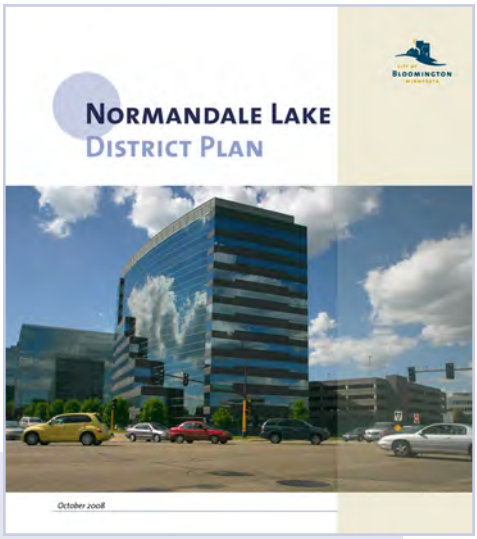
City of Bloomington, Minnesota
Normandale Lake District Plan

The Bloomington City Council adopted and placed this *District Plan* into effect on May 19, 2008, through Resolution 2008-50. The Metropolitan Council adopted its review record of the plan on August 13, 2008, (File # 18103-21).

Note that comprehensive plans are amended from time to time. The City maintains an up-to-date version of its *Comprehensive Plan* on its website: www.ci.bloomington.mn.us. A hard copy of the latest version is available at the Planning Division, Bloomington Civic Plaza, 1800 West Old Shakopee Road, Bloomington MN 55431-3027, PH 952-563-8920.



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CITY OF
BLOOMINGTON
MINNESOTA

Normandale Lake District Plan

May 19, 2008

Table of Contents

List of Figures

List of Tables

Section 1

Introduction

The Normandale Lake District Plan (NLDP) is one part of the City's *Imagine Bloomington 2025 Strategic Plan* and will be incorporated in the City's *Comprehensive Plan*. The *Imagine Bloomington 2025 Plan*'s unifying theme is "Bloomington: The Complete City."

The Normandale Lake District is a highly attractive area that, with some finishing touches, will be recognized as a distinctive destination and gateway to Bloomington. For some it will be a great place to call home. For others, the area will provide a good job and a transit-oriented work location. For the traveler, it will be a favorite place to stay while visiting Bloomington. For walkers, runners and cyclists, the District will be a four-season place to enjoy the contrast between nature and the city.

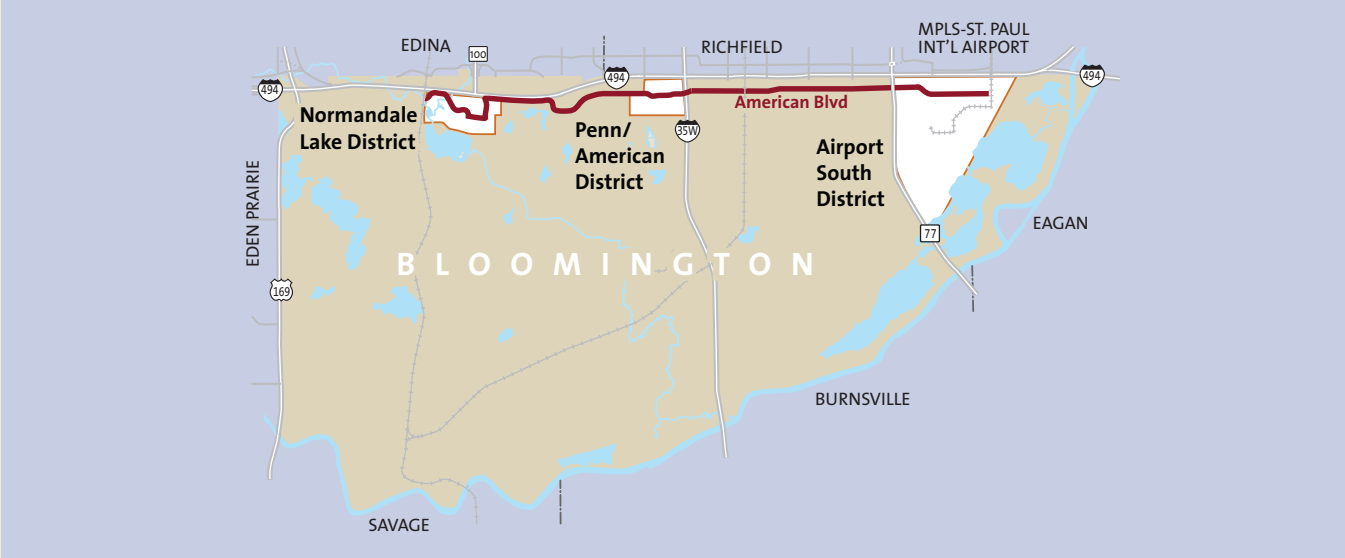
- *Complete* conveys the idea of keeping what Bloomington's residents and property owners already like (single-family neighborhoods, open space and public safety), while at the same time making continuous improvements to become the consummate city.

- *Complete* plays on two distinct emotions – pride of place (everything is here that we need) and choice (we can choose the housing type and neighborhood amenities we prefer), while making room for diversity of land uses, incomes and residents.

Bloomington is becoming more urban, a more important, diverse and interesting place. The *Imagine Bloomington 2025* surveys found a significant number of residents who said they would like to see more compact development – with good jobs, unique restaurants and public transit. They want traditional suburbia as well: single-family housing, backyards and open space. But they're open to other land use and transportation choices, as long as they're logically placed and part of a larger vision.

The Normandale Lake District is a distinctive destination and gateway to Bloomington, a four-season place to enjoy the contrast between nature and city.

Figure 1.1 District Plans along I-494 Corridor



Bloomington's larger vision locates higher density, transit-oriented uses and regional shopping destinations along I-494 and the American Boulevard corridor. There are three distinct districts along American Boulevard; Normandale Lake is the western-most district. The Normandale Lake District is already established as the metropolitan area's preeminent suburban office location and as a park reserve of regional significance. *See **Figure 1.1**, above.* It contains about 15 percent of Bloomington's future commercial and residential development potential.

Seven Imperatives for the Normandale Lake District Plan

1. Design transportation and transit improvements that will serve build-out of parcels in the District.
2. Balance residential, office, hotel and retail uses.
3. Enhance the neighborhood center and access to parks serving residents in the northwest part of Bloomington.
4. Establish development principles that protect the environment and surrounding open space.
5. Improve the District's appearance with consistent streetscape, landscape and signs.
6. Design a sign and wayfinding system that helps people find their destination and adds to the unified a ppearance of the District.
7. Propose a viable mechanism to pay for the initial 10-years of public improvements in the District.

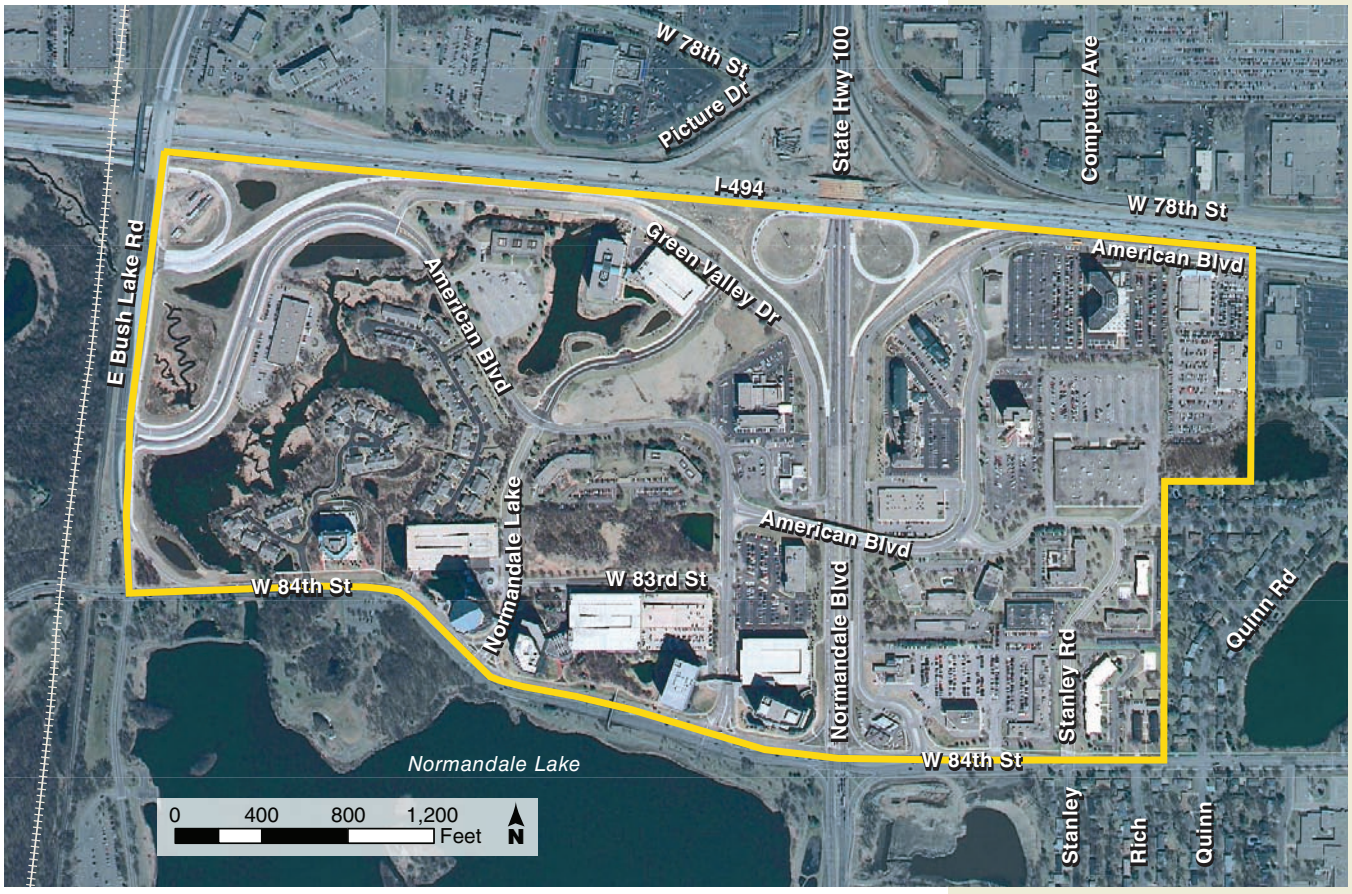
Section 2

Background and Existing Conditions

Normandale Lake lies just south of the District.

The Normandale Lake District ("District") encompasses approximately 178 acres, located at the juncture of Interstate 494 and Highway 100. As shown in ***Figure 2.1***, below, the District is bound on the north by I-494, on the south by West 84th Street, on the west by East Bush Lake Road, and on the east by properties along Stanley Avenue. The District contains about 15% of the city's 20-year commercial and residential potential.

Figure 2.1 Study Area



Source: Bloomington Planning Division.

2.1 Planning Context and History

The District has been planned for high intensity commercial development since the first citywide land use plan was adopted in 1963. The northwest quadrant of Bloomington, including the District, has been the subject of several area-specific plans over the past few decades, including:

- The *Western Area Plan* - 1975
- The *Land Use and Transportation Study (LUTS)* - 1990
- The *Northwest District Plan* - 1991

These plans, as well as the *Bloomington Comprehensive Plan*, have supported the vision of creating a high intensity commercial development node in this area, taking advantage of its excellent access to the regional transportation system. The plans have consistently recommended intensive office development complemented by a mix of retail and residential uses to create a major employment node, which in turn can foster and sustain transit service.

In 1966, the area around West 84th Street at Stanley Road had lots of space available for development along I-494, shown in the upper left side of this photo.

District Characteristics

Major Employment Center

The District is a major employment center, both regionally and within Bloomington. The area is recognized in the Twin Cities metropolitan region for its concentration of prime Class A office space. It contains the highest concentration of office space in Bloomington and has the second highest concentration of employment in the city, currently accounting for about 9% of total city employment.

Concentration of Class A Office Space

Office space in the District has maintained consistently high rents for comparable products within the region and specifically the I-494 corridor. ***Table 2.1***, next page, lists the major office buildings in the District. All but two (Southgate and the Highland Bank) are located in the office park west of Normandale Boulevard.

Exceptional Access and Assets

The area offers direct connections to regional roadways (I-494 and TH 100), proximity and access to Normandale Lake Park (a unit of the Hyland-Bush-Anderson Lakes Regional Park Preserve) and a mix of restaurants, retail, personal services, and day care that serves area office workers and residents.

Hyland-Bush-Anderson Lakes Regional Park Reserve

The reserve is a primary amenity for the District. With paved trails for recreational users and destinations such as Bush Lake Beach, West Bush Lake Park, Richardson Nature Center, a downhill ski area and an Olympic sized 70 meter ski jump facility, the Park Reserve is the second most visited park facility in the metropolitan area. The Park Reserve's 1000+ acres of open space and wetlands along with Nine Mile Creek, which winds through the area, give the District a distinctive natural character.

District Characteristics

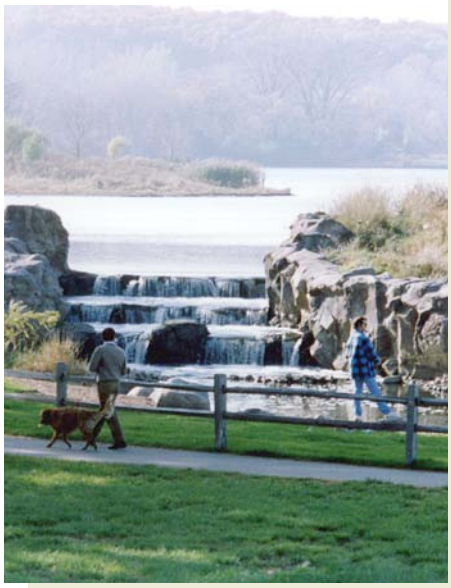
- **Major Employment Center.**
- **Concentration of Class A Office Space.**
- **Exceptional Access and Assets.**
- **Hyland-Bush-Anderson Lakes Regional Park Reserve.**

Table 2.1: Major Office Buildings (Over 4 Stories) in the District, 1970 to 2007

Building Address	Project Name	Year Built Built	Floor Area Area (s.f.)	Parcel Area (s.f.)	F.A.R.	Stories
5001 American Blvd. W.	Southgate	1970	265,658	380,412	0.53	10
8201 Norman Center Dr.	8201 Building	1973	92,605	166,900	0.11	5
8300 Norman Center Dr.	8300 Tower	1982	309,364	228,178	1.36	12
5600 W. 84th St.	8400 Tower	1984	461,748	255,814	1.81	17
5800 W. 84th St.	8500 Tower	1986	521,046	227,582	2.29	23
5270 W. 84th St.	Highland Bank	1986	60,767	111,332	0.55	5
5601 Green Valley Dr.	Norman Pointe I	1999	221,145	312,595	0.71	7
8331 Norman Center Dr.	8000 Tower	2000	265,492	175,171	1.52	12
5600 Green Valley Dr.	Norman Pointe II	2006	332,000	264,017	1.26	10
5600 W. 83rd St.	8200 Tower	2007	285,000	269,636	1.06	11

Source: Bloomington Planning Division.

2.2 Land Use and Development Patterns



Just to the south of the District is Normandale Lake and the Hyland-Bush-Anderson Lakes Regional Park Reserve.

Existing land uses in the District consist of a mix of office, hotels, freeway-oriented commercial, neighborhood-oriented retail, and multiple-family development (both rental and owner-occupied).

A tabulation of the District's area by land use and zoning designation is shown on ***Tables 2.2 and 2.3*** (pages 2.6 and 2.7). Exclusive of road right-of-way, the District consists of approximately 178 acres. ***Figures 2.2 and 2.3*** illustrate the existing land use and zoning designations in the District and adjacent areas.

The District exhibits very different development patterns and character east and west of Normandale Boulevard (TH 100).

East of Normandale Boulevard

The area is a mix of commercial and residential uses and a variety of building types. The east side development pattern and character is typical of older suburban commercial strip development.

- Along the highway frontage, land uses consist primarily of multi-story hotels and offices and single story commercial or industrial uses.

- A neighborhood commercial center, consisting of a strip retail center, a freestanding bank, restaurants, gas/convenience store, and a fitness club, is located north of West 84 Street, between Normandale Boulevard and Stanley Avenue.

- Parking is predominantly provided in surface lots, resulting in large areas of pavement and poor interior circulation with few pedestrian accommodations. Planned changes to the Normandale Boulevard/I-494 interchange will further degrade interior circulation.

Residential development on the east side of the District consists of older apartment complexes built in the mid-1960s. This land use provides a transition between the neighborhood commercial center and the single-family residential neighborhood located just east of the District.

- Multi-family residential properties were developed consistent with the styles and development regulations of the mid-1960s that fostered standardized building setbacks, landscaped yard areas, detached multiple garages and surface parking lots.

- Required yard areas are the primary open space amenity and provide little, if any, utility other than passive landscaping.

While not as prevalent on the east side of the District, there are a number of open spaces located along the eastern boundary of the District. These include natural ponds that have become stormwater ponds between American Boulevard and 84th Street, east of Stanley Avenue, as well as the stormwater pond constructed by Mn/DOT after the last I-494 improvement project in 2005.

West of Normandale Boulevard

The District has developed in a 'campus-like' or 'office park' manner, with adjacent high-quality multi-family development.

- Offices consist of high density, tall (10+ story) office buildings with adjoining parking structures.
- Residential development consists of high-quality townhomes and condominiums.
- The area is interspersed with open space, including Nine Mile Creek and its associated wetlands.
- Development takes advantage of lake views and visibility from I-494.
- Normandale Lake and surrounding parkland provide an attractive setting for both office and residential developments.
- Well-maintained landscaping, an integrated trail system, and natural landscapes create an attractive environment for walking and bicycling and provide a visual connection to the adjacent parkland.

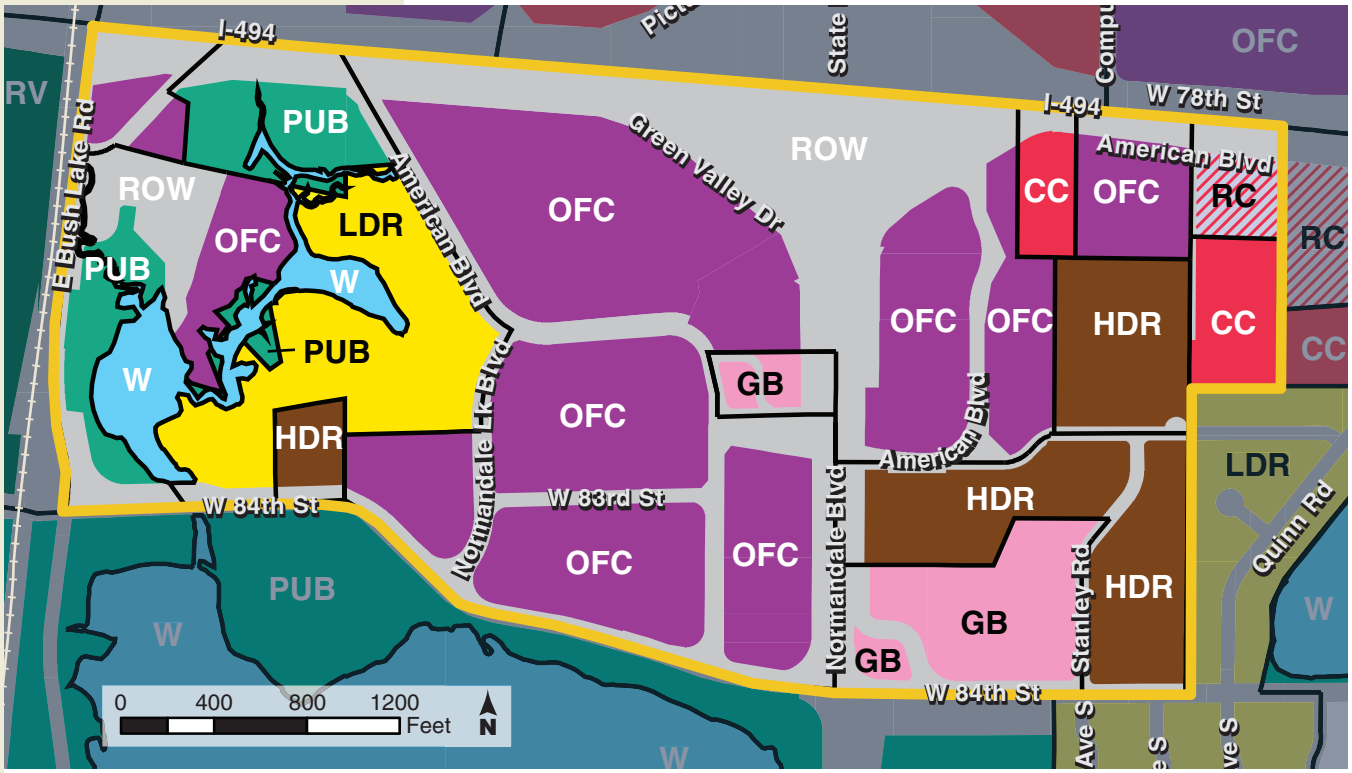
Looking south over the District, I-494 is in the foreground, Pauly Pond is on the left, and Normandale Lake is to the right (west) of Normandale Boulevard.

Table 2.2: Existing Land Use Guide Designations

Land Use Guide	Intended Uses	Acres	%
Office (OFC)	Professional offices, hotels (if near freeway).	92.89	52.0
Community Commercial (CC)	Medium scale service and retail, such as supermarkets, restaurants, theatres, offices. Excludes "big box" retail, hospitals, large shopping centers, and automobile sales.	8.01	4.5
Regional Commercial (RC)	Similar to Community Commercial, but allows "big box" retail, large shopping centers, and automobile sales.	2.86	1.6
General Business (GB)	Neighborhood commercial nodes, including smaller supermarkets, drug stores, restaurants, gas stations, offices. Excludes hotels, "big box" retail, medium and large shopping centers, automobile rental and sales.	12.74	7.2
Low Density Residential (LDR)	Residential development with density of 5 or fewer units per acre. Typically single-family homes. Can also be two-family and low-density townhomes.	16.07	9.0
High Density Residential (HDR)	Residential development with density of 10 or more units per acre. Typically apartments and condominiums.	27.97	15.7
Public (PUB)	Parks, schools, fire stations, municipal buildings, public open spaces.	17.81	10.0
Right-of-Way (ROW)	Public streets, utility corridors, etc.	NA	

Source: Bloomington Planning Division.

Figure 2.2 Existing Land Use Map



Legend

OFC	Office	GB	General Business	PUB	Public
RC	Regional Commercial	LDR	Low Density Residential	W	Water
CC	Community Commercial	HDR	High Density Residential	ROW	Right-of-Way

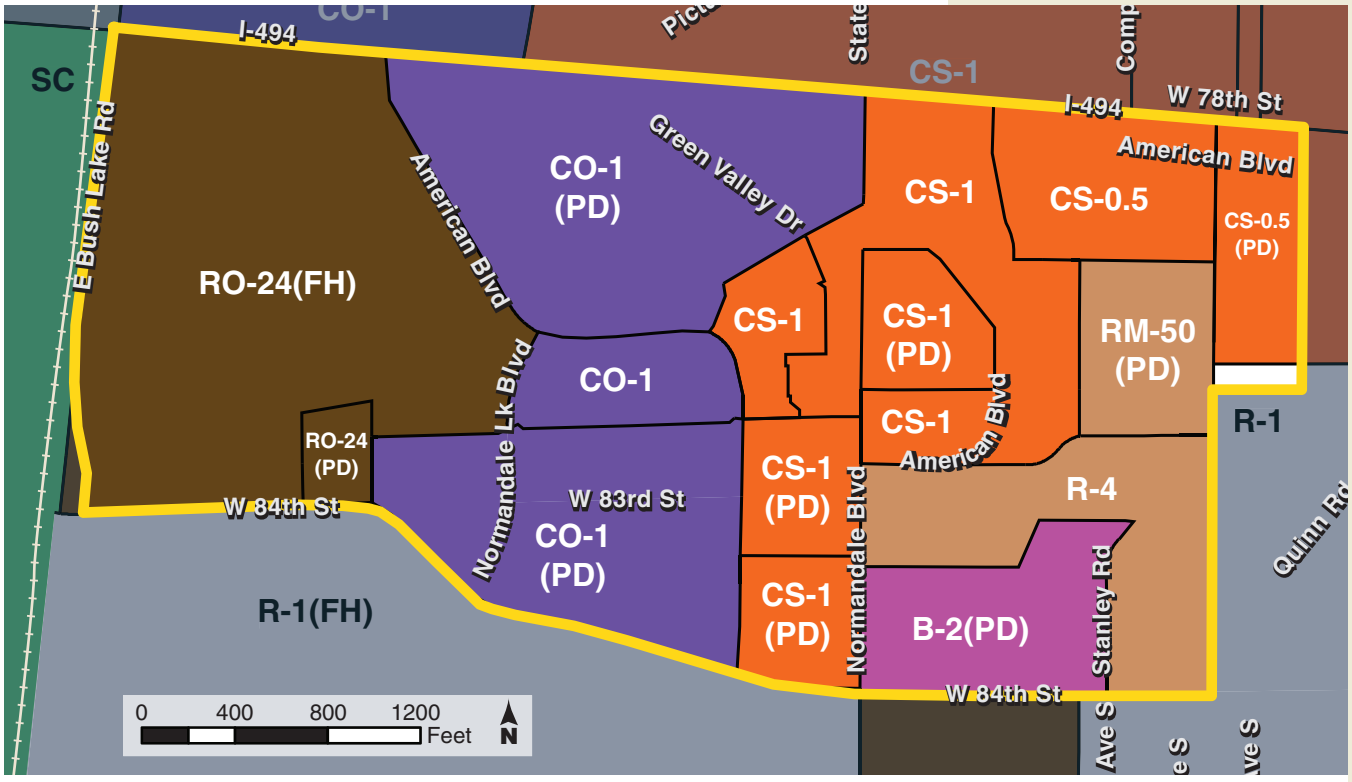
Source: Bloomington Planning Division.

Table 2.3: Existing Zoning Designations

Zoning	Typical Uses Permitted	Acres	%
CO-1 (PD)	Commercial Office (Planned Development) – Offices, public uses, transit stations. Maximum floor area ratio of 1.0.	51.26	28.6
CS-0.5	Commercial Service – Retail stores, banks, restaurants, automotive services and some motor vehicle sales. Maximum floor area ratio of 0.5.	9.88	5.5
CS-0.5 (PD)	Commercial Service (Planned Development) – Same as CS-0.5 but approved as PD.	8.09	4.5
CS-1	Commercial Service – Retail stores, banks, restaurants, automotive services and some motor vehicle sales. Maximum floor area ratio of 1.0.	12.01	6.7
CS-1 (PD)	Commercial Service (Planned Development) – Same as CS-1, but approved as PD.	16.85	9.5
B-2 (PD)	General Commercial (Planned Development) – Office, retail, service, restaurant, auto fueling and service; approved as a PD.	11.12	6.2
R-4	Multiple-Family – Single-family homes, dwellings for two or more families, senior housing, churches.	17.44	9.8
RO-24	Residential Office – Mix of high density residential dwellings with integrated office uses.	41.59	23.4
RO-24 (PD)	Residential Office – Planned Development. Same as RO-24, but approved as PD.	0.88	0.5
RM-50 (PD)	Multiple-Family – Planned Development. Apartments, condos, senior housing, with densities of 20 to 50 units per acre.	9.64	5.4

Source: Bloomington Planning Division.

Figure 2.3 Existing Zoning Map



Legend

B-2	Neighborhood Business	C0-1	Commercial Office	R-1	Single Family Residential
CS-1	Commercial Service	RO-24	Residential Office	R-4	Multiple Family Residential

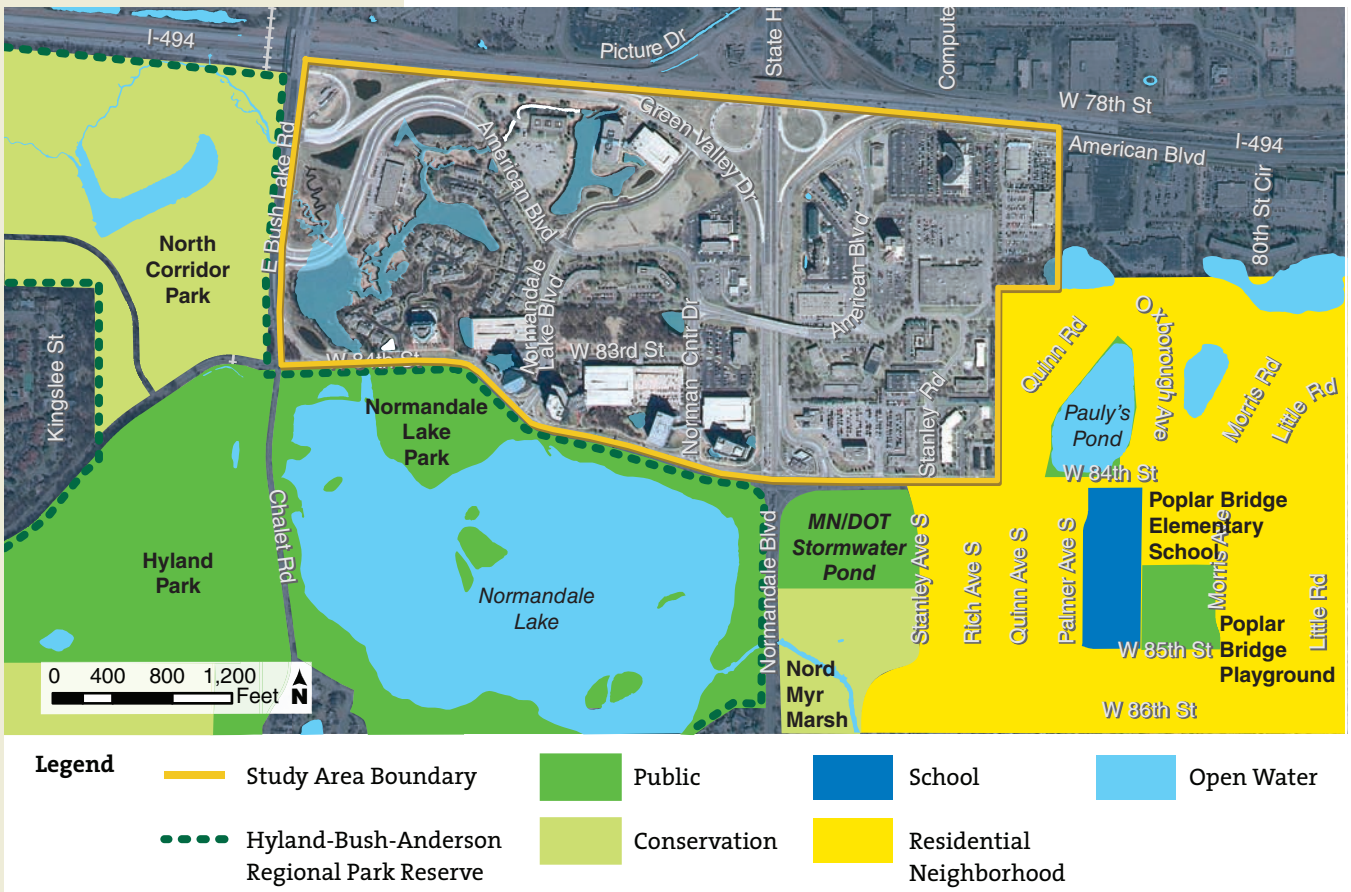
Source: Bloomington Planning Division.

Single-family neighborhoods, mostly built in the 1960s and 70s, surround the District.

Surrounding Land Uses

Single-family neighborhoods, mostly built in the 1960s and 70s, surround the District on the east, west, and south. Concerns about mitigating traffic and the visual impacts of development on neighborhood character are particularly important to neighborhoods immediately adjacent to the District. The area to the south and west is bound by the Hyland-Bush-Anderson Lakes Regional Park Reserve and North Corridor Park, respectively. Just southeast of the intersection of Normandale Boulevard and West 84th Street is a landscaped and bermed stormwater treatment pond owned by Mn/DOT (aka Goldman Pond). ***Figure 2.4***, below, shows the pattern of existing development, parks and schools surrounding the District.

Figure 2.4 Surrounding Land Use



Source: Bloomington Planning Division.

2.3 Movement and Circulation Patterns

The District contains a range of office, retail commercial and residential destinations that generate high volumes of vehicle traffic, particularly during weekday peak hours. In addition, Normandale Lake Park and the Regional Park Reserve draw pedestrians and bicyclists from the nearby residential neighborhoods and the office park, as well as from around the entire metropolitan region.

Vehicle Movement

The District has direct access to the regional transportation system via I-494 and TH 100. Local roads, particularly American Boulevard and West 84th Street, provide good east-west access between the District and other parts of Bloomington. American Boulevard provides an east-west arterial route through Bloomington, parallel to I-494. Its western terminus, at East Bush Lake Road, is in the District. West 84th Street runs parallel to American Boulevard across northwestern Bloomington, between East Bush Lake Road and Penn Avenue.

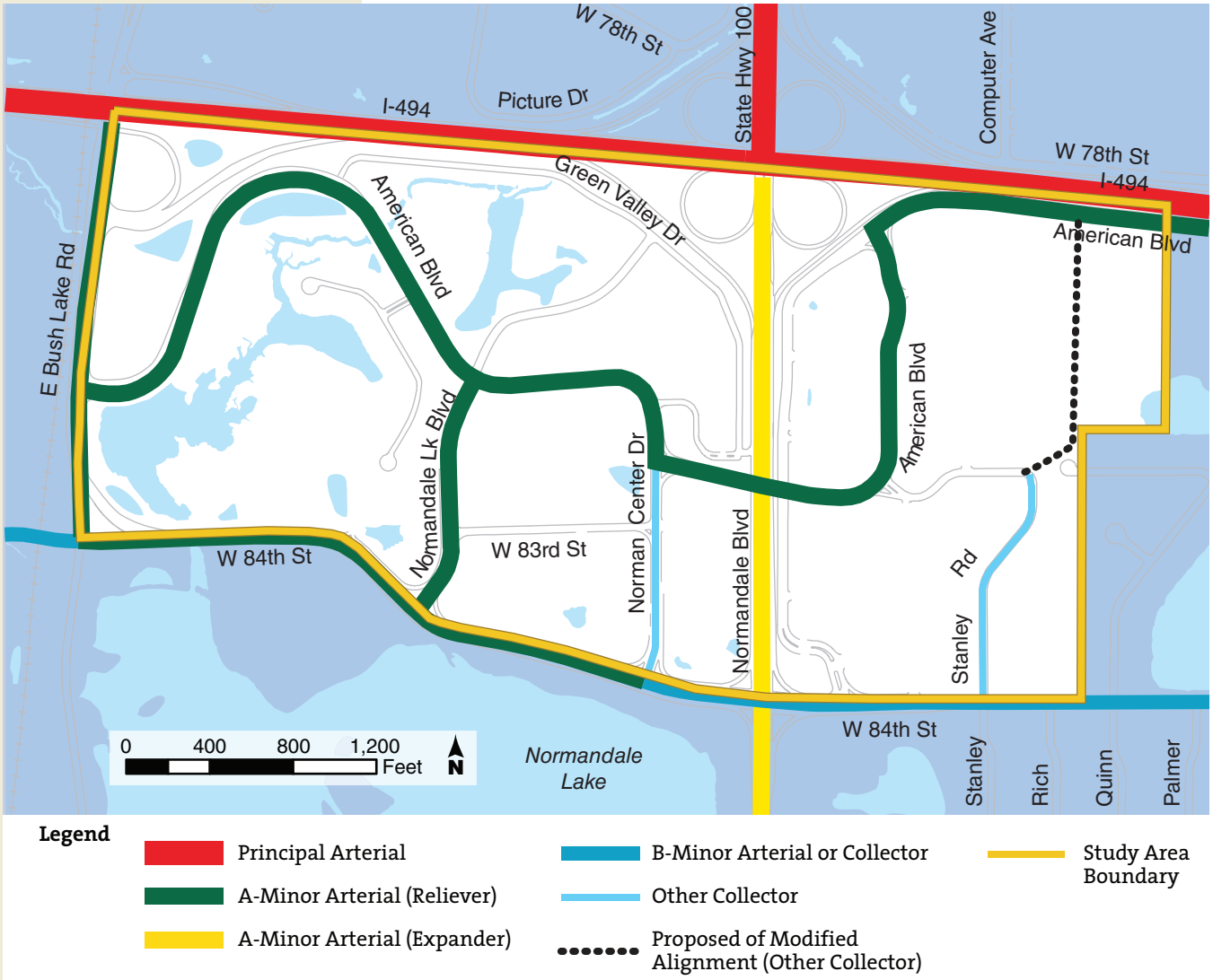
North-south roads mostly provide access to individual properties within the District. East of Normandale Boulevard, connections between West 84th Street and American Boulevard are limited. Adding a north-south connection by extending Stanley Road to American Boulevard, has been identified in the City's comprehensive plan as a long-term project. This plan continues to identify the Stanley Road connection as a long-term project to improve circulation in the District. Construction of this extension will be timed in conjunction with development of abutting properties.

Figure 2.5 (page 2.10) illustrates the functional classification of roads in the District. Following are some observations about existing vehicle movement:

- Segments of the regional highway network surrounding the District currently experience periods of significant congestion during the morning and afternoon peak periods.
- In order to avoid congestion on I-494, many drivers (including Bloomington residents) use the local arterial roads, particularly American Boulevard and West 84th Street. This increases congestion on these and other local streets in and around the District resulting in "cut through" traffic.
- Some turning movements at the intersection of Normandale Boulevard and West 84th Street currently experience congestion during peak travel periods.
- Even without planned future development, growth in background traffic will worsen congestion levels unless significant changes are made to increase the capacity of the intersection.

The wide range of office, retail commercial and residential destinations in the District generate high volumes of traffic.

Figure 2.5 Road Functional Classification



Source: Bloomington Comprehensive Plan 2000 *(Amended April 2004).*

- Managing the traffic volumes associated with regional trips and destinations places great demands on the City's street network. Increased trips generate the need to improve the performance and capacity of local roadways.
- Construction of wider roads may have negative effects on surrounding land uses and make it more difficult to promote a safe, attractive, and comfortable pedestrian and bicycle environment.

The District Plan endeavers to address, balance and mitigate the impacts of these observations.

Pedestrian and Bicycle Movement

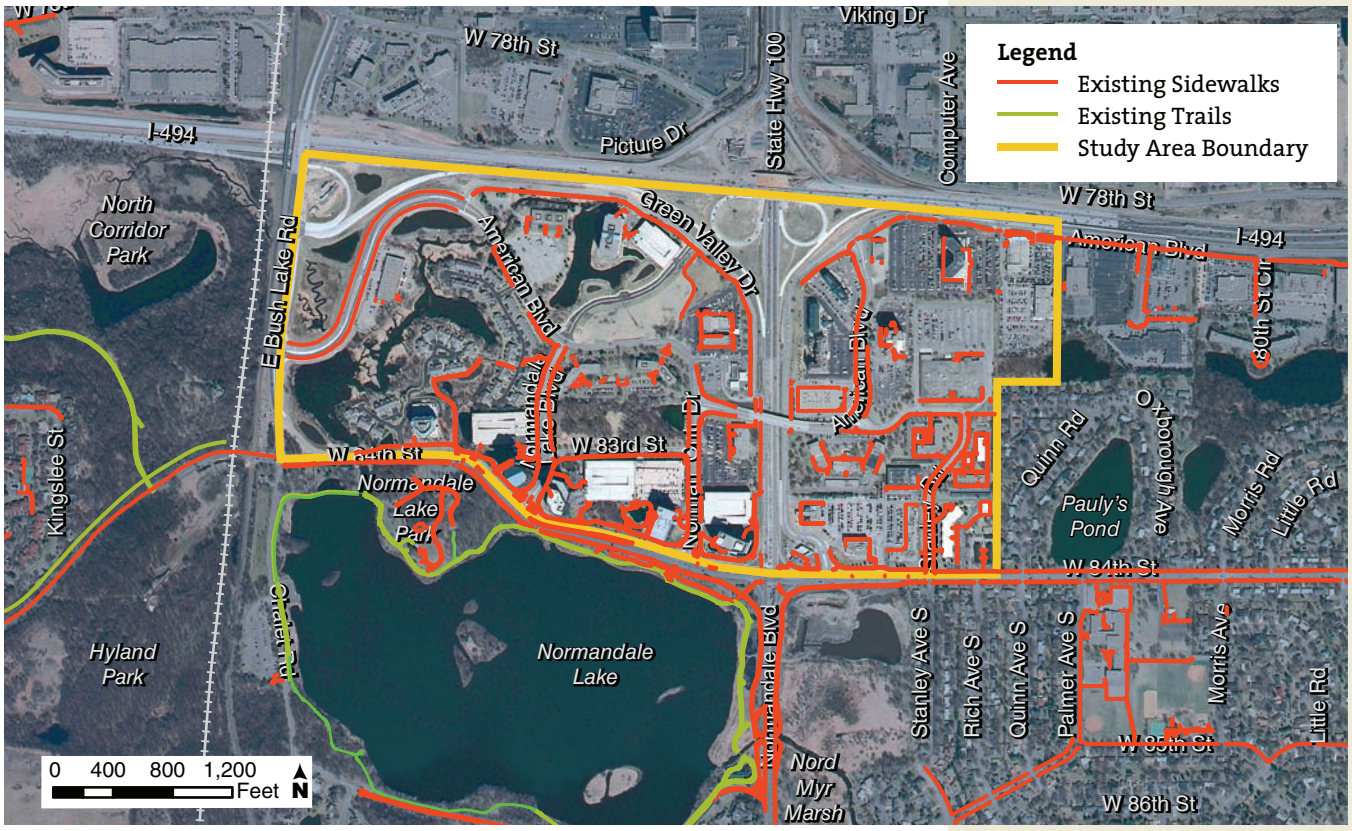
Pedestrians and bicyclists can move about in the District using existing roadways, sidewalks and trails, shown on ***Figure 2.6***, below. However, not all road segments include sidewalks or trails and there are breaks in sidewalk and trail continuity that impede circulation and movement. High traffic volumes on Normandale Boulevard and West 84th Street present a major challenge for pedestrian and bicycle movement through the District.

Some observations about existing pedestrian and bicycle movement include:

- An existing trail around Normandale Lake connects to an extensive trail system within the Hyland-Bush-Anderson Regional Park Reserve and North Corridor Park.
- Access to the park trail system is provided at signal controlled intersections on West 84th Street and by a pedestrian bridge connection to the office park and a pedestrian tunnel under Normandale Boulevard south of West 84th Street.
- In 2006 the City completed a new bikeway trail along East Bush Lake Road between West 84th and 105th

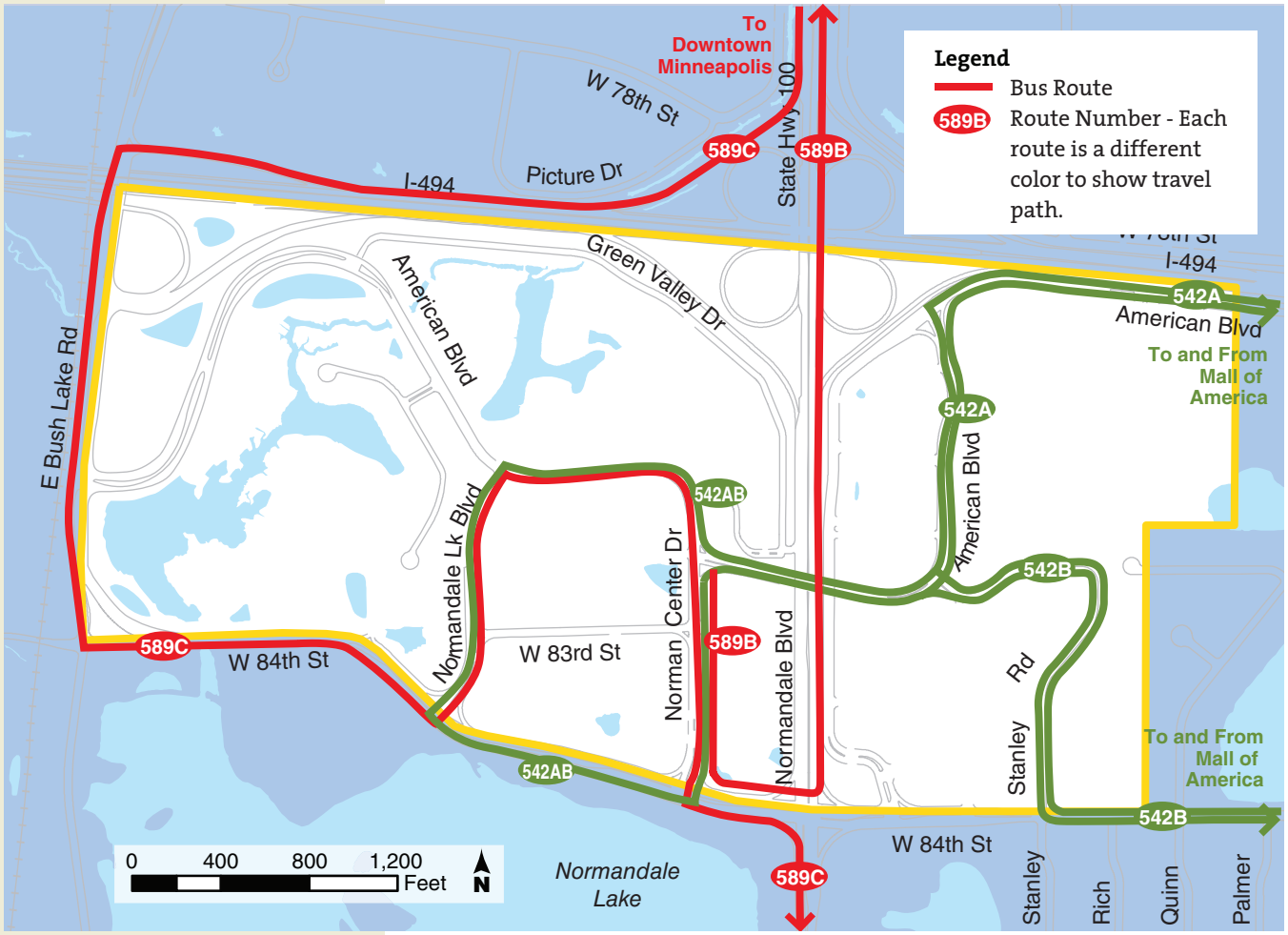
Pedestrians and bicyclists can move about in the District using existing roadways, sidewalks and trails.

Figure 2.6 Existing Sidewalks and Trails



Source: Bloomington Engineering Division.

Figure 2.7 Existing Transit Routes



Source: Metro Transit.

Street that serves as a major north-south bikeway link.

- Normandale Boulevard physically separates the east and west halves of the District. Crossing is currently allowed at: 1) the signalized intersection at West 84th Street; 2) on the American Boulevard bridge; or 3) through the pedestrian underpass located adjacent to Nine Mile Creek.

Transit Service

Transit service is available within the District for trips within Bloomington and the region, including express service to downtown Minneapolis. Metro Transit operates three routes that serve the District described below and shown on ***Figure 2.7***, above.

- **Route 589**, an express route, provides service to and from downtown Minneapolis during the AM and PM peak hours, Monday through Friday. While this route mostly serves this area as an origin for outbound morning trips and destination for inbound afternoon trips, it also provides limited "reverse commute" buses from downtown Minneapolis to the Normandale Lake Office Park and western Bloomington on weekday mornings and returning in the afternoon.

- **Route 578** provides weekday service through Edina to and from downtown Minneapolis during AM and PM peak hours only.

- **Routes 540 and 542** provide weekday "cross-town" service adjacent to the I-494 corridor to the Mall of America. From the MOA, connections can be made to the Hiawatha LRT line, which provides service to the MSP International Airport and downtown Minneapolis.

Some observations about existing transit service:

- All of the routes provide fairly frequent (15-30 minute interval) service during morning and afternoon peak hours on weekdays.

- Service during non-peak times is less frequent and none of the routes provide any weekend service.

- The consequence of this schedule is that transit service for workers and residents in the District is not convenient unless their primary transit needs coincide with the weekday peak hours.

- Western Bloomington is currently viewed by Metro Transit primarily as an origin for outbound trips on weekday mornings and a destination for inbound trips on weekday afternoons.

- Given the amount of additional employment projected in the office park, Metro Transit has indicated a willingness to consider this area as a trip destination as employment numbers increase. This will result in some modifications of route schedules to enhance "reverse commute" service during weekday peak hours.

Buses serve the District for trips within Bloomington and the region, including express service to downtown Minneapolis.

2.4 Existing Utilities

The District is served by the City's municipal sanitary sewer system and water system, shown in ***Figures 2.8*** (page 2.14) and ***2.9*** (page 2.15). Both systems are essentially fully developed in accordance with sound utility modeling, engineering, and construction practices. Upgrades will continue to occur in conjunction with routine maintenance or to accommodate new development or redevelopment.

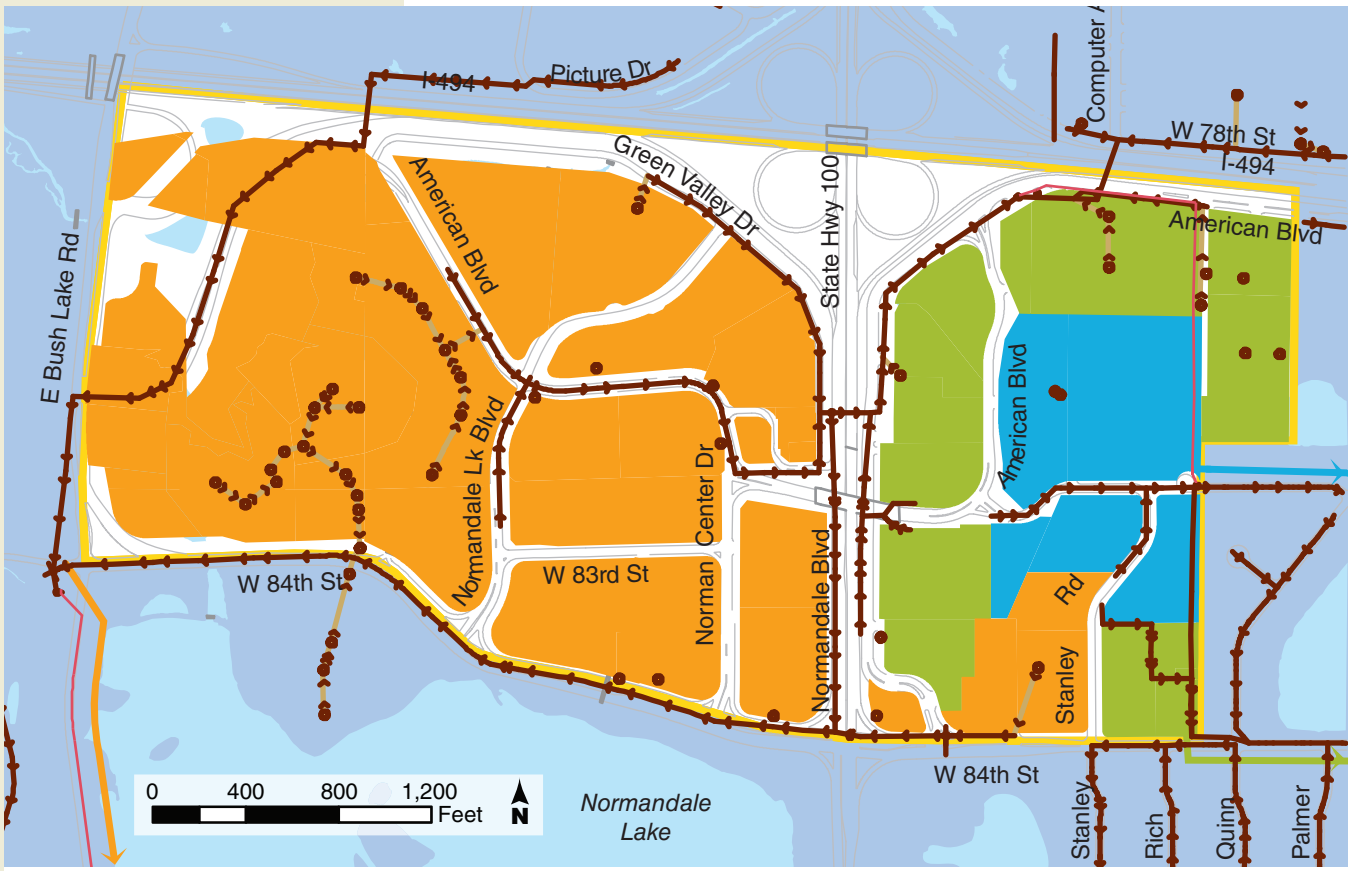
Public Sanitary Sewer System

The sanitary sewer system consists of components (collection mains, interceptors and lift stations) that are owned and operated by the City and components owned and operated by the Metropolitan Council Environmental Services (MCES). Sanitary sewer treatment is provided by the MCES Seneca Facility in Eagan. The existing system has adequate capacity to serve existing development.

The District is divided into two sub-sewer sheds with separate collection systems. The sewer lines receiving wastewater from the west side of District have adequate capacity to serve planned development through 2030. A few parcels on the east side of Normandale Boulevard are also served by the western sub-sewer shed, including the shopping center, the bank, and the

Both the public water and sanitary sewer systems are essentially fully developed.

Figure 2.8 Existing Sanitary Sewer System



Source: Bloomington Utilities Division.

City crews are upgrading the sanitary sewer system.

Holiday convenience store/gas station. The remainder of the east side of the District is in a different sub-sewer shed served by a regional sewer interceptor (3-BN-499) that is part of the Metropolitan Council Environmental Services (MCES) system.

- The City recently completed a preliminary evaluation of sanitary sewer capacity in the area. The sewer model identified future capacity shortfalls in the regional sewer interceptor 3-BN-499, which serves much of the east side of the Distr ict and portions of Edina.
- Given future development plans in both Bloomington and Edina, upgrades to this interceptor will be required to accommodate future development.
- Bloomington and Edina staff are currently working together with MCES staff on a solution to ensure adequate capacity to serve planned growth in both cities.

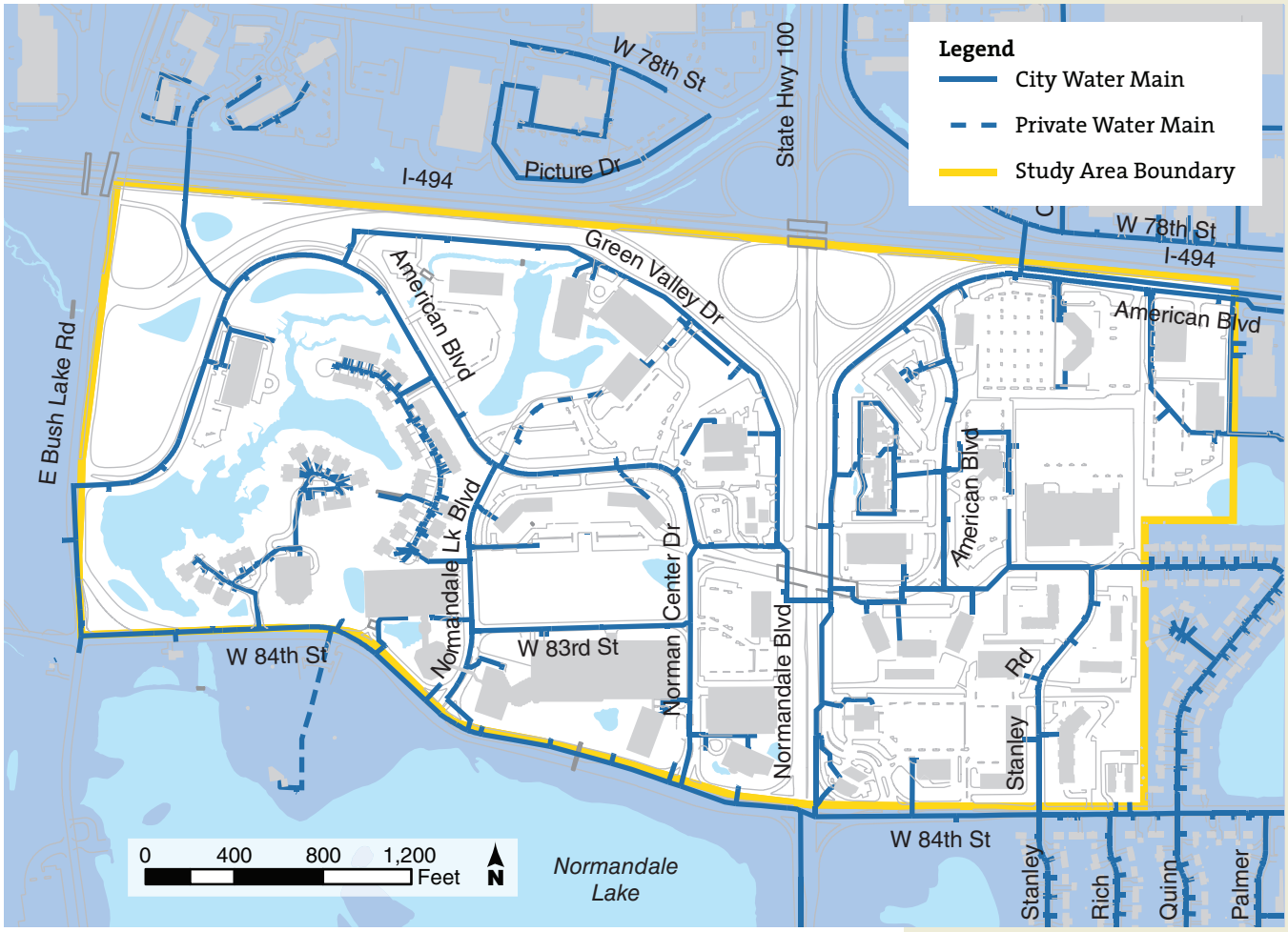
Public Water System

The Bloomington water system has three components: water supply, water treatment and distribution network. Water supply and treatment are located outside of the District. Some characteristics of the public water system include:

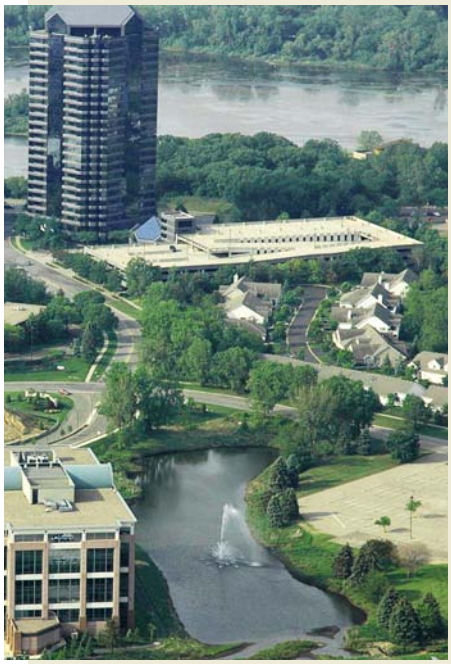
- The existing water system capacity is adequate to accommodate anticipated future development beyond 2030.
- The District is in the normal water pressure zone area of the City. The City's *Water System Master Plan* does not identify pressure deficiencies within the District.

The existing water system capacity is adequate to accommodate anticipated future development beyond 2030.

Figure 2.9 Existing Water Distribution System



Source: Bloomington Utilities Division.



The District includes approximately 12 wetland areas that are part of the area's hydrology.

2.5 Existing Stormwater Management

Stormwater management is particularly important in the District because of its relationship to natural resources within the area, particularly Nine Mile Creek. Urban stormwater runoff drains to receiving bodies of water that have natural resource values and are often associated with resources in the park and open space system. The need to maintain clean and healthy water bodies is fundamental in all urban ecosystems.

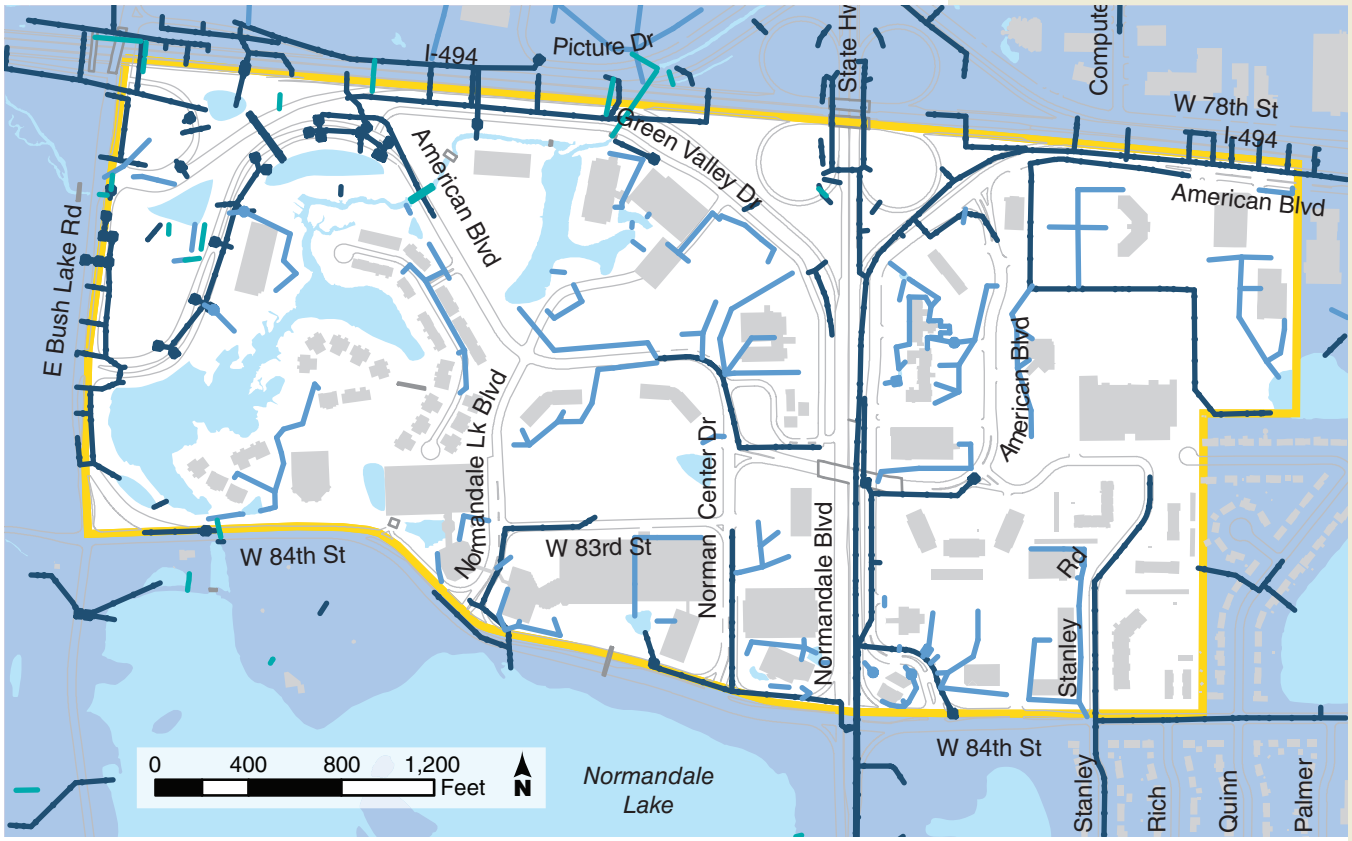
The District is within the jurisdiction of the Nine Mile Creek Watershed District (NMCWD), which has adopted a watershed management plan for surface waters within the watershed. The City updated its *Comprehensive Stormwater Management Plan* in October 2007. This plan outlines the City's requirements for stormwater quantity and water quality. The City works cooperatively with NMCWSD to implement goals and programs aimed at protecting water resources.

The District includes portions of two sub-watersheds—Upper Nine Mile Creek and Skriebakken Pond. These sub-watersheds comprise approximately 3,960 acres in total area. The District constitutes about 6.5% of the area of the combined sub-watersheds.

Surface runoff from properties in the District discharge to a series of ponds before entering existing storm sewers, that convey the runoff to Nord Myr Marsh and Nine Mile Creek. Nine Mile Creek (including the main branch and north branch) is the main receiving body for stormwater runoff. Additional stormwater basins contributing to Nine Mile Creek include Normandale Lake, Mn/DOT stormwater pond (aka Goldman Pond), Victoria Pond, and Wanda Miller Pond. In addition to stormwater basins, the area includes approximately 12 wetland areas that are part of the hydrology.

Figure 2.10, next page, illustrates the existing system of stormwater pipes and basins. To accommodate projected growth to 2030, some upgrades to the existing system will be needed. These will occur in conjunction with specific development proposals.

Figure 2.10 Existing Stormwater System



Legend

- Public Stormwater Main
- Private Storm Sewer Line
- Culvert
- Catch Basin
- Study Area Boundary

Source: Bloomington Utilities Division.

This Mn/DOT stormwater pond (aka Goldman Pond) contributes to Nine Mile Creek.

Natural habitat in the District coincides primarily with the wetlands and public water bodies located west of Normandale Boulevard.

2.6 Environmental Patterns and Characteristics

The District and its immediate surroundings are characterized by a range of park, open space and aquatic resources, many of which are associated with Nine Mile Creek and the Hyland-Bush-Anderson Lakes Regional Park Reserve. No ecologically sensitive resources have been identified within the District boundaries.

Vegetation and Habitat

The District is identified in the *Environmental Protection Element of the Bloomington Comprehensive Plan 2000* as "urban with vegetation" and "urban without vegetation". While the area west of Normandale Boulevard has retained a fair amount of vegetation, much of the east side of the District is covered by impervious surfaces (buildings and parking lots) with small patches of lawn/ landscaping and minimal tree cover.

Natural habitat coincides primarily with the wetlands and public water bodies located west of Normandale Boulevard. Two branches of Nine Mile Creek flow through the District. The creek and associated wetlands provide habitat for species requiring an aquatic environment, such as fish found in ponding areas of the creek, as well as species requiring both wet and dry environments, such as songbirds and waterfowl. Wetland habitat provides a source of food, water, nesting material and shelter.

The east side of the District is characterized as "urban without vegetation." In this area, wildlife species that have adapted to urban landscapes such as gray squirrels, rabbits, and raccoons are more prevalent. The wetland and small woodland area on the adjacent property to the east of the District provides habitat and cover for a variety of species commonly found in the upper Midwest such as woodpeckers, robins, chickadees, skunks, turtles, and amphibians.

Water Resource Quality and Regulation

Upstream stormwater runoff affects nutrient and sediment levels in Nine Mile Creek. Because of these nutrients and sediments, Nine Mile Creek is not classified as a high quality fishery habitat.

West of Normandale Boulevard there are areas within the 100-year floodplain (elevation 816.5 ft, also see ***Figure 2.11***, next page.) The City has zoning regulations – the Flood Hazard Overlay District (FH) – that regulate development and land disturbance in the floodplain. The City also has Shore Area Regulations associated with Nine Mile Creek, which designate two zones related to the ordinary high water level (OHWL) or top of bank of the DNR Protected Water. Along Nine Mile Creek, the Shore Area is defined as a 50-foot zone parallel to the top of bank (approximately the 812 foot elevation) while the Shore Area Impact Zone is identified as a 25-foot area parallel to the top of bank. These regulations limit development and encroachment in these areas.

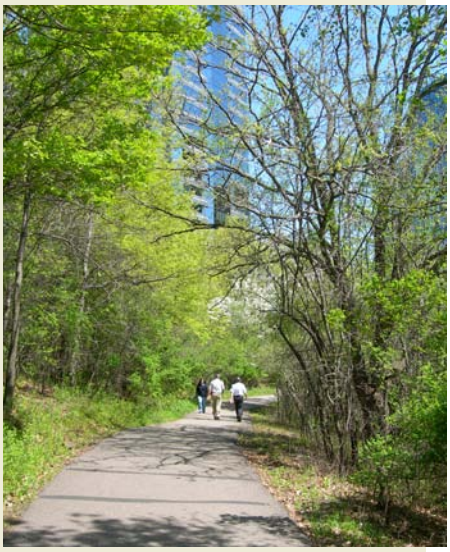
Park and Open Space Features

The District is surrounded by park and open space resources, primarily associated with the Hyland-Bush-Anderson Lakes Regional Park Reserve. The most visually prominent features include Normandale Lake, Hyland Hills Ski Area (Mt. Gilboa), and the Bush Lake Ski Jump. These park and open space resources are unique amenities that provide an attractive setting for area residents and employees.

Key environmental features are shown in ***Figure 2.11***, below, and include:

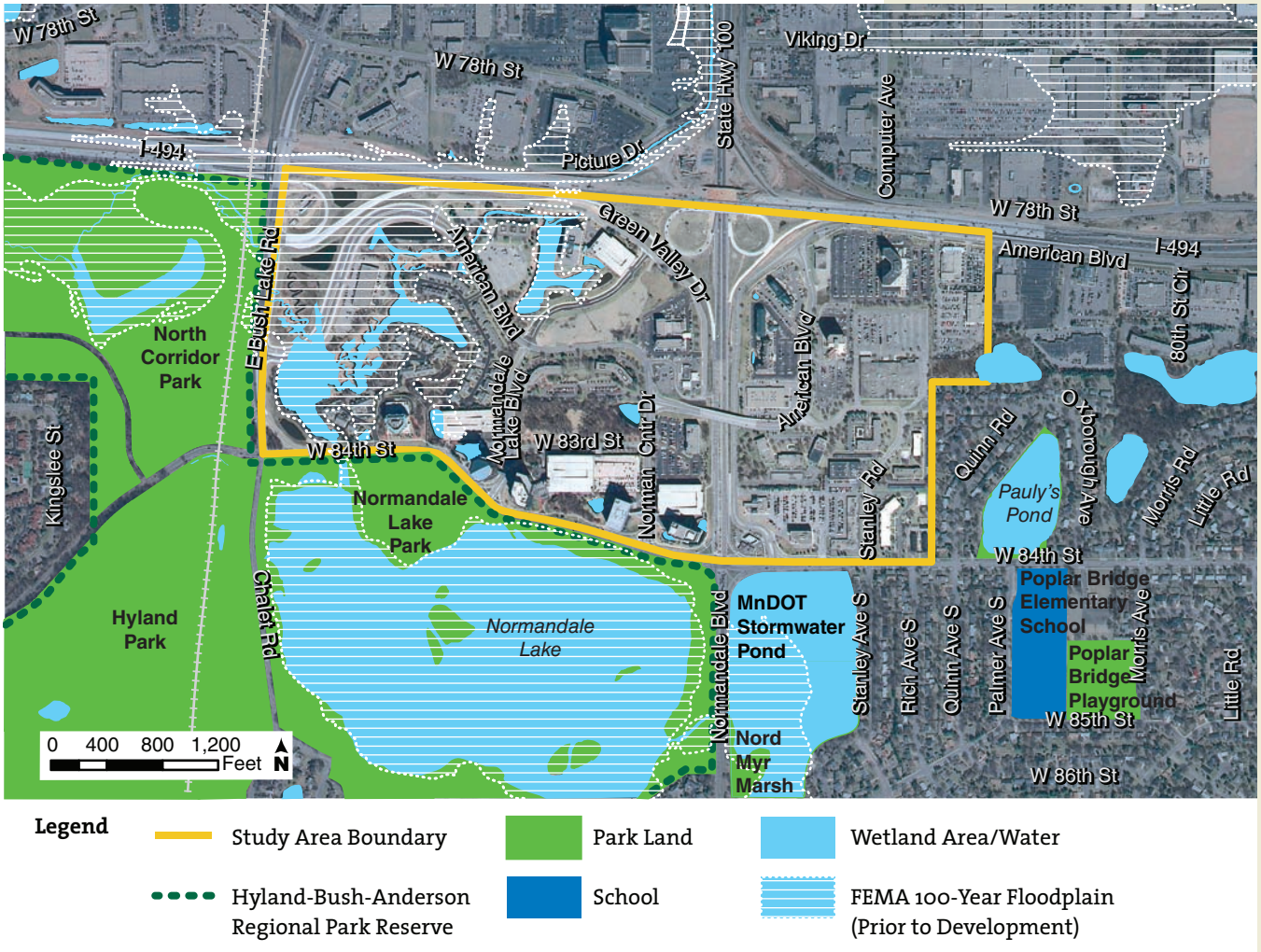
Normandale Lake

The lake was created in 1974 to provide flood control through a joint initiative of the Nine Mile Watershed District and the City of Bloomington. It expanded the open water area of a former wetland and has now become a very popular walking and biking amenity for residents, employees and visitors from other communities.



Walking trails are within easy reach of the District's offices, hotels and residences.

Figure 2.11 Existing Environmental Considerations



Source: Bloomington Planning Division.

Nine Mile Creek winds through the west side of the District lending a natural character to the area.

Nine Mile Creek

The creek, associated wetlands and open spaces wind through the west side of the District lending a natural character to the area. The creek flows under Normandale Boulevard where it enters Nord Myr Marsh – a large wetland complex located south of the District.

Several open spaces

Open spaces located just beyond the District boundary include: stormwater ponds located east of Stanley Avenue and other City and school open spaces or facilities such as Pauly's Pond and Poplar Bridge Elementary School and playground.

Mn/DOT stormwater pond (aka Goldman Pond)

The pond anchors the southeast corner of the intersection of Normandale Boulevard and West 84th Street. Tall berms were created around the pond and have been heavily landscaped. Given its adjacency to a major intersection, the pond, berms, and landscaping provide a visually prominent feature at the edge of the District and extend the natural character of Normandale Lake Park to the east side of Normandale Boulevard.

Located adjacent to a major intersection, Goldman Pond, its berms, and landscaping provide a visually prominent feature at the southeast edge of the District.

Section 3

Opportunities and Challenges

The Normandale Lake area has unique assets and characteristics that present both opportunities and challenges to its future growth and development. Some of the unique characteristics are described below. The remainder of this section summarizes the opportunities and challenges to development in the District over the next 20 years.

A regional employment center

The District has one of the highest concentration of jobs in the Twin Cities metropolitan area and is the second most intense employment district in Bloomington, after the Airport South District. It has the highest concentration of office employment in Bloomington.

Planned and developed as a high quality, high density, mixed-use area

Since development began in the early 1980s, the office park on the west side of Normandale Boulevard has emphasized distinctive architectural design, high quality building materials and ample landscaping. Today the area enjoys a reputation for quality and amenities including easy access to adjacent parkland and supporting retail and service uses.

Attractive to a wide range of development types

Direct access to the regional transportation system makes the District particularly attractive to commercial development, including hotels and offices. Likewise, the proximity to significant natural amenities has made the area one of the most desirable places to live in Bloomington. Located at the intersection of major highways, the District also serves as a gateway into Bloomington.

Natural character and landscape

The Nine Mile Creek corridor passes through the west side of the District encompassing a system of water and wetlands that connects to neighboring communities and extends through Bloomington to the Minnesota River. While development on the west side of the District is integrated with the existing wetlands and woodlands, few of the original natural features were retained as the east side of the District developed in the 1960s and 70s. There are opportunities to reintroduce and enhance natural amenities in conjunction with redevelopment.

Since development began in the early 1980s, the office park on the west side of Normandale Boulevard has emphasized distinctive architectural design, high quality building materials and ample landscaping.

Adjacency to major regional roads, such as American Boulevard, TH 100 and I-494, enhances access for employment and commercial business.

3.1 Growth Estimates and Assumptions

The northwest area of Bloomington has been identified for intensive commercial/office development for decades. Land use and zoning designations since the City first adopted a Comprehensive Plan in the 1960s have provided for a concentration of high-intensity office, regional commercial, and mixed uses. Reasons for fostering intense development in this area include:

- **Maximizing the benefits of direct access and proximity to the regional transportation system**, including frontage on I-494 and TH 100 (Normandale Boulevard). Adjacency to major regional roads enhances access for employment and commercial business. It also contributes to the function of the area as a gateway into Bloomington.

- **Using the unique natural amenities of the area to attract high-quality development.** The presence of the Hyland-Bush-Anderson Lakes Regional Park Reserve makes the District and surrounding area attractive for Class-A office development as well as residential development.

- **Continuing Bloomington's commitment to accept a reasonable level of growth and plan wisely for it.** To accommodate growth, it is critical to balance development with appropriate investment in infrastructure improvements and traffic management. It also recognizes that complex traffic congestion issues cannot be "solved" but can be "managed". However, the City cannot do this alone; it requires cooperation of county and regional government as well as the private sector.

- **Concentrating development and employment can be served more effectively by public transit.** Given the large amount of employment in the District, Metro Transit has begun to view this area as a destination for transit riders and not simply an origin. They have begun to modify their bus routes to better accommodate employees coming to Bloomington in the morning and leaving in the afternoon. This will help reduce some of the peak hour traffic coming to and from the District.

- **Land values will continue to appreciate and foster demand for redevelopment of older structures and underutilized properties in the District.** The economics of redevelopment often require greater densities to make high-value development financially feasible.

Table 3.1 Change in Employment (Jobs) by Use Type, 2007-2030

Use	Existing		2030		Total Change
	Estimate	% of Total	Estimate	% of Total	
Office	8,220	88%	12,522	88.6%	+4,302
Retail	543	6%	1,068	7.5%	+525
Restaurant	95	1%	95	0.7%	NC
Hotel (Full Service)	357	4%	357	2.5%	NC
Hotel (Limited Service)	97	1%	97	0.7%	NC
TOTAL	**9,312**		**14,139**		**+ 4,827**

Source: Bloomington Planning Division, 2007.

Demographic Trends

Much of the area within the District is developed with commercial office, hotel, and retail uses. The District will continue to be Bloomington's second largest employment center and first in concentration of office employment. ***Table 3.1***, above, shows a break down of projected future employment (jobs) in the District by type of use.

Estimates of future employment are based on both City development forecasts and employment factors derived from analysis of historic employment rate data as well as data from the Institute of Transportation Engineers (ITE).

Commercial Trend Findings

- The vast majority (88%) of employment in the District currently consists of office jobs.
- Over the next 20+ years office employment is forecast to increase by over 50%.
- Retail and restaurant employment is projected to increase, almost doubling by 2030 (increase of 97%). This reflects the assumption that the existing neighborhood shopping center with redevelop and expand to better utilize the property.

The District incorporates a small amount of residential development, mostly consisting of apartments, townhomes and condominiums. The District is forecast to account for about 10% of total growth in residential dwelling units in Bloomington by 2030. ***Table 3.2***, next page, illustrates the existing breakdown of units in the District by type and the corresponding residential population estimate.

The vast majority (88%) of employment in the District currently consists of office jobs.

Table 3.2 Change in Residential Units by Type, 2007-2030

Unit Type	2007			2030		
	Number of Units	Persons/ Unit	Estimated Population	Number of Units	Persons/ Unit	Estimated Population
Townhome	67	1.95	131	67	2.10	141
Condo	48	1.62	78	48	1.67	80
Apartment	279	1.62	452	622*	1.67	1,038
Total	394	--	661	737	--	1,259

Note: Persons/unit rates based on Metropolitan Council for 2007 and City estimates for 2030.

** Number of apartments in 2030 based on assumed 282 units at 5100 W. 82nd and about a 30% increase in density of existing apartments at 5233 W. 82nd and 8200 Stanley when they redevelop.*

Source: Bloomington Planning Division, 2007.

Residential Trend Findings

- The majority (70.8%) of residential dwellings in the District consist of apartment units; all built prior to 1970.
- The total number of residential dwelling units is estimated to increase by approximately 340 units over the next 20 years. This represents an increase of about 86%.
- Apartments will continue to be the most prevalent type of dwelling unit in the District, representing about 86% of total units in 2030.
- Census data indicate an increase in the number of persons per household, particularly for non-white households.
- With the projected increase in units and a slight increase in the ratio of persons per unit, the residential population of the District is estimated to increase by 598 people, or about 90%, by 2030.

New residential unit growth is associated with one proposed 282 unit apartment development approved by the City Council in May 2008 and some possible increase in density (30% assumed) if two of the older apartment buildings redevelop. It is also assumed that some of the existing older apartment buildings in the District will redevelop over the next 20 years.

When redevelopment occurs, it is likely that new residential buildings would be built to replace existing aging structures and could develop in a mixed use form. It is assumed that new apartments or condo developments would require an increase in density to make redevelopment financially feasible. Increases in residential density may require a traffic study to ensure adequate road capacity and access are available.

Many existing apartment buildings in the district are over 40 years old.

Projected Development

Most of the existing vacant land in the District is located on the west side of Normandale Boulevard and is planned for office, hotel or residential development. Although there is very little undeveloped land on the east side of the District, it is expected that as land values increase, properties will redevelop more intensely and foster better utilization of land that is currently devoted to surface parking lots.

Estimated changes in land use and development intensity within the District are shown in ***Table 3.3***, below. General findings include:

- Office development is the most prevalent land use in the District and this pattern will continue with the expected addition of over 1.3 million square feet of new office space over the next 20 years.
- Commercial/retail development is also forecast to more than double as a result of anticipated redevelopment of the neighborhood shopping center located on the east side of the District.
- Hotels currently occupy about 500,000 square feet. of the District, mostly east of Normandale Boulevard. There are two potential sites for future hotel development in the District.
- Recent approval of 282 new rental apartments has signaled an emerging market for residential units with access to the District's amenities. This plan estimates an additional 60 units, however, the form of development may change, through property redevelopment, to allow a greater variety of housing styles and sizes and to integrate residential uses with neighborhood retail and commercial uses. Some increase in density would likely be required to make such redevelopment financially feasible.

Hotels currently occupy about 11 acres in the District.

Office development will remain the most prevalent land use in the District.

The existing shopping center is aging and will likely be rehabilitated over the next 20 years.

Table 3.3 Change in Development by Use Type, 2007 – 2030

Land Use Type	Existing Development	Forecast 2030 Development	Change
Multi-Family Residential	394 DU	737 DU	+343 DU
Commercial/Retail	217,395 s.f.	427,338 s.f.	+209,943 s.f.
Hotel	474,241 s.f.	474,241 s.f.	NC
Office	2,490,688 s.f.	3,794,680 s.f.	+ 1,304,002 s.f.

Source: Bloomington Planning Division, 2007.

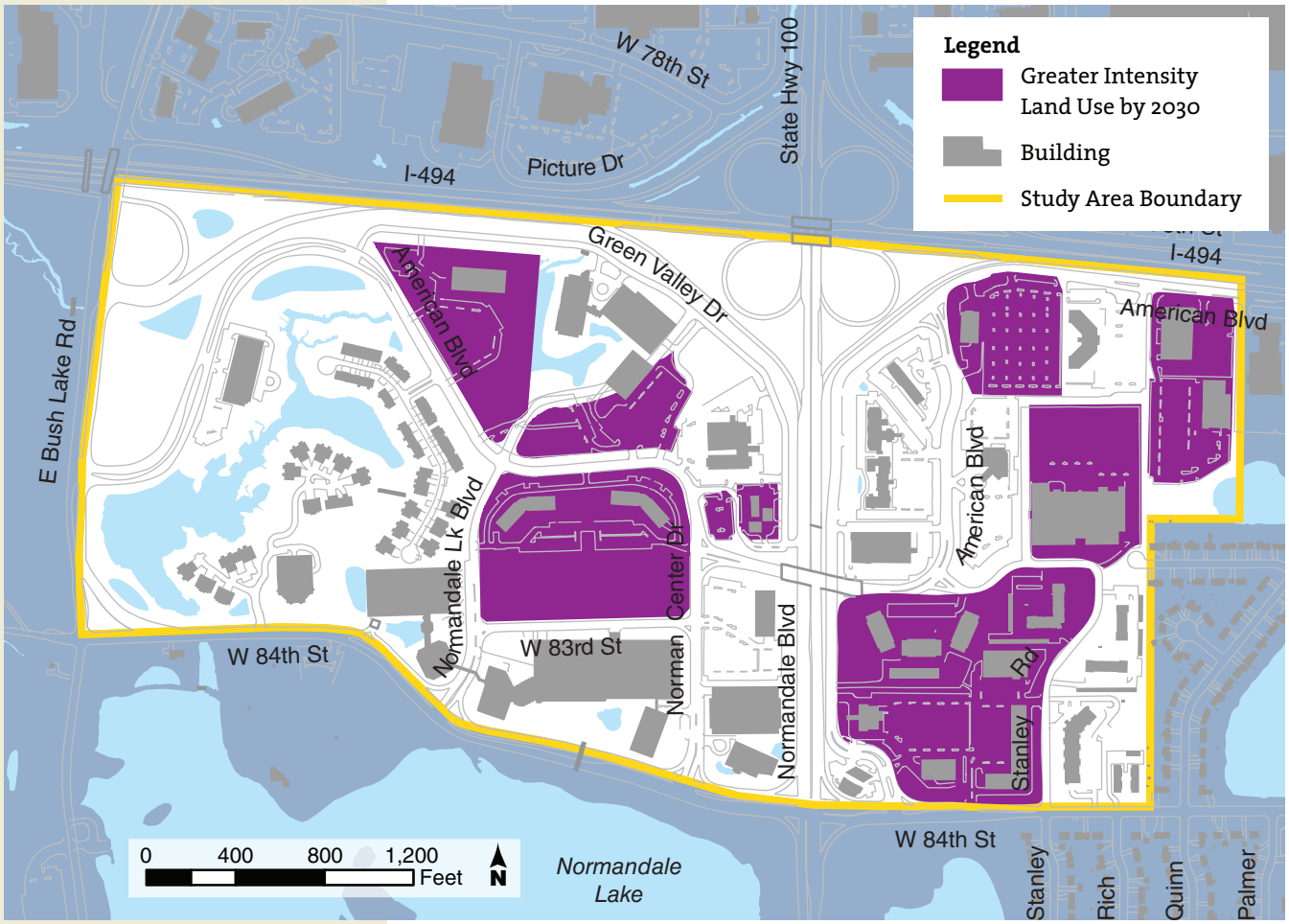
Older apartments on the east side of the District were developed in the 1960s and may be redeveloped over the next 20 years.

3.2 Redevelopment Potential

Many of the land uses existing within the boundaries of the District are expected to remain over the next 20 years. While the west side of the District contains a few undeveloped and vacant parcels, most redevelopment will occur on parcels located east of Normandale Boulevard. ***Figure 3.1***, below, identifies parcels in the District anticipated for new development or intensification of development over the next 20 years.

Many of the structures on the east side of the District were developed in the 1960s and 70s and are approaching functional obsolescence. With a growing office and residential customer base, the existing neighborhood center has the potential to be redeveloped and reconfigured into a much more attractive center that better serves the adjacent office park and residential neighborhoods.

Figure 3.1 Future Development and Redevelopment



Source: Bloomington Planning Division.

Redevelopment Opportunities

Improve Utilization of Land

The east side of the District currently has a significant amount of land devoted to surface parking. When parcels redevelop there are opportunities to reduce the amount of surface pavement by building multi-story buildings (vertical mixed use) and incorporating parking in structures or underneath buildings.

Incorporate Transit Facilities

Metro Transit has expressed a willingness to enhance transit service to this area. As redevelopment occurs, opportunities to incorporate enhanced transit facilities should be explored.

Incorporate Natural Features

While the west side of the District includes a significant amount of green space and landscaping, these features are less prominent on the east side. As parcels redevelop there is opportunity to increase the amount of landscaped and pervious area in a manner that enhances individual properties and also extends a more "green" character throughout the east side. Redevelopment will also require compliance with current stormwater management regulations for on-site ponds. If well designed, ponds can become aesthetic focal points and provide natural habitat. Given the small parcel sizes on the east side of the District, consideration should be given to creating one regional pond to serve all development in that area.

Improve Internal Circulation

The east side of the District, south of West 82nd Street, does not currently provide clear paths for moving between Stanley Avenue and the frontage road on Normandale Boulevard. Vehicles must traverse multiple parking lots to get through and there are no routes or paths to accommodate pedestrians or bicyclists. Redevelopment provides an opportunity to provide clear drive aisles or streets through this area that would enhance access to new developments for vehicles as well as pedestrians and bicyclists.

Redevelopment Constraints

Small Parcel Sizes

Several parcels on the east side of the District are quite small, making it more difficult to redevelop without consolidation. This will require significant cooperation between multiple property owners.

Multiple Property Owners

Coordinating redevelopment will require working with several property owners who likely have individual development ideas and timing requirements. Some property owners will be ready to consider redevelopment much sooner than others and may not have the will or ability to "sit" on their property until adjacent properties are also ready for redevelopment.

Lack of Internal Circulation

This is primarily a factor in the area bounded by West 82nd on the north,

The east side of the District currently has a significant amount of land devoted to surface parking.

Increased sewer capacity may be needed to accommodate future development.

Stanley Road on the east, West 84th St. on the south, and Normandale Boulevard on the west. As noted above, there are no public (or private) streets providing access through this area. There is an informal route created from parking lot drive aisles. Establishing a clear route through these parcels (whether public or private) would enhance access to the businesses and increase safety and customer convenience.

Sewer Capacity

Recent sanitary sewer modeling indicates capacity constraints in the regional interceptor serving much of the east side of the District. This sewer is owned and operated by Metropolitan Council Environmental Services (MCES) and also serves portions of Edina. Bloomington and Edina staff are currently working with MCES staff on a long-term solution to ensure adequate sewer capacity to serve planned growth in both cities. However, necessary improvements may not be implemented for several years. Until the sewer capacity is increased, new development that would result in an increase in sewer flow may be delayed.

The area currently experiences traffic congestion during afternoon peak hours.

3.3 Managing Traffic and Circulation

The area currently experiences traffic congestion during afternoon peak hours. Some of this is the result of the concentration of office employment in the District. There is also a significant amount of traffic originating outside the District that enters Bloomington on Normandale Boulevard/TH 100 on weekday afternoons. This traffic consists of a mix of Bloomington residents returning home after work as well as pass-through travelers. The traffic analysis conducted for this District Plan estimated levels of future traffic and identify road improvements needed to accommodate development through 2030. *See **Appendix A***.

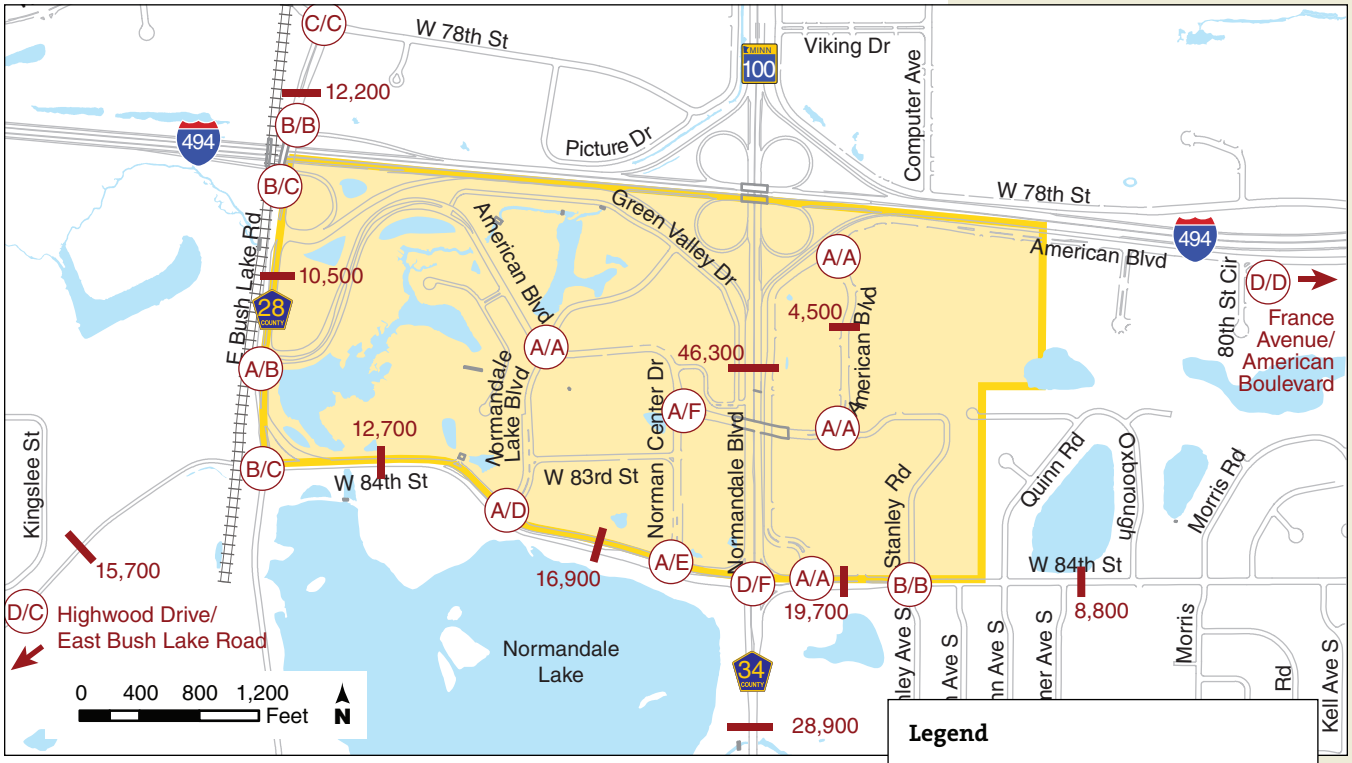
Figures 3.2 and 3.3, on the next page, illustrate existing (2002) and future (2030) traffic volumes in the District.

Level of Service (LOS)

The traffic study analyzed the LOS at the intersection of Normandale Boulevard and West 84th Street. LOS is an indicator of how well an intersection operates and the average amount of time vehicles wait to get through. A LOS rank from A to D is considered acceptable by MnDOT, Hennepin County and the City in terms of a design goal.

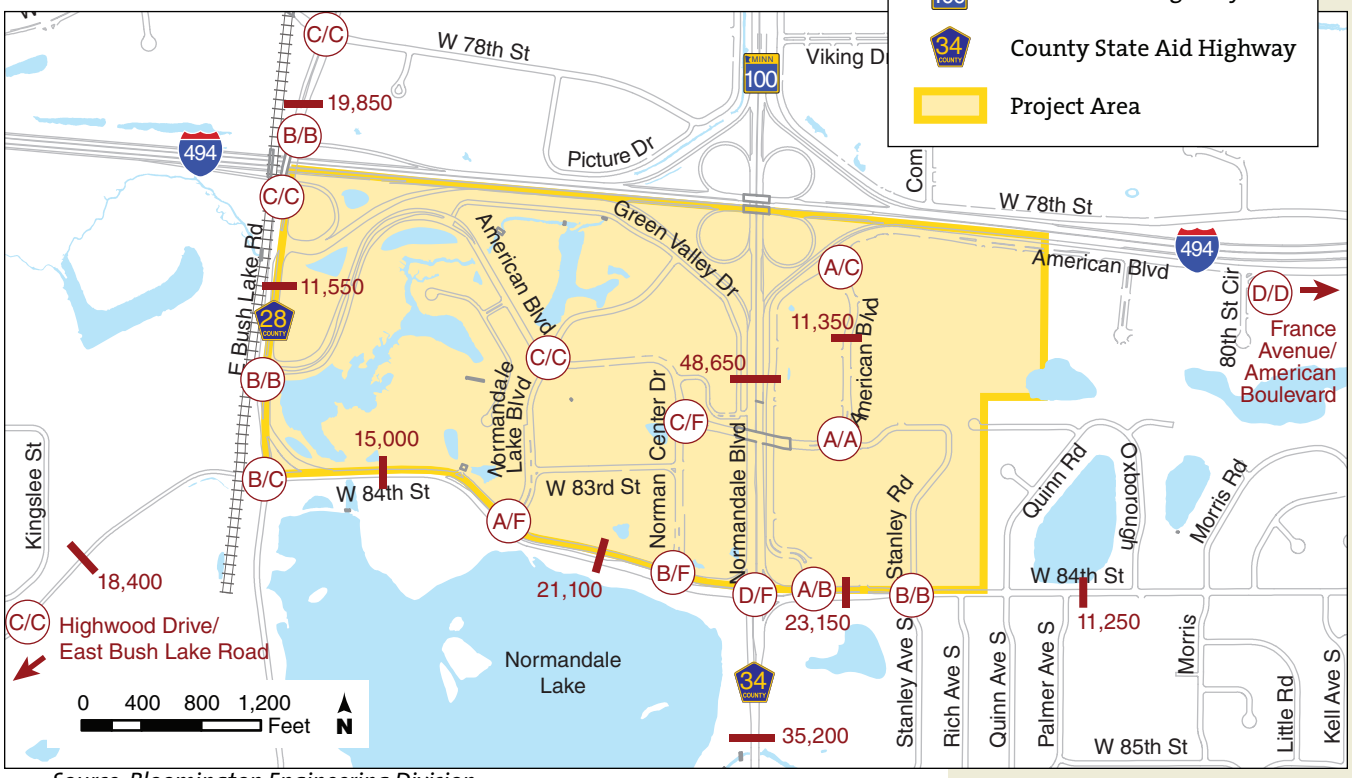
Currently, the intersection of Normandale Boulevard and West 84th Street operates at a LOS F during weekday afternoon peak hours

Figure 3.2 Existing (2002) Traffic Volumes



Source: Bloomington Engineering Division.

Figure 3.3 Future (2030) Traffic Volumes



Source: Bloomington Engineering Division.

As employment increases there are opportunities to expand and enhance transit service to the District.

(approximately 4-6 p.m.). The poor operations at this intersection create backups that negatively affect the intersections at West 84th St. and Norman Center Drive and West 84th St. and Normandale Lake Boulevard, causing them to operate at LOS E and F, respectively. Road improvements are necessary to alleviate current traffic congestion and accommodate projected future development in the area as well as anticipated growth in background traffic over the next 20 years.

Proposed Road Improvements

Based on analysis of existing and projected traffic volumes, several design concepts to increase intersection capacity were prepared for review and evaluation by the City. To achieve LOS D, improvements are also needed at other intersections and road segments in the District.

The preferred concept includes:

- Reconstruction of the intersection of Normandale Boulevard and West 84th St. to add lanes to increase traffic capacity;
- A future access from Bush Lake Road to west bound I-494 will have a significant beneficial impact on peak hour traffic congestion in the District.
- A pedestrian bridge over Normandale Boulevard (a required feature) to remove pedestrian crossings from the intersection;
- Additional signals and turn lanes on some internal streets in the District;
- Realignment of some internal streets in the District; and
- Some access restrictions including medians to restrict turning movements and a one-way restriction on Norman Center Drive.

A detailed description of the proposed road and traffic improvements is included in ***Appendix A***. In addition, *Section 6: Implementation Plan*, describes the funding and phasing of these road improvements.

Transit Enhancements

The District is currently served by three transit routes operated by Metro Transit. Service is primarily during weekday morning and afternoon rush hours. Transit access at other times is either not available or very limited.

As employment increases there is opportunity to expand and enhance transit service to the District. As previously stated, Metro Transit has indicated a willingness to consider the District as a trip destination during weekday rush hours, rather than simply a trip originator. Improved east-west transit service is also anticipated along American Boulevard to support more intensive development along this corridor.

The I-494 employment corridor through Bloomington and adjacent cities is one of the most logical and vital corridors in the Twin Cities for transit service improvements. A new transit way paralleling the I-494 employment corridor between the Hiawatha and Southwest LRT lines will be a vital and necessary component. Although completion of

such a transit way may be 20 to 40 years in the future, planning for it needs to start today.

Until a transit way can be created, limited bus stop services should be created along I-494 to facilitate suburb to suburb transit trips. The service would transport riders between stations or transfer points along the corridor where they would be able to transfer to/from local routes.

Improving Connectivity

Good access in and out of the District is provided by the major roads in the area, including American Boulevard, West 84th Street, Normandale Boulevard, and East Bush Lake Road. Internal circulation within the District is also generally good, with the exception of the area between Normandale Boulevard and Stanley Avenue, south of West 82nd Street. As noted above, establishing a through connection in this area would enhance access to existing businesses, increase safety and improve circulation. Creating streets in this area, whether public or private, should be done in a manner that maximizes the development potential of adjacent parcels.

Enhancing Pedestrian/Bicyclist Movement

Many of the major streets in the area are flanked by sidewalks and/or multi-purpose trails. However, the system of sidewalks and trails has gaps and some of the busy streets can be barriers to pedestrian and bicycle circulation. There is opportunity to expand the sidewalk and trail network in conjunction with road reconstruction and property redevelopment.

There are also opportunities and challenges to improve connections between the east and west sides of the District and to surrounding residential neighborhoods and Normandale Lake Park. A pedestrian bridge, required for operation of the 84th and Normandale intersection, will provide a safe means for pedestrians and bicyclists to cross Normandale Boulevard. However, access to the pedestrian bridge will need to be carefully designed. The existing American Boulevard bridge over Normandale Boulevard has sidewalks, but these are not wide enough to accommodate both pedestrians and bicyclists.

Many of the major streets in the area are flanked by sidewalks and/or multi-purpose trails.

Infrastructure capacity will need to be increased before new development can occur in some locations.

3.4 Coordinating Development with Infrastructure

Public infrastructure (i.e., roads, sewers) capacity must be adequate to accommodate development. In some cases infrastructure capacity will need to be increased before new development can occur. Generally, infrastructure upgrades are constructed when new development occurs or scheduled as part of the City's ongoing street and utility maintenance program.

The public infrastructure improvement needs anticipated to accommodate development in the District over the next 20 years include:

Road and Streetscape Improvements

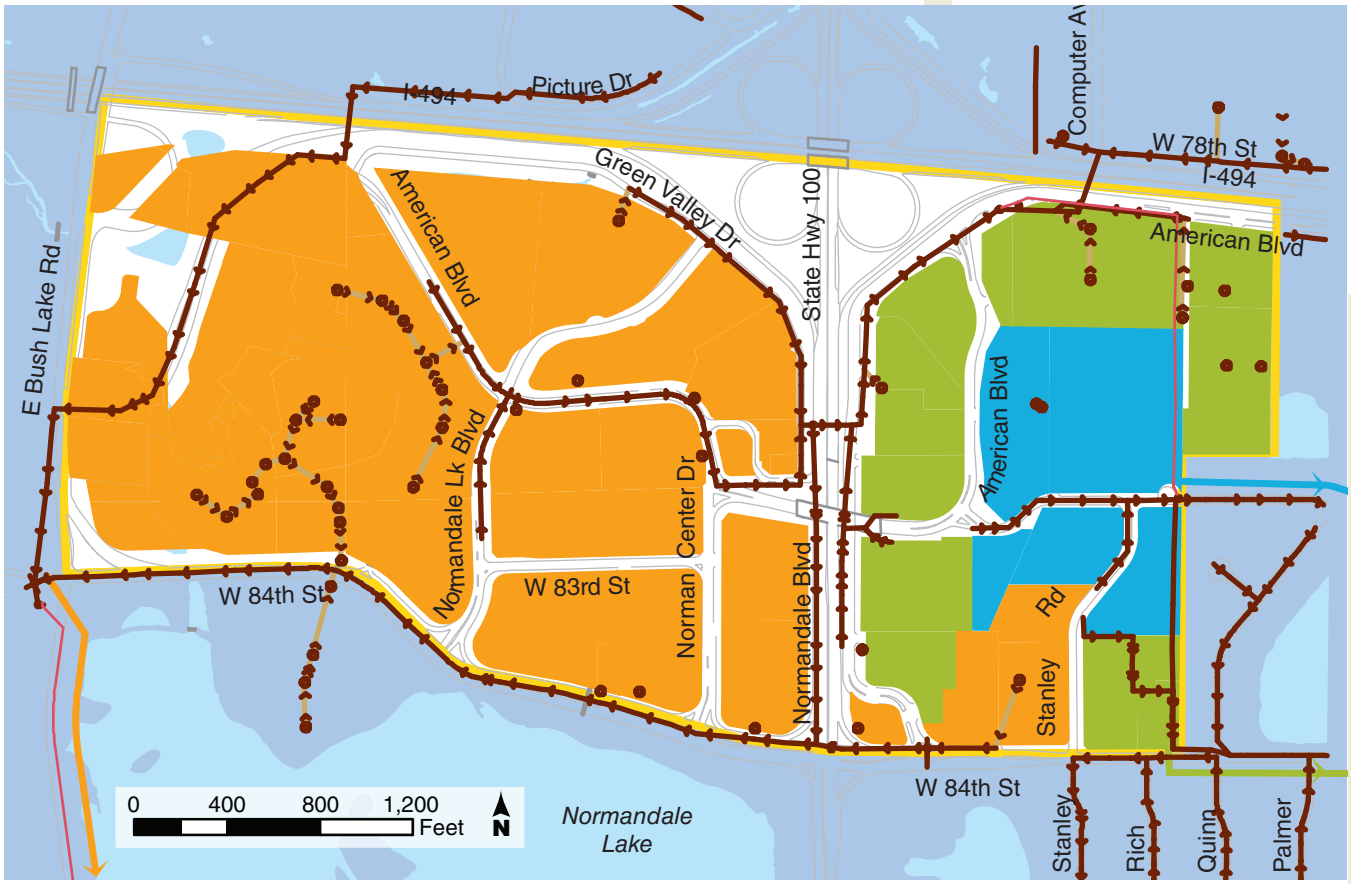
A detailed description of the planned road infrastructure and streetscape enhancements and timing of implementation is included in *Section 5: Development Framework* and *Section 6: Implementation Plan*. Most of the proposed improvements will occur in two phases between 2008 and 2014. Other road and streetscape improvements will occur in conjunction with scheduled road reconstruction.

Sanitary Sewer Capacity Constraints

Figure 3.4, next page, illustrates the sanitary sewer drainage areas in the District. The sanitary sewer system serving the west side of District (shown in orange) has adequate capacity to serve planned development through 2030. A few parcels on the east side of Normandale Boulevard, including the shopping center, the bank, and the Holiday convenience store/gas station, are also served by that system. The remainder of the east side of the District is served by a regional sewer interceptor (3-BN-499) that is part of the Metropolitan Council Environmental Services (MCES) system, which also serves portions of Edina north of I-494. This interceptor is currently near capacity. Thus, additional development or redevelopment on parcels served by this interceptor requiring more sanitary sewer capacity will need to be closely evaluated to determine whether sufficient capacity is available.

Bloomington and Edina staff are currently working with MCES staff on a long-term solution to ensure adequate sanitary sewer capacity is available to serve planned growth in both cities.

Figure 3.4 Existing Sanitary Sewer and Drainage Areas



Legend

- Drains via Chalet Lift Station and south on Chalet Road
- Drains to W. 84th St. via W. 84th St.
- Drains to W. 84th St. via W. 82nd St. and Oxborough Ave.
- Public Sanitary Sewer Line
- Private Sanitary Sewer Line
- Manhole
- Study Area Boundary

Source: Bloomington Utilities Division, 2008.

Substantial private investments have been made to beautify the District.

Intentional consideration of urban design is important to establish a clear identity and visual consistency.

3.5 Enhance District Character

Given the District's regional and local importance as an employment, recreation, and residential destination, and its location as a gateway to Bloomington, investments in the public and private realm are merited to enhance and maintain the physical and visual character of the area. Intentional urban design is important to establish a clear identity and visual consistency and to ensure that development is sensitive to the natural environment and enhances livability and property values.

Substantial private sector investments have been made in the area that enhance its visual character, particularly in the office developments west of Normandale Boulevard. Further enhancements, primarily to the public realm, should build on these efforts. There are also opportunities to extend the natural character, which is fairly prevalent on the west side of the District, to the area east of Normandale Boulevard in conjunction with redevelopment of older properties.

Enhancing the District's character will require commitment to the following efforts:

- **Enhance the design and function of public streets, sidewalks and paths:** This includes timely redesign, reconstruction, and maintenance of streets, sidewalks, and trails to provide for comfort, safety, and traffic flow while supporting surrounding land uses. It also includes establishing a more attractive environment for walking, biking and driving.

- **Create green networks: Green networks can include streets, sidewalks, trails or interconnected stormwater ponds.** The emphasis is on use of plants and trees to enhance comfort and aesthetics, improve air quality, and moderate the impacts of weather. Green networks should reinforce primary routes to and between destinations in the area such as parks and open spaces, workplaces, residences, and commercial shopping areas.

- **Budget resources for construction and maintenance:** Adequate maintenance is crucial to create and sustain an attractive and distinctive identity for the District in the long term. Good design and careful selection of materials should ensure consideration of maintenance requirements. Even so, committing resources to routine and long-term maintenance is necessary to ensure streetscape elements retain their luster and ability to define a positive identity and image in the District.

A more detailed description and summary of proposed streetscape and urban design enhancements is provided in *Section 5: Development Framework* and an outline of tasks and phasing to implement these enhancements is included in *Section 6: Implementation Plan.*

Section 4

Vision and Goals

This chapter defines the vision and goals for development in the Normandale Lake District over the next 20 years. The vision and goals establish a framework to guide public and private investment consistent with the City's aspirations to realize the District's potential as an employment center, residential neighborhood, recreation destination, and gateway to Bloomington.

What makes the Normandale Lake Area unique?

- Regional destination.
- Bloomington gateway.
- Planned high quality, high intensity, mixed use area.
- Natural character and landscape.

4.1 Vision: "The Big Idea"

To position the entire District to gain maximum benefit from private and public investments, the vision for the District is to:

Continue to develop as a high quality, high density mixed use area in a manner that extends, reinforces and celebrates the natural environment.

Three primary goals to achieve this vision include:

a. Expand the **park-like character.**
b. Improve **identity and connectivity.**
c. Achieve a more **visually cohesive built environment.**

Each goal is discussed in more detail on the following pages.

Goal 1 Expand the park-like character.

Create green networks.

The District's existing natural systems (parks and open space, Normandale Lake, Nine Mile Creek, woodlands and wetlands) lend a natural character to the area. Historically, development in the District has inconsistently responded to existing natural systems. Development west of Normandale Boulevard has incorporated the existing creek, wetlands, and wooded areas whereas development east of Normandale Boulevard reflects older suburban development patterns with large expanses of pavement devoted to surface parking and no provisions for infiltrating stormwater.

Normandale Lake, with its open vistas and trails, Nine-Mile Creek and associated wetlands and area woodlands contribute to the area's park-like character. A primary goal is to extend this character throughout the District to enhance its aesthetic value and distinctiveness.

Expanding the park-like character will involve:

- Establishing a connected network of open space.
- Creating visual and physical connections between Normandale Lake Park and the MnDOT stormwater pond.
- Enhancing landscaping along streets and other public areas.
- Integrating stormwater treatment facilities to create a "green" network.

Goal 2 Improve District identity and connectivity.

Enhance the design and function of public streets, sidewalks and paths.

The District encompasses major employment, recreational, and retail destinations. As a result, the area draws a substantial amount of vehicle traffic, which necessitates a system of multiple-lane roads. These roads can present barriers to pedestrians and bicyclists wanting to access the park and businesses in the area.

Currently pedestrian and bike traffic can move about within the District using existing sidewalks and trails along the roads and around Normandale Lake. However, not all road segments include sidewalks or trails to accommodate pedestrian traffic. Breaks in sidewalk and trail continuity and inconsistent design (width, pavement quality, separation from vehicle traffic) make it difficult for pedestrians and bicyclists to travel through the entire District comfortably and safely.

Located at the interchange of I-494 and TH 100 (Normandale Boulevard), the District functions as a gateway to northwest Bloomington. Establishing a consistent design character through coordinated use of streetscape elements, building materials and signs can improve visual cohesiveness and create a distinct identity for the District.

Improving identity and connectivity will involve:

- Installing a complete system of sidewalks and trails.
- Building a visually distinctive pedestrian bridge over Normandale Boulevard that emphasizes the District's gateway function.
- Creating trail connections between Normandale Lake Park and the MnDOT stormwater pond.
- Installing streetscaping along roads using a consistent palette of plants, lighting, and sidewalk/trail pavement material.
- Installing a coordinated system of public wayfinding signs throughout the District.

Goal 3 Achieve a more visually cohesive built environment.

Building materials, architectural styles and scale, and site planning decisions define the character and visual quality of the built environment. Enhancing the overall cohesiveness of the built environment can be achieved by coordinating private site planning and building design decisions with public efforts to enhance the public realm (i.e., streetscaping, wayfinding signs).

Creating a visually cohesive built environment will involve:

- Establishing area-specific design guidelines to address building height, massing, setbacks, and exterior materials.
- Defining a list of desired materials for landscaping and streetscape enhancements.
- Continued enforcement of existing sign regulations.
- Earmarking funding for on-going maintenance of public areas and facilities.

Adopt design guidelines to ensure attactive development.

4.2 Objectives

Eleven objectives were defined to achieve the District's vision and goals. These objectives express the values that the community has indicated are important factors to consider in making planning and development decisions in the District.

Objective 1

Foster intense and compact development.

The west side of the District contains a concentration of premiere office space that serves as a regional employment center. Concentrating high density office development in this area allows for efficient use of existing regional and local road and utility infrastructure. There is tremendous opportunity to establish a mix of mutually supportive uses on the east side of the District that would serve the office park, hotels, and the surrounding residential neighborhoods. Making development more compact promotes pedestrian activity and can enhance economic synergies.

Objective 2

Maintain and enhance the public realm.

Streets, sidewalks and trails, open spaces and park facilities are the common spaces that bind the District together. Public spaces should convey the City's commitment to high quality development and reinforce the area's identity. Making a commitment to finance and maintain public realm improvements is critical.

Objective 3

Foster revitalization.

The City will continue to support and encourage redevelopment that capitalizes on existing investments and amenities in the District. Revitalization should also strengthen adjacent single-family neighborhoods, promote connections to area parks and natural areas, and enhance the ecological integrity of the natural resources in the area.

Objective 4

Ensure visual and functional continuity.

Redevelopment of property in the District offers an opportunity to achieve greater balance in the physical character and profile of the east and west sides of the District. Providing continuity in the built environment (architecture, streetscape, signage) through use of street and building design guidelines will help establish a more balanced and visually unified district, allowing the District to appear and function as a whole.

Objective 5

Create a distinct district identity.

Located at the interchange of I-494 and Normandale Boulevard (TH 100), the Normandale Lakes area serves as a gateway to the City. Normandale Lake is a prominent visual landmark, making the area immediately recognizable and providing an attractive "front yard" to the surrounding office park development. The cluster of distinctive, tall office buildings are also recognizable landmarks in the area. Creating a distinct identity for the District will involve building on the existing natural character and high-quality of development in the area.

Objective 6

Design with nature.

Natural features are a prominent component of the landscape in and around the District and have directly influenced the pattern of development, particularly where Nine Mile Creek winds through the west side of the District. Design with nature means developing in a manner that protects and enhances the natural resources in the area by treating existing natural features as assets and utilizing techniques such as low-impact design and best management practices.

Objective 7

Encourage sustainable and balanced development.

The Normandale Lake District possesses a number of desirable characteristics, notably visually prominent natural features and a number of high-quality developments. Preserving and enhancing these assets will be critical to sustain the character and value of the District and surrounding neighborhoods. Integrating natural features, using high-quality and energy-efficient design, fostering a synergistic mix of land uses, and establishing a prominent public realm are all important aspects of sustainable and balanced development.

Objective 8

Provide a high level of access and connections.

The District serves visitors and employees from around the region as well as neighborhood residents. Providing safe and convenient access and circulation for vehicles, pedestrians and cyclists will be critical to the area's success. Access to the regional road network will become increasingly important as the area continues to grow and intensify. Improving access to the regional highway system and improvements to local streets, sidewalks and trails can enhance connectivity to and between the various destinations in the area.

Objective 9

Ensure sensitivity to residential neighborhoods.

There are a variety of residential neighborhoods in and around the District. These areas are a vital component of the District. While the District will continue to develop and change, protecting and maintaining the livability of residential neighborhoods is a high priority. This will require the provision of a well-designed and safe circulation system for pedestrians, bicyclists, and motorists, site buffering and landscaping, and careful attention to building design.

Objective 10

Emphasize quality, comfort, and safety.

Deriving long term value from public investments is typically achieved through high quality design and construction. Investing in a well-designed public realm can reduce long-term maintenance costs and will result in the creation of attractive public spaces that feel safe and comfortable, enhance property values, and improve livability.

Objetive 11

Commitment to implement and maintain.

Public spaces and facilities that are well cared for tend to retain their public value and function for longer periods of time. Committing adequate resources to maintain public improvements from the outset of a project will ensure that community expectations regarding the physical condition of streets, trails, and parks are met.

Section 5

Development Framework

The Development Framework provides a guide for new development and redevelopment within the Normandale Lake District (District). It takes into consideration several elements – transportation and traffic, urban design, land use function and pattern, parks and open space resources, trails and connectivity. The framework describes a development vision based on five principles:

- Use development ideas that are forward looking, but also grounded in previous planning studies, analyses and projects.
- The planning horizon is the year 2030. The importance of a long-term timeframe should not be underestimated. Opportunities will occur during the next 20 years that do not seem practical based on today's market demand.
- Land use changes need to consider a variety of factors from sewer capacity and transportation improvements to energy and sustainability.
- Market demand, investment and technology are variables that can speed up or slow down, resulting in revisions to predicted development pace and concepts.
- This District Plan should be considered in the larger context of future land use and transportation growth in the I-494 corridor including concentrated employment nodes, mixed uses, and introduction of high density residential.

This District Plan takes into account the larger context of future land use and transportation growth in the I-494 corridor, including concentrated employment nodes, mixed uses, and introduction of high density residential.

5.1 Challenges and Opportunities

The northwest area of Bloomington is characterized by an established and growing Class A office market and several solid residential neighborhoods. These land uses take advantage of nearby park and open space amenities and proximity to the regional roadway system. They also provide a market area for commercial goods and services.

Future development in the District will continue to be based on these advantages and amenities.

Over the next 20 years, the land use and development pattern west of Normandale Boulevard is expected to remain, with only minor changes to better accommodate existing uses. The area east of Normandale Boulevard is expected to change

Since many of the existing multi-family residential units east of Normandale Boulevard were built in the 1960s, redevelopment of these buildings will be a focus for change in the District.

more noticeably. Some of the commercial and residential structures will be replaced. Changes in commercial, cultural and recreational activities combined with demand for new residential alternatives are factors that will foster redevelopment.

Specifically, the focus of change in the District will be the neighborhood retail and multi-family residential areas east of Normandale Boulevard, south of American Boulevard, west of Stanley Avenue and north of 84th Street. Many buildings in this area were built in the late 1960s to the mid-1970s and will be over 60 years old in 2030. The area has the potential to redevelop and be reconfigured into a more contemporary, functional and efficient sub-district that serves the larger residential and commercial service area in northwest Bloomington.

5.2 Overview of Development Framework

The Development Framework is a guide for new development and redevelopment in the District. The recommended land use plan was selected from four land use scenarios prepared to evaluate the development potential of alternative land use and circulation patterns. All concepts assumed that the development pattern in much of the District is unlikely to change in the next 20 years, with the exception of the area east of Normandale Boulevard between 82nd and 84th Streets. The four land use scenarios are presented in ***Appendix B***.

This area is envisioned to redevelop to better complement and serve the office park west of Normandale Boulevard, strengthen its value to residential neighbors by providing convenient retail/commercial services and extend the market area served beyond the immediate District.

In conjunction with the land use alternatives, five internal circulation concepts were developed to examine access and movement patterns in the focus area, particularly in light of the planned future closing of the frontage road along the east side of Normandale Boulevard. The circulation concepts establish the physical layout and form for redevelopment. Circulation scenarios were evaluated on their ability to accommodate future redevelopment as well as various modes of movement including pedestrians, bicyclists, vehicles, and transit. The five circulation concepts are presented in ***Appendix C***.

Key development and circulation objectives include:

- Recommend land uses that are complementary to the area's commercial employment base and adjacent residential areas both east and west of Normandale Boulevard.

• Foster connections between development and park and open space resources.

• Complement and enhance transit opportunities.

• Incorporate urban design elements such as streetscaping, pedestrian-scaled building massing, and site amenities to establish a cohesive character for the District.

• Facilitate movement of pedestrians, bicyclists, vehicles, and transit within the District and connect the District to adjacent residential areas.

• Define a circulation system hierarchy that complements access needs and design objectives.

• Establish a circulation system that enhances land use efficiency by defining basic layouts and patterns for development.

Observations and Assumptions

The land use and circulation scenarios considered the following development and transportation factors that are likely to remain constant.

• 5100 West 82nd Street is proposed to redevelop with approximately 282 apartments. This increases the number of residents in the neighborhood center's market area and sets a tone for future residential redevelopment.

• Stanley Road will be extended north of 82nd Street to connect with American Boulevard in conjunction with redevelopment of adjacent parcels.

• I-494/TH 100 interchange improvements will result in closing the northern portion of the frontage road on the east side of Normandale Boulevard.

• Urban design improvements that provide a cohesive district character will occur in conjunction with new development and/or street construction.

• The existing neighborhood center was constructed 35 years ago and will be 57 years old in 2030. It is likely to undergo redevelopment to retain its market viability.

• The Holiday Station and Highland Bank buildings will remain as part of the redeveloped neighborhood center.

• The multi-family residential units along 82nd Street, 84th Street and Stanley Road are over 40 years old (constructed in the 1960s). These buildings will be 65 years old in 2030 and, like the shopping center, will likely require redevelopment during the next 20 years.

• Properties abutting I-494 will continue to be designated for freeway oriented service (e.g. hotel) and office uses. The existing hotels and Southgate office building may remain, expand or redevelop during the timeframe of this plan.

• The existing carpet store at 5115 American Boulevard West will redevelop to a non-retail use. The proposed land use designation on this parcel allows for redevelopment with office or hotel uses, consistent with abutting properties. This land use change is considered a "clean up" recommendation.

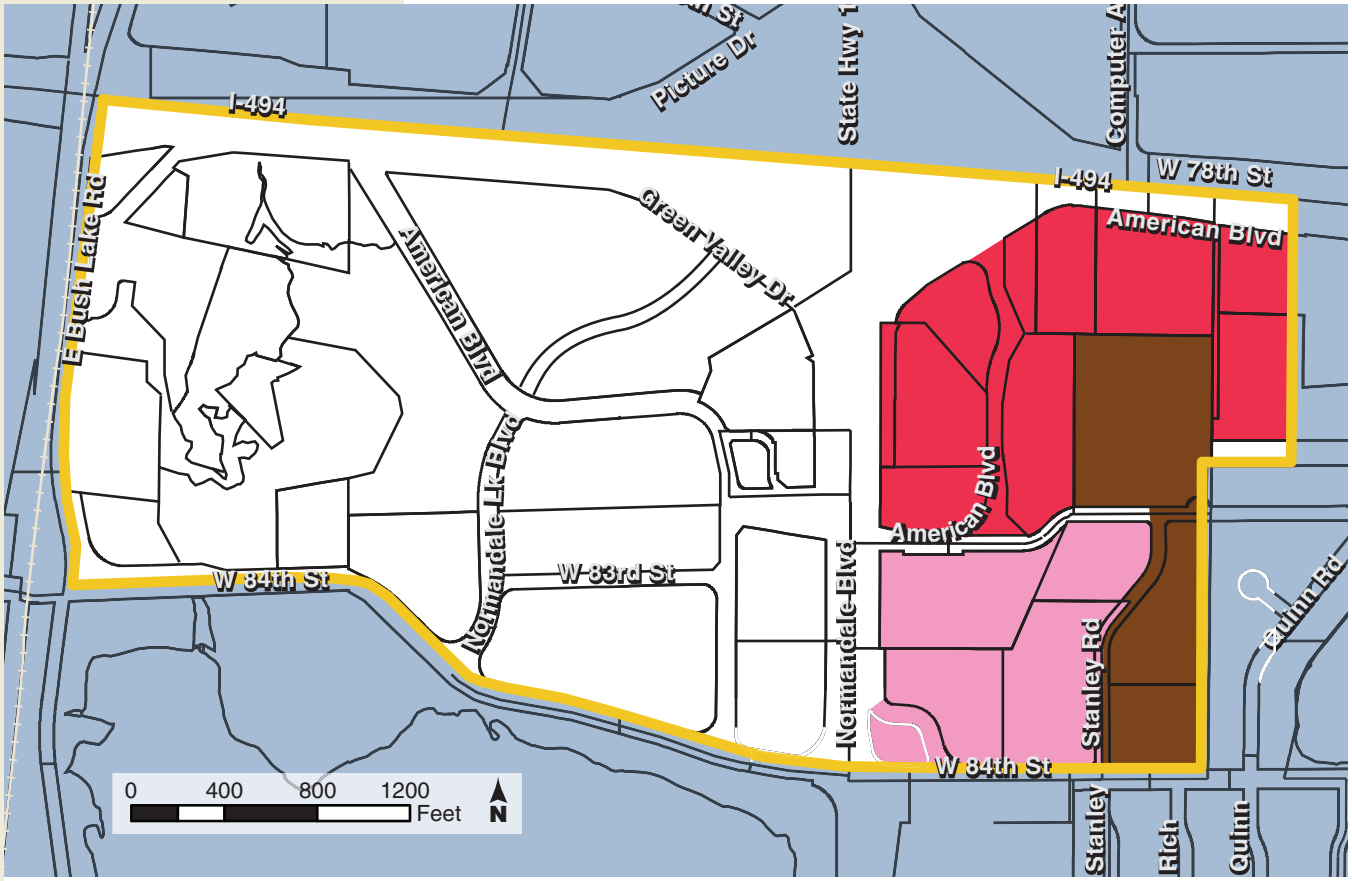
The Holiday Station and Highland Bank buildings will remain as part of the redeveloped neighborhood center.

• The existing Mercedes/Nissan auto dealer and Bally's health club properties will redevelop. Proposed land use designations would allow future redevelopment consistent with existing development, oriented to regional commercial uses.

5.3 Recommended Land Use and Circulation Concepts

The four land use and five circulation scenarios mentioned above were reviewed by District property owners, the Planning Commission and the City Council. The preferred land use concept for the area east of Normandale Boulevard is described here and shown in ***Figure 5.1***, below.

Figure 5.1 Preferred Land Use Concept



Source: Bloomington Planning Division.

Land Use Characteristics and Implications

The development character on the west side of Normandale Boulevard is very different from that on the east side. This is due to major differences in land use types, but also because the west side developed later and was subject to requirements to minimize impacts on environmental features such as wetlands. Almost all of the parking west of Normandale Boulevard is in structures, whereas parking east of Normandale is in surface lots.

West of Normandale Boulevard

- The existing land use pattern - primarily Class A office with some multiple-family residential - is expected to remain.

- Existing vacant parcels or older office buildings are anticipated to redevelop with high-rise offices, hotels, or integrated multiple-family residential uses.

- The former gas station site located at 5400 American Boulevard West is owned by the adjacent Crowne Plaza Hotel and will likely redevelop as part of a hotel expansion.

East of Normandale Boulevard

- Multiple-family development provides a buffer and height transition between existing single-family neighborhoods to the east and the commercial and freeway oriented uses to the north and west.

- An apartment development at 5100 West 82nd Street may set the stage for more new multiple-family residential units in this area. While the total area designated for multiple-family development may not change significantly, locations may shift and physical form will change as existing apartment sites are redeveloped.

- A change from High Density Residential to General Business is proposed for the existing apartment buildings located south of American Boulevard and north of 82nd Street. This will increase the area designated for General Business. It will also allow redevelopment as a mixed use project, with multiple-residential use integrated vertically or horizontally with retail/commercial uses.

- Expanding the area designated for General Business should improve the potential for redevelopment of the existing neighborhood center.

- The proximity of the neighborhood center to office and hotel development may foster a market for supportive or symbiotic uses.

- Small parcel sizes in some locations will require site assembly to foster commercial/retail redevelopment.

Most of the parking west of Normandale Boulevard is in structures; parking east of Normandale is in surface lots. This has a profound impact on the relative attractiveness of the areas.

Improving internal circulation through the retail center is recommended.

Internal Circulation Characteristics and Implications

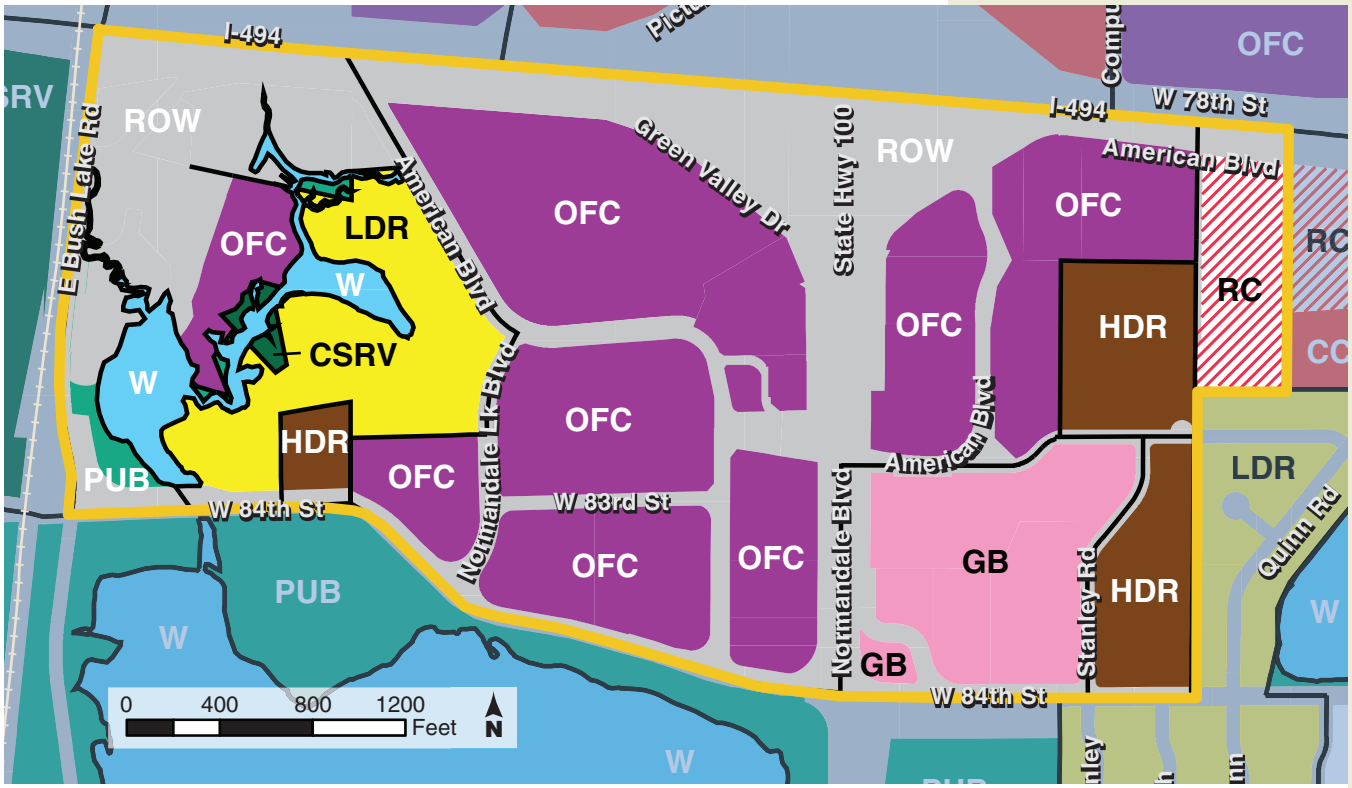
Modifications to the internal circulation system east of Normandale Boulevard are proposed to facilitate redevelopment in the area between 82nd and 84th Streets. Characteristics of the preferred circulation concept include:

- Create a central east-west street located approximately mid-way between 82nd and 84th Streets. This will become particularly important for internal circulation after the east frontage road on Normandale Boulevard is closed.
- A north-south connection between the new east-west street and 84th Street could be created on the east side of the existing bank. This could be a public street or remain as a private drive. Its primary function would be to enhance access to property in this quadrant.
- The proposed streets should be located to minimize creation of unusable remnant parcels. This can best be achieved when multiple properties redevelop together. If parcels develop independently, care should be taken to align the streets along existing property lines.
- The through street locations result in parcel sizes consistent with the minimum size requirements for the proposed B-4 zoning. The parcels are approximately 2.7 acres, 4.4 acres, and 10 acres.
- Parcels with road frontage on all sides will require careful design to minimize a "back door" appearance on any side.

5.4 Future Land Use Recommendations

The recommended future land use designations in the District are shown on ***Figure 5.2***, next page, and the primary uses intended for each land use category are described in ***Table 5.1***. Permitted and conditional uses are defined in the zoning districts described later in this report.

Figure 5.2 Proposed Land Use Guide Plan



Legend

OFC	Office	LDR	Low Density Residential	PUB	Public
RC	Regional Commercial	HDR	High Density Residential	CSRV	Conservation
GB	General Business	ROW	Right-of-Way	W	Water

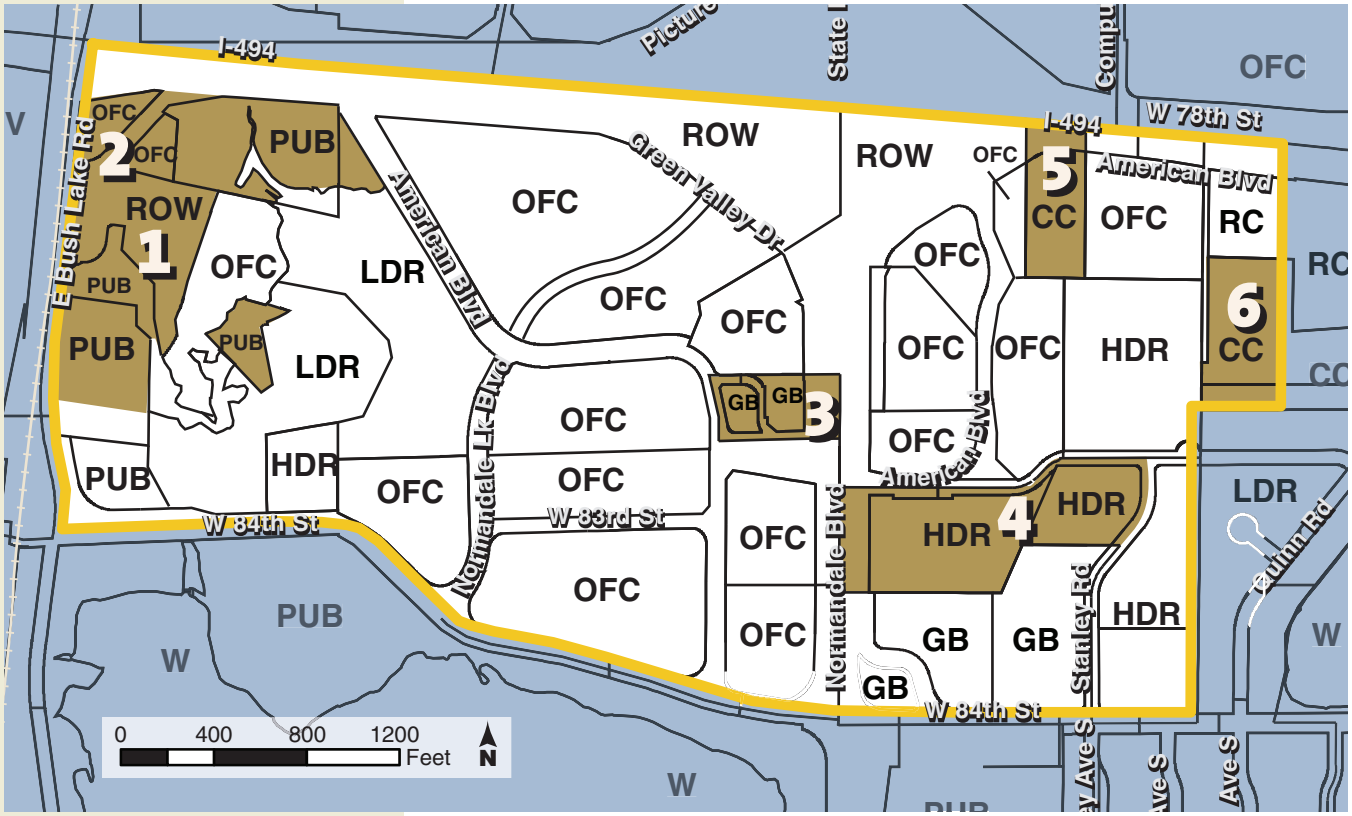
Source: Bloomington Planning Division.

Table 5.1 Description of Land Use Categories

Land Use Category	Intended Uses
Office (OFC)	Professional offices, hotels (if near freeway).
Regional Commercial (RC)	Similar to Community Commercial, but allows "big box" retail, large shopping centers, and automobile sales.
General Business (GB)	Neighborhood commercial nodes, including smaller supermarkets, drug stores, restaurants, gas stations, offices. Residential uses are allowed if integrated with a general business land use and allowed by the zoning. Excludes hotels, "big box" retail, medium and large shopping centers, automobile rental and sales.
Low Density Residential (LDR)	Residential development with density of 5 or fewer units per acre. Typically single family. Can also be two family and low-density townhomes.
High Density Residential (HDR)	Residential development with density of 10 or more units per acre. Typically apartments and condominiums.
PUB (Public)	Parks, schools, fire stations, municipal buildings, public open spaces.
Conservation (CSRV)	Natural areas, park and conservation areas.
Right-of-Way (ROW)	Public right of way; typically streets and utility corridors.

Source: Bloomington Planning Division.

Figure 5.3 Parcels Proposed for Land Use Guide Changes



Source: Bloomington Planning Division.

The parcels owned by MnDOT or the City of Bloomington along East Bush Lake Road are used for road right-of-way. The recommended land use change will reflect actual use. (See #1 and #2.)

Summary of Recommended Land Use Changes

Land use changes are recommended on the parcels shown on ***Figure 5.3***, above, and described below:

1. Change from Public to Right-of-Way.

These five parcels are owned by MnDOT or the City of Bloomington and used for road right-of-way. The recommended change will reflect actual use.

2. Change from Office to Right-of-Way.

These three parcels are owned by MnDOT and used for road right-of-way. The recommended change will reflect actual use.

3. Change from General Business to Office.

These three parcels contained a gas station, which has been removed and the property has been purchased by the adjacent hotel owner. The proposed land use allows for expansion of the hotel development.

4. Change from High Density Residential to General Business.

Two of these parcels currently contain apartment buildings constructed in the 1960s. The third is a small remnant owned by the City of Bloomington. The recommended land use would allow new development in coordination with redevelopment of the retail/commercial parcels to the south. The GB land use designation

(and proposed C-4 zoning) would allow for mixed use development consisting of residential uses integrated with retail/commercial development.

5. Change from Community Commercial to Office.

The current Community Commercial designation only applies to a portion of this parcel and was originally intended to allow a restaurant use that never developed. The proposed land use change will give this parcel a single land use designation that is consistent with surrounding parcels.

6. Change from Community Commercial to Regional Commercial.

The proposed land use change will make this parcel consistent with the adjacent parcel to the north. Given that access to this parcel is limited, it is expected that redevelopment will occur in conjunction with the parcel to the north.

Table 5.2, below, indicates the changes proposed for each land use category. The largest change is in the Right-of-Way (ROW) category. This reflects recommendations to designate parcels used for roads as ROW rather than Public (PUB).

The other category with a significant change is High Density Residential (HDR). The 9.2 acre decrease reflects the recommendation to designate two parcels with existing apartment buildings as General Business (#4 above). With the proposed B-4 zoning, these parcels could redevelop with high density residential uses, provided they are developed in coordination with adjacent commercial development.

These parcels contain apartment buildings constructed in the 1960s. The recommended land use change would allow new high density residential development coordinated with adjacent commercial uses. (See #4.)

Table 5.2
Acreage Comparison by Existing and Proposed Land Use Category

Land Use Category	Existing	Proposed	Change
Office (OFC)	92.91 acres	95.19 acres	+2.28 acres
Community Commercial (CC)	8.01	0	-8.01
Regional Commercial (RC)	2.86	8.09	+5.23
General Business (GB)	12.74	20.32	+7.58
Low Density Residential (LDR)	16.07	16.07	0
High Density Residential (HDR)	27.97	18.77	-9.20
PUB (Public)	17.81	9.16	-8.65
Conservation (CSRV)	0	1.36	+1.36
Right-of-Way (ROW)	NC	9.40	+9.40

Source: Bloomington Planning Division.

The area west of Normandale Boulevard has been guided and zoned for high intensity office and commercial uses, taking advantage of access to regional transportation.

5.5 Zoning Recommendations

The City is phasing out some existing commercial zoning districts and replacing them with newly-adopted districts. The new zoning districts will be applied when District Plans or other area studies are adopted. ***Table 5.3*** indicates the existing zoning districts that will be replaced and the likely new designations.

The table indicates general similarity between the existing and new districts, but there is not a one-to-one correspondence. In other words, the existing commercial zoning districts could be replaced with any of the new commercial zoning districts. The proposed new zoning district for each property was selected to most closely match the existing use or to reflect desired future uses.

Table 5.3 Existing and New (Replacement) Zoning Districts

Existing Zoning District*	New Zoning District
CS-0.5 (Commercial Service) CS-1 (Commercial Service) CO-1 (Commercial Office)	C-1 (Freeway Office and Service) C-2 (Freeway Commercial) C-4 (Freeway Office)
RO-24 (Residential Office	R-1 (PD) (Single Family – Planned Development) B-1 (Neighborhood Office) SC (Conservation) RM-50 (Multiple Family)
R-4 (Multiple-family)	RM-24 (Multiple Family)

*Zoning Districts to be eliminated.

Source: Bloomington Planning Division.

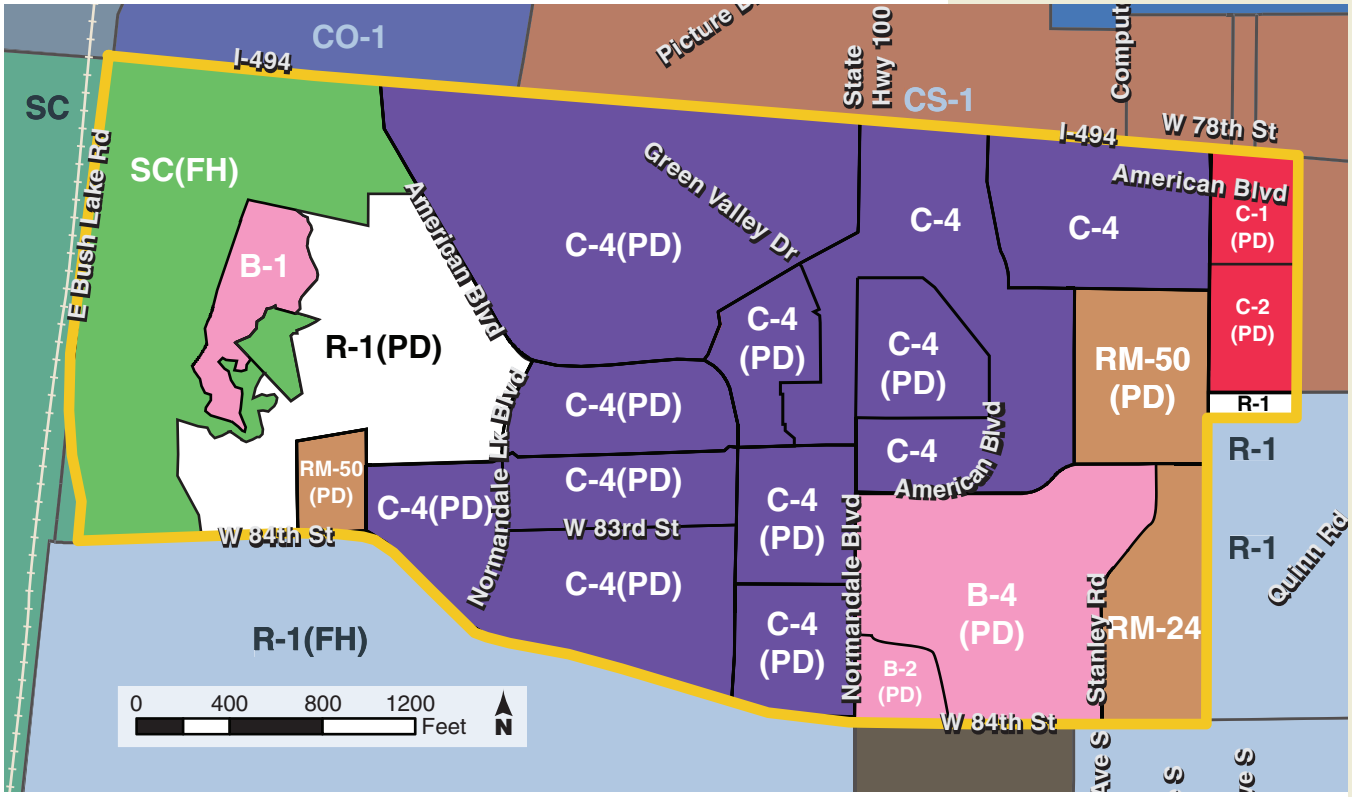
Description of Recommended Zoning Designations

Proposed zoning in the District is illustrated on ***Figure 5.4*** and ***Table 5.4***, next page, describes the typical uses permitted in the recommended new zoning districts. Over half of the land area in the District (not including roads) is zoned for commercial office, hotels, retail and service uses (C-1, C-2, C-4, B-1, B-2, B-4). This area has historically been guided and zoned to foster high intensity office and commercial uses that take advantage of the excellent access to the regional transportation system. The proposed zoning maintains that objective.

The following overlay designations are currently used or may be added to any zoning district:

- *Planned Development overlay (PD)* is intended to promote creative and efficient use of land by allowing design flexibility.
- *Flood hazard overlay zone (FH)* includes land within delineated floodway, flood fringe, or flood plain. Allows agriculture, public, and park uses.

Figure 5.4 Proposed Future Zoning



Legend

C-1	Freeway Office and Service	B-1	Neighborhood Office	R-1(PD)	Single Family (Planned Development)
C-2	Freeway Commercial	B-2	General Office	RM-24	Multiple-Family
C-4	Freeway Office	B-4	Neighborhood Commercial Center	RM-50	Multiple-Family
				SC(FH)	Conservation (Flood Plain)

Source: Bloomington Planning Division.

Table 5.4 Uses Permitted by Proposed Zoning District

Zoning District	Typical Uses Permitted
C-1 (Freeway Office and Service)	Auto Dealerships, Office, Restaurants.
C-2 (Freeway Commercial)	Office, Hotel, Retail and Service, Auto Fueling and Service.
C-4 (Freeway Office)	Office, Hotel, Restaurant (in Office or Hotel), Accessory Retail and Service.
B-1 (Neighborhood Office)	Office.
B-2 (General Commercial)	Office, Retail and Service, Restaurant, Auto Fueling and Service.
B-4 (Neighborhood Commercial Center)	Office, Retail and Service, Restaurant, Residential uses integrated with non-residential uses.
R-1 (PD) (Single Family – Planned Development)	Single Family Dwellings, Multiple Family Dwellings, if part of a Planned Development.
RM-24 (Multiple Family)	Multiple Family Dwellings (e.g., Apartments, Condominiums) with density of 12 to 24 units per acre, Senior Housing.
RM-50 (Multiple Family)	Multiple Family Dwellings (e.g., Apartments, Condominiums) with density of 20 to 50 units per acre, Senior Housing.
SC (Conservation)	Natural Areas, Conservation Areas, Wildlife Management.

Source: Bloomington Planning Division.

Rezoning will allow the retail center to redevelop in coordination with adjacent apartments.

Summary of Recommended Zoning Changes

Zoning changes are proposed for most of the parcels in the District. However, only a few result in significant changes that would allow uses different from what are allowed under the current zoning. Some of the recommended changes "clean up" existing designations that do not accurately reflect existing development on the property.

Many of the recommended changes will apply the new commercial zoning district designations and will not significantly impact use of the property. However, the new designations contain development standards such as building setbacks or Floor-Area-Ratio (FAR) that would apply to new development or redevelopment on the property.

Zoning changes that would allow significantly different uses on the property are shown on ***Figure 5.5***, next page, and include:

1. Change from CS-1 to C-4.

These three parcels (5311, 5301, 5400 Green Valley Drive) are under the same ownership as the adjacent hotel. The gas station has been removed and the proposed zoning will make these parcels consistent with the zoning on the adjacent hotel property and allow redevelopment as part of the hotel.

2. Change from R-4 to B-4.

Two of these parcels (5233 West 82nd Street and 8200 Stanley Road) contain older apartment buildings. The proposed zoning is consistent with proposed zoning on the adjacent parcels to the south and will allow coordinated redevelopment of the existing neighborhood center as a mixed use development, with integrated residential, retail and commercial uses.

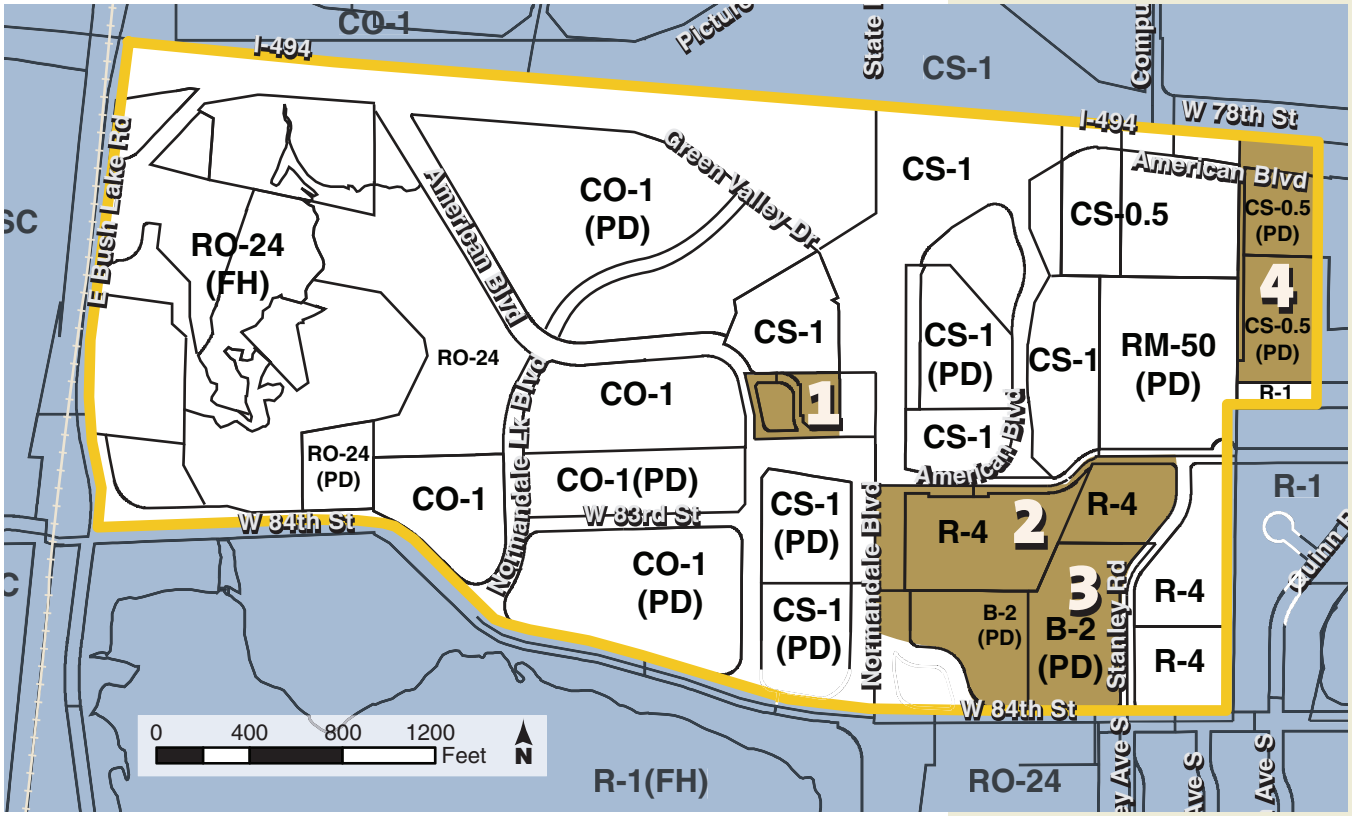
3. Change from B-2 (PD) to B-4 (PD).

These four parcels (8301 Normandale Boulevard, 5270 and 5200 West 84th St., and 8250 Stanley Road) comprise a mix of retail and commercial uses. The proposed zoning will allow all existing uses to remain as permitted uses, but also allow redevelopment with a mix of uses, including integrated residential. The intent of the recommended zoning is to allow these parcels to redevelop in coordination with the apartment properties to the north.

4. Change from CS-0.5(PD) to C-1 (PD) and C-2 (PD).

The proposed zoning on these two parcels (4901 and 4951 American Boulevard West) reflects the existing auto dealership and health club uses. The primary change resulting from the proposed rezoning of the health club property to C-2 (PD) will be to make the existing use conforming. It will also allow for retail development, which is limited to a provisional use under the existing CS-0.5 zoning.

Figure 5.5 Parcels Proposed for Major Zoning Changes



Source: Bloomington Planning Division.

The proposed zoning on these two parcels, *see number 4 on the map above*, reflects the existing auto dealership and health club uses.

The intersection of 84th Street and Normandale Boulevard operates at LOS F during the weekday afternoon peak.

A bicycle and pedestrian bridge over Normandale Boulevard will improve traffic flow in the 84th Street intersection and be a gateway feature.

5.6 Summary of Proposed Improvements

1. District Roadway and Circulation Improvements

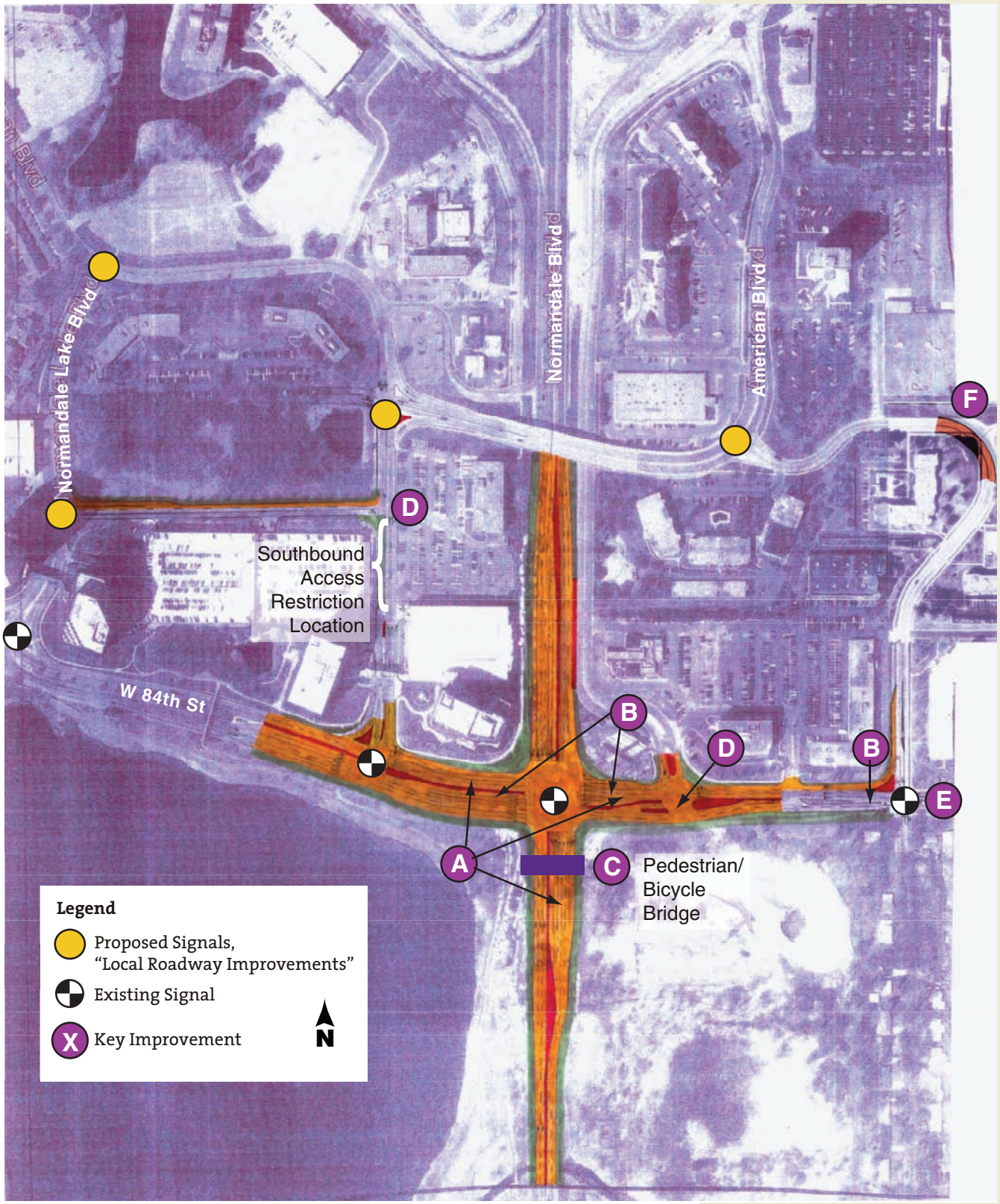
The traffic analysis done for this District Plan indicates that the intersection of 84th Street and Normandale Boulevard currently experiences periods of delay or congestion during weekday afternoon peak hours (operating at a Level of Service F). With significant new development and employment in the District over the next 20 years, road improvements are needed to mitigate current congestion and effectively manage future traffic levels in the area.

Proposed roadway improvements are shown on ***Figure 5.6***, next page, and include:

- Reconstruction of the intersection of Normandale Boulevard and West 84th Street to add through and turn-lanes to increase traffic capacity;
- A pedestrian bridge over Normandale Boulevard - a required feature that allows the 84th and Normandale intersection to operate at a better service level by removing at-grade pedestrian crossings;
- Widening 83rd Street between Norman Center Drive and Normandale Lake Boulevard;
- Realignment to improve the intersection of 82nd Street and Stanley Road;
- Add a turn lane on Stanley Road at intersection with 84th Street;
- Additional or new signals at several intersections in the District;
- Access restrictions:
  - Vehicles (except those exiting from the 8000 Tower ramp) will be prevented from heading south on Norman Center Drive.
  - Vehicles heading south on the Normandale Boulevard frontage road will be prevented from making east-bound left turns onto 84th Street.

Other road improvements are needed to enhance circulation in the area between Normandale Boulevard and Stanley Road, south of 82nd Street. As described on page 5.6, establishing a through connection in this area will enhance access to existing businesses, increase safety and improve circulation. New through streets, whether public or private, should be designed to maximize the development potential of adjacent parcels.

Figure 5.6 Proposed Road Improvements



Source: Bloomington Engineering Division.

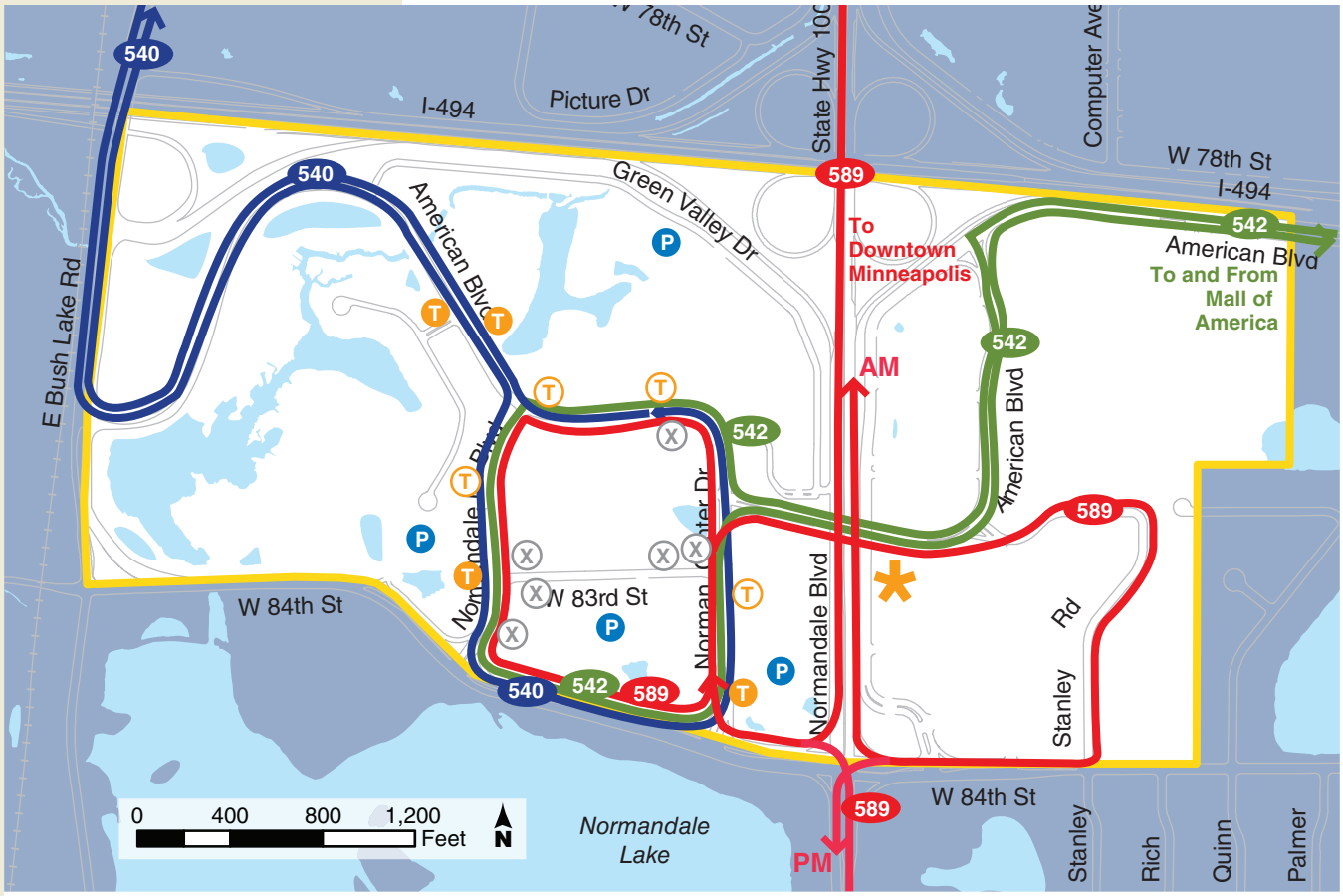
As the District develops, it will be a more prominent transit destination and enjoy improved service.

2. Transit Improvements

Transit options will increase as new development and redevelopment occurs and as people look for alternatives to reduce commuting and travel times. As the District and surrounding area develop with more intense and varied land uses, it will be a more productive transit destination. While this plan anticipates development of additional transit facilities in coming years, it does not prescribe specific locations or development requirements for future facilities. It recognizes that future transit facilities may be sited in multiple locations and take various structural forms, depending on their specific function.

With District employment forecast to increase substantially over the next 20 years, there is opportunity to expand and enhance transit service to the District. Metro Transit has indicated a willingness to consider the area as a trip destination and has proposed future route changes, shown in ***Figure 5.7***, below.

Figure 5.7 Future Transit Routes



Legend

- Bus Route
- 589 Route Number

Bus Stops:

- Existing
- Proposed
- Removed

- Parking Structures
- Transit Access/ Enhancement

Source: Metro Transit, 2008.

The following enhancements to transit service include:

- Add earlier and later "reverse commute" trips from downtown Minneapolis in the AM and returning to downtown in the PM. This would expand the route times to accommodate people arriving in the District after 8:00 a.m. and leaving between 3:30 p.m. and 6:00 p.m.

- Make routes through the District more direct to improve efficiency.

With implementation of road and streetscape improvements as well as redevelopment, the City will continue to work with Metro Transit to:

- Prepare a prototype for an Enhanced Transit Stop through coordination with streetscape/urban design improvements.

- Explore potential to create a new route transfer facility integrated with future redevelopment in the area east of Normandale Boulevard, between 82nd and 84th Streets.

In addition, long-term City plans should continue to encourage improved east-west transit service along American Boulevard by establishing a new transitway parallel to I-494 between the Hiawatha and Southwest LRT lines. Although completion of such a transit way may be 20 to 40 years in the future, it will be a vital and necessary component in the future Twin Cities transit system to serve more intense development along the I-494 employment corridor.

3. District Parking

Centralizing and sharing parking in structures will allow for more efficient land utilization, concentration of development intensity that integrates land uses and results in a live-work community, and improve vehicle and pedestrian movement and circulation. Specific district parking location(s) have not been identified at this time since integration of these structures should occur as part of site specific development. The City will work with land owners and developers to identify opportunities to provide shared parking in the District.

Some items to consider include:

- Parking lots or structures should be located behind or "wrapped" with buildings to minimize their visual dominance along a street.

- Encourage use of the shared parking flexibility measures in the City's zoning code (Section 21.301.06(e)(2)).

4. Utility Improvements

The District is served by the City's municipal water and sanitary sewer. Both systems are fully developed and upgrades will occur in conjunction with routine maintenance, street reconstruction, or to add capacity for new development or redevelopment.

While the public water system is adequate to accommodate anticipated future development, the sanitary sewer system serving the east side of the District will require upgrades to accommodate new

Parking lots and structures should be located behind or "wrapped" with buildings to minimize their visual dominance along a street.

Stormwater management practices include rain gardens and other features that promote onsite infiltration.

development or redevelopment that results in increased sewer flows.

Recent sanitary sewer modeling identified capacity constraints in the regional sewer interceptor (3-BN-499), which is owned and operated by Metropolitan Council Environmental Services (MCES). This interceptor serves most of the east side of the District (excluding the shopping center, bank, and Holiday convenience store/gas station) as well as portions of Edina north of I-494.

Recommended actions include:

- Bloomington will continue to work with Edina and MCES staff to identify improvements needed to ensure adequate sewer capacity for long-term planned growth in both cities.
- Until the interceptor capacity is increased, new development that results in an increase in sewer flow will need to be carefully evaluated to determine whether adequate capacity exists.

5. Stormwater Management Strategies

District stormwater management strategies related to future development and redevelopment need to be based on a comprehensive approach that combines traditional best management practices (BMPs) such as ponding with Low Impact Development (LID) techniques. This approach must provide for both stormwater management (quality and quantity of runoff) and natural resource enhancement. Combined approaches need to be applied at both the site and district levels.

Recommended actions include:

- Update the City's *Comprehensive Surface Water Management Plan* and *City Code* (zoning and land subdivision regulations) to include LID techniques and criteria for regional water quality projects.
- Continue to require that evaluation and assessment of stormwater management plans be conducted at the project application stage rather than after the approval of development plans.
- Continue to incorporate LID techniques and best management practices as strategies for stormwater treatment in new development and redevelopment projects. Appropriate LID practices may include infiltration basins, rain gardens, green roofs, treatment trains, and other practices that promote infiltration.
- Continue to require plans for operations and maintenance of stormwater management facilities in conjunction with project approvals and implementation.

Several specific storm water infrastructure improvement projects have been identified for the District. Generally, these improvements will be implemented in conjunction with road improvements. These include:

1. Upgrade approximately 1,500 LF of 27-inch to 36-inch RCP in Area 6.
2. Upgrade approximately 1,200 LF of 15-inch to 42-inch CMP in Area 3.
3. Upgrade approximately 2,100 LF of 48-inch to 60-inch CMP in Normandale Boulevard.

4. Address short duration road flooding at 5120 American Boulevard West (likely in combination with Item #1 above).

5. Possible upgrade of approximately 700 LF of 24-inch RCP in Area 2.

6. Natural Resources, Parks and Open Space, and Trail Improvements

The District's signature characteristic is the range of natural resource, open space, park and trail amenities located within or adjacent to it. These amenities are the result of context-sensitive site development and building construction and due to the City's history of responsible public park and open space acquisition and stewardship. These landscape amenities play a major role in defining the District's character and identity. Resource protection and enhancement will grow in importance during the plan's time horizon.

Natural Resources and Open Space

Natural resource elements within the District are primarily related to Nine Mile Creek, its shore area and large associated wetlands. The Normandale Lake and Hyland Park (northern portion) units of the Hyland-Bush-Anderson Regional Park Reserve, directly adjacent to the District, comprise terrestrial and aquatic environments that support passive recreation and provide a diverse habitat for wildlife and a setting for various vegetative communities.

Policies and programs to support the preservation and enhancement of natural resources and open space include:

- Require application of low impact development techniques and practices (BMPs) by development and redevelopment projects.
- Encourage use of native plant species and maintenance of natural landforms as part of the site development and construction process.
- Work with MnDOT to develop the park and open space character of Goldman Pond (on southeast corner of 84th Street and Normandale Boulevard) and include trails as an amenity.
- Continue joint implementation activities with the Three Rivers Park District including expansion of the Regional Park Reserve in west Bloomington to allow for better natural resource preservation and park and open space consolidation.

Park Improvements and Enhancements

The south edge of the District abuts Normandale Lake Park, a unit of the Hyland-Bush-Anderson Regional Park Reserve (west of Normandale Boulevard) and Goldman Pond (east of Normandale Boulevard). Reconstruction of the intersection of Normandale Boulevard and West 84th Street will create opportunities to improve the appearance and public use of these properties.

The intersection improvement requires acquisition of additional right-of-way on the south side of

The District's signature characteristic is the range of natural resource, open space, park and trail amenities located within or adjacent to it.

The pedestrian and bicycle bridge will be an important link between the east and west sides of Normandale Boulevard.

84th Street along the north edge of Normandale Lake Park and Goldman Pond. The road improvements need to have a context-sensitive design approach taking into consideration a variety of factors and collaboration of affected agencies. The transfer of park land to right-of-way will require approval of 4(f) and 6(f) documents for the conversion of park land and public property acquired by Federal funds.

To meet 4(f) requirements, this documentation needs to show that there is no practical and feasible alternative to using the subject property for right-of-way and that the project is planned to mitigate any potential impacts. To meet 6(f) requirements, the documents need to show that the conversion can be done in accordance with State plans and that substitution of other recreational or park and opens space properties of equal value will be made. Creative preparation of 4(f) and 6(f) documents could result in savings in the amount budgeted for right-of-way replacements.

Activities to coordinate road improvements and park impacts include:

- Proceed with the planning and design of intersection and pedestrian bridge projects based on a collaborative context-sensitive design approach.
- Prepare and submit Section 4(f) and 6(f) documents to MnDNR and MnDOT.
- Determine whether a restrictive covenant has been recorded against the property.
- Notify the Metropolitan Council regarding the amount of regional parkland being transferred for road right-of-way.

The pedestrian and bicycle bridge, required as part of the intersection improvement, will be an important link between the uses east and west of Normandale Boulevard. Providing good connections between Normandale Lake Park and the residential neighborhoods to the east is an important objective of this District Plan.

The proposed bridge will be designed to accommodate both pedestrians and bicyclists. It must also be attractive and well integrated into the surrounding landscape because, by virtue of its location, it will become a significant visual feature and gateway to the area and City. A more thorough discussion of design considerations for the pedestrian bridge and improving trail connections is included on page 5.27.

Trail Development and Enhancements

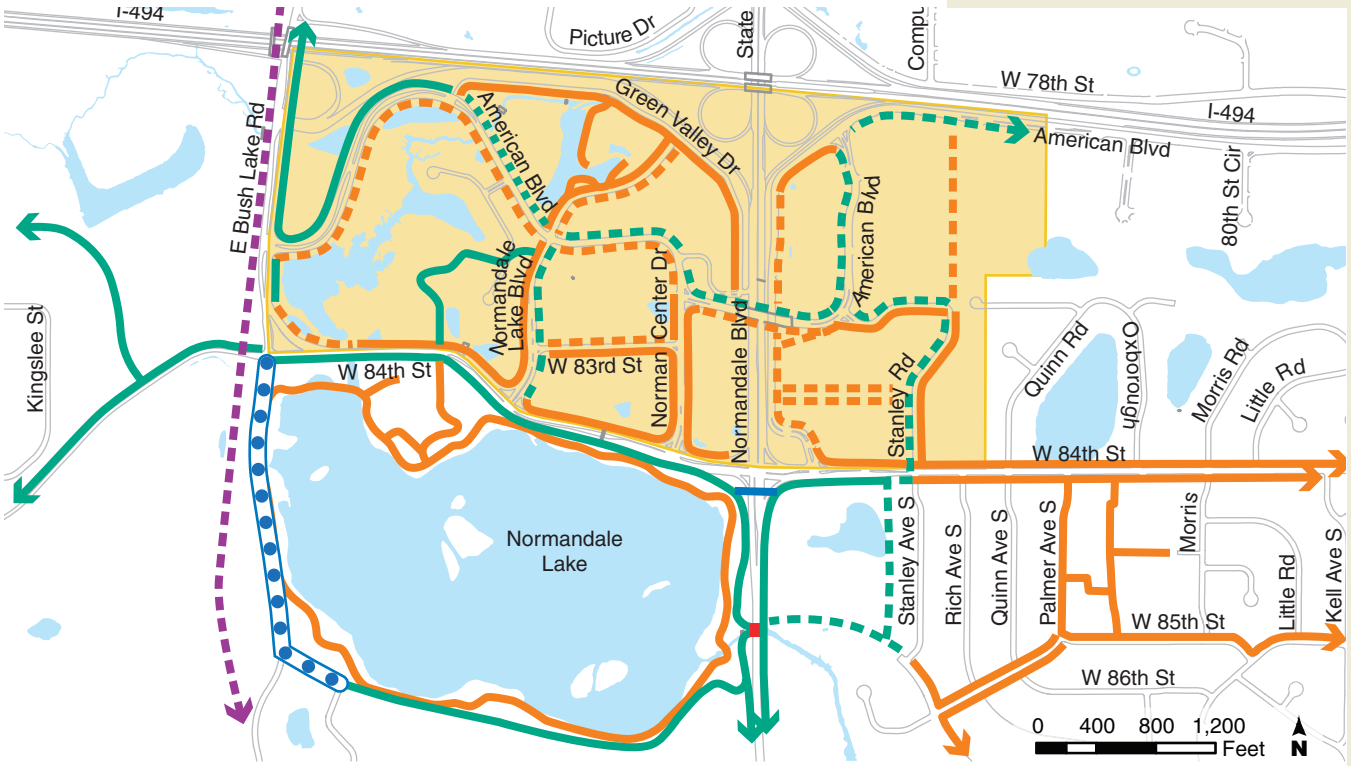
Improving connections and access between adjacent park and open space amenities and the District must be coordinated with future development and redevelopment in the area. Many of the existing roads are flanked by sidewalks and/or multi-purpose trails. However, the system of sidewalks and trails has gaps and some of the busy roads in the area are barriers to pedestrian and bicycle circulation.

There are opportunities to extend the sidewalk and trail network in conjunction with road reconstruction and property redevelopment. Proposed trail system enhancements are shown on ***Figure 5.8***, below, including:

- Construct a pedestrian and bicycle bridge over Normandale Boulevard.
- Integrate the pedestrian bridge access ramps with trails in Normandale Lake Park and the berm around Goldman Pond on the east side.
- Extend a path down the berm between the bridge and the existing sidewalk/trail along the south side of 84th Street.
- Eliminate at-grade pedestrian crossings at the intersection of Normandale Boulevard and West 84th Street.
- Install sidewalks and/or trails as proposed in the Urban Design Enhancements (page 5.22) when the adjacent streets are reconstructed.
- Create and/or improve pedestrian crossings at other locations on 84th Street (e.g., at Stanley Road, Norman Center Drive, Normandale Lake Boulevard).

Many of the major roads in the area are flanked by sidewalks and/or multi-purpose trails.

Figure 5.8 Proposed Trails and Paths



Legend

- Pedestrian Bridge
- Potential Regional Trail
- Proposed Shared-Use Path
- Proposed Pedestrian Way
- Existing Shared-Use Path
- Existing Pedestrian Way
- Existing On-Street Connection
- Trail Underpass
- Project Area

Note: Trails and sidewalks will meet City design standards.

Source: Bloomington Parks and Recreation Division.

Connectivity and access between adjacent parks, open space amenities and the District are improved with pedestrian bridges, such as the one over W. 84th Street.

Streetscape should use a consistent palette of plants, lighting, pavement, and retaining wall materials.

- Improve on and off road connections between the east and west sides of the District, to surrounding residential neighborhoods and to Normandale Lake Park.

- Work with MnDOT to create trails around Goldman Pond to connect the residential neighborhood to the east with Normandale Lake Park via the existing creek/trail underpass beneath Normandale Boulevard.

7. Urban Design Enhancements

Several physical improvements to public property and policy actions are proposed to create an overall complete and unified appearance in the District and achieve the measures outlined in *Section 4: Vision and Goals*, which include:

- Creating a more park-like character.

- Improving connectivity and identity.

- Creating a visually cohesive built environment.

Following is a summary of the recommendations for physical improvements to the public realm:

- Establish a visually connected network of open space.

- Create physical connections between Normandale Lake Park and Goldman Pond.

- Enhance landscaping along streets and other public areas.

- Integrate stormwater treatment facilities to create a green network.

- Install a complete system of sidewalks and trails.

- Build a pedestrian/bicycle bridge over Normandale Boulevard.

- Create trail connections between Normandale Lake Park and Goldman Pond.

- Install streetscape enhancements along roads using a consistent palette of plants, lighting, sidewalk/trail pavement, and retaining wall materials.

- Install a coordinated system of public wayfinding signs throughout the District.

Realizing these improvements may also require establishing policy initiatives or regulatory tools. Some urban design guidelines are included in this Plan. Possible additional actions include:

- Establish area-specific design guidelines to address building height, massing, setbacks, and exterior materials.

- Enforce existing sign regulations or consider adoption of area-specific regulations to ensure an appropriate degree of design consistency for private signs.

- Earmark funding for maintenance of public areas and facilities

Phasing of public improvements is summarized in *Section 6: Implementation Plan*.

Recommended Urban Design Guidelines

Roads

A two-tiered system of streetscape enhancement is proposed as shown on ***Figure 5.9***, below. Design characteristics of each tier are:

Tier 1 streets – ***Figure 5.10*** (page 5.24) is a cross section and plan view illustrating the following features:

- Boulevard trees located behind the trail/ sidewalk.
- Road- and pedestran-scale lighting.
- Turf boulevards with a stamped, colored concrete edge.
- Medians edged with colored, stamped concrete and planted with trees, shrubs and ornamental grasses.

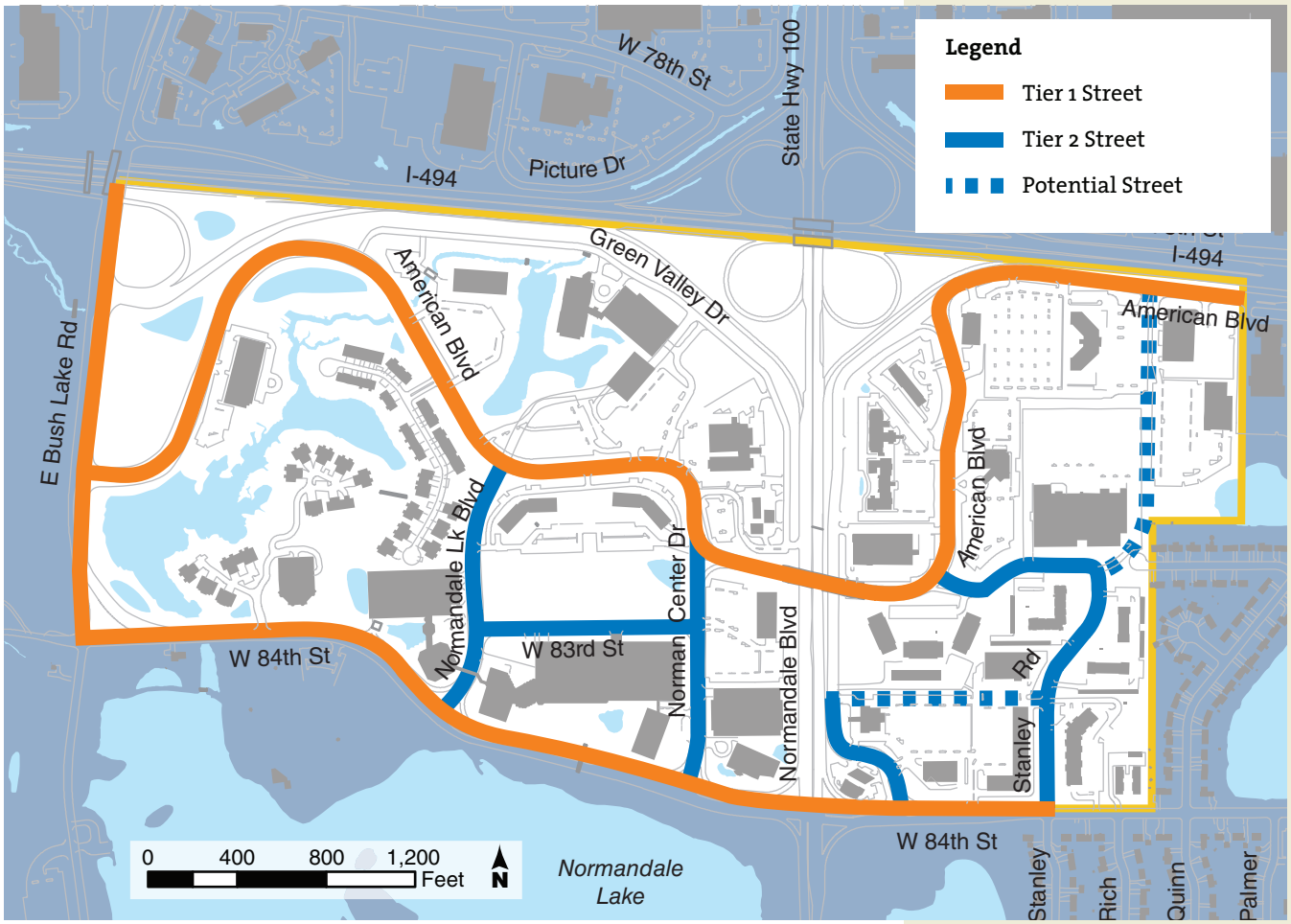
Tier 2 streets – ***Figure 5.11*** (page 5.25) is a cross section and plan view illustrating the following features:

- Boulevard trees located behind sidewalks
- Pedestrian scale lighting
- Turf boulevards

All trails and sidewalks will be designed consistent with City standards and recommendations in the *Bloomington Alternative Transportation Plan*.

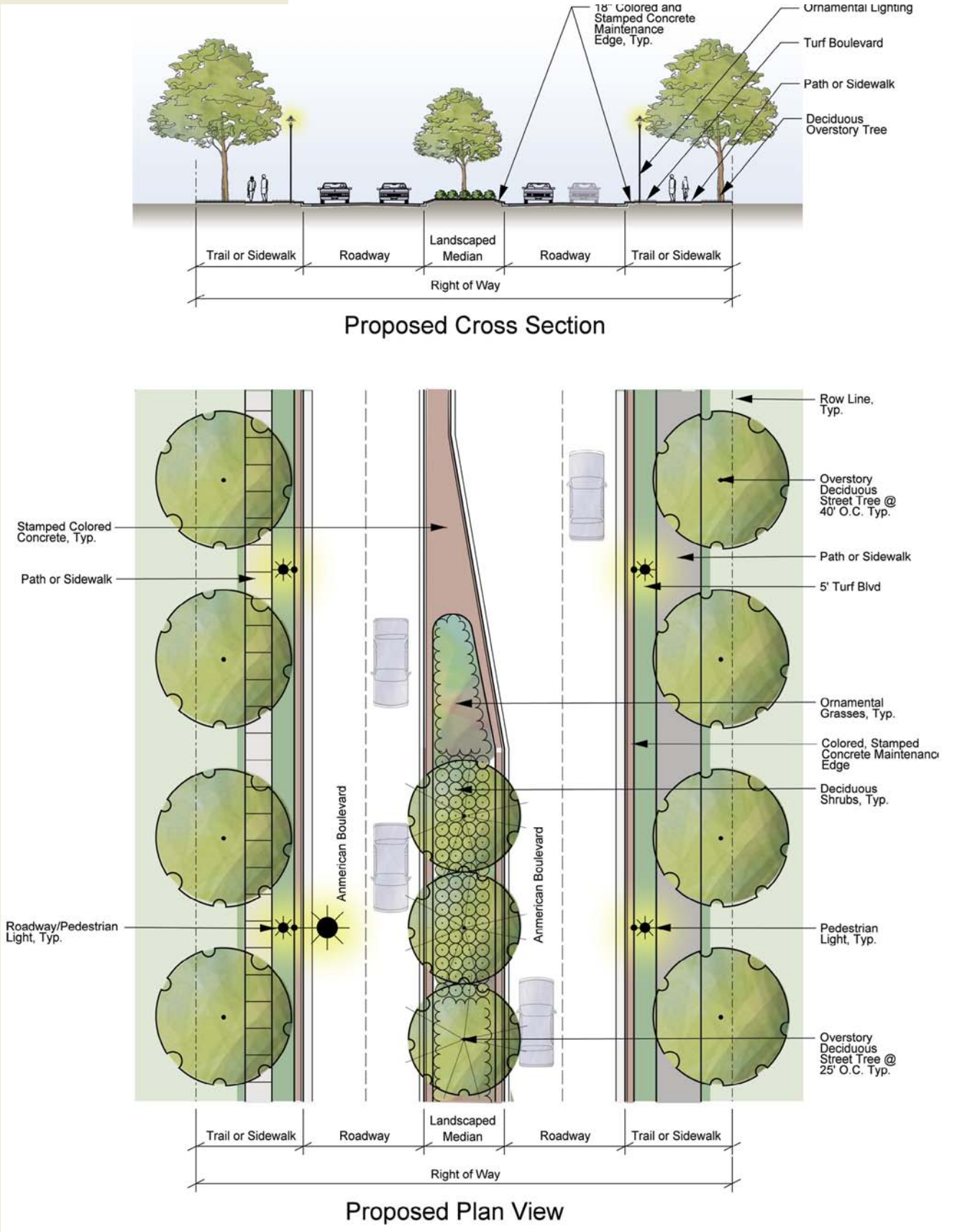
Tier 1 streets will have medians planted with trees, shrubs and ornamental grasses.

Figure 5.9 Streetscape Hierarchy



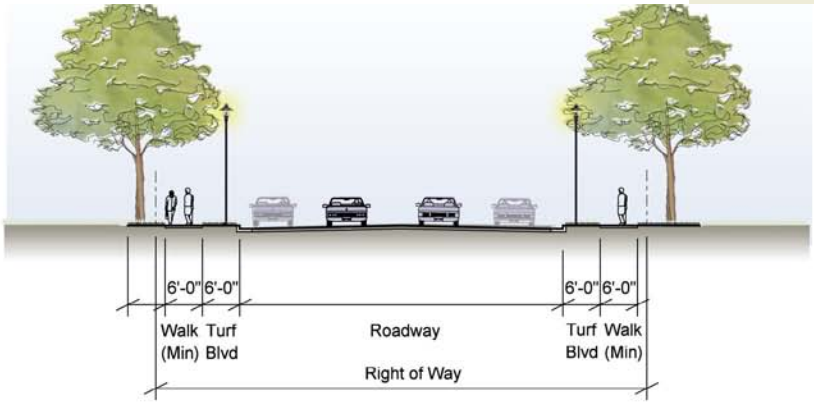
Source: Bloomington Planning Division.

Figure 5.10 Tier 1 Cross Section

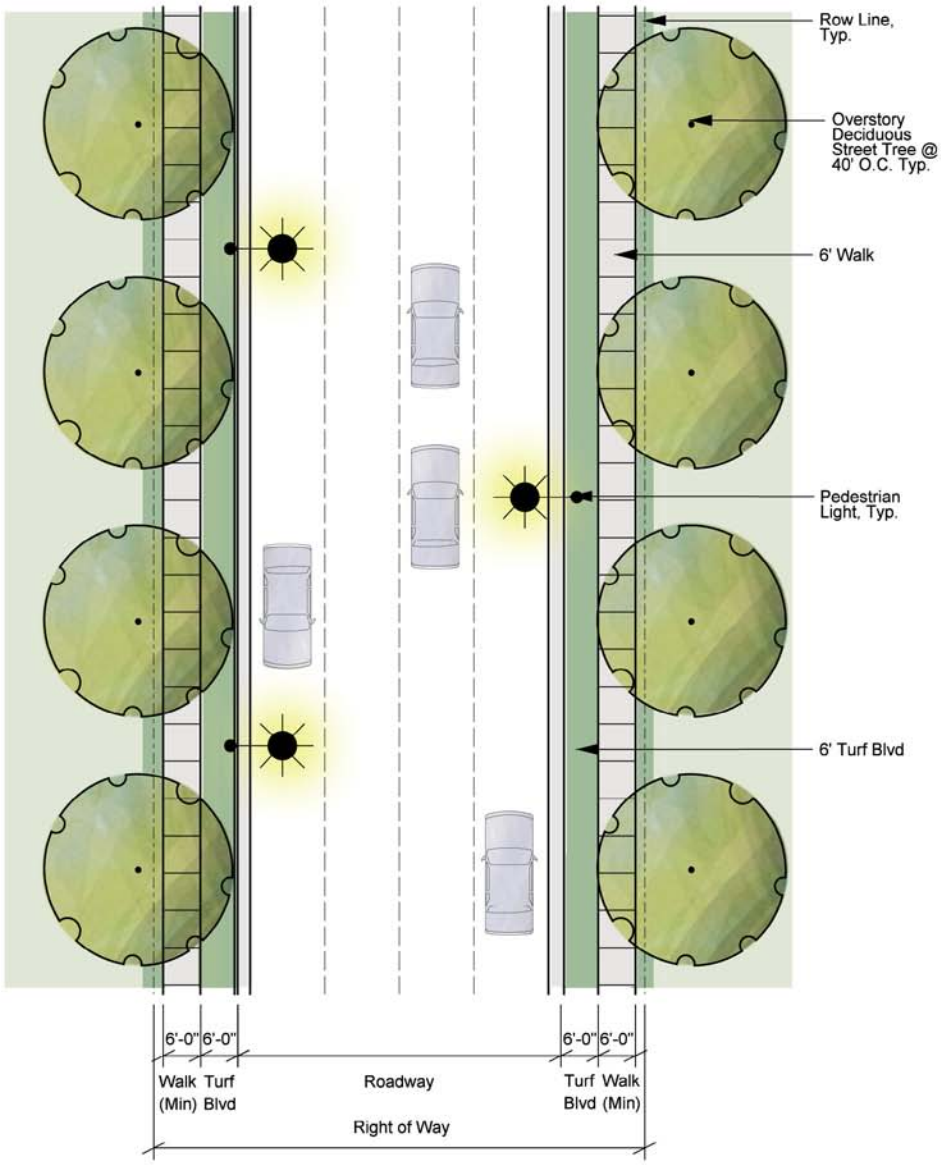


Source: Bloomington Planning Division.

Figure 5.11 Tier 2 Cross Section



Proposed Cross Section



Proposed Plan View

Source: Bloomington Planning Division.

Use of decorative light fixtures will reinforce the District's design identity.

Landscaping in the District will emphasize use of native plants.

Plant Materials

Plants known to be disease, salt and drought tolerant are preferred as are plants that possess seasonal interest (fall color, spring and summer blooms, texture), and that complement or extend natural plant communities found in the District. Plant materials that accomplish these objectives include:

Trees

- Norway Maple
- Hackberry
- Quaking Aspen
- Swamp White Oak

Shrubs

- Dogwood
- Lo-gro Sumac
- Euonymus
- Shrub roses
- Lilacs

Grasses

- Little Bluestem
- Prairie Dropseed
- Feather Reed Grass 'Karl Forester'
- Fescues

Perennial Flowers

- Daylilies
- Asters
- Rudbeckia (Black-eyed Susan)
- Purple Coneflower
- Liatrus (Blazing Star)
- Coreopsis

Colored and Textured Concrete

Use of colored concrete edging along sidewalks and around medians is proposed along Tier 1 streets to provide a decorative buffer and a maintenance strip between the road and landscaped areas or sidewalks:

- **American Boulevard** – Concrete edging will be a reddish color.
- **84th Street** – Concrete edging will be a dark grey/brown color.

Street Lighting

The streetscape concept calls for three types of light poles. All light fixtures installed in the right of way will conform to City standards. To encourage timely and cost effective maintenance and to provide consistent light levels on roadways, it is City policy to use a limited range of pole and fixture types. Recommended light standards include:

- **Roadway** – This single luminaire, medium height fixture (typically 35 feet) is intended to provide lighting for traffic on the roadway. The same fixture installed at France Avenue and Old Shakopee Road is recommended.
- **Pedestrian** – This single luminaire, low height fixture is shorter (14 to 16-foot typical) to illuminate the sidewalk or trail surface. The pole and luminaire may be more decorative to reinforce the District design identity.
- **Combined Road/Pedestrian** – This fixture includes two luminaires, one positioned higher to illuminate the road surface and one lower to illuminate the sidewalk or trail. The road luminaire would be mounted at a height of about 35 feet and the pedestrian luminaire would be mounted 14 to 16 feet above the ground.

Pedestrian Bridge Design

The pedestrian bridge over Normandale Boulevard must accomplish several objectives. First, it must provide a safe crossing for pedestrians and bicyclists. The bridge design will need to meet Federal, ADA, MnDOT, Hennepin County and Three Rivers Park District design requirements and standards.

It must also be visually distinctive, attractive and well integrated into the surrounding landscape because it will become a significant visual feature and gateway to the area and the City.

Recommended design criteria and considerations include:

- Minimum 14 foot width to accommodate both pedestrians and bicyclists.
- Maximum 5% slope on ramp approaches to comply with ADA accessibility requirements (greater slope allowed with handrails and periodic landings).
- Minimum 17 foot 4 inch clearance above the surface of Normandale Boulevard.
- Integrate the east side approach with the existing berm around Goldman Pond.
- Integrate the west approach ramp into the existing trees and landscape in Normandale Park and connect with the existing park trail system.
- Integrate a regional park information sign as part of the west side ramp approach structure.
- Curve the bridge span and approaches to create visual interest.
- Consider coordinating or incorporating intersection signs and signals with the bridge span structure.
- Use a railing style and materials similar to those on the existing pedestrian bridge over West 84th Street west of Normandale Boulevard.

The pedestrian bridge over Normandale Boulevard must be visually distinctive, well integrated into the surrounding landscape, and designed to serve as a gateway for the city.

Curving the bridge span and approaches can provide visual interest.

Identity/Gateway

District Entrance

Circulation Decision Point

Pedestrian Kiosk

8. Wayfinding Signs

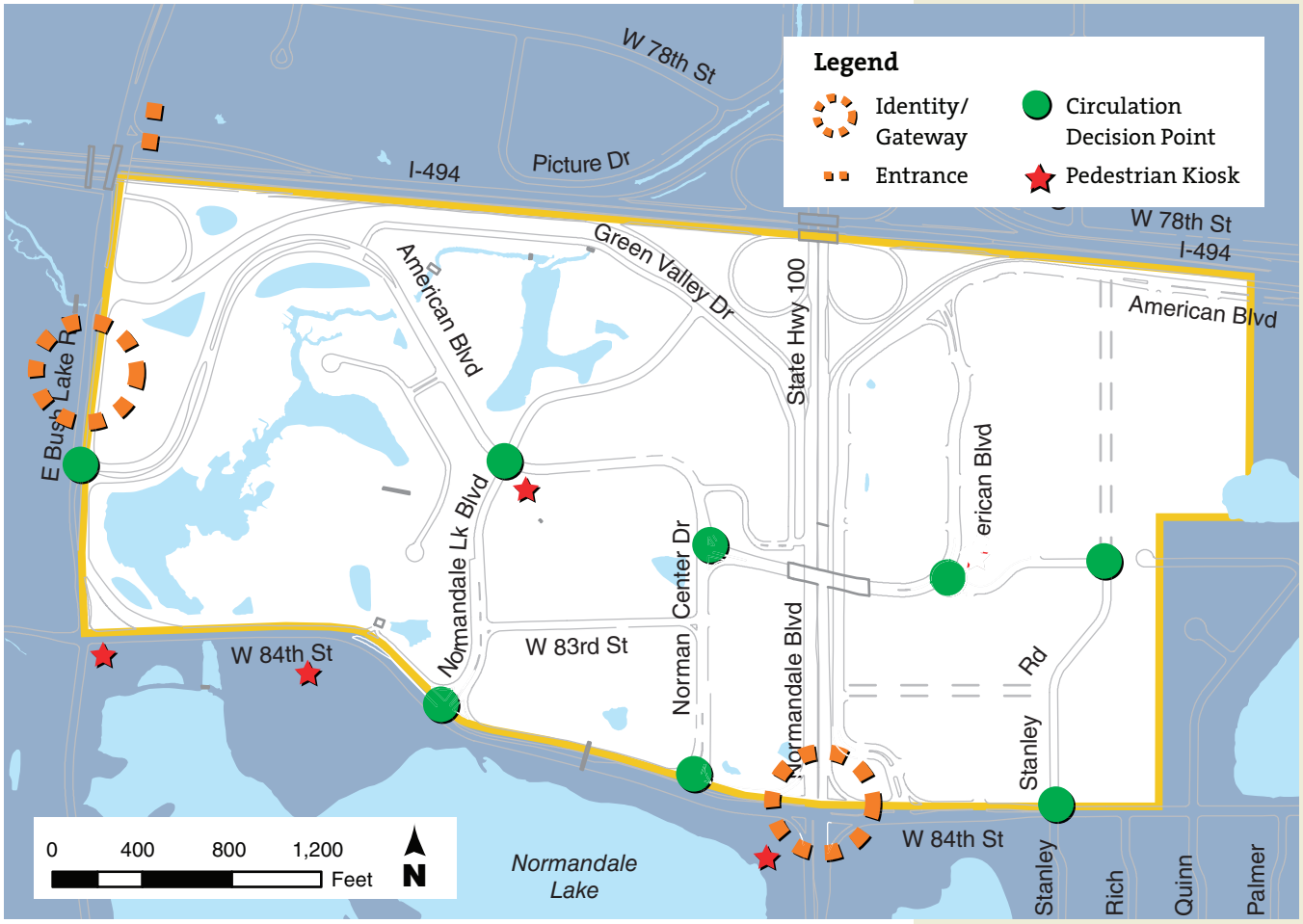
Given its location at the intersection of I-494 and TH 100, the Normandale Lake District functions as an important Bloomington gateway. Establishing and implementing a coordinated system of public signs will help define the District and create a cohesive identity. The City will work in coordination with Hennepin County and Three Rivers Park District to develop a public sign system that orients visitors and passers-by, directs travelers in cars, on bikes or on foot to their destinations and provides identity for the District.

The recommended wayfinding system will consist of four distinct sign types as described below and at the locations shown on ***Figure 5.12***, next page:

- **District Identity/Gateway** – These signs provide key information to orient people to destinations and routes in the District.
- **District Entrance** – These signs function as a "welcome" sign at the outer edges of the District.
- **Circulation Decision Point** – These signs are located at intersections throughout the District and function to reinforce route choice and wayfinding.
- **Pedestrian Kiosk** – These signs provide orientation and route information for pedestrians and cyclists. They will be located along existing and proposed pedestrian/bicycle routes.

The examples in the left column illustrate each of the sign types described above. The City will engage a professional sign designer and coordinate with the various implementing agencies to develop specific sign designs and an implementation program. Wayfinding signs should be implemented at the same time as streetscape improvements are installed.

Figure 5.12 Wayfinding Sign System



Source: Bloomington Planning Division.

Section 6

Implementation Plan

The west side of Normandale Lake District continues to develop as a premierClass-A office park.

For any planning document to be effective, clear steps and actions must be proposed to implement the plan recommendations. This chapter of the Normandale Lake District Plan (NLDP) summarizes the key recommendations described in the *Development Framework (Section 5)* and outlines an implementation phasing and financing strategy.

This plan has a long-term focus with a 20-year planning horizon. While several of the plan recommendations are intended to be implemented in the near future, others will not be implemented for 10 years or more. A phasing plan has been developed to organize the recommended tasks into short, mid-term, and long-term time frames.

6.1 Summary of Plan Recommendations

The recommendations described in the Development Framework (Section 5) are summarized in ***Table 6.1***, below. The anticipated time frame for implementation has been identified for each action. Likewise, the lead agency and partners responsible for implementing each task are also identified.

Table 6.1 Proposed Public Improvements in the District

Action/Task	Timing	Responsibility
Road Improvements		
Widen W. 83rd St.	2008-2010	Public Works Staff
Install access restriction on Norman Center Drive (between W. 83rd and W. 84th St.).	2008-2010	Public Works Staff
Install signal at American Blvd. and Norman Center Drive.	2008-2010	Public Works Staff
Install signal at W. 83rd St. and Normandale Lake Blvd.	2008-2010	Public Works Staff
Modify curve at W. 82nd St. and Stanley Road.	2008-2010	Public Works Staff
Add right turn lane (south- bound) and signal modification on Stanley Ave. and W. 84th St.	2008-2010	Public Works Staff
Apply for grants.	2009	Public Works Staff
Reconstruct intersection of W. 84th St. and Normandale Blvd.	2011-2014 (Assumes receipt of federal grant)	Public Works Staff

The Normandale Lake Water Quality Improvement Project includes temporary drawdown to eradicate curley leaf pondweed to reduce phosphorus loading to improve water quality.

Table 6.1 (continued) Proposed Public Improvements in the District

Action/Task	Timing	Responsibility
Pedestrian Bridge		
Design and construct pedestrian bridge.	2011-2014 (Assumes receipt of federal grant)	Public Works Staff
Work with MnDOT to integrate east ramp approach into berm around Goldman Pond.	Begin 2008	Public Works and Planning Staff
Work with Three Rivers Park District to integrate west ramp with park trails.	Begin 2008	Public Works, Parks, and Planning Staff
Sewer Improvements		
Work with MCES and Edina to address capacity constrains in 3-BN-499 interceptor.	Ongoing	Public Works and Planning Staff
MCES interceptor improvements.	To be determined by Met Council	MCES
Improvements to City's water and sanitary sewer systems.	As needed in conjunction with new development	Public Works Staff
Stormwater Management		
Water quality and storm sewer infrastructure improvements as needed to meet the City's *Comprehensive Surface Water Management Plan* goals, NPDES MS4 permit requirements or TMDL implementation plan requirements.	Ongoing	Public Works Staff
Normandale Lake Water Quality Improvement Project, includes temporary drawdown to eradicate curley leaf pondweed to reduce phosphorus loading to improve water quality.	2009-2011	Public Works Staff, Nine-Mile Creek Watershed District
Update City's *Comprehensive Surface Water Management Plan* to include low-impact design (LID) techniques and criteria for regional water quality projects.	In conjunction with next update of CSWMP	Public Works Staff

Table 6.1 (continued) Proposed Public Improvements in the District

Action/Task	Timing	Responsibility
Trails		
Work with MnDOT to develop a plan for trails around Goldman Pond connecting to creek underpass tunnel.	Begin 2008; ongoing	Public Works, Parks, Planning Staff; MnDOT, Three Rivers Park District (TRPD)
Improve sidewalk/trail on American Blvd. bridge.	2013+ (With bridge reconstruction)	Public Works and Planning Staff
Remove sidewalks on 84th St. at Normandale Blvd.	2014	Public Works Staff
Streetscape Enhancements		
Design and construct (short term): Plant boulevard trees, install decorative lighting, update adjacent sidewalks, install planted medians (Tier 2 streets only).	2008-2010	Public Works, Parks, Planning Staff
Design and construct (mid-term): Plant boulevard trees, install decorative lighting, update adjacent sidewalks, install planted medians (Tier 1 streets only).	2011-2013	Public Works, Parks, Planning Staff
Wayfinding Signs		
Coordinate sign design with TRPD, MnDOT and Hennepin County.	2008; Ongoing	Planning, Public Works, Parks Staff; MnDOT, HCPW, TRPD Staff
Design wayfinding signs, District "street" signs, and prepare implementation program.	2008; Ongoing	Planning, Public Works, Parks Staff; MnDOT, HCPW, TRPD Staff
Fabricate and install wayfinding signs.	2009-2013	

Unified streetscaping can create a distinctive character in the District.

Way finding signs will orient and direct visitors to their destinations.

Metro Transit will work with the City to improve access and efficiency of transit service in the District.

Table 6.1 (continued) Proposed Public Improvements in the District

Action/Task	Timing	Responsibility
Transit Enhancements		
Work with Metro Transit to modify routes serving the District to improve access and efficiency.	2008	Planning, Public Works Staff, Metro Transit
Expand AM and PM "reverse commute" trips between downtown Minneapolis and the Normandale Lake Office Park.	2008	Metro Transit
Enhance design of existing bus stops. Coordinate with streetscape enhancements.	2008-2013	Planning, Public Works Staff, Metro Transit
Design and construct an enhanced transit stop to serve the east side of the District.	2013+ (in conjunction with redevelopment)	Planning, Public Works Staff, Metro Transit
Work with Metro Transit to improve east-west transit service along American Boulevard.	Ongoing	Planning, Public Works Staff, Metro Transit
Land Use and Zoning		
Amend *Comprehensive Guide Plan.*	2008	Planning Staff
Amend zoning.	2008 - 2009	Planning Staff
Develop and adopt District urban design guidelines.	2009-2010	Planning Staff
Redevelopment		
Working with property owners to address redevelopment issues (lot consolidation, etc.).	Ongoing as needs arise	Planning, HRA Staff

There are a number of public improvements proposed in the area immediately surrounding the District that contribute to the future development and character of the District. These are listed below in ***Table 6.2***.

Table 6.2 Proposed Public Improvements Outside the District

Action/Task	Timing	Responsibility
Construct median in Normandale Blvd. between Nine Mile Creek and 94th St. to create protected turn lanes.	2013+ (Depends on receipt of grant funding)	Public Works, Hennepin County
Identify traffic management measures for residential area south of W. 84th St., east of Stanley Ave.	2008 (Outcome of *Poplar Bridge Neighborhood Traffic Study*)	Public Works
Install traffic calming measures in neighborhood south of W. 84th St., east of Stanley Ave.	Varies (Per recommendation of *Poplar Bridge Neighborhood Traffic Study*)	Public Works
Construct access ramp to westbound I-494 at Bush Lake Road	2030+ (Depends on State funding)	MnDOT
Remove house on Sharrett property (north side of Normandale Lake)	2008	Public Works and Parks
Miscellaneous path improvement and maintenance in Normandale Lake Park	Ongoing	Public Works and Parks
Design and install kiosks and identification signs in Normandale Lake Park.	2008, Ongoing	Planning, Public Works, Parks Staff; TRPD Staff

Source: Bloomington Planning Division.

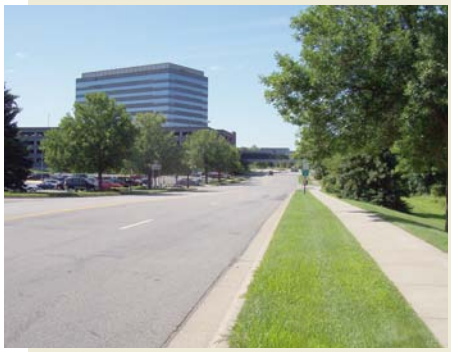
Addressing neighborhood cut-through traffic is the subject of the *Poplar Bridge Neigborhood Traffic Study*.

6.2 Phasing Plan

Implementation of the plan recommendations is expected to occur in four phases. Most of the physical improvements will occur within the public right-of-way and are scheduled to be implemented in conjunction with road construction projects. ***Figure 6.1***, next page, illustrates the anticipated time frames for construction of physical improvements within the District context. The short and mid-term phases correspond to the schedule of street improvements associated with reconstruction of the West 84th Street and Normandale Boulevard intersection.

Short Term (2008-2010)

This first phase, shown in green, includes improvements anticipated to be constructed in 2008 and 2009,



Short term improvements also include sidewalks, trails and boulevard trees.

mostly related to reconstruction of local streets in the District. Short term improvements also include: sidewalks/trails, boulevard trees, lighting and a limited number of wayfinding signs. Key tasks not related to construction of public improvements that will be completed during this phase include recommended amendments to the Land Use Guide Plan and corresponding zoning changes.

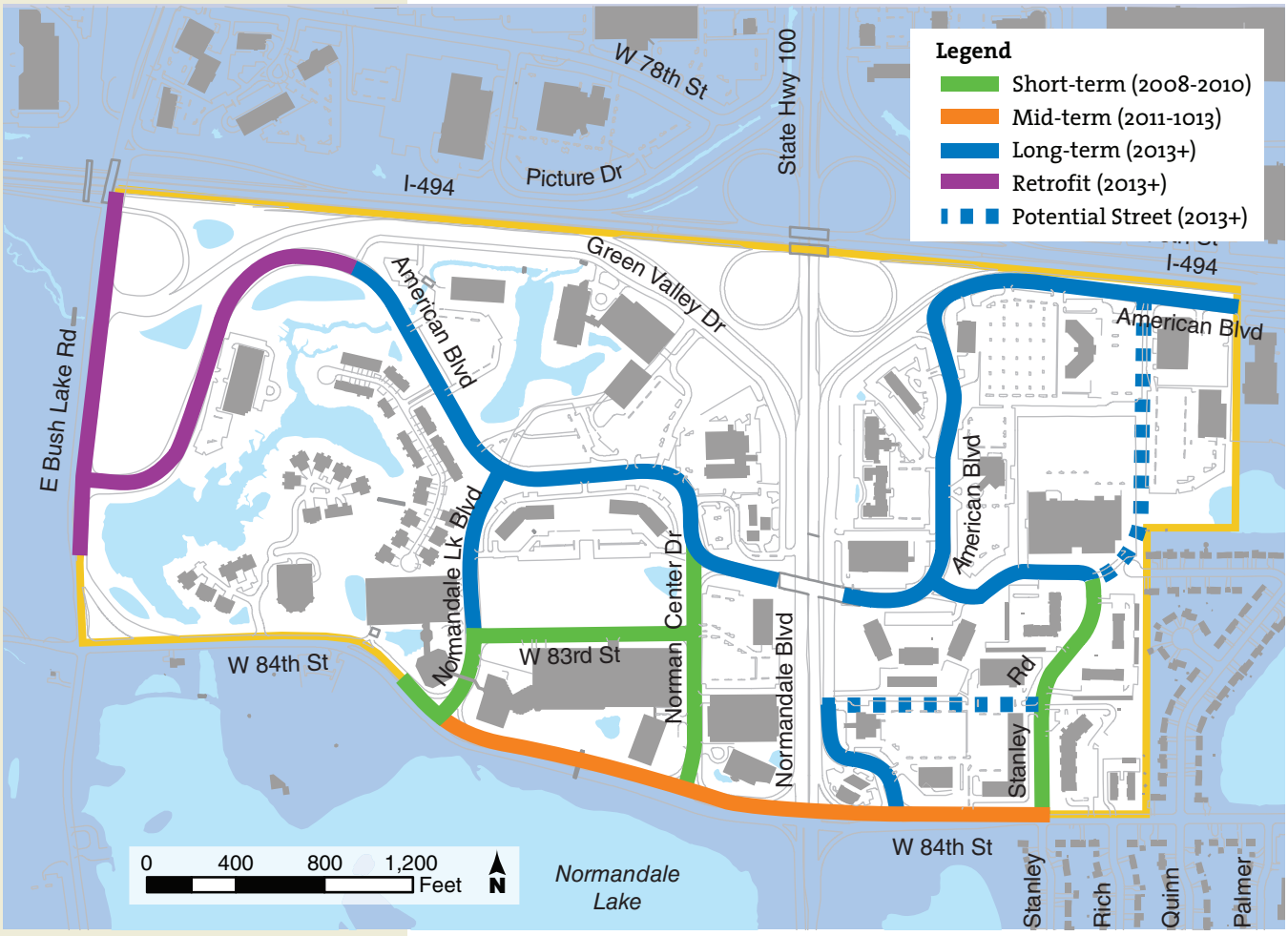
Mid Term (2011-2013)

This phase, shown in orange, focuses on 84th Street and the reconstruction of the W. 84th Street/ Normandale Boulevard intersection. Construction during this phase is anticipated to begin in 2013. Mid-term improvements also include: sidewalks/trails, boulevard trees, lighting and completion of the wayfinding sign system.

Long Term (2013+)

Public improvements in these areas, shown in blue, would occur with reconstruction of these road segments, which is not expected to occur until after 2013. Resources for these improvements are not included in the proposed financing strategy but will be identified in relation to future road improvement projects.

Figure 6.1 Phasing of Public Improvements



Source: Bloomington Engineering Division.

Retrofit (2013+)

Public improvements in these areas, shown in purple, are also not expected to occur until after 2013, perhaps even after the long term improvements are completed. Implementation of streetscape improvements will occur when these road segments require major repair or reconstruction. Given that most of these road segments were constructed relatively recently, they are not expected to require major repairs for at least 15 years.

6.3 Funding Scenario

The financing strategy developed for implementation of the improvements proposed in the Development Framework (Section 5) focuses on the short and mid-term phases described above. It is based on anticipated receipt of grant funds in 2009 and 2013 that would facilitate construction of road improvements needed to improve traffic flow through the intersection of West 84th Street and Normandale Boulevard and proposed urban design enhancements intended to be installed in conjunction with road reconstruction.

The funding strategy for these short and mid-term public improvements includes costs for street, right-of-way, bicycle and pedestrian facilities, signs, and lighting improvements. A total cost for improvements through 2014 is $41.2 million (inflated to the proposed year of construction), which includes $3 million reserved for project contingency. ***Table 6.3***, next page, shows the project budgets associated with the proposed traffic and urban design enhancements.

While funding for implementation of the long term and retrofit improvements is not currently identified, future implementation is critical to achieve a complete, visually cohesive system of streetscape, signs and plantings to convey a strong District identity. Funding for the long term and "retrofit" phases will be identified with approval of these construction projects, likely through the City's capital improvement budget process.

Funding Sources

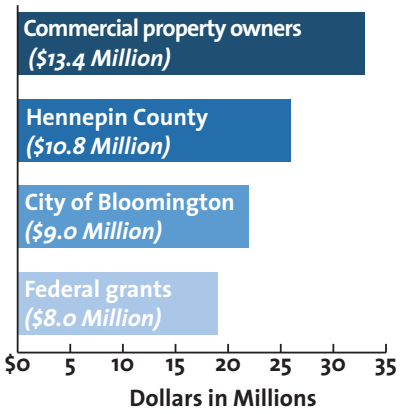
Springsted Inc., the City's financial consultant, prepared a comprehensive cash flow funding model for the proposed public improvements. Four separate funding sources are anticipated to pay for the improvements. If any of these funding sources are delayed or unavailable, the projects may need to be modified or delayed so that the resources will be commensurate with the project's cost. If funding becomes available earlier, the project schedule could advance.

Federal Grant

The City intends to apply for Federal Grant funding in the 2009 round of SAFETEA-LU funding. The intended amount of grant application is $1.0 million for the pedestrian bridge over Normandale Boulevard and $7.0

The financing strategy for implementation reflects a partnership between public and private entities.

Figure 6.2
Key Funding Sources



The above funding contributions by percentages are:

- **Commercial property owners ..... 33 percent**
- **Hennepin County ..... 26 percent**
- **City of Bloomington .... 22 percent**
- **Federal grants ..... 19 percent**

Table 6.3 Projected Budgets (in Millions)

Project Element	Total Construction Cost (at year of Construction)	Federal Grant	Hennepin County	City of Bloomington		
				Abatement of City Tax on New Development	Commercial Property Assessment	Total Local Contribution
84th and Normandale						
Design and Construction	$ 18.6	$ 7.0	$5.8	$1.2	$4.6	$5.8
Right-of-way	$ 7.0		$3.5	$1.1	$2.4	$3.5
Ped/bike bridge	$ 4.0	$ 1.0	$1.5	$1.5		$1.5
Interior Streets	$ 3.0				$3.0	$3.0
Urban Design	$ 5.6			$ 4.0	$1.6	$5.6
Contingency	$3.0			$1.2	$1.8	$3.0
TOTAL	**$ 41.2**	**$ 8.0**	**$10.8**	**$9.0**	**$13.4**	**$22.4**
Percent Share	100%	19%	26%	22%	33%	55%

Note: Amounts expressed in dollars inflated to the appropriate year of construction (2009 or 2013

In 2001, the City Council established a policy that additional office development could not be approved in the District until traffic improvements were constructed.

million for the intersection improvements at West 84th and Normandale. If the grant is not approved in the application year, construction may be delayed until a grant is approved.

Hennepin County

Normandale Boulevard is a County Road. The City has requested that Hennepin County pay 50 percent of the design, construction and right-of-way cost for the 84th and Normandale intersection and pedestrian/bicycle bridge. Hennepin County has made a preliminary commitment to participate in project funding of $10.8 million.

Commercial Property Owners

The primary reason for the proposed improvements is to accommodate peak hour trips from office, hotel and retail uses in the District. The office owners and developers in the northwest quadrant of West 84th and Normandale have entered into assessment agreements with the City based on the proposed public improvement plan and funding scenario. The projected revenues from these assessments will fund approximately $13.4 million in project costs. In the assessment agreements with office owners, the City has agreed to use its best efforts to reach assessment agreements with hotels and retail uses in proportion to the benefit they receive from street and intersection improvements.

City of Bloomington

In 2001, the City Council established a policy that additional office development could not be approved in the District until traffic

improvements were constructed. The City has committed to use its property tax abatement authority for new development occurring in the district between 2008 and 2028 because unless the street improvements were funded, the buildings could not be constructed and the property tax revenues from them would be unavailable to the City. The 5600 American Boulevard and 8200 Norman Center Drive office buildings were the first developments where the tax abatement was applied. Following procedures in State law, the City invited the School District to participate in the tax abatement funding. The School District declined; therefore the City can use abated taxes for up to 20 years to pay for the improvements. Revenue from the abatements will fund about $9.0 million of the project costs.

Reducing Total Project Costs

About $5 million of the total estimated project cost is for purchasing land to replace parkland that will be required for future right-of-way. Since these properties were acquired using Federal funds, Federal law requires that replacement park property be provided elsewhere. The City intends to obtain credit from land it will purchase with other funding sources to add to the City park holdings. To the extent that the City obtains approval from MnDOT and the MnDNR for this credit, it will reduce the amount budgeted for right-of-way replacement and therefore the amount of project funding the City and County need to provide.

About $5 million of the total estimated project cost is for purchasing land to replace parkland that will be required for future right-of-way.

Appendix A

Traffic Operations Technical Report Draft

Prepared for: City of Bloomington

October 2007

Prepared by:

SRF Consulting Group, Inc.

SRF No. 0065645

TABLE OF CONTENTS

Page

LIST OF TABLES

Page

LIST OF FIGURES

Page

1.0 INTRODUCTION

SRF Consulting Group, Inc. has completed an operations analysis of the roadway network in the Normandale Lake District, in the City of Bloomington (see Figure 1: Project Location). The traffic analysis area has approximate boundaries of East Bush Lake Road, Interstate 494 (I-494), 84th Street, Stanley Avenue and France Avenue. Development/Redevelopment of this area will include increased office density, hotel expansion, additional retail uses and multi-family residential. Potential development/redevelopment in the area has highlighted the need to better understand how the existing roadway network currently operates and will operate under future (year 2030) conditions. The traffic analysis structure is as follows:

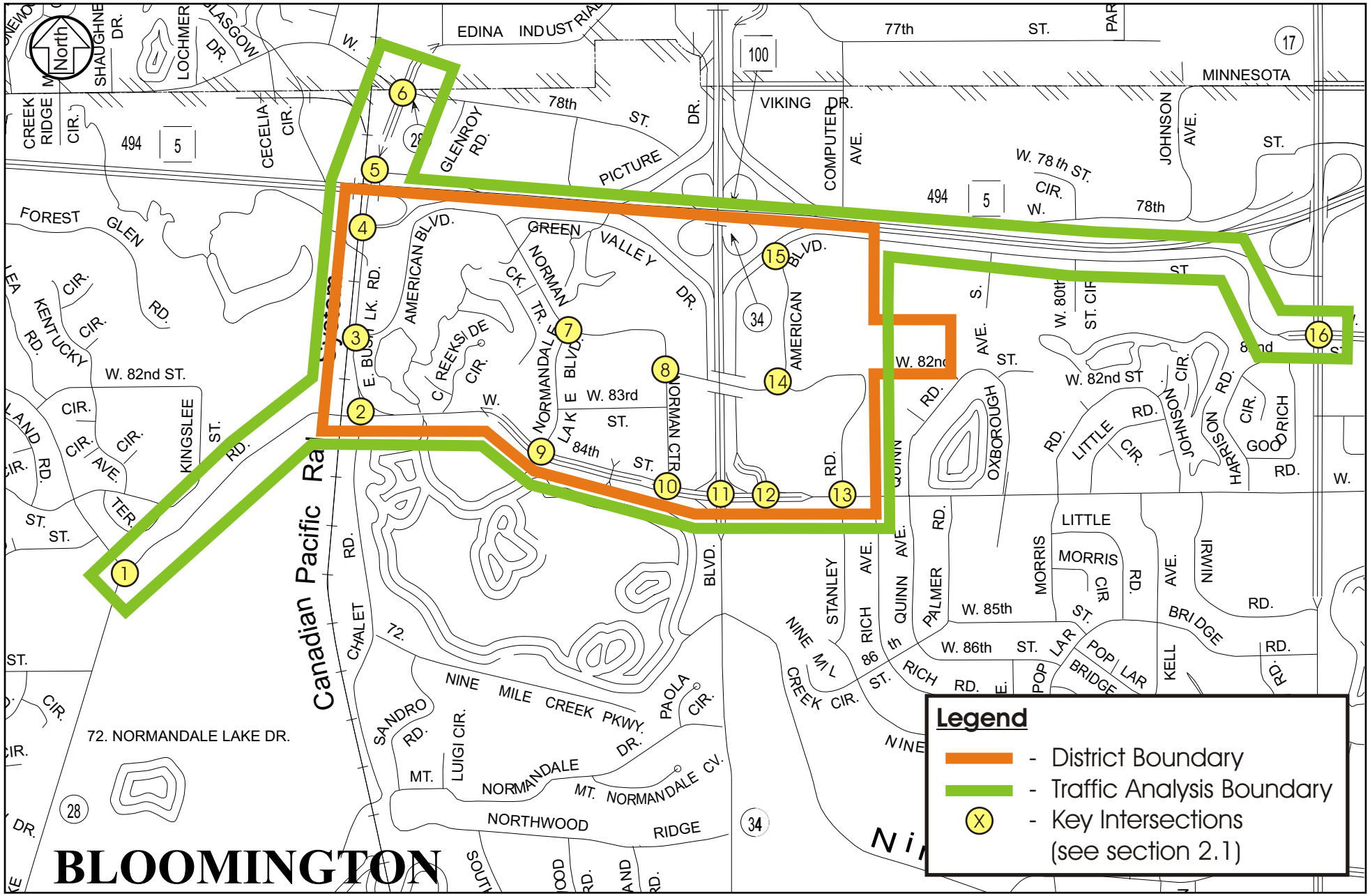
- Determine the local roadway network baseline conditions (i.e., operations analysis of existing (year 2005/2006) conditions during the morning and afternoon peak hours)
- Develop future (year 2030) traffic forecasts based on projected land use in the Normandale Lake District
- Identify the level of traffic mitigation necessary to accommodate the projected development/redevelopment
- Develop four roadway concept alternatives to mitigate operational issues identified under no build conditions
- Determine to what extent each concept alternative mitigates the operational issues and achieves a level of service D
- Develop preliminary cost estimates for four concept alternatives for comparison purposes
- Further refine two selected roadway concept alternatives in order to determine a preferred alternative
- Identify preferred roadway concept alternative to mitigate operational issues

2.0 EXISTING CONDITIONS

2.1 Data Collection

Traffic operations were analyzed at the following key intersections as labeled on Figure 1:

1. East Bush Lake Road/Highwood Drive
2. East Bush Lake Road/84th Street
3. East Bush Lake Road/American Boulevard
4. East Bush Lake Road/I-494 South Ramp
5. East Bush Lake Road/I-494 North Ramp
6. East Bush Lake Road/78th Street
7. Normandale Lake Boulevard/ American Boulevard
8. Norman Center Drive/American Boulevard
9. 84th Street/Normandale Lake Boulevard
10. 84th Street/Norman Center Drive
11. 84th Street/Normandale Boulevard
12. 84th Street/Normandale Service Road
13. 84th Street/Stanley Road
14. 82nd Street/American Boulevard
15. Normandale Service Road/ American Boulevard
16. France Avenue/American Boulevard



DISTRICT BOUNDARY AND TRAFFIC ANALYSIS STUDY AREA

Figure 1

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City of Bloomington

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0065645
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Current traffic controls include signalization at all key intersections, except:

- Normandale Lake Boulevard/American Boulevard
- Norman Center Drive/American Boulevard
- 84th Street/Normandale Service Road
- 82nd Street/American Boulevard
- Normandale Service Road/American Boulevard.

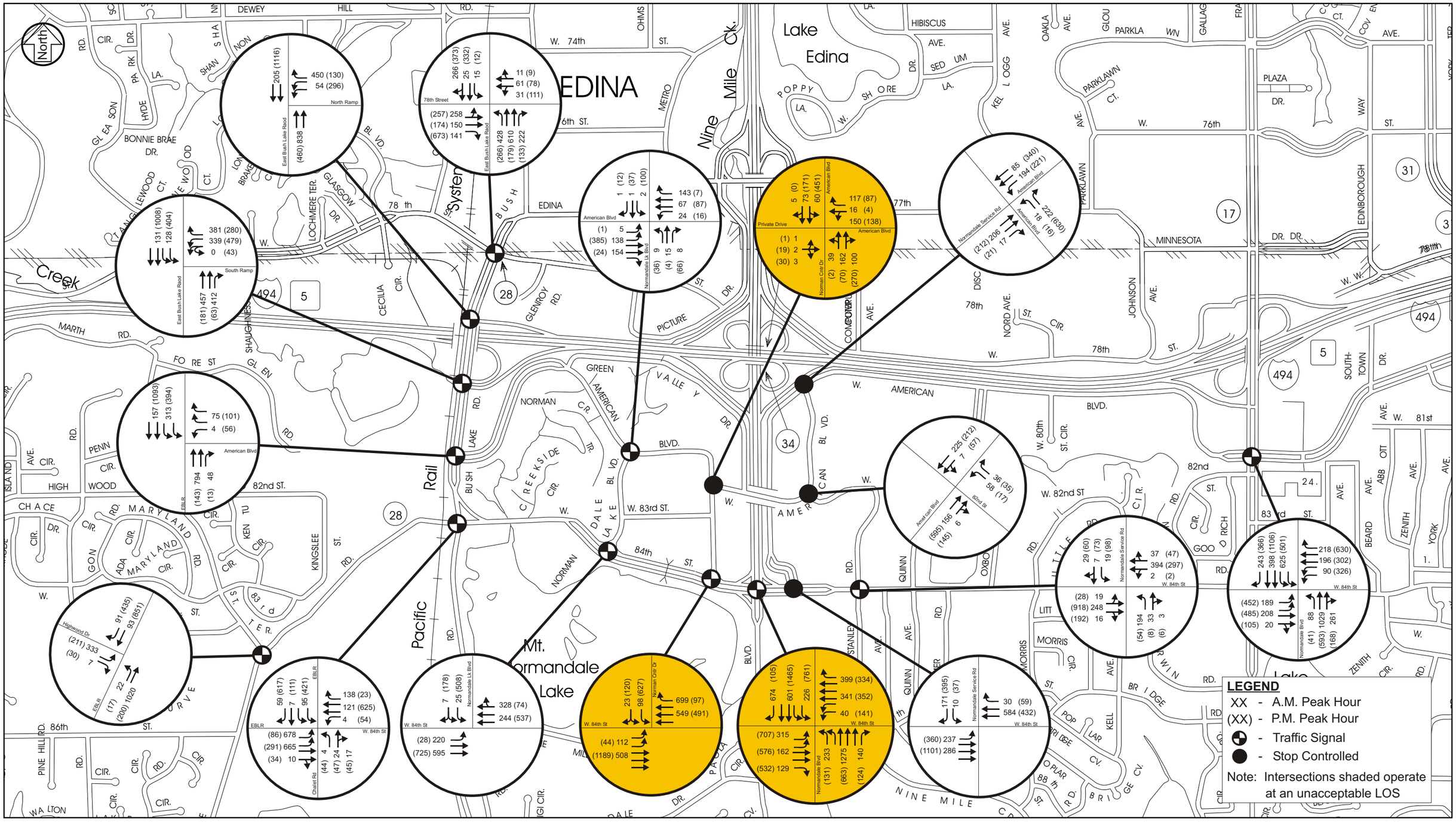
SRF Consulting Group, Inc. collected a.m. and p.m. peak hour turning movement counts at all key intersections in December 2005 and April 2006. Existing geometrics[1], traffic controls, and a.m. and p.m. peak hour traffic volumes for the key intersections are shown in Figure 2.

2.2 Existing Operations

An operations analysis was conducted for the a.m. and p.m. peak hours at each key intersection to determine how traffic currently operates within the project area. All signalized intersections were analyzed using the Synchro/SimTraffic software and unsignalized intersections were analyzed using the Synchro/SimTraffic and Highway Capacity Software. Capacity analysis results identify a Level of Service (LOS), which indicates how well an intersection is operating. The LOS results are based on average delay per vehicle. Intersections are given a ranking from LOS A through LOS F. LOS A traffic flows at or above the posted speed limit; vehicles are almost completely unimpeded in the ability to maneuver. Less than 10 seconds of average delay per vehicle is experienced at a signalized intersection under LOS A conditions. LOS F indicates an intersection where demand exceeds capacity, the number of vehicles arriving at an intersection is greater than the number that can move through it. More than 80 seconds of average delay per vehicle is experienced at signalized intersections under LOS F conditions. LOS A through D is considered acceptable by Hennepin County and the City of Bloomington.

For side-street stop controlled intersections, special emphasis is given to providing an estimate for the level of service of the minor approach. The traffic operations at an unsignalized intersection with side-street stop control can be described in two ways. First, consideration is given to the overall intersection level of service. This takes into account the total number of vehicles entering the intersection and the capability of the intersection to support those volumes. Second, it is important to consider the delay on the minor approach. Since the mainline does not have to stop, the majority of delay is attributed to the side-street approaches. When reporting level of service operations for side-street stop controlled intersections the overall intersection level of service is shown followed by the side-street level of service (i.e., LOS A/B).

[1] All existing geometrics are shown with the exception of the East Bush Lake Road/84th Street intersection; here the planned roadway improvements are displayed (planned construction year 2007/completion year 2008).



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EXISTING TRAFFIC VOLUMES

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City of Bloomington

Figure 2

Results of the analysis shown in Table 1 indicate that all key intersections operate at an acceptable overall LOS D or better during the a.m. peak hour, with existing traffic controls and geometric layout. However, three of the 16 key intersections currently operate at an unacceptable LOS E or worse during the p.m. peak hour:

- Norman Center Drive/American Boulevard
- 84th Street/Norman Center Drive
- 84th Street/Normandale Boulevard

Table 1
Existing Peak Hour Capacity Analysis
Level of Service Results

Intersection	Level of Service (Average Delay in seconds)	
	A.M.	**P.M.**
East Bush Lake Road/Highwood Drive	D	C
East Bush Lake Road/84th Street	B	C
East Bush Lake Road/American Boulevard	A	B
East Bush Lake Road/I-494 South Ramp	B	C
East Bush Lake Road/I-494 North Ramp	B	B
East Bush Lake Road/78th Street	C	C
Normandale Lake Boulevard/American Boulevard *	A/B	A/B
Norman Center Drive/American Boulevard *	A/C	**F/F (65)**
84th Street/Normandale Lake Boulevard	A	D (50)
84th Street/Norman Center Drive	A	**E (70)**
84th Street/Normandale Boulevard	D	**F (90)**
84th Street/Normandale Service Road *	A/E	A/F
84th Street/Stanley Road	B	B
82nd Street/American Boulevard *	A/B	A/C
Normandale Service Road/American Boulevard *	A/C	A/C
France Avenue/American Boulevard	D	D

Note: Values shown in parenthesis represent overall delay per vehicle.
* Indicates an unsignalized intersection. The overall LOS is shown followed by the worst approach LOS (as explained in Section 2.2).

The intersection of Normandale Boulevard/84th Street currently operates poorly due to the heavy southbound through and left-turn movements, as well as the heavy eastbound left-turn movement. Improvements to LOS are limited without complete reconstruction of the intersection. This topic will be discussed further under year 2030 conditions, and the concept alternative development sections. The poor operations of the intersection of Normandale Boulevard/84th Street negatively impact the adjacent intersection of 84th Street/Norman Center Drive with vehicles spilling back from this intersection into these adjacent intersections. The vehicles that spill back block the adjacent intersections, making it difficult for vehicles on the side-street of Norman Center Drive and the Normandale Service Road to complete their maneuver.

3.0 YEAR 2030 FORECASTS

3.1 Background Traffic Growth

Daily traffic forecasts were developed for year 2030 as part of the *Northwest Bloomington Neighborhood Study*, conducted by SRF Consulting Group in 2005. The City of Bloomington asked SRF to conduct an origin-destination study to identify commuter traffic patterns and the amount of through traffic due to increased congestion and additional development in the surrounding area. In addition, the *Northwest Bloomington Neighborhood Study* identified and quantified the traffic shifts that would result from major planned improvements on the regional system. Mn/DOT was in the process of improving TH 169 to a full freeway facility and planning for additional improvements to other major regional nodes (I-494). This project was an independent evaluation of the local roadway network. Based on these daily forecasts, traffic was estimated to grow at a range of zero to one and one-half percent per year, depending on location and roadway traveled. These growth ranges represent overall volume growth (background traffic, plus potential development/redevelopment). To provide perspective, a one-half percent growth per year results in approximately 13 percent additional trips over the next 24 years; one and one-half percent growth per year results in approximately 43 percent additional trips over the next 24 years. It should be noted that when applying the background growth rates, the potential trips generated by future development/redevelopment was taken into account to determine the appropriate amount of overall traffic growth for particular roadways.

3.2 Regional Roadway Improvement Assumptions

The regional roadway network surrounding the Normandale Lake District is currently deficient, with periods of congestion during the morning and afternoon peak periods. This congestion is well documented by the Minnesota Department of Transportation (Mn/DOT) as part of their Annual Congestion Report. The Mn/DOT Transportation Improvement Program (TIP) has identified various components of the regional roadway network surrounding the Normandale Lake District for improvement by year 2030. The key regional roadway improvements assumed as part of the year 2030 analysis, which affect operations and travel patterns in the area, are:

- Upgrade of Trunk Highway 169 (TH 169) to a full freeway facility, from Old Shakopee Road to I-494
- Reconstruction of the TH 169/I-494 interchange to improve capacity.
- Capacity expansion along I-494 from France Avenue through I-35W

A key improvement that was not assumed immediately within the year 2030 horizon is a westbound access from East Bush Lake Road to I-494. This additional access will modify the trip patterns on the local roadway system and influence the mitigation needs at the intersection of 84th Street/Normandale Boulevard. During the project study process this westbound access to I-494 was reviewed and its impacts were measured. However, based on conversations with Mn/DOT staff this improvement is not anticipated to occur within the foreseeable future and therefore was not included in our final analysis to determine the local roadway mitigation needs.

The regional improvement assumptions are important to note due to the impact they have on the local roadway network and its operation in the Normandale Lake District. Improvement to the regional system will alter trip patterns on the local roadway system and how trips access the regional network. In addition, these improvements will alter the trip diversion patterns currently occurring from the regional system to the local system in the Normandale Lake District.

3.3 Regional Improvement Implications on the Local Roadways

Consideration was given to adjacent regional roadway improvements, and their impact on route diversions through the area. Regional roadway improvements are expected to reduce the amount of trips that divert from the regional roadway network to use the local roadway system within the Normandale Lake District. Data developed as part of the *Northwest Bloomington Neighborhood Study* indicates that under year 2030 conditions, when regional improvements are completed, it is expected that traffic volumes on the local roadway system will be reduced. This reduction was taken into account when developing the overall background growth and year 2030 forecasts.

3.4 Trip Generation Estimates

Traffic forecasts for the Normandale Lake District were developed for year 2030 conditions. City Planning staff provided a table dated 5/16/06 showing potential areas of development/redevelopment and the associated land use types and sizes (see Figure 3: Future Areas of Development/Redevelopment). Trip generation estimates for the a.m. and p.m. peak hours and on a daily basis were calculated for the Normandale Lake District based on trip generation rates from the 2003 ITE Trip Generation Reports. Table 2 displays a summary of the trip generation calculations for each potential development/redevelopment site.

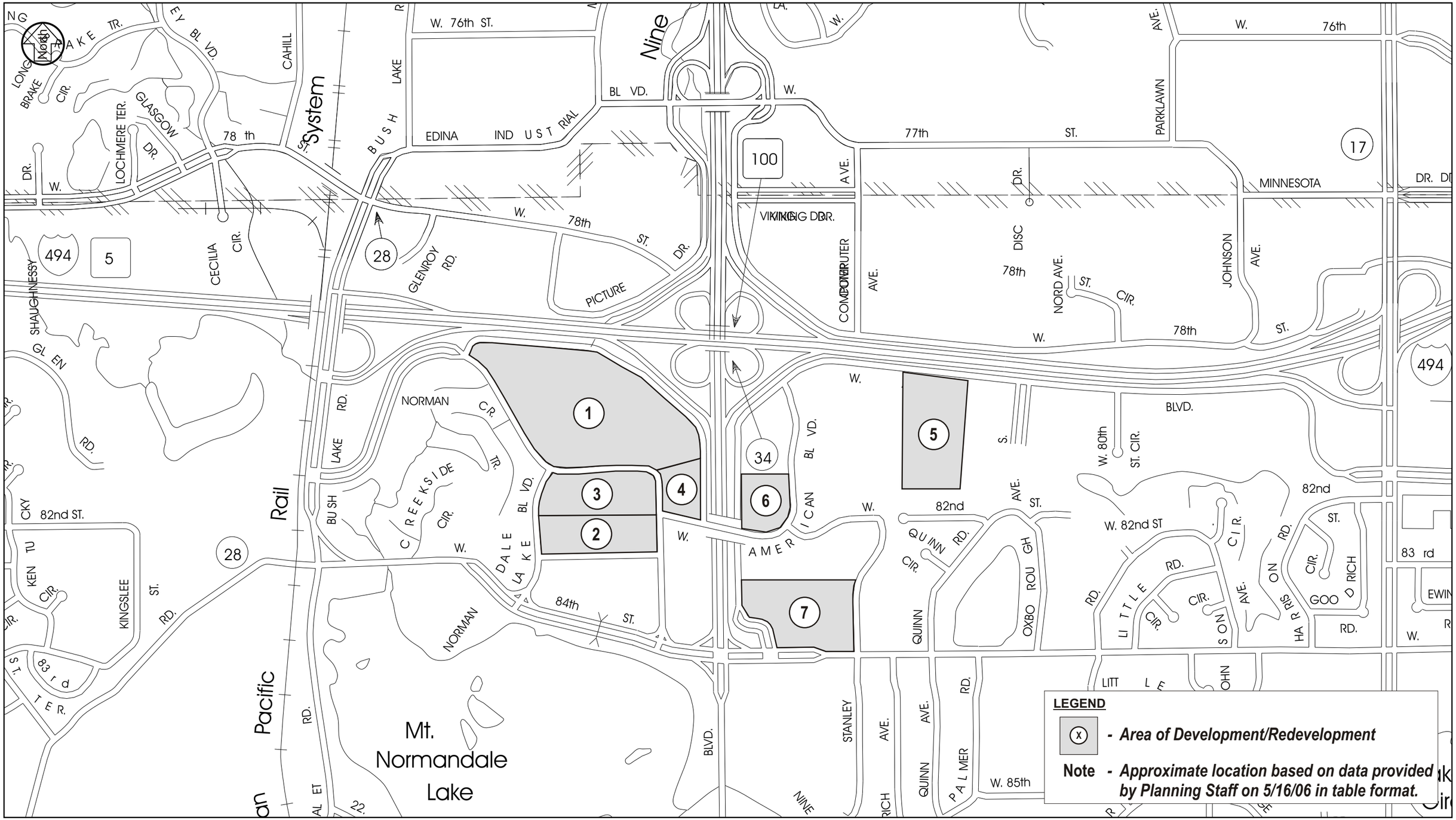
SRF conducted an Origin-Destination (O-D) Survey to determine current travel patterns for trips entering and exiting the office park area in the northwest quadrant of the 84th Street/Normandale Boulevard intersection during the peak periods. This information was used to develop the directional trip distribution for projected land uses in the area, along with regional daily traffic volumes. Figures 4A and 4B display the directional trip distribution.

3.5 Forecast Intersection Volumes

The following process was used to forecast the year 2030 peak hour turning movement volumes:

- The existing peak hour intersection volumes were increased to represent year 2030 conditions using a linear growth rate (compounded annually).
- Reductions were applied to account for regional trips that will no longer divert through the study area once the regional roadway system improvements (bulleted items from section 3.2) are in place (by year 2030).
- Trip generation estimates were distributed to the local roadway network, in addition to the background base volumes.

The combination of background traffic, reductions due to regional roadway improvements and trips generated by proposed, future development results in the year 2030 peak hour intersection volumes for the Normandale Lake District as shown in Figure 5.



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FUTURE AREAS OF DEVELOPMENT/REDEVELOPMENT

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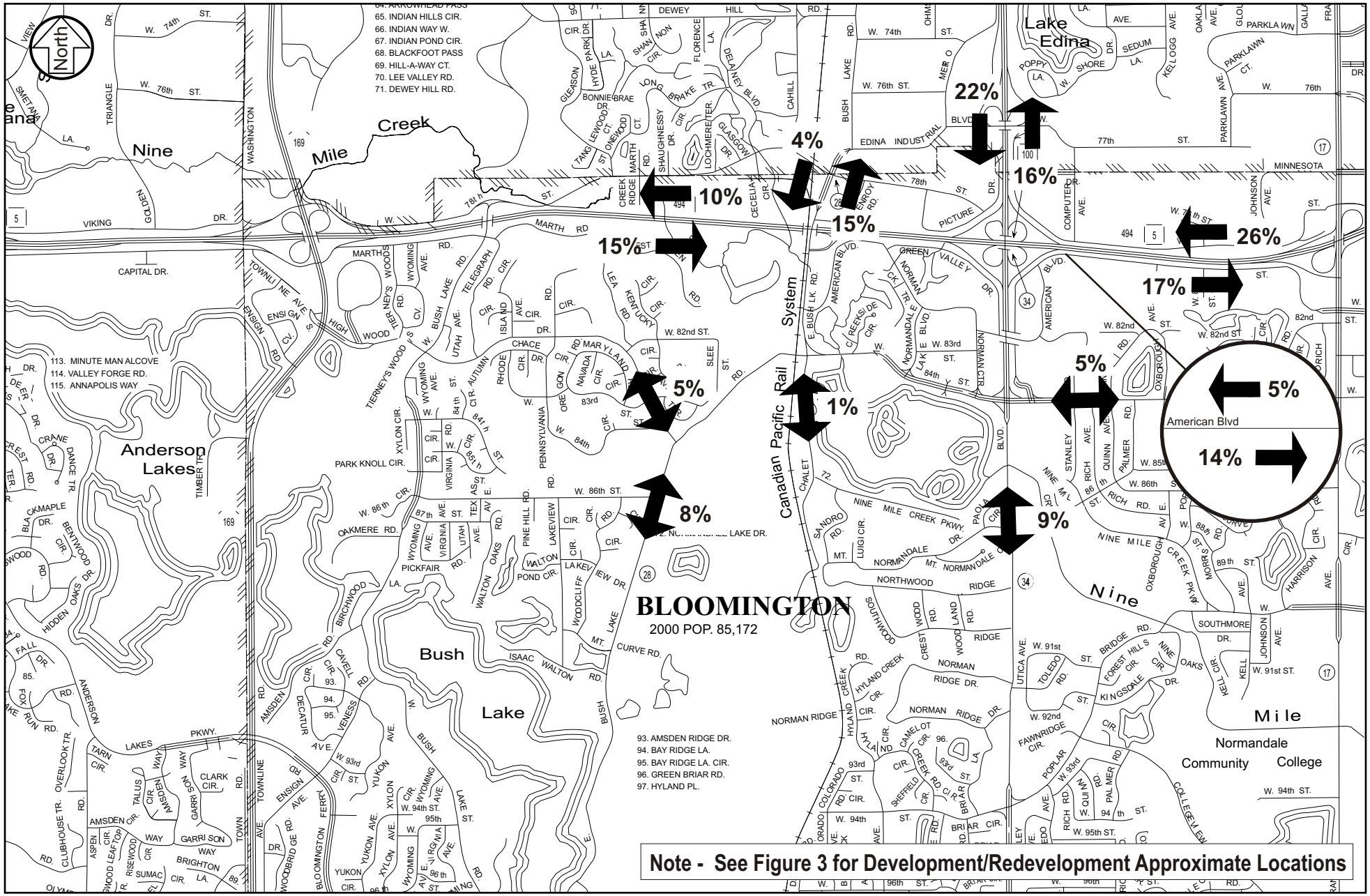
City of Bloomington

Figure 3



DIRECTIONAL DISTRIBUTION - DEVELOPMENT/REDEVELOPMENT AREAS WEST OF NORMANDALE BOULEVARD

Figure 4A

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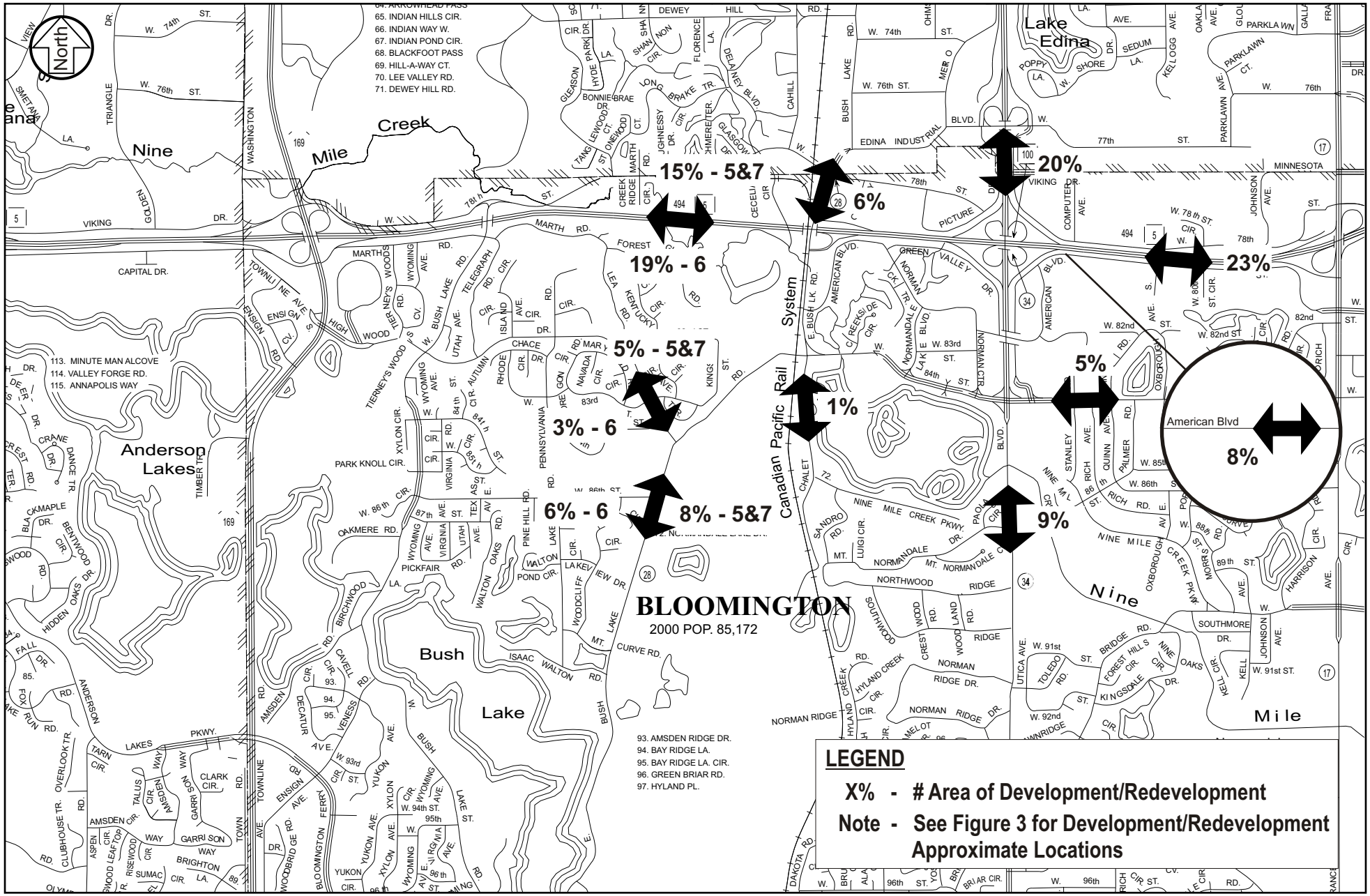
Table 2

Trip Generation Estimates

Area of Development/ Redevelopment	Development Description	ITE Code	Land Use	2006 Land Use Size (1,000 SF)	Change in Land Use Size from 2006-2030 (1,000 SF)	Total 2030 Land Use Size (1,000 SF)	A.M. In Veh.	A.M. Out Veh.	P.M. In Veh.	P.M. Out Veh.	Daily Trips
	Norman Pointe IV - Office *	710	General Office Building	0	332	332	431	59	77	374	3,361
1	Norman Pointe II and III - Office *	710	General Office Building	0	644	644	732	100	136	664	5,598
2	General Office (UP)	710	General Office Building	0	295	295	402	55	75	365	3,248
3	General Office (Jostens)	710	General Office Building	74.2	241	315.2	329	45	61	298	2,653
4	Freeway Commercial - Service	820	Shopping Center	2.8	32.5	35.3	20	13	59	63	1,396
5	Regional Commercial Retail	815	Free Standing Discount Store	78.6	97.6	176.2	56	26	247	247	5,468
6	General Office	710	General Office Building	38.1	75.7	113.8	103	14	19	94	833
7	Neighborhood Commercial Retail	820	Shopping Center	133.4	89.2	222.6	56	36	161	174	3,830
						Totals:	**2,130**	**348**	**834**	**2,279**	**26,387**

Notes:

- All trip generation is based on the year 2030 land use forecasts prepared by City of Bloomington Planning Staff dated 5/16/06
- Total 2030 land use size equals, 2006 land use plus change in land use size from 2006-2030
- Source: City of Bloomington "Normandale Lakes Development Area Study" table dated 5/16/06
- * Used equation for trip generation calculations to be consistant with Norman Pointe EIS



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DIRECTIONAL DISTRIBUTION - DEVELOPMENT/REDEVELOPMENT AREAS EAST OF NORMANDALE BOULEVARD

Figure 4B

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City of Bloomington

4.0 YEAR 2030 NO BUILD CONDITIONS

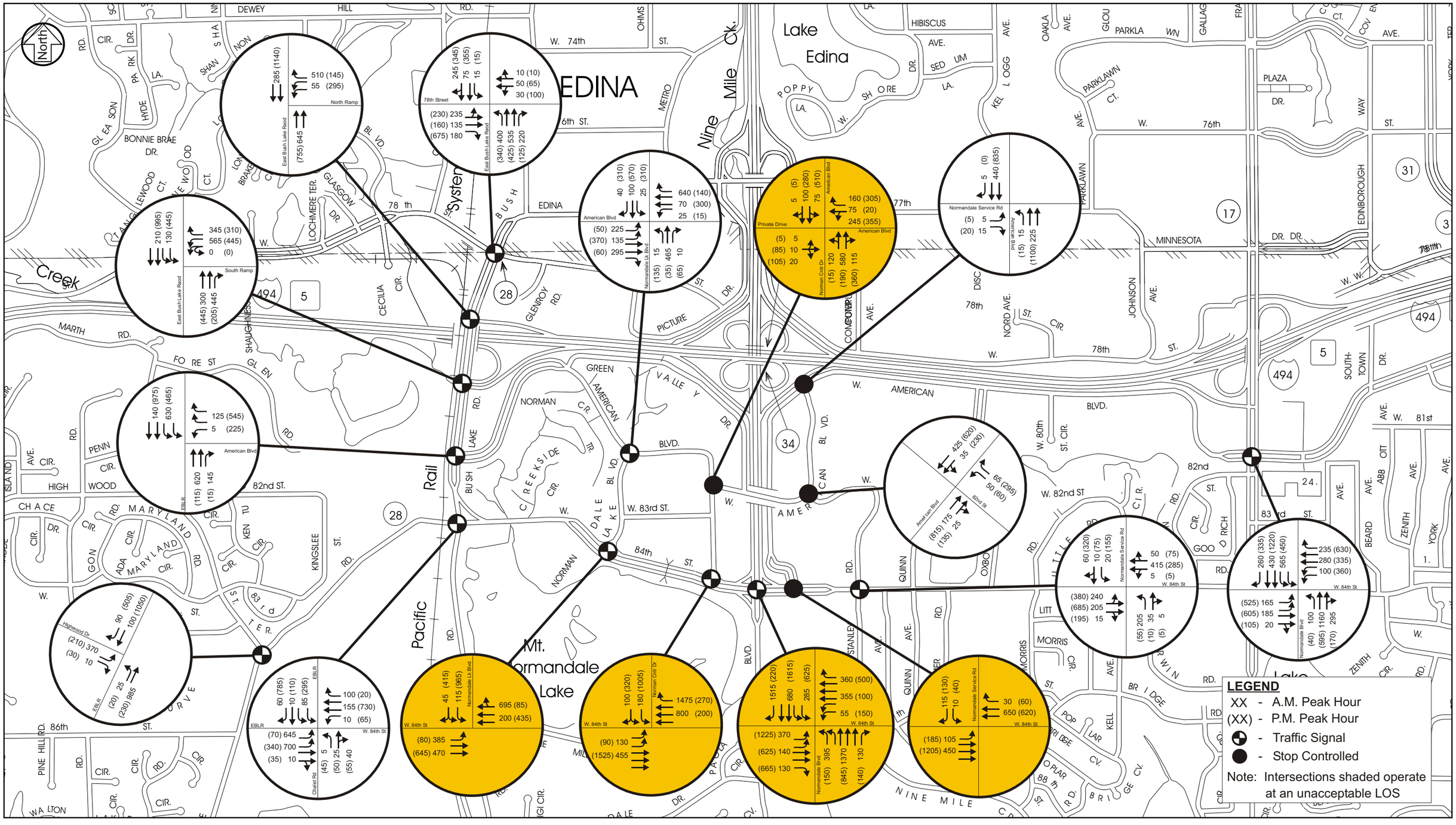
No build conditions represent year 2030 conditions without traffic control and geometric modifications to the local roadway network, assuming that all projected development has been constructed. An operations analysis was completed for year 2030 no build conditions during the a.m. and p.m. peak hours at each of the key intersections. All signalized intersections were analyzed using the Synchro/SimTraffic software and unsignalized intersections were analyzed using the Synchro/SimTraffic and Highway Capacity Software. All existing signal timing was assumed optimized under this scenario.

The analysis results shown in Table 3 indicate that all key intersections operate at an acceptable overall LOS D or better during the a.m. peak hour, with existing traffic controls and geometric layout. During the p.m. peak hour, five of the 16 key intersections will operate at an unacceptable LOS E or F. All operational problems along 84th Street, under year 2030 no build conditions, are due to the poor operations at the intersection of 84th Street/Normandale Boulevard. The queues along 84th Street will degrade to a point where they impact the adjacent intersections of 84th Street/Normandale Boulevard. While existing conditions exhibit a certain level of failure along 84th Street, year 2030 no build conditions indicate an expansion of these failures. The Norman Center Drive/American Boulevard intersection failure will also expand considerably under future year 2030 conditions.

Table 3
Year 2030 No Build Peak Hour Capacity Analysis
Level of Service Results

Intersection	Level of Service (Average Delay in seconds)	
	A.M.	**P.M.**
East Bush Lake Road/Highwood Drive	C	C
East Bush Lake Road/84th Street	B	C
East Bush Lake Road/American Boulevard	B	B
East Bush Lake Road/I-494 South Ramp	C	C
East Bush Lake Road/I-494 North Ramp	B	B
East Bush Lake Road/78th Street	C	C
Normandale Lake Boulevard/American Boulevard	C	C
Norman Center Drive/American Boulevard *	C/F	**F/F (--)**
84th Street/Normandale Lake Boulevard	A	**F (270)**
84th Street/Norman Center Drive	B	**F (270)**
84th Street/Normandale Boulevard	D	**F (100)**
84th Street/Normandale Service Road *	A/E	**E/F**
84th Street/Stanley Road	B	B
82nd Street/American Boulevard *	A/B	A/D
Normandale Service Road/American Boulevard *	A/C	C/F
France Avenue/American Boulevard	D	D

Note: Values shown in parenthesis represent overall delay per vehicle.
* Indicates an unsignalized intersection. The overall LOS is shown followed by the worst approach LOS (as explained in Section 2.2).



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YEAR 2030 NO BUILD TRAFFIC VOLUMES

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City of Bloomington

Figure 5

5.0 YEAR 2030 CONCEPT ALTERNATIVES

Based on the existing and year 2030 no build condition analysis results the local roadway network requires modifications to mitigate the failures that currently exist and will continue into the future. Therefore, SRF completed a planning level analysis of various design alternatives to determine what type of intersection design best addresses the operational and physical location issues. Additional local roadway improvements are being recommended as part of the overall area mitigation plan, but this section focuses on the 84th Street/Normandale Boulevard concept alternatives.

5.1 Year 2030 Preliminary Alternative Evaluation

The intersection of 84th Street/Normandale Boulevard is immediately adjacent to an office tower development in the northwest quadrant, Normandale Lake in the southwest quadrant, a Mn/DOT water retention pond in the southeast quadrant and a commercial development in the northeast quadrant. Consideration was given to these constraints, as well as the following factors, during the concept development process:

- Ensure that there is an appropriate range of concept types developed
- Achieve acceptable function regarding traffic volumes and pedestrian movements
- Minimize negative impacts and enhance neighborhood livability

Prior to developing concept alternatives for City staff review, SRF conducted a preliminary alternative evaluation of the following intersection types:

- Typical at-grade design with increased capacity
- Continuous flow design
- Michigan U-turn design, Normandale Boulevard only and both roadways
- Grade-separated arterial interchange with four-way overlapping left-turns
- Three-lane roundabout
- Split-level single point interchange
- Innovative at-grade reduced conflict intersection (RCI) with 3/4 U-turns

Based on the following criteria:

- Volume to capacity (V/C) ratios based on critical turning movements. Intersections have a certain amount of conflicting volume that they can service. To determine the V/C ratio for a given intersection alternative you add up the sum of all conflicts and divide it by the theoretical capacity of that particular intersection design. 1.0 is at capacity and anything below 1.0 is under capacity.
- Overall intersection size/amount of right-of-way needed based on number of lanes and medians required

Following this preliminary alternative evaluation, SRF presented City staff with numerous concepts for initial consideration. Based primarily on functionality, the following four concept sketches were developed and moved forward for consideration:

Concept A – Typical at-grade intersection design with increased capacity (see Figure 6)
Concept B – Grade-separated partial single-point/partial arterial interchange (see Figure 7)
Concept C – Grade-separated left-turn movement interchange (see Figure 8)
Concept D – At-grade partial Michigan U-turn/RCI (see Figure 9)

Each of the four concept sketches presented in Figures 6–9 minimize the right-of-way impacts immediately adjacent to the roadway and present alternatives that have the potential to mitigate the operational issues observed under year 2030 conditions, based on a planning level analysis.

5.2 Year 2030 Cursory Concept Analysis

A cursory operations analysis was conducted in order to further determine the effectiveness of each concept alternative at mitigating the operational issues observed under year 2030 conditions. This analysis includes all development/redevelopment in the Normandale Lake District under year 2030 conditions during the p.m. peak hour at the key failure intersections along 84th Street (operating at an unacceptable LOS E or F, see Table 4). LOS D has been identified by the City of Bloomington and Hennepin County as the functional design goal for all intersections in order to receive City and County approval.

Table 4
Year 2030 Build P.M. Peak Hour Capacity Analysis
Level of Service Results – Concept Alternatives

Intersection	A	B	C	D
84th Street/Normandale Lake Boulevard	D	C	C	**E (70)**
84th Street/Norman Center Drive	C	C	C	**F (120)**
84th Street/Normandale Boulevard	**F (80)**	C	C	D (55)
84th Street/Normandale Service Road *	**E/F**	B/F	A/A	**F/F (70)**

* Indicates an unsignalized intersection. The overall LOS is shown followed by the worst approach LOS (as explained in Section 2.2).

As shown in Table 4, two of the four concept alternatives will result in acceptable operations at the key intersections along 84th Street. These two concept alternatives represent the grade-separated alternatives. Although Concepts A and D provide additional capacity to the intersection, they are not able to handle the amount of conflicting volume. As previously discussed under existing conditions, it is the heavy southbound through/left-turn and eastbound left-turn movements directly conflicting with one another that cause the major failures. Concept A improves upon the overall level of service at the intersection of 84th Street/Normandale Boulevard and manages the queues along 84th Street to minimize their impact on adjacent intersections. However, it does not achieve the desired acceptable LOS D. Refinement of this alternative is necessary to achieve an acceptable LOS D. Concept D does not come close to achieving an acceptable LOS D at the majority of intersections along 84th Street. The cursory operations analysis review indicates that queuing issues along 84th Street will be too great to overcome, without a significant volume reduction at the intersection. The local roadway realignment shown in Figure 9 depicts an attachment to this alternative that may modify travel patterns enough to reduce the volume through this intersection and thus improve its operations.

5.3 Preliminary Concept Cost Estimate

Preliminary cost estimates were developed for each of the four concept alternatives in order to provide decision makers additional comparative information. These estimates were comprised of a combination of the following:

1. Roadway Reconstruction (base concept)
2. Bridges/Retaining walls (base concept)
3. Right-of-Way (base concept)
4. Design/Miscellaneous/Contingency (base concept)
5. Pedestrian Bridge
6. Local Roadway Realignment

The preliminary cost estimates shown in Table 5 are based on the initial two dimensional concept sketches and do not account for topography changes. The right-of-way estimates for the local roadway realignments associated with Concept D vary considerably based on different relocation alignments.

Table 5
Preliminary Concept Cost Estimate

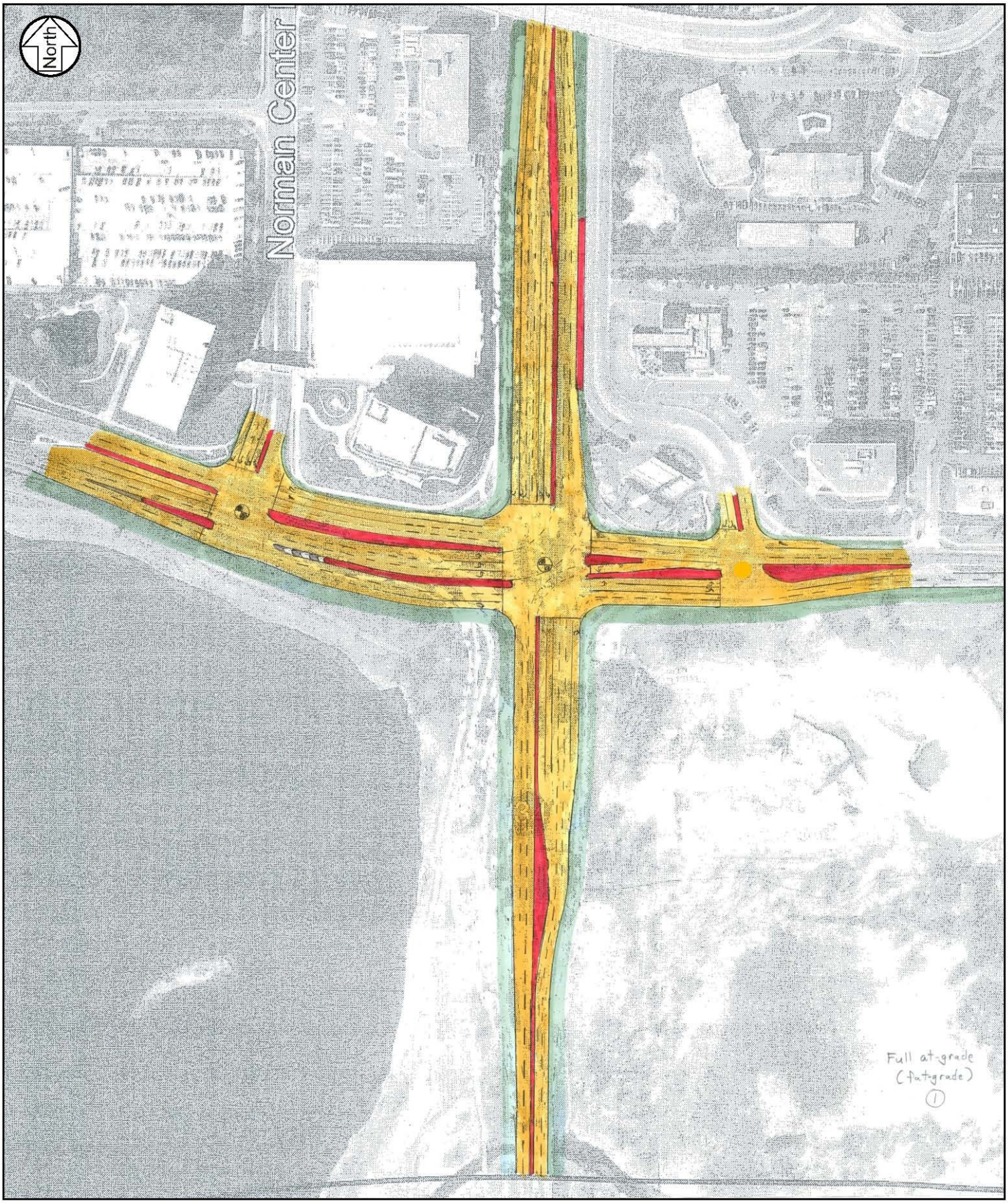
	A	B	C	D
Base Concept	$15 M	$28 M	$41 M	$15 M
Pedestrian Bridge	$1 M	--	--	$1 M
Local Roadway Realignment	--	--	--	$14 M
Total:	**$16 M**	**$28 M**	**$41 M**	**$30 M**

Note: Values shown are based on year 2005 dollars. These preliminary cost estimates were developed in year 2006 prior to Mn/DOT releasing their updated year 2006 average prices.

The pedestrian bridge and local roadway realignment under concept D were included with the concepts that require them as part of their designs, up to this point in the review process, to achieve an acceptable level of service.

6.0 SELECTING A PREFERRED ALTERNATIVE – PHASE I

A primary purpose of the Normandale Lake District Plan was to examine a full range of design alternatives for the 84th Street/Normandale Boulevard intersection, including non-traditional designs. As discussed in previous sections, numerous concepts were initially considered. From these, four concepts were selected based primarily on functionality. To narrow these alternatives, the City defined two levels of evaluation criteria related to six key considerations. The Phase I evaluation criteria were used to narrow the four leading concepts to two.



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CONCEPT A - AT GRADE

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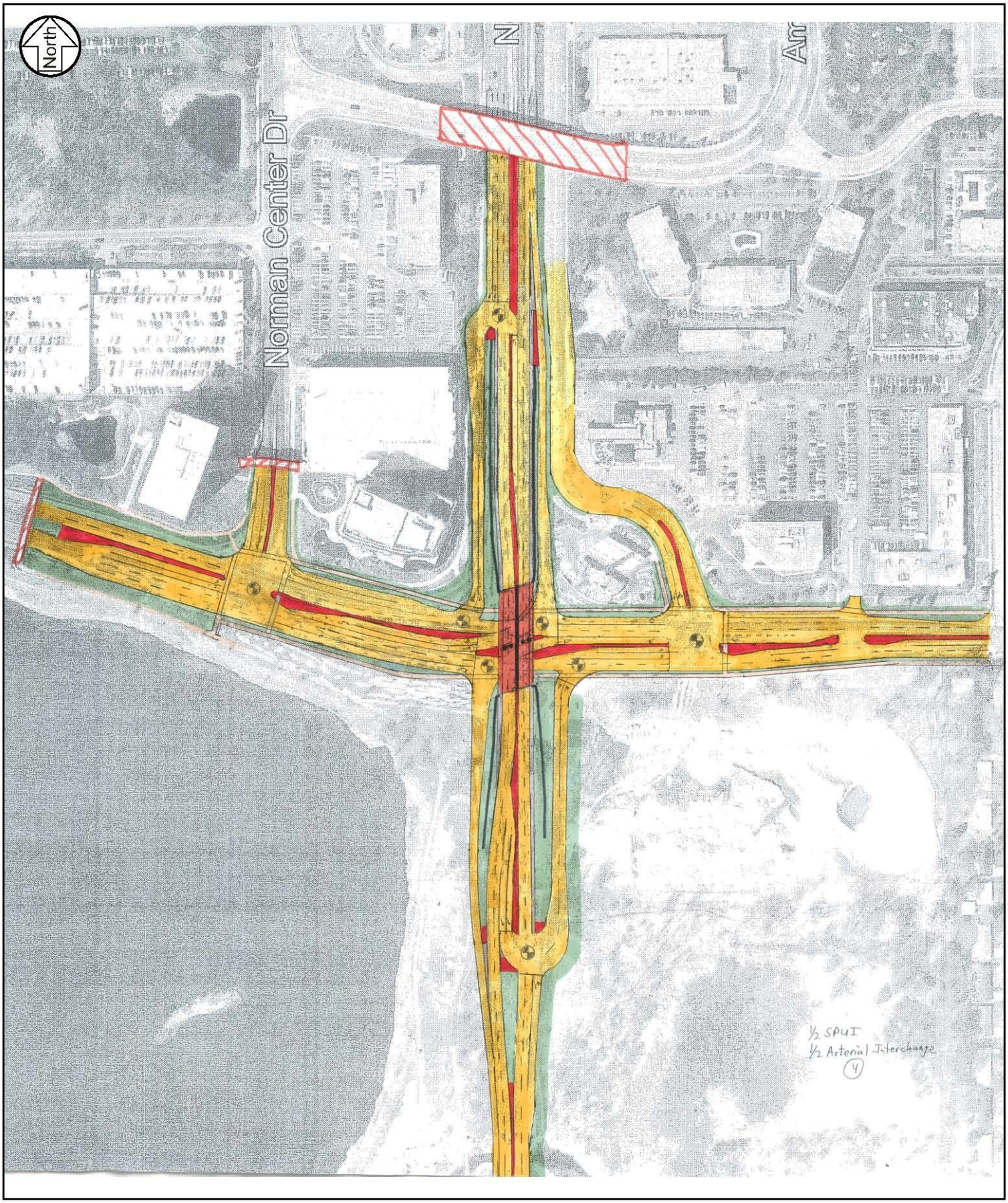
Figure 6



CONCEPT B - GRADE SEPARATED, PARTIAL SINGLE POINT

Figure 7

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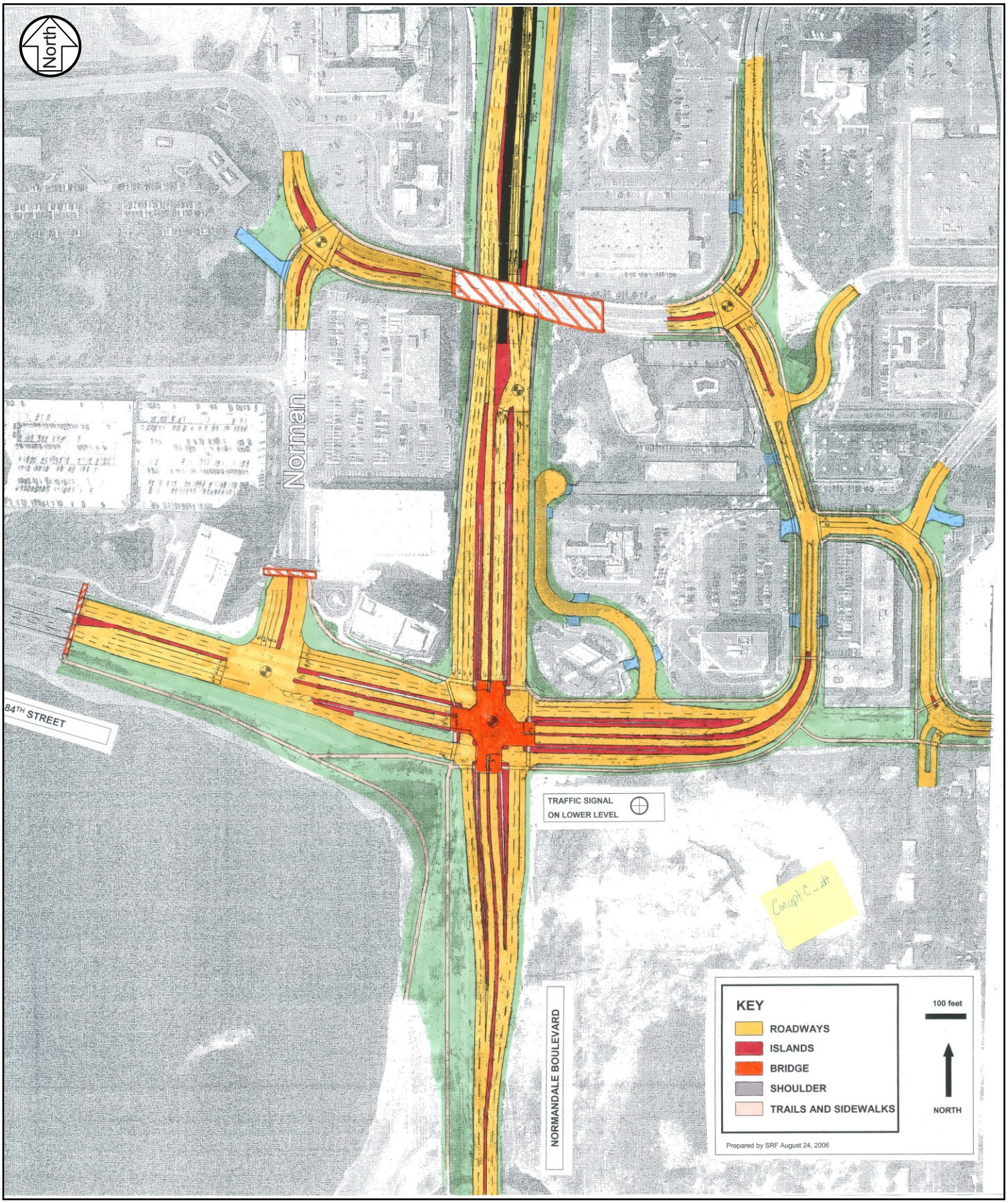

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CONCEPT C - GRADE SEPARATED WITH LEFT-TURN INTERCHANGE

Figure 8

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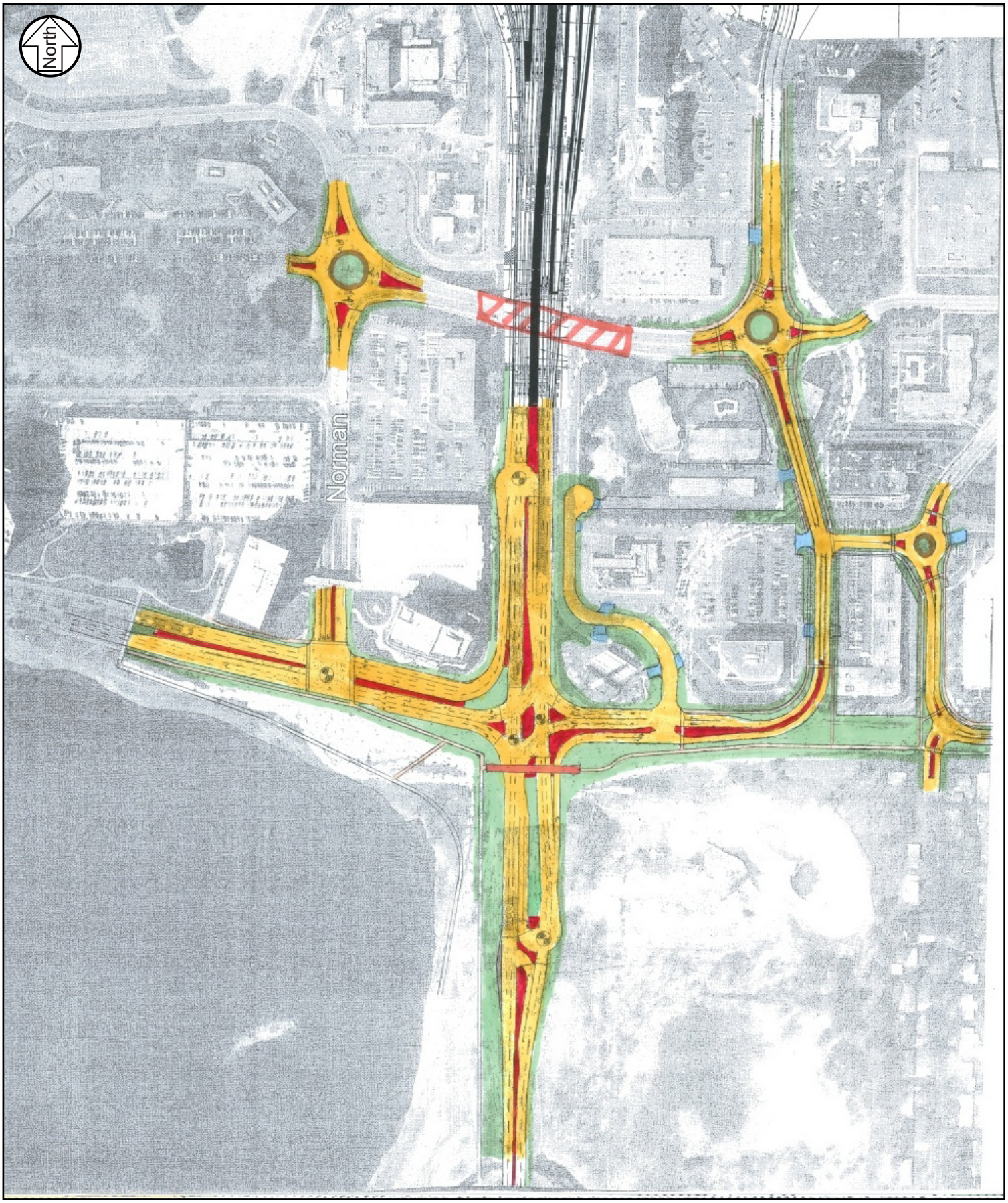
Appendix A.24



CONCEPT D - AT GRADE WITH PARTIAL MICHIGAN U-TURNS

Figure 9

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6.1 Phase I Evaluation Criteria

Neighborhood Impacts (Aesthetics, Access) • Facilitates pedestrian access to parks by minimizing number of traffic lanes crossed or by separating pedestrians from vehicular traffic • Provides opportunity for a positive pedestrian experience (aesthetics, safety, weather protection, sightlines) • Facilitates wayfinding to area destinations
Traffic • The concept has potential to modify (or add) roadway capacity in the future. • Intersections operate at a Level of Service D or better
Parkland Impacts • The concept does not negatively affect the use of parkland and recreational areas (wayfinding, vehicular access/entry points). • The concept offers opportunity to make a regional trail connection to area parks.
Environmental Impacts • The concept minimizes area of potential wetland impacts. • The concept minimizes impacts to wooded areas.
Commercial Property Impacts • The concept maintains access to private property.
Implementation/Cost • Comparison of preliminary costs to construct the base intersection concept • Preliminary cost to construct other elements associated with the alternative (e.g., pedestrian bridge, local roadway realignment)

The Phase I evaluation resulted in selection of Concepts A and B for further consideration. Concept A is an at-grade intersection with enhanced turning capacities and a pedestrian bridge over Normandale Boulevard. Concept B is a grade-separated design where through traffic on Normandale Boulevard passes over through traffic on 84th Street; left turns are handled north and south of the intersection at signal-controlled J-turns in expanded medians on Normandale Boulevard.

A third concept was included, Concept N. Concept N was included for comparison purposes to represent an alternative where no substantial improvements are made to the intersection. This concept included only minor local roadway improvements to enhance traffic capacity without making lane additions or using structures at the 84th Street/Normandale Boulevard intersection.

7.0 YEAR 2030 CONCEPT A & B REFINEMENT

As indicated in the previous sections, Concept A required additional refinement in order to achieve an acceptable LOS D operation. Concept B achieves the required acceptable LOS D operation with its current configuration and thus did not require additional refinement. In addition to an operations analysis of the refined Concept A, updated cost estimates were presented to reevaluate Concepts A and B.

The concept design sketch shown in Figure 6 (Concept A) already proposes a reasonable amount of additional capacity for the eastbound left-turn movement (triple left-turn lanes). The southbound through movement capacity has been increased as well from existing conditions to accommodate three southbound through lanes exiting this intersection. Providing additional capacity for these movements is not feasible given right-of-way space limitations. In order to achieve the functional design goal of LOS D, the eastbound left-turn volume must be reduced by approximately 225 vehicles at the 84th Street/Normandale Boulevard intersection during the p.m. peak hour under year 2030 conditions.

The O-D survey data collected internal to the office park area indicates that a significant amount of vehicles exiting this area during the p.m. peak period use the 84th Street/Normandale Boulevard intersection to access the regional roadway network. This travel pattern includes a southbound left-turn movement from either Norman Center Drive or Normandale Lake Boulevard to access 84th Street, followed by an eastbound left-turn movement onto northbound Normandale Boulevard. There are two alternative methods to reduce this eastbound left-turn volume from 84th Street:

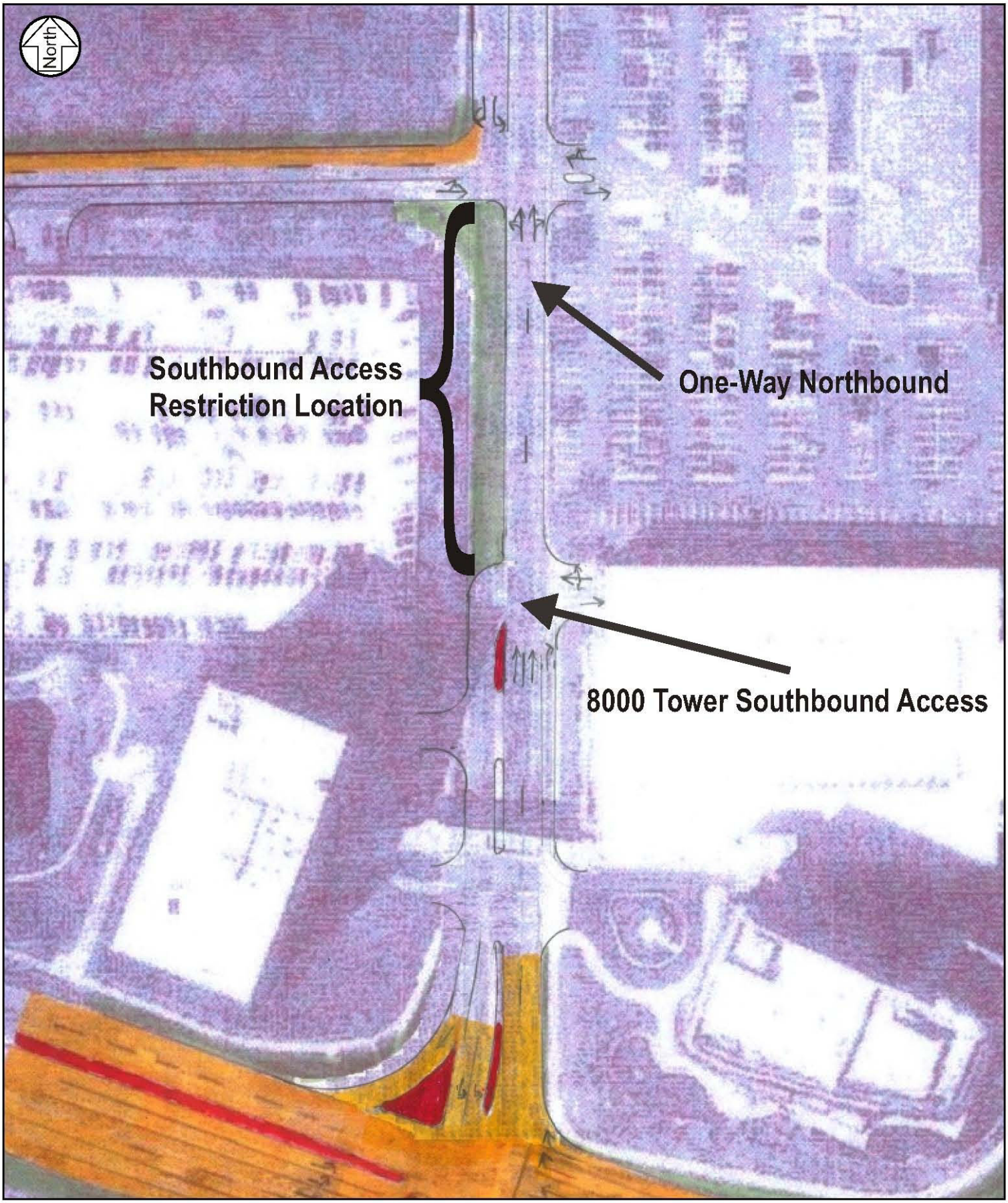
- Modify the land use assumptions (i.e., replace office with other land use, such as hotel) in the office park area to reduce the p.m. peak hour trips generated, subsequently reducing the amount of eastbound left-turns, or
- Develop internal office park circulation modifications to encourage diversions (i.e., restrict southbound access onto 84th Street along Norman Center Drive).

Based on meetings with City staff, elected officials, property owners and a cursory review of the impacts associated with each method, the access restriction alternative was preferred.

7.1 Access Restriction

As it exists, the Norman Center Drive access location onto 84th Street is not in compliance with typical access spacing guidelines and the close spacing contributes to its poor operation. Restricting the southbound movement at this intersection will cause a significant amount of trips to divert to alternate exit points from the office park area. It is important to note that the southbound left-turn access restriction will not be a total restriction. It is intended that the office tower located in the immediate northwest quadrant of the 84th Street/Normandale Boulevard intersection (8000 Tower) will have southbound access from Norman Center Drive to 84th Street. Figure 10 depicts how this access restriction will be accomplished. Vehicles exiting the 8000 Tower will be able to go southbound on Norman Center Drive from the parking ramp access drive, and make southbound left-turns onto 84th Street. Norman Center Drive will have a northbound one-way only section between the 8000 Tower access driveway and 83rd Street, restricting all others from making southbound left-turns from Norman Center Drive.

Using the O-D survey data and a route diversion curve, a model was developed to predict travel pattern shifts under year 2030 full development conditions. Route diversion curve data is based on the premise that vehicles will divert from their intended route/path if an alternate route is at least within 30 percent of the original route travel time. If the two routes are equal in travel time, 50 percent of the trips will divert their intended route. Trip diversion in this area occurs in the following manner:



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REFINED CONCEPT A - NORMAN CENTER DRIVE ACCESS RESTRICTION *Figure 10*

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ACCESS RESTRICTION TRIP DISTRIBUTION (PERCENTAGE)

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RESTRICTION TRAFFIC ROUTING

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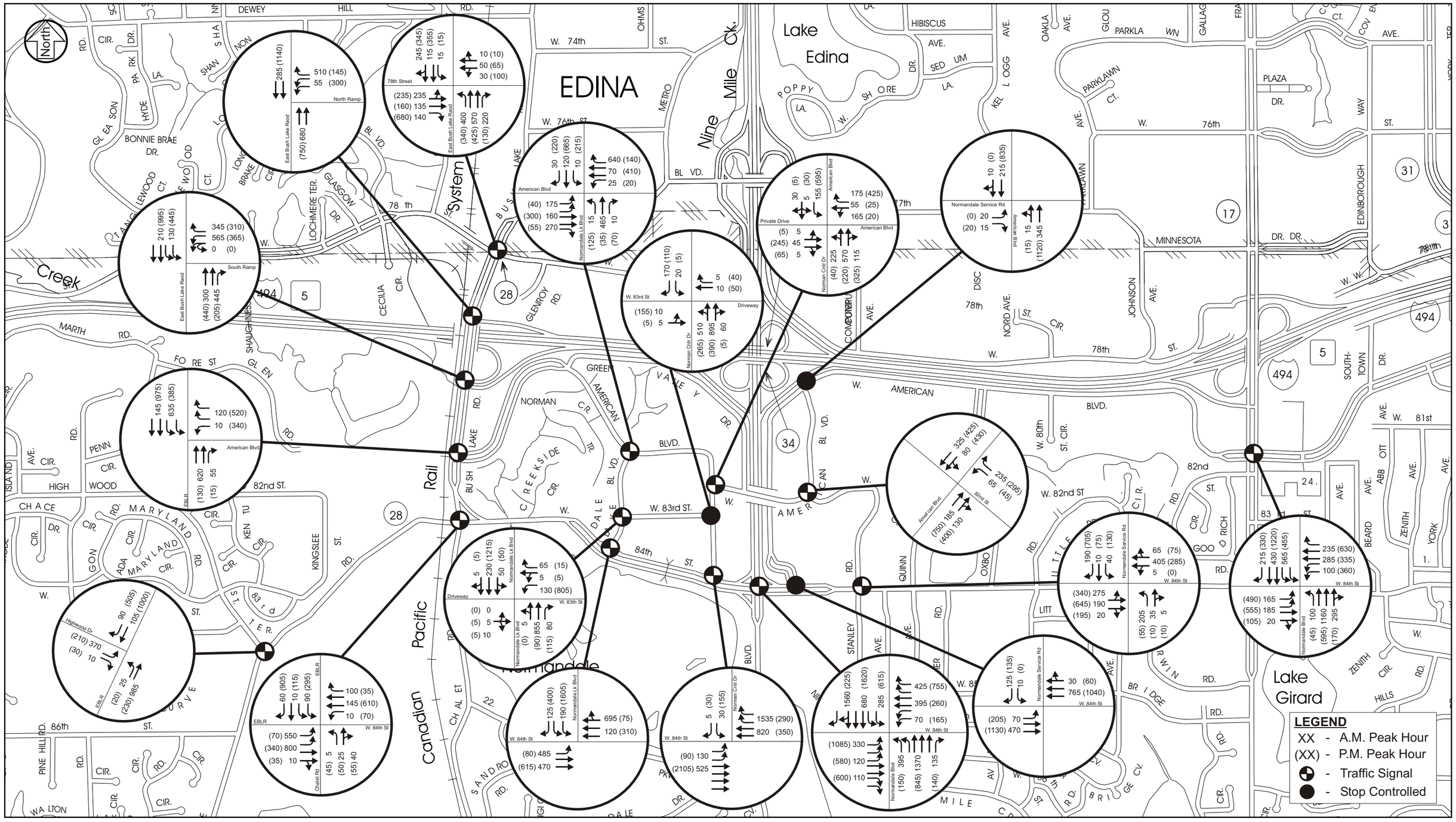
Figure 12



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YEAR 2030 BUILD TRAFFIC VOLUME FORECASTS WITH ACCESS RESTRICTION

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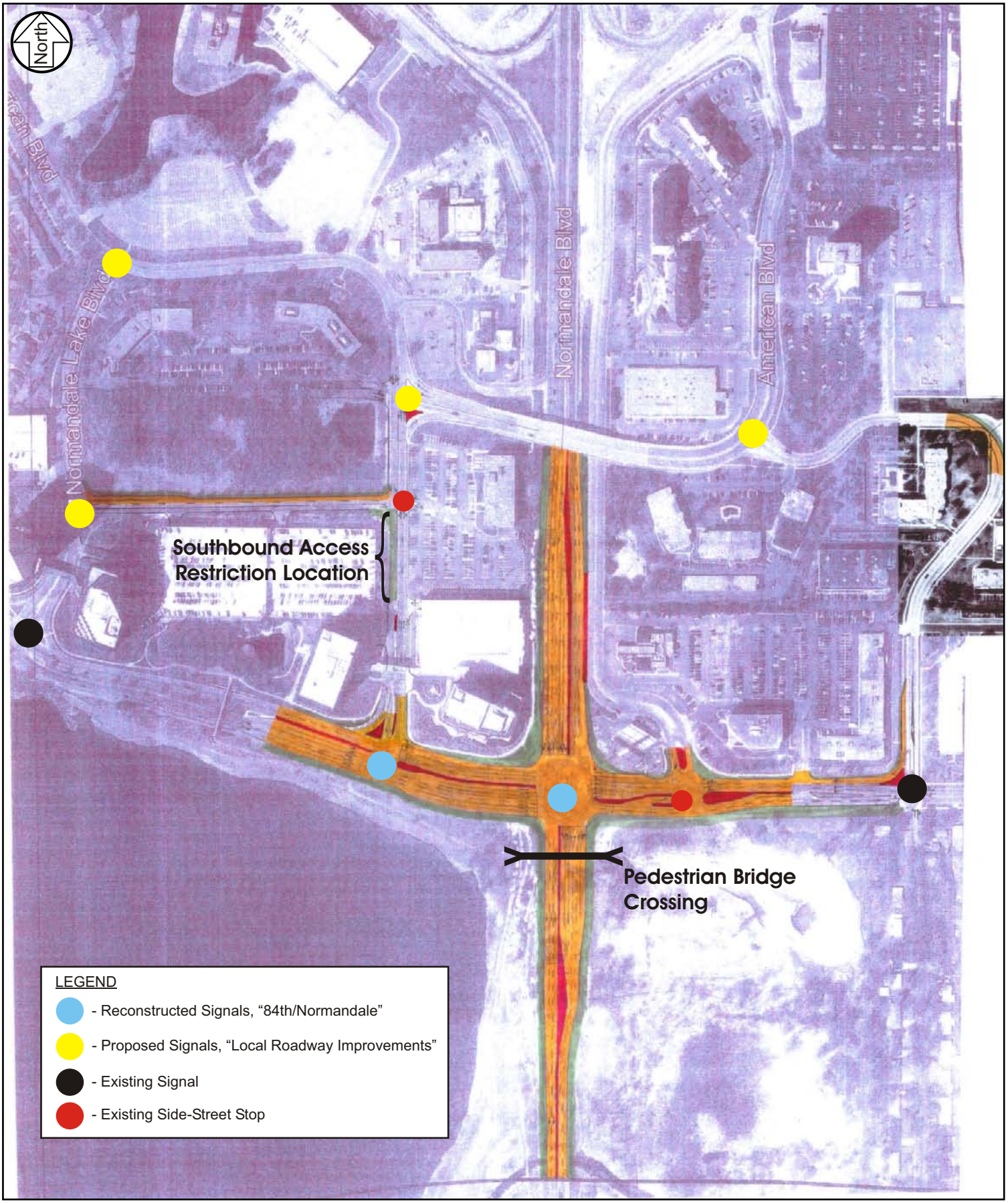
Figure 13



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REFINED CONCEPT A

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Figure 14

- American Boulevard to the west (to access East Bush Lake Road)
- American Boulevard to the east (to access 84th Street or France Avenue)
- Normandale Lake Boulevard to the south (to access 84th Street)

Figures 11 and 12 depict trip distribution and routing with the access restriction in place. The resultant traffic volume shifts are shown in Figure 13 for year 2030 full development conditions.

7.2 Refined Concept A Operations Analysis

In order to determine what impacts the access restrictions will have on the internal and external local roadway network, an operations analysis was completed for year 2030 full development conditions during the a.m. and p.m. peak hours at each of the key intersections. With the change in travel patterns, additional capacity is needed on the internal and external local roadways in order to accommodate the shift in volume. The following improvements are needed for all key intersections to operate at an acceptable LOS D or better:

- Reconstruct Norman Center Drive as a one-way only northbound from 8000 Tower ramp access driveway to 83rd Street.
- 83rd Street, internal to the office park area, needs more capacity to accommodate the additional trips that will now use this road to access 84th Street via Normandale Lake Boulevard.
- Normandale Lake Boulevard/83rd Street, Norman Center Drive/American Boulevard and 82nd Street/American Boulevard intersections require the installation of traffic signals.
- Stanley Avenue north of 84th Street requires some minor curve alignment modifications to increase the turning radius.
- 84th Street (east of Normandale Boulevard) requires an additional lane from Stanley Avenue to Normandale Boulevard due to the additional trips using this route to access the regional roadway network via American Boulevard, to Stanley Avenue, to 84th Street, then to Normandale Boulevard.
- 84th Street/Normandale Boulevard intersection requires additional capacity (as a refinement). Add dual right-turn lanes east and westbound on 84th Street. Add dual left-turn lanes westbound on 84th Street.
- A pedestrian bridge over Normandale Boulevard, south of 84th Street is a required improvement, as the optimal signal timing will not allow enough time for at-grade pedestrian movements.

Results of the analysis shown in Table 6 indicate that all key intersections will operate at an acceptable overall LOS D or better during the a.m. and p.m. peak hours, with the recommended traffic controls and geometric layout described above. Figure 14 depicts the final Concept A alternative based on the refinements stated above. Although all key intersections operate acceptably, congestion will occur internal to the office park area along Normandale Lake Boulevard and 83rd Street. As a result, queuing internal to the site will be heavy at the Normandale Lake Boulevard/83rd Street and 84th Street/Normandale Lake Boulevard intersections during the p.m. peak hour.

Table 6
Year 2030 Refined Concept A Peak Hour Capacity Analysis
Level of Service Results

Intersection	Level of Service (Average Delay in seconds)	
	A.M.	P.M.
East Bush Lake Road/Highwood Drive	D	D
East Bush Lake Road/84th Street	B	C
East Bush Lake Road/American Boulevard	B	B
East Bush Lake Road/I-494 South Ramp	C	C
East Bush Lake Road/I-494 North Ramp	B	B
East Bush Lake Road/78th Street	C	D
Normandale Lake Boulevard/American Boulevard	C	C
Normandale Lake Boulevard/83rd Street	A	C
Norman Center Drive/American Boulevard	C	C
Norman Center Drive /83rd Street *	A/F	B/F
84th Street/Normandale Lake Boulevard	B	D
84th Street/Norman Center Drive	A	A
84th Street/Normandale Boulevard	D	D
84th Street/Normandale Service Road *	A/E	A/D
84th Street/Stanley Road	B	C
82nd Street/American Boulevard	A	B
Normandale Service Road/American Boulevard *	A/C	A/C
France Avenue/American Boulevard	D	D

* Indicates an unsignalized intersection. The overall LOS is shown followed by the worst approach LOS (as explained in Section 2.2).

7.3 Refined Pedestrian Bridge

As stated in section 7.2, a pedestrian bridge is needed to remove pedestrians from at-grade movements. Removing pedestrian movements from the at-grade intersection allows the extra time required for pedestrian movements to be allocated back to vehicles, resulting in acceptable operations. All pedestrian movements will be restricted at-grade under the refined Concept A scenario. The design will not provide crosswalks, pedestrian crossing indications on the signal poles, push buttons, etc. At-grade movements will also be physically restricted where possible (i.e., physical earthen berms). The pedestrian bridge will be incorporated into the existing trail system, connecting to the existing pedestrian/bicycle paths around Normandale Lake and the existing pedestrian bridge over 84th Street west of Normandale Boulevard. Knowing that this improvement is needed for the intersection to operate acceptably for traffic movement, the pedestrian bridge cost estimate was included in the refined Concept A costs.

7.4 Refined Cost Estimates

Updated cost estimates were developed in order to reevaluate Concepts A and B. The previous cost estimate presented for Concept A was updated to include the additional improvements at the intersection of 84th Street/Normandale Boulevard and the other improvements needed to the local roadway network. It is important to note that the preliminary cost estimates shown in Table 7 are based on two dimensional concept sketches and do not account for topography changes.

Table 7
Refined Preliminary Concept Cost Estimate

	Original A	Refined A	B
Base Concept	$15 M	$16.5 M	$28 M
Pedestrian Bridge	$1 M	$2.5 M [1]	--
Local roadway improvements	--	$3.1 M	--
Total:	**$16 M [2]**	**$22.1 M [3]**	**$28 M [2]**

[1] Pedestrian bridge cost rose due to refined bridge cost estimates and modified bridge concept as project progressed.
[2] Values shown are based on year 2005 dollars.
[3] Values shown are based on year 2006 dollars.

Due to the Concept A refinements, the cost estimate has increased approximately 5.9 million dollars. This increase includes a change in the construction costs by one year (2006 vs. 2005). At the time the refined Concept A cost estimate was developed, updated pricing information was available from the Mn/DOT average price list. There is not a direct factor that can be applied to bring the original Concept A costs in line with the year 2006 dollars estimate used for refined Concept A. It is estimated that the difference due to the average yearly prices is approximately 6.5 percent.

8.0 SELECTING A PREFERRED ALTERNATIVE – PHASE II

8.1 Phase II Evaluation Criteria

These concepts were then evaluated more in-depth once the designs were refined and additional traffic modeling, impact data and cost estimates were developed. The expanded Phase II evaluation criteria are documented below.

Neighborhood Impacts (Aesthetics, Access)

- The concept encourages appropriate traffic speeds on 84th Street and on Normandale Boulevard south of study area.
- The concept would create gaps in Normandale Boulevard's traffic flow that would improve access to and from residential side streets.
- The concept can improve livability by reducing noise and improving pedestrian safety for land uses adjacent to 84th Street and Normandale Boulevard.

Parkland Impacts

- The concept minimizes the area of potential parkland impacts, based on worst case scenario construction limits.
- The concept facilitates wayfinding both to and within the park area.
- The concept offers opportunities to enhance park facilities.

Traffic • The concept meets appropriate design criteria and improves access routes to regional roadways. • Intersections operate at a Level of Service D or better. • The concept maintains acceptable transit route times. • The concept provides opportunity for transit services and facilities that serve the area as a transit destination. • The concept creates suitable locations for easy to use, comfortable and attractive transit stops.
Environmental Impacts • The concept minimizes area of potential wetland impacts. • The concept minimizes or enhances water quality in the study area. • The concept minimizes impacts to wooded areas.
Commercial Property Impacts • The concept minimizes the impacts on private property (acquisition and change of access points) based on worst case construction limits. • The concept roadway network enhances development opportunities as identified by the City's Comprehensive Plan, while ensuring that parcel size and access points do not preclude development.
Implementation/Cost • The concept will not require extraordinary levels of maintenance effort (roadway, drainage, bridge structures, landscaping and other amenities). • The concept has been determined to be potentially feasible by other jurisdictions involved in project approvals. • Additional public improvements required by new development are reasonable when compared to the benefit yielded to the city (ratio of net tax revenue generated to comprehensive project cost). • A reasonable financing strategy can be identified. • The concept can accommodate financial participation (leveraged private resources or phased public investment) within the construction sequence.

The following table summarizes how the concepts compared based on the six evaluation criteria.

	Concept A	Concept B	Concept N
Neighborhood impacts and access	Allows pedestrian bridge.	Pedestrian bridge not allowed. Visual impacts.	No change
Traffic	Achieves LOS D Easier to accommodate transit.	Achieves LOS D Difficult to accommodate transit.	Does not achieve LOS D.
Parkland	Some encroachment on parkland.	Slightly less encroachment on parkland.	No change.
Environmental	Similar under both	Similar under both	No change.
Commercial Neighborhoods	Similar under both.	Similar under both.	No change.
Cost and Implementation	Medium cost. Reasonable funding strategy available.	Highest cost	Lowest cost

The Bloomington City Council spent several meetings analyzing and comparing the alternatives, with most of the time spent on choosing between Concepts A and B. In the final analysis, three deciding factors led the City Council to choose a Concept A (with design modifications to improve traffic operations) as the preferred alternative. Each of the deciding factors is discussed below.

8.2 Cost

The City conducted a detailed examination of a complete range of sources to finance the public improvements required in the study area. To fund construction of refined Concept A, the City assumed it would succeed at obtaining $8 million in federal grants, $10 million in Hennepin County participation, $14 million in benefited office space assessments and use of the City's tax abatement authority. It was clear that no additional funding source was available to pay for the additional cost of Concept B. In spite of any advantages it possessed, Concept B was simply not affordable.

8.3 Neighborhood Objectives

Residents of neighborhoods east, south and west of the intersection were clear they wanted a solution that:

1. Discouraged or eliminated "cut-through traffic" that does not have an origin or destination within reasonable proximity to the intersection.
2. Does not extend "freeway conditions" into the neighborhoods. These were defined as high vehicle speeds, streams of traffic without gaps created by signal cycles and more dangerous conditions associated with higher speed, flow and volume.
3. Minimizes park impact. Normandale Lake and Hyland Park are important and well-used open space assets. Intersection structures and additional right-of-way taken from park land were seen as significant impacts. Federal requirements for park land replacement also had significant impact on costs of the concepts. Road overpass structures were perceived as having undesirable visual impacts on the park and on residential areas closest to the intersection.

8.4 Design Simplicity and Driver Comfort

Refined Concept A has the potential problems of eastbound to northbound triple left turn lanes and limited southbound left turn capacity at 84th Street and Norman Center Drive. Concept B has "J-turns" also called "Michigan lefts" in the Normandale Boulevard median north and south of 84th Street. These J-turns were viewed as a greater negative because local drivers would not be familiar with this geometry and they were considered harder to integrate with future improvements to the I-494/TH-100 interchange. Thus, refined Concept A was determined to provide the higher level of design simplicity and driver comfort.

Appendix B

LAND USE SCENARIOS

Neighborhood Center Land Use Scenarios

Problem and Opportunity

Many of the land uses existing within the boundaries of the Normandale Lake Area Study (NLAS) are expected to remain over the next 20 years. However, several of the commercial and residential structures east of Normandale and south of American and 82nd Street are approaching functional obsolescence. With a growing office and residential customer base in its service area, the existing neighborhood center has the potential to be redeveloped and reconfigured into a much more attractive center that benefits its whole residential and commercial service area. To this end, several future land use and circulation pattern scenarios have been developed as an essential first step in evaluating the future development potential of the neighborhood center.

General Comments and Assumptions

- The former Seagate building (5100 W. 82nd) is proposed to develop with approximately 418 apartments. This results in an overall increase of residents in the neighborhood center's market area.
- Stanley Road will be extended north of W. 82nd Street to connect with American Boulevard.
- Urban design improvements to provide district character will occur in conjunction with new (re)development and/or street (re)construction.
- The Holiday Station and Highland Bank buildings will remain and become part of the redeveloped neighborhood center in all alternatives.
- I-494/TH 100 interchange improvements will result in closing the northern portion of the frontage road on the east side of Normandale Boulevard.

Appendix B
Land Use Scenarios

Four scenarios were developed for guiding future land use in the area east of Normandale Boulevard. Planning staff favors *Alternative B*, which proposed an increase in the size of the neighborhood commercial center potentially making it more attractive for redevelopment. It also maintains a similar amount of multiple-family residential as currently exists in the area and locates it to provide a transition/buffer between existing single family neighborhoods to the east and more intense commercial and freeway-oriented uses to the west and north. This alternative could also be modified to include the transit hub shown in *Alternatives C and D*.

Narrative and graphic descriptions of each land use alternatives follow.

Appendix C
Circulation Scenarios

Five scenarios were developed for reconfiguring vehicle access and land parcels in the area east of Normandale and south of W. 82nd Street. Planning staff favor *Concepts 1 and 3*, which provide an east-west through-street to enhance circulation through this area for vehicles, as well as pedestrians and bicyclists.

Narrative and graphic descriptions of each concept follow the land use alternatives. See ***Appendix C***.

Alternative A

Characteristics

• Properties abutting I-494 designated for freeway oriented service (e.g. hotel) and office uses. Southgate office building assumed to remain. Existing hotels are assumed to remain. It is assumed that the existing carpet store, Nissan dealer, and Bally's health club properties will redevelop. Zoning should restrict retail to limited or accessory uses.

• Areas currently designated for multiple-family residential uses will be rehabilitated or redevelop with new multiple-family uses. These may occur at higher densities with integrated (possibly structured) parking.

• The shopping center area along W. 84th Street will redevelop with a mix of commercial uses, including neighborhood oriented retail, small offices, and restaurants.

General Analysis

Pros

• Multiple-family development provides a buffer and height transition between existing single-family neighborhood to the east and the commercial and freeway oriented uses to the north and west.

• Increase in residential density may foster redevelopment of the commercial/retail shopping node.

• Increase in land area for residential uses and increased density may boost local transit use and enhanced transit service and facilities.

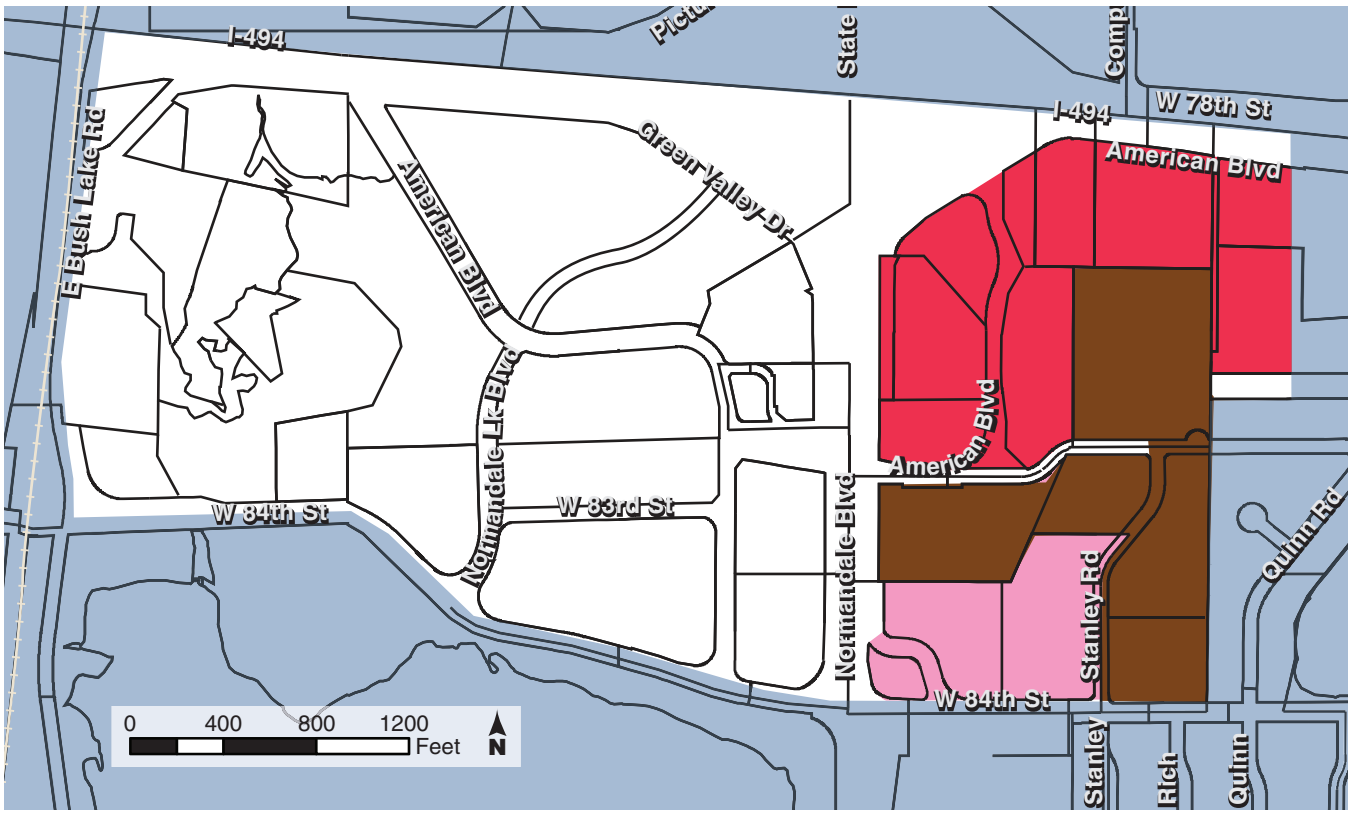
Cons

• Small parcel sizes may require site assembly to foster commercial/retail redevelopment.

• Small parcel sizes may result in need for shared and/or structured parking for both multiple-family residential and commercial/retail uses. This would make redevelopment more expensive.

• Some residential "sandwiched" between freeway-oriented commercial uses and retail commercial uses. Careful design required to ensure compatibility.

Alternative A



Legend

- High Density Residential
- Mixed Commercial/ Retail (TOD)
- Freeway Commercial/Office

Alternative B

Characteristics

• Properties abutting I-494 designated for freeway oriented service (e.g. hotel) and office uses. Southgate office building assumed to remain. Existing hotels are assumed to remain. It is assumed that the existing carpet store, Nissan dealer, and Bally's health club properties will redevelop. Zoning should restrict retail to limited or accessory uses.

• Increased area designated for commercial/retail land uses. This area could include some integrated residential uses if developed as a mixed use project.

• Amount of area designated for multiple-family residential will remain similar to current conditions, although the locations will change.

Pros

• Multiple-family development provides a buffer and height transition between existing single-family neighborhood to the east and the commercial and freeway oriented uses to the north and west.

• Expanded area designated for commercial/retail may improve potential for redevelopment, although assembly of small parcels will be required. This area could also include integrated residential uses if developed as a mixed use or transit-oriented development (TOD) project.

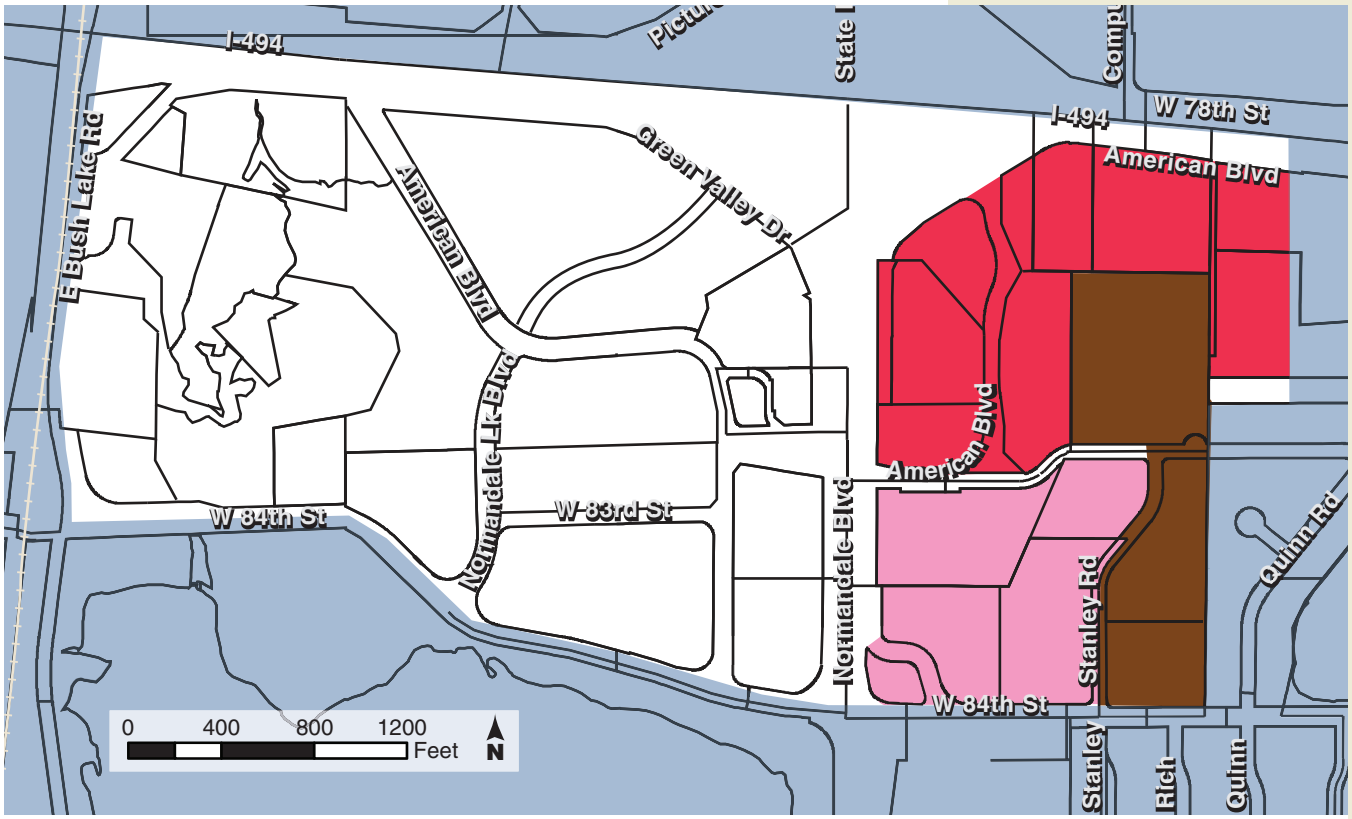
• Adjacent commercial/retail uses and hotels may foster a market for supportive or symbiotic uses.

• Commercial/retail uses adjacent to American Boulevard enhances access for employees of office park west of Normandale Boulevard.

Cons

• Small parcel sizes may require site assembly to foster commercial/retail redevelopment.

Alternative B



Legend

- High Density Residential
- Mixed Commercial/ Retail (TOD)
- Freeway Commercial/Office

Alternative C

Characteristics

• The former Seagate building (5100 W. 82nd) is the only property assumed to be developed with multiple-family residential uses in this scenario. Existing multiple family developments are proposed to be redeveloped with commercial/retail uses.

• Properties abutting I-494 designated for freeway oriented service (e.g. hotel) and office uses. Southgate office building assumed to remain. Existing hotels are assumed to remain except the La Quinta, which is assumed to redevelop with commercial/retail use. It is assumed that the existing carpet store, Nissan dealer, and Bally's health club properties will redevelop. Zoning should restrict retail to limited or accessory uses.

• The Pacer Center property is proposed to redevelop as a transit station/hub. This may provide for limited transit rider parking, kiss 'n' ride drop-off, bus layover, and a larger than typical transit stop. It will be important to ensure good pedestrian and bicycle access in conjunction with the urban design enhancements.

• This includes the largest area designated for commercial/retail uses of all scenarios. This area could also include integrated residential uses if developed as a mixed use or transit-oriented development (TOD) project.

Pros

• Expanded area designated for commercial/retail may improve potential for redevelopment, although assembly of small parcels will be required.

• Commercial/retail uses adjacent to American Boulevard enhances access for employees of office park west of Normandale Boulevard.

• Development of a transit station/hub could increase transit ridership and foster TOD.

Cons

• Commercial/retail uses adjacent to existing single-family residential will require careful design and buffering to ensure compatibility.

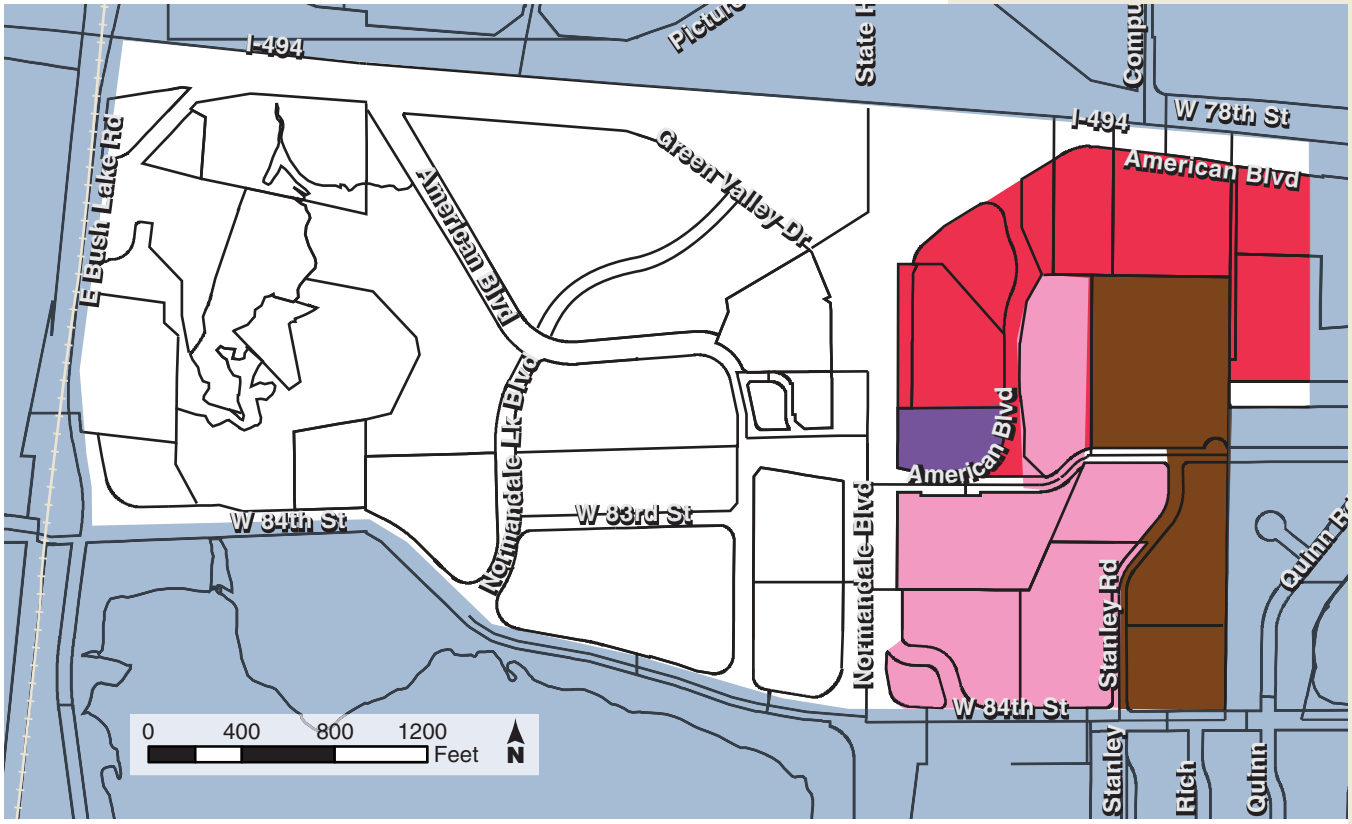
• Large amount of commercial/retail may result in increase in area traffic.

• Amount of commercial/retail proposed may exceed market demand for space in the area.

• Small parcel sizes require assembly to foster commercial/retail redevelopment.

• Reduction in land area designated for multiple-family residential may decrease or limit transit demand.

Alternative C



Legend

- High Density Residential
- Mixed Commercial/ Retail (TOD)
- Freeway Commercial/ Office
- Transit Hub

Alternative D

Characteristics

• The former Seagate building (5100 W. 82nd) the adjacent hotel (La Quinta) site are proposed to redevelop with multiple-family residential uses. Existing multiple family developments are proposed to be redeveloped with commercial/retail uses.

• The amount of area designated for multiple-family residential will remain similar to current conditions, although the locations will change.

• Properties abutting I-494 designated for freeway oriented service (e.g. hotel) and office uses. Southgate office building assumed to remain. Existing hotels are assumed to remain except the La Quinta, which is assumed to redevelop with multiple-family residential use. It is assumed that the existing carpet store, Nissan dealer, and Bally's health club properties will redevelop. Zoning should restrict retail to limited or accessory uses.

• The Pacer Center property is proposed to redevelop as a transit station/hub. This may provide an area for limited transit rider parking, kiss 'n' ride drop-off, bus layover, and a larger than typical transit stop. It will be important to ensure good pedestrian and bicycle access in conjunction with the urban design enhancements.

• Commercial/retail uses proposed on both sides of Stanley Ave. This results in a fairly large commercial node. This area could include some integrated residential uses if developed as a mixed use/TOD project.

Pros

• Expanded area designated for commercial/retail may improve potential for redevelopment, although assembly of small parcels will be required.

• Commercial/retail uses adjacent to American Boulevard enhances access for employees of office park west of Normandale Boulevard.

• Development of a transit station/hub could increase transit ridership and foster TOD.

• Multiple-family residential adjacent to transit station would increase transit ridership.

Cons

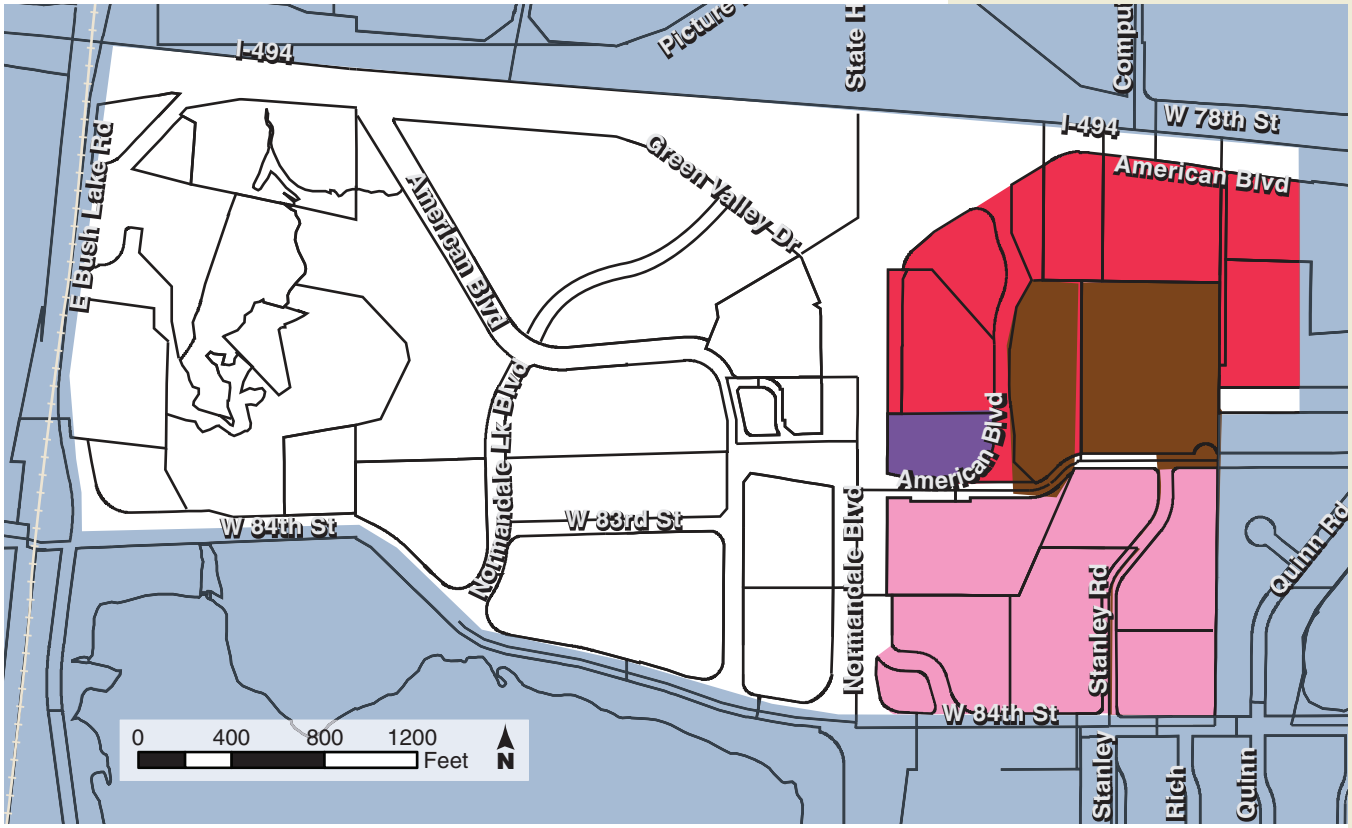
• Commercial/retail uses adjacent to existing single-family residential will require careful design and buffering to ensure compatibility.

• Large amount of commercial/retail may result in increase in area traffic.

• Amount of commercial/retail may exceed market demand for the area.

• Small parcel sizes require assembly to foster commercial/retail redevelopment.

Alternative D



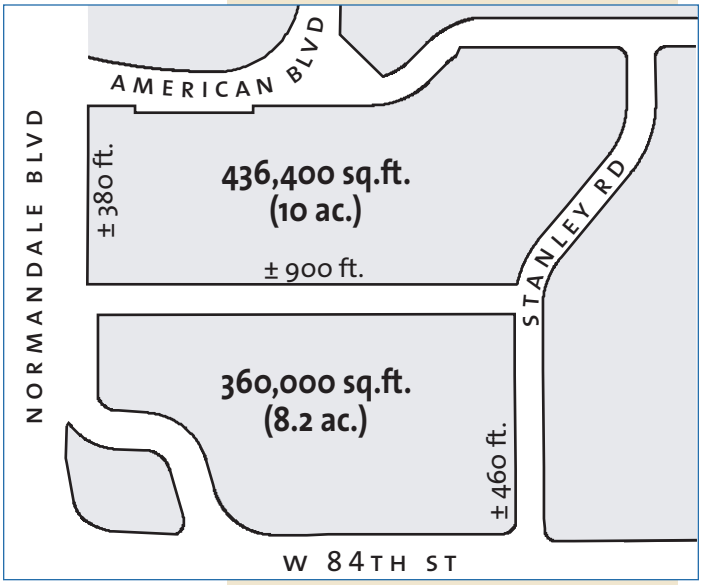
Appendix C

Internal Circulation Alternatives

Neighborhood Center Circulation Concepts

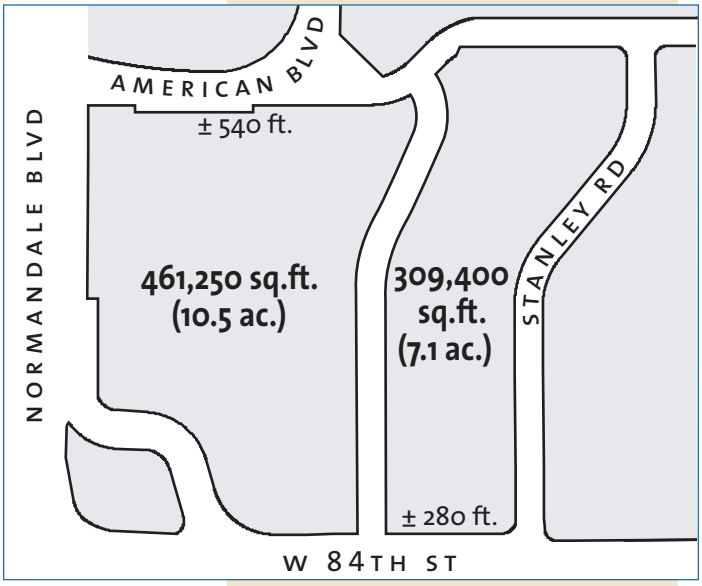
Concept 1

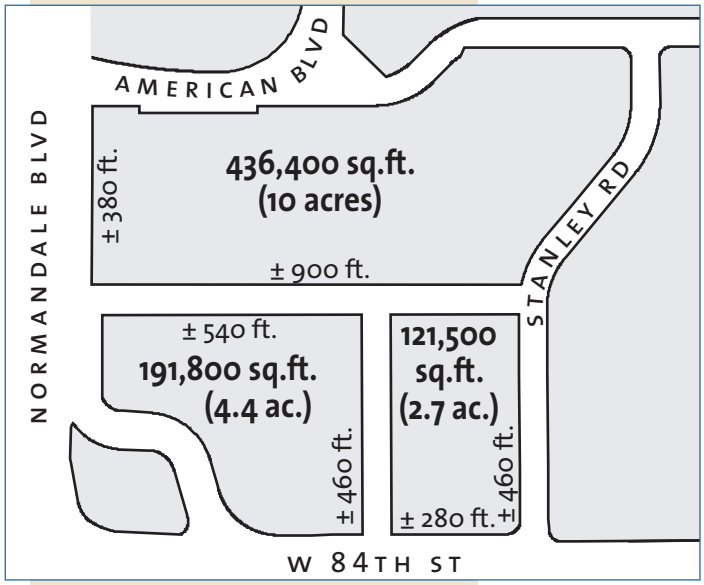
- Includes one primary E-W road through the center of the land area.
- Results in two, relatively large parcels (10 acres and 8.2 acres) with relatively good depth (380 feet and 460 feet).



Concept 2

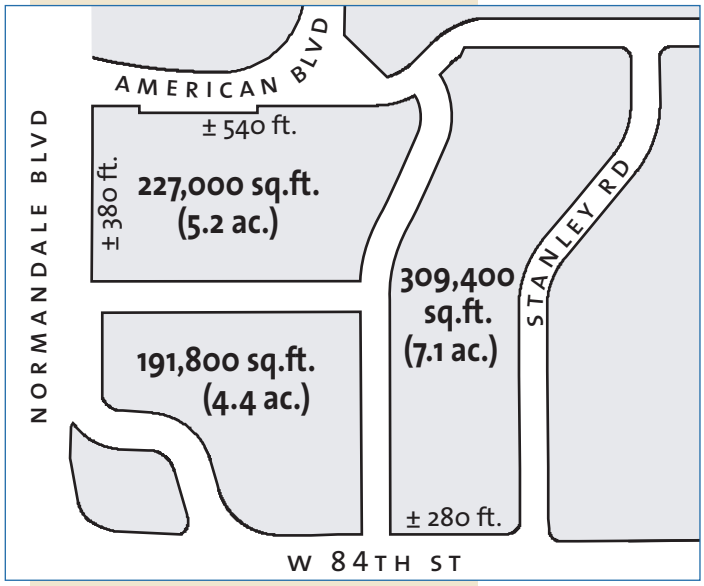
- Includes one primary N-W road through the center of the land area. No through road access to Stanley.
- Results in two, relatively large parcels (10.5 acres and 7.1 acre).
- One parcel is fairly narrow (± 280 feet wide) and will have dual street frontage, including long frontage on Stanley. This will require careful design to minimize "back door" appearance.





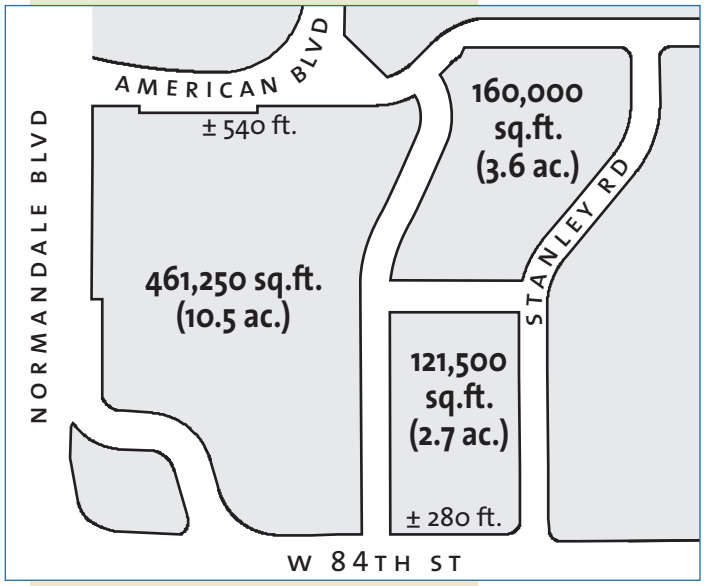
Concept 3

- Includes central E-W through road with a N-S road extending south from the through road.
- Creates a fairly small parcel (2.7 acres/121,500 sq.ft.), however, this is well within the minimum size for either B-2 or B-4 zoning. (Note: similar in size to The Pointe.) Small size and road frontage on all sides would require careful design to minimize "back door" appearance on any side.
- Provides a range of parcel sizes from 2.7 acres to 4.4 acres and 10 acres (small, medium, large).



Concept 4

- Includes a central N-S road extending between W. 84 and W. 82nd Streets with a cross road extending to the west, but no through road to access Stanley.
- Creates three medium size parcels of 4.4, 5.2, and 7.1 acres.
- The largest parcel is long and narrow (± 280 ft wide) and will have dual street frontage, including long frontage on Stanley. This will require careful design to minimize "back door" appearance.



Concept 5

- Includes central N-S through road with a road extending east to connect with Stanley.
- Creates one fairly large parcel (10.5 acres) and two fairly small parcels (2.7 and 3.6 acres).
- The two smaller parcels, while within the minimum size required for the likely zoning (B-2 or B-4), will require careful design to minimize "back door" appearance given street frontage on all sides.