Transportation Plan

Waite Park Transportation Plan

Waite Park, Minnesota

SEH No. A-WAITE0604

February 2007

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Table of Contents

Table of Contents

List of Tables

List of Appendices

Transportation Plan

Waite Park Transportation Plan

Prepared for City of Waite Park, Minnesota

1.0 Introduction

A Transportation Plan is a parallel document to a Comprehensive Plan. The Comprehensive Plan is intended to guide the City for future growth and development patterns while a transportation plan is intended to guide the City through mobility improvements with development.

With the City of Waite Park's Comprehensive Plan update complete in August 2004. Substantial changes to land use were made; the need to further focus on the local transportation needs of the community became evident. In response to this need, the City of Waite Park retained SEH to complete a Transportation Plan to determine the alternatives to best serve the needs of Waite Park and the surrounding communities.

Many issues have prompted the City to undertake this study including: interrupted traffic flows on Highway 23 through Waite Park, anticipated commercial and residential development within the existing city limits and on property surrounding the community, and the need to identify and preserve future transportation corridors as development pressures reach out to currently undeveloped land.

This study takes into account other transportation plans for the area, including the overall regional transportation plan completed by the St. Cloud Area Planning Organization (APO). In addition to looking at the compatibility with other area studies, this plan also evaluated current and future land uses and historical, current, and projected traffic volumes.

1.1 Process Details

Development of the Waite Park Transportation Plan involved four main tasks. Table 1 below, highlights these tasks. These tasked included, data assembly, minor arterial sketch planning, public involvement, and final report.

Table 1
Process Task Descriptions

Task	Details
Data Assembly	■ Assemble historical traffic counts ■ Assemble Land Use ■ Assemble base mapping ■ Acquire St. Cloud APO model input/output
Minor Arterial Sketch Planning	■ Develop goals ■ Review and identify constraints ■ Develop proposed alignments ■ Roadway sizing guidance ■ Review and evaluate alignments ■ Select and finalize preferred plan
Public Involvement	■ Public Input Meetings ■ Stakeholder group meetings ■ City Council presentations
Final Report	■ Draft report ■ Finalized report

There were three public input meetings throughout the project process. In November 2005, the first public input meeting was held to gather public input on the study process, schedule and goals.

A Transportation Plan Stakeholder Group was assembled of volunteers from the general public, City staff and officials, surrounding community representatives, and Waite Park business representatives. The Stakeholder Group met for the first time in December 2005 and consisted of the following people:

- Todd Rodenwald - Developer
- Richard Carlbom - St. Joseph
- Tim Jansky- Citizen Waite Park
- Mitch Anderson - Stearns County
- Herm Bartz - Waite Park Council
- Paul Ringsmuth - Waite Park Council
- Shaunna Johnson - Waite Park Staff
- Matt Smallya - St. Joseph Township and Property Owner
- Jason Bernick – Business
- Terry Wotzka – Waite Park Staff
- Bill Schluenz – Waite Park Staff

At the first stakeholder meeting, the attendees were given an aerial photo of the City and the orderly annexation area, and were also given criteria regarding spacing of collector, minor arterial, and major arterial roadways. As a baseline, the existing roadway classifications were mapped according to the City's Comprehensive Plan. The attendees were then divided into two groups to independently layout a transportation system of collector and

minor arterial roadways within the City of Waite Park and the orderly annexation area according to the criteria that was provided. Each group map can be found in Appendix A.

From these ideas developed during the first stakeholder meeting, a proposed transportation network was mapped electronically, fine-tuned, and shown to the stakeholder group and the public at large at a second public input meeting in order to gain comments. A second stakeholder group meeting was held to discuss possible alternatives and the preliminary screening process. Selection of the viable alternatives was then carried forward into the evaluation phase. The resulting future conceptual road network map is illustrated in Figure 5.4.

The framework illustrated in Figure 5.4 is built on the guiding principle that the most efficient and effective roadway system for a community is one based on a grid of primary (arterial) roads spaced approximately 1-mile apart and secondary (collector) roads spaced at approximately 1/2-mile intervals between each primary road. The ability to attain this basic framework is dependent on natural barriers (rivers, hills, lakes, other environmental features) and existing development.

Furthermore, the proposed roadway improvements and functional classification assignments reflected on Figure 5.4 are based on expected capacity needs, safety and traffic operations, preserving roadway corridors, and the potential need for future river crossings to enhance connectivity between community facilities, neighborhoods, and the region.

2.0 Purpose and Need

Travel patterns are extremely dynamic and influenced highly by land use locations. People make several trips, utilizing many routes to reach numerous origins and destinations. As communities grow there is a need to update different aspects of the transportation system. This task might seem daunting without proper planning. Therefore, it is very important to develop a resource to guide transportation decision makers. This plan will serve as a resource for the community to use when evaluating transportation development options. The following details the purpose and need statements for developing a transportation plan.

Purpose

- Provide guidance to the community for roadway improvements
- Establish guidelines for right-of-way acquisition

Need

- Establish continuity between existing and future transportation system
- Provide adequate access to new developments

2.1 Goals and Objectives

The goals and objectives were developed by the Stakeholder group, City Council, and public input meetings after thorough discussion. The established goals provide the framework for the Waite Park Transportation

Plan. These goals reflect the vision of what the City of Waite Park transportation system should provide. Listed below are a set of goals and objective that should be applied and assessed when considering potential transportation improvements throughout the City. These goals and objectives are not ranked or presented in order of importance or need.

Objective

- To develop a comprehensive Transportation Plan for the City of Waite Park

Goals

- Identify relative constraints in the project area
- Determine the best conceptual transportation plan for the City
- Provide guidance for the typical cross sections required for different collector and minor arterial alignments

3.0 History and Overview

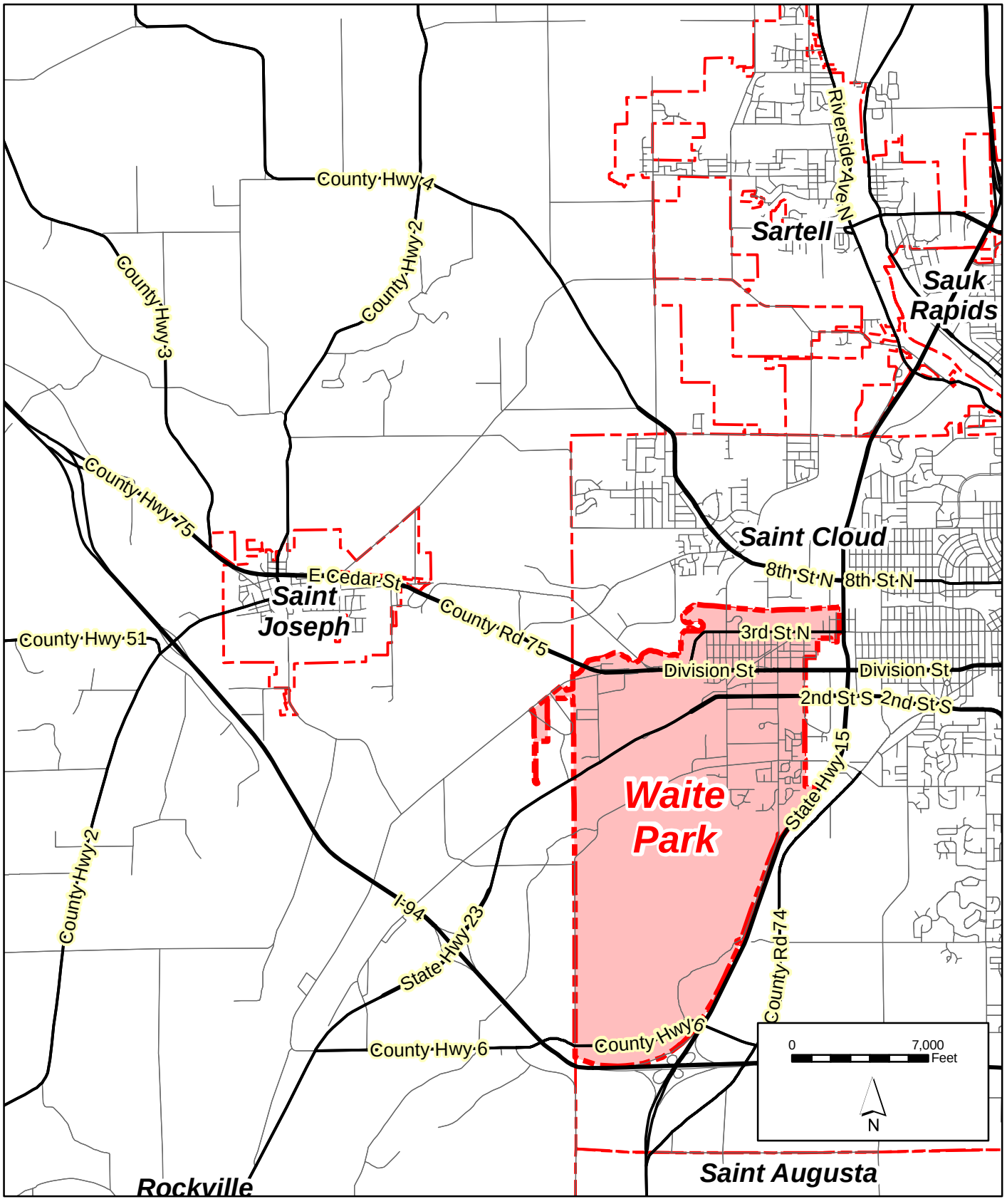
The City of Waite Park is located in Stearns County, Minnesota. Waite Park spans about 7.8 square miles and is approximately 70 miles northwest of Twin Cities Metropolitan area. Nearby cities include St. Cloud, St. Joseph, Sartell, Sauk Rapids, and Rockville. Refer to Figure 3.1 for a geographical location map for Waite Park.

Waite Park was incorporated as a village on March 20, 1893. Waite Park received its name after Henry Chester Waite of St. Cloud. He was a local landowner, attorney, statesman and entrepreneur. The first street to be platted was 3rd Street in Waite Park. Early employment included jobs with the Great Northern Railroad, granite quarries and various public and commercial opportunities.

Commercial properties continue to develop along TH 23 and CSAH 75. The Crossroads Mall, located on the eastern edge of Waite Park and bordering St. Cloud, offers the community a wide array of retail shops. This mall serves local and regional traffic.

Quarry Park and Nature Preserve is a 250-acre park located in the central Waite Park. It is a joint effort between the City and Stearns County and it offers hiking, biking, swimming, and fishing activities to visitors.

Waite Park also has strong and growing commercial and industrial regions. Businesses benefit from the great highway access that serves the City primarily, I-94, TH 23, CSAH 75, and TH 15. The St. Cloud Regional Airport also provides businesses to aviation services.



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Location Map
Transportation Plan
Waite Park, Minnesota

Figure
3.1

4.0 Land Use

The goal of this section is to examine existing and future land use patterns. The type and density of land use highly effects travel demand. Trip making patterns such as distribution or volumes are highly a function of location and use of land. City growth in employment and population can change the dynamics of the existing trip patterns. Therefore, avoiding future congestions requires careful coordination of land use planning, zoning, and transportation services planning.

4.1 Existing Land Use

A detailed land use plan is contained within the City of Waite Park's Comprehensive Plan updated August 2004. The Land Use plan sets general guidelines for designation, densities, and design standards for land uses whereas zoning is the of segregation of incompatible uses. Therefore, zoning is a system used to permit or prevent new developments from harming existing residents or businesses.

The City of Waite Park encompasses approximately 5,000 acres. Figure 4.1 shows the existing land use within the City of Waite Park. The amount of land classified by each land use type is shown in Table 2.

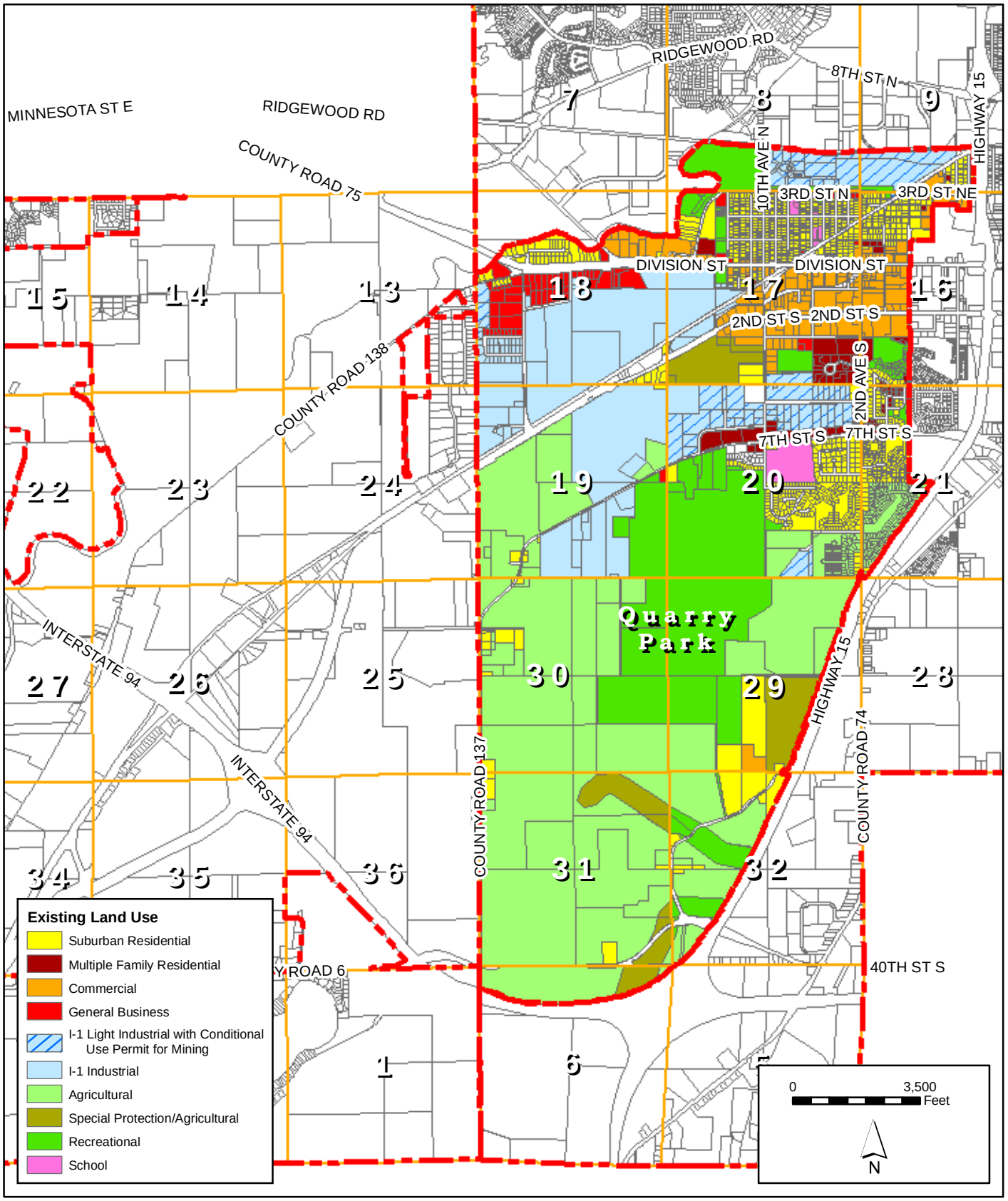
Table 2 - Existing Land Use

	Land Uses	
Land Use Type Category	**Acreage**	**Distribution**
Suburban Residential	539	11.7%
Multiple Family Residential	285	6.2%
Commercial	260	5.6%
General Business	94	2.0%
I-1 Light Industrial with Conditional Use Permit for Mining	254	5.5%
I-1 Industrial	630	13.6%
Agricultural	1,753	37.9%
Recreational	771	16.7%
School	38	0.8%
Total	4,624	100.0%

Agricultural usage accounts for a majority of the land use by acreage with significant industrial, recreational, and residential usages.

Residential — the existing residential developments are a mixture of medium/high density residential units. Much of the high density residential is located along 7th Street South and 2nd Avenue South. These developments act as a buffer between residential and commercial/industrial uses.

Commercial, General Business, and Industrial Uses — these uses make up approximately 28-percent of the City's total area. Commercial parcels are generally located along principal arterials including Division Street and 2nd Street. Waite Park has 5 areas of industrial concentrations and is home to several large businesses including Bernick's Pepsi Cola and Hardrives.



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Existing Land Use

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Figure
4.1

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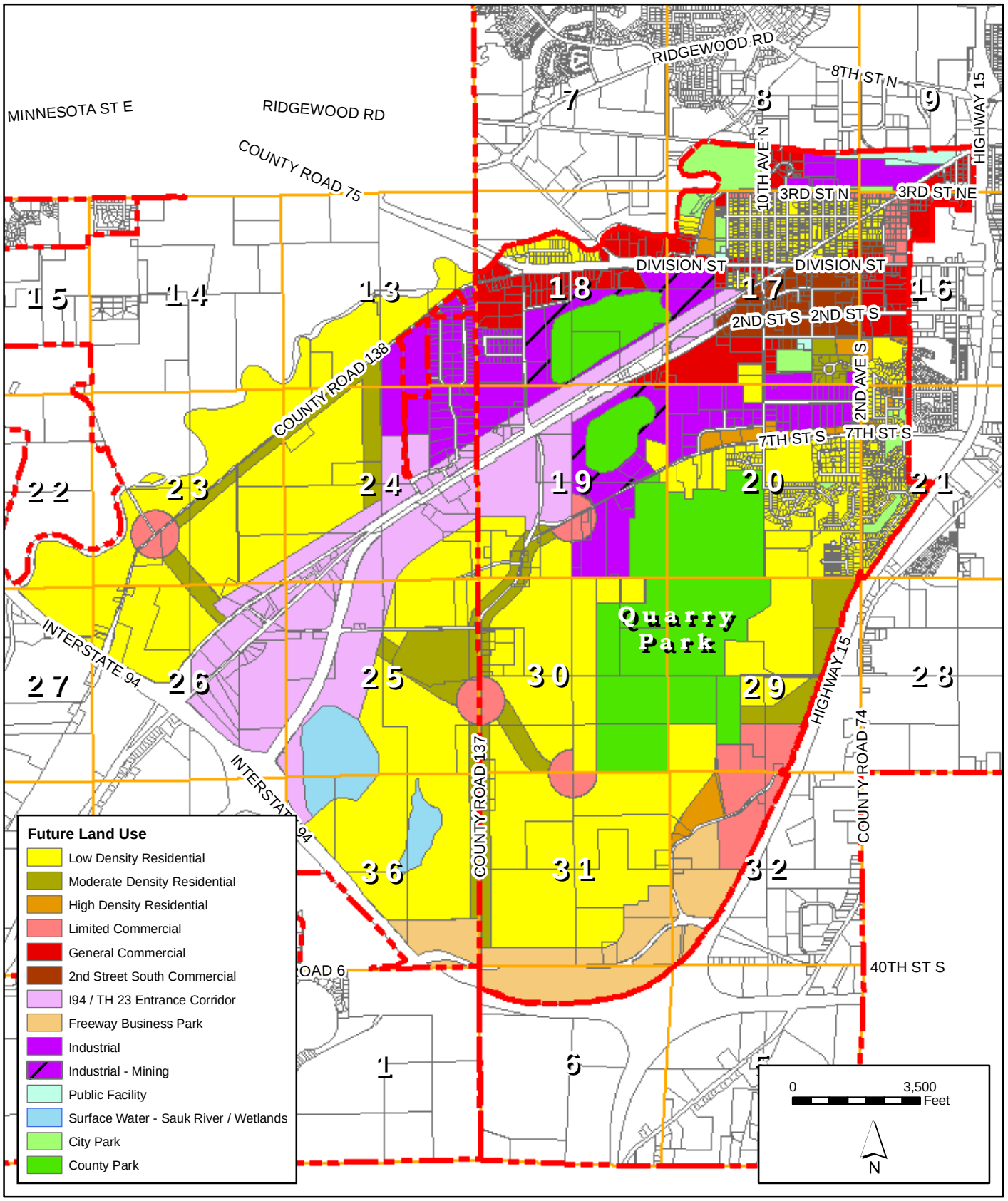
4.2 Future Land Use

Since the 1970's the population of Waite Park has more than doubled from 2,824 in the year 1970 to 6,658 in the year 2000. This growth has been accompanied by changes in land use patterns and transportation needs.

The City of Waite Park is projecting an increase in population to 10,400 residents and increase households to 4,700 by the year 2020. Retail and commercial employment is also expected to increase. Much of the growth will be accommodated in the southern and western areas of the City. Figure 4.2 shows the future full build-out land use for the City of Waite Park. The amount of full build-out area classified by each land use type is shown in Table 3.

Table 3 - Future Land Use

	Land Uses	
Land Use Type Category	**Acreage**	**Distribution**
Low Density Residential	2085	27.6%
Moderate Density Residential	358	4.7%
High Density Residential	89	1.2%
Limited Commercial	170	2.3%
General Commercial	227	3.0%
2nd Street South Commercial	120	1.6%
I94 / TH 23 Entrance Corridor	508	6.7%
Freeway Business Park	231	3.1%
Industrial	449	6.0%
Industrial - Mining	67	0.9%
Public Facility	26	0.3%
Surface Water – Sauk River / Wetlands	4	0.1%
City Park	78	1.0%
County Park	2	0.0%
Undevelopable	3,130	41.5%
Total	7,544	100.0%



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Future Land Use

Transportation Plan

Waite Park, Minnesota

Figure

4.2

4.3 Relationship with Transportation

Integrating land use development and transportation recognizes the interdependence between the regional and local transportation network and adjoining land uses. The relationship between land use and transportation includes, but is not limited to, the following:

- The number of vehicle trips generated on any given parcel of land can vary tremendously depending on the type and density of land use.
- The anticipated growth within the community requires planning to determine how well the roadway network will serve the needs of residents, businesses, commuters, commercial transporters, and others traveling within the City.
- Transportation planning assists in determining what types of future land use planning guidelines should be established to help ensure that essential roadway elements, such as capacity and safety improvements, do not fall short of travel demands and that land use conflicts are minimized.

Growth within the City of Waite Park and within the region will continue to have an impact on the existing transportation system both in terms of increased traffic volumes and safety concerns.

4.4 Recommendations

The following initiatives are recommended to facilitate coordinated land use and transportation planning actions.

- The City of Waite Park should support land uses that reduce vehicular trip generation while enhancing opportunities for transit and non-motorized travel.
- The City of Waite Park should support regional efforts that promote higher densities and mixed land uses near major transit centers and corridors.
- The City of Waite Park should maintain and promote cost effective and orderly development and redevelopment patterns throughout the City.
- The City of Waite Park should promote orderly and concise development and future growth patterns shall correspond to existing collector streets where possible.

5.0 Roadway System

All public roadways in the City of Waite Park represent a roadway network. The intent of this section is to evaluate the roadway network within Waite Park with full City build-out traffic demands and identify issues and opportunities for improvements.

5.1 Functional Class

The purpose of this section is to describe the functional classification system and its application to the City of Waite Park.

Functional classification is a system by which streets and highways are grouped according to the character of traffic intended to serve. Basic to this process is the recognition that individual roadways do not function independently. Most travel involves movement along a network of different types of roads. The functional class of the roadway should be an important consideration in the development of local regulations for land development. The mobility of higher classified roadways should be protected by careful management of site development and access spacing. Transportation problems occur when roadway design and the management of access to the roadway are inconsistent with the functional and operating demands imposed by the surrounding land uses on the roadway.

Below, the four basic functional classification categories (principal arterials, minor arterials, collectors, and local roadways) are described. This transportation plan focuses on the needs of the cities minor arterials and collector roadways.

Principal Arterials

Principal arterials have the highest volume capacity and provide the highest level of service at the greatest speed for the longest uninterrupted distance. This type of roadway is intended to connect larger cities with one another and connect major business concentrations. The emphasis is on mobility rather than land access. The nature of land uses adjacent to principal arterials is typically of a higher intensity. Interstate 94, Trunk Highway 23 (2nd Street South), Trunk Highway 15 and CSAH 75 (Division Street) are classified as principal arterial roadways located within or in close proximity to the City.

Minor Arterials

Minor arterials connect to the principal arterial system, other minor arterials and collector streets. This type of roadway is intended to provide service for trips of moderate length at a somewhat lower level of mobility than principal arterials. Minor arterials are of regional importance because they relieve, expand, or complement the principal arterial system. The nature of land uses adjacent to minor arterials is typically of medium to high intensity. Examples of existing minor arterials in the City include: 3rd Street North, 10th Avenue (from TH 23 to 3rd Street North), 2nd Avenue (from 7th Street, CR 137 north to 3rd Street), County Road 135, 7th Street (east of 10th Avenue to TH 15), Waite Avenue (north of TH 23 to 3rd Street) and CSAH 6.

Collectors

Collector streets typically serve short trips and place moderate emphasis on both access and mobility. They provide access from neighborhoods to the arterial system. Examples of existing collectors in the City include: CR 137/7th Street South (west of 10th Avenue), 28th Avenue, 13th Avenue (north of CSAH 75 to 3rd Street), 6th Avenue (north of CSAH 75 to 3rd Street), 1st Street South (from 10th Avenue to 2nd Avenue), 10th Avenue

South (north of 7th Street to TH 23), 2nd Avenue South (south of 7th Street/CR 137) and Granite View Road.

Local/Neighborhood Roadways

Local/neighborhood roadways interconnect residential neighborhoods, commercial and industrial nodes and agricultural lands. Local roads typically serve short trips at low speeds and provide high levels of property access. This transportation plan does not address future local roadways.

5.2 Jurisdictional Classification

Roadways are also classified on the basis of which level of government owns and maintains the road. Three levels of government share jurisdiction over the existing transportation system within the study corridor; State, County, and City. Typically, a roadway's jurisdiction is determined by several factors, including the following:

- Length of road/length of trip;
- Connections to roadways of similar jurisdiction level;
- Functional classification;
- Average Daily Traffic (ADT);
- Purpose of trips being served;
- Special facilities served; and
- Design type of the roadway.

Roadways within Waite Park under MN/DOT's jurisdiction:

- Truck Highway 23
- Truck Highway 15
- Interstate 94

Roadways within Waite Park under Stearns County jurisdiction:

- County Road 137
- CSAH 75
- CSAH 81
- County Road 135
- CR 138
- CSAH 6

The City of Waite Park has jurisdiction over all public roads within the city limits. Cities and townships generally own roadways that solely serve local property access and transportation needs. Roadways, such as trunk highways, which serve regional, inter-county, or statewide transportation needs, are owned by the state. Stearns County owns the roads that serve intermediate

level functions and generally provide intra-county connections to locations within and adjacent to the County. As the City of Waite Park continues to develop and new roads are built, it is appropriate to examine the jurisdictional responsibility for roadways and to consider if jurisdictional transfers are appropriate. Typically, the majority of new roadway mileage constructed to serve new development will be placed under the jurisdiction of the City unless a new roadway is developed to provide efficient connections to other areas in the region (i.e. SW Beltway).

5.3 Existing Transportation System

There are four principal arterials in Waite Park: I-94, TH 15, TH 23 (2nd Street South), and CSAH 75 (Division Street). Each of these roadways is under jurisdiction of either the State of Minnesota or Stearns County.

I-94 creates the southern border of Waite Park, with two interchanges within the City at the junctions of TH 15 and TH 23. I-94 is a high-speed, four-lane controlled access freeway that connects major regional trade centers in western Minnesota and North Dakota to the Twin Cities Metropolitan area. As part of the interstate system, this facility carries the highest level of importance with respect to serving long through trips.

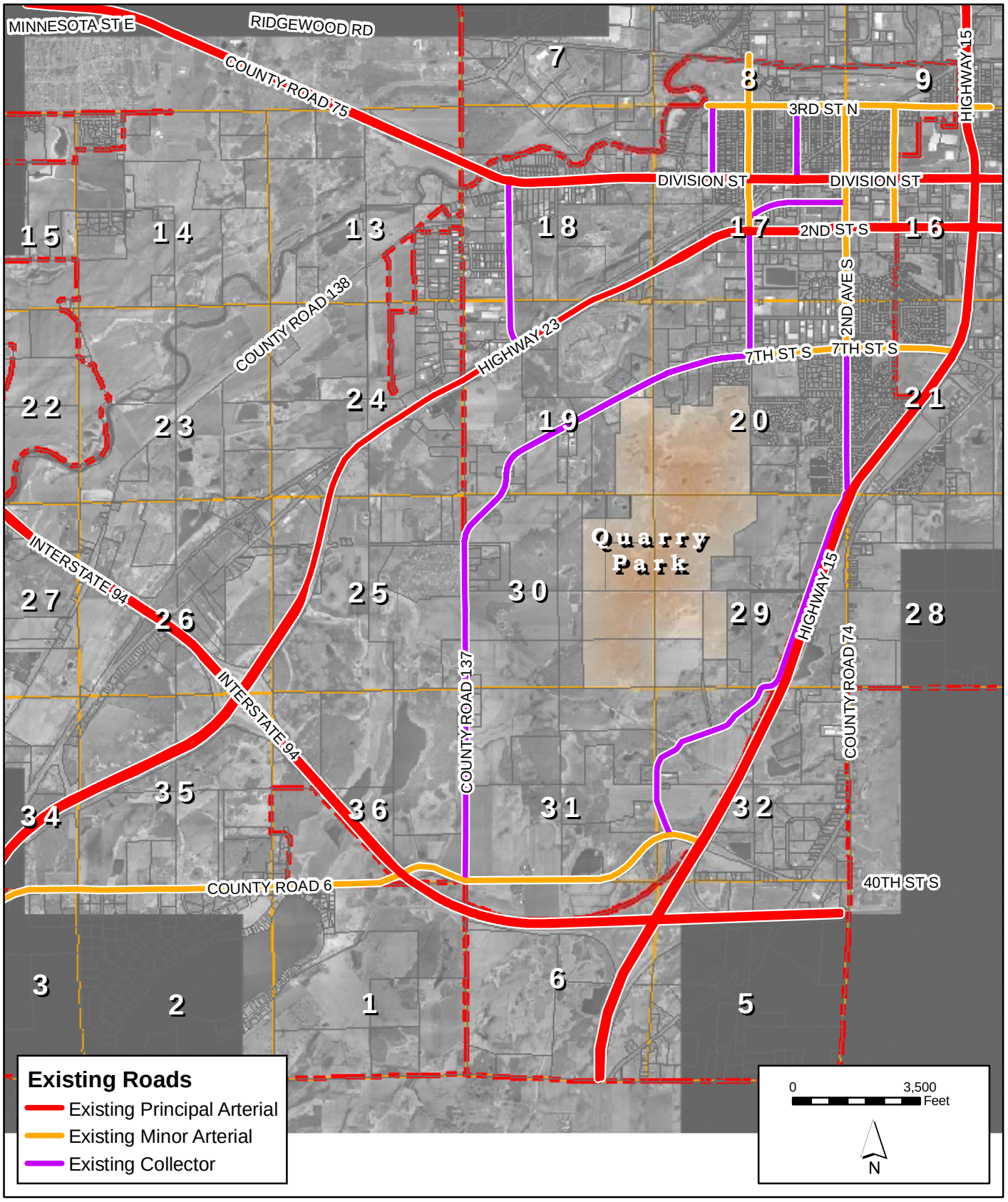
TH 23 and CSAH 75 are major east-west commuting parallel corridors serving regional and local traffic. These corridors experience much congestion in both the AM and PM peak hours as well as on weekends. The high volume, high-speed nature of both corridors results in safety concerns for all modes of traffic using or crossing both highways. Other important east-west corridors include County Road 137 and 3rd Street North.

TH 15 is a major north-south commuting route located on the eastern boundary of Waite Park. This corridor also experiences much congestion in the AM and PM peak hours as well as on weekends. Other important north-south roadways include 10th Avenue, 2nd Avenue, Waite Avenue, and 28th Avenue. Figure 5.1 shows the existing Waite Park transportation system.

Existing transportation issues were developed by the Stakeholder group, City Council, and public input meetings after through discussion. The following highlights these issues that are important to the mobility of the City.

Issues

- Promoting the integrity of CSAH 75 and TH 23 as mobility corridors in the urban area subject to access management guidelines.
- Minimizing the impact of Division Street (CSAH 75) and 2nd Street South (TH 23) as a fragmenting barrier within the community.
- Promoting the CSAH 75 and I-94/TH 23 entrances to Waite Park as aesthetically pleasing corridors.
- Future development driveway access points directly onto the future "Southwestern Beltway", County Road 137, TH 23, CSAH 138, CSAH 6, and Granite View Road should be curtailed by planning internal road systems which provide access to the lots or when direct access is required, joint driveways.



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Existing Roadway Network
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Waite Park, Minnesota

Figure
5.1

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5.4 Traffic Forecasts

Traffic forecasting is the process of using existing and future development patterns to estimate future roadway traffic volumes. The traffic forecasts for this study assumed a full build-out scenario for the City of Waite Park. The process involved the following steps:

- Buildable Land Inventory
- Trip Generation
- Trip Distribution
- Network Assignment

A buildable land inventory identified how, where, and what type of development can occur in a jurisdiction's urban growth area. The first step in the process is to inventory vacant land areas and apply any natural barrier constraints to the vacant land area. Constraints include natural resources like rock quarries, floodplains, grasslands, wetlands, etc. The constraints and issues within Waite Park were identified through input from the public, the stakeholders group, and in review of environmental, traffic, and land use data collected through field observations, GIS datasets, and aerial photographs. The study area issues and constraints include:

- Existing and Planned Residential, Commercial, and Industrial Developments – This issue focuses on the need to identify and preserve future transportation corridors as development pressures reach out to currently undeveloped land.

- The Sauk River and Associated 100-Year Floodplain – The Federal Emergency Management Administration (FEMA) has issued a flood hazard boundary map for the Sauk River; which flows adjacent to the City of Waite Park. This issue reflects the associated cost and difficulty of constructing new river/floodplain crossings.

- Parklands and Dedicated Open Space – There are nine parks located within the City of Waite Park along with a City-owned green space directly north of 3rd Street between 1st and 10th Avenues.

- Numerous Wetland Basins and Woodlands Scattered Throughout the Study Area – The City of Waite Park features irregular topography, wetlands of diverse types and vegetation consisting of predominantly woodlands and forests.

- Active and Closed Mining/Quarry Sites – The City of Waite Park has a long history of mining activities. As it relates to transportation planning, there are several elements to consider with active mines and once these sites are no longer in operation. These items include the size of the site, changes in ground elevations (steep slopes), and ground/surface water issues.

- Adequate Intersection Spacing Along TH 23 – This issue focuses on the need to provide adequate intersection spacing along TH 23, to protect safety and traffic operations as the number of vehicles using the highway increases.

Areas with severe constraints are deemed unbuildable while areas with zero or minimal constraints are considered buildable. Through a process called zoning, the unconstrained or buildable land areas are given a specific land use characteristic (i.e. single-family residential, commercial, industrial, etc.).

For estimation purposes, the Waite Park was divided into Traffic Analysis Zones (TAZs). There are 23 TAZs included in this study. Please refer to Figure 5.2 for a geographical location of these zones. The numbers representing the TAZs correspond to the St. Cloud APO TAZ designation number. The total land acreage available for the full build-out was decreased to account for local roadways and green space. It was assumed that 25 -percent of the buildable area would be for roadways while 10 -percent would be for green space. Tables 4 thru 7 show the difference between existing, 2030, and full build-out TAZ inputs.

Table 4- Household by TAZ in Waite Park Urban Area

TAZ	2000	2030 St. Cloud APO Model	Full Build-Out
51	26	33	0
52	2	2	0
53	401	521	213
54	0	0	0
55	56	56	0
60	318	323	245
61	318	318	45
62	72	72	0
73	15	15	0
74	6	6	0
75	75	76	18
76	17	17	0
77	3	3	0
78	5	5	0
89	28	267	429
90	354	489	195
91	996	1001	259
92	361	401	328
103	157	440	970
108	71	750	1,544
113	16	367	1,360
141	40	521	2,256
146	267	310	1,758
Totals	3,604	5,993	9,620

Table 5 - Office Square Footage in Waite Park Urban Area

	Office (1000 ft^2)		
TAZ	2000	2030 St. Cloud APO Model	Full Build-Out
51	0	0	-
52	10.15	10.15	-
53	20.32	20.32	-
54	30.43	30.43	-
55	10.2	10.2	-
60	4.07	4.07	-
61	42.23	42.23	130.68
62	55.96	55.96	-
73	7	7	692.60
74	0	0	714.38
75	0	46.95	749.23
76	2.4	2.4	1,729.33
77	18.38	18.38	30.49
78	18.89	18.89	-
89	10	10	2,901.10
90	0	0	300.56
91	51.87	51.87	853.78
92	270.08	270.08	17.42
103	0	0	-
108	0	0	-
113	0	0	6,063.55
141	0	0	5,932.87
146	0	0	4,173.05
Totals	552	599	24,289

Table 6- Industrial Square Footage in Waite Park Urban Area

	Industrial (1000 ft^2)		
TAZ	2000	2030 St. Cloud APO Model	Full Build-Out
51	0	0	-
52	0	0	-
53	0	0	-
54	41.74	471.74	1,441.84
55	0	111.83	222.16
60	112.55	112.55	-
61	0	0	-
62	0	0	-
73	244.17	1363.51	3,698.24
74	20.39	20.39	962.68
75	2.12	2.12	731.81
76	19.07	19.07	-
77	0	0	-
78	0	0	-
89	50.16	513.16	2,260.76
90	254.86	540.91	1,938.42
91	288.35	345.36	2,090.88
92	0	0	17.42
103	0	0	-
108	0	0	-
113	0	0	-
141	27.2	230.18	1,254.53
146	0	0	-
Totals	1,061	3,731	14,619

Table 7- Retail Square Footage in Waite Park Urban Area

	Retail (1000 ft^2)		
TAZ	2000	2030 St. Cloud APO Model	Full Build-Out
51	0	0	-
52	65.22	130.2	156.82
53	37.16	70.6	274.43
54	0.5	147.83	570.64
55	105.13	125.77	496.58
60	79.82	90.83	278.78
61	114.39	142.18	897.34
62	920.06	1151.73	1,485.40
73	30.18	164.27	13.07
74	283.98	308.06	174.24
75	54.36	152.38	200.38
76	234.58	514.95	39.20
77	335.1	456.08	906.05
78	448.63	450.37	17.42
89	0	288.96	849.42
90	162.18	561.17	1,629.14
91	296.47	413.72	217.80
92	293.93	293.93	500.94
103	0	0	-
108	0	47.51	1,032.37
113	0	346.35	1,285.02
141	6.67	354.02	557.57
146	0	181.23	405.11
Totals	3,468	6,392	11,988

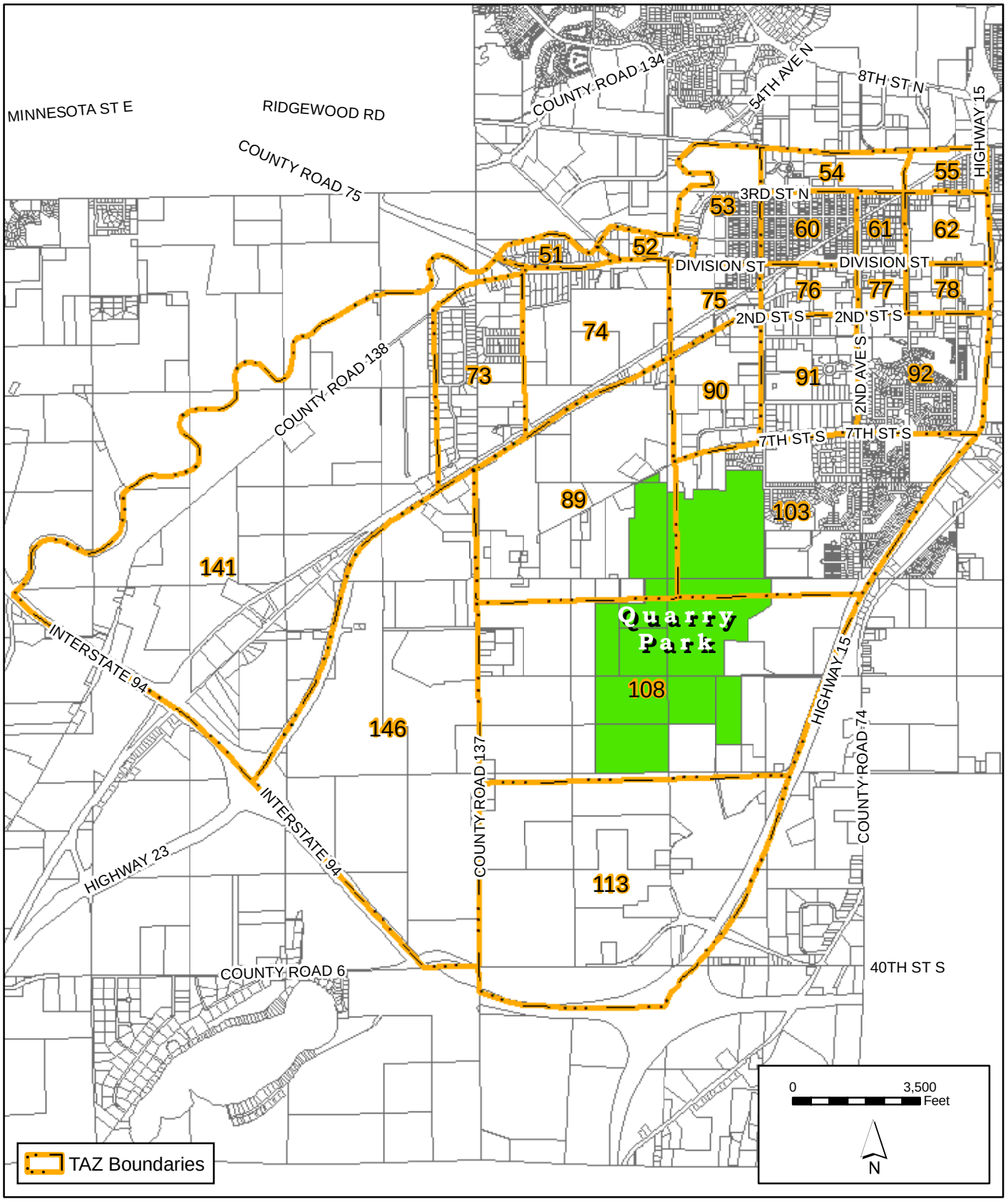
Trip generation is the process of applying static equations based upon specific TAZ land use characteristic (i.e. number of households, building area, etc.). Trip generation was conducted using rates from the most recent ITE Trip Generation Manual and rates from the St. Cloud APO regional travel model. Vehicle trips were generated by applying the trip generation rates to the reduced building area. Table 8 below highlights the trip generation rates.

Table 8 - Trip Generation Rates

Land Use Category	Trip Rate	Unit	ITE Code Description
Single-Family	9.57	per dwelling unit	210-Single Family Detached
Multi-Family	6.72	Per dwelling unit	220-Appartment
Office	195.11	Acres	750-Office Park
Industrial	51.80	Acres	110-General Light Industrial
Low Industrial	6.75	Acres	120-General Heavy Industrial
Low Retail	0.0475	Square foot building space	St. Cloud APO Model Rate
Medium Retail	0.0650	Square foot building space	St. Cloud APO Model Rate

Trip distribution allocates the trips to the respective origin or destination locations. The trips were assigned onto the network based upon existing traffic distribution patterns. Currently, 65 -percent of trips heading northeast towards the developed area of Waite Park and St Cloud, 20 -percent route to the south/east via I-94, and 15 -percent were travel to the north/west along I-94 and local roads.

Finally, network assignment is the process of distributing these trips onto the future roadway network (Figure 5.4) and the end result will be estimated link ADTs. Each TAZ's generated traffic was first distributed onto the transportation network individually. Once all of the TAZ's were assigned individual, the traffic volumes were combined with overlapping network volumes distributed from other TAZ's. These new values become the full build-out traffic projections for the City of Waite Park. Since the traffic volumes include 100 -percent built areas, these traffic projections will be significantly higher than previous forecast traffic projections. The results of the traffic forecasting analysis are shown in Figure 5.3.



Map Document: (C:\Projects\WaitePark\060400\ReportFigs\Waite Park - TAZ Locations.mxd) 9/1/2006 -- 11:50:42 AM - dt

SEH
1200 25TH AVE SOUTH
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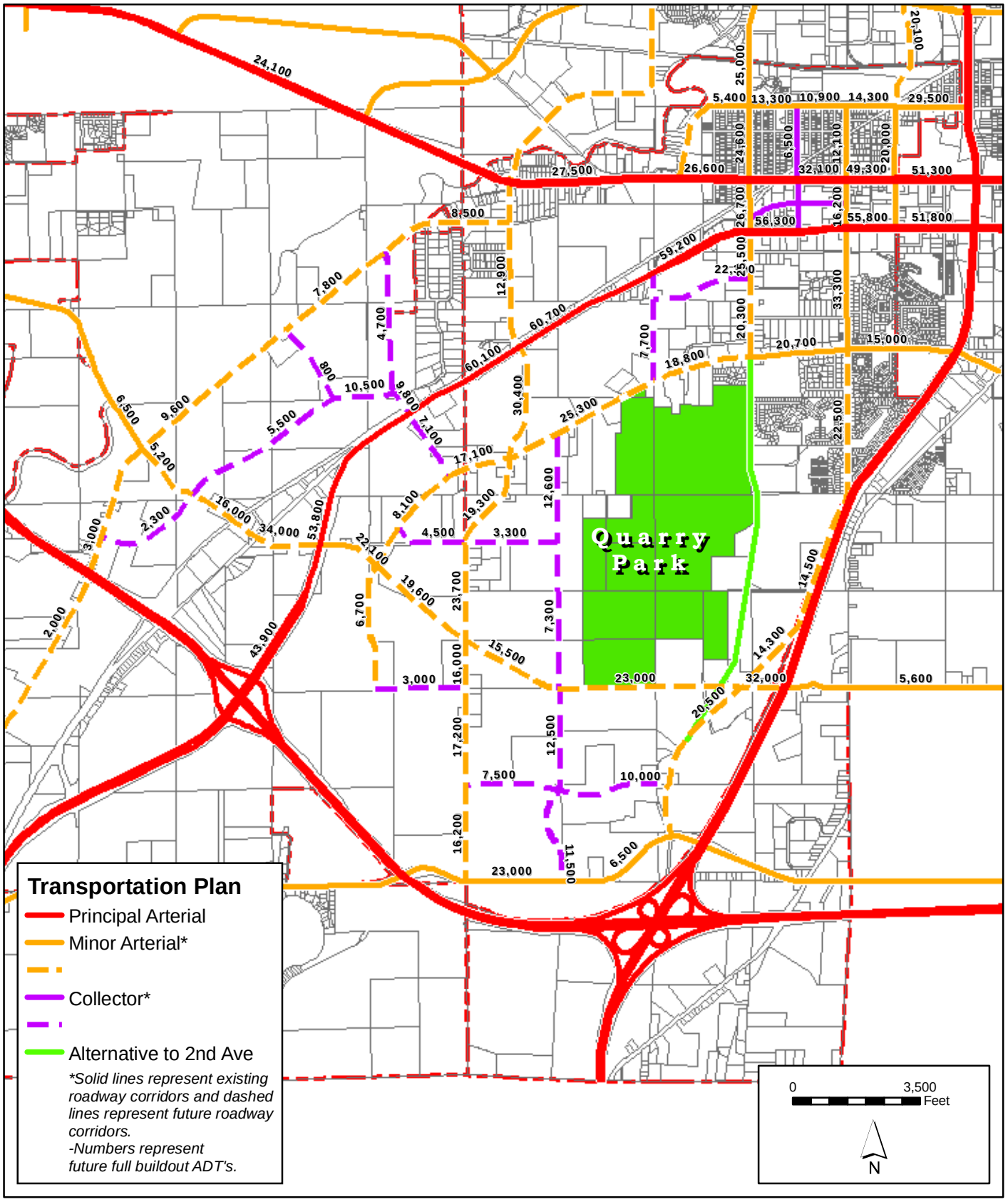
FILE NO.
AWAITE0604.00

DATE:
08/29/06

TAZ Boundaries

Transportation Plan
Waite Park, Minnesota

Figure
5.2



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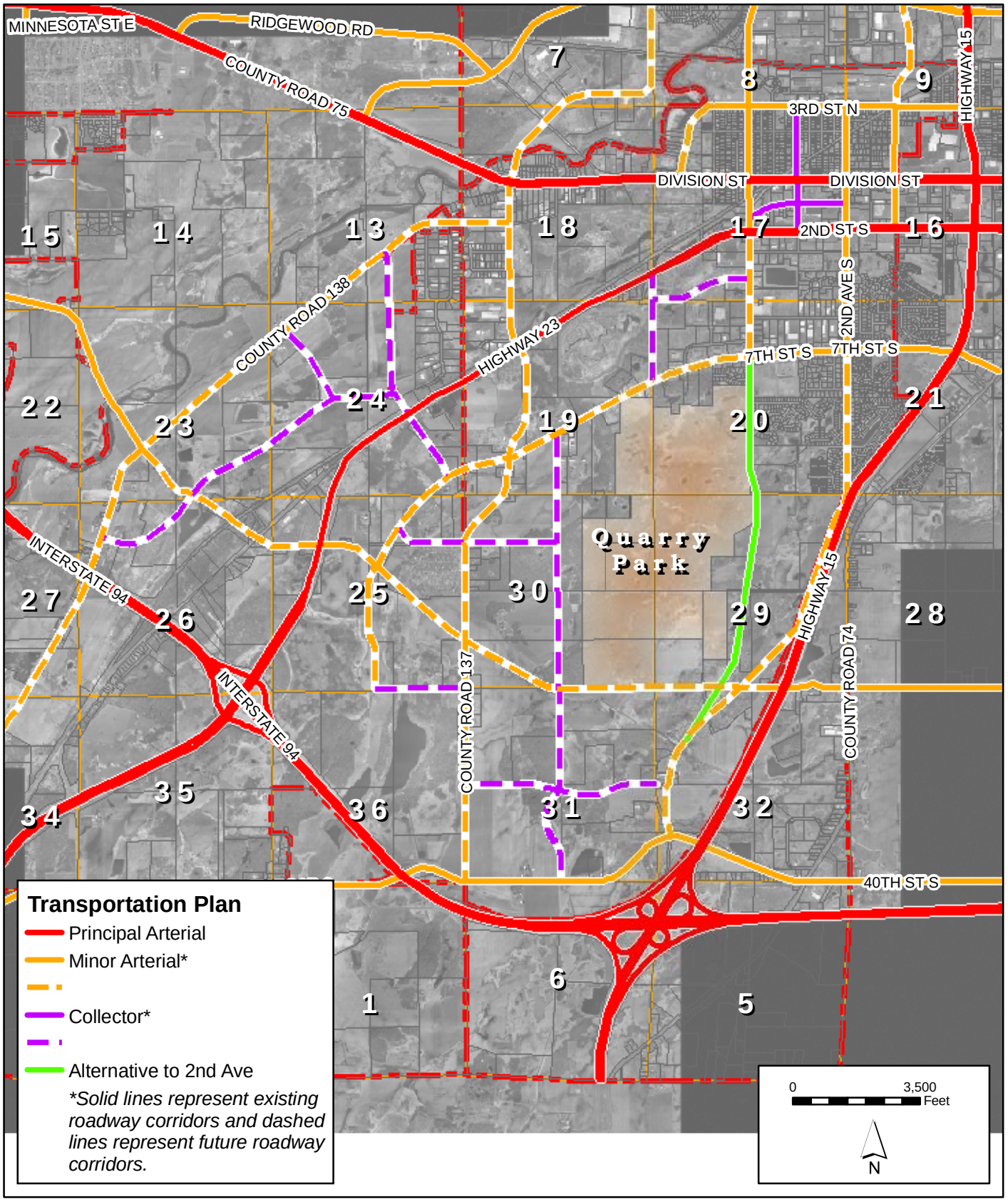
Full Build-Out Traffic Forecasts

Transportation Plan

Waite Park, Minnesota

Figure

5.3



Map Document: (C:\Projects\WaitePark\060400\ReportFigs\Waite Park - Future Network.mxd) 9/1/2006 -- 11:48:56 AM - dt

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AWAITE0604.00

DATE:
08/29/06

Future Roadway Network

Transportation Plan

Waite Park, Minnesota

Figure

5.4

5.5 Existing System Deficiencies

The results from the traffic forecasting exercise were used to determine any capacity deficiencies that would exist in a full build-out scenario. This information is used to either plan additional capacity improvements or to manage facilities more effectively through access management, right-of-way preservation, land use and development controls.

Capacity deficiencies are determined by the future volume to capacity ratio (v/c). Future volumes were calculated during the traffic forecasting exercise and the Table 9 shows typical roadway capacities by characteristic.

Table 9 Typical Roadway Capacities

Roadway Design	Capacity (Average Daily Traffic- ADT)
2-lane urban roadway	≤10,000
2-lane rural roadway	≤15,000
3-lane roadway	≤20,000
4-lane undivided roadway	15,000-20,000
4-lane divided roadway	20,000-40,000
6-lane divided roadway	40,000-60,000

According to the St. Cloud APO Transportation Plan roadways within Waite Park that are already experiencing capacity deficiencies include segments of TH 23, segments of CSAH 75, segments of TH 15 and 10th Avenue North between CSAH 75 and 3rd Street North.

Roadways expected to experience capacity deficiencies in the full build-out include larger segments of TH 23, CSAH 75, and TH 15. 10th Avenue North and 2nd Avenue between CSAH 75 and CR 137 are also included.

Trunk Highway 23, CSAH 75, and TH 15 – Portions of these roadways already operate at or near capacity causing periods of congestion and delay. These conditions will continue to worsen without significant improvements to the roadway. At the time of this report there was an on-going transportation study of these three roadways within the region to determine future needs.

10th Avenue North – The segment of 10th Avenue North between 3rd Street and TH 23 is expected to approach capacity over time. The City is currently

using their City-wide traffic model to determine a typical section that will be required of this roadway.

2nd Avenue – This roadway is expected to exceed capacity in the future. A connection to TH 15 at 33rd Street South will only expedite the time line.

5.6 Future Roadway Network Issues

There are many unique issues to the roadway system in Waite Park. Most of these issues are regional in nature and involve state and county roads. The City must work in cooperation with Mn/DOT and Stearns County to develop plans for the future.

There were five main issues that were identified during this study process which warrant further discussions:

1. TH 23, CSAH 75, and TH 15
2. Future location of the Southwest Beltway
3. Future I-94 Access
4. 10th Avenue/2nd Avenue north-south minor arterial
5. Sauk River Bridge Crossing

5.6.1 TH 23, CSAH 75, and TH 15

As discussed earlier, these 3 roadways are major commuting routes both within the City and regionally. Also, there is an ongoing corridor study along these 3 routes. The study is looking at issues such as how they relate to each other, access issues, etc. Specific recommendations and conclusions regarding these roadways are not appropriate at this time due to the ongoing corridor studies.

5.6.2 Future Location of the Southwest Beltway

Shortly after the completion of this plan the St. Cloud APO will be taking on a corridor study to determine the best location for the Southwest Beltway. This roadway will be an arterial roadway with regional significance as it will provide connectivity around the St. Cloud metropolitan area. This study was completed without any preconceived notions on the Beltway location. The future transportation network provide north-south arterials throughout the City, which are needed for movement around the City regardless of the Beltway location. These arterials also provide an opportunity for the Beltway to come through the City at these locations. It is recommended that this transportation plan be updated when the outcome of that study is complete. Depending where the Beltway comes through the City it may change some roadway connection points in this plan.

5.6.3 Future I-94 Access

The issue about a future access to I-94 at or around County Road 6 was brought up at public meetings and at the stakeholder meeting. Mn/DOT was

contacted to determine the possibility of this happening. The outcome of these discussions was the determination to leave the access out of this transportation plan, with the expectation that it will not happen in the life of this plan. It is recommended that this issue be revisited when the plan is updated.

5.6.4 10th Avenue/2nd Avenue north-south Minor Arterial

It is necessary for the City to provide a north-south arterial between Quarry Park and TH 15. The St. Cloud APO Transportation Plan originally showed 10th Avenue continuing south of CR 137 along the eastern edge of Quarry Park as a regional north-south arterial. At this time, due to cost constraints, the City would prefer to utilize an existing roadway, 2nd Avenue, to fill this arterial need.

The St. Cloud APO and the City of Waite Park have come to an agreement that a corridor study will be done in the future, when deemed necessary, to determine the preferred route which will take into consideration both regional and local needs. The St. Cloud APO has amended their Transportation Plan to reflect this agreement. The City of Waite Park future roadway network also shows both options, until a corridor study can be complete.

5.6.5 Sauk River Bridge Crossing

There have been discussions about a Sauk River crossing within the City of Waite Park. There are at least two viable locations where this could occur; 28th Avenue or 3rd Street North. This has been recognized by both the St. Cloud APO and the City of Waite Park as an issue that needs to be further studied. A study will be completed by the St. Cloud APO starting sometime in 2007. Again, specific recommendations regarding the bridge location will not be made at this time and should be determined in the future study.

5.7 Recommendations

The following recommendations provide a right-of way footprint recommendation for each future minor arterial and collector roadway within the City. Table 10 provides the City with a very valuable and powerful planning tool. More details about design guidelines can be found in Chapter 7.0. It should be noted that while capacity analysis identifies potential problem areas, it is recommended that additional traffic information be reviewed to confirm operational problems as specific improvements or operational changes are being considered for implementation.

Table 10 - Recommendations

Roadway	Classification	Existing Geometrics	Recommended Geometrics	Recommended ROW
3rd Street North between 10th Avenue and TH 15	Minor Arterial	4-lane divided	4-lane divided	120-150 feet
3rd Street North west of 10th Avenue	Minor Arterial	2-lane	4-lane divided	120-150 feet
CR 137	Minor Arterial	2-lane	4-lane divided	120-150 feet
33rd Street South	Minor Arterial	n/a	4-lane divided	120-150 feet
County Road 6	Minor Arterial	2-lane	4-lane divided	120-150 feet
County Road 138	Minor Arterial	2-lane	2-lane	80-100 feet
28th Avenue between TH 23 and CSAH 75	Minor Arterial	2-lane	4-lane undivided	100-120 feet
28th Avenue between TH 23 and CR 137	Minor Arterial	n/a	4-lane divided	100-120 feet
28th Avenue between CR 137 and 40th Street South	Minor Arterial	2-lane	4-lane undivided	100-120 feet
10th Avenue between 3rd Street and CR 137	Minor Arterial	4-lane undivided/2-lane	4-lane divided	120-150 feet
2nd Avenue between 3rd Street and TH 23	Minor Arterial	2-lane/4-lane	4-lane undivided or 3-lane	100-120 feet
2nd Avenue between TH 23 and CR 6	Minor Arterial	2-lane/4-lane	4-lane divided	120-150 feet
Waite Avenue between Veterans Drive and TH 23	Minor Arterial	4-lane undivided	4-lane divided	120-150 feet
1st Street South between 10th Avenue and 2nd Avenue	Collector	2-lane	2-lane	80 feet
4th Street South west of 10th Avenue	Collector	n/a	3-lane or 4-lane undivided	80-100 feet
East-West collector east of CR 138	Collector	n/a	3-lane or 4-lane undivided	80-100 feet
Bel Claire Drive	Collector	2-lane	2-lane	80 feet
East-West collector west of CR 137	Collector	n/a	2-lane	80 feet

Roadway	Classification	Existing Geometrics	Recommended Geometrics	Recommended ROW
East-West collector between CR 138 and 2nd Avenue	Collector	n/a	2-lane or 3-lane	80 feet
44th Avenue South	Collector	n/a	2-lane	80 feet
North-South collector between CR 138 and CR 137	Collector	n/a	2-lane or 3-lane	80 feet
North-South collector between CR 137 and CR 6	Collector	n/a	3-lane or 4-lane undivided	80-100 feet
North-South collector between TH 23 and CR 137	Collector	n/a	2-lane or 3-lane	80 feet
6th Avenue	Collector	2-lane	2-lane or 3-lane	80 feet

6.0 Pedestrian and Bike Trails

In recent years, increased attention has been given to non-motorized travel not only as a means of recreation, but also as a means of practical transportation. Although the trips have many similarities, people biking or walking for recreation often value different facility characteristics than those biking or walking to an employment or shopping destination. Two basic needs for improving non-motorized facilities for all purposes are:

- The need for continuous facilities that connect important origin and destination points. This includes removing physical barriers and ensuring system continuity is maintained across political boundaries
- The need to provide facilities with increased safety for the user.

6.1 Facility Types

Non-motorized facilities include sidewalks, trails, bike lanes, and shared roadway facilities.

Sidewalks

Sidewalks are typically located parallel and adjacent to roadways and are within public right-of-way. They are primarily concrete and typically range from 3-6 feet wide. Sidewalks cater mainly to pedestrian traffic but are also used by bicyclists when other bike facilities are not available.

Trails

Trails provide an off-street alternative to pedestrians and bicyclists. These routes may or may not be adjacent to existing roadways. These are usually shared facilities ranging between 8-12 feet wide. Material surface type includes crushed rock, wood chips, and bituminous pavement.

Shared roadways facilities

Shared roadway facilities are roadways that pedestrians and bicyclists can legally use for transportation. These facilities include most public roadways except the Interstate System and other freeway type facilities.

Bicycle lanes

Bicycle lanes are a portion of the roadway or shoulder that is designated for exclusive or preferential use by bicycles. These lanes are designated through striping or pavement markings and are typically 3-5 feet wide.

6.2 Opportunities

As mentioned in the Park and Trails/Recreation Section of Waite Park's Comprehensive Plan, the City has initiated measures to procure substantial park, trail and recreational facilities. A city's trail system should connect areas where there is important activity concentration within the city and region. The provision of exclusive facilities for both pedestrians and bicycles has many safety and operational benefits. Incorporating bikeways and walkways into the design of new developments is important due to the difficulty associated with constructing trails after development has occurred.

The recommendations from this roadway plan, assume that a trail or sidewalk will be added to the design of arterials and collectors, thus connecting the trail system within the city.

On a regional level there are two initiatives that the city is currently focusing on. The proposed regional trails include:

- The Glacial Lakes State Trail expansion from Richmond to St. Cloud
- The Lake Wobegon Trail expansion to St. Cloud.

7.0 Design Guide

Most cities typically undergo considerable discussions relative to roadway widths in conjunction with development proposals or reconstruction plans. The design criteria presented in this section should be used as a general guidance for the development of the roadway system in the City of Waite Park. Each segment of roadway within the City should be reviewed in greater detail at the time of design and/or construction in order to provide the necessary design elements to accommodate the specific amount and type of traffic projected. The following pages provide design recommendations and typical roadway guidelines for a network classification system including minor arterials and collectors.

7.1 Minor Arterial Roadways

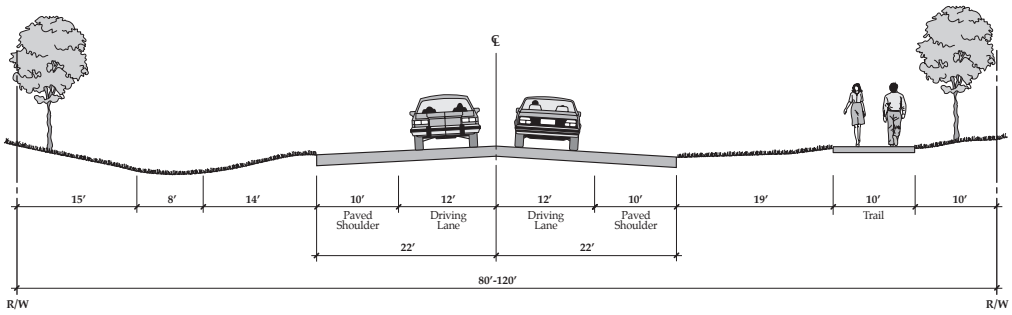
Minor arterial roadways connect important locations within a region. They connect the City of Waite Park with other cities (St. Joseph, St. Cloud) and with other important locations within Stearns County and the region. They also provide supplementary connections to business concentrations and other important points outside of the county or region. Minor arterials emphasize mobility rather than providing access (see Figure 7.1).

Typical Posted Speed: 30-45 mph in urban/urbanizing areas
45-55 mph in rural areas

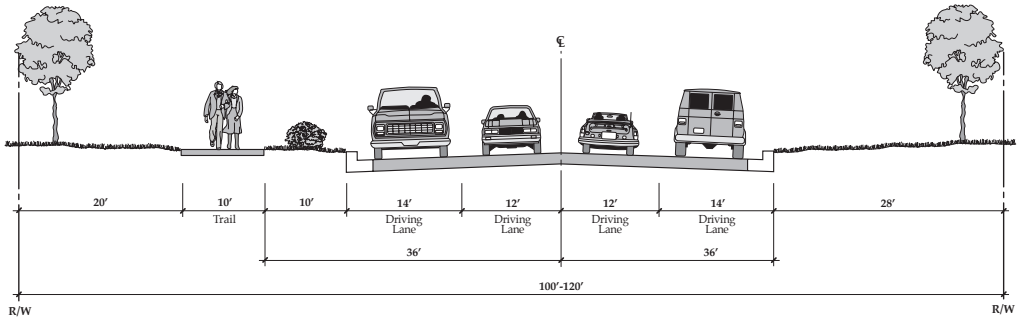
Number of Travel Lanes: 2-4 lanes; depending of projected travel demand

Right-of-Way Requirements: 80-foot to 150-foot wide corridor to accommodate up to a divided four-lane roadway with consideration for turn lanes and adjacent sidewalk/trail on both sides of the road.

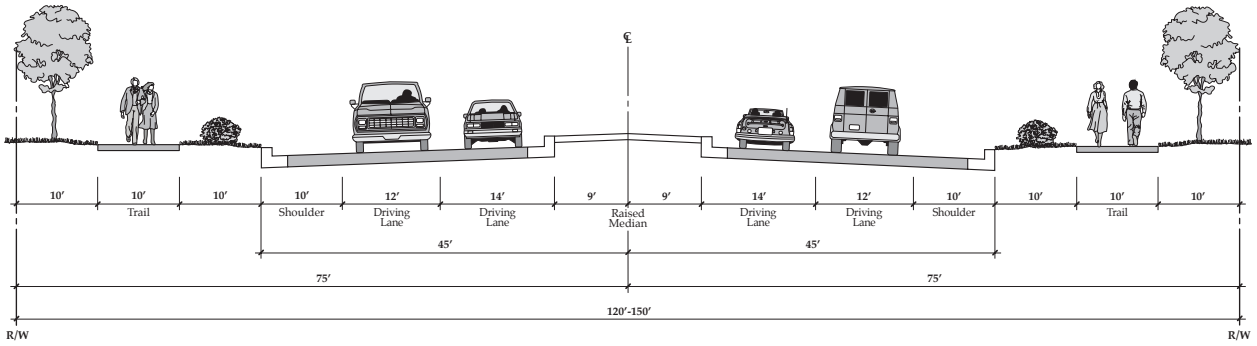
Estimated Construction Cost per Mile of Roadway: Construction costs vary greatly based on width of roadway, design specifications, adjacent trail(s), utility improvements/relocations, underlying soils, etc. The costs of a regional arterial could range from approximately $750,000 to over $1.5 million a mile.



Minor Arterial
(Two-Lane Rural)



Minor Arterial
(Four-Lane Undivided Urban)



Minor Arterial
(Four-Lane Urban Divided)

- Emphasize Mobility Rather Than Providing Access to Local Properties
- Design Speed: 45-55 Miles Per Hour
- Typical Posted Speed: 30-45 Miles Per Hour in Urban Areas, and 45-55 Miles Per Hour in Rural Areas
- Two-Lane or Four-Lane Facility. A Four-Lane Roadway May be Divided with a Raised Center Median
- Recommend Adjacent 10′ Bicycle/Pedestrian Trail
- 80′-150′ Right-of-Way Corridor (150′ Corridor Desired if Four-Lane Divided Facility is Ultimately Anticipated)
- The Estimated Construction Costs Per Mile of a Regional Arterial Roadway Could Range from Approximately $750,000 to Over $1.5 Million

Figure 7.1

Potential Minor Arterial Roadway Cross Sections

7.2 Collector Roadways

Collector roadways are designated to serve slightly shorter trips than minor arterial roadways. They collect and distribute traffic from developments to the arterial system. Collectors supplement the arterial system and emphasize equally mobility and land access (see Figure 7.2).

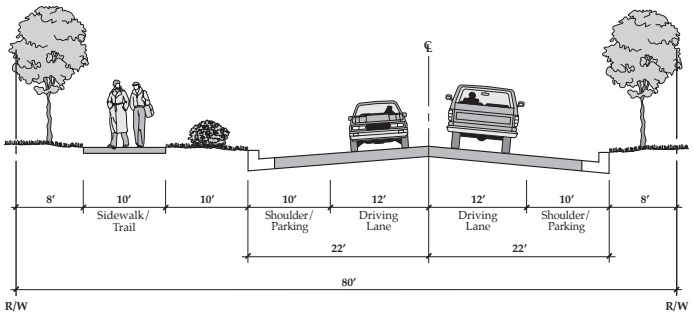
Typical Posted Speed: 30 mph in urban areas

35-55 in urbanizing and rural areas

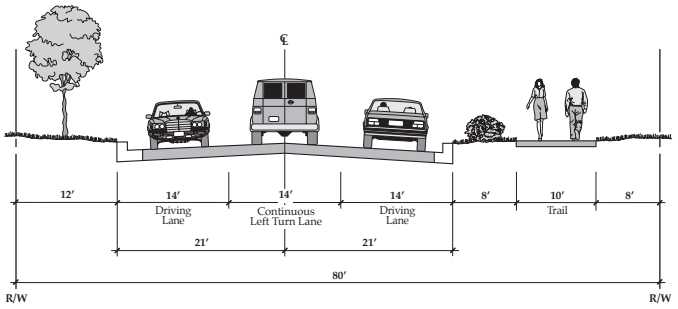
Number of Travel Lanes: 2-4 lanes; depending on projected travel demand

Right-of-Way Requirements: 80 to 100-feet to accommodate up to a four-lane undivided typical section with a trail.

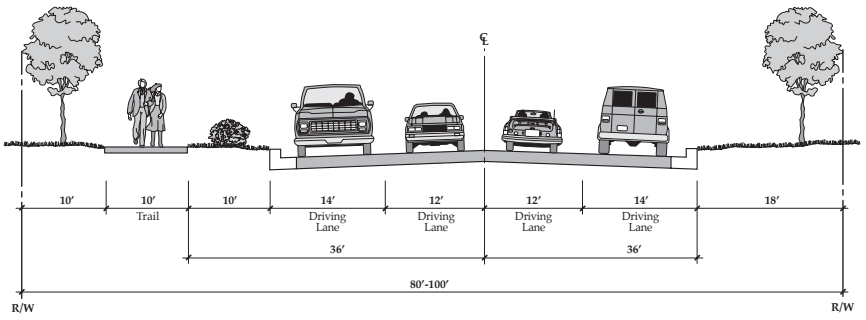
Estimated Construction Cost per Mile of Roadway: Construction costs vary greatly based on width of roadway, design specifications, adjacent trail(s), utility improvements/relocations, underlying soils, etc. The costs could range from approximately $450,000 to over $1.0 million a mile.



Collector
(Two-Lane Urban)



Collector
(Three-Lane)



Collector
(Four-Lane Undivided Urban)

- Emphasis is on Land Access, Not on Mobility
- Typical Posted Speed: 30 Miles Per Hour in Urban Areas and 35-55 Miles Per Hour in Rural Areas
- Recommend Adjacent 10′ Bicycle/Pedestrian Trail
- 80′-100′ Right-of-Way Corridor (to Accomodate Up to a Four-Lane, Undivided Urban Section with a Trail)
- The Estimated Construction Costs Per Mile of a Regional Collector Roadway Could Range from Approximately $450,000 to Over $1,000,000

Figure 7.2

Potential Collector Roadway Cross Sections

8.0 Plan Implementation

This section provides an overview of the procedures required to implement the Transportation Plan.

8.1 Transportation Plan Adoption

The Transportation Plan will be reviewed and ultimately adopted by the City of Waite Park City Council. It is recommended that this document be updated within the next 3 years to account for any changes resulting from ongoing or upcoming studies mentioned in Section 5.6. As growth and changes subside, updates should be completed every 5 years. This is a living document that can and should be periodically reviewed and updated as conditions change. Circulation of this document among residents and business community will bring awareness of opportunities and limitations incorporated into the plan so that they may make informed decisions.

8.2 Sources of Funding

Implementation of the enhancements or improvements to the Transportation System may qualify for a variety of potential funding sources. Overviews of these sources are provided below.

Municipal State-Aid

The State of Minnesota provides funding to support City roads and bridges in cities in which the population exceeds 5,000. The City of Waite Park qualifies for funding from this program and receives approximately $180,000 annually. State-aid funding may only be used on streets that are designated on the City's Municipal State Aid (MSA) System. The MSA system is comprised of 20 -percent of the local road mileage, and generally includes the arterial and collector streets within the system.

Federal-Aid

The City of Waite Park, as a member of the St. Cloud Area Planning Organization (APO), annually competes for Federal funds made available under the Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Approximately $1.8 million are made available each year for projects throughout the St. Cloud metropolitan area. The funds can only be used on the routes identified in the APO Financially Constrained Plan.

Special Assessments

Under Minnesota Statute 429, cities have the authority to assess property owners for certain local improvements based upon benefit received. The City of Waite Park uses this method of financing for constructing new streets in subdivisions, and reconstructing existing streets. The City may utilize this funding source on any street in the City.

Tax-Increment Financing

Throughout the years, the City of Waite Park has established a number of Tax-Increment Financing Districts within the City. Within these districts, the

City captures the value of the tax increment between the time the district was established and the present day tax value. This increment is used to pay for eligible infrastructure improvements within the Tax Increment District and within the Development District, which is generally the corporate City limits.

Local Property Taxes

Each year the City of Waite Park prepares a budget, and levies a local property tax. Because the state imposes tax levy limits on all Minnesota cities as a means of limiting property tax burdens on owners of all taxable property, City officials have to be very selective in determining which streets are incorporated into capital improvement plans. As a result, this method of finance is used mainly only for street maintenance.

General Obligation Bonds

The City of Waite Park regularly issues bonds to finance street reconstruction projects throughout the City. The bonds are paid through property tax payments by all property owners in the City. This method of financing is typically used in street reconstruction projects to supplement any special assessments levied on the project, since special assessments typically only cover approximately 25 -percent of the cost of the improvements.

Developer Contributions

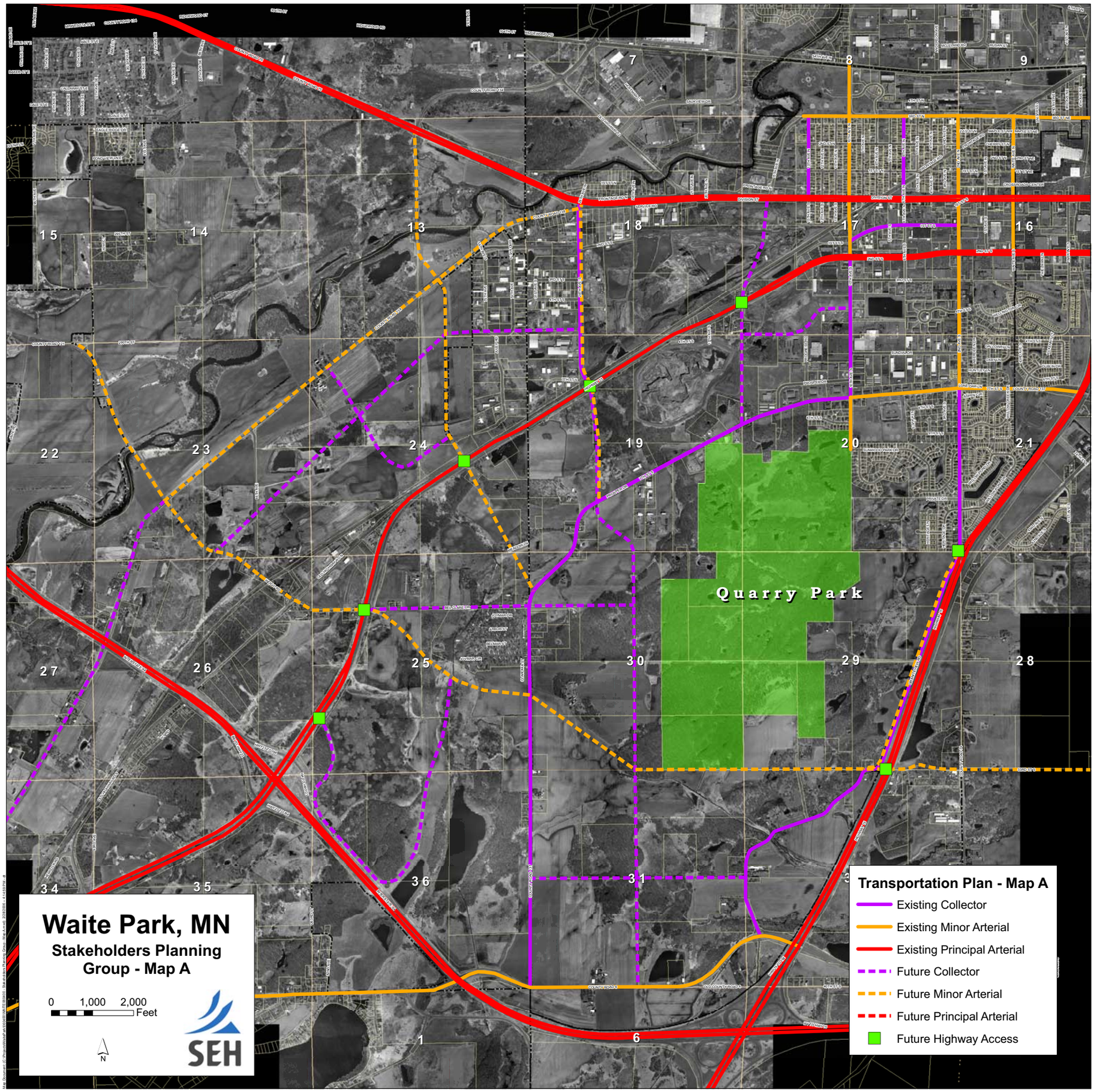
When new subdivisions are constructed, the City will typically enter into a Development Agreement with the Developer. The Development Agreement states that the developer will privately finance the street and other infrastructure improvements. This method of finance is only available for streets in newly constructed subdivisions.

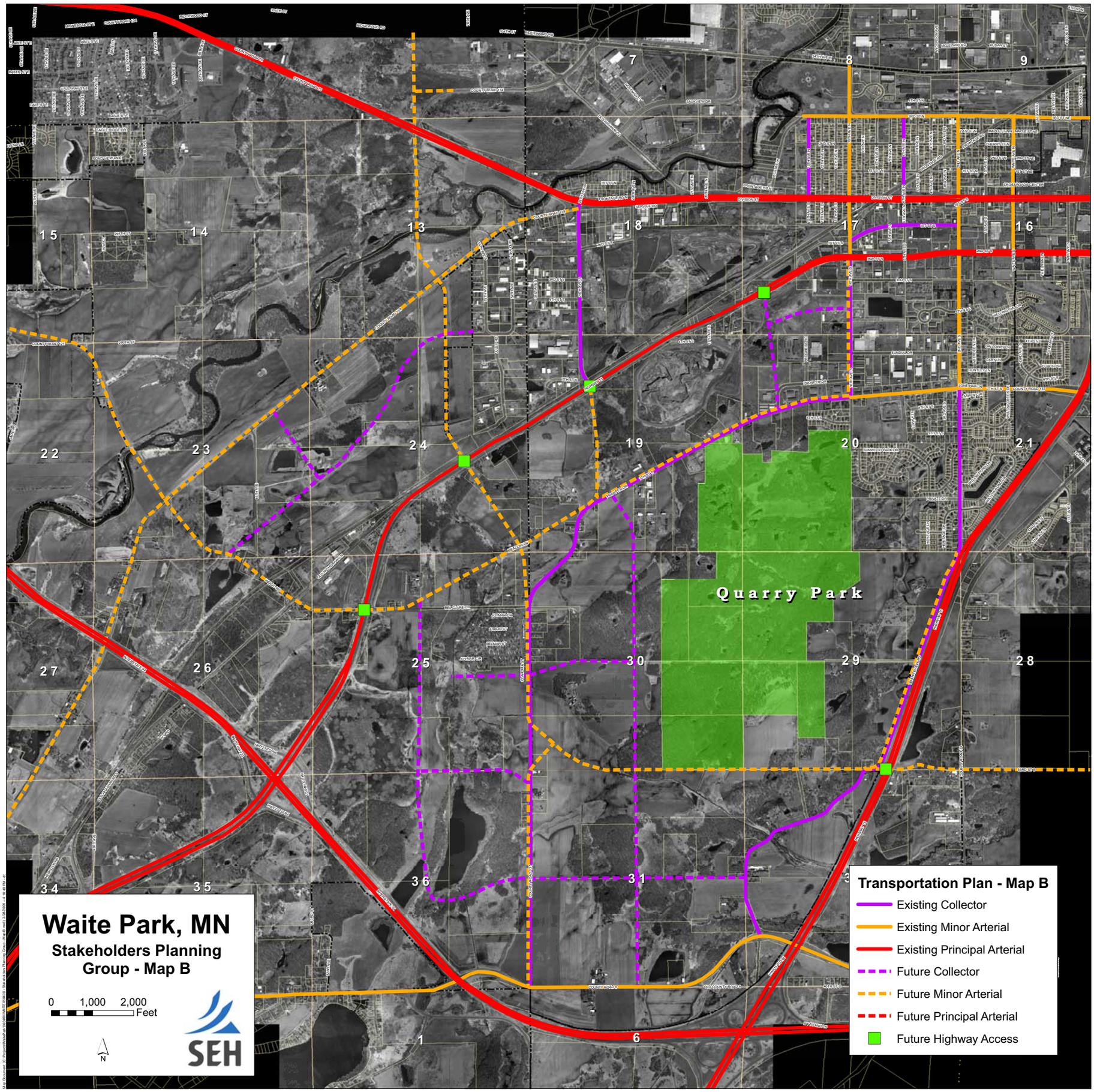
Local Sales Tax

Beginning in 2006 the City of Waite Park began collecting a portion of the St. Cloud area ½ cent sales tax. This tax revenue (approximately $1 million/year) can be used by the City for regional transportation projects, as well as other regional type projects within the City. Based on the regional requirement, the streets that are eligible for utilizing this method of financing are arterial and collectors streets. The City will be able to collect this tax until March, 2007. A referendum vote to extend the collection of this tax is scheduled for the 2006 general election.

Appendix A

Stakeholder Group Transportation Network Maps


Quarry Park
Transportation Plan - Map A
Existing Collector
Existing Minor Arterial
Existing Principal Arterial
Future Collector
Future Minor Arterial
Future Principal Arterial
Future Highway Access
Waite Park, MN
Stakeholders Planning Group - Map A
0 1,000 2,000 Feet
N
SEH


Waite Park, MN
Stakeholders Planning Group - Map B
0 1,000 2,000 Feet
N
SEH
Transportation Plan - Map B
Existing Collector
Existing Minor Arterial
Existing Principal Arterial
Future Collector
Future Minor Arterial
Future Principal Arterial
Future Highway Access
Quarry Park

Appendix B

Public Comments

PUBLIC OPEN HOUSE COMMENTS

Re:	Waite Park Transportation Plan	**Date of Meeting:**	March 1, 2006
Project Manager:	Kate Miner	**Time of Meeting:**	5:00 – 6:30 p.m.
SEH No.:	A-WAITE0604 14	**Location of Meeting:**	Waite Park City Hall

The following comments were received at the above referenced public open house:

I. Written Comment

Good Meeting + Good Maps. March 1.

It was good to hear that 33rd Street may be a major E-W Beltway. 28th Avenue would then be a good N-S connector to a future northern corridor. Another idea for a road running northeast to southwest:

- Build due south from where 134 + 75 meet
- Then follow the Sauk River over to 121
- Use that bridge to cross the river
- Continue to an interchange with both 23 + 137
- When the new St. Joe School is built, connect 121 with this new road. This would be about where 290th St. runs E-W

Hopefully this would make 'Field St.' unnecessary and finally push for the interchange of 75 and I-94 be made into a full interchange to accommodate traffic to and from the cities.

I would appreciate being a participant in future stakeholder meetings as well. It's important to out St Joe 'Action Group' to know what Waite Park is doing

Please call or write temporarily as my computer is on the fritz.

II. Written Comment

Does not agree with 10th Avenue South roadway extension

p:\uz\w\waite\060400\public involvement\received comments without addresses.doc

Jerilyn Swenson/seh
01/04/2007 11:51 AM

To Melissa Cook/seh@seh
cc
bcc
Subject File - AWAITE0604 14

----- Forwarded by Jerilyn Swenson/seh on 01/04/2007 11:50 AM -----

"Scott Mareck" <mareck@stcloudapo.org>
12/01/2006 01:32 PM

To "Jerilyn Swenson" <jswenson@sehinc.com>
cc <kminer@sehinc.com>
Subject Re: Waite Park Transportation Plan

Jerilyn:

Please refer back to a March 24, 2006 letter sent to Kate Minor outlining APO staff comments. We have nothing additional at this time.

Thanks for checking.

Scott M. Mareck, AICP
Transportation Planning Manager
St. Cloud Area Planning Organization
1040 County Road 4
St. Cloud, Minnesota 56303-0643
Phone: 320-252-7568
Fax: 320-252-6557
E-Mail: mareck@stcloudapo.org

----- Original Message -----
From: Jerilyn Swenson
To: mareck@stcloudapo.org
Cc: kminer@sehinc.com
Sent: Friday, December 01, 2006 1:06 PM
Subject: Waite Park Transportation Plan

Scott,

A draft copy of the Waite Park Transportation Plan was submitted to the St. Cloud APO in September. I'm checking to see if the St. Cloud APO has comments to incorporate into the final plan. If there are comments, you may submit them either to me or Kate.

Thanks and hope you have a nice weekend.
Jerilyn

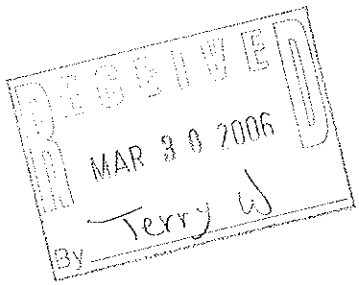
Jerilyn Swenson
Project Engineer
SEH
1200 25th Ave. S. | PO Box 1717
St. Cloud, MN 56302-1717
320.229.4352 (direct)

St. Cloud
Area Planning Organization

1040 County Road 4, St. Cloud, MN 56303-0643
(320) 252-7568 • (320) 252-6557 (FAX) • E-mail: admin@stcloudapo.org • www.stcloudapo.org

March 24, 2006

Ms. Kate Minor, PE
Short Elliot Hendrickson Consulting
1200 25th Avenue South
P.O. Box 1717
St. Cloud, Minnesota 56302-1717



Subject: City of Waite Park Transportation Plan

Ms. Minor:

As you requested, St. Cloud Area Planning Organization (APO) staff have reviewed the draft City of Waite Park Transportation Plan provided with your March 8, 2006 memorandum. We have reviewed this Plan, as it relates to the APO's recently adopted St. Cloud Metropolitan Area 2030 Transportation Plan, and several ongoing or scheduled Metro Area roadway corridor studies.

1. **Sauk River Crossing**
   We suggest that an arrow be illustrated between 28th Avenue and 3rd Street, along the Sauk River, to communicate the scheduled 2007 "Sauk River Crossing" Environmental Assessment (EA). This EA study will evaluate the transportation purpose and need for a new Sauk River crossing in this area, and will analyze many river crossing alignment alternatives, including: 28th Avenue, 3rd Street, Old Highway 52, and 15th Avenue.

2. **28th Avenue Extension**
   As you clarified in our March 16, 2006 telephone conversation, the extension of 28th Avenue, as depicted in the attached draft Waite Park Transportation Plan exhibit, is illustrated incorrectly. Historic concept drawings have illustrated this alignment extending directly south from the intersection of 28th Avenue and TH 23, connecting to approximately where Stearns CR 137 curves south. It is the APO's understanding that this more westerly alignment is also consistent with previous City of Waite Park right-of-way acquisition for this extension.

   Although shown in error, we believe that the more easterly alignment for 28th Avenue merits further consideration by the City. This easterly alignment avoids a significant wetland just north of Stearns CR 137, and also provides excellent north/south system continuity south to the planned 33rd Street new alignment. From

a transportation planning perspective, the ½ mile spacing of this easterly 28th Avenue alignment from Stearns CR 137 would also be ideal.

As noted previously, since federal funds are programmed for the 28th Avenue project (between TH 23 and Stearns CR 137) the Federal Highway Administration (FHWA) must approve the preferred alignment alternative ultimately selected for this project prior to federal funds being obligated for construction. Before a FHWA decision is made in this regard, an EA must be completed by the City that evaluates multiple alignment alternatives relative to their transportation performance, and their social, economic and environmental impacts.

3. **10th Avenue Extension**

As previously discussed with Waite Park officials, it is suggested that a proposed extension of 10th Avenue be illustrated along the east side of Quarry Park, extending to 33rd Street south (in addition to the proposed future minor arterial along 2nd Avenue/Granite View Road). An arrow should point between the two corridors to illustrate that a future federal EA will be needed to select the preferred alignment for a north/south minor arterial within this travel shed. This EA will need to evaluate transportation, social, economic and environmental aspects of the two corridors. (The APO Board will be acting on a proposed amendment to its 2030 Plan this spring that would illustrate the 10th Avenue/2nd Avenue corridors in this same fashion).

4. **15th Avenue Extension**

As we discussed in our March 16, 2006 telephone conversation, although beneficial from a transportation perspective, the proposed southerly extension of 15th Avenue between Stearns CSAH 75 and TH 23 is likely infeasible for the immediate future, due to an ongoing granite mining operation.

If desired, the City could perhaps depict this project as "illustrative" only, noting that construction may be 50 plus years in the future.

5. **Southwest Beltway**

As you are aware, a federal Environmental Impact Statement (EIS) will begin this summer to evaluate alignment alternatives for a new north/south minor arterial corridor extending from the future 33rd Street alignment, south of Quarry Park, to the Stearns CSAH 4/CR 133 intersection in the City of Sartell.

Considering that minor arterials, from a transportation planning perspective, are ideally spaced at ½ mile intervals in urban areas, and considering that the Southwest Beltway Corridor currently spans approximately 1 ¾ miles from 20th Avenue in the City of St. Joseph to 28th Avenue in the City of Waite Park without a

continuous north/south roadway; as many as three new minor arterials could potentially be justified for preservation and construction in this corridor.

Some of the new north/south minor arterial alternatives that will be explored in the upcoming Southwest Beltway EIS include: 28th Avenue in the City of Waite Park, Julip Road/Stearns CR 134 in the City of Waite Park and the City of St. Joseph and 20th Avenue in the City of St. Joseph. Given the uncertainty of what the Southwest Beltway Scoping process will recommend, it is suggested that the City Transportation Plan remain flexible to incorporating one, two, or all three corridors as minor arterials.

6. **Stearns CR 6/I-94 Interchange**
It may be desirable for the City to plan for the possibility of a future interchange along Interstate 94 at Stearns CR 6. Such a project could perhaps be collaborated on between the City of Waite Park, the City of Rockville, Stearns County. An "Interchange Justification Report" would need to be prepared by local jurisdictions, and approved by MnDOT and FHWA, for such a project to be constructed.

7. **Access Management**
As you are aware, an access management plan is currently under development for TH 23/2nd Street South. It is highly recommended that the City of Waite Park Transportation Plan place the implementation of this TH 23/2nd Street South Access Plan as a high priority. Access closures/consolidations should be implemented in cooperation with MnDOT as land development/redevelopment occurs.

In order to maximize the useful life of the overall collector/arterial system, the City is also strongly encouraged to adopt official access management policies as part of its Transportation Plan. These policies can be implemented through an independent access management ordinance, or incorporated into existing subdivision and land development ordinances.

For your information, attached you will find access management guidelines approved by the APO Board as part of the St. Cloud Metropolitan Area 2030 Transportation Plan. These guidelines were derived from "best practices" of MnDOT and local St. Cloud Area communities. Please feel free to utilize these guidelines as a reference when developing access management policies for the City of Waite Park.

Thank you for providing the APO with an opportunity comment on the City of Waite Park Transportation Plan. A sketch map is attached summarizing the comments we have noted. Please contact me with any questions you may have.

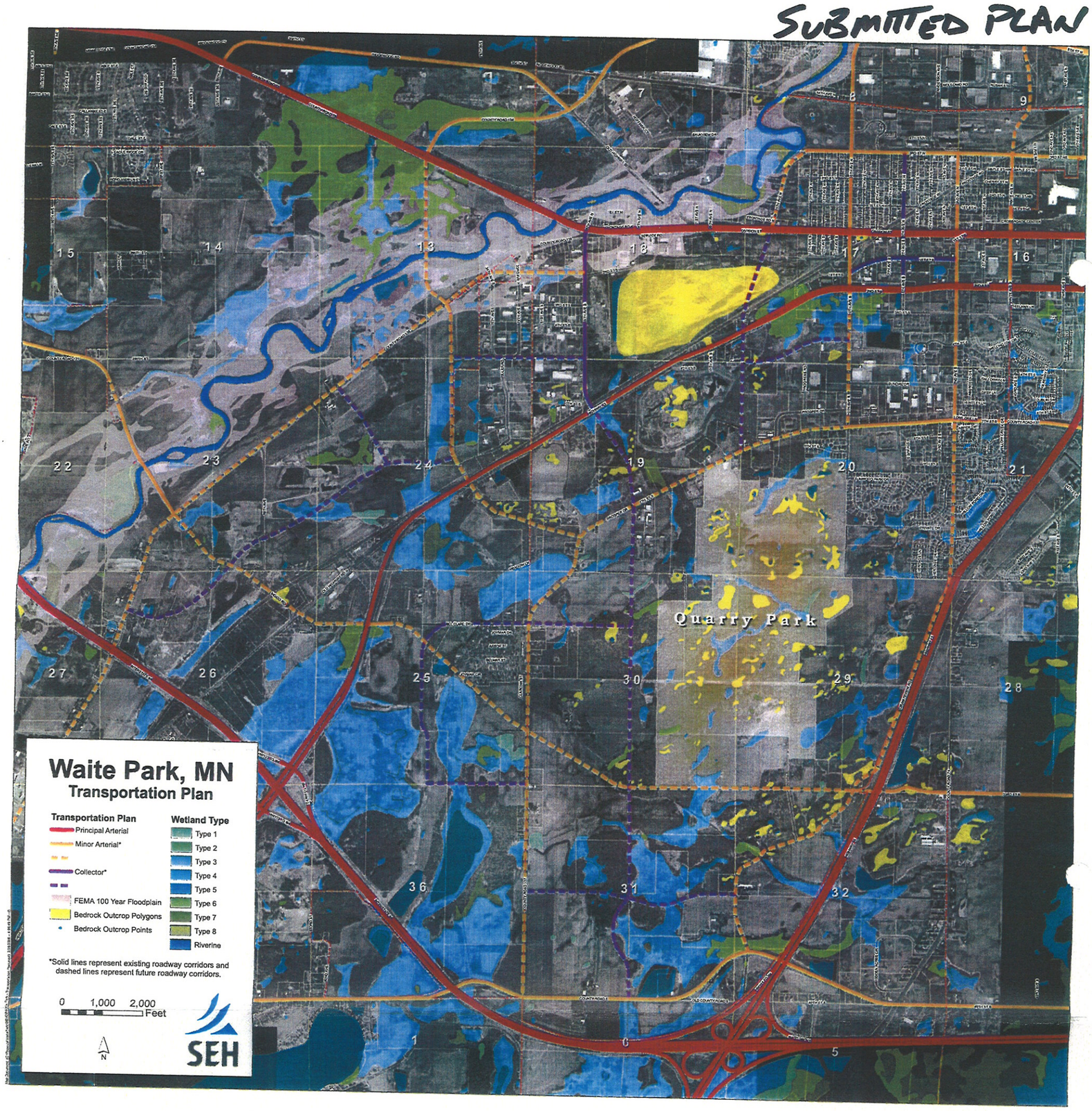
Sincerely,

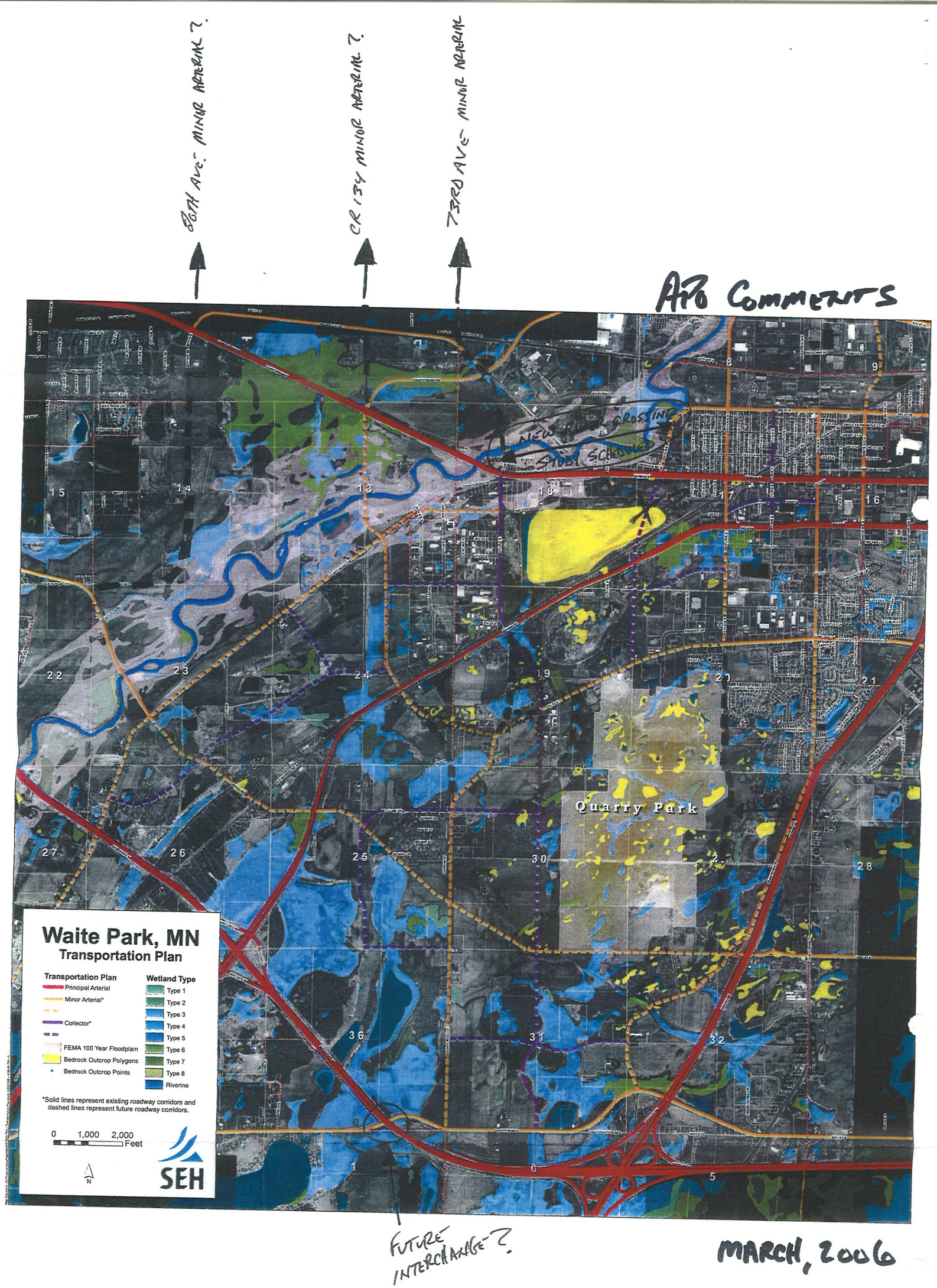
Scott Mareck, AICP
Transportation Planning Manager

Enclosures

Copy: Shaunna Johnson, City of Waite Park Administrator
Bill Schluenz, City of Waite Park Public Works
Terry Wotzka, SEH Consulting

SUBMITTED PLAN




80TH AVE. MINOR ARTERIAL ?
CR 134 MINOR ARTERIAL ?
73RD AVE. MINOR ARTERIAL ?
APO COMMENTS
NEW RR CROSSING
STUDY SCHOOLS
Quarry Park
Waite Park, MN
Transportation Plan
Transportation Plan
Principal Arterial
Minor Arterial*
Collector*
FEMA 100 Year Floodplain
Bedrock Outcrop Polygons
Bedrock Outcrop Points
Wetland Type
Type 1
Type 2
Type 3
Type 4
Type 5
Type 6
Type 7
Type 8
Riverine
*Solid lines represent existing roadway corridors and dashed lines represent future roadway corridors.
0 1,000 2,000 Feet
N
SEH
FUTURE INTERCHANGE ?
MARCH, 2006

APO Planning Area Access Management Guidelines

Exhibit 6B

	Urbanized				Urbanizing				Rural			
Typical Facility Characteristics	Principal Arterial		Minor Arterial	Collector	Principal Arterial		Minor Arterial	Collector	Principal Arterial		Minor Arterial	Collector
Example of Facility	Interstate / Freeway	Non-Freeways	4-Lane Divided, 4-Lane Undivided	4-Lane Undivided, 3-Lane, 2-Lane	Interstate / Freeway	Non-Freeways	4-Lane Divided, 4-Lane Undivided	4-Lane, 2-Lane	Interstate/ Freeway	Non-Freeway	4-Lane, 2-Lane	2- Lane
Facility Spacing (Miles)	I-94	T.H. 10, 15 & 23, CSAH 75	3rd St. N, 10th St So, Pinecone Rd, & Benton Dr	Lincoln Ave, 6th Ave No, Rolling Ridge Rd (SC), 18th St N (SR), & C.R. 119 (Sartell)	I-94	T.H.10, T.H. 15 & 23, CSAH 75	C.R. 1 (Benton), Golden Spike Rd, C.R. .137, C.R. 2 (St. Joseph)	65th Ave Sartell, C.R. 6 (Stearns), C.R. 121 (Stearns)	I-94	T.H. 10, 15 & 23, CSAH 75	C.R. 3 (Benton), C.R. 4 (Stearns), C.R. 8 (Sherburne)	C.R. 8 (Benton), C.R. 115 (Stearns), C.R. 3 (Sherburne)
Trip Lengths (Miles)	4 + Miles	1-4 Miles	1/3 - 1 Mile	1/4- 1/2 Mile	2-5 Miles	2-3 Miles	2/3 - 1.5 Miles	1/3 to 1 Mile	5 + Miles	3-5 Miles	2-3 Miles	2/3 - 1.5 Miles
Roadway ADT	>10 Miles	5-10 Miles	1-5 Miles	<1 Mile	10-20 Miles	4+ Miles	2-4 Miles	1-2 Miles	20-100 Miles	15-30 Miles	10-20 Miles	5-10 Miles
Mobility Hierarchy	20,000-70,000	15,000-50,000	10,000-30,000	<10,000	20,000-70,000	10,000-25,000	5,000-10,000	1000-5000	20,000-60,000	5,000-15,000	3,000-5,000	500-1,000
Posted Speed Limit (MPH)	Highest	Higher	High	Moderate	Highest	Higher	High	Moderate	Highest	Higher	High	Moderate
Large Trucks	60	35-50	30-40	30	70	55-65	35-45	30	70	55-65	35-55	35-55
Accessibility Hierarchy	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted
Arterial Street Access Allowance	Severely Restricted	Highly Restricted	Restricted	Permitted	Severely Restricted	Highly Restricted	Restricted	Permitted	Severely Restricted	Highly Restricted	Restricted	Permitted
Collector Street Access Allowance	All Arterials	All Arterials	All Arterials	Non-Freeways & Minor Arterials	All Arterials	All Arterials	All Arterials	Non-Freeways & Minor Arterials	Principal Arterials & Non-Freeways	All Arterials	All Arterials	Non-Freeways & Minor Arterials
Local Street Access Allowance	None	Non-Freeway & Minor Arterials	Restricted	Unrestricted	None	Restricted	Restricted	Unrestricted	None	Restricted	Unrestricted	Unrestricted
Driveway Access Allowance	None	Highly Restricted	Restricted	Unrestricted	None	None	Restricted	Unrestricted	None	None	Restricted	Unrestricted
Intersection Design/Control	None	Highly Restricted	Restricted	Unrestricted	None	None	Restricted	Permitted	None	None	Restricted	Unrestricted
Signal Locations	Interchanges Only	Interchanges / Traffic Signals	Traffic Signals	Traffic Signals, 4-Way Stop	Interchanges Only	Interchange/ Traffic Signals	Traffic Signals	4-Way Stop, X-St Stops	Interchanges Only	Interchange Traffic Signals	Traffic Signals	4-Way Stop, X- Street Stops
Signal Spacing (Feet)	NA	Arterials, Collectors, & Major Generators	Arterials, Collectors, & Major Generators	Non-Freeway, Minor Arterials & Other Collectors	NA	Arterials, Collectors, & Major Generators	Arterials, Collectors, & Major Generators	Arterials & Other Collectors	NA	Other Arterials, Collectors	Arterials & Collectors	Minor Arterials & Other Collectors
Interchange Spacing (Miles)	NA	2310-4400'	1760-2930'	1760'	NA	4840'	2310-3665'	1760 '	NA	4840'	2310-4840'	2310-4840'
Right-Of-Way (Feet)	1 Mile Minimum	1 Mile Minimum	NA	NA	1-4 Miles	1-4 Miles	NA	NA	4+ Miles	2-4 Miles	NA	NA
Parking	300'	200'	100-120'	80'	300' +	200' +	100-150'	80'	300' +	200' +	80-120'	80'
	None	None	None	Restricted	None	None	None	Restricted	None	None	None	None

NOTES

1) These guidelines are intended to reflect "Best Practices" in Access Management (IDEAL)
2) When addressing State owned and operated facilities, please refer to MnDOT Guidelines