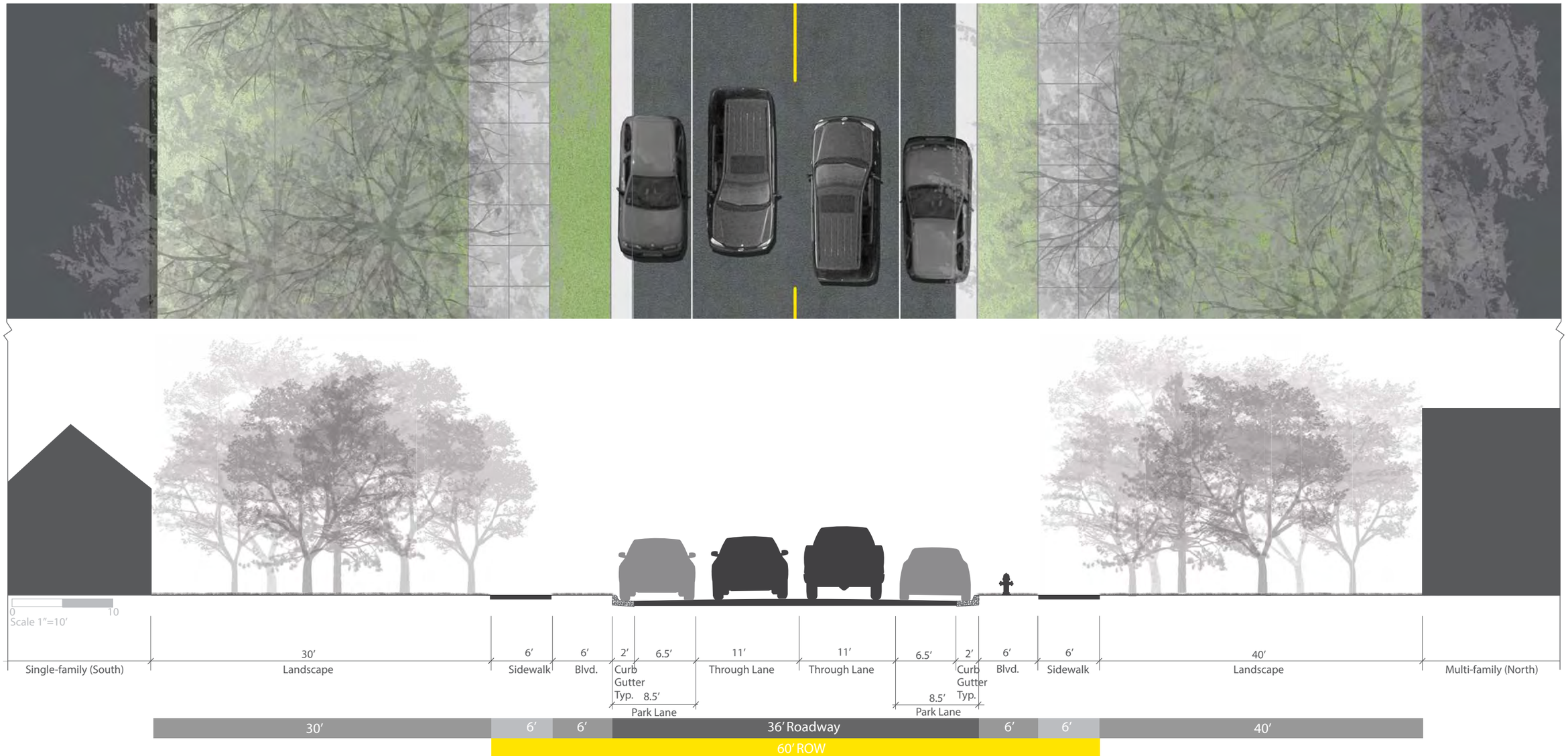
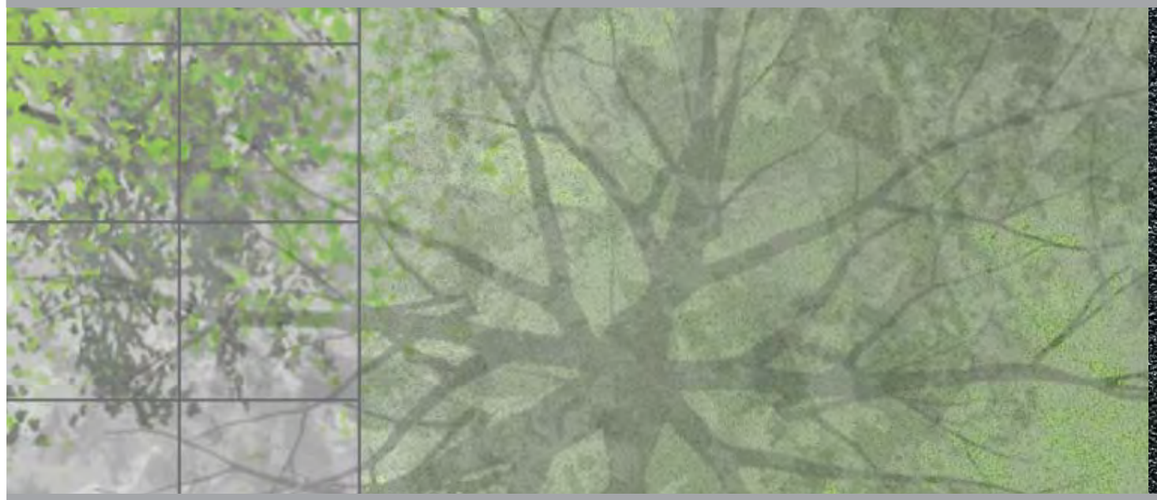




*Figure 4.20 86th 1/2 Street Plan and Cross Section*




# Sub-Surface Space Allocation
# CHAPTER 5

**Locating Below Ground Elements**
**Utilities Layout Representative Cross Section for Lindau Link**

# Sub-Surface Space Allocation

## Locating Below Ground Elements

While the proper placement of streetscape elements above ground is critical, it is equally important to be aware of the sub-surface conditions of the street section. The location of public and private utilities, lighting and irrigation conduit, and stormwater treatment facilities are often located below grade and affect the location of streetscape elements above grade and opportunities for future expansion/ improvements.

Public and private utilities should be located within the roadway (i.e.: between the curbs) whenever possible. This allows easy access to manholes and pipelines for maintenance purposes and minimizes potential disruption to streetscape elements, particularly pavements with higher level finish. Public sector utilities include storm sewers, sanitary sewers, domestic water, signal interconnections, lighting conduit, and irrigation. Private sector utilities include power, telephone/communication, gas, fiber optic, cable lines, and possibly hot and cold water for district energy.

Lighting and signals should be located in a common trench when possible. This utility trench should be located at the back of curb and should be limited to 4-6 feet wide. Street trees occurring within the trenches should be planted so as not to interfere with utilities.

Stormwater treatment can occur almost any place within the road right-of-way, depending on the type of treatment utilized. Traditional storm sewer piping and storage chambers are most often located between the curbs. Permeable pavements, tree trenches and other methods using open-graded aggregates or Silva Cells for stormwater treatment usually occur behind the curb, but can occur in the roadway as well. The important point with stormwater treatment is to establish the approach early in the design process, so the streetscape design can accommodate the desired facilities. Stormwater Provisions are discussed in more detail in Chapter 8.

## Utilities Layout Representative Cross Section for Lindau Link

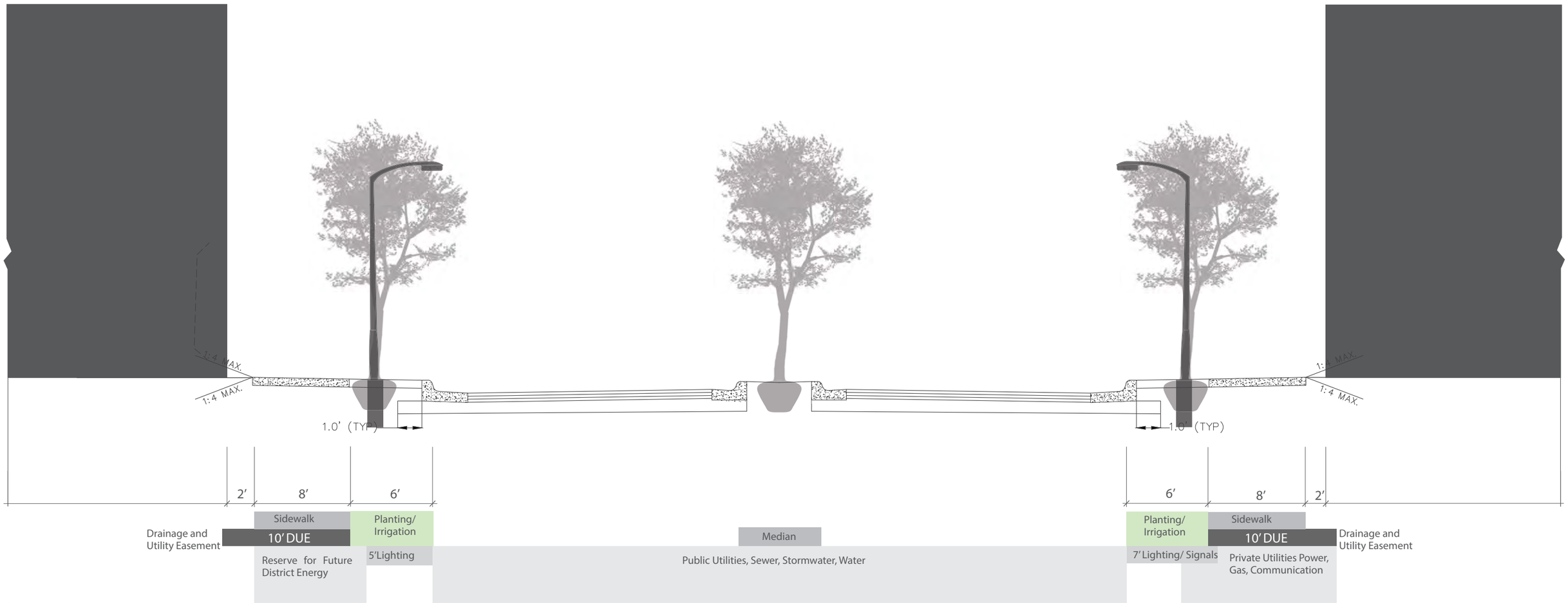
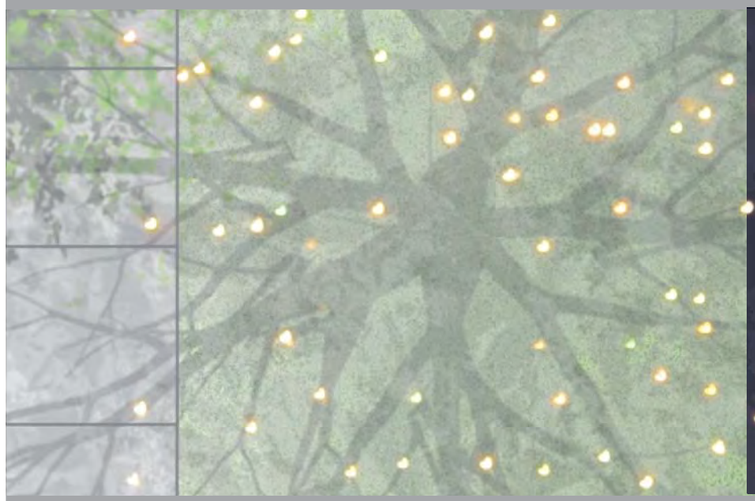



*Figure 5.1 Sub-Surface Typical Cross Section*



# Lighting & Electrical CHAPTER 6

# Lighting & Electrical

## Objective

This section provides general guidance for the City when placing new and replacing existing lighting units within public rights of- way, plazas, and open spaces within the South Loop District. Following the 2010 Mn/DOT Roadway Lighting Design Manual, this guide provides practical lighting strategies for roadway and sidewalk lighting. Other lighting applications including accent, landscape, and some streetscape lighting, would be defined as special and unique and are not guided by City's Standards or the Mn/DOT Design Manual. Those lighting applications would be intended to highlight special areas and would be final design driven, specifically in the Lindau Link area. The information within this section is not intended to replace the city standards, but instead support and expand them.

## Lighting Treatment

This guide provides a recommended framework for the lighting of key roadways throughout the district. It also highlights practical issues, such as light trespass and light pollution, as well as energy efficiency and maintenance.

Primary fixtures identified in these guidelines utilize LED technology and were chosen for their appearance, performance and ease of maintenance. Recognizing the City has standard specifications for roadway lighting, this guide recommends deviation from those standards as an attempt to establish the South Loop District as a unique place within the city. This way include mounting heights and the use of distinctive luminaires.

Through photometric review, luminaire, pole heights, and spacing were recommended. While LED fixtures historically have not provided the light output that HID lamps do, today's LED technology typically out-performs traditional gas-discharged lamps (medal-halide or high pressure sodium). Currently the up-front costs for LED are higher than gas discharged lamped fixtures. Decisions during the final design on lighting unit types, spacing, and photometrics will be required in providing optimal lighting for the South Loop District. The preference is to select a streetlight fixture which can be used in the initial implementation projects (Lindau Link & 30th Avenue), retrofitting other existing roadways, and full roadway reconstruction within the South Loop District.

## Banners and Banner Poles

Light poles most often provide the best and least expensive way to display both permanent and seasonal banners. All project recommended light poles can be fitted with banners via manufacturer provided arms and fasteners, making them banner ready. This guide suggests that if banners become part of the streetscape vocabulary, they should be focused in the primary pedestrian areas of the South Loop District and occasionally at key intersections and places of decision for drivers and pedestrians.

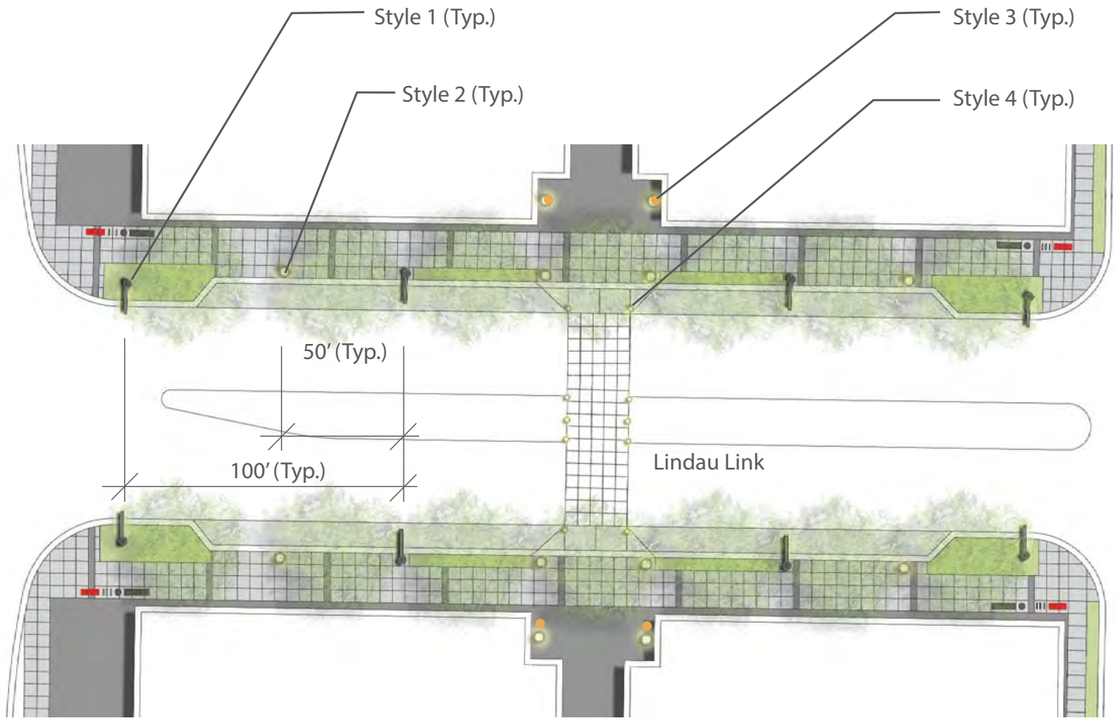



*Figure 6.1*

**Lindau Link Lighting Concept**

### Proposed Lighting Products:

| Light | Manufacturer | Model | Pole Type/Ht. | Arm | LED | Distribution |
|---|---|---|---|---|---|---|
| ***Style 1*** | BEGA | LED Area Light | Alum/30' | TBD* | 154W | Type III |
| ***Style 2*** | Louis Poulsen | Kipp Post LED | Alum/12' | NA | 60W | Type V |
| ***Style 3*** | Schreder | NEMO Column | Steel 16'-6" | NA | Varies | Type V |
| ***Style 4*** | Schreder | NEMO Bollard | Steel 3'-4" | NA | Varies | Type V |
| ***Style 5*** | Kimm | Lightvault LTV71 | Steel In-Ground | NA | 18W | Flood |

*Table 6.1 Proposed Lighting Products*

**Note:** Reuse existing bases, conduit, and wiring when possible when retrofitting lighting within existing roadway. Space units for new/reconstructed roadways.

*Final photometrics will help determine the need or desire for single or double arm units.

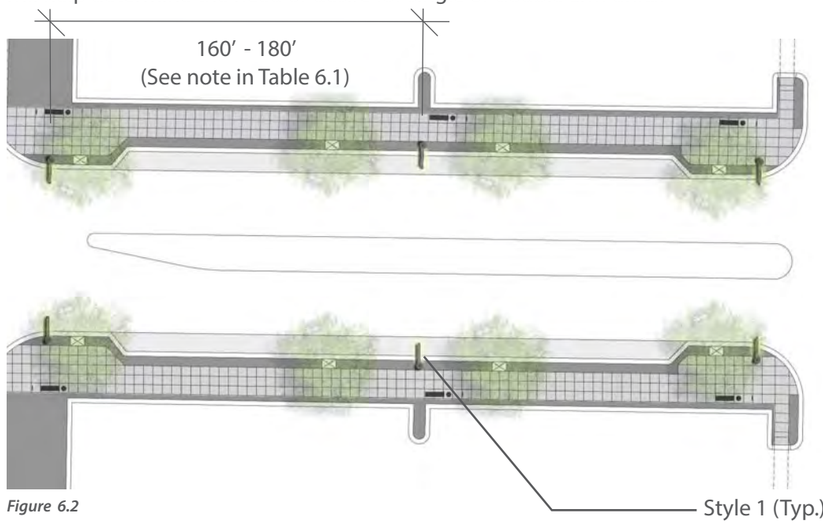



*Figure 6.2*

**Collector/Arterial Roads Lighting Concept**

Style 1

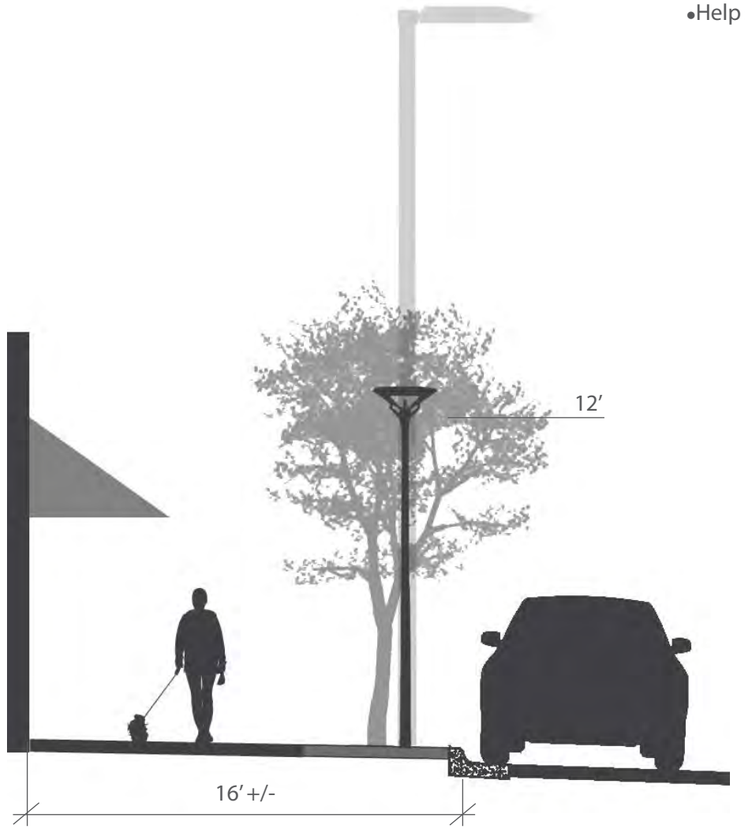
*Figure 6.3*

Style 2

*Figure 6.4*


Collector/Arterial Roads & Lindau Link

*Figure 6.5*




Lindau Link

*Figure 6.6*

## Lighting Supporting the South Loop District Development Principles

Roadway and pedestrian lighting will play a crucial role in the development of complete streets within South Loop District and specifically within the Lindau Link. Lighting within the Lindau Link will provide the following benefits:

- Provide safety and security
- Visually make an east/west connection from MOA to Bloomington Central Station
- Help create/support an urban character
- Help encourage movement and circulation
- Provide a human scale element at the street level
- Help support visual continuity

## Proposed Roadway Lighting Types

Lighting throughout the district should be deliberate in providing a level of visibility which enables motorists and pedestrians to see quickly, distinctly and with certainty all significant detail. This includes the road alignment and any obstacles on or about to enter the roadway.

## Fixture Materials and Color

The material types and colors should meet criteria identified within the Design Vocabulary Chapter. Specifically, the color of all metals to be Graphite Black, equivalent to RAL 9011 or Bega Black.

**Targeted Light Levels and Uniformity Ratios**

| Roadway Classification | R2 & R3 | | Max Unif. |
|---|---|---|---|
| | Foot-candles | Lux | avg/min |
| Intermediate Collector / Arterial | 0.8-1.0 | 9-11 | 4:1 |

*Information taken from the 2010 Mn/DOT Roadway Lighting Design Manual.*

*Table 6.2 Targeted Light Levels and Uniformity Ratios*

# Lighting and Electrical

## Proposed Special Lighting Types

### Special Lighting Application

These types should be located in areas that highlight both places and objects. Lighting Styles 3 & 4 should be located in the gallery and mid-block crossing areas. They would help provide strong visual ties to the north and south sides of the Lindau Link. The Style 5 fixture would be placed in the pavement under street trees. Styles 3, 4, & 5 are found only on the Lindau Link, and the preferred source is LED.

The Style 3 fixture has the ability to change color, providing the opportunity for event and seasonal applications. Its familiar style and material ties the Lindau Link to fixtures found in the park at Bloomington Central Station.

The Style 4 fixture is a bollard light that provides nighttime safety as well as daytime scale and security for pedestrians waiting to cross at the mid-block. Materials and style of this bollard land within the family of furniture and other lighting types within the South Loop District.

The Style 5 fixture is an in-ground fixture intended to light the underside of all trees within the boulevard and specific trees within the median. The dramatic effect helps establish a rhythmic pattern along the street and the residual light will help create an ambiance that would be appreciated and welcomed at a pedestrian scale.

8.6″ Diameter Column

**Style 3**

*Figure 6.7*

6″ Diameter Bollard

**Style 4**

*Figure 6.8*

9″ Diameter Inground Fixture

**Style 5**

*Figure 6.9*

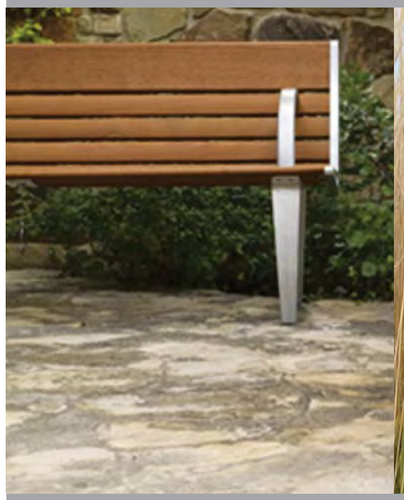
### Holiday and Vendor Power Source

Throughout the Lindau Link, provisions for electrical power will be necessary for vendors and other transient electrical users. 50 amp services located in dedicated cabinets should be located near sidewalks and gallery areas and any other specific areas the city may identify as places vendors, musicians, and other performers could congregate. Access to the power would be through a permitting process and would otherwise be under lock and key to minimize misuse.

GFI outlets should be located at the base of all trees within the Lindau Link on dedicated services. These should have in-use lockable cover boxes to allow for holiday or other use while minimizing vandalism or theft of plug-in fixtures. GFI's and boxes should be placed on a sturdy standpipe to protect the electrical source from maintenance equipment.


**Gallery Area on Lindau Link**

*Figure 6.10*




# Design Vocabulary CHAPTER 7

Overview
Design Framework
Design Vocabulary
Materials, Color, Texture Palette
Site Furnishings & Plantings

# Design Framework and Design Vocabulary

## Overview

### Design Framework

The over-arching design framework, established based on principles from the South Loop District Plan, identifies three goals which will help guide decisions in the selection of streetscape design elements: walkability, sense of place, and sustainability.

In order for streets to be walkable it is important to have good lighting and wayfinding cues, as well as opportunities to rest, find shade, and have a sense of enclosure. Elements should be at a pedestrian scale, providing interesting detail and texture as well as comfortable proportions. Streets need to be ADA compliant. These considerations will affect pavement choice and grade transitions throughout the streetscape.

Having a distinct identity will assist in creating a sense of place. This can be done through the use of distinct elements not found elsewhere, or through the use of an established logo or brand. Public art should be integrated into the streetscape, and context should be embraced and celebrated. Design should be timeless to allow for variable development in architectural styles and materials. Stormwater and other sustainable initiatives should be celebrated and interpreted. Providing design consistency and continuity throughout the streetscape will assist with wayfinding and sense of place.

Choosing durable materials that can withstand winter conditions, or that may have multiple manufacturers to make replacement parts readily accessible, will work towards a more sustainable streetscape. Other solutions such as stormwater best management practices, LED lighting, using recycled products and installing native landscape materials will help to make the streetscape more environmentally sound.

### Design Vocabulary

Design vocabulary determines the overall appearance of the streetscapes within the district. Having a common vocabulary establishes unity and identity for the district, tying the various elements of the streetscape together. It also contributes to wayfinding by creating a sense of clarity throughout the district. Design vocabulary influences the selection of paving, site furniture, plantings, structures, and lighting.

The proposed design vocabulary for all streetscapes in the district is contemporary, simple, clean, and timeless. It will be accommodating, flexible, and will express both unity and diversity. Elements will have simple and clean lines with minimal ornamentation, and will combine well with a variety of styles over time. Elements will generally be neutral in color and texture, with color and highlight provided by landscaping and public art.


*Figure 7.1 Design vocabulary as shown on American Boulevard*

Contemporary
Architectural
Energetic
Bold
Memorable
Sustainable
Simple
Simple Lines
Urban
Fresh
Timeless
Identifiable
Clean Lines
Durable
Vibrant
Strong
Express Materials
Monochromatic
Neutral

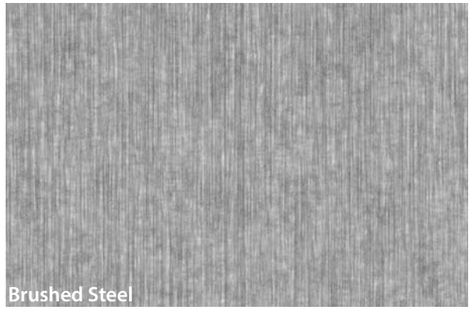

Scored Concrete


Fiberglass Planter (Silver Metallic Finish) *Victor Stanley, INC.*

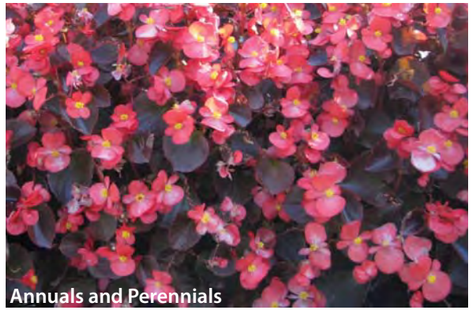

Ornamental Grasses

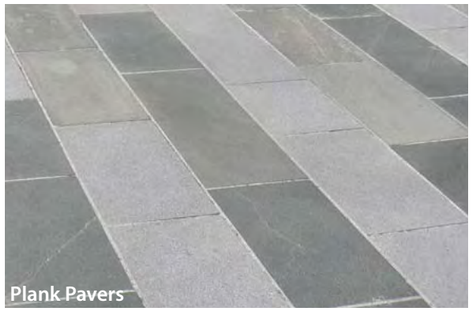

Concrete Pavers


Ornamental Grasses


Brushed Steel


Granite Pavers *Tile Tech Pavers*

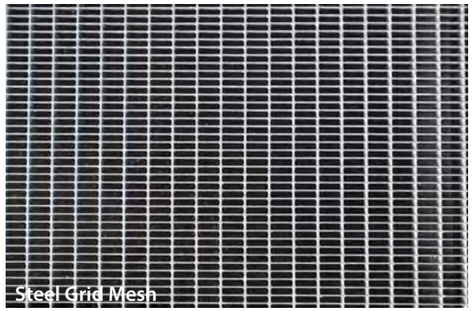

Annuals and Perennials

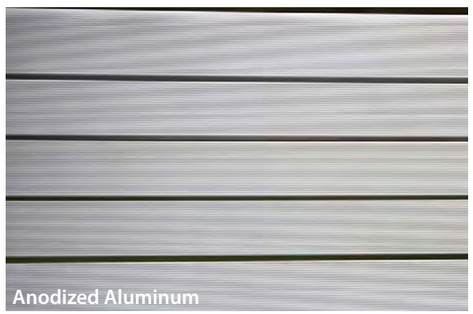

Plank Pavers


Fiberglass Planter (Black Grain Finish) *Victor Stanley, INC.*


Pavers with Custom Pattern


Annuals and Perennials


Steel Grid Mesh


Anodized Aluminum


Colored Concrete


Annuals and Perennials


Expostone Pavers *Wassau Tile Pavers*


Turf

*Figure 7.2 Design vocabulary and materials matrix*

# Design Vocabulary

### 1. Paving Vocabulary

The paving design will unify the entire project, with patterns and colors that establish a visual identity for the site. Paving will be characterized by clean lines, simple geometric forms, and subtle, neutral colors that offset the more colorful plantings and public art. As part of the project's focus on sustainability, permeable pavers will be used where feasible to increase infiltration. Concrete will be light broom finished and scored, with select color to create accent areas. These accent areas will contribute to wayfinding, indicating parking areas and pedestrian circulation. Higher finish materials such as colored or treated concrete, concrete pavers, stone and manufactured surfaces will be used in select areas or to provide accent.

### 2. Furniture Vocabulary

Site furnishings play an important role in the streetscape, as they establish a physical character for the district. Site furniture unifies differing architectural styles and spaces by creating a consistent, recognizable element throughout the project. Furniture will be durable and contemporary, made of brushed metal in monochromatic colors. This aesthetic is timeless and will combine well with a variety of architectural styles. Site furniture may include benches, bike racks, trash receptacles, recycling receptacles, bollards, pots, and planters.

### 3. Landscaping

Plants will contribute color, texture, seasonal variety and smell to the streetscape. They will be in pots as well as in planted beds, including planted medians. Native plants will be used where possible, as well as plant material that will provide seasonal color. Selecting plants that can thrive in streetscape conditions is essential.

### 4. Structures

Retaining walls and transit shelters are the main structural elements of the streetscape. Walls will reflect the design vocabulary with clean, simple lines. They will be constructed of durable materials that are neutral in color and texture. Transit shelters will be the standard model throughout the site, with a more upscale model allowed if there is a clear maintenance program.

## Paving

**Colored Concrete and Scoring**

- Patterns and wayfinding
- Simple, geometric patterns and forms

**Pervious Pavers**

- Patterns and wayfinding
- Simple, clean lines
- Allow water to infiltrate

## Bike Racks

**Standard U Rack**

- Metal
- Simple shape

**Emerson Bike Rack**

- Brushed metal
- Simple, contemporary shape
- Upright, vertical form

## Benches

**ParcVue Bench**

- Brushed metal
- Seamless shape

**Austin Bench**

- Wood and metal
- Clean, simple lines
- Back or backless

## Pots

**Sorella Planter**

- Metal
- Sleek, clean, simple
- Various geometric shapes

**Urban Planter**

- Metal
- Square

*Figure 7.3 Site furniture examples*

## Trash/Recycling

**Poe Trash Receptacle**

- Brushed metal
- Clean, vertical lines

## Landscaping

**Grade-level Plantings**

- Accent annuals and perennials
- Varieties that are hardy and provide seasonal interest
- Stormwater re-use opportunity

**Landscape Medians**

- Full size or ornamental trees
- Flowering shrubs
- Perennial flowers and grasses
- Hardy, salt resistant
- Stormwater re-use opportunity

## Retaining Walls

- Cast in place
- Modular block with precast cap
- Natural stone

*Figure 7.4 Site furniture*

## Shelters

**Updated Shelter**

- Metal and glass
- Clean lines, geometric forms
- Opportunity for public art


**Metro Transit Shelter**

- Metal and glass

## Bollards*

**Annapolis Bollard**

- Metal
- Internal light

**Nemo Bollard***

- Metal

**5. Lighting**

Lighting is essential to creating a safe streetscape at night. It also provides ambience, a sculptural element to the streetscape, and can act as a protective barrier. Lighting will vary based on the particular streetscape condition. Bollards provide pedestrian-scale lighting, and serve as protective barriers between the sidewalk and the street. Pole lights are also pedestrian scale, and create ambience at the street level. Taller fixtures provide lighting for both the street and the sidewalk. Lighting fixtures can also contribute to wayfinding, as they provide a location for banners or other signage.

*Refer to the Lighting and Electrical section to specify lighting units, materials and color information.





# Stormwater Provisions
# CHAPTER 8

Overview
Stormwater Regulations Summary
Potential Best Management Practices Toolbox
Potential Treatment Devices
Best Management Practices Application Matrix
Cross Sections with Potential Treatment Device Applications

# Stormwater Provisions

## Overview

The existing stormwater system that serves the South Loop District is a complex system of pipes utilizing four outfalls that eventually discharge to the Minnesota River (see Figure A.1 in the Appendix). Flow splitters have been used in a number of locations to maximize the available capacity as well as water quality treatment (Figure A.2, Appendix). In addition to the conveyance system, a variety of treatment elements were added over the past decade in an effort to meet water quality goals for the Minnesota River. With these facilities, the City has invested a significant amount of resources as a Municipal Separate Storm Sewer Systems (MS4) permittee.

## Stormwater Management

Stormwater management typically addresses three key measures: water quality, rate control, and volume control. The measures are common throughout the State and refined by three oversight agencies that have jurisdiction over the South Loop District, including the Richfield-Bloomington Watershed Management Organization, the Lower Minnesota River Watershed District, and the National Pollutant Discharge Elimination System (NPDES), which is administered through the Minnesota Pollution Control Agency (MPCA). A table summarizing the regulations associated with these three agencies can be found on page 43.

Controlling the rate of stormwater discharge has been a common requirement of development for decades, as this measure affects the downstream conveyance system.

Water quality measures have been required since the Clean Water Act in the 1970's and found their way into the landscape in the form of open water ponds in the 1980's and 1990's.

Volume control has been incorporated into the various regulations since the early 2000's as a means of reducing runoff from new development via increased on-site infiltration. Infiltration significantly benefits water quality as most pollutants are removed from the stormwater runoff when it infiltrates back into the ground. It should be noted that volume control is not required for areas located in the Lower Minnesota River Watershed District. The trend towards volume control is very strong in Minnesota and future regulations are likely to be in place soon, such as 1.1-inches of runoff from impervious, which is currently being investigated by the MPCA sponsored Stormwater Minimal Impact Design Standards (MIDS) Work Group.

## Future Opportunities

Opportunities for innovative stormwater treatment have greatly expanded in the past decade through the development of new technologies. However, a single treatment device often cannot address all measures of stormwater management. For example, one device may be good at providing rate control, but does not provide volume control. The table on page 4 lists potential stormwater treatment devices that appear feasible for use in the South Loop District, along with a ranking of how well the devices achieve water quality, rate control and volume control treatment goals. The table also provides rankings for operations and maintenance costs and capital costs for each of the potential devices. The treatment devices are grouped by their location above or below ground. A third category highlights devices that provide specific types of treatment or repurpose the water for other uses. Representative images of each of the potential treatment devices can be found on pages 45 – 47 of this section of the plan.

Just as each treatment device provides unique treatment benefits, certain treatment devices are better suited to particular roadway types based on such factors as available right-of-way space, desired streetscape appearance, anticipated sediment loading and required maintenance operations. The table on page 9 ranks the potential treatment devices for their applicability for each of the street types in the South Loop District. Treatment devices may not be recommended due to physical or jurisdictional constraints, incompatibility with adjacent lane uses, or high ratio of estimated cost to benefits received. Recommended and optional treatment devices for each of the District street types are identified on pages 50 – 57, with the recommended designation indicating treatment devices best suited to that District street type. These graphics also depict where within the street right-of-way the potential treatment devices would be located. Some of the potential treatment devices denoted on these pages may not individually be able to fully meet the stormwater treatment goals.

There are a number of existing conditions that affect the choice of stormwater management approach. First, Figure A.3 in the Appendix provides insight into the pollutant loading from the area. The figure depicts pollutant loading based on land use, indicating that land use with a high percentage of impervious surfaces contributes a high amount of phosphorus. Additional treatment within the public right-of-way will lessen the load on the pond system, particularly Pond C. Second, for locations in the South Loop District where soil data is available, soils are of a granular nature, which is typically conducive to infiltration. Last, the existing storm drain system provides adequate drainage and flood protection for existing conditions, but may not have capacity for development that increases the amount of impervious surface.

The overall stormwater goal for the South Loop District is to provide additional Best Management Practices (BMP's) as streets are constructed that will meet current regulations, anti-degradation standards, and future Total Maximum Daily Loads (TMDL's) for the Mississippi River (South Metro Mississippi-Turbidity and Lake Pepin TMDL's). Specifically, the proposed stormwater management approach incorporates the following:

- Volume control BMP's to reduce runoff from new impervious surfaces in the South Loop District, enhance the efficiency of the existing system, and meet current and anticipated future regulations.
- Rate control as needed to ensure that the existing storm drain systems are not overloaded.
- Additional water quality measures for the Ceridian outfall that is currently not receiving water quality treatment and for those areas not receiving full treatment (80th Street and Hogback outfalls). Implementation of these BMPs will not only help the City meet its regulatory requirements, but may also provide other streetscape benefits, such as additional vegetation and a source of water for new streetscape plantings.

| Key Measures | Richfield-Bloomington Watershed Management Organization/ City of Bloomington | Lower Minnesota River Watershed District | National Pollutant Discharge Elimination System (NPDES) |
|---|---|---|---|
| Water Quality | In the design of new, or modifications to existing stormwater conveyance systems, treatment of stormwater runoff to Nationwide Urban Runoff Program (NURP) guidelines must be provided prior to discharge to the public system. If NURP is not feasible, Minnesota Pollution Control Agency (MPCA) guidelines may be substituted. | Water quality stormwater management must comply with the requirements of MPCA General Permit for Construction Activity. | **Construction site permit** Where a project's ultimate development replaces pervious surfaces with one or more acres of impervious surface, a water quality volume of ½ inch of runoff from the new impervious surfaces must be treated.<br><br>**MS4 permit current draft language** for new development – no net increase from pre-project conditions of Total Suspended Solids (TSS), Total Phosphorous (TP), or volume. For redevelopment – a net reduction from pre-project conditions of volume, TSS and TP. |
| Rate Control | Future discharge rates from new development and redevelopment will, at a minimum, not exceed the existing discharge rates. | The proposed development activity will not increase the peak stormwater runoff rate from the site, under pre-development conditions, for anything less than a 24-hour precipitation event with a return frequency of 1 or 2, 10, and 100 yr events. The project must also comply with the requirements of the MPCA's General Permit for Construction Activity. | **Construction site permit** Stormwater must be discharged in a manner that does not cause nuisance conditions, erosion in receiving channels or on downslope properties, or inundation in wetlands causing a significant adverse impact to the wetlands.<br><br>**MS4 permit current draft language** None. |
| Volume Control | The City encourages enhanced infiltration practices wherever practical. Infiltration or alternative practices may be required as part of development or redevelopment to control volume as determined by the City's Stormwater Pollution Prevention Plan (SWPPP).<br><br>In the RBWMO Infiltration practices and low impact development techniques should be implemented to limit runoff volumes from the redevelopment area to 1988 levels or lower where soils are suitable. | Stormwater runoff volume retention shall be achieved onsite in the amount equivalent to the runoff generated from one-half (0.5) inch of runoff over new impervious surfaces of redevelopment or development. (applies where there is a net increase in impervious surface of 1 acre or more). | **Construction site permit** None.<br><br>**MS4 permit current draft language** See water quality requirements above. |

Notes:

(1) The South Metro Mississippi River is impaired for dissolved oxygen and turbidity/additional stormwater treatment required. Current draft total maximum daily load (TMDL) Turbidity goal is 25% reduction.

(2) Other TMDLs may result in modifications to SWPPPs and /or future permit requirements.

(3) Construction site permit update anticipated in 2013

*Table 8.1 Regulatory Matrix*

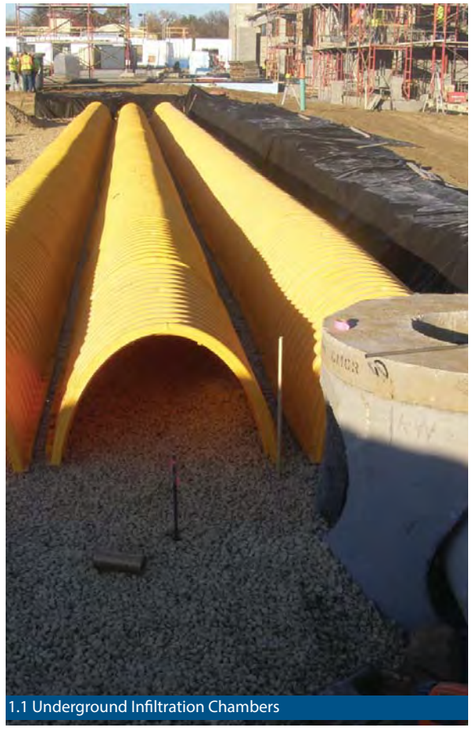
## Potential Best Management Practices Toolbox

| Potential Treatment Device | Water Quality | Volume Reduction | Rate Control | Capital Cost | Operations & Maintenance |
|---|---|---|---|---|---|
| **Primarily Underground** | | | | | |
| 1. Underground Infiltration Chambers | ● | ● | ● | ◐ | ◐ |
| 2. Swirl Separator (Grit Chamber) | ◐ | ○ | ○ | ◐ | ◐ |
| 3. Underground Detention | ◐ | ○ | ● | ◐ | ◐ |
| 4. Tree Planter | ● | ◐ | ◐ | ◐ | ● |
| 5. Tree Trench | ● | ◐ | ◐ | ◐ | ● |
| 6. Cistern/Reuse | ● | ● | ◐ | ○ | ○ |
| **Primarily Above Ground** | | | | | |
| 7. Bioretention Basins/Rain Gardens | ● | ● | ◐ | ◐ | ◐ |
| 8. Permeable Pavers/Porous Pavement | ◐ | ● | ◐ | ◐ | ◐ |
| 9. Infiltration Trench | ◐ | ● | ◐ | ◐ | ◐ |
| 10. Boulevard Swale | ● | ● | ◐ | ● | ● |
| **Other (Pretreatment/Public - Private)** | | | | | |
| 11. SAFL Baffle (Sump Catch Basin Enhancement - Pretreatment) | ◐ | ○ | ○ | ● | ◐ |
| 12. Vegetated Filter Strip (Pretreatment) | ◐ | ◐ | ◐ | ● | ◐ |
| 13. Infiltration/Flow-through Planter | ● | ● | ○ | ◐ | ◐ |
| 14. Active Chemical Treatment (Alum, Cloride) for Reuse | ● | ○ | ○ | ○ | ○ |
| 15. Subsurface Irrigation (EPIC System) | ● | ● | ◐ | ◐ | ● |

○ - No Benefit/High Cost/High Operations and Maintenance (O & M)
◐ - Partial Benefit/Medium Cost/Medium O & M
● - Full Benefit/Low Cost/Low O & M

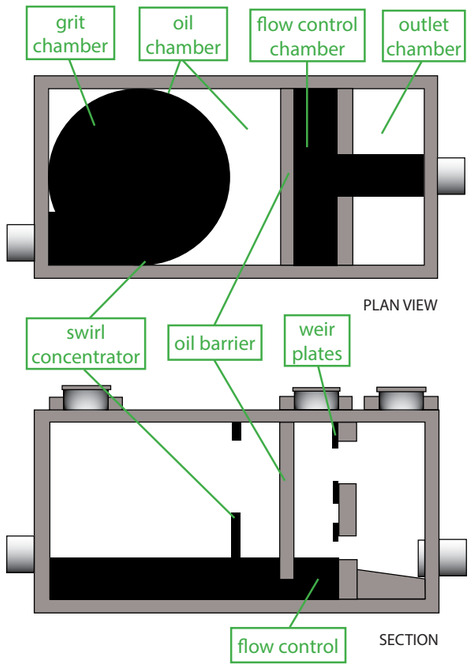
*Table 8.2 Potential Best Management Practices Toolbox Matrix*

## Primarily Underground



1.1 Underground Infiltration Chambers

1.2 Underground Infiltration Chambers *St. Louis Park, MN*



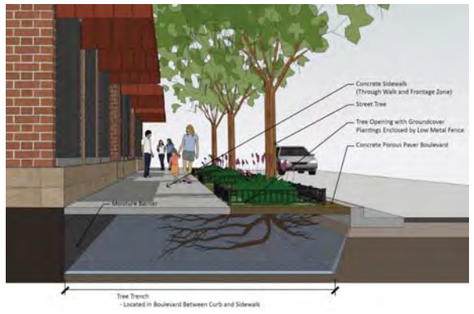

2.1 Swirl Separator (Grit Chamber)

2.2 Swirl Separator (Grit Chamber) *61st. Street, Minneapolis, MN*

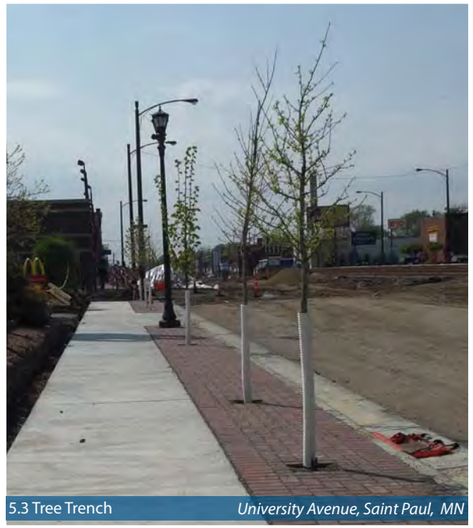
3.1 Underground Detention *Bloomington, MN*


4.1 Tree Planter


5.1 Tree Trench




5.2 Tree Trench



5.3 Tree Trench *University Avenue, Saint Paul, MN*

5.4 Cu Structural Soils *University Avenue, Saint Paul, MN*

6.1 Cistern/Reuse

*Figure 8.1 Primarily Underground Stormwater Treatment Devices Examples*

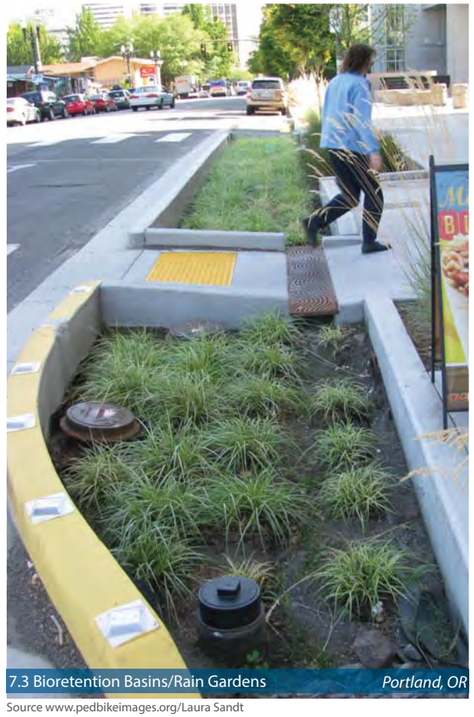
# Stormwater Provisions

## Potential Treatment Devices

### Primarily Above Ground

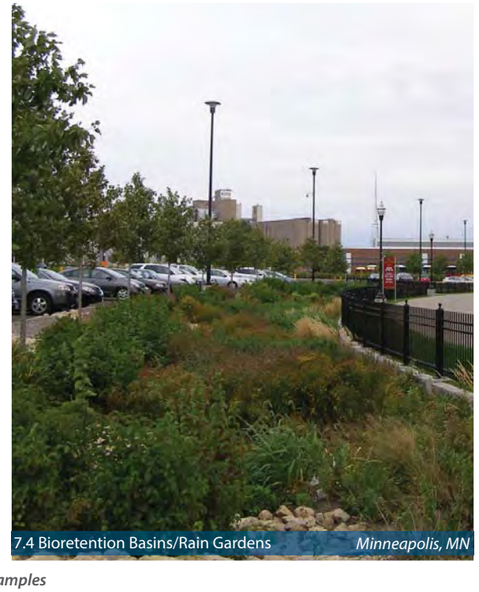
7.1 Bioretention Basins/Rain Gardens *Brooklyn Center, MN*

7.2 Bioretention Basins/Rain Gardens *Brooklyn Center, MN*



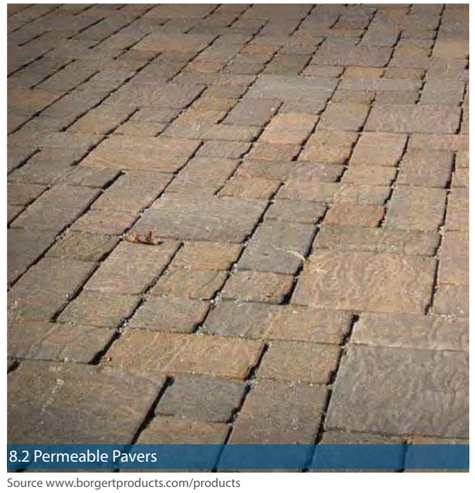
7.3 Bioretention Basins/Rain Gardens *Portland, OR*

Source www.pedbikeimages.org/Laura Sandt



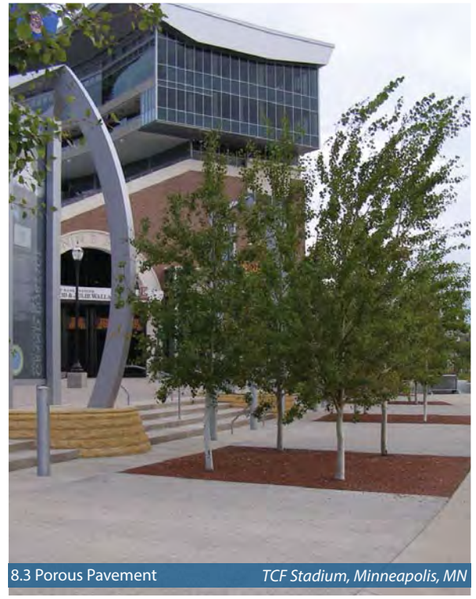
7.4 Bioretention Basins/Rain Gardens *Minneapolis, MN*

8.1 Permeable Pavers *Silverwood Park, New Brighton, MN*

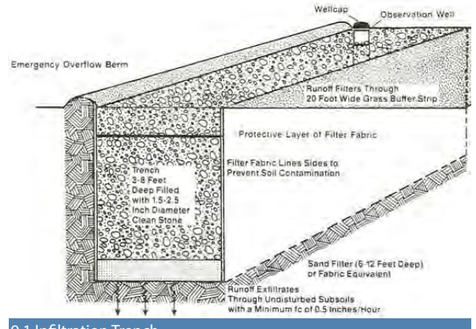


8.2 Permeable Pavers

Source www.borgertproducts.com/products



8.3 Porous Pavement *TCF Stadium, Minneapolis, MN*




9.1 Infiltration Trench

Source: Thomas Schveler

9.2 Infiltration Trench

10.1 Boulevard Swale *54th Street, Minneapolis, MN*

10.2 Boulevard Swale *High Point Neighborhood, Seattle, WA*

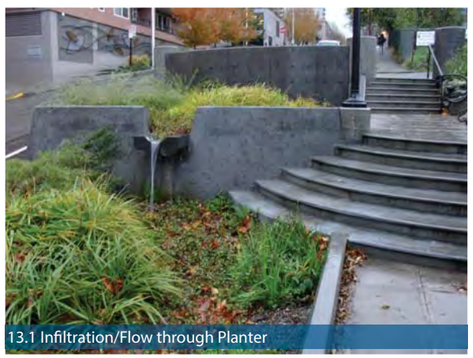
Source: SVR Design Company

*Figure 8.2 Primarily Above Ground Stormwater Treatment Devices Examples*

## Other Pretreatment/Public - Private

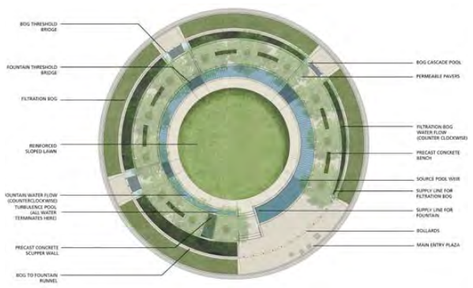
11.1 SAFL Baffle (Sump Catch Basin Enhancement - Pretreatment)

12.1 Vegetated Filter Strip



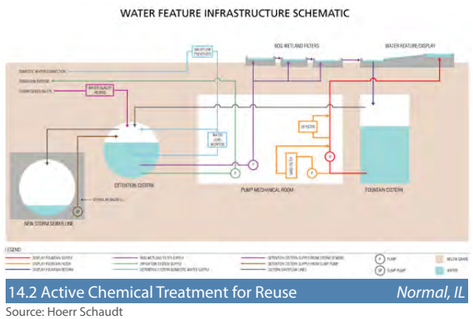
13.1 Infiltration/Flow through Planter

Source: Buster Simpson




14.1 Active Chemical Treatment for Reuse *Normal, IL*

Source: Hoerr Schaudt




14.2 Active Chemical Treatment for Reuse *Normal, IL*

Source: Hoerr Schaudt

14.3 Active Chemical Treatment for Reuse *Normal, IL*

Source: Hoerr Schaudt

15.1 Subsurface Irrigation (Epic System) *TCF Stadium, Minneapolis, MN*


15.2 Subsurface Irrigation *TCF Stadium, Minneapolis, MN*

*Figure 8.3 Other Pretreatment/Public - Private Stormwater Treatment Devices Examples*

# Stormwater Provisions

## Streetscape Hierarchy

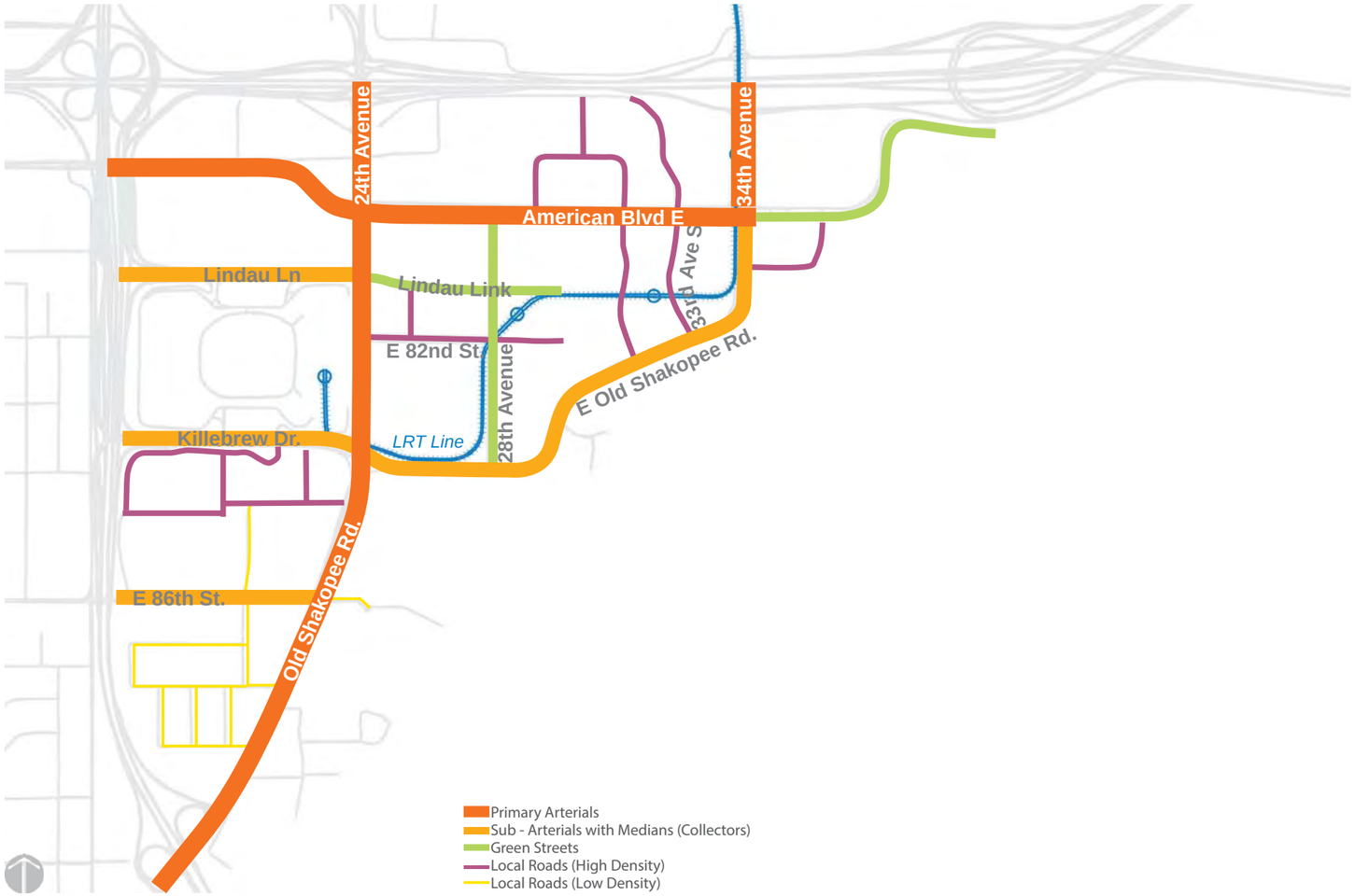



*Figure 8.4 Streetscape Hierarchy Diagram*

| Potential Treatment Device | Primary Arterials (24th Ave/34th Ave) | Primary Arterials (American Blvd) | Collectors (Sub - Arterials) | Local Roads (High Density) | Green Streets | Local Roads (Low Density) |
|---|---|---|---|---|---|---|
| **Primarily Underground** | | | | | | |
| 1. Underground Infiltration Chambers | ○ | ● | ◐ | ○ | ◐ | ○ |
| 2. Swirl Separator (Grit Chamber) | ◐ | ◐ | ◐ | ○ | ◐ | ○ |
| 3. Underground Detention/Infiltration | ○ | ● | ◐ | ○ | ◐ | ○ |
| 4. Tree Planter | ◐ | ◐ | ● | ◐ | ● | ○ |
| 5. Tree Trench | ● | ● | ● | ◐ | ● | ○ |
| 6. Cistern/Reuse | ○ | ◐ | ◐ | ○ | ◐ | ○ |
| **Primarily Above Ground** | | | | | | |
| 7. Bioretention Basins/Rain Gardens | ○ | ● (Center Median) | ● | ● | ● (Center Median) | ● |
| 8. Permeable Pavers/Porous Pavement | ○ | ◐ (Sidewalks) | ○ | ● (Parking Bays) | ● (Parking Bays) | ● (Parking Bays) |
| 9. Infiltration Trench | ○ | ● | ◐ | ○ | ● | ○ |
| 10. Boulevard Swale | ◐ | ◐ | ◐ | ◐ | ○ | ● |

○ - Not recommended

◐ - Optional

● - Recommended

*Table 8.3 Best Management Practices Application Matrix*

# Stormwater Provisions

## Primary Arterials 24th Avenue





2 Swirl Separator



4 Tree Planter


10 Boulevard Swale

Optional Treatment Devices


5 Tree Trench

Recommended Treatment Devices

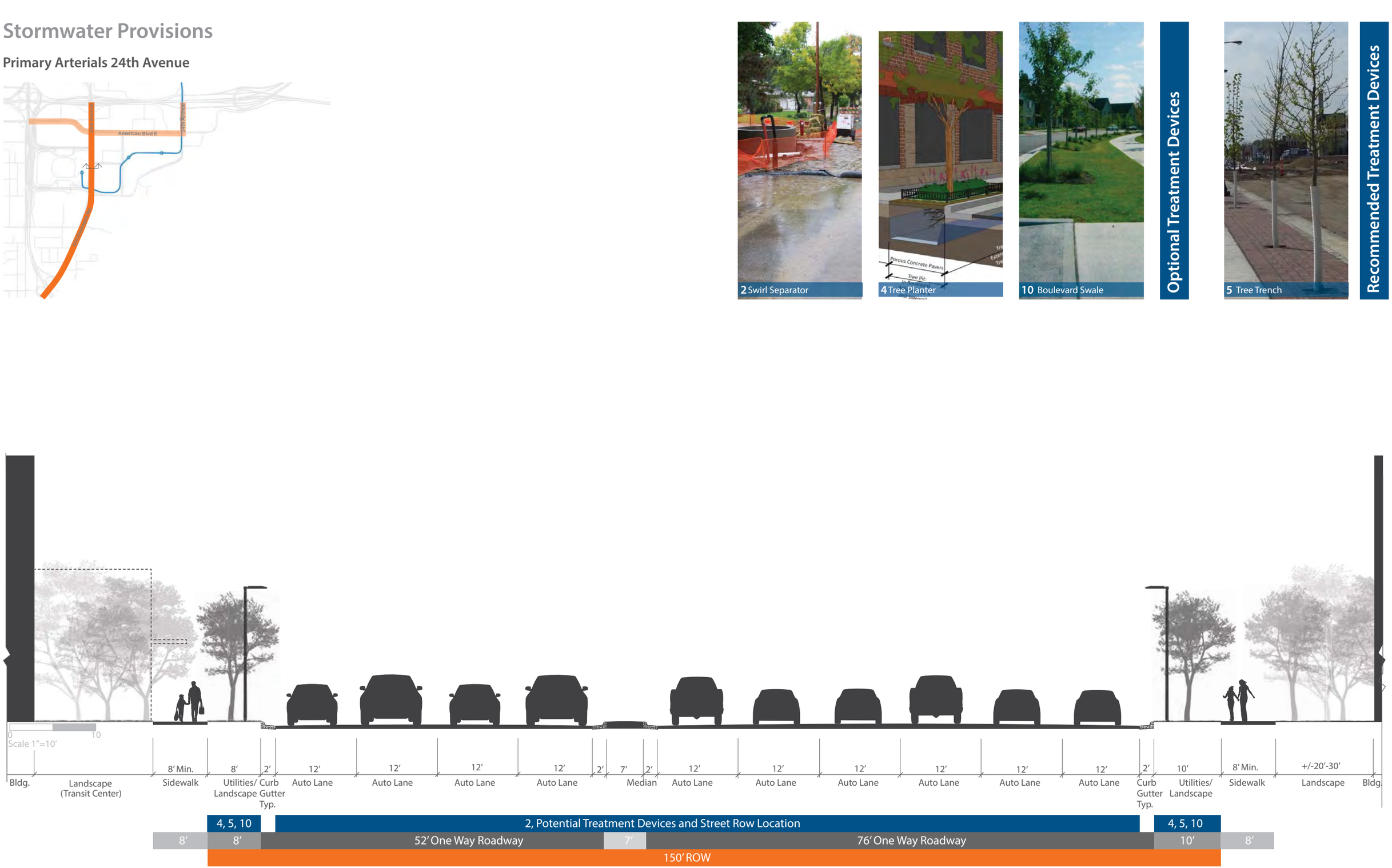
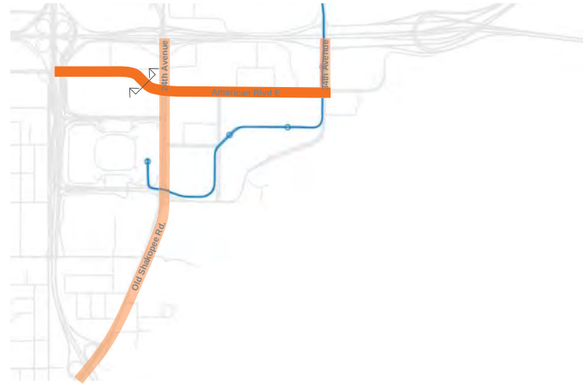



*Figure 8.5 Potential Stormwater Treatment Devices for 24th Avenue*

# Stormwater Provisions

## Primary Arterials American Boulevard (West of 24th Avenue)




**Recommended Treatment Devices**


1 Underground Infiltration


5 Tree Trench


9 Infiltration Trench


3 Underground Detention

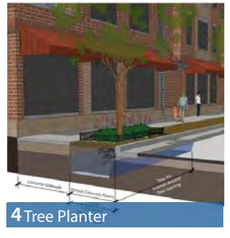

7 Bioretention Basin

**Optional Treatment Devices**


2 Swirl Separator


6 Cistern/Reuse


10 Boulevard Swale


4 Tree Planter


8 Porous Pavement

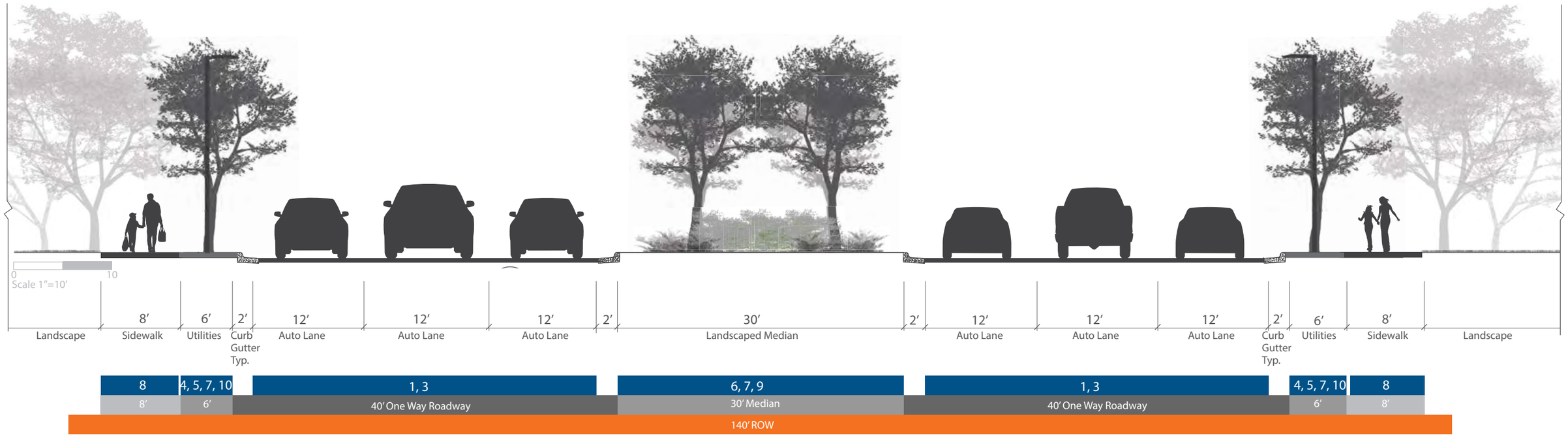
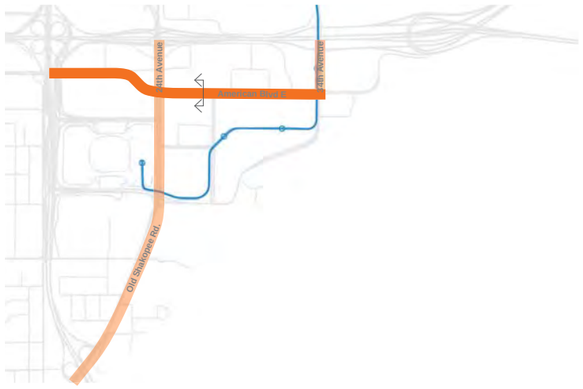



*Figure 8.6 Potential Stormwater Treatment Devices for American Boulevard*

# Stormwater Provisions

## Primary Arterials American Boulevard (East of 24th Avenue)





2 Swirl Separator


4 Tree Planter


8 Porous Pavement


6 Cistern/Reuse


10 Boulevard Swale

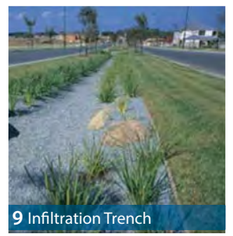
Optional Treatment Devices


1 Underground Infiltration


3 Underground Detention


7 Bioretention Basin


5 Tree Trench


9 Infiltration Trench

Recommended Treatment Devices

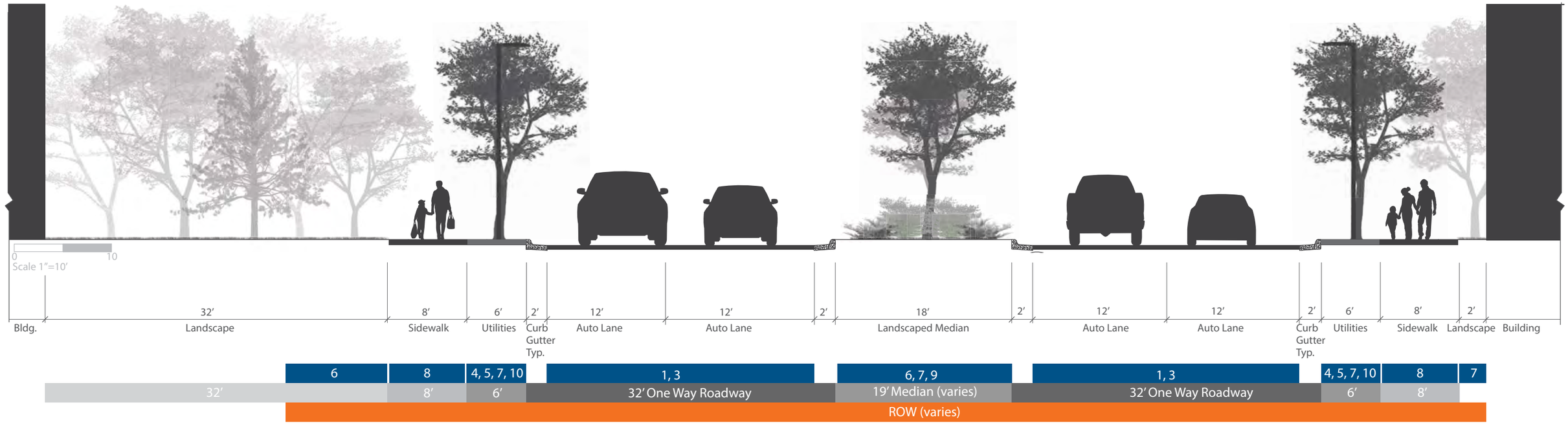



*Figure 8.7 Potential Stormwater Treatment Devices for American Boulevard*

# Representative Cross Sections/Plans

## Collectors (Sub - Arterials) E. Old Shakopee Road - East of 24th Street

**Recommended Treatment Devices**



4 Tree Planter



7 Bioretention Basin



5 Tree Trench

**Optional Treatment Devices**



1 Underground Infiltration



3 Underground Detention



9 Infiltration Trench



2 Swirl Separator



6 Cistern/Reuse



10 Boulevard Swale





*Figure 8.8 Potential Stormwater Treatment Devices for E. Old Shakopee Road*

# Stormwater Provisions

## Local Roads (High Density) Metro Drive Road







4 Tree Planter



5 Tree Trench



10 Boulevard Swale

**Optional Treatment Devices**



7 Bioretention Basin



8 Permeable Pavers

**Recommended Treatment Devices**

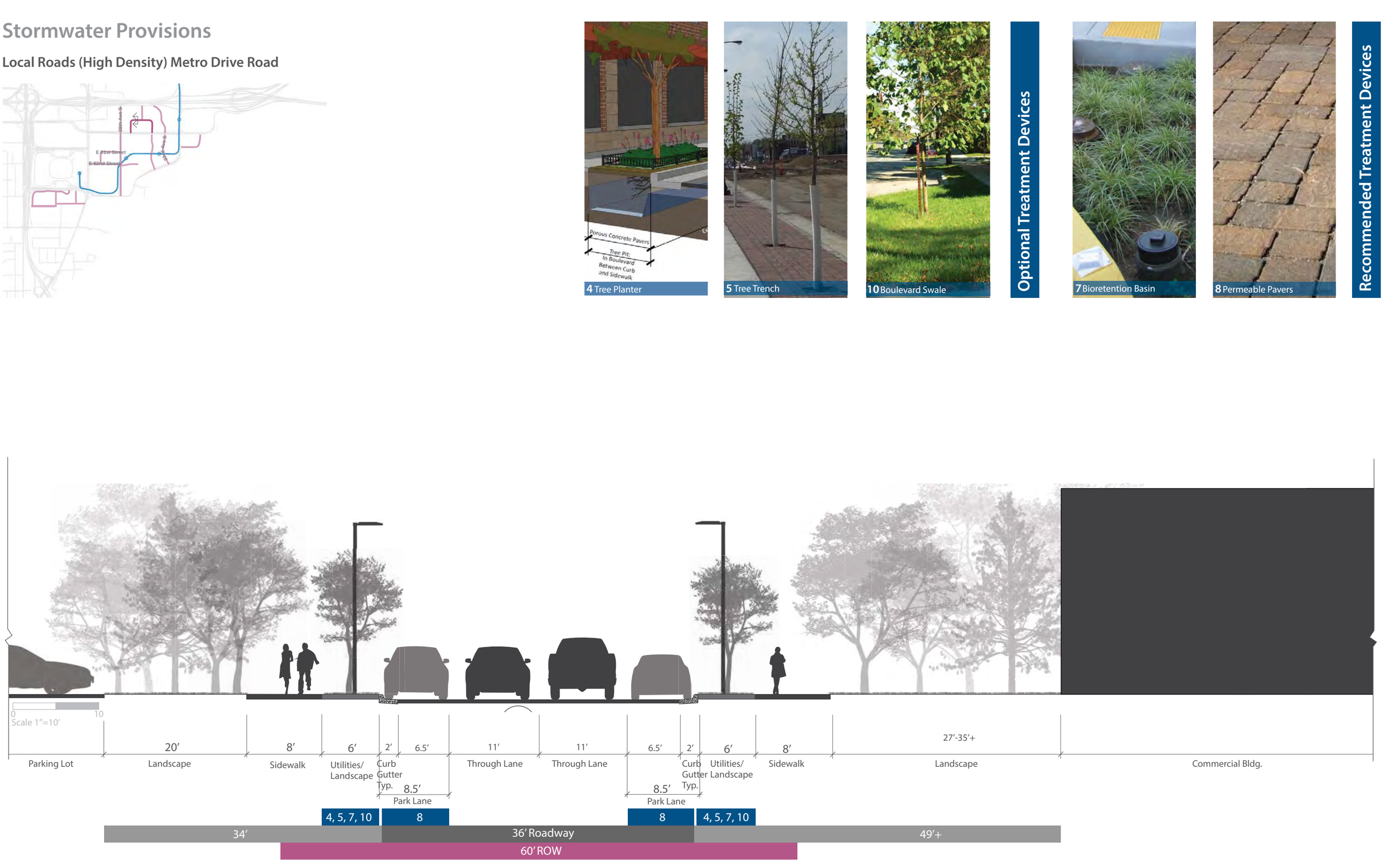
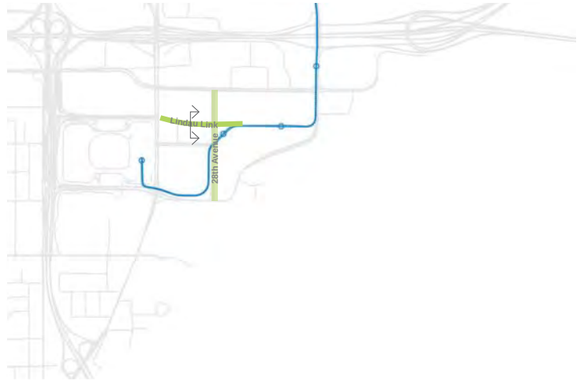



*Figure 8.9 Potential Stormwater Treatment Devices for Metro Drive Road*

## Green Streets Lindau Link Proposed 2030

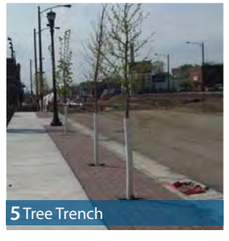


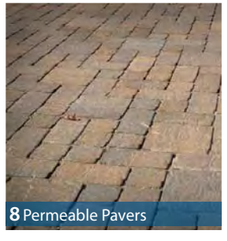

**Recommended Treatment Devices**


4 Tree Planter


7 Permeable Pavers


9 Infiltration Trench


5 Tree Trench


8 Permeable Pavers

**Optional Treatment Devices**


1 Underground Infiltration


3 Underground Detention


2 Swirl Separator


6 Cistern/Reuse

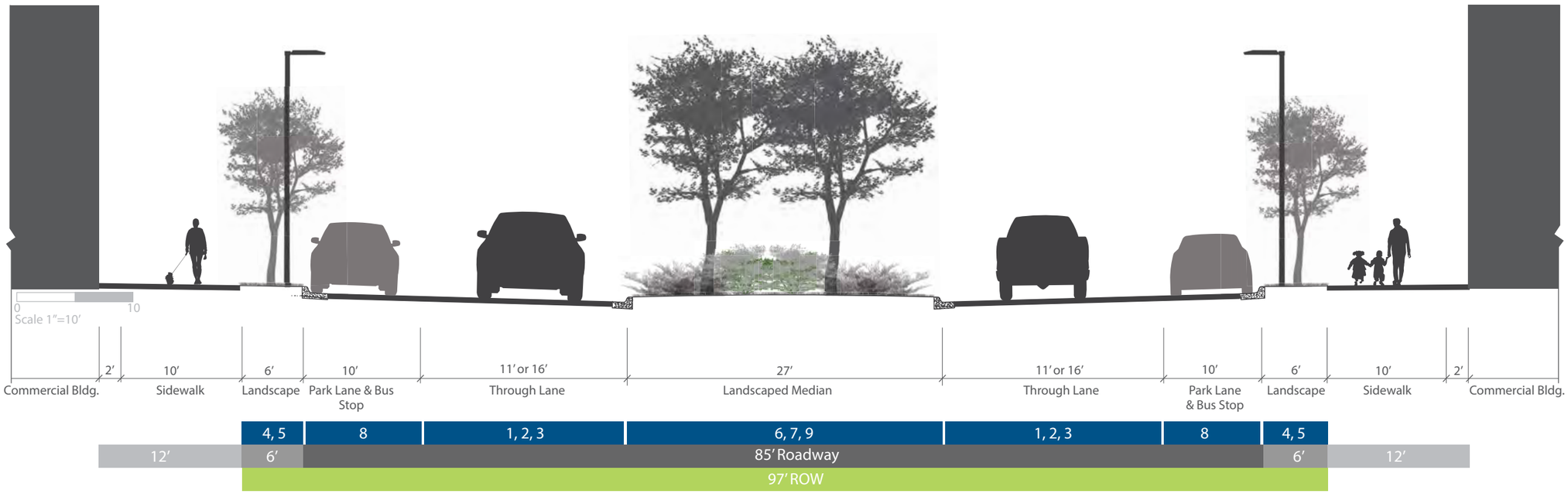
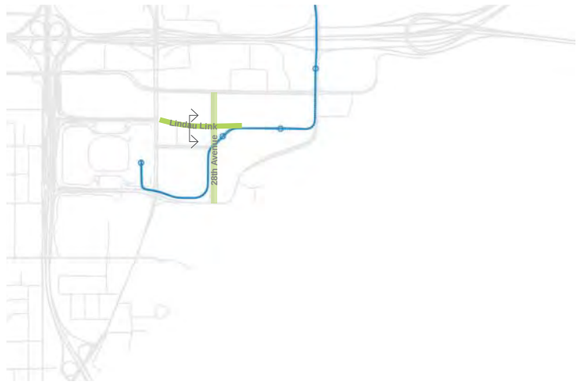



*Figure 8.10 Potential Stormwater Treatment Devices for Lindau Link Proposed 2030*

# Stormwater Provisions

## Green Streets Lindau Link Proposed 2050



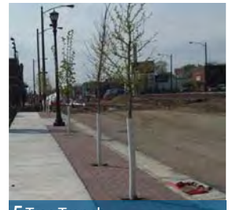


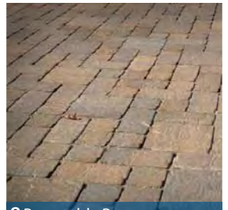
1 Underground Infiltration


3 Underground Detention

Optional Treatment Devices


4 Tree Planter


5 Tree Trench


8 Permeable Pavers


2 Swirl Separator


6 Cistern/Reuse


7 Permeable Pavers


9 Infiltration Trench

Recommended Treatment Devices

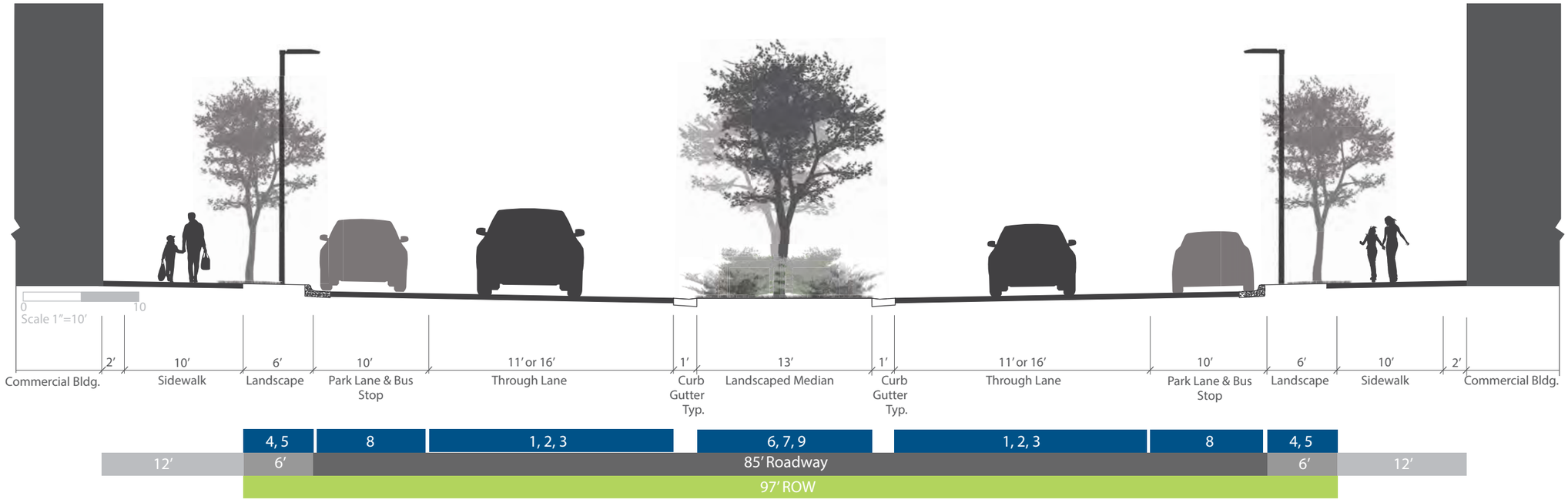
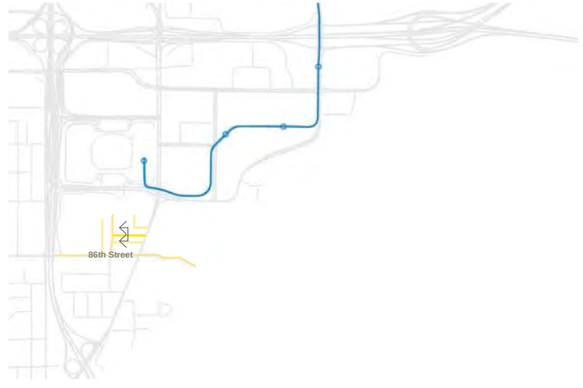



*Figure 8.11 Potential Stormwater Treatment Devices for Lindau Link Proposed 2050*

## Local Roads (Low Density) 86th 1/2 Street




Recommended Treatment Devices


7 Bioretention Basin


8 Permeable Pavers


10 Boulevard Swale

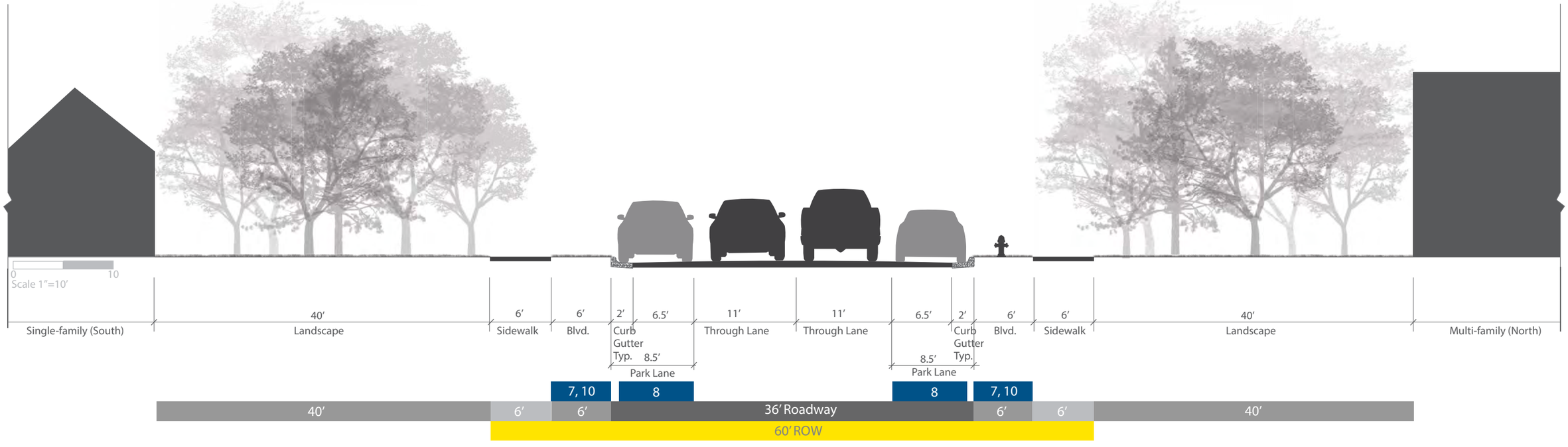
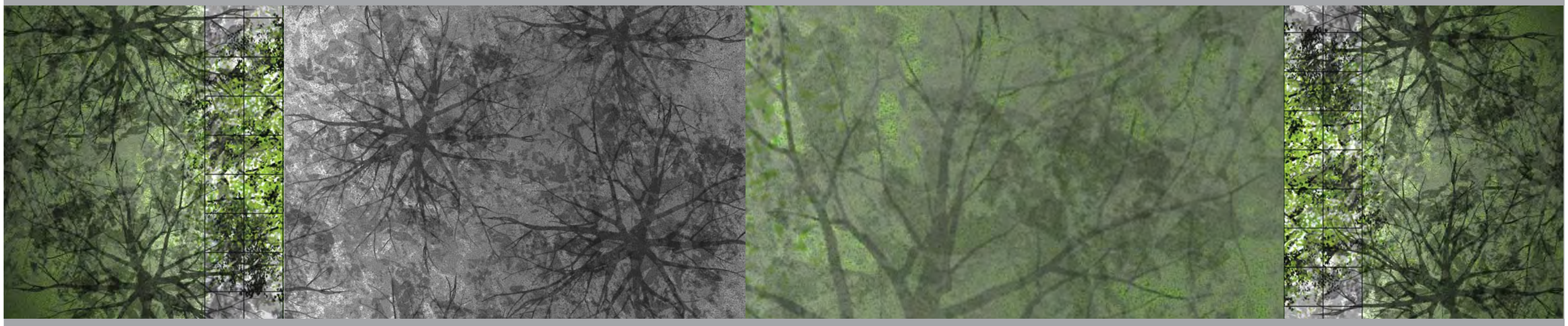



*Figure 8.12 Potential Stormwater Treatment Devices for 86th 1/2 Street*



# Landscaping CHAPTER 9

Overview
Trees
Shrubs & Perennials

# Landscaping

## Overview

The South Loop landscape will respond to the guidance provided within the South Loop District Plan, which recommends that the streetscape:

- Use street trees and boulevard plantings to create buffers to increase pedestrian comfort
- Include boulevard trees for pedestrian scale
- Be coordinated to visually connect both north and south sides of a street
- Incorporate sustainable design practices, which include infiltration basins and rain gardens
- Incorporate planted medians where space allows

The design of the District's landscape will include plant species that are primarily native and indigenous to the region. Drought tolerant species that can handle harsh streetscape conditions will dominate, while plants that require more water will be planted in drainage swales. Both deciduous and evergreen species will be used, with a focus on species diversity to avoid the potential of disease or other stress related factors that could impact large areas of landscape. Where feasible, plants will be used and placed to take advantage of reused runoff and redirected water in the landscape. In addition, a 3" minimum depth of organic mulch will be applied to all planting areas to help retain moisture and reduce weed growth. The planting design will need to respond to sight visibility requirements and other vehicle, bicycle and pedestrian safety criteria.

The design vocabulary for the District's streetscape improvements identifies a neutral style for built improvements, while the landscape will provide the primary source of color variation and seasonal interest for the District.

## Trees

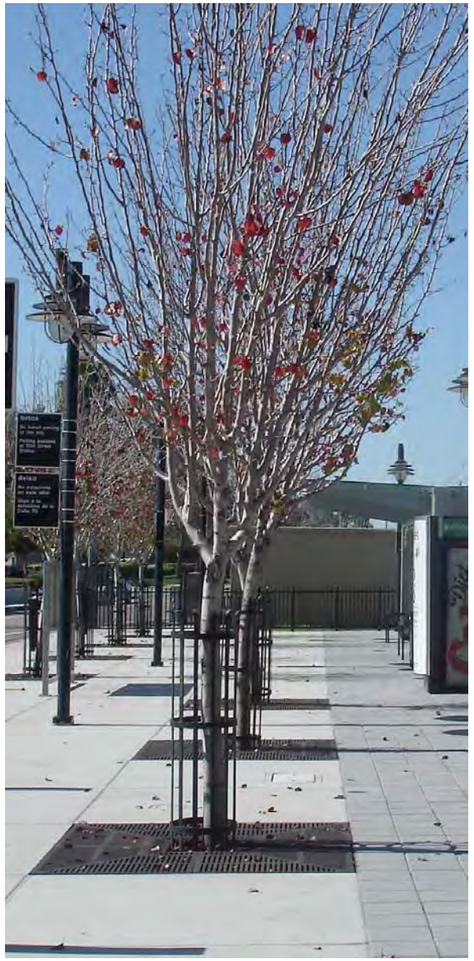
Trees are an essential element of the streetscape as they frame the street, create pedestrian scale, and provide shade. Trees also help screen unsightly structures and uses, such as building service yards, loading areas and parking lots. Conversely, trees can emphasize and enhance desirable views, architectural elements or facilities. The use of evergreen trees is encouraged, but due to harsh roadway conditions trees should be located a minimum of 25 feet from the roadway.

Trees will be selected based on environmental, aesthetic, and structural factors, and their placement will take into consideration utilities, public sidewalks, proximity to traveled way and sub-surface foundations. Care should be taken to minimize conflicts with roadway lighting, signage and traffic signals. When planted adjacent to parking areas, trees should be

A. Trees in grassed boulevard

B. Trees in structural soils with pavers

C. Trees in sructural soils with open surface



D. Trees in structural soils with tree grate

E. Tree trench using structural soils, permeable pavers, and tree grates

***Figure 9.1 Various conditions for tree planting***

## List of Recommended Trees

| | Elm Tree Selections | Ht. | Wdt. | Shape | Texture | Flower | Fruit | Summer Foliage | Fall Color | Additional Interest | Local Availability [see note] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | *Ulmus americana 'Princeton'* Princeton Elm | 60-80' | 40-60' | vase form, upright | medium | — | — | dark green | yellow | fast growing, graceful, symmetrical branching | xxx |
| 2 | *Ulmus americana 'Valley Forge'* Valley Forge American Elm | 60-70' | 60-70' | upright, arching | medium | — | — | dark green | yellow | adaptable, resistant to dutch elm disease | xxx |
| 3 | *Ulmus 'Morton'* Accolade Elm | 70' | 50-60' | vase-shaped | broad leaf | — | — | dark green, glossy | yellow | tolerant; arching form | xx |
| 4 | *Ulmus x 'Cathedral'* Cathedral Elm | 40-50' | 40-60' | vase-shaped | large leaf | — | samara | light green | yellow | larger leaves | xxx |
| 5 | *Ulmus davidiana japonica* Discovery Elm | 35-45' | 35-40' | upright, vase-shaped | medium | | samara | green | yellow | good cold hardiness; tolerant | xx |
| | **Overstory Tree Selections** | | | | | | | | | | |
| 6 | *Acer x freemanii 'Sienna Glen'* Sienna Glen Maple | 50-60' | 40' | pyramidal | medium | red | seedless | green | burgundy red | smaller leaves; hardy; uniform branching | xx |
| 7 | *Quercus bicolor* Swamp White Oak | 50-60' | 40'-50' | narrow, rounded | coarse | - | acorn | glossy, dark green | brown | significant acorn litter | xx |
| 8 | *Gymnocladus dioica* Kentucky Coffeetree | 50-60' | 40'-50 | open, spreading | medium | green-white | brown pod | blue-green | golden yellow | late bloomer | xxx |
| 9 | *Gleditsia tricanthos var. 'Skyline'* 'Skyline' Thornless Honeylocust | 50-70' | 35'-50' | pyramidal | fine | yellow | - | green | copper yellow | strong wooded, looses leaves early, low maintenance | xx |
| 10 | *Acer negundo 'Sensation'* Sensation Maple | 30' | 25' | rounded | medium | chartruese | - | green | brilliant red | great fall color, uniform growth | x |
| | **Upright Tree Selections** | | | | | | | | | | |
| 11 | *Gingko biloba 'Princeton Sentry'* Princeton Sentry Gingko | 40'-60' | 20'-30' | pyramidal, rouded | medium | - | - | green | brilliant yellow | great fall color; pest, disease free | xx |
| 12 | *Quercus robur 'Fastigiata'* 'Fastigiatia' English Oak | 50' | 15'-20' | narrow, columnar | medium | - | acorn | dark green | brown | acorns stay on throughout winter | x |
| 13 | *Tilia americana 'Redmond'* Redmond Linden | 50' | 30' | dense, pyramidal | coarse | yellow | nutlet | light green | yellow | very large leaves, fragrant | xxx |
| 14 | *Acer rubrum 'Armstrong'* Armstrong Red Maple | 50'-60' | 15'-25' | columnar, upright | medium | red | red | green | red, orange very early | winter interest, attractive bark | xx |
| 15 | *Syringa reticulata 'Ivory Silk'* Ivory Silk Lilac | 25' | 15' | compact, oval | medium | creamy white | brown capsule | dark green | - | winter interest, fragrant | xxx |
| 16 | *Acer rubrum 'Autumn Spire'* Autumn Spire Red Maple | 50' | 20'-25' | broadly columnar | medium | showy red | - | green | beautiful red | consistent great fall color | xx |
| 17 | *Tilia americana 'Boulevard'* Boulevard Linden | 50'-60' | 25'-30' | narrow, pyramidal | coarse | fragrant yellow | nutlet | dark green | yellow | great for boulevards | xxx |
| 18 | *Malus x 'Velvet Pillar'* Velvet Pillar Crabapple | 20' | 15' | upright, columnar | small leaf | fragrant pink | red | purple | red, orange very early | fruit little, purple foliage | x |
| | **Additional** | | | | | | | | | | |
| 19 | *Acer platanoides 'Crimson Sentry'* Crimson Sentry Norway Maple | 25' | 15' | columnar | medium | yellow | samara | red-purple | maroon, red bronze | extended length of color, slow growth | xx |
| 20 | *Acer tataricum 'Gar Ann'* Hot Wings Maple | 25' | 15' | upright, spreading | medium | yellow-white | bright red samara | green | yellow-red | perfect for small spaces | xxx |
| 21 | *Acer platanoides 'Princeton Gold'* Princeton Gold Norway Maple | 35' | 30' | oval | medium | - | samara | bright yellow-green | yellow | stunning accent color | xxx |
| 22 | *Acer platanoides 'Variegatum'* Variegated Norway Maple | 50'-60' | 40'-50' | upright, rounded | medium | yellow | samara | varigated | yellow | dense, well-shaped crown, white margins around green leaves | xxx |
| 23 | *Malus x 'Thunderchild'* Thunderchild Crabapple | 20' | 15' | oval | medium | early, pink | dark red, small | purple | dark purple | color interest for most of the year | xx |

note: xxx - readily available to x - limited availability

***Table 9.1 Recommended Tree List***

planted in locations to minimize the associated fixed object conflicts. Locating trees within the rights of way or street easements vary based on roadway type, location and jurisdiction. Bloomington staff has reviewed this issue and provides guidance for tree placement within the South Loop District. This guidance is summarized in a memorandum dated November 8, 2012, provided within the Appendix of this Guide.

Since the South Loop District is adjacent to and within the MSP Runway 17-35 Protection Zone, FAA-required height restrictions occur which may limit tree heights within the northern limits of the District. Plans for tree installation should be reviewed with representatives of the Metropolitan Airports Commission to understand these limitations and possible review and administrative requirements. Additionally, tree species within this airport zone cannot include varieties which bear fruit or attract flocking birds.

Trees that are planted in paving will have a minimum planting well of 50 square feet, to a depth no less than 3 feet 6 inches. Trees shall be planted by size and condition based on the following minimums:

- Deciduous trees: 2-1/2" caliper, B & B
- Ornamental trees: 8' Ht., B & B
- Evergreen trees: 6' Ht., B & B

A list of recommended trees is provided within this section. Tree selection, location and design will:

- Highlight intersections and primary District entry locations
- Provide variation in tree species mix from street to street, but have general consistency within the District
- Provide diversity within block to block segments by including 3 to 4 different tree varieties

## Shrubs and Perennials

As a general rule, shrub and perennial massings will be of the same species to create a more aesthetically pleasing and unified appearance. Shrubs will be used to screen and buffer views of adjacent facilities such as parking lots and service yards. Shrubs and perennials will be used to enhance, highlight and frame other areas such as entries, signage, and other streetscape features.

Shrubs and perennials will be planted within massed planting beds, and should be bordered by an edger. Planting soils as identified within this chapter shall be used within the entire mass planting beds, to a minimum depth of 24 inches. Shrubs and perennials will be planted by size and condition based on the following minimums:

- Deciduous shrubs: #2 container
- Evergreen shrubs: #3 container
- Perennials: #2 container
- Ornamental grasses: #2 container

A list of recommended shrubs, perennials and ornamental grasses is provided within this section.








*Figure 9.2 Irrigation, structural soil and permeable pavers, shrubs and perennial examples*

## Ground Cover

All landscaped areas not planted in shrub and perennial massings or as infiltration plantings/rain gardens will be seeded and/or sodded based on the limits of disturbance and project budget. Sod will be Mn/DOT Type Salt Resistant. When seeding is the determined turf establishment method, Mn/DOT Seed Mixtures will be used. Their selection will be based on their ability to thrive in specific site conditions and context. Generally, boulevards and other turf areas will be seeded with mixtures that contain a variety of grass types such as fescue, ryegrass and bluegrass, and areas adjacent to natural areas or stormwater facilities will be seeded with native blends and will include forbs. Salt resistant seed mixtures will be considered.

## Container Plants

At special plaza or District gateway areas, additional landscaping will be provided through the use of plant containers. Containers provide an opportunity for defining space, incorporating additional furniture and adding seasonal color to the streetscape. Plantings within containers will include a combination of perennials and ornamental grasses, and will be the primary means of introducing seasonal color. Annuals will also be planted within containers to provide dramatic and focused color. Providing separate spring, summer and fall plantings will help create seasonal interest within the South Loop. Manual watering will be required for container plantings in lieu of an automatic irrigation system.

## Soil Mix and Mulch

The long term viability of plantings begins with the soil medium in which they are planted. All plantings will utilize Mn/DOT Select Topsoil Borrow, amended with compost, sand and fertilizer. Where tree plantings occur within paved areas, structural soil is the recommended planting medium as described in the following section. All single tree and mass planting beds will be top dressed with Mn/DOT Type 6 mulch (shredded hardwood ).

## Structural Soil

Within urban, paved areas, structural soil can increase the survivability of street trees by promoting root growth as well as providing structural support to adjacent pavement. It is made from a combination of gap-graded gravels, clay loam, and hydrogel**,** and can be compacted to pavement design requirements. The shape and size of the gravel particles create gaps that allow the roots to penetrate, while the clay loam provides a growing medium and the hydrogel holds everything together.

Trees are generally planted in a trench containing structural soil instead of a typical tree pit, so that roots have more freedom of movement. Pavers contained by a movable edger or adjustable tree grate can be used to cover the surface at the tree's base, which allows for adjustments to accommodate tree growth.

While structural soil benefits the long-term health of trees when planted within paved conditions, it can be costly to install, primarily due to it being proprietary. Cornell University-developed and patented (CU) structural soils are the most common and the most tested. Structural soils are cost-effective when installed where the streetscape will be included as part of new construction, and are strongly encouraged for use within the South Loop streetscapes.

## Irrigation

Plant selection should take into account the potential need for irrigation. The focus should be on using stormwater or otherwise designing a system to reduce the demand for watering in the public realm. Typically, the City of Bloomington does not install or maintain automatic irrigation systems within public street rights-of-way. However, within the South Loop District, providing irrigation systems in special areas is recommended. The South Loop District Plan-defined special 'green streets' of Lindau Link and 30th Avenue could include publicly-funded and maintained irrigation systems. If used, irrigation systems should be designed to reduce coverage area, cost and maintenance.

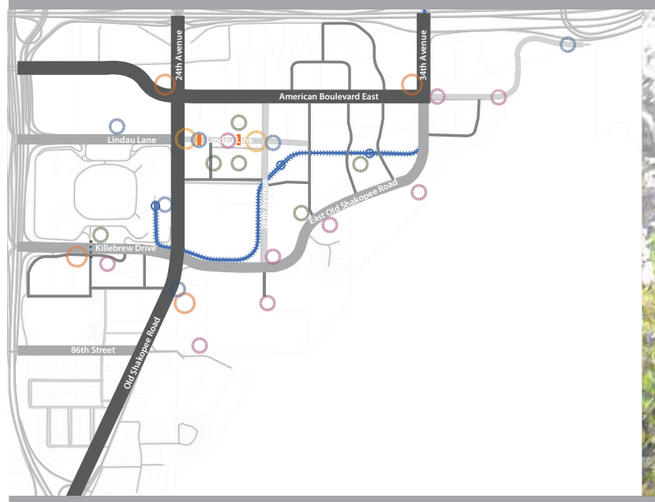
## Stormwater Provisions

Stormwater design strategies are identified within Chapter 8 of these guidelines, which include incorporation and integration of landscape design for infiltration basins and trenches, tree trenches and tree planters, biorentention basins, and rain gardens. Plantings within these special areas are encouraged and will support and complement other streetscape design components.

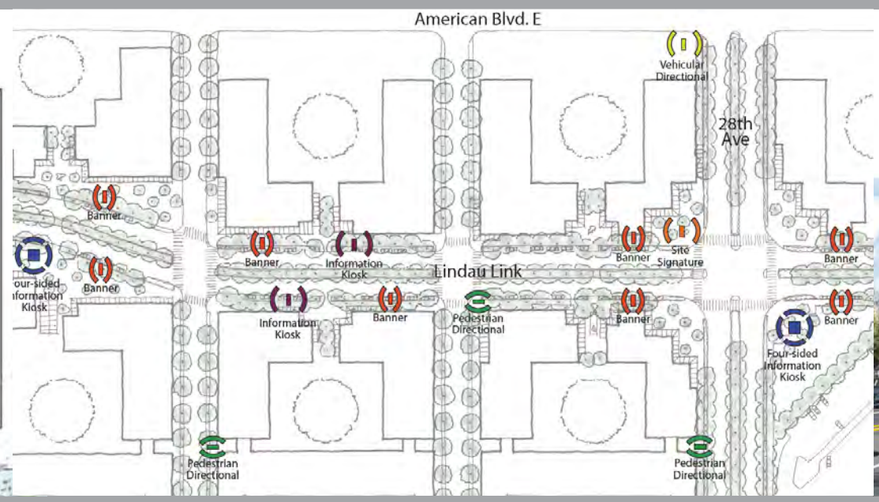
## List of Recommended Shrubs, Perennials and Ornamental Grasses

| | Shrubs | Ht. | Wdt. | Application | Interest |
|---|---|---|---|---|---|
| 1 | *Ribes Alpinum*<br>Alpine Currant | 3'-5' | 5'-6' | Deciduous hedge, screening | yellow-green foliage |
| 2 | *Diervilla Lonicera*<br>Dwarf Bush Honeysuckle | 6'-8' | 5'-6' | irregular hedge, screening | red fall color, raingardens |
| 3 | *Euonymus Alatus Compacta*<br>Dwarf-Winged Euonymus | 8'-10' | 6'-8' | accent and irregular hedge | brilliant red fall color |
| 4 | *Rosa Rugosa - Pavement Foxi*<br>Foxy Pavement Rose | 2.5' | 2.5' | accent in massings | rose hips, full flowers |
| 5 | *Rhus Aromatica 'Gro-Lo'*<br>Gro-Low Sumac | 2' | 6-8' | low spreading ground cover | bronze - red fall color |
| 6 | *Syringa Patula 'Miss Kim'*<br>Miss Kim Lilac | 6'-8' | 5'-6' | irregular hedge, accent | fragrant, flowers |
| 7 | *Syringa Meyeri 'Palibin'*<br>Dwarf Korean Lilac | 4'-6' | 5'-7' | hedge, screening | fragrant, flowers |
| 8 | *Spiraea Japonica 'Magic Carpet'*<br>Magic Carpet Spirea | 2' | 2' | accent, color, tight locations | flower, fall color |
| 9 | *Juniperous Chinensis 'Mint Julep'*<br>Sea Green Juniper | 4'-6' | 4'-6' | evergreen massings, interest | light green, arching |
| 10 | *Viburnum Trilobum 'Bailey Compact'*<br>Compact American Viburnum | 5'-6' | 5'-6' | irregular hedge, screening | brilliant red fall color |
| | **Perennials and Ornmental Grasses** | | | | |
| 11 | *Sedum 'Autumn Joy'*<br>Autumn Joy Sedum | 1.5' | 1.5' | seasonal color massing | pink flowers, raingardens |
| 12 | *Rudbeckia 'Goldstrum'*<br>Black-eyed Susan | 2.5' | 1.5' | seasonal color massing | orange flowers, summer color |
| 13 | *Achillea Millefolium 'Borealis'*<br>Borealis Yarrow | 3' | 1.5' | seasonal color massing - fall | pink/yellow flowers |
| 14 | *Calamagrostis Acutiflora 'Karl Foerester'*<br>Karl Foerester Grass | 3.5' | 1.5' | hedge, screen, winter interest | gold seed heads in fall |
| 15 | *Symphoyotricum Novae-Angliae*<br>New England Aster | 3'-4' | 1.5' | seasonal color massing - tall | purple, raingardens |
| 16 | *Hemerocallis 'Pardon Me'*<br>Pardon Me Daylily | 1.5' | 1.5' | seasonal color massing - low | red flower, raingardens |
| 17 | *Echinacea Purpurea 'Rubinstern'*<br>Ruby Star Purple Coneflower | 3' | 2' | seasonal color massing | purple raingardens |
| 18 | *Hemercallis 'Stella D'Oro'*<br>Stella D'oro Daylily | 1.5' | 1.5' | seasonal color massing - low | yellow flower |
| 19 | *Schizachyrium Scoparium*<br>Little Bluestem | 3' | 1.5' | seasonal massing - tall | texture,seed raingardens |
| 20 | *Iris Versicolor*<br>Flag Blue Iris | 3' | 1.5' | seasonal accent - tall | blue/yellow raingardens |
| 21 | *Liatris Spicata 'Floristan Violett'*<br>Floristan Violet Liatris | 3' | 2' | seasonal accent- tall | purple, tall spikes |
| 22 | *Solidago 'Little Lemon'*<br>Little Lemon Goldenrod | 1' | 1' | seasonal accent - low | yellow heads - fall |
| 23 | *Minscanthus Sinensis "Purpurascens'*<br>Miscanthus Flame Grass | 4' | 4' | seasonal massing - tall | texture, red in fall |

***Table 9.2 Recommended shrub, perennial and ornamental grass list***









# Wayfinding and Branding CHAPTER 10

Wayfinding Strategy
Branding
Sign System Design
Sign Types
Banners & Sign Locations
Cost Estimates for Signage Types

# Wayfinding and Branding

## Wayfinding Strategy

The wayfinding and branding strategy, provided through public investment in the South Loop District, includes a framework of features that will work together to make the District more vibrant, comfortable and identifiable.

## Branding

The established brand name and logo, (identity) prepared by Bolin Marketing for the City of Bloomington is a recognizable mark that will be applied as the key feature for the District's recognition. Prominent site Gateway and Signature signs will feature the logo, while general directional and information sign types will apply the logo as a secondary message. (Figure 10.1)

Other non-sign opportunities may be considered when applying the District's logo within the environment. These may include graphic treatments to street furniture, lighting stanchions or within the sidewalk, walls or roadway surfaces. (Figures 10.2 and 10.3) A more interpretive application may be considered by applying features of the logo, such as the color scheme, graphic form or the logo-type. This alternative or interpretive application of the logo may be considered if it provides an added level of connectivity or continuity to the surroundings. (Figure 10.4)

## Sign System Design

The Sign System will be incorporated throughout the District. Messages will be posted, sized and placed at locations that are readable and informative. Different sign types will be designed to meet the particular needs of people as they arrive and move through the District. While signs will have different functions and potentially form, they will display common elements to adhere to a cohesive style. This style or aesthetic will reflect the character of the District and the City of Bloomington. (Figure 10.5)

The sign system includes the following sign types:

- District Signature Sign
- Site Signature Sign
- Static Vehicular Directional Sign
- Primary Pedestrian Information Kiosk
- Secondary Pedestrian Information Kiosk
- Pedestrian Directional
- Recognition Banners


*Figure 10.1*

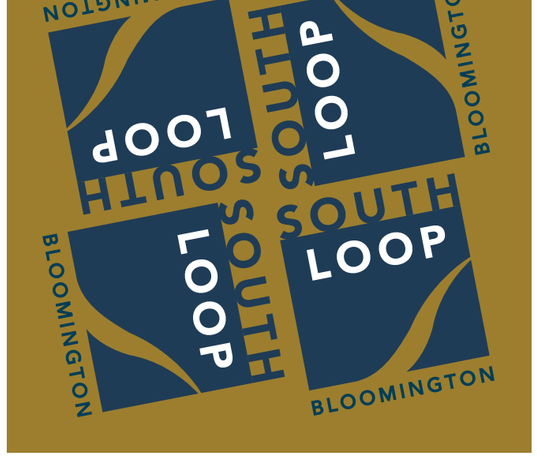



*Figure 10.2*


*Figure 10.3*

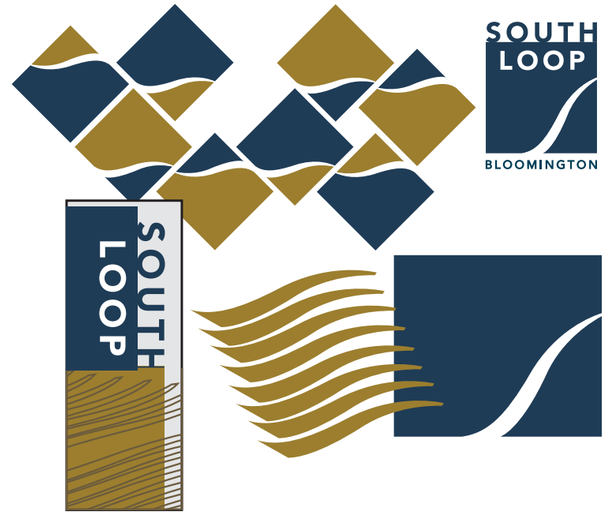



*Figure 10.4*

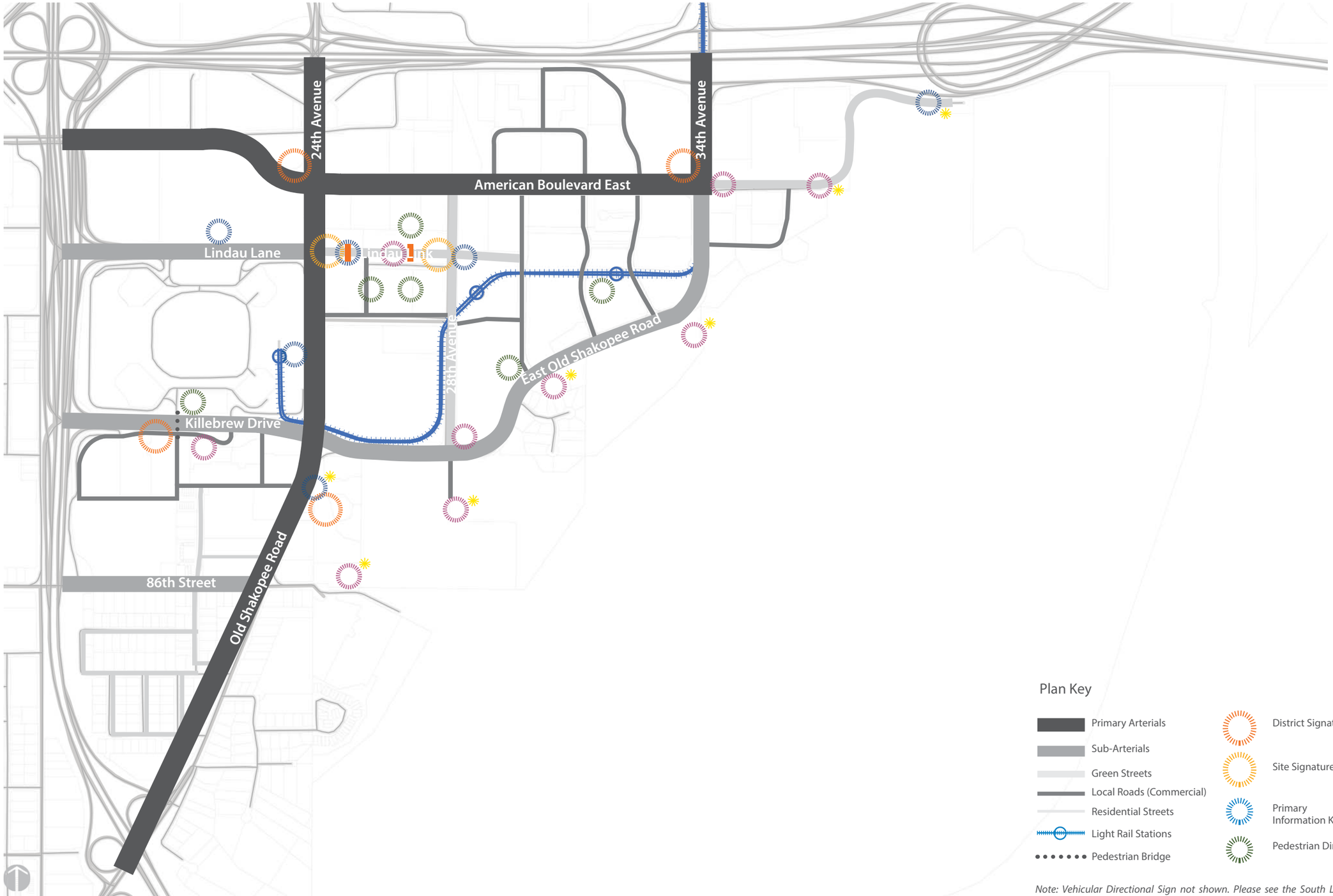



*Figure 10.5 Sign locations throughout the district*

Plan Key

- Primary Arterials
- Sub-Arterials
- Green Streets
- Local Roads (Commercial)
- Residential Streets
- Light Rail Stations
- Pedestrian Bridge
- District Signature Sign
- Site Signature Sign
- Primary Pedestrian Information Kiosk
- Pedestrian Directional
- Secondary Pedestrian Directional
- Recognition Banners
- Trail Head Locations

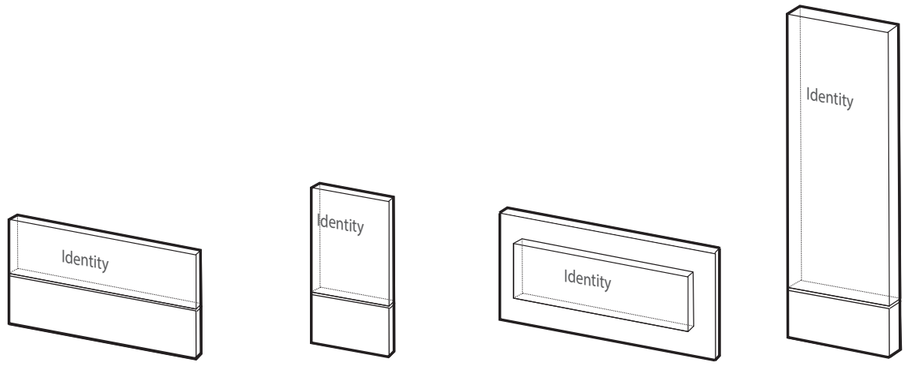
*Note: Vehicular Directional Sign not shown. Please see the South Loop local wayfinding system maps Concept of Operations Document.*

# Wayfinding and Branding

## Sign Types

- **Site Signature Signs** are designed to reinforce the District's identity in a scale and design that confirms points of arrival to areas as defined sites within the larger South Loop District. When combined with other streetscape features, the design may be a literal or interpretive application that serves to define the area in combination with applied architectural and landscaping features. (Figure10.6)
- **Static Vehicular Directional Signs** (unchanging message) signs as well as dynamic (changeable message) signs are located throughout the District. These signs are designed to provide vehicular traffic directions along public roadways to primary destinations within the District. Some directional signs will be free-standing structures. These directional signs will need to follow applicable requirements as outlined in the Minnesota Manual of Unifrom Traffic Devices, but where possible should follow a consistent style designed to reflect the character of the District and the City of Bloomington. (Figure 10.7)
- **Primary Pedestrian Information Kiosks** sign types provide orientation maps, services, locations and directional information for the immediate site and District while also posting information on public events and sponsorships. The proposed configuration of these Kiosks are as two-sided or four sided free-standing structures. Each structure would include hard-wiring for optional illumination and data. Located within public pazas and civic open spaces, access to the kiosks would be from multiple directions as people either gather at these locations or pass through them to reach other destinations. Sustainable and maintainable internet based and interactive media resources are optional applications to be considered as potential features of these information kiosks.
- **Secondary Pedestrian Information Kiosks** sign types provide orientation maps, services, locations and directional information for the immediate site and the general District. The general configuration of these Kiosks are as two sided, free-standing structures. Both faces would include similar sets of information. Located along street frontages at street intersections or where courtyards/ galleries intersect with the street. Each structure would include hard-wiring for optional illumination and data. (Figure 10.8)
- **Pedestrian Directional Signs** are placed at the interseciton of pedestrian sidewalks and pathways throughout the District. Desitnations are posted on the signs with coresponding directional arrows. Information is organized within groups or as individual destinations within the District. The posted copy identifying destinations should be presented in a simple and clear format. The quantity of locations listed on each sign will vary by sign location, orientation and the number of destinations. The application of this sign type may range from free-standing structures to sign panels attached to existing posts or wall surfaces.

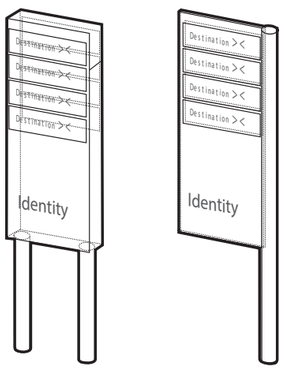
### District and Site Signature Signs
Alternative or Optional Configurations




A. Horizontal Monument B. Pedestal Sign C. Applied to wall or other structure D. Vertical Pylon

*Figure 10.6 Alternative or optional configurations*

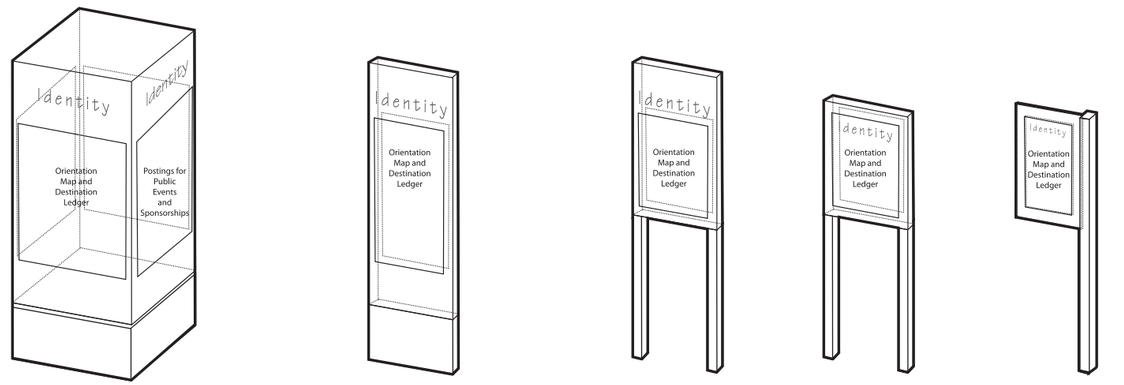
### Static Vehicular Directional Sign
Alternative or Optional Configurations




A. Double Post and Panel B. Single Post, narrow profile Post and Panel

*Figure10.7 Static vehicular directional signs*

### Pedestrian Information Kiosks and Directional Signs
Alternative or Optional Configurations




A. Vertical Pylon B. Horizontal Monument C. Pedestal Sign D. Pedestal Sign E Pedestal Sign

*Figure 10.8 Primary and secondary information kiosks*

### Banners and Locations

Recognition Banners provide an efficient and effective approach to site recognition and identity. Well-designed and positioned banners will project a cohesive identity of South Loop; conveying a unifying vision while building excitement and anticipation for the South Loop development. Banners can be applied as double-sided panels, cantilevered off of streetlight stanchions or as dedicated, free-standing post mounted application. Banners are easily changeable and may be considered as an adaptable, short term or long term application that can be incorporated throughout the District. Materials and methods vary, from pliable fabrics to rigid, layered graphic panels. (Figure 10.9)

### Lindau Link Sign Locations

Lindau Link will accommodate people drawn to the social and business venues that are developed within and along the primary roadways. The following plan for Lindau Link provides an example of signs placed to inform and direct people as they arrive, park and make decisions while navigating through the area. This plan is provided as a model for the design and programming of a cohesive system of signs that will be appropriately scheduled for these and applicable conditions throughout the District.

People entering Lindau Link will be presented with signs that confirm their arrival to the South Loop District of the City of Bloomington. "Signature" signs are placed and oriented to confirm arrival to the District or sites within the District. Banners are placed along selected street frontages as an additional method of reinforcing the District's identity. Dynamic and static directional signs provide directions to convenient and available parking. Once parked, pedestrians will be directed to their destination by directional and information signs. Kiosks located at plazas, key intersections or gathering points provide information about the site and surrounding destinations. These kiosks include a broader range of posted information while more immediate location and services information is provided on smaller kiosk and directional signs located along the street frontages. (Figure 10.10)


*Figure 10.9 Recognition banners*

**Lindau Link Wayfinding**

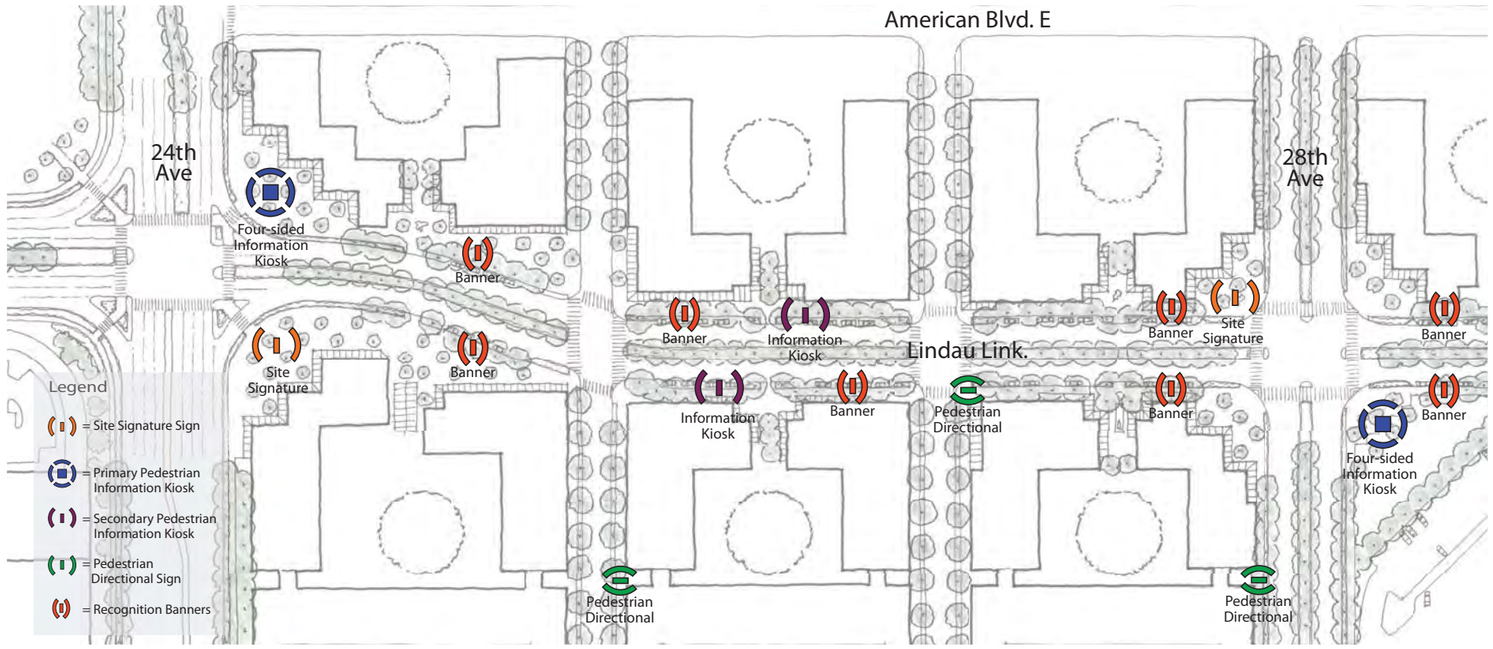



*Figure 10.10 Potential sign locations on Lindau Link*

## Cost Estimate for Signage Types

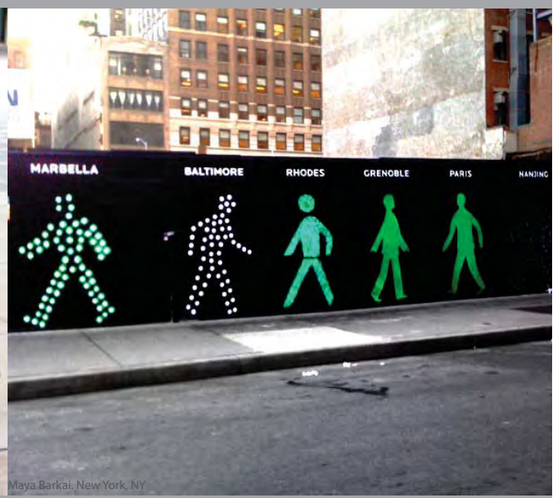
| Item | Base | Ref | Description | Unit Cost | Quantity | Site and Utility Work | Total Sign Cost | Sign Cost plus Site and Utility Work |
|---|---|---|---|---|---|---|---|---|
| 1 | base | A | District and Site Signature Sign; horiztonal monument | $75,000 | 0 | $20,000 | 0.00 | $95,000 |
| | 1.1 alt | A | District and Site Signature Sign; horiztonal monument–less detailed | $35,000 | 0 | $15,000 | 0.00 | $50,000 |
| 2 | base | B | Pedestrian Signature Sign–detailed | $18,000 | 0 | $3,500 | 0.00 | $21,500 |
| | 2.1 alt | B | Pedestrian Signature Sign–less detailed | $10,000 | 0 | $2,000 | 0.00 | $12,000 |
| 3 | base | C | Wall Applied Signature Sign–detailed | $25,000 | 0 | $5,500 | 0.00 | $30,500 |
| | 3.1 alt | C | Wall Applied Signature Sign–less detailed | $10,000 | 0 | $500 | 0.00 | $10,500 |
| 4 | base | D | District and Site Signature Sign; vertical monument | $85,000 | 2 | $25,000 | $170,000 | $195,000 |
| | 4.1 alt | D | District and Site Signature Sign; vertical monument–less detailed | $40,000 | 0 | $15,000 | 0.00 | $55,000 |
| 5 | base | A | Primary, four-sided Pedestrian Information Kiosk with static posted District information | $35,000 | 2 | $10,000 | $70,000 | $80,000 |
| | 5.1 alt | A | Primary, four-sided Pedestrian Information Kiosk with dynamic, (digital) posted District information | $85,000 | 0 | $17,500 | 0.00 | $102,500 |
| 6 | base | B | Secondary, double-sided Pedestrian Information Kiosk with static posted District information | $18,000 | 2 | $4,500 | $36,000 | $40,500 |
| | 6.1 alt | B | Secondary, single-sided Pedestrian Information Kiosk with dynamic, (digital) posted District information | $38,000 | 0 | $7,500 | 0.00 | $45,500 |
| 7 | base | C | Primary Pedestrian Directional Sign | $15,500 | 3 | $1,500 | $46,500 | $48,000 |
| 8 | base | D | Secondary, double-post Pedestrian Directional sign | $10,500 | 0 | $1,500 | 0.00 | $12,000 |
| 9 | base | E | Secondary, single-post Pedestrian Directional sign | $10,000 | 0 | $1,200 | 0.00 | $11,200 |
| 10 | base | | Primary Recognition Banner System; rigid stock panel graphics and hardware on existing poles | $2,750 | 8 | $500 | $22,000 | $22,500 |
| | 10.1 alt | | Primary Recognition Banner System; fabric stock panel graphics and hardware on existing poles | $1,000 | 0 | $500 | 0.00 | $1,500 |
| 11 | | | System Design and Scheduling | $50,000 | 1 | $5,000 | $50,000 | $55,000 |
| | | | | | | | | |
| 12 | | | **Signage Sub Total** | | | | | **$441,000** |

*Figure 10.10 Cost estimates for signage types*

Bloomington Central Station, MN


Everyday Poems for Your Sidewalk.
Saint Paul, MN

Jill Sebastian. Madison, WI.




Maya Barkai, New York, NY

# Public Art CHAPTER 11

# Public Art

## Introduction

The City of Bloomington embraced high aesthetic standards in the design of its Civic Plaza and government buildings and grounds. The Civic Plaza is also the home for the Bloomington Theater and Art Center, and six other arts organizations. Visitors experience a well-designed and welcoming building where they can also attend a theater performance, explore visual art in the galleries, or participate in studio art or dance classes.

Incorporating public art into civic planning and the development of Bloomington's South Loop area continues this tradition of valuing the arts and providing citizens access to artistic experiences.

The South Loop District Plan envisions the potential for public art to add excitement, energy, interest and identity to the evolving District.

The public art concepts and approaches in this section carry out the directives stated in the South Loop District Plan:

- Support the design of "complete streets" by fostering storefront and street-level activity, inviting exploration by pedestrians
- Provide streetscape amenities that enhance pedestrian experience and safety
- Create key visual landmarks for the areas identified as the plazas that are important District gateways along 24th Avenue and at 34th Avenue, Lindau Link, and American Boulevard
- Complete the place-making elements at gateways and public plazas at key intersections
- Create a visually prominent civic space around the intersection of 24th Avenue and Lindau Link

## Public Art Principles

The South Loop Streetscape Master Plan adopts an expansive definition of public art that reflects contemporary artistic practice and embraces public art ranging from events, activities and temporary work to artwork integrated into the ongoing construction of the streetscape.

Public art:

1. Contributes to establishing the character of and identity for the District.
2. Combines with effective sightlines, signage and landscaping at significant gateways, to identify and set the tone for the district through visual landmarks.
3. Contributes to distinguishing building facades and architecture in the District.
4. Integrates with streetscape amenities and provides function, identity, discovery and delight.
5. Punctuates streetscape galleries with visual centerpieces and wayfinding landmarks that define the space.
6. Functions as sculptural environments that are components of stormwater amenities, when feasible.

## Public Art Opportunities

The Master Plan's Principles are expressed in six public art conceptual categories that address the district's unique conditions (Figure 11.1):

### District Gateways

High visibility sculptural works, pedestrian bridges.

**Locations**

- 24th Avenue and American Boulevard East
- Killebrew Drive west of Old Shakopee Road
- 34th Avenue and American Boulevard East.

**Media/Materials**

Large-scale vertical sculptural markers or aerial sculptures with steel structure incorporating light, color, prismatic glass, and/or fabric.

**Purpose/Effect/Function**

Wayfinding/signage announces district for vehicles exiting I-494; visible day and night.

### Vehicular/Pedestrian Transition Passages

Architecturally-integrated art, wayfinding, gateway/markers.

**Locations**

- 24th Avenue and Lindau Lane
- Lindau Link and 28th Avenue
- American Boulevard East and 34th Avenue
- 28th Avenue and East Old Shakopee Road

**Media/Materials**

Architecture: ceramic wall murals, photographic window films, textile awnings. Wayfinding kiosks. Sculptural gateways or markers integrated with landscaping. Streetscape Ensemble of Integrated Elements also may be incorporated. Free-standing or aerial sculptural work for roundabout: metal, wood and/or stone.

**Purpose/Effect/Function**

Transition from vehicular to pedestrian-scaled environment. Art and architecture as visual landmarks. Landscaping and human-scale sculptural work (gateways, markers) shelter and welcome pedestrians. Landmark signifying gateways.

### Streetscape Ensemble of Integrated Elements

Wayfinding, streetscape furnishings, streetscape structures.

**Locations**

- Lindau Link
- Vehicular/Pedestrian Transition Passages in the district.

**Media/Materials**

Sculptural wayfinding signage or kiosks. Streetscape furnishings including sculptural seating (forged or painted metal, ceramic or tile mosaic, stone); bike racks (metal); planters (stone); tree guards and grates (mild steel and Core-ten steel); pavement carpets, insets and details (granite, terra-cotta tile, cast concrete); manhole covers (cast iron). Structures including fences/railings /grates (painted mild steel or Core-ten steel) or cast-in-place concrete retaining walls.

**Purpose/Effect/Function**

Primarily experienced by pedestrians or bicyclists. Wayfinding and landmarks for district identity. Fine-grained detail and texture. Functional and memorable street furnishings. Unique repeatable streetscape elements combined with items of standardized design. Whimsy and visual surprise.

### Gathering/Multi-Use Spaces

Galleries, pocket parks, courtyards, pedestrian alleys, amphitheaters, gardens.

**Locations**

- SE Corner Lindau Link and 28th Avenue
- Galleries on Lindau Link
- Hydrant Park
- Bloomington Central Station Park

**Media/Materials**

Large-scale free-standing sculpture (glass, metal, painted metal, bronze, stone) as landmark and centerpiece. Design of entire space including seating and landscaping (stone, cast concrete, glass and plants). Stormwater Amenities, if feasible.

**Purpose/Effect/Function**

Large sculpture or entire space with seating and landscape provides a landmark meeting and activity place.

### Temporary/Seasonal Events, Activities, Temporary Works

Construction fences, storefront and sidewalk displays, festivals.

**Locations**

- District-Wide

**Media/Materials**

Construction fence murals (printed vinyl or painted plywood, embellished chain link). Storefront and sidewalk displays. Festivals (music, chalk drawing, lighting, outdoor film).

**Purpose/Effect/Function**

Temporary programmatic uses that draw attention and people to the area as it develops. All seasons; especially winter events. Temporary exhibits highlight local subjects and artists. Establishes character of the district and may lead to permanent uses.

### Parks/Stormwater Amenities

Environmental art, street furniture of natural materials.

**Locations**

- District-Wide

**Media/Materials**

Environmental art including landscape and stormwater structures (berms, plantings, boardwalks, bridges). Interpretive signage, seating, or other structures constructed of natural materials.

**Purpose/Effect/Function**

Experiential and educational (model of environmental care). Relationship to nearby Minnesota Valley National Wildlife Refuge.

The conceptual categories are depicted on the following pages in a district-wide plan map (Figure 11.1), and a detail plan showing Lindau Lane (Figure 11.3). Examples of public art in each of the six conceptual categories are illustrated in a collection of images.

# Public Art

## Categories and Locations

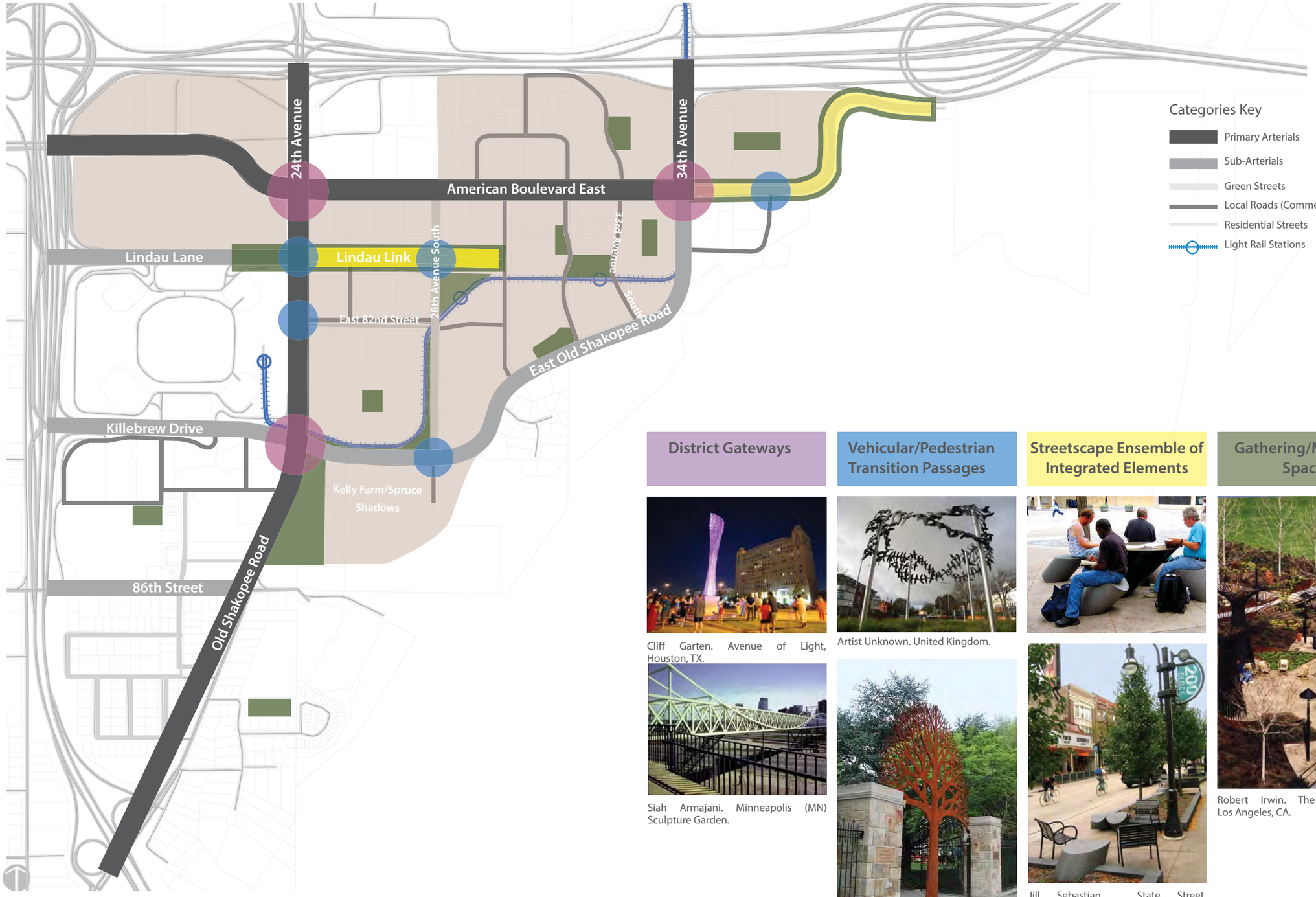



Figure 11.1 Public Art Opportunities - District Wide Diagram

### Categories Key

- Primary Arterials
- Sub-Arterials
- Green Streets
- Local Roads (Commercial)
- Residential Streets
- Light Rail Stations
- District Gateways
- Vehicular/Pedestrian Transition Passages
- Streetscape Ensemble of Integrated Elements
- Gathering/Multi-Use Spaces
- Events, Activities, Temporary Works

### District Gateways



Cliff Garten. Avenue of Light, Houston, TX.



Siah Armajani. Minneapolis (MN) Sculpture Garden.

### Vehicular/Pedestrian Transition Passages



Artist Unknown. United Kingdom.

Artist and location unknown.

### Streetscape Ensemble of Integrated Elements






Jill Sebastian. State Street, Madison, WI.

### Gathering/Multi-Use Spaces

Robert Irwin. The Getty Center, Los Angeles, CA.

### Events, Activities, Temporary Works

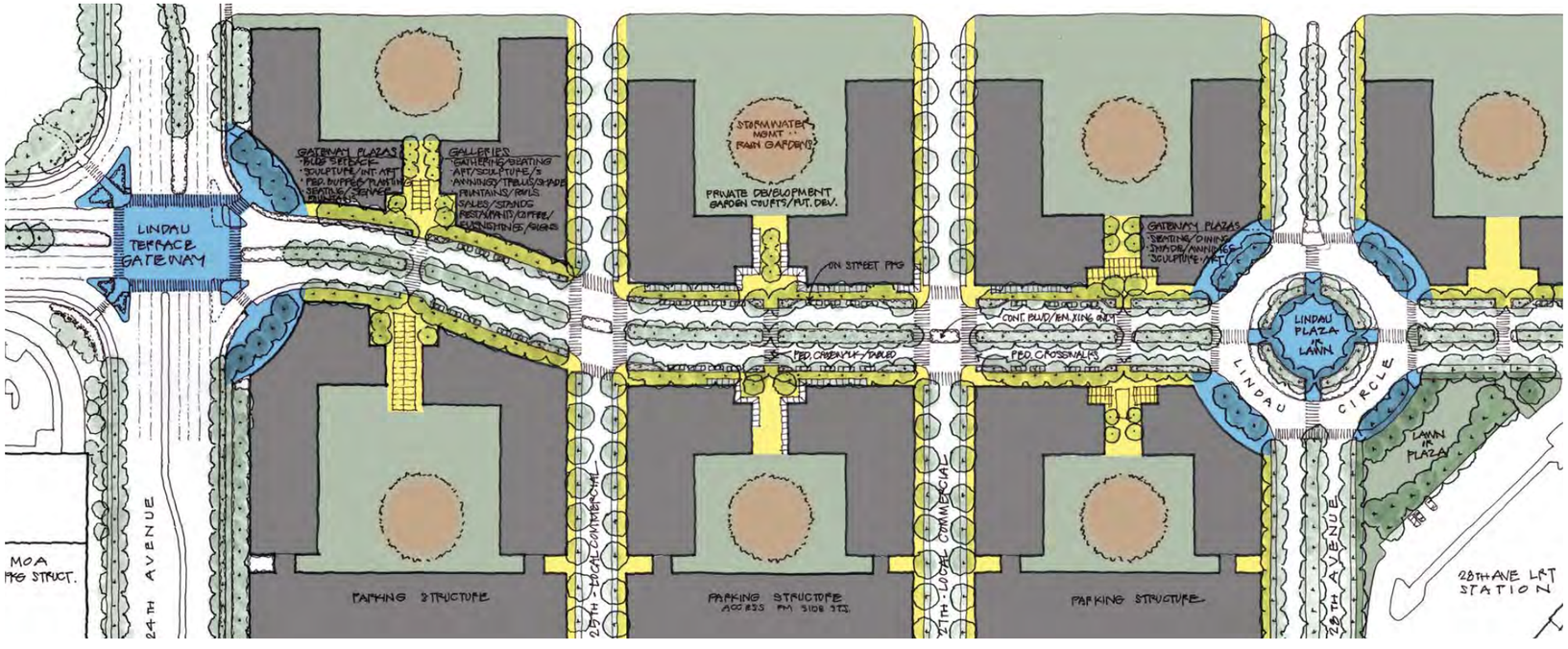
Maya Barkai. Construction fence mural. Re-construction, a public art program of the Downtown Alliance, New York, NY.

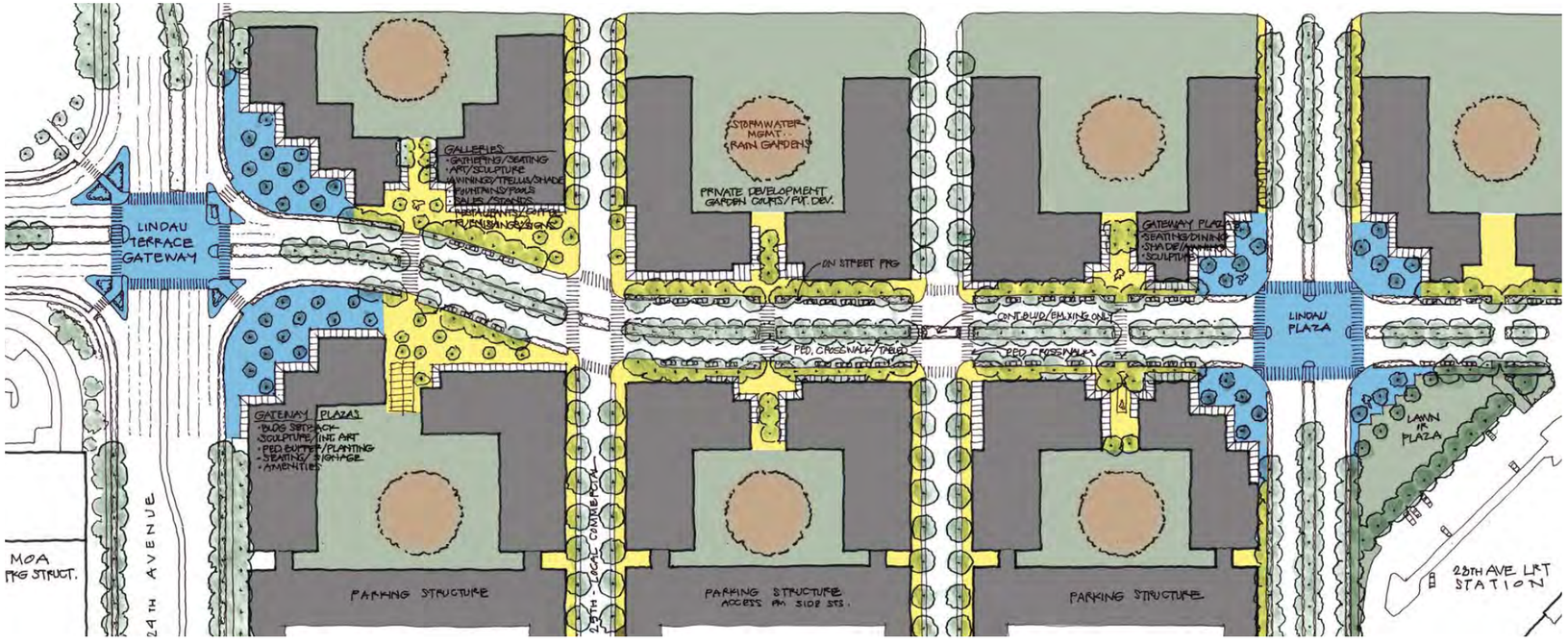
Dawn Wagner. Larimer Square Chalk Art Festival, Denver, CO.

Figure 11.2 District-wide categories. The photography of public art in this section shall not be reproduced without citing the artist, if identified.

# Public Art Opportunities

## Lindau Link Detail




Categories Key

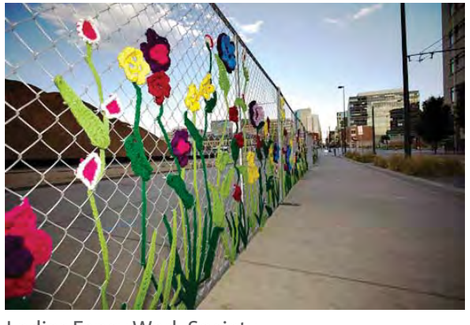
- Vehicular/Pedestrian Transition Passages
- Streetscape Ensemble of Integrated Elements
- Gathering/Multi-Use Spaces
- Stormwater Amenities

*Figure 11.3 Lindau Link detail illustrated optional plans*

## Construction Fence Art


Artist Unknown. Construction fence on State Street, Madison, WI.


Maya Barkai. Construction fence mural. New York, NY.



Ladies Fancy Work Society. Crocheted fence. Denver, CO.

## Outdoor Exhibitions and Events

Wing Young Huie. University Avenue project 2010, Saint Paul, MN.

Wing Young Huie. University Avenue storefronts.

Terry Evans. Millennium Park exhibition. Chicago, IL.


Michael Murname and Andrew Saboe. Northern Spark 2011. Saint Paul, MN.

Christo and Jean Claude. The Gates in Central Park, New York, NY.

Dawn Wagner. Larimer Square Chalk Art Festival, Denver, CO.

Jim Campbell. Northern Spark 2011. Saint Paul, MN.

*Figure 11.4 Events/Activities/Temporary Works Examples*

# Public Art Examples

## District Gateways

### Vertical Sculptural Markers

Cliff Garten. Houston, TX.

Cliff Garten. Phoenix, AZ.

Ray King. Philadelphia, PA.

### Pedestrian-Scaled Gateways

Artist and location unknown.

### Pedestrian Bridges

Al Price. Phoenix, AZ.

Laurie Lundquist Nisbet. Phoenix, AZ.

Barbara Grygutis. Chandler, AZ.

Siah Armajani. Minneapolis, MN.

*Figure 11.5 District Gateways Examples*

## Storefront Enhancements

Nicollet Mall, Minneapolis.

Javier Tavera. Minneapolis, MN.

Anne-Marie Karlsen. Chicago, IL.

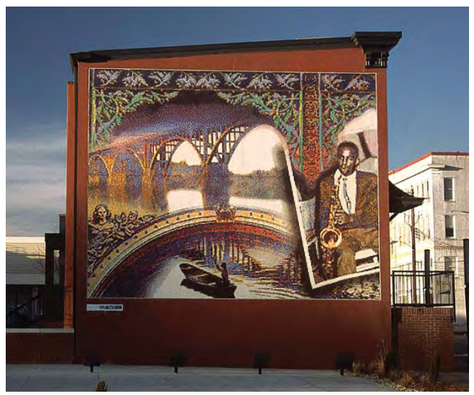
## Wayfinding/Signage/Information

Kurt Kiefer. Portland, OR.

Artist and location unknown.

## Murals Integrated with Architecture

Robert Healey, East Los Streetscapers. Los Angeles, CA.



Mike Mandel. Richmond, VA.

## Roundabouts/Traffic Circles

Steve Jensen. Olympia, WA.

Artist Unknown. United Kingdom.

*Figure 11.6 Vehicular/Pedestrian Transition Spaces Examples*

# Public Art Examples

## Streetscape Ensemble of Integrated Amenities

### Sculptural Wayfinding


Kurt Kiefer. Seattle, WA.

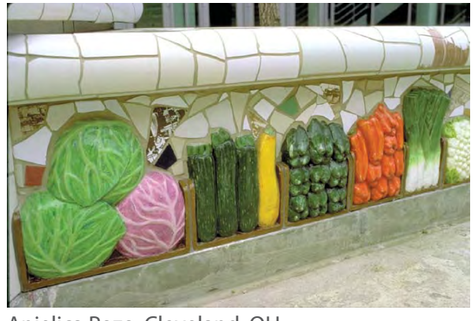
### Sculptural Seating Small Gathering Spaces


Jill Sebastian. Madison, WI.

### Benches

Mary Laredo Herbeck.
Detroit, MI.


Lois Teicher. Detroit, MI.



Anjelica Pozo. Cleveland, OH.

### Bike Racks

Isaac Duncan. Louisville, KY

Pittsburgh (PA) Bike Rack.

### Planters and Tree Guards/Grates


Brad Goldberg. Nicollet Mall, Minneapolis, MN.

Lisa Elias. Minneapolis, MN.

*Figure 11.7 Streetscape Ensemble of Integrated Amenities Examples*

## Fences/Railings/Gates

Lisa Elias. Minneapolis, MN.

Eric Powell. Berkeley, CA..

## Manhole Covers


Nancy Blum. Seattle, WA.

## Cast-in-Place Concrete Retaining Walls

Carolyn Braaksma. Denver, CO.

Seitu Jones. Saint Paul, MN.

Michael Mercil. Saint Paul,MN.

## Pavement Carpets, Insets and Details


Cliff Garten. Saint Paul, MN.

Andrew Leicester. Saint Paul, MN.

*Everyday Poems for City Sidewalk*.
Saint Paul, MN

Mike Mandel. Cambridge, MA.

Brad Goldberg. Nicollet
Mall, Minneapolis, MN.

*Figure 11.8 Streetscape Ensemble of Integrated Amenities Examples*

# Public Art Examples

## Gathering/Multi-Use Spaces

### Sculptural Centerpieces

Howard Ben Tre. Nicollet Mall, Minneapolis, MN.

Rob Neilson. Los Angeles, CA.

Myklebust and Sears. Minneapolis, MN.

### Garden Gathering Places

Robert Irwin. Los Angeles, CA.

### Amphitheaters

Athena Tacha. Louisville, KY.

Jody Pinto. Phoenix, AZ.

### Game Tables

Ned Smyth. Checkers table. New York, NY.

Chess players on Michigan Avenue near Millennium Park, Chicago, IL.

*Figure 11.9 Gathering/Multi-Use Spaces Examples*

## Sculptural Stormwater Management Environment

Herbert Bayer. Kent, WA.

Herbert Bayer. Kent, WA.

## Seating of Natural Materials

Kinji Akagawa. Cambridge, MN.

Kinji Akagawa. Minneapolis (MN) Sculpture Garden.

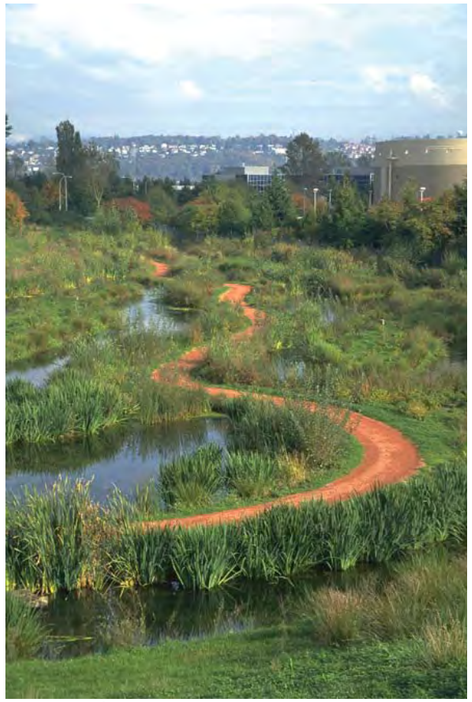
Paul Sires. Raleigh, NC.

## Sculpture in Stormwater Management Garden

Olympic Sculpture Park. Seattle, WA.

## Stormwater Management with Sculptural Places

Lorna Jordan. Kent, WA.



Lorna Jordan. Kent, WA.

*Figure 11.10 Stormwater Amenities Examples*

# Public Art Process

## Implementation

The City of Bloomington does not have an extensive history of commissioning public art and therefore has the opportunity to devise innovative policies and procedures that meet the needs of the City, and that are informed by contemporary best practices for public art process. Bloomington's successful Civic Plaza placemaking partnership with Bloomington Theater and Art Center is an excellent local example of the way public art and artists can be leaders in placemaking.

In the 1970-1980s, many cities and states adopted formula-based allocations for public art. This "percent for art" model sets base-line funding for each project, but does not take into account the relative importance and scale of the project. Appropriate media and materials, expense, the expectation for community involvement and participation are not considered in the creation of the artwork. All of this may add time and expense to a project.

Experience has shown that the budget for public art should be determined by considering the specific needs, desires and potential of each project. The City of Bloomington has the opportunity to establish a flexible funding model that utilizes city funds to leverage private and foundation funds, in addition to other sources.

Other U.S. cities have public art programs, and the State of Minnesota has a "percent for art" law that is administered primarily through the Minnesota State Arts Board. These programs are valuable resources for procedures and information. They include how to determine a scope of work for public art projects, produce open or invitational calls for artists, conduct artist selection meetings, develop contracts with artists for design proposals, commission artwork, and purchase existing work.

The City of Bloomington has partnering organizations including the Bloomington Theater and Art Center to assist in the effort to plan for and commission public art. The City is currently working with the Bloomington Center for the Arts on a National Endowment for the Arts grant to study how art can be integrated into public spaces in the South Loop District. A knowledgeable and experienced public art administrator or project manager will likely be needed to develop and carry out public art projects on an ongoing basis.

Administering public art projects requires specialized expertise. Works of public art are original and unique products, and the services and the products provided by public artists do not work the same way as typical city purchases. Contracts for public artists' design services, and authorizing them to produce artwork for the City, differ from other types of contracts that the City may use to procure services or goods. Artist agreements must address federal copyright law and the provisions of the Visual Artist Rights Act of 1990. Public art administrators can advise the City on responding to the unique requirements for creative placemaking.

To implement the placemaking elements described in this chapter, a detailed plan that identifies locations, priorities, and funding would help the result be cohesive and coordinated. The matrix of process details on the following pages set forth basic information on media/materials and their estimated cost/price range; timeline for integration of public art into the development of the South Loop district, how to identify artists, and how to lead coordinating department and potential partnering organizations.

| | Media/Materials | Estimated Cost/Price Range | Timeline for Integration | How to Identify Artists | Lead Coordinating Department and Partnering Organizations |
|---|---|---|---|---|---|
| **District Gateways** | | | | | |
| 24th Avenue & American Boulevard<br>East Killebrew Drive & Old Shakopee Road | Large-scale vertical sculptural markers or aerial sculptures with steel structure incorporating light, color, prismatic glass, and/or fabric. | $100,000 - $300,000 | Future 24th Avenue reconstruction includes site development (electricals and footings, etc.) to support artwork. | Request for Qualifications (RFQ) national open call for artists. | Public Works - Engineering with Bloomington Theater and Art Center (BTAC) and City Cultural Arts staff. |
| 34th Avenue & American Boulevard East | Signature pedestrian bridge constructed of concrete, steel, glass, and/or chain-link mesh. Wayfinding signage incorporated, where feasible. | $1.2 - $2 million | Future feasibility study for pedestrian bridge. Pending outcome, bridge may be included in reconstruction of 34th Avenue intersection. | Request for Qualifications (RFQ) national open call for engineering team with artist as co-lead. | Public Works - Engineering with BTAC and Cultural Arts staff. |
| **Vehicular/Pedestrian Transition Passages** | | | | | |
| 24th Avenue & Lindau Lane/Link<br>American Boulevard East (East of 34th Ave)<br>28th Avenue & East Old Shakopee Road<br>24th Ave and 82nd St | Architecture: ceramic wall murals, photographic window films, textile awnings. Wayfinding kiosks. Sculptural gateways or markers integrated with landscaping. Streetscape Ensemble of Integrated Elements also may be incorporated. | $ 3,500 - $50,000 | Future requirements added to district code for architecture, and for design guidelines for storefronts. Coordinated with site development. | National invitational call (short list) of artists for ceramic wall murals. RFQ local open call for artists for window films, construction fences, and textile awnings. RFQ national open call for sculptural gateways or markers. | Community Development - Planning, Public Works - Engineering, BTAC and Cultural Arts staff advisors and developers/business community. |
| Lindau Link & 28th Avenue | Free-standing or aerial sculptural work or fountain for roundabout: metal, wood and/or stone. Architecture: ceramic wall murals, photographic window films, textile awnings. Wayfinding kiosks. Sculptural gateways or markers integrated with landscaping. | $80,000 - $200,000 | Streetscape construction 2013 includes site design, electricals and footings, as necessary, to support later installation of artwork. | RFQ regional open call for artists. | Public Works - Engineering with BTAC and Cultural Arts staff. |
| **Streetscape Ensemble of Integrated Elements** | | | | | |
| Lindau Link and the other Vehicular/Pedestrian Transition Passages in the district | Sculptural wayfinding signage or kiosks. Streetscape furnishings including sculptural seating (forged or painted metal, ceramic or tile mosaic, stone); bike racks (metal); planters (stone); tree guards and grates (mild steel and Core-ten steel); pavement carpets, insets and details (granite, terracotta tile, cast concrete); manhole covers (cast iron). Structures including fences/railings /grates (painted mild steel or Core-ten steel) or cast-in-place concrete retaining walls. | Signage/kiosks: $10,000. Streetscape furnishings: unit cost $200 - $10,000 plus $1,000 - $4,000 design fees. Structures: linear foot $250-500 plus $2,000 - $5,000 design fees. | Lindau Link Streetscape construction 2014 includes site design, electricals and footings, as necessary, to support later installation of artwork. | RFP for wayfinding design team with artist member to collaborate on signage/kiosk. Competition/ contest conducted through RFPs seek designs by regional artists for bike racks, pavement insets, and/or benches that become icons for the district. Alternative: City Artist in Residence as an in-house collaborator with design teams on an ongoing basis. | Public Works - Engineering with BTAC and Cultural Arts staff. |
| **Gathering/Multi-Use Spaces** | | | | | |
| SE Corner Lindau Link & 28th Avenue<br>Hydrant Park | Large-scale free-standing sculpture (glass, metal, painted metal, bronze, stone) as landmark and centerpiece. Design of entire space including seating and landscaping (stone, cast concrete, glass and plants). Stormwater Amenities where feasible. | Freestanding sculpture: $50,000 -$100,000. Artist design fee for entire space: 10-15% of total site construction budget. | Streetscape construction 2013 includes site design, electricals and footings, as necessary, to support later installation of artwork. | RFQ for regional open call for artists for free-standing sculpture. RFQ for national open call for artists to design entire space. | Community Development - Planning, Public Works - Engineering and/or Parks Department and developers/ business community with BTAC and Cultural Arts staff. |
| **Events, Activities, Temporary Works** | | | | | |
| District-Wide | Construction fence murals (printed vinyl or painted plywood, embellished chain link). Storefront and sidewalk displays. Festivals (music, chalk drawng, lighting, outdoor film). | Murals: $3,000 - $10,000. Temporary exhibit structural system: $ ??? | City "temporary construction signs" code may need amendment to accomplish construction fence murals. As opportunities arise; interim use of vacant parcels as area develops. | RFQ local open call for artists to create construction fencing murals. RFP seeking independent producers to develop/coordinate/ produce events and festivals. | Community Development - Planning or Public Works - Engineering for construction fence murals. For others, Parks and Recreation and City Cultural Arts staff teams with independent producers including arts or cultural organizations, libraries, historical societies, performers, individual artists, etc. |
| **Stormwater Amenities** | | | | | |
| District-Wide | Environmental art including stormwater structures (berms, plantings, boardwalks, bridges). Interpretive signage. Seating constructed of natural materials. | Artist design fee: 10-15% of total site construction budget. | Streetscape construction 2013 including stormwater systems and ongoing future development. | RFP for national call for stormwater engineering design team with artist member. | Public Works - Engineering, with Lower Minnesota River Watershed District. Minnesota Valley Natonal Wildlife Refuge staff. |

*Table 11.1 Process Details*

# Public Art Maintenance and Care

## Maintaining Public Art

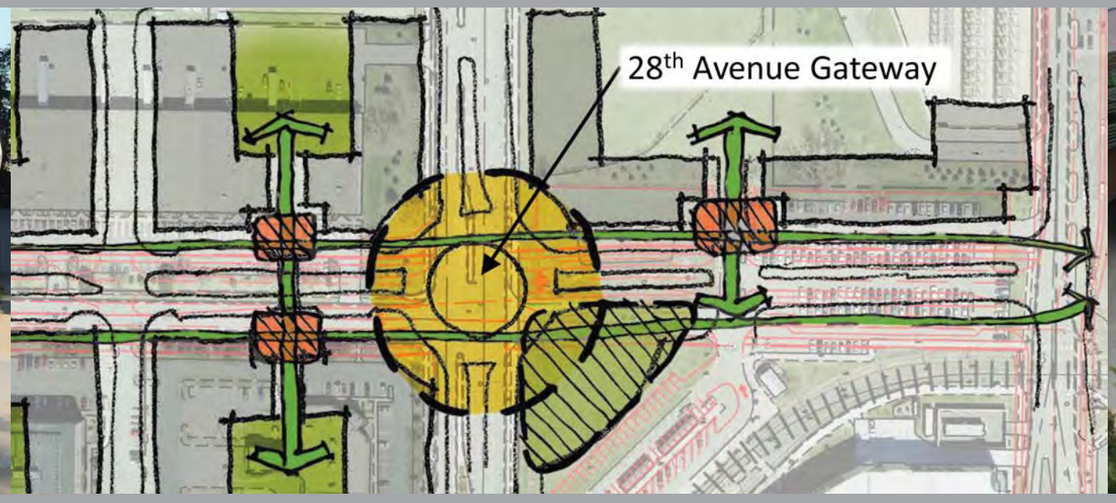
Public art requires both routine maintenance and periodic, special care known as "conservation" depending upon the media/materials. Conservation by the public artist who created the work, or by a trained professional with credentials as a conservator, may also be necessary if the work has been damaged or vandalized.

Public art may employ standard architectural or streetscape construction materials such as concrete, glass, steel, wood and stone. Artwork using these materials may be maintained similarly to architectural or streetscape materials. But artists may also create work in bronze, painted steel, ceramics or other specialty materials and often combinations of several materials.

Funds for maintenance and care of public art should be set aside whenever a new work is commissioned. However, it is often impossible to determine an appropriate budget for maintenance and care until the specific design for the public artwork is known.

Best practices for commissioning public art dictate that when artists present design proposals, details are submitted about materials and construction techniques, and a draft operations and maintenance plan for the proposed artwork is prepared. Contract deliverables for the design phase also commonly require that an experienced art conservator prepare an analysis of the artwork's materials and construction techniques, and comment on the artist's maintenance plan and schedule. Using this information, a maintenance budget range can then be established, and the City is able to determine at the design stage whether it has the funding and capacity to maintain the artwork.

After the public art is installed, artists must file complete documentation including a written technical description to enable an inspection of the work and the preparation of an initial baseline conservation report documenting its condition. Warranty clauses in contracts with artists specify that the artist must maintain the work and assure that it is free from defects for a period of usually up to three years.




# Plazas and Public Spaces CHAPTER 12

# Plazas and Public Spaces

## Introduction

Plazas and public gathering spaces are the real heart of the South Loop District. As noted by Project for Public Spaces, "Great public spaces are where celebrations are held, social and economic exchanges take place, friends run into each other, and cultures mix. They are the front porches of our public institutions and our social life - restaurants, retail, coffee shops, convenience services – where we interact with each other. When the spaces work well, they serve as a stage for our public lives."

As the South Loop District grows and matures, these plazas and public spaces and the pedestrian friendly connections between them will be major contributors to the success of the District. The vision painted by the South Loop District Plan speaks to this connectivity in a broader sense, but clearly suggests that this concept of unparalleled connectivity translates from the broad scale to a continually finer grain of gateways, public plazas, courtyards, and niches that create a pedestrian friendly place.

## Purpose and Intent

This streetscape plan identifies locations for public plazas and open space within the district and defines the characteristics of these spaces.

This plan builds on the broad intent of the District Plan to concentrate mixed use development along the Lindau Link, and to transform the South Loop area from typical suburban development to an urban character and density. This concentration would desirably be composed of restaurants and retail shops that can create street level activity, linking the Mall of America (MOA) and Bloomington Central Station (BCS). This concentration of street level activity leads to opportunities for development of gateways, plazas, galleries, courtyards and other forms of public gathering spaces.

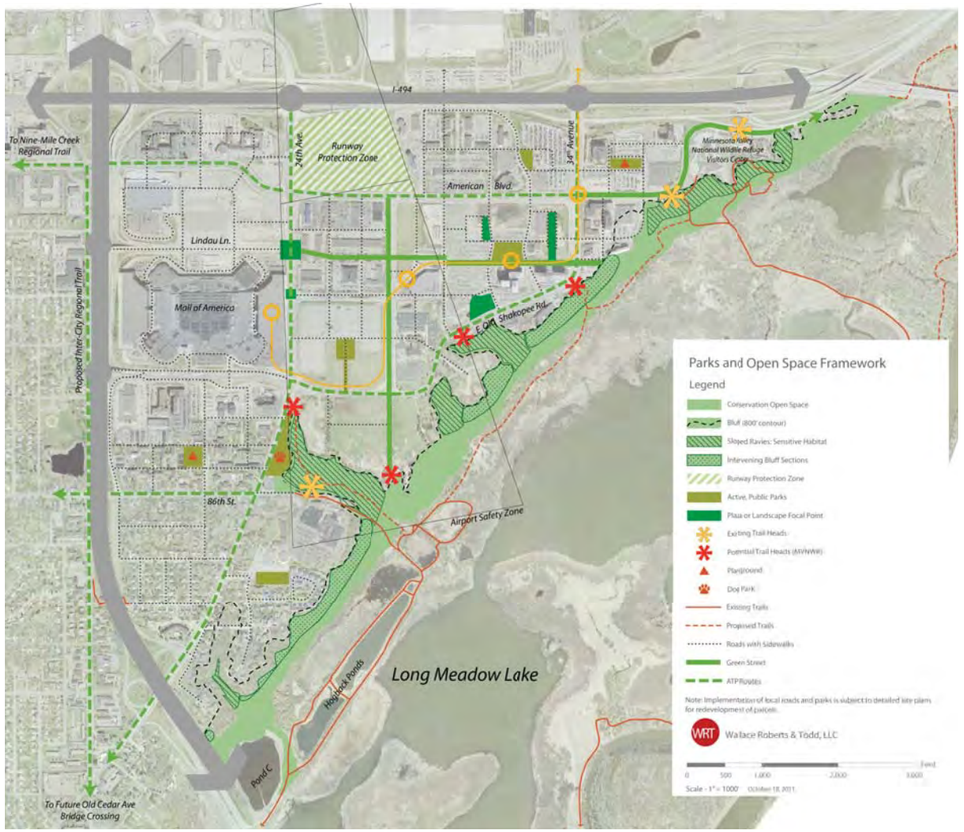



*Figure 12.2 South Loop District Plan parks and open space framework map*

### Plaza and Public Open Spaces

The South Loop District's framework plan for public space within the District identifies a number of strategies:

- Establish a network of interconnected parks, open spaces, and trails
- Interconnected network of multi-modal streets and green infrastructure
- Mixed use within a fine grained network of pedestrian-friendly, walkable streets
- Active storefronts and pedestrian amenities
- Public plazas at 24th Ave and Lindau Link
- Galleries along Lindau Link
- Create gateway features and public plazas: include place-making elements, wayfinding signs, public art, street furniture, lighting and landscaping

*Figure 12.1 Successful public spaces should be engaging, active, and interactive. Project for Public Spaces.*

## Identification of Plazas and Public Spaces

This streetscape plan identifies a variety of plazas and public spaces that create a bridge from broader to finer grained spaces and linkages. Because of its position in the hierarchy of street and public space function, the primary concentration of these spaces is within or connecting to Lindau Lane/Lindau Link.

**District Gateways:** 24th Avenue and American Boulevard; 24th Avenue and Killebrew Drive; and 34th Avenue and American Boulevard

**24th Avenue Corridor:** 24th Avenue is a visually distinctive gateway and transit corridor with the opportunity for a major plaza and gateway to the Lindau Link

**Public Plazas:** MOA and Lindau Lane; 24th Avenue and Lindau Lane; 28th Avenue and Lindau Lane; Bloomington Central Station Park (existing); and MOA Transit Station

**Courtyards/Galleries:** Located at mid block along Lindau Lane between 24th Avenue and 30th Avenue

**Civic Spaces:** 28th Avenue and Lindau Link, and 28th Avenue Transit Station Park/Plaza

**Public/Private Courtyards:** As the South Loop District Plan suggests, open spaces/courtyards may be created off Lindau Link and throughout the District to provide great opportunities for public/private partnership developing mutually usable spaces.

## Land Use and Architecture Supporting Public Spaces

The South Loop District Plan identifies land use and a framework of building configuration, massing and scale which will serve to define Lindau Link as an urban environment. Three to four story buildings located at the right-of-way or easement line and near to the street will help create enclosure and comfortable human scale to the wide right-of-way and street's linear public spaces and pedestrian thoroughfares.

This streetscape plan further defines opportunities for creating additional, finer grained spaces. Recommendations include configuring private buildings with intersection corner and mid-block façades which define and provide for transitional spaces, such as courtyards and galleries, between private space entries and public open space at key nodes.

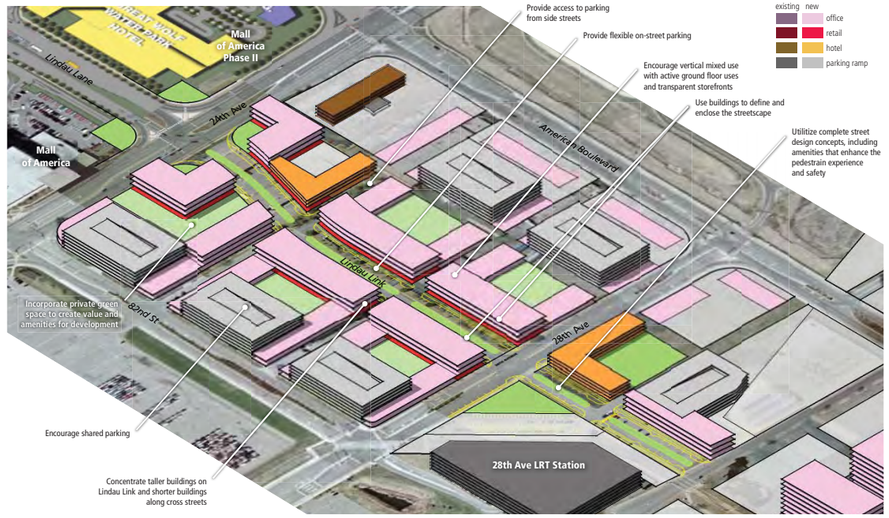



*Figure 12.3 Lindau Link 2050; land use and framework plan from South Loop District Plan*

### Identification of Plazas and Public Spaces


*Figure 12.4 South Loop map showing plazas, gateways, galleries, transit stations and courtyards*

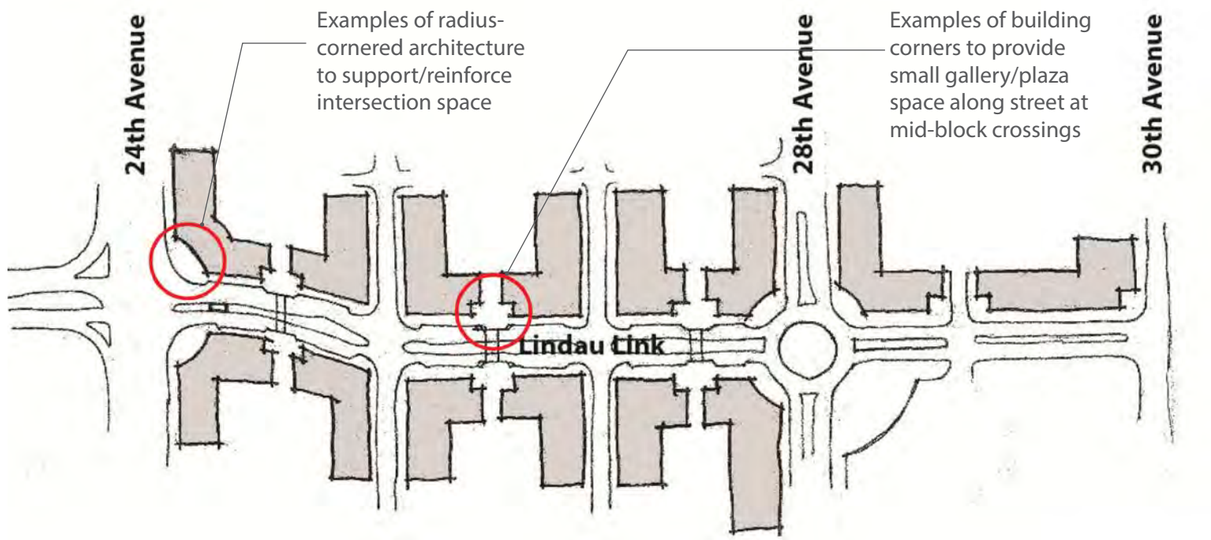



*Figure 12.5 Building configurations and massing can serve to support public space*

# Plaza Concepts

## Lindau Link Area Plaza and Open Space

### Concept

The integration of existing and future plaza and open spaces for Lindau Link can help create the strong pedestrian and public space corridor identified as an objective within the South Loop District Plan. There are a variety of public space opportunities for this central core of the South Loop District, ranging from vehicular scaled gateways to smaller, intimate courtyards or galleries as shown in Figure 12.6.

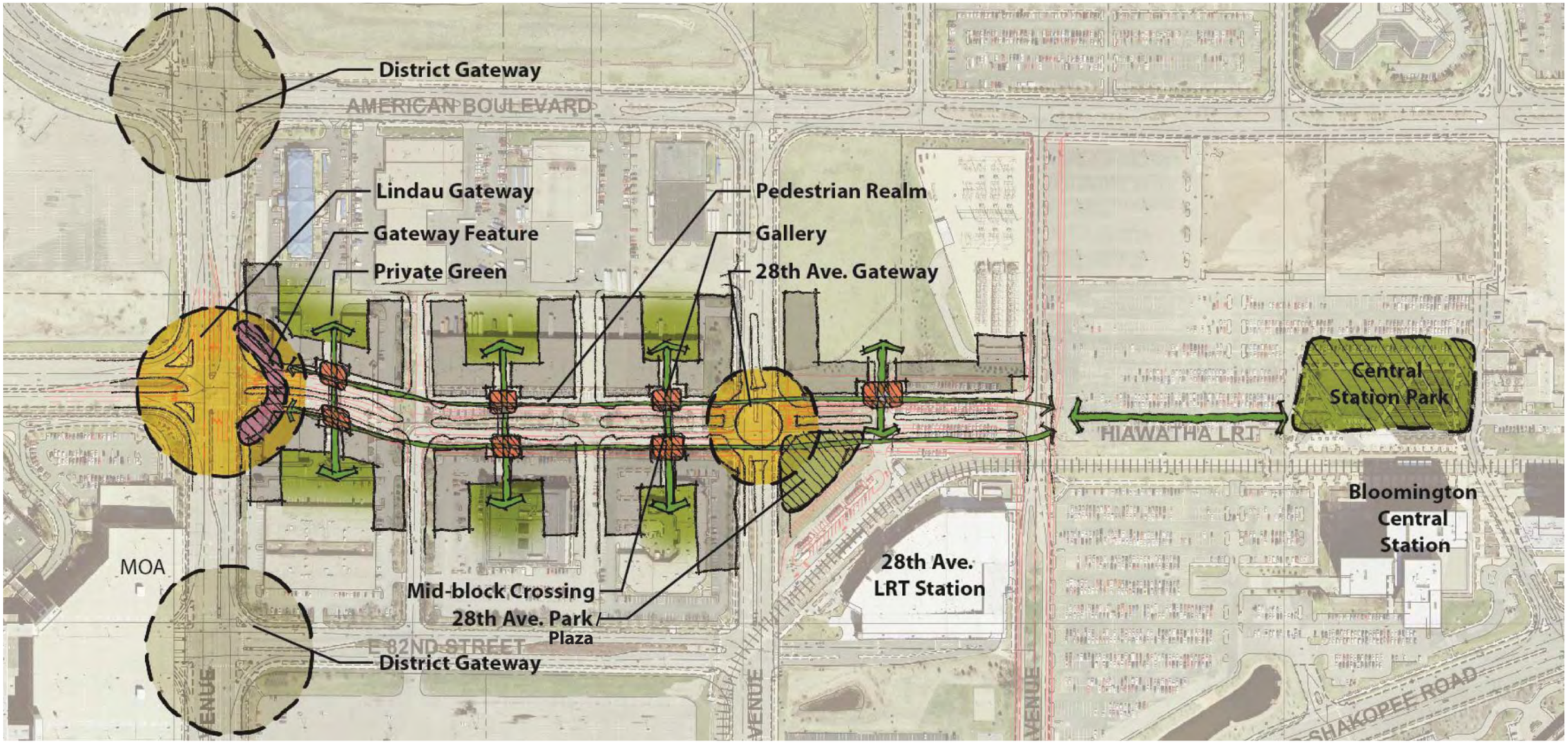



*Figure 12.6 Plaza and public space diagram of the Lindau Link area*

### District Gateways

Gateways at American Boulevard announce the primary entries into the South Loop District. Additional gateways along the 24th Avenue corridor at Lindau Link, 82nd Street and Killebrew Drive are secondary gateways to distinct areas within the South Loop District. These gateways are primarily vehicular oriented and provide:

- Large/vertical features which may include banners, monuments, public art, and landscaping
- District entry signage
- Enhanced pedestrian crosswalks

## District Gateway Locations

- 24th Avenue at American Boulevard
- 24th Avenue at Killebrew Drive
- 34th Avenue at American Boulevard

## Lindau Link Gateway Locations

- 24th Avenue at Lindau Link/Lane
- 28th Avenue at Lindau Link

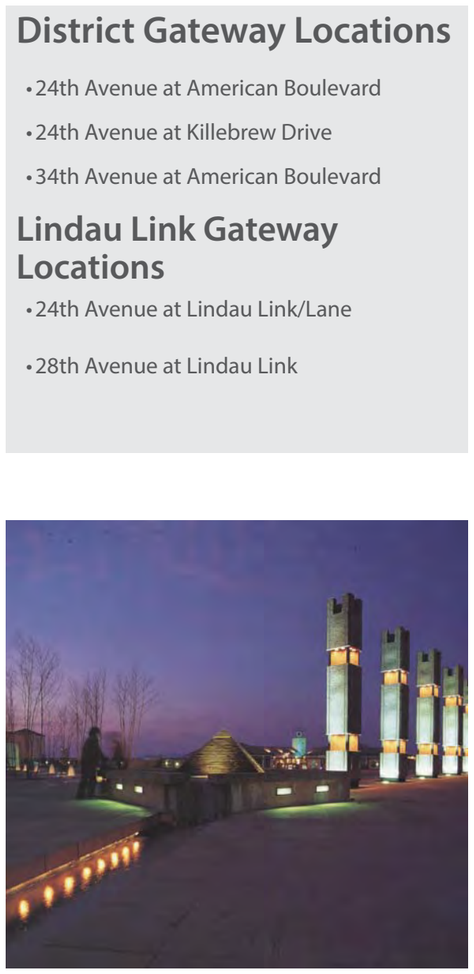


*Figure 12.7 Fukuoka Lanterns*

*Figure 12.8 Cliff Garten sculpture, North Hollywood streetscape*

*Figure 12.9 Cox Singapore Plaza*

*Figure 12.10 Nicollet Commons*

### Overview

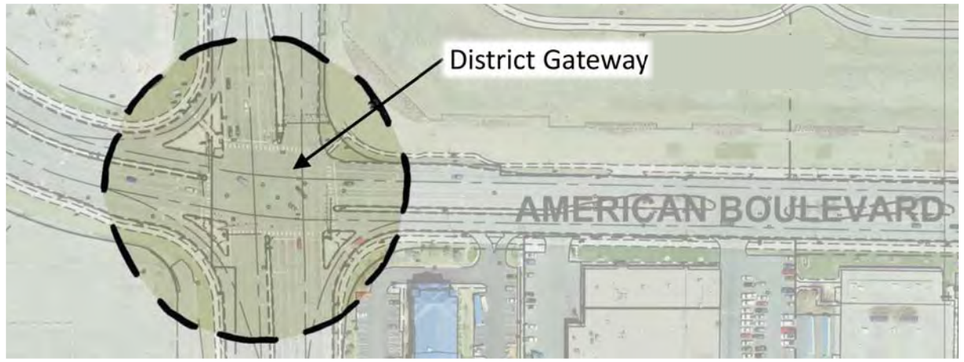



*Figure 12.11 District gateway (24th Avenue at American Boulevard)*

### Orthogonal Plaza Configuration

A secondary gateway to the district is located at 24th Avenue and Lindau Lane/Lindau Link. While secondary as defined by vehicular access and introduction, this intersection serves as a primary pedestrian gateway and potential plaza and open space, as identified in the South Loop District Plan. Building configuration and layout can provide variable enclosure for these public spaces. This orthogonal layout or 90 degree stepping concept, establishes an open, inviting arrangement at the intersection. It allows for corner plazas, open sight lines and a welcoming entrance to this primary gateway to Lindau Link.

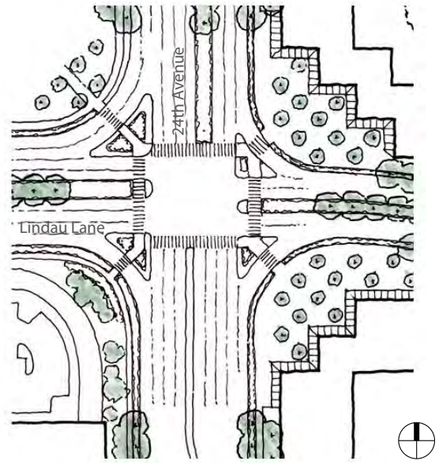



*Figure 12.12 Lindau Link Gateway: Orthogonal plaza concept*

### Concentric Plaza Configuration

This configuration option serves to 'capture' or enclose the intersection at 24th Avenue and Lindau Lane/Lindau Link in contrast to the open layout created in the orthogonal concept. Building configuration and layout at the corners is concentric, where the building faces create a strong, circular edge. This configuration would enclose the space, reducing the degree of openness at the corner. As new buildings are not currently planned for the west side of 24th Avenue, this form can be reinforced with concentrically arranged landscape elements, lighting, and public art.

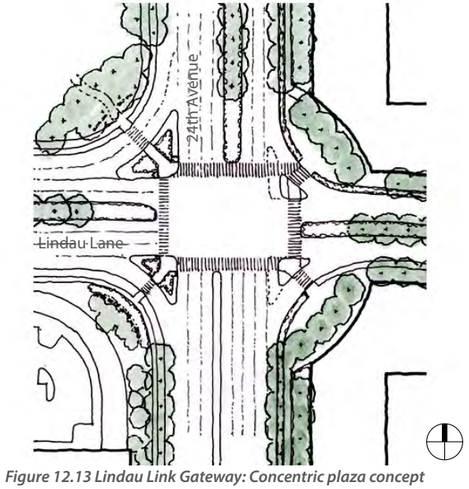



*Figure 12.13 Lindau Link Gateway: Concentric plaza concept*

# Plaza Concepts

## Public Plazas

Primary public plazas are at 28th Avenue at Lindau Link and existing at Bloomington Central Station (BCS). Secondary public plazas are located at 24th Avenue and Lindau Link and also on the upper level of the north MOA entry above Lindau Lane.

Public plazas: should be accessible, active, sociable and comfortable places, where people meet and take others when they come to visit. (PPS)

## Lindau Gateway/Plaza

This plaza, at 24th Avenue, has a dual role of gateway and plaza. It should announce arrival at the entrance to Lindau Link and provide an inviting gathering space for pedestrians. The gateway should visually/physically connect across the 24th Avenue intersection. The plazas define the intersection and are enclosed by adjacent buildings. The plazas provide an identifiable and comfortable space for people to gather, with elements that include:

- Vertical features announce gateway with banners, monuments, public art, wayfinding
- Enhanced pedestrian crosswalks and roadway/pedestrian lighting
- Architectural massing and façade fenestration helps reinforce space/create portal
- Facades should be transparent and inviting
- Spaces encourage gathering and welcome pedestrians into a comfortable space

## Lindau Gateway/Plaza at 28th Avenue

This plaza also serves a dual gateway and plaza role. It's location within the District allows for a more comprehensive design configuration. Design of this space will allow use of both roadway and pedestrian areas to provide for large events.

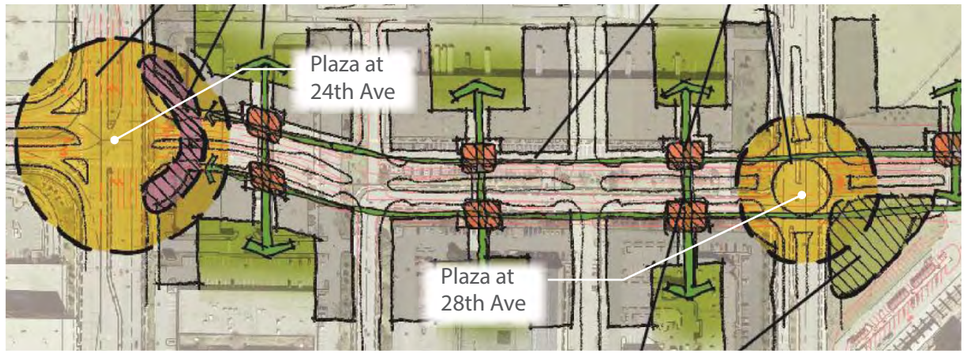



*Figure 12.18 Public plazas at Lindau Link*

## Public Plaza Elements

- Pedestrian Facilities
- Sculpture / Public Art
- Pedestrian Buffer
- Planting
- Seating
- Signage / Wayfinding/Site Identification
- Fountain
- Public Amenities / Furnishings

*Figure 12.14 Peace plaza, Rochester*

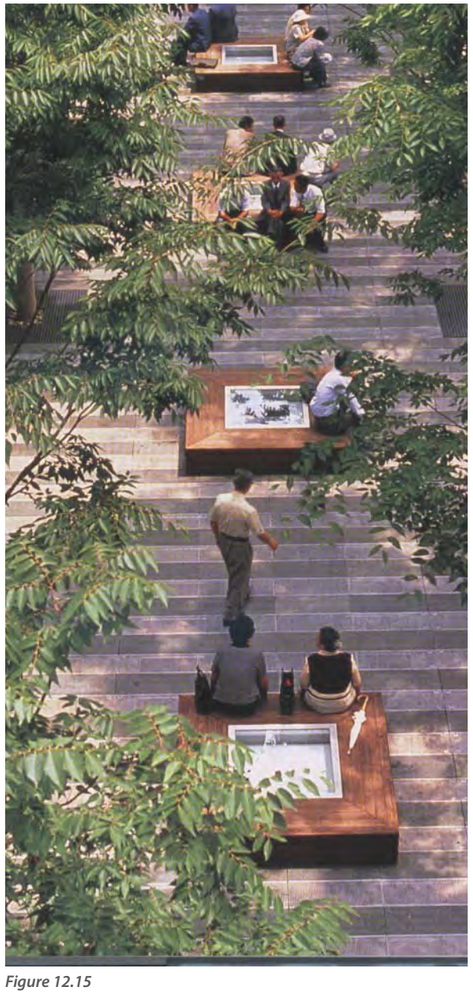


*Figure 12.15*

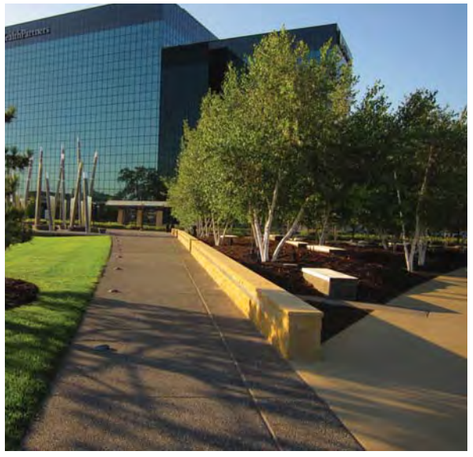


*Figure 12.16 Bloomington Central Station*

*Figure 12.17 Bloomington Central Station*

## Public Plaza at 24th Avenue

The size and configuration of this plaza will be influenced by the adjacent commercial building massing. This plan illustrates the orthogonal configuration option, which creates a more open and inviting entrance to Lindau Link. Providing plaza elements such as special lighting, landscaping, street furniture, public art, and wayfinding signage will provide for interactions, connecting, and people-watching opportunities.

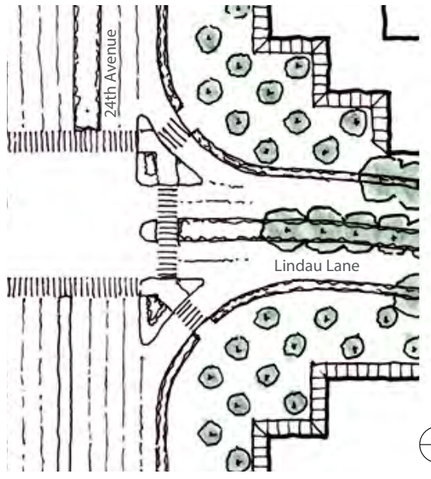



*Figure 12.19 24th Avenue and Lindau Link Plaza*

## Public Plaza at 28th Avenue

This plaza allows both the pedestrian and vehicular areas to be combined to create a community gathering space for larger events. The roundabout configuration currently being considered for the intersection of 28th Avenue and Lindau Link helps establish a physical and visual center as a public gathering place for activities that could occur during temporary road closure. This space has increased potential as it is directly adjacent to the 28th Avenue LRT station park/open space.

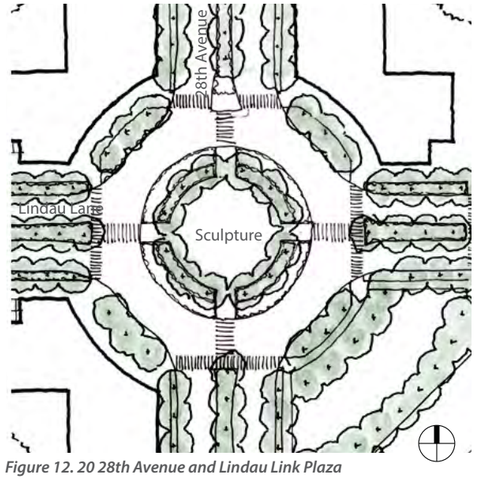



*Figure 12. 20 28th Avenue and Lindau Link Plaza*

## Courtyards/Galleries

**Lindau Link between 24th Avenue and 30th Avenue**

Breaks in the architectural massing and bump-outs along Lindau Link create opportunities for gathering spaces, courtyards, galleries along the street and building edge. These galleries should:

- Create linkages between the buildings to parking areas and private courtyard behind the building
- Add frontage/exposure to businesses for display space, seating etc.
- Provide additional gathering/activity spaces breaking up the linear sidewalk areas near midblock.
- Create visual and physical connections across Lindau Link
- Include enhanced pedestrian facilities, special pavement, seating areas, other furnishings, plant materials, lighting, etc
- Allow for potential mid-block crossing for pedestrians, for refuge, safety and enhanced street medians



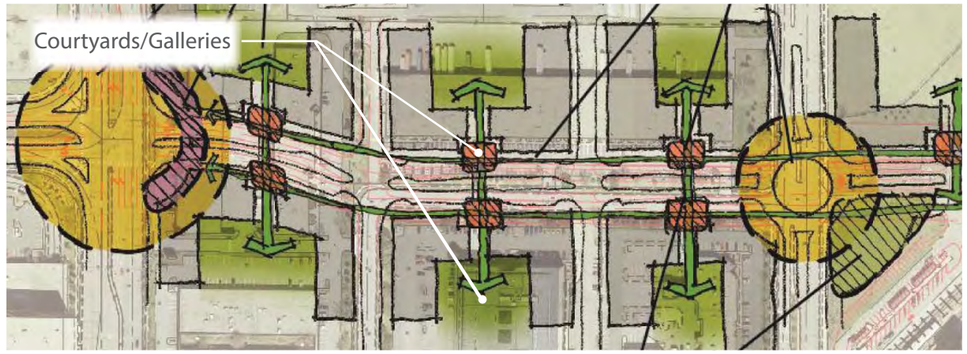



*Figure 12.22 Courtyards/galleries on Lindau Link*

## Gallery Elements

- Gathering / Seating
- Sculpture /Public Art
- Awnings / Trellis / Shade
- Fountains / Pools
- Sales / Stands
- Restaurants / Coffee shops
- Service Retails
- Furnishings / Signs
- Access Link to Parking and Private Courtyards

*Figure 12.18*

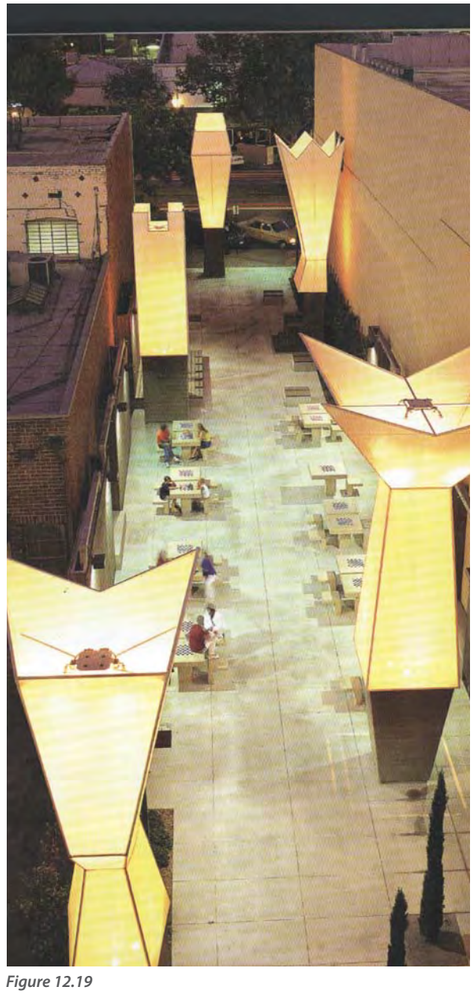


*Figure 12.19*

*Figure 12.20 St. Anthony Main, Minneapolis*

*Figure 12.21 Dedicated mid-block crossings connect galleries*

### Lindau Link Galleries

The sketch depicts north and south courtyard/ galleries across Lindau Link. Introducing periodic opportunities for rest, connecting, experiencing public art and other passive activities will be beneficial for encouraging walking along Lindau Link and within the District.

The design of these pedestrian spaces should be coordinated with potential cross-walk or gallery pavements, special lighting, landscape, and street furniture. The galleries and crossings should work together as a connected system of design elements, to clearly identify these special public spaces within the corridor. Additional engineering study will be required to determine the feasibility and implementation potential for mid-block crossings.

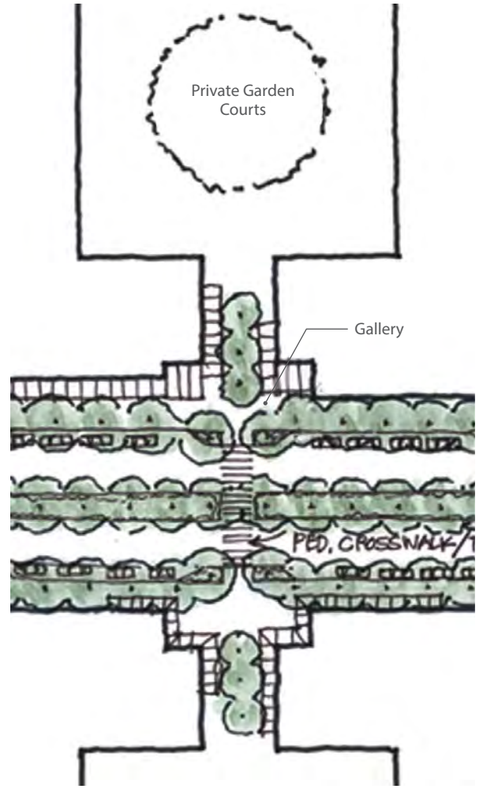



*Figure 12.23 Typical galleries connected by potential mid-block crossings*

# Plaza Concepts

## Civic Open Space and Private Development

### Transit Station Civic Open Spaces

Civic open spaces in contrast to "plazas" may be open park-like spaces that contribute to the diversity and quality of life and are central to the economic development strategy. These spaces offer separation as well as provide links between surrounding destination points and may share commercial and open space resources. These spaces should encourage social interaction, foster a distinct sense of place, reinforce the character of the district and include amenities that provide comfort and relaxation year around.

Civic open spaces provide flexibility for a wide variety of activities ranging from lawn games to concerts, performances, celebrations, speeches, markets, etc.

These spaces allow for gathering without the need to close streets or may simply allow expansion of street gatherings into the open space. Two such spaces in the district are associated with transit stations, Bloomington Central Station Park and the 28th Avenue Transit Station, both having open lawn areas which are valuable assets to the district. However, the 28th Avenue site may require additional parking for transit users, reducing the area for public use. Coordination with Metro Transit is necessary to determine the availability of this potential park/plaza space.

### Private Development/Courtyards-Plazas

These privately held spaces or courtyards, located behind the frontage development along Lindau Link and at private building entries, provide a wide variety of opportunities for the district. They provide another form of diverse space from open lawns to watershed management through attractive rain gardens, private gathering spaces, terraces, quiet space off the "main drag"

Incentives should be provided to incorporate features and amenities that minimize environmental impacts caused by storm water runoff and on air quality caused by vehicular traffic.

These courtyards are generally seen as less intensely developed and softer, but as development matures and succeeds, pressure to infill these spaces could occur. As infill occurs there should be stronger incentive to develop green roofs to help replace the on grade green space.

Although privately held, these spaces also provide an opportunity for a public/private blend of use and activities.

## Civic Open Spaces

- Public Lawn
- Flexible Open Spaces
- Gathering
- Events
- Wayfinding / Kiosks
- Link to Transit Station

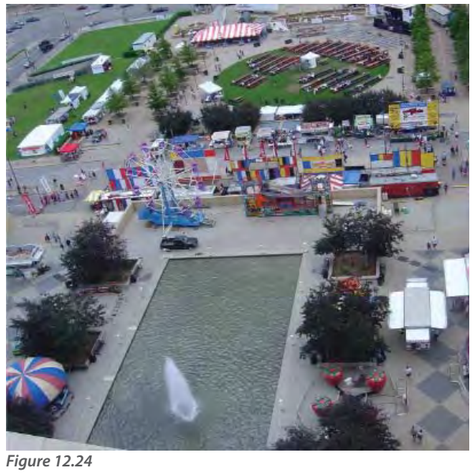


*Figure 12.24*

*Figure 12.26 Bloomington Central Station*

### Civic Open Spaces

Within the southeast quadrant of the proposed 28th Avenue and Lindau Link roundabout is the 28th Avenue Transit Station. As the current site is not fully developed, additional site improvements including surface parking is anticipated to be implemented by Metro Transit. If space is available, this site provides a good opportunity to develop a civic open space, which makes a connection between the transit facility and the potential 28th Avenue and Lindau Link roundabout/public plaza.

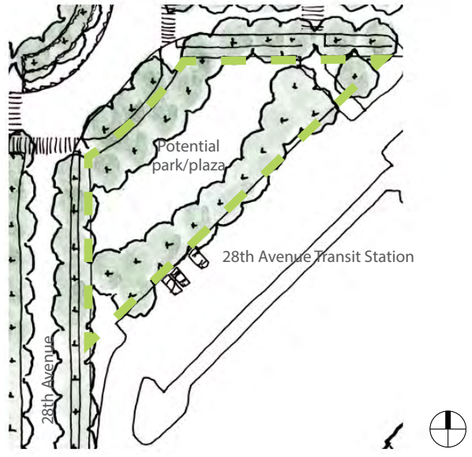



*Figure 12.28 Potential civic open space at 28th Avenue Transit Station*

## Private Development Spaces

- Public/Private Courtyards
- Garden Courts/Future Development
- Transition Between Parking and Buildings
- Stormwater Management/Rain Gardens
- Private Building Entries

*Figure 12.25 Nicollet Commons*

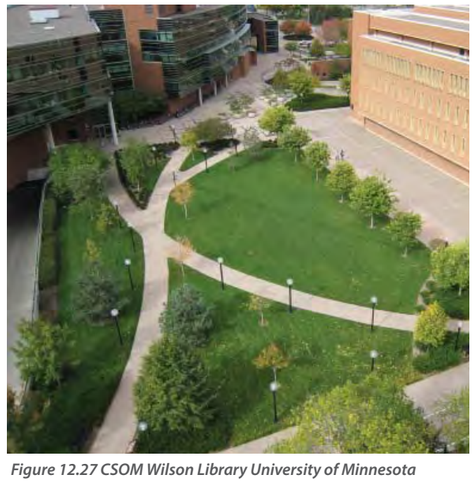


*Figure 12.27 CSOM Wilson Library University of Minnesota*

### Private Development Spaces

The South Loop District Plan identifies areas behind the commercial buildings fronting Lindau Link as potential private open spaces/ private court areas. There are a number of opportunities for developing these spaces as private/public spaces, connected with Lindau Link through galleries and courtyards between buildings, creating a comprehensive and linked system of green spaces, parks, and plazas.

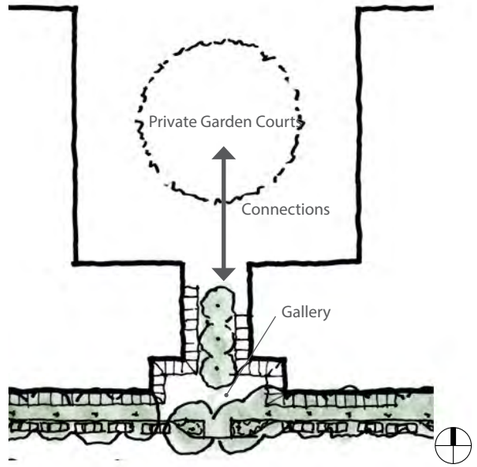



*Figure 12.29 Typical potential private development space*

# Maintenance and Operations
# CHAPTER 13

# Maintenance and Operations

## Overview

Maintenance is essential in creating an attractive and functional streetscape. In order to be walkable and aesthetically appealing, streets need to demonstrate signs of regular maintenance and care, including healthy vegetation, trash and snow removal, and intact street furniture. Certain elements, such as lighting and banners, can change depending on the season or activity, and will help bring the street to life. The types and frequency of maintenance activities are detailed in Table 13.1.

The approaches to managing streetscape maintenance can vary. Typically the maintenance is taken on by the City. In Bloomington, the Maintenance Division is responsible for maintaining most of the City streetscapes, including landscaping, lighting, street sweeping, snow removal and sidewalk repair. Hennepin County or the Minnesota Department of Transportation are responsible for other streets. The Street Maintenance Division works closely together to effectively and efficiently make use of available resources to provide a basic level of streetscape maintenance.

An alternative is to establish a service district. Cities often use service districts to deliver special maintenance services and allow recapture of some of the costs through a special charge. Some districts hire private contractors to provide maintenance services.

Service districts are often used when a city has installed significant streetscape improvements that go beyond the basic street, curb, and sidewalk treatment to include things like special pavers, banners, etc. Under state statutes, service districts must be established by petition, which must be signed by 25% or more of both property owners and the tax base within the district. They are also subject to a public hearing. In many cases it is helpful to establish the service district before construction begins, so that affected property owners have an investment in the success of the project.

Both the cities of Minneapolis and St. Louis Park have employed service districts. In Minneapolis, the Lake Street corridor has four separate service districts that deliver services such as snow removal, street cleaning, trash removal, watering, and installation/removal of banners. The Downtown Improvement District is another example of a service district; it includes an Ambassador program of street patrols and hospitality services, as well as a program to deal with recycling, graffiti removal, and beautification. In St. Louis Park, a service district was established for the Park Place project (West End shops) that covers maintenance for pedestrian lighting, banners, banner poles, raised planters, decorative tree lighting, bollards, landscaping and irrigation. The area is divided up by public and private streets; maintenance for private streets is generally not included in the service district but is the responsibility of the private property owner.

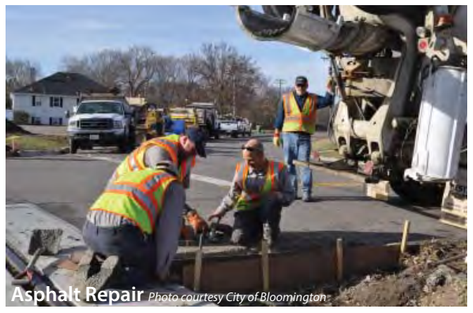
| Maintenance Components | Maintenance Activity | Frequency | Additional Comments |
|---|---|---|---|
| **Streetscape/Landscape Maintenance** | | | |
| **Concrete Sidewalk** | Snow and ice removal (perimeter), and sanding | After storms (avg, 15x a year) | |
| | Litter and debris removal | Weekly | |
| | Repairs | As needed and upon visual inspection every year | |
| | Replacement | Every 60 years | |
| | Cleaning and scrubbing | 4x a year minimum? | |
| **Parking Lots (City Owned)** | Snow and litter removal | After storm - 1" snowfall (avg. 15x a year) | |
| | Sweeping | 3x a year | |
| | Seal coat, paint striping maintenance and repair | Every 5 years | |
| | Repairs | Non-routine | |
| | Mill and overlay | Every 10 years | |
| | Replacement (includes bituminous and agg base) | Every 20-25 years | |
| **Irrigation System** | Blow out/start-up/inspect | 2x a year | |
| **Trash Receptacles** | Empty container/general repair and graffiti removal | 2x a week | |
| **Site Furnishings** | Graffiti removal | As needed | |
| | Washing and scrubbing | Seasonally | |
| **Signage** | Graffiti removal | As needed | |
| **Artwork** | Graffiti removal | As needed upon visual inspection | |
| | Repair grates | As needed upon visual inspection | |
| | Non-routine repair and maintenance (from paving) | As needed upon visual inspection | |
| **Landscape Pots** | Watering | Weekly | |
| | Graffiti removal | As needed | |
| | Washing and scrubbing | Seasonally | |
| **Bike Racks** | Washing and scrubbing | Seasonally | |
| | Graffiti removal | As needed | |
| | Repairs and replacement | As needed | |

*Table 13.1 South Loop District Streetscape/Landscape Estimated Maintenance Activities and Costs*

## Streetscape/Landscape Maintenance Matrix

| Maintenance Components | Maintenance Activity | Frequency | Additional Comments |
|---|---|---|---|
| **Bus Shelters/Kiosks** | Washing and scrubbing | Seasonally | Metro Transit is responsible for maintaining bus kiosks and shelters |
| | Graffiti removal | As needed | |
| | Repairs | As needed | |
| **Banners** | Hanging/Replacing | Annually or as needed | |
| **Newspaper Stands** | Replacing | As needed | |
| **Street Lights: Poles** | Repairs and replacement | 20 years | Annual inspection for licensing compliance<br>See Chapter 6 Lighting and Electrical |
| **Street Lights: Light Fixtures** | Repairs and replacement | As needed | |
| **Street Lights: Poles/Fixtures** | Graffiti removal | As needed | |
| **Security Systems** | Inspection | Weekly | Need fiber connection |
| | Repairs and replacement | As needed | |
| **Plant Material Items** | | | |
| **Turf grass, Lawn** | Mowing | Maintain turf 3" - 5" | Weekly mowing, fertilizer, weed control |
| **Trees** | General pruning | Every 3-5 years after establishment | See Chapter 9 Landscaping |
| | Watering | 5x per year, more if dry conditions | |
| | Replacement planting | As needed | |
| **Perennial and Shrub Beds** | General pruning | Annually | See Chapter 9 Landscaping |
| | General maintenance | Weekly | |
| | Replacement planting | As needed | |
| | Pest management | Monthly | |
| **Ornamental Grasses** | Watering | Upon establishment and during dry seasons | See Chapter 9 Landscaping |
| | Weeding | 2x a year | |
| | Watering | 4x a year minimum | |
| | Mulching | Seasonally | |
| | Dividing | Annually | |
| | General pruning | Annually (in spring 4" - 6" height) | |
| | Fertilizing | Annually | |

**Street Sweeping** *Photo courtesy City of Bloomington*



**Asphalt Repair** *Photo courtesy City of Bloomington*

**Tree Pruning** *Photo courtesy gsbrown99@flickr.com*

**Cleaning Sidewalk** *Photo courtesy PamBroviak@flickr.com*

**Snow Plowing** *Photo courtesy City of Bloomington*

| Maintenance Components | Maintenance Activity | Frequency | Additional Comments |
|---|---|---|---|
| **Stormwater Items** Primarily Underground | | | |
| **Underground Infiltration Chambers** | Litter, debris and sediment removal | 2x a year recommended | All maintenance frequencies should be modified based on inspection findings |
| | Structural Repairs | As needed upon visual inspection | |
| **Swirl Separator (Grit Chamber)** | Litter, debris and sediment removal | 2x a year recommended | |
| | Structural Repairs | As needed upon visual inspection | |
| **Underground Detention** | Litter, debris and sediment removal | 2x a year recommended | |
| | Structural Repairs | As needed upon visual inspection | |
| **Tree Trench** | Litter and debris removal | As needed | Monitoring yet to be determined |
| | Engineered soil maintenance | As needed - if soils are accidentally removed | |
| | Cleanouts, inlets and outlets | As needed upon biannual inspection | |
| | Removing grates and clearing debris | 2x a year recommended | |
| | Tree grates structural repairs/replacement | As needed upon visual inspection | |
| **Cistern/Reuse** | Litter, debris and sediment removal | 2x a year recommended | |
| | Structural Repairs | As needed upon visual inspection | |
| | Cleanouts, inlets and outlets | As needed upon biannual inspection | |
| **Stormwater Items** Primarily Above Ground | | | |
| **Bioretention Basins/Rain Gardens** | Litter, debris and sediment removal | Upon biannual inspection/after large storm events | Monitoring yet to be determined |
| | Repair of eroded areas | As needed upon visual inspection | |
| | Replacement planting | As needed | |
| | Cleanouts, inlets and outlets | Upon biannual inspection/after large storm events | |
| **Permeable Pavers/Porous Pavement** | Surface sweeping/vacuuming | 2 - 4x a year recommended | 15 year replacement; monitoring yet to be determined |
| | Washing/high pressure hosing | As needed | |
| | Structural repair/replacement | As needed | |
| **Infiltration Trench** | Litter, debris and sediment removal | Monthly or as needed after storm events | Monitoring yet to be determined |
| | Mowing and trimming of vegetation | As needed | |
| | Repairing eroded areas at inflow/overflow structures | As needed | |
| | Seed or sod to restore ground cover | 5-year maintenance | |
| **Boulevard Swale** | Litter, debris and sediment removal | As needed | Monitoring yet to be determined |
| | Repairing eroded areas | As needed upon visual inspection/after large storm events | |
| **Stormwater Items** Pretreatment/Public - Private | | | |
| **Vegetated Filter Strip (Pretreatment)** | Vegetation maintenance | As needed | |

*Table 13.2 South Loop District Stormwater Estimated Maintenance Activities and Costs*

## Stormwater Maintenance Matrix

| Maintenance Components | Maintenance Activity | Frequency | Additional Comments |
|---|---|---|---|
| **Stormwater Items** Pretreatment/Public - Private | | | |
| **Infiltration/Flow-through Planter** | Litter, debris and sediment removal | Bi-weekly | |
| | Cleaning/repairing of inflow and outflow | As needed | |
| | Soil replacement | As needed upon visual inspection/after large storm events | |
| | Replacement planting | As needed | |
| | Structural repair/replacement of concrete structures | As needed | |

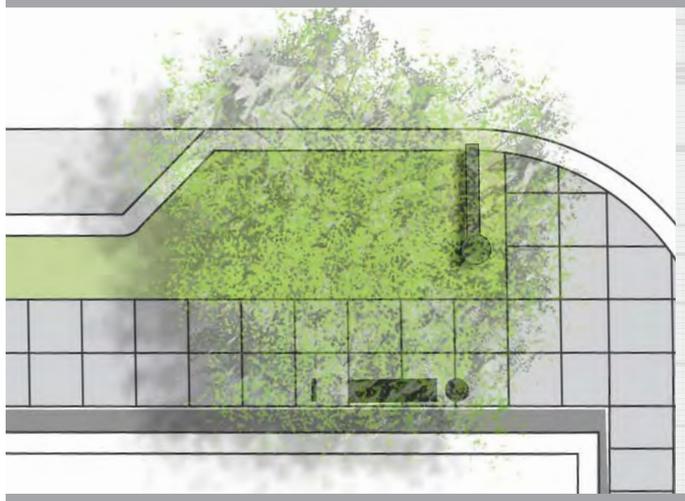

**Watering** *Photo courtesy footfingers@google.com*

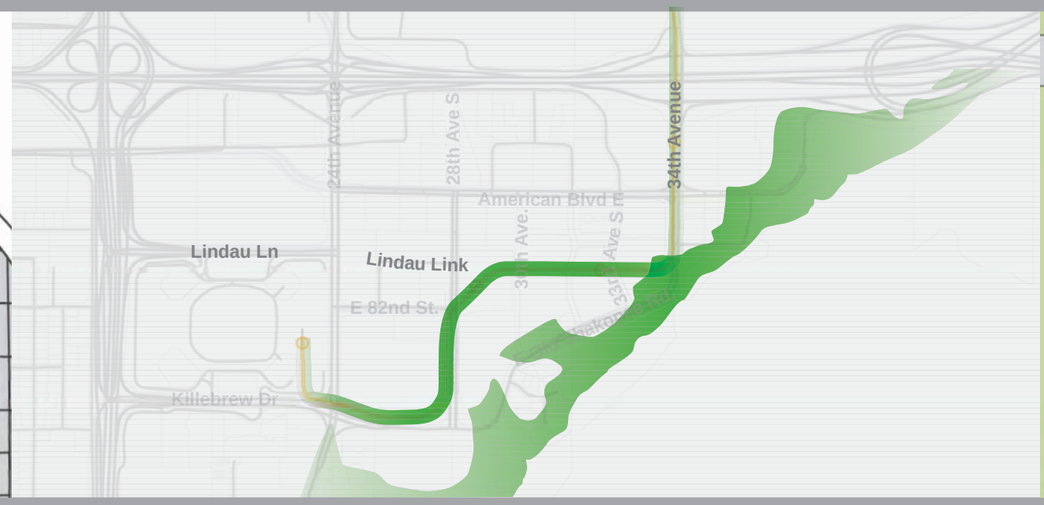

**Weeding** *Photo courtesy weeding@google.com*

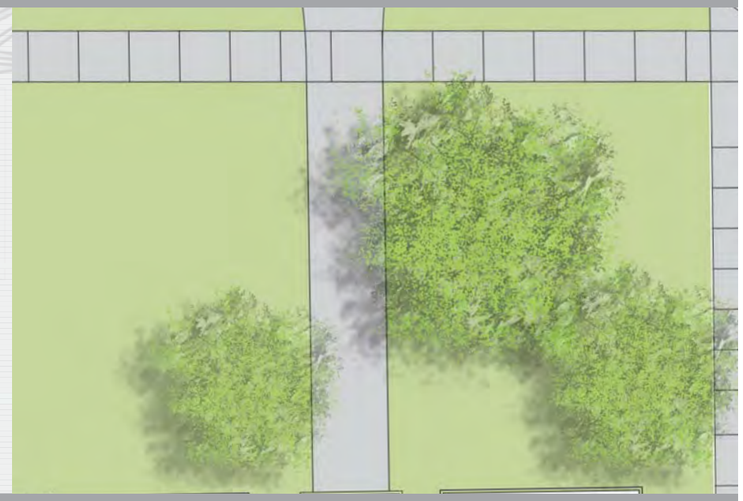

**Raingarden Planting** *Photo courtesy Madison.gov*


**Shrub Pruning** *Photo courtesy basicshrubpruning@google.com*


**Mowing** *Photo courtesy fotobydave@flickr.com*





# Cost Estimates and Construction Phasing

## CHAPTER 14

# Project Cost Estimates

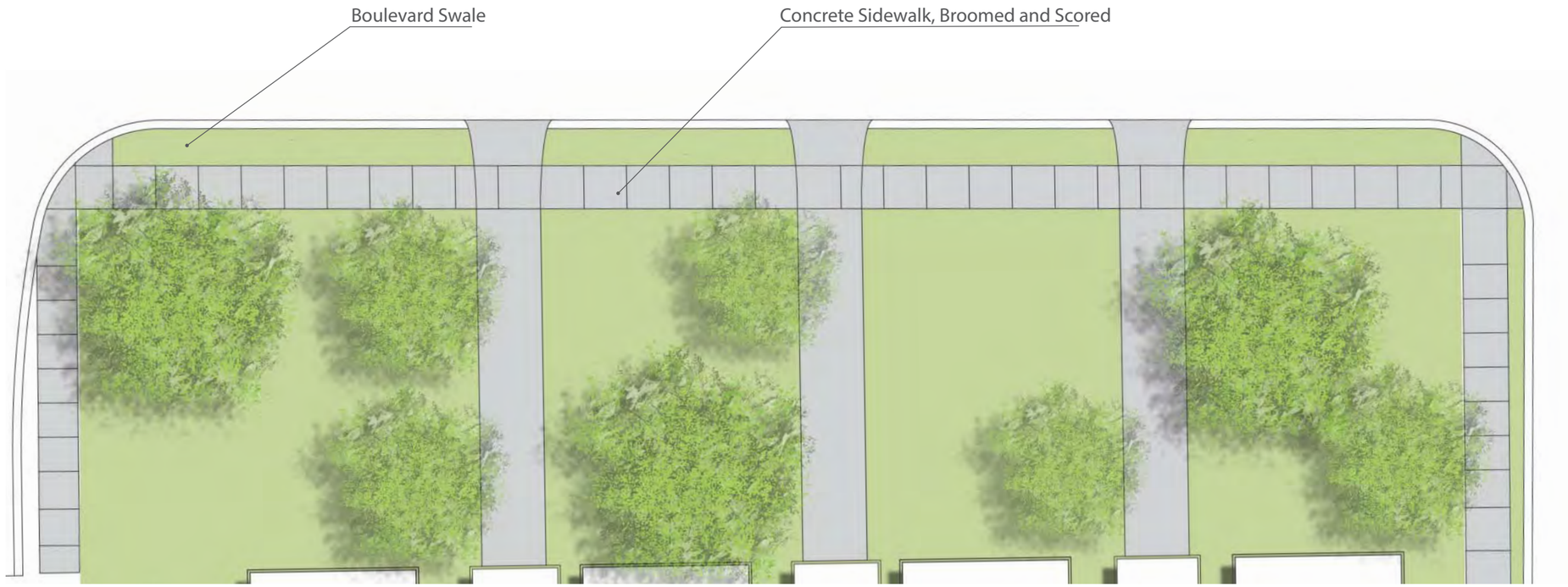
## Overview

Estimated costs have been prepared for typical street types in the South Loop District based on the preliminary design options. These costs reflect streetscape elements located between the back of curb and either the building facade or the right-of-way line, and do not include roadway construction costs.

These estimated costs are broken down into categories based on street type: residential, commercial, arterial/sub-arterial, and green street. For each of the representative categories, construction costs are provided for the stormwater costs, streetscape costs, and the combined total cost per block face. Each street type will uphold the fundamental qualities of the streetscape design; however, the character of the streetscape will vary between street types.

These cost estimates are prototypical for each street type. They were created by estimating the cost per lineal front footage for each street segment, then extrapolating this to estimate the cost of the entire street block length. A block is assumed to be 315' long between right-of-ways. Contingencies are included in the estimate, as are projected design and inspection fees. Public art cost estimates can be found in Chapter 11.

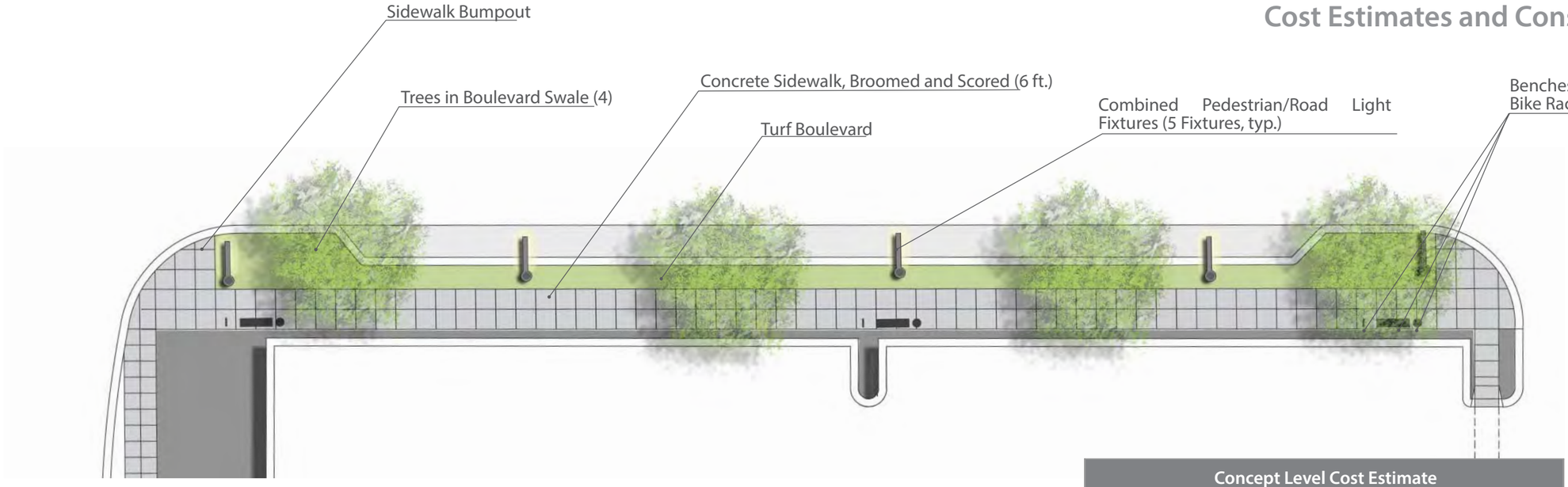
Due to the three-stage phasing of this project, estimated costs reflect both existing and anticipated future costs. Costs for mid and long range stages of implementation may change due to inflation and increases in the costs of labor and construction materials.




**Residential Street**
Representative Block Plan View
1"=30'

*Figure 14.1 Residential representative streetscape treatment*

| Concept Level Cost Estimate | | |
|---|---|---|
| Streetscape Construction Cost | Stormwater Construction Cost | Total Construction Cost per Block Face |
| $49,200 | $3000 | $52,200 |

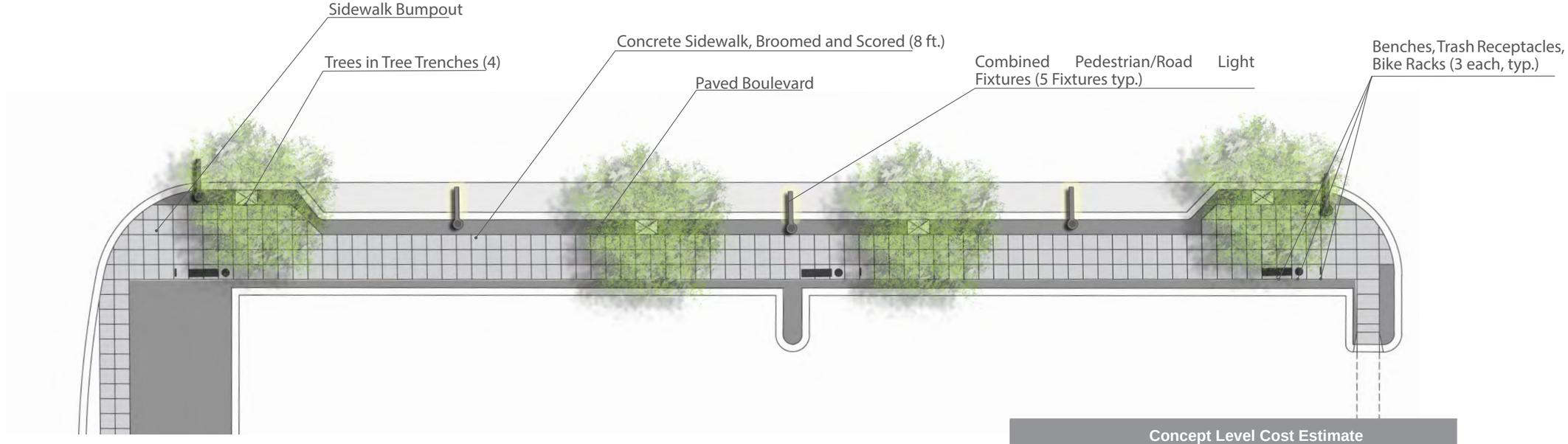



**Commercial Street**

Representative Block Plan View

1″=30′

| Concept Level Cost Estimate | | |
|---|---|---|
| Streetscape Construction Cost | Stormwater Construction Cost | Total Construction Cost per Block Face |
| $109,400 | $12000 | $121,400 |



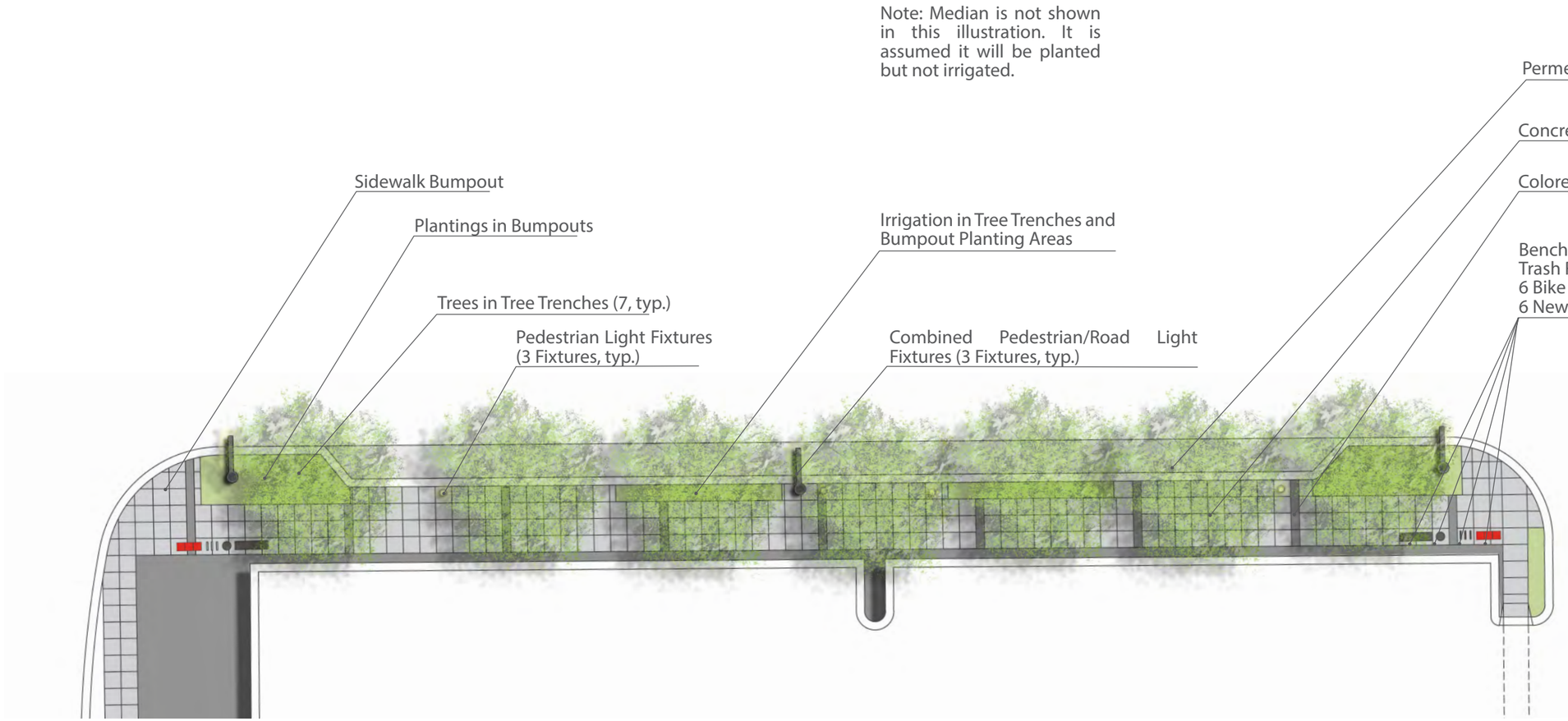

**Primary Arterials/Sub-Arterials**

Representative Block Plan View

1″=30′

| | Concept Level Cost Estimate | | |
|---|---|---|---|
| | Streetscape Construction Cost | Stormwater Construction Cost | Total Construction Cost per Block Face |
| | $103,700 | $19,200 | $122,900 |
| MEDIAN | $68,000 | — | $68,000 |

*Figure 14.2 Commercial and Arterial/Sub-Arterial representative streetscape treatments*




**Lindau LInk**
Representative Block Plan View
1″=30′

*Figure 14.3 Lindau Link representative green streetscape treatment*

| | Concept Level Cost Estimate | | |
|---|---|---|---|
| | Streetscape Construction Cost | Stormwater Construction Cost | Total Construction Cost per Block Face |
| | $205,040 | $49,400 | $254,440 |
| MEDIAN | $81,000 | — | $81,000 |

## Cost Estimate Matrix

| Item | Primary Arterials/Sub Arterials | Commercial | Lindau Link | Residential | Unit of Measure | Cost |
|---|---|---|---|---|---|---|
| 4" Gray Concrete | 5200 | 4200 | 5500 | 5000 | SF | $6.00 |
| 4" Colored Concrete | | | 2000 | | SF | $13.00 |
| Pavers over Base | 2000 | 2000 | | | SF | $9.00 |
| Permeable Pavers over Infiltration Rock | 800 | | 1880 | | SF | $18.00 |
| Lights Utilizing Existing Bases/ Electrical (160-180' O.C.) | | | | | EA | $5,000.00 |
| Lights with New Bases and Power | 5 | 5 | 6 | | EA | $8,000.00 |
| Benches | 3 | 3 | 2 | | EA | $2,500.00 |
| Trash Receptacles | 3 | 3 | 2 | | EA | $2,100.00 |
| Bike Racks | 3 | 3 | 6 | | EA | $700.00 |
| Newspaper Corral | | | 6 | | EA | $2,500.00 |
| Tree | 4 | 4 | 7 | | EA | $450.00 |
| Shrub | | | 37 | | EA | $450.00 |
| Perennials | | | 60 | | EA | $450.00 |
| Planting Soil | | 50 | 50 | | CY | $60.00 |
| Infiltration Soil (18") | | | | 150 | CY | $80.00 |
| Structural Soil | 40 | | 130 | | CY | $120.00 |
| Sod | | 2350 | | 2800 | SY | $6.00 |
| Irrigation | | | 12,000 | | LS | $12,000 |
| Curb Ramps | 4 | 2 | 4 | 2 | EA | $1,200.00 |
| Wayfinding/Signage (see Chapter 10) | | | | | – | – |
| Public Art (see Chapter 11) | | | | | – | – |
| **Total Construction Cost (per Block Face)** | **$130,900.00** | **$129,400** | **$246,440.00** | **$61,200.00** | | |
| **Engineering, Design, Inspection and Contingency (30%)** | **$39,270** | **$38,820** | **$73,932** | **$18,360** | | |
| **Total Cost** | **$170,170** | **$168,220** | **$320,372** | **$79,560** | | |

*Table 14.1 Cost Estimate Matrix per Street Type, in 2012 dollars*

# Project Phasing and Implementation

## Overview

In order to tackle a streetscape project of this size, it is important to identify phases of implementation. The South Loop District Plan has identified a long range, 40-year time frame for implementing the streetscape design, which falls into three categories: short term (2012-2019), mid term (2020-2029), and long term (2030+).

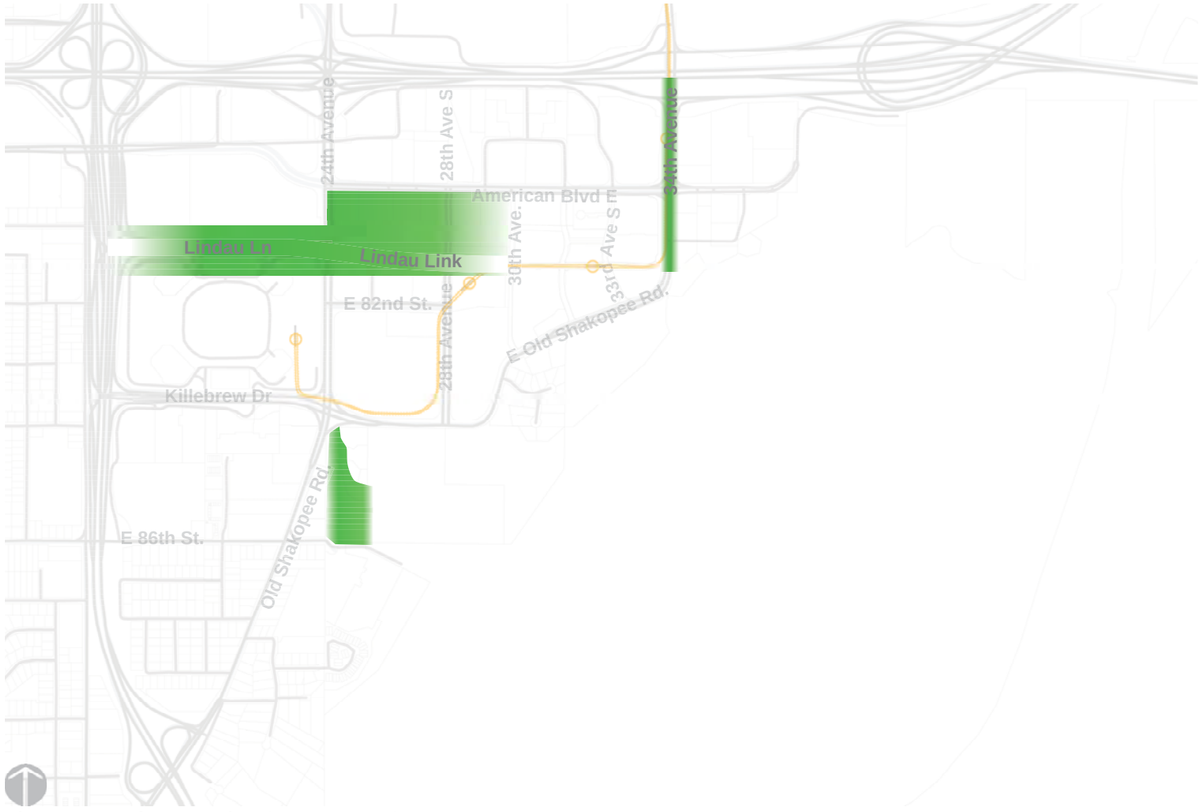
The short term phase focuses on Lindau Link/ Lane, developing parcels along Lindau Link between 24th and 30th Avenues, as well as a new dog park and MVNWR trail head next to Forest Glen Park. Sidewalks/trails, boulevard trees, lighting, and a pedestrian bridge over Killebrew Drive will also be completed in the short term phase. In addition, district identification and wayfinding signage will be implemented.

The mid term phase will focus on additional improvements, including MVNWR trailheads, sidewalks/trails, boulevard trees, lighting and completion of the wayfinding system.

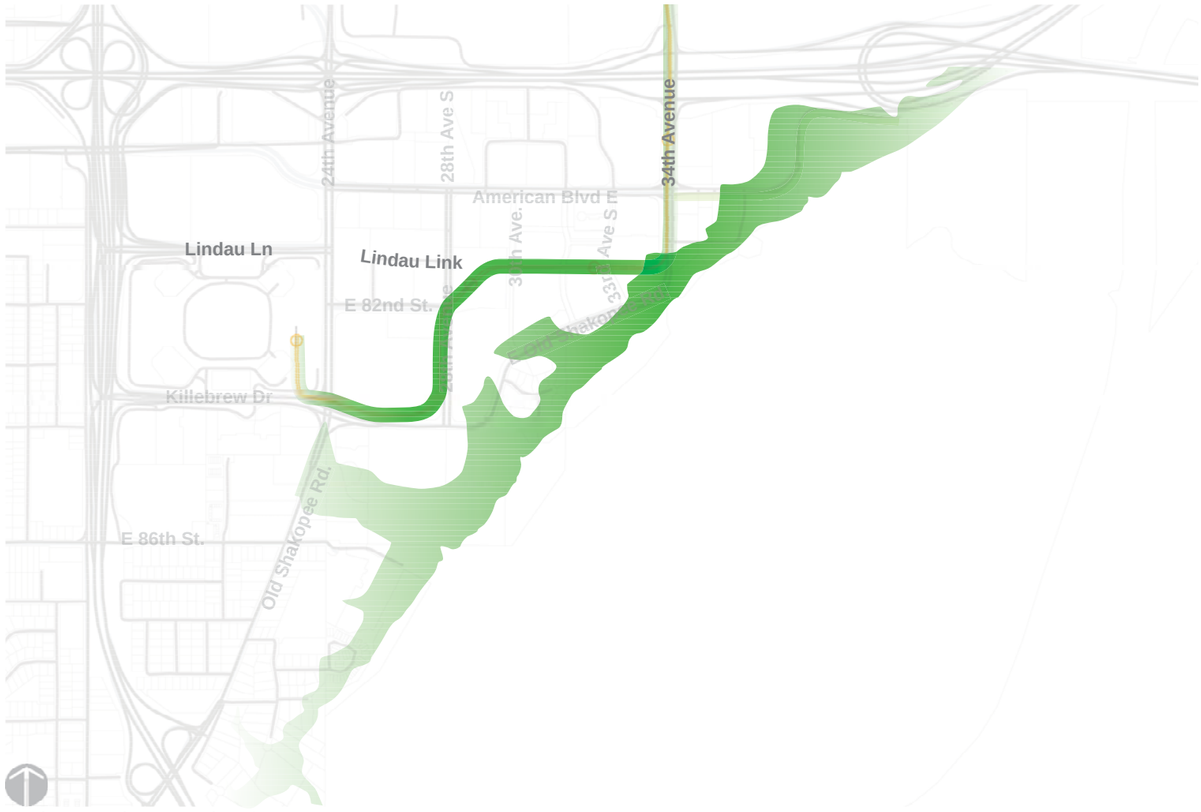
The long term phase includes public improvements to parcels that will be developed or redeveloped after 2030. Road improvements and new parks will occur in conjunction with development. Throughout the life of the district the city should take advantage of opportunities to incorporate streetscape enhancements into regular roadway improvement projects. These projects provide occasions to update items such as median pavement, lighting or site furnishings to be consistent with the district design standards.

Partnerships are important for the long term success of the South Loop District streetscape. There are multiple property owners with a stake in the streetscape who can assist with funding, sharing their perspectives, and helping the City of Bloomington implement the proposed South Loop Master Plan. These potential partners include: the Business Improvement District, the state and federal government, Hennepin County, the City of Bloomington, developers and property owners. In addition, the city may consider the creation of a Business Improvement District that will become a key partner in long term implementation and maintenance of streetscape improvements in the South Loop.

Grant opportunities are also available to assist the city in implementing streetscape initiatives. Some specific grants available to Minnesota communities include the Local Road Improvement Program (LRIP), Surface Transportation Program (STP), Safe Routes to School (SRTS) and Transporation Enhancement (TE) grants.




Short Term Phasing Plan (2012 - 2019)




Mid Term Phasing Plan (2020 - 2029)

*Figure 14.4 Phasing Plan Diagrams*

# Appendix CHAPTER A

Workshop Minutes

Stakeholder Worksheet

Technical Subgroup Meeting Agendas (Roadway Hierarchy, Cross-Section, ROW, Lighting, Electrical, Plaza/Open Space, Public Art, Level of Improvements, Cost, Maintenance, Public Space Programming and Wayfinding )

Study Area, Airport South Drainage District, City of Bloomington

P8 Drainage Patterns, Airport South Drainage District, City of Bloomington

Annual Area Total Phosphorous Loading, Airport South Drainage District, City of Bloomington

Trees in Right-of-Way or Street Easements Memo

# Workshop Minutes

**Workshop #1**

**Date:** July 11, 2012 (9:30 AM - 11:45 AM)

**Location:** Rehearsal Hall, Bloomington City Hall

| **Attendees:** | | | | |
|---|---|---|---|---|
| | Thomas Bowlin | Bloomington | Andrea Specht | BTAC |
| | Julie Farnham | Bloomington | Tom Harrington | Kimley-Horn |
| | Dave Hanson | Bloomington | Todd Halunen | Kimley-Horn |
| | Larry Lee | Bloomington | Mike McGarvey | SRF |
| | Julie Long | Bloomington | Barry Warner | SRF |
| | Schane Rudlang | Bloomington | Regina Flanagan | Art Landscape Design |
| | Becky Schindler | Bloomington | Bryan Carlson | Bryan Carlson Planning |
| | Jim Urie | Bloomington | Frank Hickey | Signia Design |
| | Rachel Flentje | BTAC | Ethan Kent | Project for Public Spaces |

**Meeting Summary:** (following agenda items)

## A. Introductions

- Staff indicated they do not have focused experience in this type of project and is looking to the consultant team to guide and lead efforts based on their experiences.

## B. Project Overview

- Review of project included general summary, schedule, relationship to Lindau Lane Grade Separation Project, Workshop and Technical Subgroup meetings with staff was reviewed by Tom.
- Schedule is ambitious, and requires significant efforts in the next couple months. Consultant team's responsibility is to provide meaningful direction for clear choices and feedback by staff and stakeholders. Attendance at these meetings is critical for issues to be heard, and decisions/direction will be documented. Issues where decisions made/direction given cannot be reintroduced /backtracked in order to stay on schedule.
- Additional Technical Subgroup meetings have been scheduled – some in attendance should have received invitations from Julie Long
- Additional, focused stakeholder reviews will occur outside these city staff meetings, as discussed with Julie L. and Julie F. These could include Metro Transit, MAC, Hennepin County, developers and neighborhood representatives.
- City indicated they have a responsibility to bring the right staff to the meetings, they will work to make and stand by decisions made at the meetings, or get answers outside the meeting and provide timely responses.

## C. Workshop #1 Overview

- The agenda for today's meeting was reviewed by Tom.

## D. South Loop District Plan Summary

- Using primary graphics taken from the draft South Loop District Plan, Barry led a discussion through the information from the District Plan which informs this Master Plan project. A handout with mapping was provided.
- Draft South Loop District Plan is the guide for this project - work to the goals and objectives identified
- Consider future private investment to support public improvements. Example could be the providing of space within private developments to accommodate streetscape elements – storage for chairs, maintenance equipment, etc.
- Consider opportunities to 'blur the line' between private and public – expand public realm into private areas; examples include wider sidewalks for outdoor dining, landscape buffer areas, etc.
- Lindau Link is the 'spine' or core of the South Loop District that will set the framework for the rest of the development
- Lindau Link is actually part of the 'L', with 24th Avenue to Lindau Link the other part of this primary entrance to the District. Even though the design of 24th is not a part of this project, the planning should consider opportunities to establish a District 'front entry' design
- As to level of expectation, Bloomington Central Station should be thought of as the 'design model' for the rest of South Loop
- Densities and configurations of building massings shown in the District Plan may not be a realistic expectation shared by all staff. The city will continue to aim high, but realities of market conditions should be considered. A small Target or CVS store might be part of the future for this area. Interested developers may not be able to completely meet the high expectations of the District Plan and vision share by some staff members. Convenience retail will always be a high priority for this District.

## E. Worksheet Response Summary

- The Worksheet responses provided by staff were summarized by the consultant team, a document provided for review, and a discussion led by Barry. A handout with precedent imagery was provided. A summary of these additional comments follows these minutes.
- Scale is important. Future buildings will provided this, but comfortable horizontal to vertical should be planned for the streetscape elements
- What makes Lindau Link different is that it is not a ' key' street from a transportation system perspective. Meaning, alternate routes would allow Lindau Link to be closed temporarily to host special community events. Planning and design should consider these opportunities
- Some Bloomington policies and requirements may be 'flexible' within the South Loop District.
- Although city policies require otherwise, there are locations within the city that have boulevard trees. This project should consider boulevard trees, especially at Lindau Link.
- The consultant team should understand and identify for the city where current city requirements and policies may be in conflict with the South Loop District Plan's vision
- Issue of expectations for bicycles on-sidewalk or on-street was discussed, and will be clarified at the upcoming Technical Subgroup meeting of 7/18/12.
- Previous BCS park events were not completely successful. The consultant team was asked to provide ideas for public space programming, examples could be farmers markets, craft fairs, etc.
- Opportunities for private spaces to share or push into sidewalk/public spaces should be considered, to include outdoor dining, bookstore and vendor carts, etc.
- Following this meeting, Schane Rudlang provided a PowerPoint document identifying additional information beyond meeting comments. A pdf of this document is attached.

## F. Placemaking – Public Space Design, Programming and Activation

- Ethan Kent led a discussion/introduction to Placemaking. A Power Point was reviewed and a hard copy handout provided.

## G. Decision/Direction List

| | Meeting | Date | Decision / Direction |
|---|---|---|---|
| 1 | Workshop #1 | 7/11/2012 | Draft South Loop District Plan is the guide for this project - work to the goals and objectives identified |
| 2 | Workshop #1 | 7/11/2012 | Some Bloomington policies and requirements may be 'flexible' within the South Loop District |

*Table A.1 Workshop #1 Decision/Direction List*

Next Workshop Meeting: Wednesday, July 25th; 2:00 to 4:00 PM, Rehearsal Hall, Bloomington City Hall

**Workshop #2**

**Date:** July 25, 2012 (2:00 PM - 4:45 PM)

**Location:** Rehearsal Hall, Bloomington City Hall

| **Attendees:** | | | | |
|---|---|---|---|---|
| | Thomas Bowlin | Bloomington | Todd Halunen | Kimley-Horn |
| | Julie Farnham | Bloomington | Mike McGarvey | SRF |
| | Larry Lee | Bloomington | Barry Warner | SRF |
| | Julie Long | Bloomington | Regina Flanagan | Art Landscape Design |
| | Becky Schindler | Bloomington | Bryan Carlson | Bryan Carlson Planning |
| | Jim Urie | Bloomington | Frank Hickey | Signia Design |
| | Rachel Flentje | BTAC | Ethan Kent | Project for Public Spaces |
| | Tom Harrington | Kimley-Horn | | |

**Meeting Summary:** (following agenda items)

**A. Opening**

**B. Decision/Direction List from Workshop #1**

- Reviewed Decision/Direction list from Workshop #1.

**C. Summary of 7/18 Subgroup Meeting (Cross-Section, ROW+)**

- Reviewed primary discussion topics and direction provided in the technical subgroup meeting held to discuss district roadway cross-section hierarchy, rights-of-way, setbacks, utility and general plaza locations and areas. The plans and illustrations reviewed at that meeting have been advanced and will be reviewed for discussion at this Workshop. City staff attendees included Julie L., Julie F., Tom B., and Jen Densrude.

**D. Hierarchy Plan**

- Reviewed a series of graphics illustrating street hierarchy in the district, identified as Primary Arterials, Collectors (sub arterials), Green Streets, Local Roads (Commercial and Residential).
- It was confirmed that roadway classifications should guide streetscape design
- The graphics should be updated to remove some of the residential roads identified east of Old Shakopee Road.
- Local Streets (Residential) do not need to be included within this study.
- It was questioned whether Lindau Link should have a separate designation – possibly classified as a 'Destination Street'. It was discussed that the Green Street category should apply unless further cross-section design discussions amend this designation.

**E. Setbacks**

- Reviewed a plan graphic illustrating proposed setbacks for the various zoning districts within the District.
- Julie F. to review and provide feedback to the team for modifications following advancements by staff in writing the code for the South Loop District and further study on this issue. Some modifications discussed included:
- There are no maximums for CS-1, CO-1 and CX-2, these may be set at 10', with the code requiring an increased dimension to provide variations for doorways, window, and other fenestrations for interest, expressed as an 'envelope' for building placement.
- Both SF and MF Residential should be taken off the table.
- Setbacks should be measured from the ROW line only



- The Streetscape Master Plan document, with respect to the above zoning districts and the setback table, should include a reference that *'zoning is not yet determined and that information provided should be verified with Bloomington Planning staff'.*

**F. Cross-Sections**

- Cross sections illustrating typical Green Streets, Primary Arterials, Sub-Arterials (Collectors), and Local Roads were reviewed. These sections were generally accepted per the following discussions.
- A concern was expressed whether Lindau Link's 2' + 8' as shown provides sufficient pedestrian space. It was indicated that the additional 6' as shown could contribute to the pedestrian realm, should covered plantings (tree grates) and walkable pavements be included in portions of the roadway section. It was further indicated that should Lindau Link be re-evaluated and reductions in the roadway portions of the section be made, this additional space could/should be allocated in the pedestrian realm.
- The typical Primary Arterial Roadway cross-section should provide 8' minimum sidewalks. Sidewalks and trees should be moved away from the street as much as possible to provide for healthier trees and snow storage. Building foundation plantings should be illustrated.
- Trees within Primary Arterial Roadway cross-section could vary, some located within the boulevard and some behind the sidewalk. The standard practice in the city is to not locate trees within the boulevard, especially on Hennepin County roads such as 24th Avenue. The team to review this issue with the County.
- Future cross sections should add vehicles and people for human scale.
- Precedent imagery of local roadway pedestrian areas with dimensions was also reviewed, to evaluate and compare with the current Lindau Link cross-sections.
- Concern was expressed for too much pedestrian space if vendor, outdoor dining and other uses are moved or not provided. The spaces should be comfortable and accommodating no matter what the use.

**G. Utilities**

- The city current allocates 7' behind the curb as the zone for signal interconnects lines. However, due to the special nature of this street, it was discussed that electrical, signal interconnects and other related utilities should be located nearer to the curb and closer together than typically installed to provide for trees and other urban design improvements.
- Irrigation system lines should be routed at the far side (away from the curb) of the tree plantings to keep them away from the electrical lines.

**H. Plaza/Public Space Design**

- A presentation of District Plan Plaza initial concept sketches for Lindau Link was reviewed. A number of precedent images were also reviewed to illustrate the potential spaces identified within the concept sketches.
- The concept sketches advance the District Plan's primary initial plaza space shown located at the Lindau Link and 24th Avenue intersection, described to be primarily an auto-oriented gateway space.
- The concept illustrates a potential park/plaza space at the remnant corner of the Metro Transit (MT) 28th Avenue Transit Station. It was noted that this area may not be available and the team should review this with Schane Rudlang. Following the meeting, Schane provided the following update via e-mail:

  *The City is exploring the possibility of a public ramp east of 30th Ave, which MT could be a user. We have not had discussions with them about that possibility though. It should be discussed with them at the time when we acquire the land necessary for Lindau across their parcel. MT does not currently utilize the full capacity in their ramp, but the parking supply is oversized for future demand. Whether they would allow the triangle to be used as a park or sold to us as a park is unknown – also a good thing to talk to them about when we acquire property, which is intended to get underway in the next 6 months or so (Shelly may have more information on this and timing of acquisition). I don't think at this time we should count on that triangle being a park since we don't have funding to buy it and the ramp that would free up the land*

## Workshop #2

*would not be 'real' for some time. We could identify it as a potential park area, and include MT in the discussion of this plan.*

- The Plaza/Public Space Diagram and the concepts illustrated are acceptable for further design study. Advance the design considering the potential for a roundabout at Lindau Link and 28th Avenue based on preliminary intersection control evaluation (ICE) report.

### I. Public Art

- A presentation of Public Art approaches/conceptual categories was reviewed as an introduction to the public art project component. Five general categories with descriptions and precedent imagery were identified.
- Reaction/comment to the information was requested, with comments to come through Julie Long. Further refinement of potential locations, type and implementation strategies will be advanced after being informed by upcoming staff comments and public space design efforts.

### G. Wayfinding

- A presentation of Wayfinding and Public Spaces was reviewed as an introduction to the wayfinding project component. Types/categories of signage with descriptions and precedent imagery were identified.
- A photographic drive-through was included as a basis for understanding the context of the proposed points of arrival and decision-making. Views also identified issues related to Lindau Link alignment across 24th Avenue and how this may affect type, size and location of this primary district entry.
- Reaction/comment to the information was requested, with comments to come through Julie Long. Further refinement of potential locations, type and implementation strategies will be advanced after being informed by upcoming staff comments and public space design efforts.

### K. Placemaking

- A brief presentation on Placemaking was reviewed, advancing conversations and issues identified in Workshop #1. Precedent imagery of similar conditions were reviewed.
- The question of whether the city desires Lindau Link to be a Destination Street or a street primarily for movement of vehicles was discussed, as Ethan indicated both cannot be successfully accomplished (conflicting goals). Staff requested that the team provide their ideal street cross-section that would best provide for a Destination Street.
- This issue of Lindau Link to be further reviewed and discussed. However, the team indicated that project schedule and work follow-up requires that direction on a city-preferred cross-section should be high on the project's list of items to resolve, as it will affect follow-up efforts.

### Decision/Direction List

| | Meeting | Date | Decision / Direction |
|---|---|---|---|
| 1 | Workshop #1 | 7/11/2012 | Draft South Loop District Plan is the guide for this project - work to the goals and objectives identified |
| 2 | Workshop #1 | 7/11/2012 | Some Bloomington policies and requirements may be 'flexible' within the South Loop District |
| 3 | Workshop #2 | 7/25/2012 | The typical Primary Arterial Roadway cross-section should provide 8' minimum sidewalks. Sidewalks and trees should be moved away from the street as much as possible. Building foundation plantings should be illustrated. |
| 4 | Workshop #2 | 7/25/2012 | The typical Local Commercial Road cross-section should be 36', which provides for on-street parking on both sides. |
| 5 | Workshop #2 | 7/25/2012 | Local Streets (Residential) do not need to be included within this study. |
| 6 | Workshop #2 | 7/25/2012 | The Plaza/Public Space Diagram and the concepts illustrated are acceptable for further design study. Advance the design considering the potential for a roundabout at Lindau Link and 28th Avenue. |
| 7 | Workshop #2 | 7/25/2012 | The general location of proposed utilities per the utility cross-section was acceptable |

*Table A.2 Workshop #2 Decision/Direction List*

Next Workshop Meeting: Wednesday, August 8th; 9:30 to 11:30 PM, Rehearsal Hall, Bloomington City Hall

**Workshop #3**

**Workshop #3**

**Date:** August 8, 2012 (Time 9:30 AM to 11: 40 AM)

**Location:** Rehearsal Hall, Bloomington City Hall

| | | | | | |
|---|---|---|---|---|---|
| **Attendees:** | Cherise Erickson | Bloomington | | Andrea Specht | BTAC |
| | Julie Farnham | Bloomington | | Tom Harrington | Kimley-Horn |
| | Anne Jacobson | Bloomington | | Todd Halunen | Kimley-Horn |
| | Dave Hanson | Bloomington | | Joni Giese | SRF |
| | Julie Long | Bloomington | | David Filipiak | SRF |
| | Larry Lee | Bloomington | | Barry Warner | SRF |
| | Shelly Pederson | Bloomington | | Regina Flanagan | Art Landscape Design |
| | Jim Urie | Bloomington | | | |

**Meeting Summary:** (following agenda items)

**A. Decision/Direction List From Workshops #1 and #2** (Tom Harrington)

- Reviewed the list (at the end of these minutes), of the 2 items determined at Workshop #1 and 5 items determined at Workshop #2.

**B. Summary of 8/1 Subgroup Meetings (Storm Water and Street Lighting -** Tom Harrington)

- Reviewed the agenda and general topics at last Wednesday's technical subgroup meetings, which will be summarized and discussed at this meeting.

**C. Summary of 8/7 Lindau Link Design/Cross-Section Meeting** (Barry Warner)

- Summarized the discussions from a meeting held at Public Works on 8/7, organized to evaluate current Lindau Link design and the land use projections used to develop traffic studies, which led to development of the cross-section. Marie Cote of SRF was directed to provide scope and fee to perform additional traffic analysis and modeling based on updated and detailed land use projections to be provided by the planning department.

**D. Public Art Update** (Regina Flanagan)

- Provided and reviewed a handout which advanced the Workshop #2 introductions based on feedback received by 4 city and BTAC staff members.
- For the master plan, this design component will provide broaden thinking, opportunities and strategies for incorporating public art within the South Loop District.
- Focused opportunities for Phase II and III projects will be further explored, including strategies, categories by location, process recommendations and general cost information.
- Pedestrian bridges should remain on the list of categories, as future pedestrian bridges should be considered as potential opportunities.
- All other categories should remain on the list, but additional categories added generally categorized as Signs (Larry provided the future dog park sculpture as signage example), Performance, Temporary Works, and Exhibitions.
- Information will be further advanced and reviewed at the upcoming Technical Advisory Group meeting on 8/22.

**E. Storm Water** (Joni Giese and David Flipiak)

- Provided and reviewed a power point and handout which introduced the storm water project component. It included a general background of storm water design requirements/regulations and a full list of potential treatment devices for the project represented as a BMP Tool Box Matrix including precedent imagery of each type. The matrix provided an evaluation of each type by benefit, cost and O and M costs.
- A district roadway classification map and shortlist of potential treatment devices, followed by individual roadway cross-sections further identifying potential devices with imagery.
- 24th Ave is a corridor with opportunities in the future for public/private partnership in addressing private and public storm water jointly.
- Prior to advancing the concepts and documenting treatment devices with the design guide, the consultant team was advised to review this with Hennepin County to determine acceptability within the county's corridor.
- Currently within the South Loop, systems are in place to handle treatment based on current roadways/impervious. However, future development of roadway systems and improvements may warrant the incorporation of some of these treatment devices.
- The design guide should identify a range of opportunities by street and location within the ROW, considering county and State Aid requirements, loading, opportunities to share facilities between public and private, etc.
- Staff was asked to review these devices and strategies and provide comments back by early next week to the consultant team through Julie L. for advancement of this project component.
- Considering permeable pavement experiences and future considerations by type, 3 systems were discussed, ranked in order of acceptability for use by the city as 1-permeable pavers, 2- porous asphalt and 3-pervious concrete. Possible acceptable locations for these pavement systems could include sidewalks and parking bays. Concern was expressed for using these materials as roadway pavement.
- Staff asked the team to consider additional opportunities for incorporating storm water BMPs in the Lindau Lane Grade Separation project beyond the rain gardens within the parking lot islands north of the plaza/tunnel.

**F. Street Lighting** (Todd Halunen)

- Provided and reviewed a power point and handouts which introduced the street lighting project component. It include a summary of existing lighting within the district and 3 approaches for street lighting design within the District, as:

  A – Ped lights on Lindau Link and street lights on all other SoLo streets
  B – Mid-height lights serving both Lindau Link and SoLo streets
  C – Ped lights on Lindau Link and a mix of ped lights and street lights on all other SoLo streets

- LED light sources are to be used for all new lighting within the District.
- Fewer light poles are preferred District-wide.
- Consider median-located street lights within Lindau Link should lighting levels using pedestrian lighting in the boulevards not be sufficient.
- Increasing the height of 'pedestrian-scale' lighting to jointly light ped areas and streets is an acceptable consideration.
- Lindau Link should have unique lighting.
- Replacing existing bent straw arms and luminaires within the District with LED sources may be enough to distinguish South Loop from other streets within the city.
- The team to begin investigating lighting types with LED sources, styles and evaluate spacing and location following photometric analysis.

**G. Streetscape Design Framework (District Plan Guiding Principles)** (Todd Halunen)

- Provided and briefly reviewed a power point and handouts which establishes a draft of the Streetscape Design Framework based on the principles and objectives identified within the South Loop District Plan.

# Workshop Minutes

## Workshop #3

- This framework will be used to confirm/validate decisions in the application and selection of streetscape design elements based on 3 key goals:
- A – Walkability
- B – Sense of Place
- C – Sustainability
- Given meeting time constraints, staff was asked to review this document and provide comments back by early next week to the consultant team through Julie L.

## Decision/Direction List

| | Meeting | Date | Decision / Direction |
|---|---|---|---|
| 1 | Workshop #1 | 7/11/2012 | Draft South Loop District Plan is the guide for this project - work to the goals and objectives identified |
| 2 | Workshop #1 | 7/11/2012 | Some Bloomington policies and requirements may be 'flexible' within the South Loop District |
| 3 | Workshop #2 | 7/25/2012 | The typical Primary Arterial Roadway cross-section should provide 8' minimum sidewalks. Sidewalks and trees should be moved away from the street as much as possible. Building foundation plantings should be illustrated. |
| 4 | Workshop #2 | 7/25/2012 | The typical Local Road cross-section should be 36', which provides for on-street parking on both sides. |
| 5 | Workshop #2 | 7/25/2012 | Local Streets (Residential) do not need to be included within this study. |
| 6 | Workshop #2 | 7/25/2012 | The Plaza/Public Space Diagram and the concepts illustrated are acceptable for further design study. Advance the design considering the potential for a roundabout at Lindau Link and 28th Avenue. |
| 7 | Workshop #2 | 7/25/2012 | The general location of proposed utilities per the utility cross-section was acceptable |
| 8 | Workshop #3 | 8/8/2012 | LED light sources are to be used for all new lighting within the District. |
| 9 | Workshop #3 | 8/8/2012 | Should permeable pavement systems be incorporated, consideration by type should follow staff preference/ experiences 1-permeable pavers, 2- porous asphalt, and 3-pervious concrete. |
| 10 | Workshop #3 | 8/8/2012 | Fewer light poles are preferred District-wide. |
| 11 | Workshop #3 | 8/8/2012 | Lindau Link should have unique lighting. |

*Table A.3 Workshop #3 Decision/Direction List*

Next Workshop Meeting: Date and time to be determined. A draft master plan/design guide document is anticipated to be reviewed at this meeting.

**Workshop #4**

**Date:** September 27, 2012 (1:00 PM - 3:00 PM)

**Location:** Rehearsal Hall, Bloomington City Hall

| | | | | |
|---|---|---|---|---|
| **Attendees:** | Thomas Bowlin | Bloomington | Becky Schindler | Bloomington |
| | Julie Farnham | Bloomington | Jim Urie | Bloomington |
| | Dave Hanson | Bloomington | Tom Harrington | Kimley-Horn |
| | Larry Lee | Bloomington | Todd Halunen | Kimley-Horn |
| | Julie Long | Bloomington | Mike McGarvey | SRF |
| | Shelly Pederson | Bloomington | Barry Warner | SRF |
| | Schane Rudland | Bloomington | | |

**Meeting Summary:** (following agenda items)

**Summary/Overview of Draft Design Guide**

- Tom H. opened the discussion summarizing the goal and intent of the project was to develop a guide with enough content to give direction but not so prescriptive that it loses flexibility. Given the time it will take to fully develop the District, specifically the Lindau Link, the guide needs to allow for some interpretation as products and development trends change.
- Barry continued with the discussion starting with Chapter 4 on Streetscape Hierarchy pointing to the matrix showing the Streetscape Level of Treatment then going through the plan and section graphics describing the levels of treatment on the various road types.
- Barry talked about Chapter 5 on Sub-surface Space Allocation.
- Todd spoke about Chapter 6 Lighting Vocabulary. He spoke briefly about the overall goal of the lighting schemes and the approach using LED fixtures for all roadways and a combination of roadway and pedestrian level lights for the Lindau Link. Photometrics were run to determine the necessary spacing. Final lights and poles will need to be chosen and photometrics will need to be run in the design phase.
- Barry presented Chapter 7 Design Vocabulary talking about a vocabulary for pavements, furniture, shelters, walls, and landscaping. Pavements could include regular grey concrete scored and textured for visual interest and could even include granite accents. The general theme would be clean lines and colors that are timeless letting the architecture be responsive to variable vernacular.
- Barry talked about Chapter 8 Stormwater Provisions showing precedent imagery of various strategies many of them being local. He also showed the sections related to the project showing the different stormwater treatment opportunities and a matrix explaining the potential treatment devices that could be used.
- Tom H. presented Chapter 9 Trees and Landscaping. The general message was the design team is suggested different planting opportunities and that the tree specie options presented in the table are all time tested, good urban trees able to withstand urban environments.
- Tom H. presented Chapter 10 Wayfinding and Branding.
- Tom H. presented Chapter 11, the Public Art summary.
- Todd presented Chapter 12 the Plaza Concepts summary. He focused the presentation on the difference between the gateways and galleries and public plazas. The thought is the gateways should be less populated public spaces and the galleries and public plazas should be the places where development and urban design encourages and embraces public mingling and activities.



- Tom closed the discussion with a note that the guide has some areas that still require some work, generally the inclusion of phasing, cost and maintenance, specifically grammatical and consistency in terms, but that we'll take the comments we hear today coupled with the notes people made and are making to the plans, combine them and verify those comments that will be incorporated into the next draft. He also asked the question if the group thought we were on the right track?
- Larry Lee commented on he thought the guide looked good and that there was more information than he would have expected for this scope of work. Shelly agreed, and suggested some technical modifications are needed, including cross-section dimensions and stormwater solutions. So generally, the draft guide
- Schane asked a question on street hierarchy and whether banner design is part of scope. Julie F. questioned whether we were planning on doing banner design as part of the final design phase. Banners are not part of the initial design inclusions, but the selection of the light poles need to consider possible future banners.
- Julie F. asked wants more information upfront in the guide on the general project philosophy. Add more maps that correspond to the ideas and considerations. The language in the hierarchy and matrixes should be consistent in each category.
- Schane asked how we transition the existing streetscape with the proposed in the places they abut? There was lots of discussion on how that transition would happen. The general feeling was that the 'orange' stamped concrete would not be replicated but instead be phased out and removed. Larry commented that there may be potential funding sources to do this work.
- Barry asked the question of where does the master plan guide go for confirmation/approval? Who brings it to the decision/policy makers? Julie L. suggested that the council has opinions. The general feeling was that the plan should be presented to Council and accept this report as designed. Larry thought that staff should present the report to the Council but there were comments by Julie L. and Julie F. that more thought needed to be had regarding that direction.

**Decision/Direction List**

| | Meeting | Date | Decision / Direction |
|---|---|---|---|
| 1 | Workshop #1 | 7/11/2012 | Draft South Loop District Plan is the guide for this project - work to the goals and objectives identified |
| 2 | Workshop #1 | 7/11/2012 | Some Bloomington policies and requirements may be 'flexible' within the South Loop District |
| 3 | Workshop #2 | 7/25/2012 | The typical Primary Arterial Roadway cross-section should provide 8' minimum sidewalks. Sidewalks and trees should be moved away from the street as much as possible. Building foundation plantings should be illustrated. |
| 4 | Workshop #2 | 7/25/2012 | The typical Local Road cross-section should be 36', which provides for on-street parking on both sides. |
| 5 | Workshop #2 | 7/25/2012 | Local Streets (Residential) do not need to be included within this study. |
| 6 | Workshop #2 | 7/25/2012 | The Plaza/Public Space Diagram and the concepts illustrated are acceptable for further design study. Advance the design considering the potential for a roundabout at Lindau Link and 28th Avenue. |
| 7 | Workshop #2 | 7/25/2012 | The general location of proposed utilities per the utility cross-section was acceptable |

# Workshop Minutes

**Workshop #4**

| | | | |
|---|---|---|---|
| 8 | Workshop #3 | 8/8/2012 | LED light sources are to be used for all new lighting within the District. |
| 9 | Workshop #3 | 8/8/2012 | Should permeable pavement systems be incorporated, consideration by type should follow staff preference/ experiences 1-permeable pavers, 2- porous asphalt, and 3-pervious concrete. |
| 10 | Workshop #3 | 8/8/2012 | Fewer light poles are preferred District-wide. |
| 11 | Workshop #3 | 8/8/2012 | Lindau Link should have unique lighting. |
| 12 | Workshop #4 | 9/27/2012 | Collect all comments and incorporate those that are prudent and bring the plan closer to final. |

*Table A.4 Workshop #4 Decision/Direction List*

Next Meeting: Open House/Stakeholder Review: October 15

**Workshop #1**

**Date:** July 11, 2012

**Location:** Rehearsal Hall, Bloomington City Hall

**Describe as concisely as possible your vision of successful streetscape implementation for the South Loop area.**

- I believe a successful streetscape will be esthetically attractive, pedestrian friendly, easy to navigate and include such attributes as public art, ease of parking (yet unobtrusive parking), attractive landscaping, adequate and attractive lighting, and clear, defined, easy to read signage.
- Streetscape components implemented are: aesthetically pleasing, generate street level activity, avoid cluttered appearance, have reasonable maintenance intervals and useful lives, and have a dedicated/separate funding source for maintenance and replacement.
- I hope the new street will attract private investment. I hope it's a place that – because it's attractive, comfortable, and easy to get around – becomes a destination.
- "Successful implementation" will require good maintenance and durability. So design and materials must be selected with that in mind. It also has to exude a timeless, classic quality, especially because there isn't much there to build off. That's a blessing and a curse!
- Design, construct and maintain a district that ties together the existing neighborhood and encourages future development. (Improves with age)
- A palette of approaches/treatments that can be applied to a range of ROW situations set, in a very loose fashion, an identity for the area. In addition, the plan should identify a few key areas/opportunities to develop significant urban spaces – be they public or private. It should encourage people to walk, sit and use the ROWs. Need to allow it to develop over many years and to change with time.
- My vision has wide sidewalks with colorful flowers and either has a touch of whimsy or educational elements. A successful streetscape is one that is well maintained and does not look dated in five years.
- My definition of whimsy is something unexpected. For instance, at Target Plaza as part of a marketing campaign there is hopscotch in a few locations. It is fun to watch both kids and adults participate in the unexpected.
- I would like a photo op piece of art. Not one that people walk by, but rather one that can be climbed on/sat on or otherwise interacted with that provides an opportunity for a picture. People currently take pictures at the MOA sign and I would like them to have the same opportunity in a plaza or somewhere along the streetscape.
- Durable and easily maintainable plants and streetscape elements. Plants that are salt and drought tolerant. Lighting, benches etc that are good looking, with a reasonable O & M cost and hourly needs. Plowability of the pedestrian areas, hand shoveling should be minimal. Public Art that is durable and will stand up to the outdoor environment with little or no maintenance. It should look inviting to walk through or sit on a bench. It should be integrated into the stormwater requirements.
- Modern, sustainable elements are selected both for the Lindau corridor for construction in 2013 and 2014 that tie together the vision of the SLDP and the existing infrastructure. These elements can be implemented in other areas of SoLo as the area densifies.
- A successful streetscape will create a distinctive sense of place—in other words, make the neighborhood look and feel unique relative to other areas in Bloomington and other areas throughout the Twin Cities. It will evoke more of an urban feel than a stereotypically suburban one. A successful streetscape will strike the right balance between diversity and consistency of aesthetics throughout the South Loop. It will incorporate a lot of greenery, preferably of a native variety that requires few inputs and interventions.
- To become a place where people are attracted to have coffee, stroll, buy lunch or meet a friend or colleague.

**What precedent or comparative projects best portray your vision for South Loop streetscape?**

Local Minneapolis/St. Paul metro area

- Excelsior & Grand in St. Louis Park
- Shops at West End in St. Louis Park
- Como Park Neighborhood's "garden district" in St. Paul.
- Rice Park area in downtown St.Paul.
- 50th & France
- Centennial Lakes
- Burnsville's Heart of the City Park – many uses draw a variety of folks – especially the water features
- Plaza--Lake Street and the River Road in front of Dunn Bros. (but I think the art for sitting on is too high and people's feet dangle which is uncomfortable.)
- Uptown
- Downtown
- Grand Avenue
- Selby Avenue between Dale and Western;
- Linden Hills
- Seward
- Northeast
- Eat Street
- Nicollet Mall
- Also the downtowns of Red Wing, Northfield, and Duluth

***(Additional Comments).*** *Communities of similar scale and demographics. Is density suggested by the master plan realistic? Need for convenience/retail in the district (Walgreens, mini- Target, etc. Respond to limitations of airport zone. Balance of vision vs. market support for proposed development. Truly urban spaces evolve over along period of time and have developed an organic diversity of uses, building types, etc. Difficult to to reproduce this diversity in a suburban site that develops over a much shorter time frame. Scale is a key element of the master plan. Awareness of creating a pedestrian scale should influence landscaping, lighting, building height, types of development, etc.*

*Unique aspect of Lindau link is that it is not the primary thoroughfare for the district. Allows for the street itself to be used for community events*

National

- Milwaukee 3rd Ward
- Public pianos in Denver
- Madison Capital Square Updates – I like the public art incorporated into the water features at various intersections.

# Stakeholder Worksheet

## Workshop #1

- South waterfront in Portland
- Bryant Park Area, NYC
- Wicker Park in Chicago
- Crystal City in Arlington, VA
- Seattle: Capitol Hill neighborhood
- Madison, WI: State Street area
- Bend, OR
- Flagstaff, AZ
- Charleston, SC

International

- Promenade in Puerto Vallarta – A stage that can be programmed but also used informally. It is pleasant to sit and watch the impromptu "performances"
- Pick any European city with walkable streets
- Town squares in many European cities with populations of approximately 100,000 people
- Montreal

***(Additional Comments)*** *Just keep in mind when comparing to other places that they should be snow locations.*

**What is the most significant issue to be addressed by the streetscape master plan?**

- Incorporating locally created public art.
- Transforming the district's character with amenities that can be sustained over time in a fiscally feasible manner.
- Creating a comfortable "urban neighborhood commercial"/pedestrian scale (minimizing the auto-scale that dominates other large roads in South Loop). Similarly, creating a comfortable and attractive pedestrian environment (both day/night) – a place with good vibe and some ambience.
- Durable materials installed properly will help ensure the long term sustainability of this project.
- Flexible palette for all streets
- Identification of specific opportunities for place making
- Allow a fairly wide range of styles – we do now want it to look like "Disneyland". It should have some variety and ability to develop its own character with a few unifying elements – like signage or maybe a certain streetlight
- To be consistent and cohesive throughout the district
- Sense of place, keeping the project on budget and affordable to maintain in the final inplace product.
- Streetscape items,
- Aesthetic stormwater treatment infrastructure
- Flexible utility corridor
- Harmonizing diverse uses: for example, making the Mall of America and residential uses feel like they belong in the same neighborhood; and
- Mitigating/minimizing existing uses and structures that are inherently unattractive and/or generic.
- In my experience, great neighborhoods and cities evolve over time and feature lots of diversity in the architecture and streetscape. The challenge for the South Loop plan will be to balance unity and diversity so that the result doesn't feel like a cookie cutter replica of so many other suburban neighborhoods.
- Integration of multiple transit options and a variety of public uses
- Select and build the elements that form the "bones or skeleton" over which we can build a complete, "gussied-up" street as development occurs.

**What is the greatest opportunity or benefit to be realized by the streetscape's implementation?**

- Creating a space in Bloomington which builds on the sense of "community" and a source of proud for its residents as well as creating a destination for the larger public (statewide and beyond) that goes beyond the attraction of the Mall of America.
- Ability to start from clean slate due to current available space in District (not fully developed).
- It will set the stage for the character (scale, quality, aesthetic) we want to create throughout the district. Hopefully it will also attract private investment in the area.
- The creation of a district that is a draw for residents business and visitors alike.
- It will make the district much more pedestrian friendly and enjoyable to visit. It should tie all the various land uses – old/new, industrial/commercial/residential, junky/high quality together. We should allow a mechanism for adjoining property owners to "add" to the streetscape to meet their needs – like a sidewalk café and perhaps some overhead shade devices or other amenities not typically found. We may even want to suggest some of these that could be installed by others.
- We should consider "temporary" uses that take advantage of underused areas that may not develop for a period of time such as a remnant parcel that could be used as a market or garden until it is developed.
- To get people to walk and gather.
- Aesthetic stormwater treatment infrastructure
- See my answer to question one. If I had to pick one opportunity from that answer, it would be the opportunity to create a neighborhood that looks and feels different from any other place in the Twin Cities.
- Building a unique sense of community while also attracting visitors…
- Help people (especially tenants and developers) see a vision for what this 6-block stretch could become and how being a port of that future would be great for their business.

**What current or proposed City of Bloomington policies or protocol are relevant to the streetscape's design or implementation? Examples may include parking lot screening requirements, street tree placement or species requirements, building setbacks, space provisions for utilities (public and private), lighting level, maintenance procedures and street design criteria. If possible, please provide electronic links to formal policies.**

- Clear view triangle requirements (City Code 17.31 and 19.126.6)
- Sidewalk width requirements (City Code 21.301.04 d(1))
- Courtesy Bench and Newspaper Rack requirements and licensing (City Code 14.147 through 14.158)
- Strategy 3.2, Section 4 Transportation p. 4.56 of Bloomington Comprehensive Plan
- Proposed City Code Chpt 8 Revisions
- Standards for installation/placement of underground private utilities in public right of way (City Code 17.70b)

- Bloomington Engineering Standard Bicycle Rack (proposed/in progress)
- Bloomington Standard Specifications for Street Lighting (Public Roadways)
- Bloomington Standard Detail for location of lighting and interconnect conduit
- Bloomington's Street Light Maintenance Agreements with Xcel Energy
- MnDOT Roadway Lighting Design Manual http://www.dot.state.mn.us/trafficeng/lighting/2010_Roadway%20Lighting_Design_Manual2.pdf

***(Additional Comments).*** *City intends to create design guidelines for South Loop District. Some are described in the Signature Elements of the SLDP. We have a rough draft we can share.*

- City has fairly new standards regarding (City Code available on City web):

  ***(Additional Comments).*** *Commerical development standards (Sec. 21.201.02) – Note – new zoning will be applied to many areas of SLD that aren't included in this table but C-4 and C-5 are examples of our intent to allow more "urban" development. CX-2 is zoning for MOA properties.*

  *Lighting (Sec. 21.301.07)*

  *Parking lot design and screening (Sec. 21.301.06)*

- City adopted a Complete Street Program (attached)
- Bloomington Central Station has master urban design guidelines – we can get you a copy (might be on city web – check key word "Bloomington Central Station")
- Select plant material that is tolerant of the conditions that will be present. Final design needs to consider snow removal with modern municipal equipment.
- The design should be practical and be responsive to the need to maintain all infrastructure in the area – utilities, streets and streetscape itself. It should also anticipate the need for others to use the ROW like Xcel, Centerpoint, Qwest and others. We should try to make the bulk of the streetscape fairly simple and concentrate our resources on a few important areas.
- Maintenance – only can maintain what we can afford. Although there is some money budgeted for maintenance in Fund 435, any "extras" will need to be provided somehow. The design of the streetscape needs to consider the costs of maintenance.
- Street Trees – typically are prohibited in the boulevard. Many underground utilities including the potential for district energy, so if trees are to be planted in the ROW/blvd, then the species should be well thought out so that roots do not interfere with underground utilities and that they grow well. It would also be nice if the variety selected could handle the harsh environment so they weren't being replaced all the time and actually grew to provide a nice canopy.
- Phasing – short term, mid-term, and long term. Be aware of which streets will be under construction and the timing of that construction. Likely will not implement a streetscape plan on a street that is not/will not be reconstructed (until such time that it is).
- 24th Avenue (CSAH 1) will need to be in agreement with Hennepin County's Streetscape document (see attached)
- South Loop District Plan
- Frankly, I think we're mostly inventing new here.

**What specific goals, objectives, criteria or descriptions exist in prior City/South Loop plans (other than the South Look District Plan) that are relevant to the streetscape master plan and its implementation?**

- MOA (Vehicular) Wayfinding Concept of Operations Study (February 1, 2007)
- *Standards for state-funded outdoor lighting fixtures* **(***Mn State Statute 16B.328 subdivision 3* https://www.revisor.mn.gov/statutes/?id=16B.328 *)*
- Strategy 3.2 and 4.2, p. 4.56, Section 4 Transportation of Bloomington Comprehensive Plan
- Strategy 3.2

  Manage the public rights-of-way to minimize risk from obstacles along transportation facilities.
  Consider requiring local service electric distribution and communication cables to be placed underground whenever the adjacent arterial or collector street is widened requiring utility pole relocation.
  Provide breakaway signs and poles meeting state and federal guidance.
  Minimize negative safety impacts from private structures placed in the right-of-way.
  Minimize the number of unshielded obstacles within 20 feet of a roadway.
  Require structure and other obstruction setbacks as necessary to maintain safety and visibility.

- Strategy 4.2

  Maintain high quality transportation infrastructure.
  Manage City roadway rights-of-way to require private utilities to be installed in a manner that does not hinder improvements to the adjacent roadway.
  Inventory and rate condition of all transportation infrastructure (including traffic signals, street lights, signs, sidewalk/bikeways and streetscaping).
  Develop target conditions for assets.
  Develop maintenance plans and funding system to achieve targets.
  Monitor asset conditions.
  Coordinate the timing of signalized intersections controlled by separate jurisdictions.

- The Alternative Transportation Plan identifies locations and design criteria for various bike/ped facilities.
- The Bluff Protection Plan (we can give you a copy) may provide some information on the native landscape materials – possibly use to establish plant palette.
- Others are much more familiar with the details of these plans than I am!
- AUAR, Comprehensive Stormwater Plan,
- Bloomington Central Station and Central Station park…

**Please comment on any topic or issue that you feel is significant to the project's ultimate success.**

- Obviously BTAC is very interested in the inclusion of public art in its many forms (permanent sculpture, temporary art, interactive art activities, and performing art spaces) as a way to achieve placemaking and to create a stronger, more vibrant community.
- Stakeholders must be comfortable with the final streetscape amenities/components selected for their particular department/division.
- A major challenge will be trying to determine the character and design palette given very little existing development to take cues from. So it will be important to create a "timeless" or universal style that can respond to unknown styles (form, height, function, etc) of future development.
- Good soils are important to the long term health of plants and trees, quality soil structure and permeable pavement should be used as much as practical.

# Stakeholder Worksheet

## Workshop #1

- Be very flexible! Take advantages of opportunities, both temporary and permanent, that exist in the district. Allow the district to inform the design as much as trying to force a look on the district – i.e. old world charm. Take advantage of the new sport of plane watching!
- Implementation and Maintenance – keep costs and budgets in mind for both.
- Examples need to come from places it snows. Most often when this type of activity is undertaken the examples come from Florida or Texas where snow removal is not an issue and they aren't realistic. I would prefer not to see examples from Celebration, FL. There have to be good examples from up north, Chicago, Milwaukee, Boston, Calgary etc.
- Keep the team on schedule!
- Help us make decisive decisions
- Buy-in from area businesses, residents and city leadership is crucial…
- Public plazas that are specifically designed to attract people—moveable chairs, tables, water features, greenery, art, shelter and sun traps, other people to watch.

**Briefly describe the intended kind of public activity that you believe the streetscape and plazas will provide, such as festivals, sidewalk activity, art fairs and noon strolling.**

- Family/child focused events and activities.
- Community garden/landscaping opportunities and/or tours.
- Locations for access to/from non-motorized transportation (bicycle share) *(Review Alternative Transportation Plan) Consider the ability to actively program the public spaces. This was attempted at Bloomington Central Station with limited success. Farmers market is a good an example of a successful effort in the city.*
- Potentially all of the above. Eventually the street will extend (maybe only as ped/bike way) to the existing Bloomington Central Park (Oslund design) that could function as a great outdoor gathering space. Lindau could be the spine to connect the park and MOA – could make it setting for a variety of activities.
- At a minimum, I hope it attracts pedestrian activity.
- Maybe, if noise isn't too bad – as a place to hang outside. BTW: noise is a concern and mitigation opportunities will play an important role in the streetscape livability.
- Commuters using light rail, Shopping/ dining by residents and visitors to the district.
- Small pocket parks that attract and encourage activity. ***(Additional Comments).*** *Small park spaces adjacent commercial businesses (restaurant, art galleries, and retail) City has draft guidelines for SoLo.*
- *Parking spaces as open space.*
- *Keys to creating pedestrian scale…*
  *Trees!*
  *Character of businesses in the corridor*
  *Critical mass of people*
  *On-street parking*
  *Whimsy*
- Maybe even a chance for some advertising or other commercial activity.
- Walking (x2); Walking to get somewhere; Noon stroll; Office tenants and guests going to lunch; noon strolling/gathering; maybe just to stroll between destinations.
- The Lunch crowd; lunch outdoors; Eating brown bag lunch in the plaza
- Weekday farmer's market; farmers' markets as along Nicollet Mall (x2)
- Sidewalk café space (x4)
- View Public Art, opportunity for public art, public art tours, art and nature tours, interactive art opportunities
- MOA guests who want some air
- ***(Additional Comments).*** *Race for the Cure (close Lindau temporarily); MOA sponsors a number of events – like Race for the Cure. I envision those utilizing Lindau as a festive end stretch (like Hennepin was for the City of Lake Loppet); special event gathering places such as walk/run events; occasionally close the street for special events, such as the Komen Race for the Cure.*
- *Performances (e.g., musical, theatrical, dance)—both formal and informal (e.g., solo street musicians); musical and performance art opportunities; Informal entertainment such as a street musician, an artist, etc.*
- *Should have at least one (maybe Bloomington Central Station already does it) a place to program larger community gatherings like art fair, concerts, political events etc.*
- Sidewalk chalk art (x2)
- Street food vendors; street vendors; weekday food trucks (x2)
- Walking with dogs
- Skateboarding in designated areas
- Snow/ice carving contests
- 3-season street life. Imagine partially sheltered spaces (could be private) where people could have a coffee from March through mid-November.

**Technical Subgroup Meeting (Roadway Hierarchy, Cross - Section, ROW and Plaza Area)**

**Date:** July 18, 2012 (8:30 AM - 10:30AM)

**Location:** South Conference Room, Bloomington Public Works

| | | | | |
|---|---|---|---|---|
| **Attendees:** | Thomas Bowlin | Bloomington | Schane Rudland | Bloomington |
| | Julie Farnham | Bloomington | Jim Urie | Bloomington |
| | Dave Hanson | Bloomington | Tom Harrington | Kimley-Horn |
| | Larry Lee | Bloomington | Todd Halunen | Kimley-Horn (author) |
| | Julie Long | Bloomington | Mike McGarvey | SRF |
| | Shelly Pederson | Bloomington | Barry Warner | SRF |

**Agenda**

**Corridor Hierarchy**

- Arterial
- Sub-Arterial
- City Commercial
- City Residential
- Special (Lindau Link)

**Roadway Cross-Sections**

- ROW width
- Sidewalk width
- Building setback
- On-street parking
- Median
- Bicycle facilities on-sidewalk on on-street
- Element line (furniture zone)
- Transit stops

**Utility Cross-Section**

- Public utilities
- Private utilities
- Policies/design standards

**Stormwater**

- Sidewalk/urban design areas to accommodate full ROW run-off
- Planning/design to date

**Plaza Space Area and Location**

- Definition of plaza
- Plaza locations set
- Space allocation/function

**Other Issues**

**Summary**

# Technical Subgroup Meeting Agenda

**Technical Subgroup Meeting (Street Lighting and Electrical)**

**Date:** August 1, 2012 (10:00 AM - 12:00 PM)

**Location:** South Conference Room, Bloomington Public Works

| | | |
|---|---|---|
| **Attendees:** | Thomas Bowlin | Bloomington |
| | Julie Farnham | Bloomington |
| | Dave Hanson | Bloomington |
| | Larry Lee | Bloomington |
| | Julie Long | Bloomington |
| | Shelly Pederson | Bloomington |
| | Schane Rudland | Bloomington |
| | Tom Harrington | Kimley-Horn |
| | Todd Halunen | Kimley-Horn (author) |
| | Barry Warner | SRF |

**Agenda**

**RFP Project Requirements**

**District Plan Guidance**

**Staff Worksheet Response Comments**

**Lighting Standards/Criteria/Requirements**

- Mn/DOT Roadway Lighting Design Manual
- City Exterior Lighting Standards
- City Code: *Section 21.301.07*
- General Guidance – Dark Sky (Model Lighting Ordinance)
- MAC Runway Approach Zone Limitations
- Others

**Existing South Loop Lighting**

**South Loop Streetscape Lighting Approaches (Street Lighting)**

- Standard Street Lighting Units
- Combination Street Lighting/Pedestrian Lighting Units
- Separate Street Lighting and Pedestrian Lighting Units

**Special Lighting**

- Bollards
- Crosswalk Lighting
- Provisions for Events/Vendors
- Provisions for Seasonal Lighting
- Provisions for Signage, Public Art and Effects

**Maintenance Issues**

**Other Issues**

**Technical Subgroup Meeting (Plaza/Open Space, Public Art and Wayfinding)**

**Date:** August 22, 2012 (8:00 AM - 10:00 AM)

**Location:** South Conference Room, Bloomington Public Works

| | | |
|---|---|---|
| **Attendees:** | Thomas Bowlin | Bloomington |
| | Julie Farnham | Bloomington |
| | Larry Lee | Bloomington |
| | Julie Long | Bloomington |
| | Shelly Pederson | Bloomington |
| | Schane Rudland | Bloomington |
| | Jim Urie | Bloomington |
| | Tom Harrington | Kimley-Horn |
| | Barry Warner | SRF |

**Agenda**

**Introductions**

**Summary of Work to Date / Reviewed in Workshops**

- Plaza Concept Plan
- Public Art Categories
- Wayfinding Concepts
- Design Framework / District Plan Guidance

**Wayfinding Hierarchy and Concepts Key**

- Wayfinding decision points, arrival and departure
- Hierarchy of wayfinding devices
- Branding the district

**Plaza/Open Space Concept Advancement**

- Activation and programming discussion of space and functions
- Will be further reviewed in a 8/29 subgroup meeting on activities

**Public Art Categories and Integration Opportunities**

- Public art opportunities overlay (example-Lindau Link)
- Gateways, streetscape ensemble, and gathering spaces
- Process of how to identify artists

**Level of Improvements, Expectations, Construction Costs, and Maintenance**

- Discussion, and to be further reviewed in 10:00 to 12:00 meeting today

**Other Issues**

**Technical Subgroup Meeting (Level of Improvements, Cost and Maintenance)**

**Date:** August 22, 2012 (10:00 AM - 12:00 PM)

**Location:** South Conference Room, Bloomington Public Works

| | | |
|---|---|---|
| **Attendees:** | Thomas Bowlin | Bloomington |
| | Julie Farnham | Bloomington |
| | Dave Hanson | Bloomington |
| | Julie Long | Bloomington |
| | Shelly Pederson | Bloomington |
| | Schane Rudland | Bloomington |
| | Tom Harrington | Kimley-Horn |
| | Mike McGarvey | SRF |

**Agenda**

**Introductions**

**Summary of Work to Date / Reviewed in Workshops**

- Review Plaza/Open Space, Public Art and Wayfinding Concepts from previous meeting
- Expectations for materials and design expressed at Workshops

**Projected Costs Summary**

**Level of Improvements Menu**

- Streetscape Component Hierarchy
- Capitol cost hierarchy

**Level of Improvements, Construction Costs, and Maintenance**

- Maintenance Practices Which Influence Material and Design
- Anticipated Maintenance/Staff Capabilities
- Additional/Special Equipment Required

**Maintenance District**

**Other Issues**

**Technical Subgroup Meeting (Public Space programming)**

**Date:** August 29, 2012 (9:30 AM - 11:30 AM)

**Location:** South Conference Room, Bloomington Public Works

| | | |
|---|---|---|
| **Attendees:** | Thomas Bowlin | Bloomington |
| | Julie Farnham | Bloomington |
| | Dave Hanson | Bloomington |
| | Larry Lee | Bloomington |
| | Julie Long | Bloomington |
| | Shelly Pederson | Bloomington |
| | Schane Rudland | Bloomington |
| | Becky Schindler | Bloomington |
| | Jim Urie | Bloomington |
| | Tom Harrington | Kimley-Horn |
| | Barry Warner | SRF |

**Agenda**

**Introductions**

**District Plan Open Space/Plaza Identification**

**Streetscape Master Plan Plaza Concept – variable opportunities identified**

- District Gateway
- Lindau Gateway
- 28th Avenue Gateway (Roundabout)
- 28th Avenue Park
- Galleries
- Lindau Link (street)

**Discuss Potential Activities/Functions**

**Identify Improvements Which Help Guide Design**

- Spaces/Area
- Pavements/Curbs/Access
- Lighting and Electrical Provisions
- Street Furniture
- Maintenance
- Landscaping
- Wayfinding
- Public Art

**Other Issues/Discussion**

# Technical Subgroup Meeting Agenda

**Technical Subgroup Meeting (Wayfinding)**

**Date:** September 6, 2012 (1:00 PM - 3:00 PM)

**Location:** South Conference Room, Bloomington Public Works

| | | |
|---|---|---|
| **Attendees:** | Thomas Bowlin | Bloomington |
| | Julie Farnham | Bloomington |
| | Larry Lee | Bloomington |
| | Julie Long | Bloomington |
| | Shelly Pederson | Bloomington |
| | Schane Rudland | Bloomington |
| | Tom Harrington | Kimley-Horn |
| | Mike McGarvey | SRF |

**Agenda**

**Purpose of the Meeting**

**Summary of Previous Review – 8/22/12 Meeting**

**Coordination with SoLo Wayfinding Con-Ops Project**

**Wayfinding Hierarchy and Concepts**

- Wayfinding decision points, arrival and departure
- Integrate wayfinding with South Loop dynamic signage
- Hierarchy and placement – review of locations by function
- Branding the district. Formal and abstract graphic applications
- Framing the steps needed to implement the wayfinding program
- Any unforseen opportunities or conflicts regarding placement

**Other Issues**

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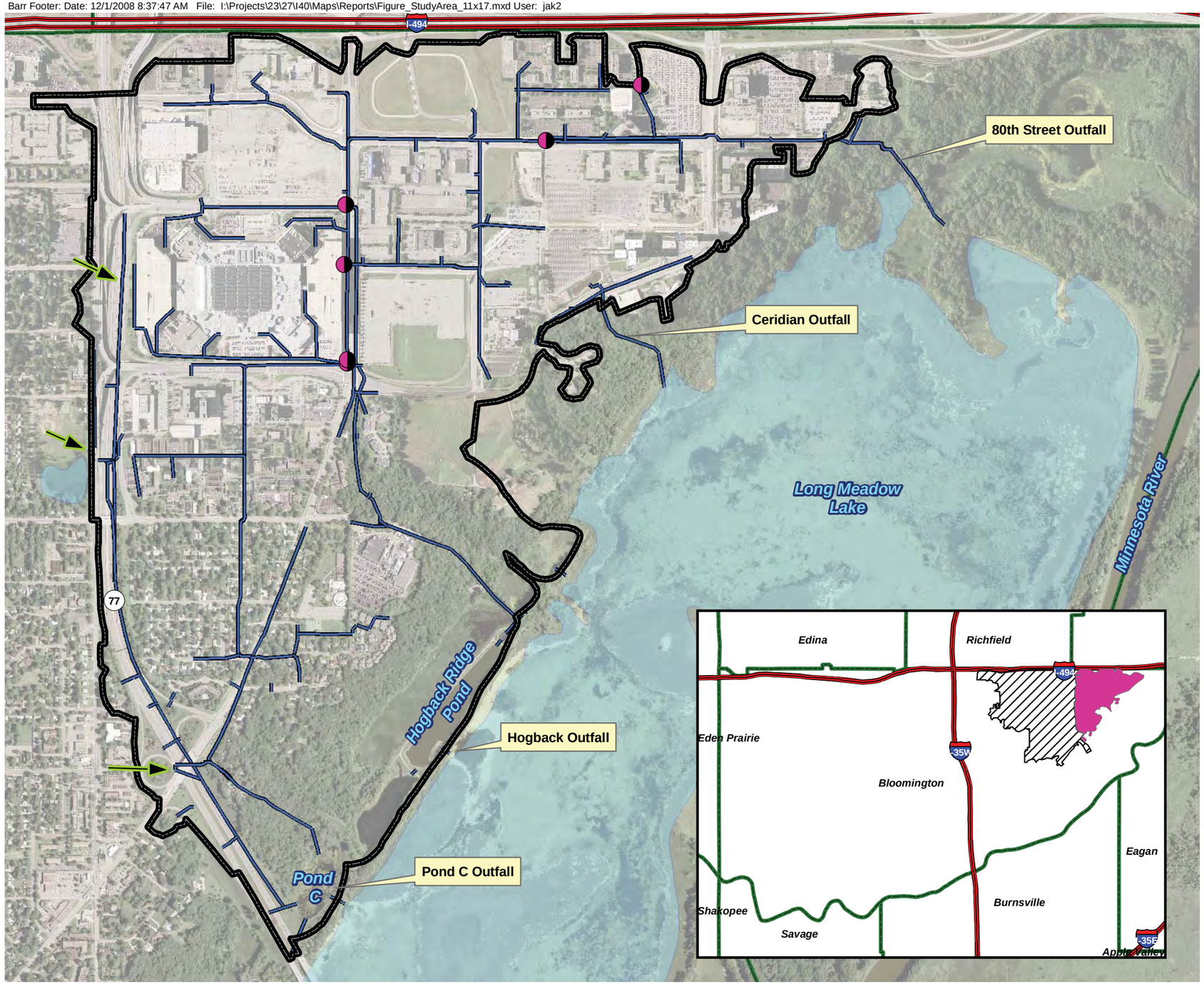


Flow Redirection Junction

Smith/Wright Inflow Locations

Airport South Drainage District

Modeled Storm Sewer

Municipal Boundary

Airport South Drainage District

Smith Pond Drainage District

Interstate Hwy

N

Feet

1,000 0 1,000

Study Area

Airport South Drainage District
City of Bloomington, Minnesota

*Figure A.1 Study Area, Airport South Drainage District, City of Bloomington, Minnesota*

## Airport South Drainage District

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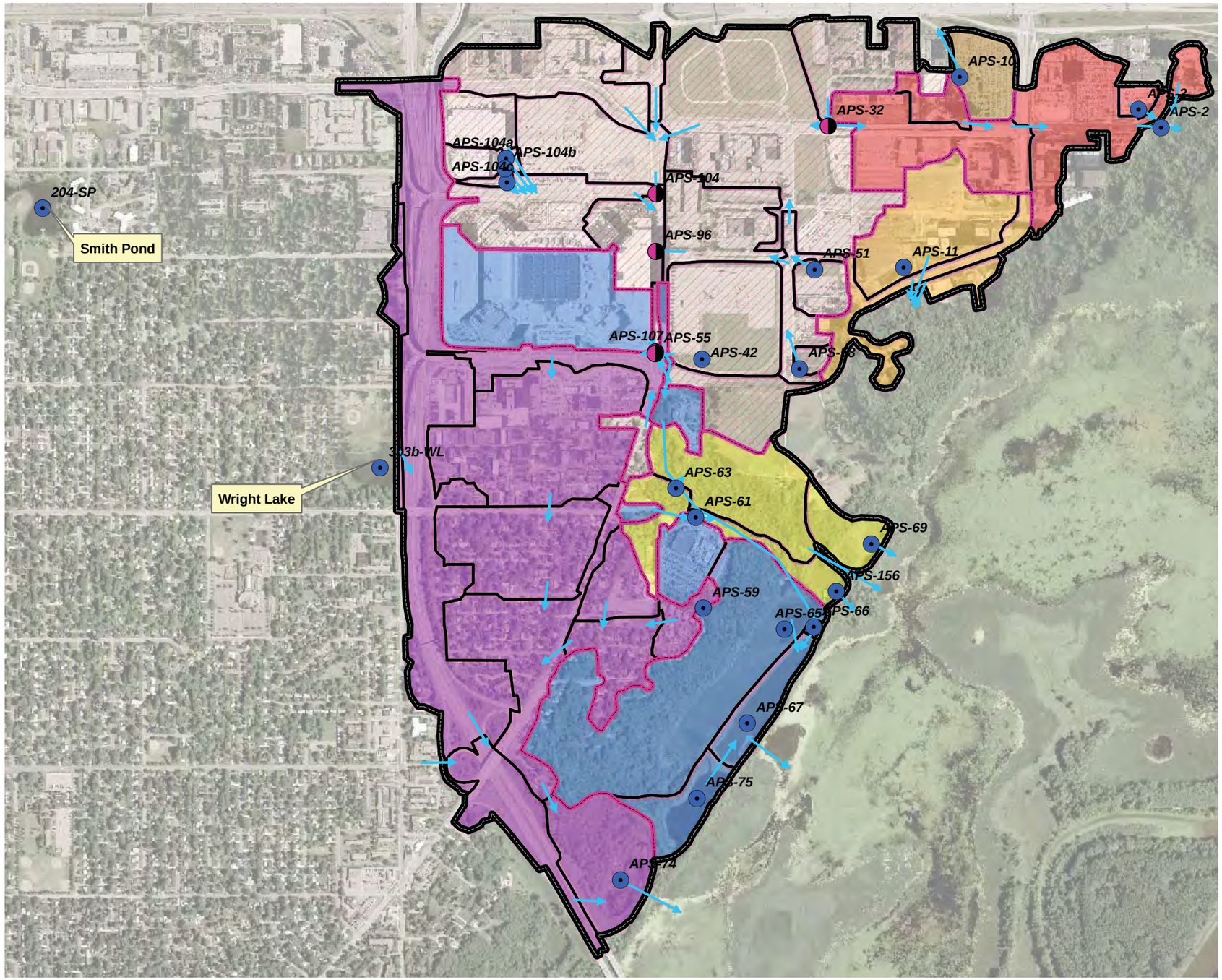


Water Quality Treatment Device (Ponds, Infiltration Basins, Wetlands, & Underground Treatment Structures)

Flow Splitter

Flow Direction

Airport South Drainage District Boundary

P8 Drainage Basins

**P8 Drainage Region-1**

Split Flows

Pond C Outfall

Hogback Outfall

I-494 Outfall

USFWS Outfalls

Ceridian Outfall

80th Street Outfall

1 - P8 Drainage Regions are organized generally by outfall.

N

Feet
1,000 0 1,000

P8 Drainage Patterns

Airport South Drainage District
City of Bloomington, Minnesota

*Figure A.2 P8 Drainage Patterns, Airport South Drainage District, City of Bloomington, Minnesota*

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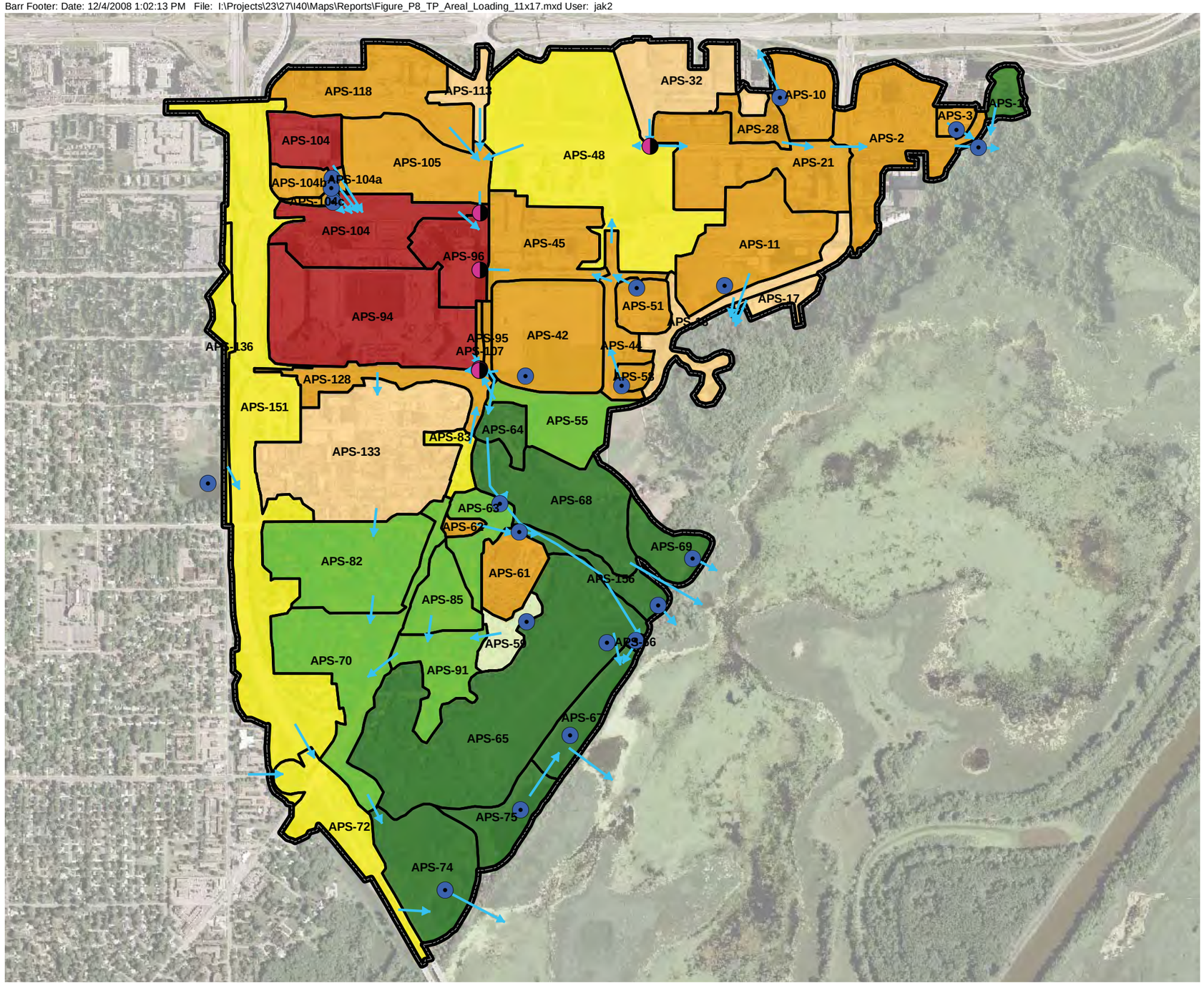


Water Quality Treatment Device (Ponds, Infiltration Basins, Wetlands, & Underground Treament Structures)

Flow Splitter

Flow Direction

Airport South Drainage District Boundary

P8 Drainage Basins

**Annual Areal TP Loading (lbs/acre/year)**

- 0.0 - 0.25
- 0.25 - 0.5
- 0.5 - 0.75
- 0.75 - 1.0
- 1.0 - 1.25
- 1.25 - 1.50
- 1.50 - 1.75
- 1.75 - 2.0

N

Feet

1,000 0 1,000

Annual Areal Total Phosphorus Loading

Airport South Drainage District
City of Bloomington, Minnesota

*Figure A.3 Annual Areal Total Phosphorous Loading, Airport South Drainage District, City of Bloomington, Minnesota*

# Landscaping

**Trees in Right-of-way or Street Easements Memo**

**Date:** November 8, 2012

**To:** South Loop Streetscape Project File

**From:** Julie M. Long, PE, City of Bloomington

Typical performance standards like MnDOT design manuals or AASHTO do not provide clear guidance with respect to trees or other obstacles within the right-of-way at speeds less than 40 MPH nor do they require guardrail or other protection. For instance according to the *MnDOT Road Design Manual*, Section 10.7.01.02 "Guard rail is generally not required where speeds are less than 40 mph. Engineering judgment must be exercised in the application of this guideline with regard to special hazardous locations in these areas." Therefore, City staff including Shelly Pederson, City Engineer, Kirk Roberts, Traffic Engineer, Tom Bowlin, Civil Engineer-Traffic, Schane Rudlang, Port Authority Director and myself met to discuss what was the appropriate engineering guidance for tree placement within the South Loop District.

In general the speed limits within the South Loop District are 35 mph or less (24th Avenue/CSAH1 is the exception at 40 mph). It is possible for motorist to speed, but given the traffic, short spacing between signals and the LRT track crossings within the district it is not anticipated that most motorists will achieve speeds significantly above the posted speed with the exception of the transition areas from the surrounding freeway system. In these areas, it is anticipated that motorist having left a freeway environment may be going faster than the posted speed limit and with signal coordination could maintain the excess speed for greater than desired distances.

Given this situation, different guidelines will be used for permitting trees within the right-of-way or street easements—one for the roadway adjacent to a freeway exit (I-494 or TH 77) to the first signal system, one for trees planted along Hennepin County right-of-way and finally a different standard for elsewhere in the district.

MnDOT does recommend that no unnecessary obstacles be placed within 12' of the curb for arterial or collector type roads. This translates to in the South Loop district that no trees will be planted within 12' of the curb along the following road segments:

- 24th Avenue from I-494 to American Blvd
- 34th Avenue from I-494 to American Blvd
- Lindau Lane from TH77 to 20th Avenue/IKEA Way
- Killebrew Drive from TH 77 to 20th Avenue

Trees planted 12' back of the curb in the area would help provide a transition into a slower environment.

Any tree placement along 24th Avenue which is also known as CSAH 1 will need to meet Hennepin County Streetscape Guidelines or the City could pursue an agreement with Hennepin County with regards to assumption of liability for the trees planted closer than the guide would permit. Per the guidelines trees may not be planted within the Operational Clear Zone which for CSAH 1 based on a speed limit of 40 mph means trees would need to be set back 10' from the curb. Hennepin County would allow other planting within the 10' Operational Clear Zone provided that the sight distance was adequately provided and that the mature height of other plants/shrubs could be no higher than 2' tall. The City would also need to take on all responsibility for replacement, trimming etc as is typical with landscaping within the County right-of-way. Rock mulch or coniferous shrubs would not be permitted. The landscape plan would need to be signed off on by the City Engineer.

Trees elsewhere in the district could be planted closer to the curb but would need to meet the 2' clear zone requirement from curb and gutter and any sidewalks or trails that would be designated for bicycle use. This would mean that trees could be planted within the typical 6' wide boulevard area that is proposed for the South Loop District. Tree placement will need to be aware of utility conflicts and not obstruct the sight lines for regulatory traffic signs or dynamic message wayfinding signs. In general, this means that trees may be planted within the right-of-way for roads with approximately 12,000 ADT and speed limits not greater than 35 mph.