



2.0

EXISTING CONDITIONS

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2.1 Demographics

The Coon Rapids Boulevard/East River Road corridor is part of the primary travelshed for four communities: Andover, Anoka, Coon Rapids, and Ramsey. There are currently 135,317 people living in these cities based on estimates from the Metropolitan Council and State of Minnesota Geospatial Information Office (2008 data). Other outlying communities (such as Elk River or St. Francis) may also use the corridor, but Andover, Anoka, Coon Rapids, and Ramsey are those expected to generate the most trips along the corridor.

The populations of these four communities have grown steadily since 1970. Each is expected to continue to grow in the future, albeit at different rates. Metropolitan Council projects that there will be approximately 170,300 people in the four primary communities by 2030 (see [Exhibit 2-1](#)).

Community	2008 Population ¹	2030 Estimated Population	Percent Growth
Coon Rapids	63,000	65,000	4%
Anoka	17,849	20,800	17%
Andover	31,023	40,500	31%
Ramsey	23,445	44,000	89%
Total	135,317	170,300	26%

EXHIBIT 2-1
Primary Community Population

¹Source: Metropolitan Council

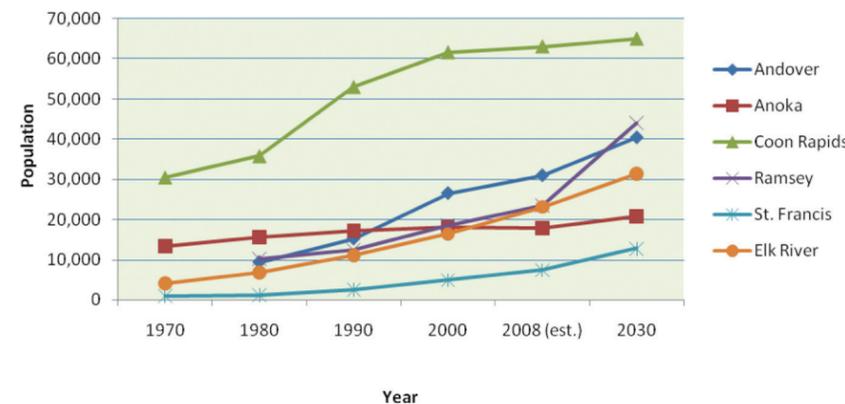
The Coon Rapids Boulevard/East River Road corridor lies within the cities of Coon Rapids and Anoka. Coon Rapids has grown substantially between 1970 and 2008. The growth rate is projected to slow as the city reaches full build-out. The city is projected to grow four percent in total over the next 22 years. Anoka's population increased four percent between 1990 and 2008 to 17,849. Its population is projected to grow to 20,800 people by 2030, an increase of 17 percent.

Andover had the largest absolute population gain from 1990 to 2008, adding about 15,000 people, for a total population of 31,023. Their growth rate is expected to drop from 104 percent over the last eight years to 31 percent over the next 22 years, reaching a total population of 40,500 by 2030.

Ramsey is the one community that is expected to have the same high growth (about 89 percent) over the next 22 years as they had from 1990 to 2008. They are expected to increase population from 23,445 in 2008 to about 44,000 in 2030.

The historical and projected population growth of the four primary communities along with Elk River and St. Francis is shown in [Exhibit 2-2](#).

EXHIBIT 2-2
Population Growth



2.2 Land Use

An analysis of the type of land uses by acreage and number of parcels was completed along the corridor. Anoka County's electronic database provided acreage for each parcel adjacent to Coon Rapids Boulevard and East River Road. However, the county's database did not include the land use for each parcel. Therefore, field studies were done to ascertain land use by address. This information was reconciled with the county's information.

2.2.1 Land Use by Size

[Exhibit 2-3](#) shows the land use types and the associated acreage along the corridor. The predominant land uses are city property and Anoka Ramsey Community College (ARCC) property. The city's property holdings include all of the parcels in the Port Riverwalk development, land that has been acquired near the proposed community center at Coon Rapids Boulevard and 111th Avenue, and other scattered parcels along the corridor. The ARCC property is located primarily between Mississippi Boulevard and Pheasant Ridge Drive.

Land Use Type	Number of Acres
City Property	68.78
College	68.77
Retail	53.37
Office	43.11
Single Family	42.82
Apartments	36.50
Communications	28.32
Industrial	25.63
Healthcare	24.03
Auto Service	21.92
Service	18.04
Townhomes	16.58
School	14.28
Restaurant	8.85
Vacant	5.45
Recreation	4.32
Institutional	4.11
Club/Lodge	3.65
Auto Sales	1.77
County Property	1.35
Light Industrial	0.93
Two-Family	0.92
Utility	0.83
Total Acres	492.33

EXHIBIT 2-3
Acres by Land Use Type

Source: Anoka County Property Database

Scattered retail uses along the corridor total more than 53 acres of land. There are 43 acres of office use, which does not include all of the healthcare related office uses. Healthcare uses, including Mercy Hospital and the various nearby offices which are predominantly medical offices, total 24 acres along the corridor. There are almost 22 acres of land devoted to automobile service related uses (car repair, car parts, tire stores, etc.). Though there are a number of restaurants in the study area, they occupy less than 9 acres of land. Industrial and light industrial uses also make up nearly 27 acres of corridor land, and WCCO radio transmission tower property (communications) makes up more than 28 acres on its own.

The four types of residential uses account for about 97 acres in the corridor. The predominant residential use is single family homes with almost 43 acres, followed by about 37 acres of apartment buildings, 17 acres of townhouses, and about one acre of two-family homes.

2.2.2 Land Use by Number of Parcels

There are 344 parcels of land adjacent to Coon Rapids Boulevard/East River Road in the study area, which are summarized in **Exhibit 2-4**. The land use type that occupies the largest number of parcels is single-family residential. The total number of residential parcels in the corridor is 134, with 79 single-family, 36 townhouse, 16 apartment, and 3 two-family parcels.

**EXHIBIT 2-4
Parcels by
Land Use Type**

Land Use Type	Number of Parcels
Single Family Residential	79
City Property	39
Office	38
Townhome	36
Retail	28
Auto Service	24
Healthcare	19
Apartments	16
Service	10
Vacant lots	10
Restaurant	9
Industrial	7
College	4
Auto Sales	4
School	3
Institutional	3
Two-family	3
Recreation	2
County	2
Utility	2
Communications	1
Club/Lodge	1
Light Industrial	1
Total Parcels	344

There are 230 non-residential parcels. The City of Coon Rapids owns 39 parcels along the corridor. Other than city property, the predominate parcels are office, retail, auto service, and health care with 38, 28, 24, and 19 parcels respectively.

There are only 10 vacant land parcels. They are located near the Coon Rapids Boulevard/East River Road split on the south end of the corridor next to the mini-storage use. The city’s vacant parcels in the Port Riverwalk project are not included in the vacant land category; they are in the city property category.

2.3 Roadway

The Coon Rapids Boulevard/East River Road corridor is varied in its lane geometry and other cross section elements as well as speed limit along its 5.8 miles. For analysis purposes, the corridor was divided into five segments based on generally uniform characteristics including: speed limit, median treatment, and presence of a frontage road system.

Segment one extends from 7th Avenue to 9th Avenue. It is a four-lane undivided section with no frontage road system. It is posted with a 35 mph speed limit and is typically situated within 66 feet of right-of-way.

Segment two extends from 9th Avenue to Mississippi Boulevard. It is a four-lane divided section with no frontage road system. It is posted with a 50 mph speed limit and is typically situated within 150 feet of right-of-way.

Segment three extends from Mississippi Boulevard to Hanson Boulevard. It is a four-lane divided section with a relatively continuous frontage road system along the southwest side of Coon Rapids Boulevard. There is one discontinuity between 111th Avenue and Crooked Lake Boulevard. There are also a few segments of frontage road located along the northeast side of Coon Rapids Boulevard, but these are short and discontinuous. It is posted with a 45 mph speed limit and is typically situated within 150 feet of right-of-way.

Segment four extends from Hanson Boulevard to Avocet Street. It has a continuous frontage road along the southwest side of Coon Rapids Boulevard. It is posted with a 45 mph speed limit and is typically situated within 150 feet of right-of-way. Between Hanson Boulevard and Egret Boulevard, it is a four-lane divided section. Between Egret Boulevard and Avocet Street, it is a five-lane divided section (two lanes southeastbound, three lanes northwestbound).

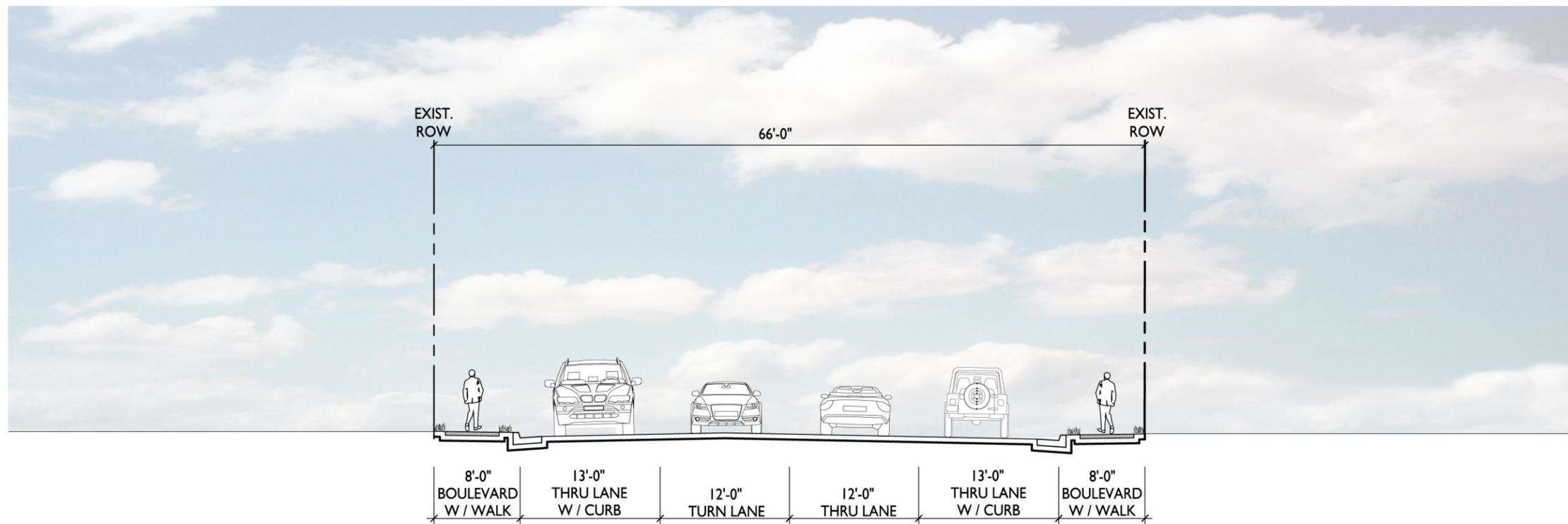
Segment five extends from Avocet Street to TH 610. It is a divided roadway with a small segment of frontage road between Avocet Street and the East River Road on-ramp. The right-of-way varies between 120 and 200 feet. The lane geometry north of the Coon Rapids Boulevard/East River Road split is seven-lane divided (three lanes southeastbound, four lanes northwestbound). It is posted with a 45 mph speed limit. East River Road southeast of the split is four-lane divided with a 45 mph posted speed limit. Coon Rapids Boulevard southeast of the split is four-lane divided with a 50 mph posted speed limit.

An overview of the corridor and segmentation is shown in **Exhibit 2-5**. Typical cross sections for each of the segments are shown in **Exhibits 2-6** through **2-11**.



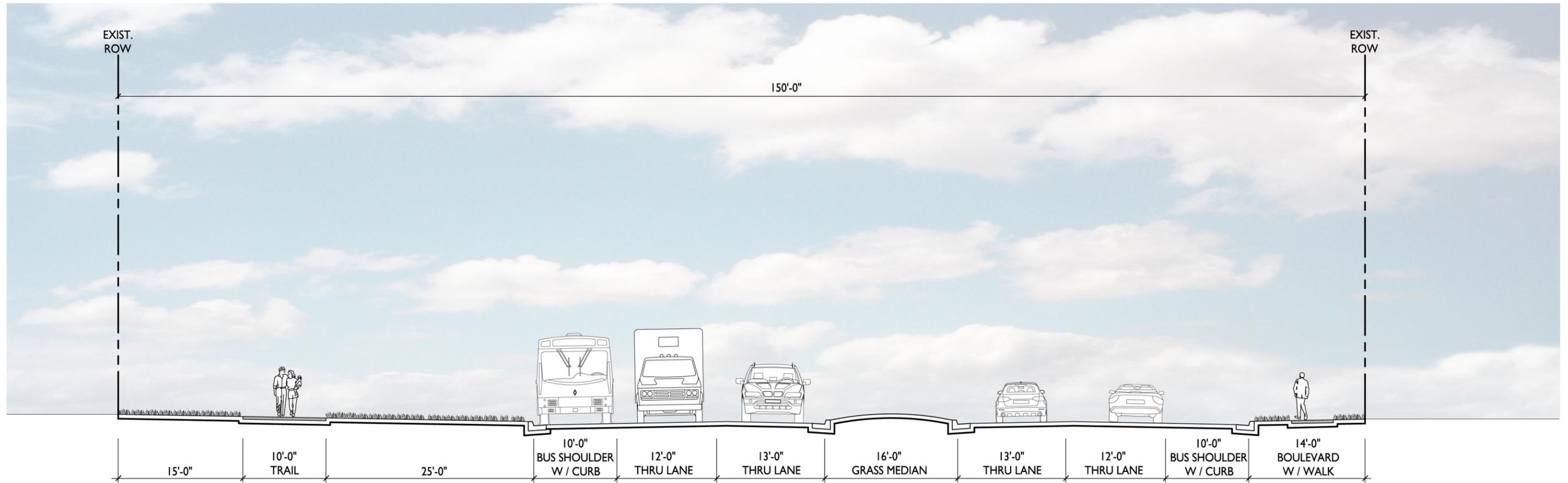


EXHIBIT 2-5 Existing Roadway Overview



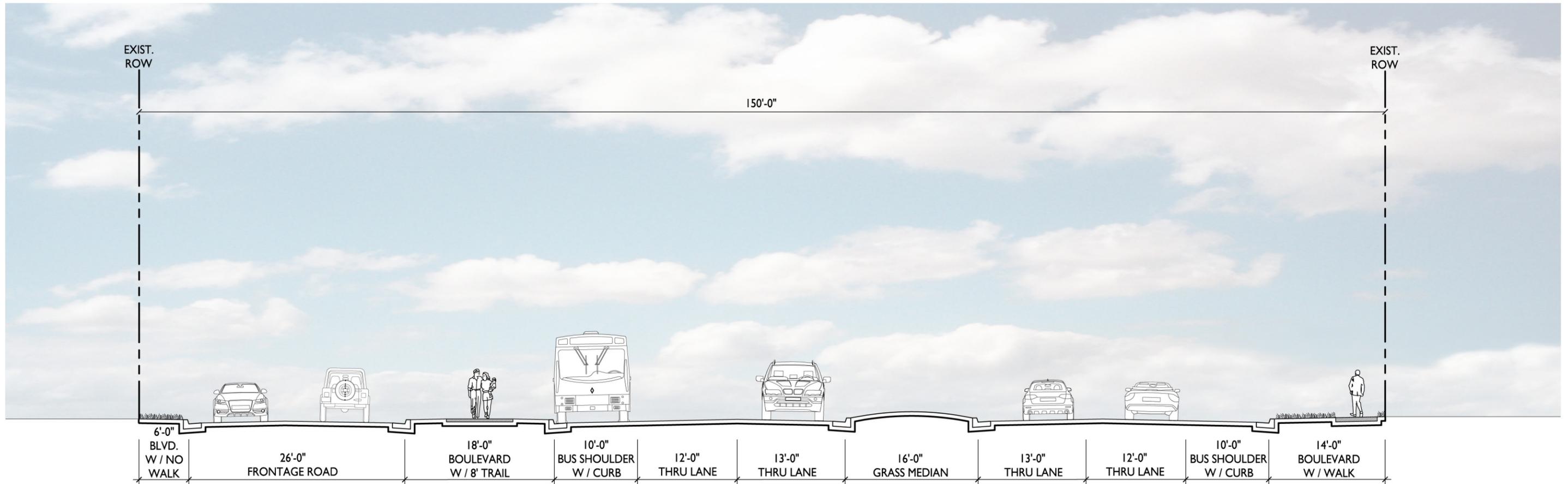
Segment 1
7th Avenue to 9th Avenue

EXHIBIT 2-6 Existing Roadway Cross Section (1 of 6)



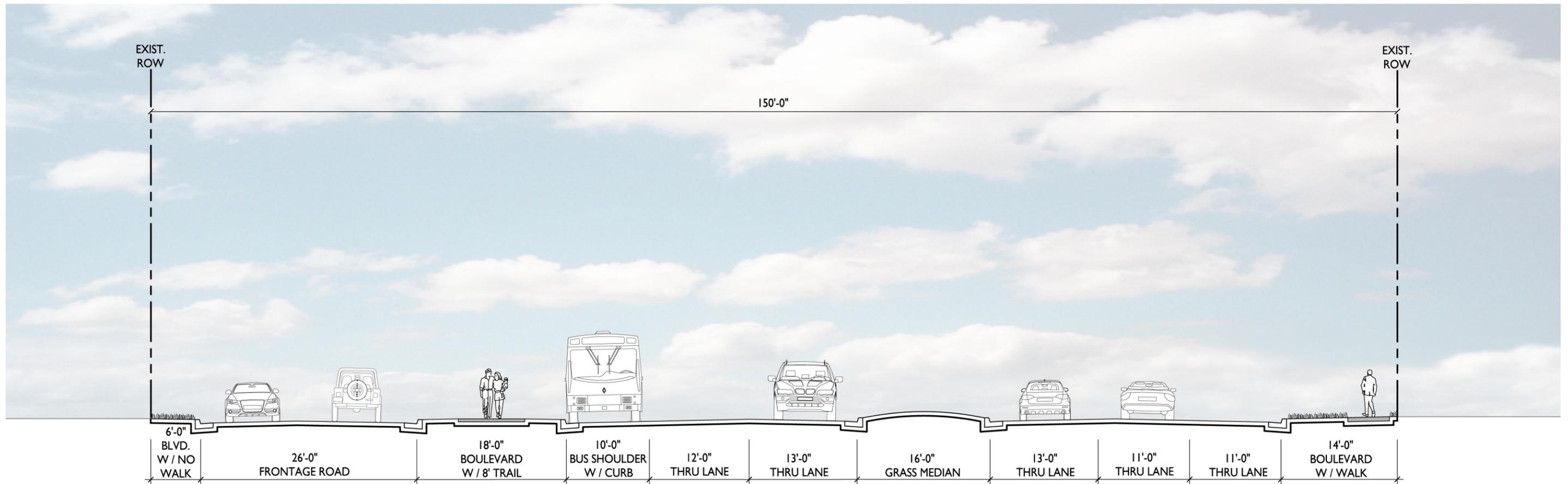
Segment 2
9th Avenue to Mississippi Boulevard

EXHIBIT 2-7 Existing Roadway Cross Section (2 of 6)



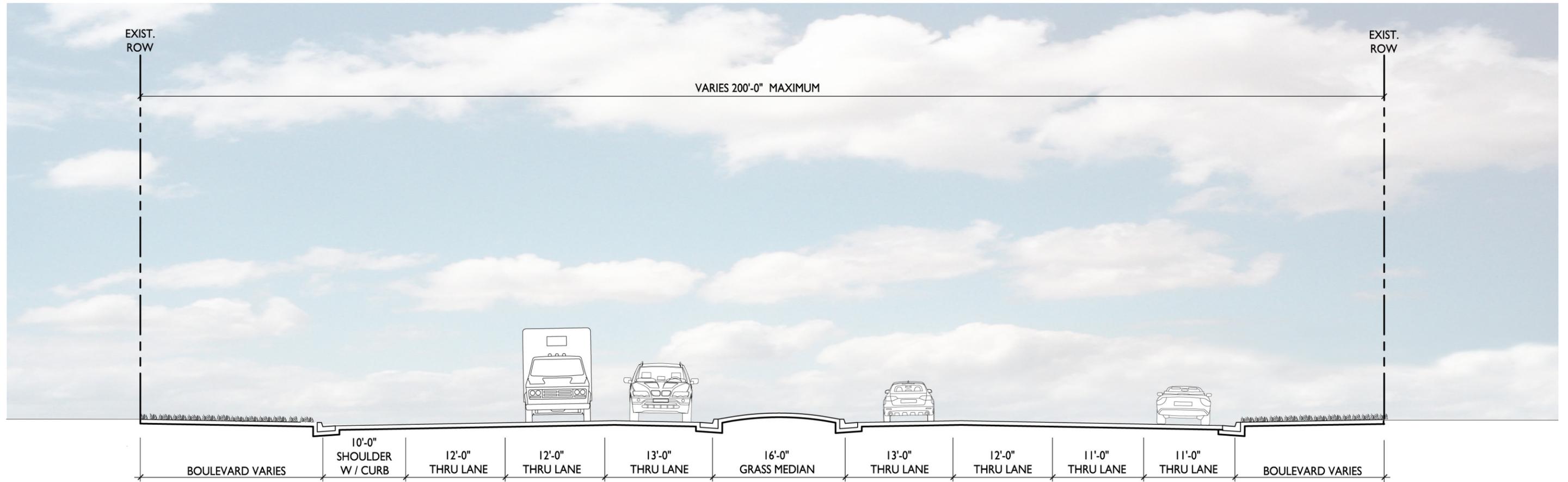
Segments 3 & 4
Mississippi Boulevard to Egret Boulevard

EXHIBIT 2-8 Existing Roadway Cross Section (3 of 6)



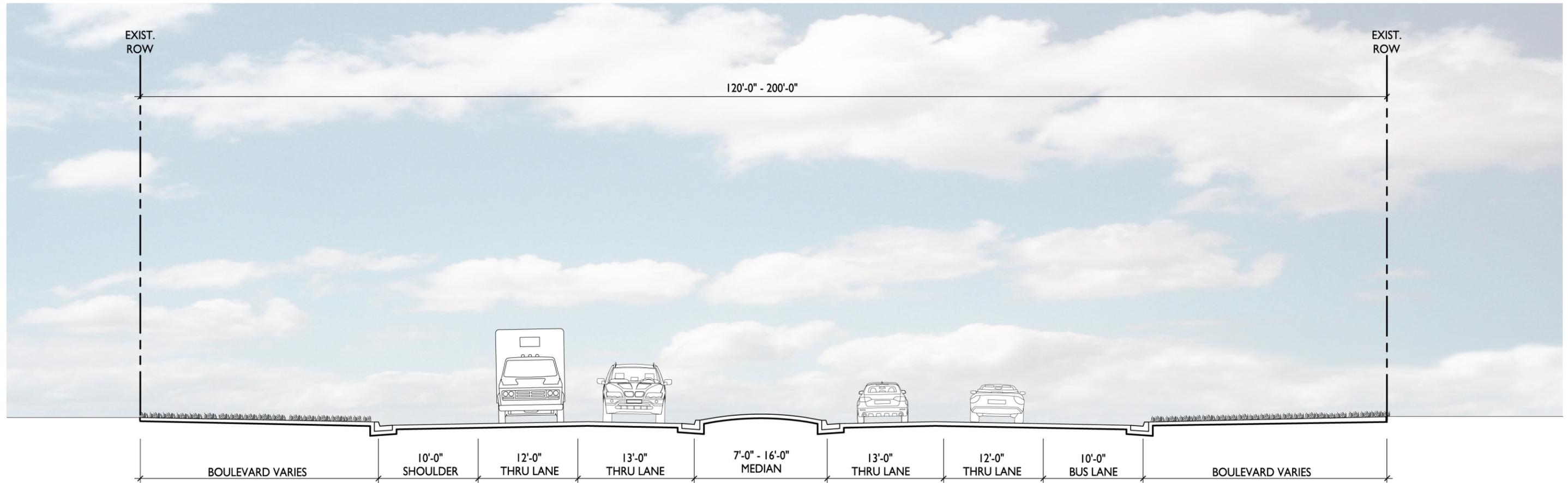
Segment 4
Egret Boulevard to Avocet Street

EXHIBIT 2-9 Existing Roadway Cross Section (4 of 6)



Segment 5
Avocet Street to "Split"

EXHIBIT 2-10 Existing Roadway Cross Section (5 of 6)



Segment 5
"Split" to TH 610 (CSAH 1 & CSAH 3)

EXHIBIT 2-11 Existing Roadway Cross Section (6 of 6)

2.4 Traffic

The City of Coon Rapids, City of Anoka, Anoka County, and Mn/DOT maintain a regular count program for major roadways within their jurisdictions. The existing average annual daily traffic (AADT) volumes for corridor segments are based on available data from the municipalities and are shown in [Exhibit 2-12](#). Additionally, turning movement counts were recorded for both the a.m. peak period (6:30 a.m. to 8:30 a.m.) and p.m. peak period (4:00 p.m. to 6:00 p.m.) at 16 intersections along the corridor:

- East River Road (CSAH 1) and 7th Avenue (CSAH 7)
- Coon Rapids Boulevard (CSAH 1) and Blackfoot Street
- Coon Rapids Boulevard (CSAH 1) and Round Lake Boulevard
- Coon Rapids Boulevard (CSAH 1) and Pheasant Ridge Drive
- Coon Rapids Boulevard (CSAH 1) and Mississippi Boulevard
- Coon Rapids Boulevard (CSAH 1) and 111th Avenue
- Coon Rapids Boulevard (CSAH 1) and Crooked Lake Boulevard (CSAH 18)
- Coon Rapids Boulevard (CSAH 1) and Xavis Street
- Coon Rapids Boulevard (CSAH 1) and Hanson Boulevard (CSAH 78)
- Coon Rapids Boulevard (CSAH 1) and Egret Boulevard
- Coon Rapids Boulevard (CSAH 1) and Avocet Street
- East River Road (CSAH 1) and TH 610 WB/Foley Boulevard (CSAH 11)
- East River Road (CSAH 1) and TH 610 EB
- Coon Rapids Boulevard (CSAH 3) and Foley Boulevard (CSAH 11)
- Coon Rapids Boulevard (CSAH 3) and TH 610 WB
- Coon Rapids Boulevard (CSAH 3) and TH 610 EB.

Existing volumes, roadway and intersection geometry and characteristics obtained in the field, and traffic signal timings obtained from Anoka County and Mn/DOT were input into a Synchro/SimTraffic model. Coon Rapids Boulevard, from Avocet Street to Round Lake Boulevard, is a coordinated system running 140 second cycle lengths during the peak periods. Five one-hour simulations were run for both the a.m. and p.m. peak periods. The averaged results were used to determine the levels of service (LOS) for the facility, segments, and intersections. LOS is a qualitative indication of traffic operations defined in terms of letter grades - A through F. LOS A indicates free flow conditions; LOS F represents breakdown conditions where the traffic volume exceeds the capacity of the roadway or intersection. LOS D is generally considered the threshold acceptable to most drivers. LOS for the facility and segments are based on average travel speed.

The overall existing facility LOS in the a.m. peak hour for CSAH 1 is LOS C southeastbound and LOS B northwestbound. The overall existing facility LOS in the a.m. peak hour for CSAH 3 is LOS B southeastbound and LOS E northwestbound. [Exhibit 2-13](#) displays the LOS by segment and direction for the a.m. peak hour. The overall existing facility LOS in the p.m. peak hour for CSAH 1 is LOS B southeastbound and LOS D northwestbound. The overall existing facility LOS in the p.m. peak hour for CSAH 3 is LOS D southeastbound and LOS C northwestbound. [Exhibit 2-14](#) displays the LOS by segment and direction for the p.m. peak hour.

East River Road and Coon Rapids Boulevard operate acceptably as overall facilities during both peak periods with the exception of CSAH 3 northwestbound in the a.m. peak hour. However, there are isolated segments with reduced average travel speed, such as between TH 610 EB and Foley Boulevard on East River Road in both

directions during both the a.m. and p.m. peak hours. This is due to the close spacing of the intersections that limits turn lane lengths, insufficient roadway width to accommodate dual left-turn lanes, and uncoordinated timing of the signals. Coon Rapids Boulevard between East River Road and Egret Boulevard currently operates at LOS F in the northwestbound direction during the p.m. peak hour due to heavy congestion at the intersection of Coon Rapids Boulevard and Egret Boulevard. Northwestbound queues frequently spillback through the intersection of Coon Rapids Boulevard and Avocet Street, causing lane blocking problems for turning movements. Coon Rapids Boulevard between TH 610 WB and Foley Boulevard also operates at lower average speeds due to congestion at the intersection of Coon Rapids Boulevard and Foley Boulevard.

LOS for the intersections is based on average control delay (seconds of delay per vehicle). [Exhibit 2-15](#) displays the LOS for intersections during the a.m. peak hour and [Exhibit 2-16](#) displays the LOS for intersections during the p.m. peak hour. The LOS presented for the unsignalized intersection of Coon Rapids Boulevard and TH 610 WB is based on the average delay of the minor movement (left-turn movement onto TH 610).

All of the intersections studied operated acceptably during the a.m. peak hour based on overall average control delay, but some individual movements operated at LOS E or F. Most of these were not related to operational problems, but were due to relatively low demand and long cycle lengths. The coordinated section of the corridor between Avocet Street and Round Lake Boulevard operates on 140 second cycle lengths during the peak periods. Thus, vehicles making a movement that has low volume will almost always have some delay (i.e., they will not likely arrive during the green phase). Minor lane blocking also occurred at some intersections where through lane queues extended past the entrance to turn lanes. Lane group operational problems were noted at three intersections during the a.m. peak period:

- Coon Rapids Boulevard (CSAH 1) and Round Lake Boulevard - southbound left-turn movement
- Coon Rapids Boulevard (CSAH 1) and Crooked Lake Boulevard (CSAH 18) - southbound left-turn movement
- Coon Rapids Boulevard (CSAH 1) and Hanson Boulevard (CSAH 78) - northbound thru, and southbound left-turn movements.

Two intersections do not operate acceptably during the p.m. peak hour based on overall average control delay: Coon Rapids Boulevard and Avocet Street and Coon Rapids Boulevard and Egret Boulevard. In addition, there were several individual movements at other intersections that operated at LOS E or F. Again, most of these movements were not related to operational problems, but to low demand combined with long cycle lengths. As with the a.m. peak period, some short periods of lane blocking occurred at some of the intersections. Lane group operational problems were noted at the same two intersections that exhibited overall LOS issues in addition to one other intersection:

- Coon Rapids Boulevard (CSAH 1) and Hanson Boulevard (CSAH 78) - northwestbound thru movement
- Coon Rapids Boulevard (CSAH 1) and Egret Boulevard - northwestbound left-turn, thru, and right-turn movements
- Coon Rapids Boulevard (CSAH 1) and Avocet Street - northwestbound thru movement.

There are emergency services facilities located along the corridor at Mercy Hospital near Blackfoot Street (access via Dakota Street) and a City of Coon Rapids fire station near Egret Boulevard. The proximity of these facilities to the corridor result in frequent emergency vehicle preemption (EVP) calls to the coordinated signal system. As a result of the preemption calls, the signal system leaves the coordinated signal system settings and then must recover to get back to coordination once the call has been serviced. This can cause added delay and congestion and the perception of a lack of coordination along the Coon Rapids Boulevard/East River Road corridor, particularly during peak periods and especially near Blackfoot Street and Egret





EXHIBIT 2-12 Existing AADT Traffic Volumes

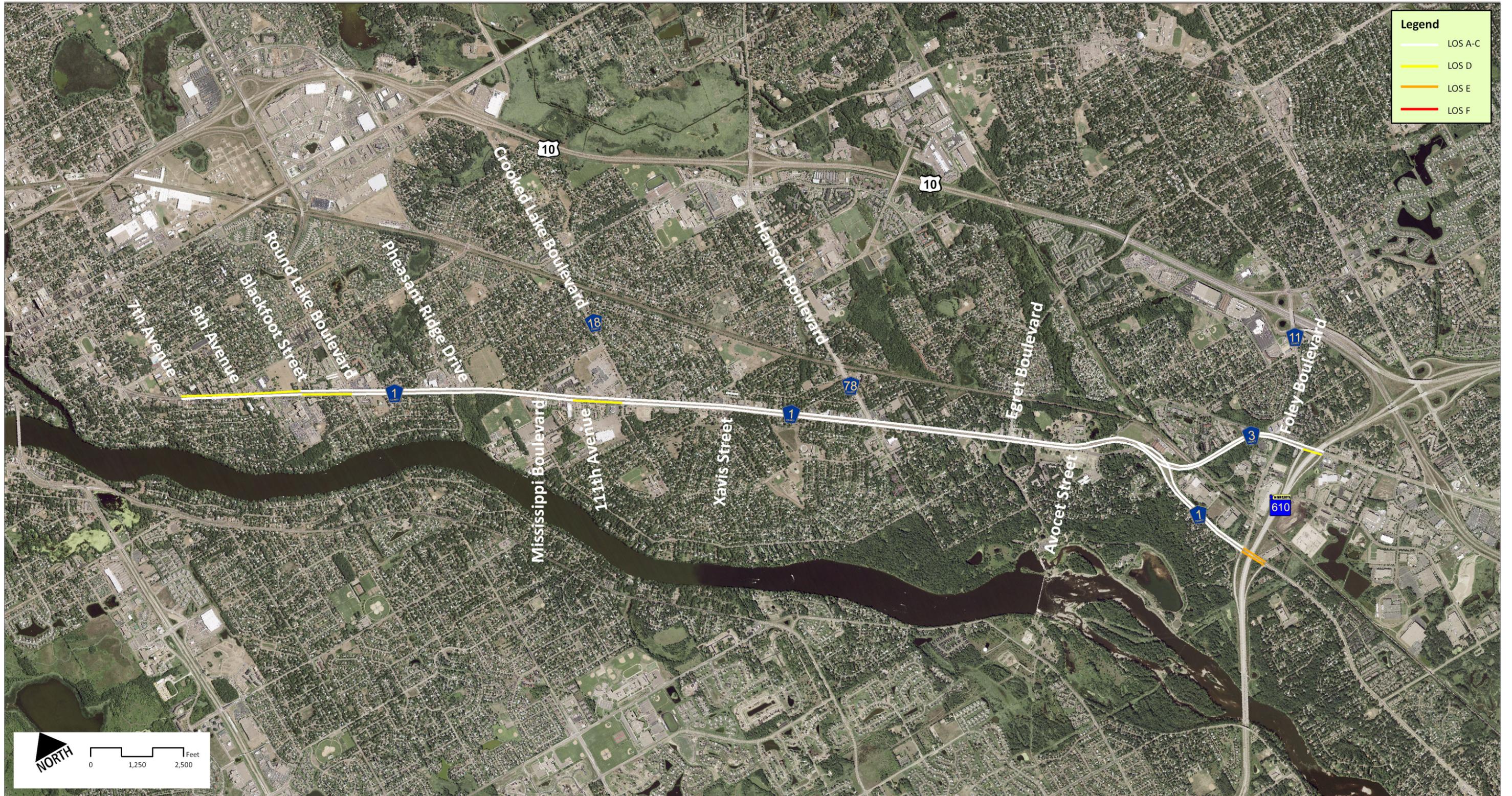


EXHIBIT 2-13 Existing AM Peak Hour Arterial Level of Service

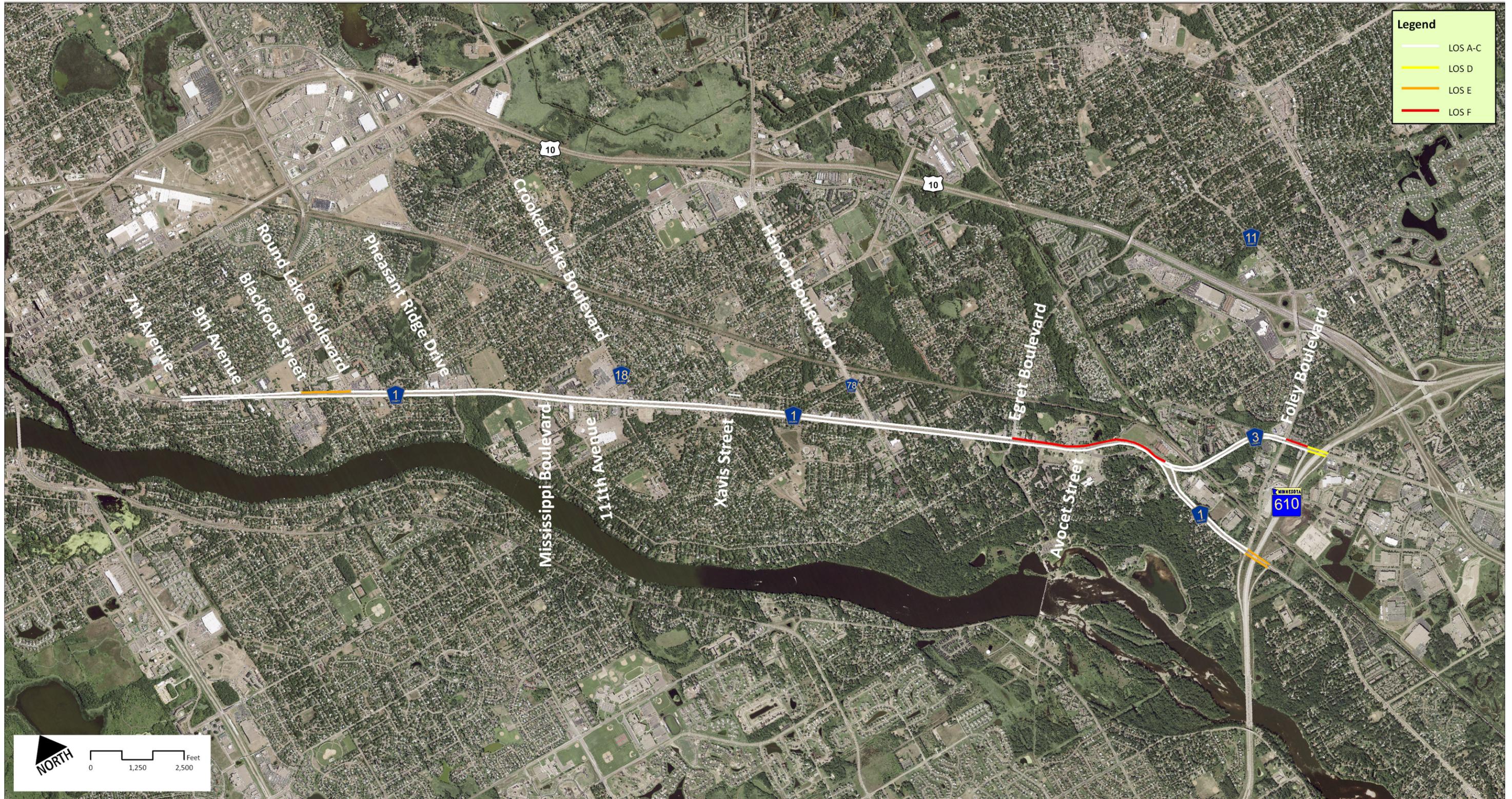


EXHIBIT 2-14 Existing PM Peak Hour Arterial Level of Service

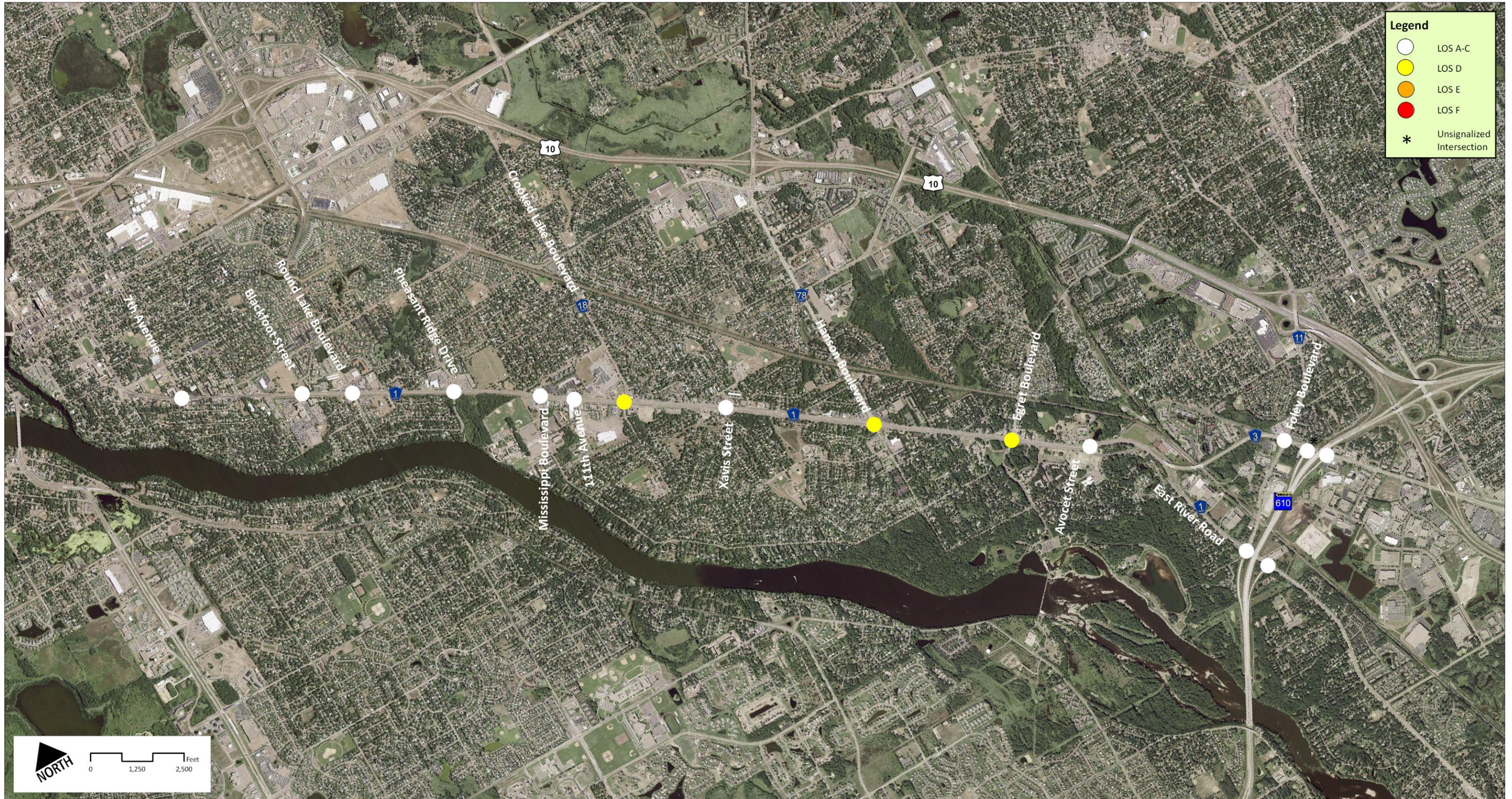


EXHIBIT 2-15 Existing AM Peak Hour Intersection Level of Service

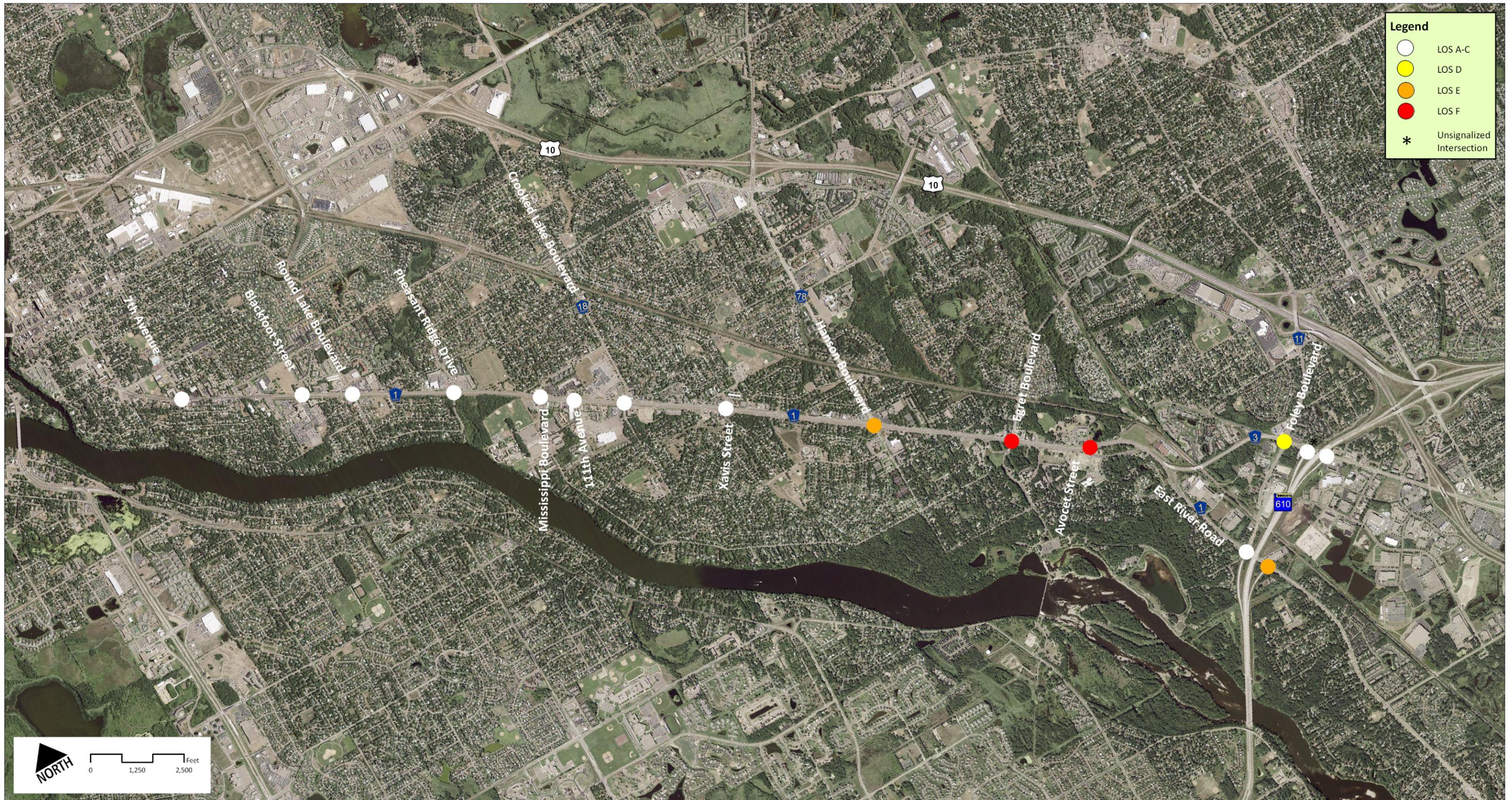


EXHIBIT 2-16 Existing PM Peak Hour Intersection Level of Service

Boulevard. The Synchro/SimTraffic model cannot account for the effects of signal preemption in the LOS results, and therefore the actual operations may be worse than what is predicted by the model.

The proximity of the BNSF Railway tracks that run parallel to the Coon Rapids Boulevard/East River Road corridor can contribute additional delay and congestion due to the queues on the cross streets from the at-grade railroad crossings. With the addition of Northstar Commuter Rail service which began on November 16, 2009, 12 additional trains per weekday pass through the at-grade crossings, in addition to the freight traffic, which is summarized in the next section.

The four hours of turning movement count data for the sixteen intersections were compared against Traffic Signal Warrants 2, 3, and four hours of Warrant 1 from the Minnesota Manual of Uniform Traffic Control Devices (MnMUTCD). Based on the count information, the signals at East River Road and 7th Avenue, Coon Rapids Boulevard and 111th Avenue, Coon Rapids Boulevard and Xavis Street, and Coon Rapids Boulevard and Avocet Street do not meet the Warrants. The intersection of East River Road and 7th Avenue does meet 80 percent of Warrant 1 for the four hours of volume data, which is sufficient to justify not removing an existing signal. The other three signals do not meet 60 percent of Warrant 1 and therefore may be candidates for traffic signal removal. The unsignalized intersection of Coon Rapids Boulevard and TH 610 WB meets the Traffic Signal Warrants based on the left-turn movement as the minor approach, but delay and queuing at the intersection do not seem to indicate that a signal is needed.

Existing conditions also were analyzed with signals removed from the intersections at Coon Rapids Boulevard and 111th Avenue, Coon Rapids Boulevard and Xavis Street, and Coon Rapids Boulevard and Avocet Street. The corridor conditions do not improve markedly since the side streets at these intersections are relatively low volume and do not take much green time away from the main line. Side street delay would be significant for all three intersections without the signals, and the signal spacing without the traffic signals at these three intersections may result in poorer progression for the coordinated signal system. All three side streets may have increased future volumes due to proposed developments and local street network modifications explored in Section 4. The need for signalization at these three intersections should be revisited as redevelopment or roadway projects occur in the area.

2.5 Access

Coon Rapids Boulevard/East River Road is classified as an A Minor Arterial; it is an A Minor Expander between TH 610 and Hanson Boulevard and an A Minor Reliever from Hanson Boulevard to 7th Avenue. Anoka County Highway Department Access Spacing Guidelines for an A Minor Arterial in an urbanizing area state that primary full movement intersections should be spaced 1/4 mile from each other, conditional secondary intersections should be spaced at 1/8 mile, and signals should be spaced at 1/4 mile. Private access should be allowed by exception or deviation only. Additionally, the Mn/DOT Traffic Engineering Handbook states that a 250-foot separation between the intersection of the mainline and the cross street and the intersection of the frontage road and the cross street is desirable to reduce the interference of the two intersections.

Access is controlled on the majority of Coon Rapids Boulevard/East River Road through a combination of measures. The roadway is divided with a 15.5-foot median from TH 610 to approximately 9th Avenue. A frontage road provides local access on the southwest side of Coon Rapids Boulevard from East River Road to Crooked Lake Boulevard (CSAH 18). In addition, there is a short segment of frontage road on the northeast side of Coon Rapids Boulevard near Thrush Street.

There are 34 public street intersections and 85 driveway accesses along the Coon Rapids Boulevard/East River

Road corridor. There are three different types of access among these intersections and driveways: full access, T-intersection, and right-in/right-out. Full access intersections are the least restrictive, but have 32 conflict points; T-intersections have 9 conflict points; and right-in/right-out intersections, the most restrictive, have 4 conflict points. Conflict diagrams showing the different conflict points for each intersection type are shown in Exhibits 2-17 through 2-19. Of the 34 public street intersections, 20 are full access and 14 are T-intersections. The driveway accesses include 28 T-intersections and 57 right-in/right-out accesses.

Existing median openings and direct frontage road access points between signalized intersections are highlighted in the existing roadway features exhibits found at the end of this section.

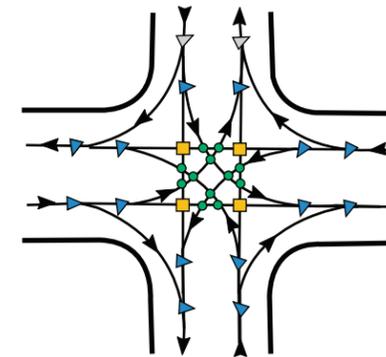


EXHIBIT 2-17
Full Access Intersection
Conflict Diagram
(32 Conflict Points)

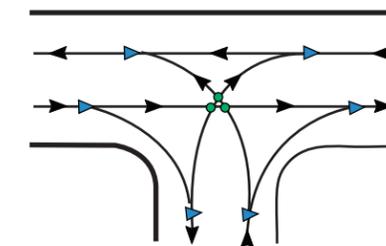


EXHIBIT 2-18
T-Intersection Conflict Diagram
(9 Conflict Points)

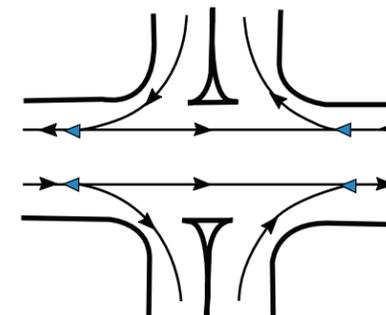


EXHIBIT 2-19
Right-in/Right-out Intersection
Conflict Diagram
(4 Conflict Points)

Source: Traffic Safety Fundamentals Handbook, Mn/DOT Office of Traffic, Safety, and Technology, August 2008.

2.6 Safety

The latest five years of available crash data (2002-2006) along the Coon Rapids Boulevard/East River Road corridor, provided by Anoka County, showed that there were 715 crashes reported along CSAH 1 and 63 crashes reported along CSAH 3. Crashes were analyzed based on type, age of driver, injury, lighting, location, road surface condition, time, weather, and year. Notable trends in the data were that most crashes along the corridors were rear end or right angle, and they occurred during clear or cloudy weather on dry road surfaces, during the daylight hours. As expected, there were concentrations of crashes during the peak periods. **Exhibit 2-20** displays the crashes by the hour of day. Younger drivers were disproportionately at fault as shown in **Exhibit 2-21**.

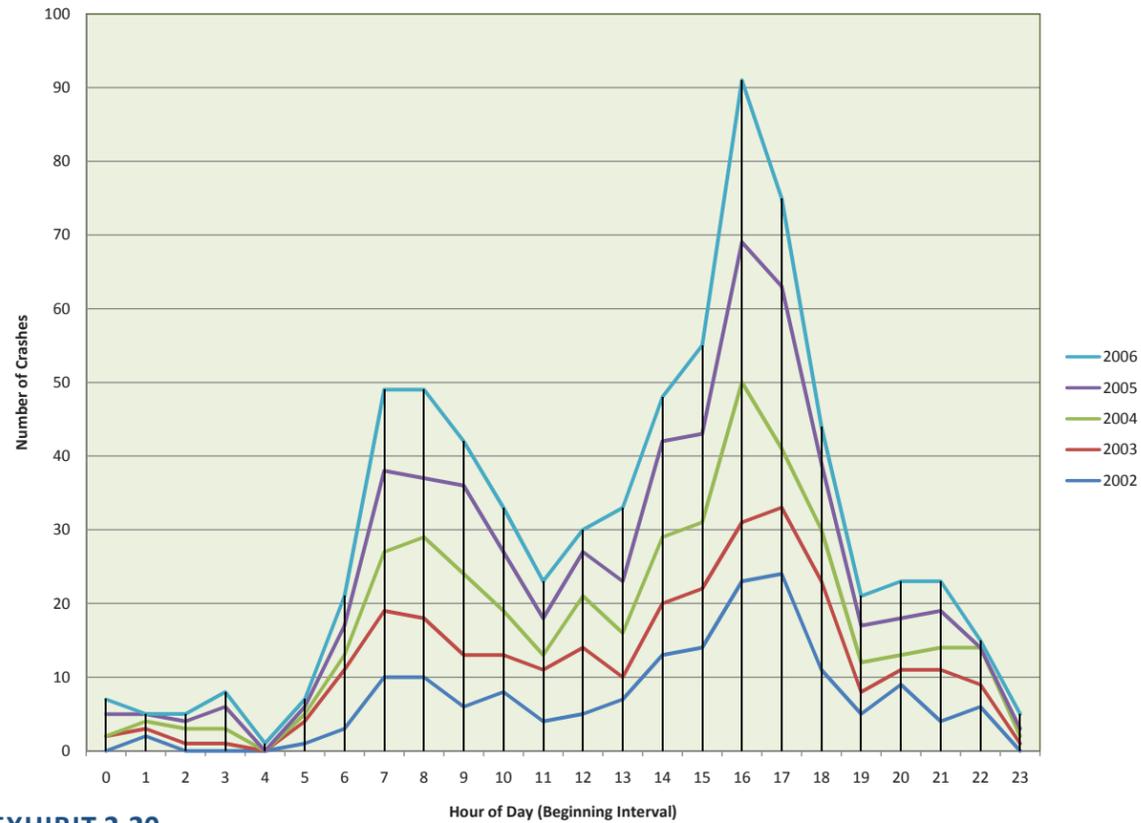


EXHIBIT 2-20
Crashes by Hour of Day

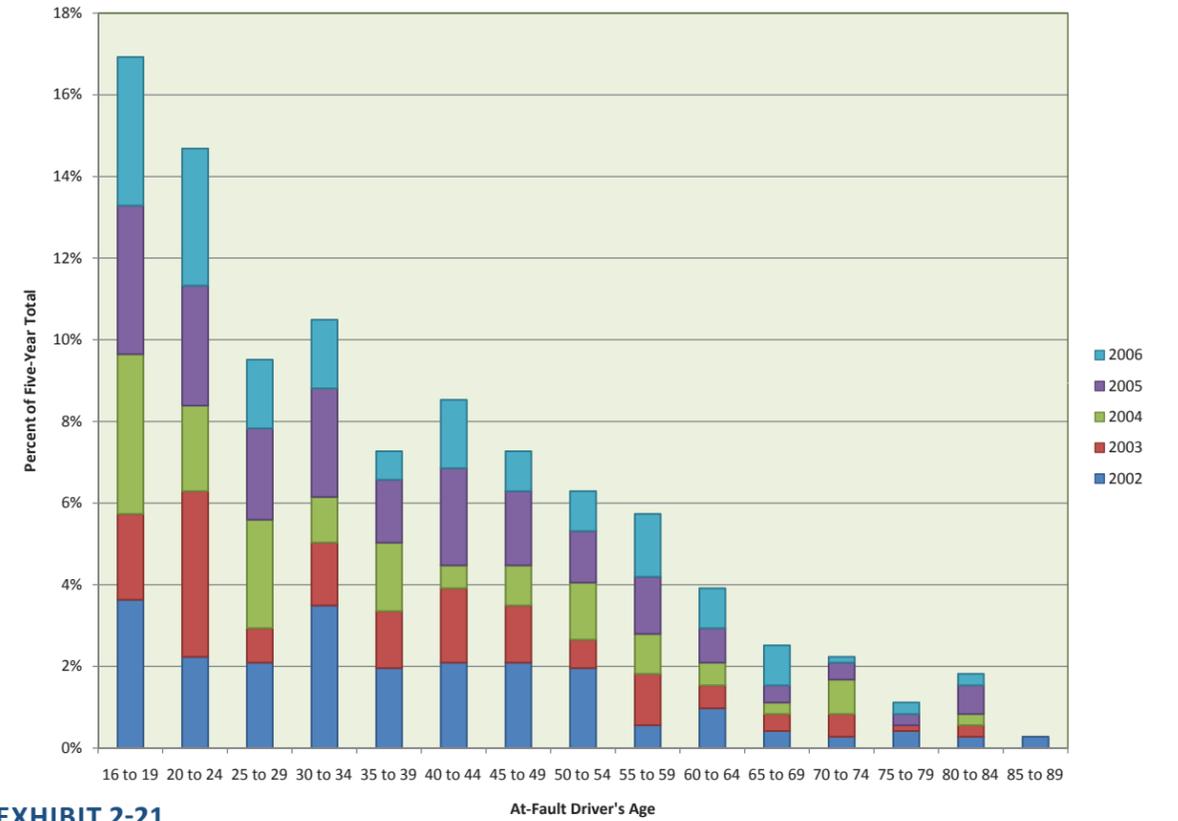


EXHIBIT 2-21
Crashes by Age of Driver-at-Fault

Overall, the observed crashes are below the statewide average for similar facilities. CSAH 1 had a facility crash rate of 2.59 crashes per million vehicle miles and CSAH 3 had a facility crash rate of 1.59 crashes per million vehicle miles. The statewide average is 3.70 crashes per million vehicle miles for similar facility types (4-Lane Divided Conventional Roadways) as listed in the Mn/DOT Traffic Safety Fundamentals Handbook from 2008.

The recorded crashes were predominantly located at intersections or within intersection influence areas (within 0.05 mile of the intersection). **Exhibit 2-22** summarizes the crashes at intersections where 10 or more crashes were recorded during the five-year period.

Intersection	Total Number of Crashes	Entering AADT	Intersection Crash Rate	Metro Average	Critical Crash Rate*
TH-610 [CSAH 3]	12	29350	0.22	0.8	1.30
Foley Blvd. (CSAH-11) [CSAH 3]	46	32900	0.77	0.8	1.27
Ramp from TH-610 EB (CSAH 1)	34	23700	0.79	0.8	1.36
Foley Blvd. (CSAH-11)/TH-610 WB (CSAH 1)	20	23700	0.46	0.8	1.36
Coon Rapids Blvd Extension (MSAS-126)	18	35100	0.28	0.2	0.44
Avocet Street (MS-313)	33	35000	0.52	0.8	1.25
100th Lane (M-122)	34	35000	0.53	0.2	0.44
Exit to Frontage Road (M-317)	17	35000	0.27	0.2	0.44
Egret Blvd. (MSAS-104)	63	36500	0.95	0.8	1.24
Ibis Street/Hummingbird Street (M-224/M-427)	19	30000	0.35	0.2	0.47
Hanson Blvd. (CSAH 78)	68	35300	1.06	0.8	1.25
Xavis Street (MSAS-137)	27	25800	0.57	0.8	1.33
Direct River Drive/Yukon Street (M-216/M-100)	12	23800	0.28	0.2	0.51
Crooked Lake Blvd. (CSAH 18)	38	30000	0.69	0.8	1.29
111th Avenue (M-354)	27	22500	0.66	0.8	1.37
Mississippi Blvd. (MSAS-105)	19	27100	0.38	0.8	1.32
Pheasant Ridge Drive (MSAS-121)	31	23300	0.73	0.8	1.36
Round Lake Blvd. (MSAS-121)	14	25700	0.30	0.8	1.33
Hospital Road/Blackfoot Avenue (MSAS-119)	13	19900	0.36	0.8	1.41
7th Avenue (CSAH 7)	17	17400	0.54	0.7	1.32

EXHIBIT 2-22 Crash Rates

- = Intersection crash rate exceeds critical crash rate
- = More than 10 crashes per year

**Intersection Crash Rate > Critical Crash Rate identifies a hazardous location. The intersection crash rate is higher than can be accounted for due to the random nature of crashes, therefore there is a high probability that the conditions at the intersection are contributing to the crashes. Source: Traffic Safety Fundamentals Handbook, Mn/DOT Office of Traffic, Safety, and Technology, August 2008.*

The Critical Crash Rate defines the threshold where the intersection crash rate exceeds the average crash rate at a statistically significant level taking into account exposure (AADT). There was one intersection where the observed crash rate exceeded the Critical Crash Rate: Coon Rapids Boulevard and 100th Lane. 100th Lane is a low volume local street with side street stop control at Coon Rapids Boulevard. The proportion of right angle crashes at Coon Rapids Boulevard and 100th Lane significantly exceeds the expected amount (61% versus 25%).

Two other intersections, Coon Rapids Boulevard and Hanson Boulevard and Coon Rapids Boulevard and Egret Boulevard, were evaluated due to the high number of crashes recorded. Although there were a high number of crashes at these two intersections, the volume of entering traffic results in calculated crash rates below the Critical Crash Rate. Regardless, the percentage of rear end crashes at the intersection of Coon Rapids Boulevard and Hanson Boulevard significantly exceeded the expected amount based on statewide average intersection crash distribution (78% versus 52%). Driver inattention was the predominant contributing factor.

Two fatal crashes were recorded in the CSAH 1 and CSAH 3 corridors for the five-year period. One involved a pedestrian and a motor vehicle with an impaired driver during dark (street lights on) and wet conditions on the segment between TH 610 and Coon Rapids Boulevard near 94th Avenue NW. The other involved a young bicyclist and a motor vehicle. Based on the crash records, the primary contributing factor was disregard of the traffic control device by the bicyclist.

There were 13 bicycle/pedestrian crashes recorded during the five-year period; five occurred mid-block and eight occurred at signalized intersections. About half of the bicycle/pedestrian crashes occurred during dark conditions with street lights illuminated. Although there is not roadway lighting between major intersections, all signalized intersections have two or four luminaires. Contributing factors were non-motorist violation or error or failure to yield right of way by the bike/pedestrian in all cases except one of the fatal crashes which was related to driving under the influence (DUI). Gaps in sidewalk facilities may have been related to four of the crashes.

2.7 Trails and Sidewalks

Trails and sidewalks are provided within the Coon Rapids Boulevard/East River Road corridor, but are inconsistent in their location, condition, and continuity. Many are interrupted by local street and driveway connections to Coon Rapids Boulevard/East River Road, some are squeezed within the narrow boulevard strip between the frontage road and Coon Rapids Boulevard, most are in poor condition, and many sidewalks on the northeastern side of corridor simply end, only to start again one block away. This pattern repeats itself throughout the corridor. The photographs shown illustrate these various conditions. The existing roadway features exhibits found at the end of this section include existing sidewalk locations along the corridor.

The primary trail facility is an Anoka County Mississippi River Regional Trail. It is located on the southwestern side of the project corridor, primarily within the boulevard between southeastbound Coon Rapids Boulevard and the frontage road or within the boulevard southwest of Coon Rapids Boulevard. In the City of Anoka the trail is located on-street, but does not have a designated shoulder lane for trail users. At Direct River Drive, which is located approximately halfway within the study area length, the Mississippi River Regional Trail leaves the corridor and becomes either a local, on-street bikeway or it meanders through neighborhood parks. It provides a connection to nearby recreational facilities such as the Coon Rapids Dam Regional Park, the Mississippi River Regional Trail to the south, Bunker Hills Regional Park, and the Coon Creek Regional Trail to the north. At the point the Mississippi River Regional Trail leaves the corridor, a City of Coon Rapids trail begins, running southeast to Avocet Street.

In addition to the general issues listed above, the following statements identify specific deficiencies of the existing trail and walkway system within the Coon Rapids Boulevard/East River Road corridor:

- Sidewalks are narrow, with widths between four and six feet – most are at five feet.
- While a majority of the trails are 10 feet, some are only eight feet wide. Many of those that are 10 feet are deteriorated at the edges such that the usable width is between eight feet and nine feet.
- Some trails, especially within the boulevard strip between the frontage road and Coon Rapids Boulevard, are adjacent to retaining walls. These abrupt grade delineators are a hazard for users.



- Many sign posts, light poles, power poles, and other vertical elements are within the trail or just at the edge of the trail, again creating hazards for users.
- There are very few Americans with Disabilities Act (ADA) compliant pedestrian ramps where sidewalks and trails meet roadway curbs.
- A majority of the asphalt trail pavements and concrete sidewalks are in poor condition. There are many asphalt patches and misaligned concrete panels, creating uneven surfaces. Weeds and grass are growing in the pavement.
- There is dramatic grade change in some segments of the trail, typically where a trail is in a large boulevard space that functions as a ditch. The most excessive of these trail slopes are assumed not to be ADA-compliant.

Existing and currently proposed trails along the Coon Rapids Boulevard/East River Road corridor are shown in [Exhibit 2-23](#).

2.8 Transit

Metro Transit operates two scheduled service bus routes along the Coon Rapids Boulevard/East River Road corridor: Route 850 and Route 852. Both routes may utilize the designated Bus Only Shoulders along the corridor between Blackfoot Street and Avocet Street during periods of congestion. Only transit buses are authorized to use the shoulder, and they are subject to specific operating rules such as a maximum speed of 35 mph that is no more than 15 mph greater than the adjacent traffic.

Route 850 has three route alternatives. Route 850A runs between Anoka-Hennepin Technical College and downtown Minneapolis with express service between the Foley Park and Ride and downtown Minneapolis. Route 850A operates only during peak periods with approximately 25-minute headways. Route 850F does not serve the Coon Rapids Boulevard/East River Road corridor; it only operates between the Foley Park and Ride and downtown Minneapolis. Route 850N serves the Riverdale Park and Ride and operates along Coon Rapids Boulevard southeast of Hanson Boulevard. Route 850N operates only during peak periods with approximately 20-minute headways during the morning peak and approximately 30-minute headways during the evening peak.

Route 852 has two route alternatives. Route 852A runs between Anoka-Hennepin Technical College and downtown Minneapolis. Route 852A operates 16 hours a day with approximately one hour headways. Route 852F does not serve the Coon Rapids Boulevard/East River Road corridor; it only operates between the Foley Park and Ride and downtown Minneapolis.

The Anoka County Traveler also operates along the corridor. It does not provide scheduled service, but offers dial-a-ride curb-to-curb services with a 30-minute pick-up window.

Northstar Commuter Rail began service November 16, 2009 between Big Lake and downtown Minneapolis. Northstar runs along the current BNSF Railway tracks, which are roughly parallel to the Coon Rapids Boulevard/East River Road corridor. There is one station in Anoka, more than one mile from the northwestern end of the CSAH 1 corridor on 4th Avenue, and one station in Coon Rapids, more than 0.5 mile from the Coon Rapids Boulevard/East River Road corridor at the Riverdale Park and Ride on Northdale Boulevard. Each weekday, there are five inbound trains to downtown Minneapolis during the morning peak period and five outbound trains to Big Lake during the evening peak period each weekday. One reverse trip operates during each peak period. Weekend service consists of three round trips per day.

Transit routes and stations/stops serving the Coon Rapids Boulevard/East River Road corridor are shown in [Exhibit 2-24](#).



2.9 Freight Movements

Two modes serve freight along the Coon Rapids Boulevard/East River Road corridor - trucks (heavy vehicles) and rail. Heavy vehicles account for 0.2 percent to 1.2 percent of the traffic along the corridor during the peak periods, based on the turning movement counts. A typical assumption for the heavy vehicle percentage on an arterial would be two percent, so Coon Rapids Boulevard/East River Road has less truck traffic and is servicing local land uses rather than through freight movements. This is not unexpected, given that there are not significant truck trip generators along Coon Rapids Boulevard/East River Road and TH 10 is nearby and parallel, carrying more than four percent heavy vehicle traffic.

The BNSF Railway operates approximately 60 trains per day on the tracks paralleling the Coon Rapids Boulevard/East River Road corridor to the north and east. There are at-grade railroad crossings for most of the major cross streets to Coon Rapids Boulevard/East River Road: Foley Boulevard, Egret Boulevard, Hanson Boulevard, and Crooked Lake Boulevard. Near the southern end of the corridor, the proximity of the railroad crossings to Coon Rapids Boulevard/East River Road results in spillback of vehicle queues from the railroad crossings to Coon Rapids Boulevard/East River Road. The railroad crossing is about 800 feet from the East River Road and Foley Boulevard/TH 610 WB intersection, about 1,000 feet from the Coon Rapids Boulevard and Egret Boulevard intersection, and about 1,600 feet from the intersection of Coon Rapids Boulevard and Hanson Boulevard.

2.10 Utilities

Public and private utilities are located within the Coon Rapids Boulevard/East River Road right-of-way; these utilities are both above ground and below ground. Above ground utilities include: power, telephone, and cable television. Underground utilities include: water main, sanitary sewer, storm sewer, gas, power, telephone, and cable television. Above ground and underground utilities are generally located between the curb and the right-of-way, except for storm sewer. Storm sewer is generally located under the existing roadway pavement.

A Metropolitan Council sanitary sewer interceptor crosses Coon Rapids Boulevard between the Coon Rapids Boulevard/East River Road split and the intersection of Coon Rapids Boulevard and TH 610.

2.11 Environmental and Cultural Constraints

2.11.1 Vegetation and Species

Coon Rapids Boulevard/East River Road is primarily an urban corridor with little undeveloped or undisturbed open space. With the exception of the Coon Creek crossing, vegetation in the corridor is limited and consists mostly of landscaped and manicured areas. A Minnesota County Biological Survey County Maps records search found no records of rare plant or animal species, or ecologically sensitive areas within the corridor. Coon Rapids Boulevard/East River Road is located in a county with no known federally listed endangered, threatened, proposed or candidate species, or final or proposed critical habitat. The state-listed threatened Blanding's turtle is known to be found near water bodies in Anoka County and may be present in this corridor. Blanding's turtles have a tendency to travel long distances over land between two areas, often crossing roadways. This makes the turtles susceptible to collisions with vehicles. When parts of the Coon Rapids Boulevard/East River Road corridor are proposed for design and construction, further consultation regarding the Blanding's turtle should occur with the Minnesota Department of Natural Resources (DNR) as part of the environmental review process.

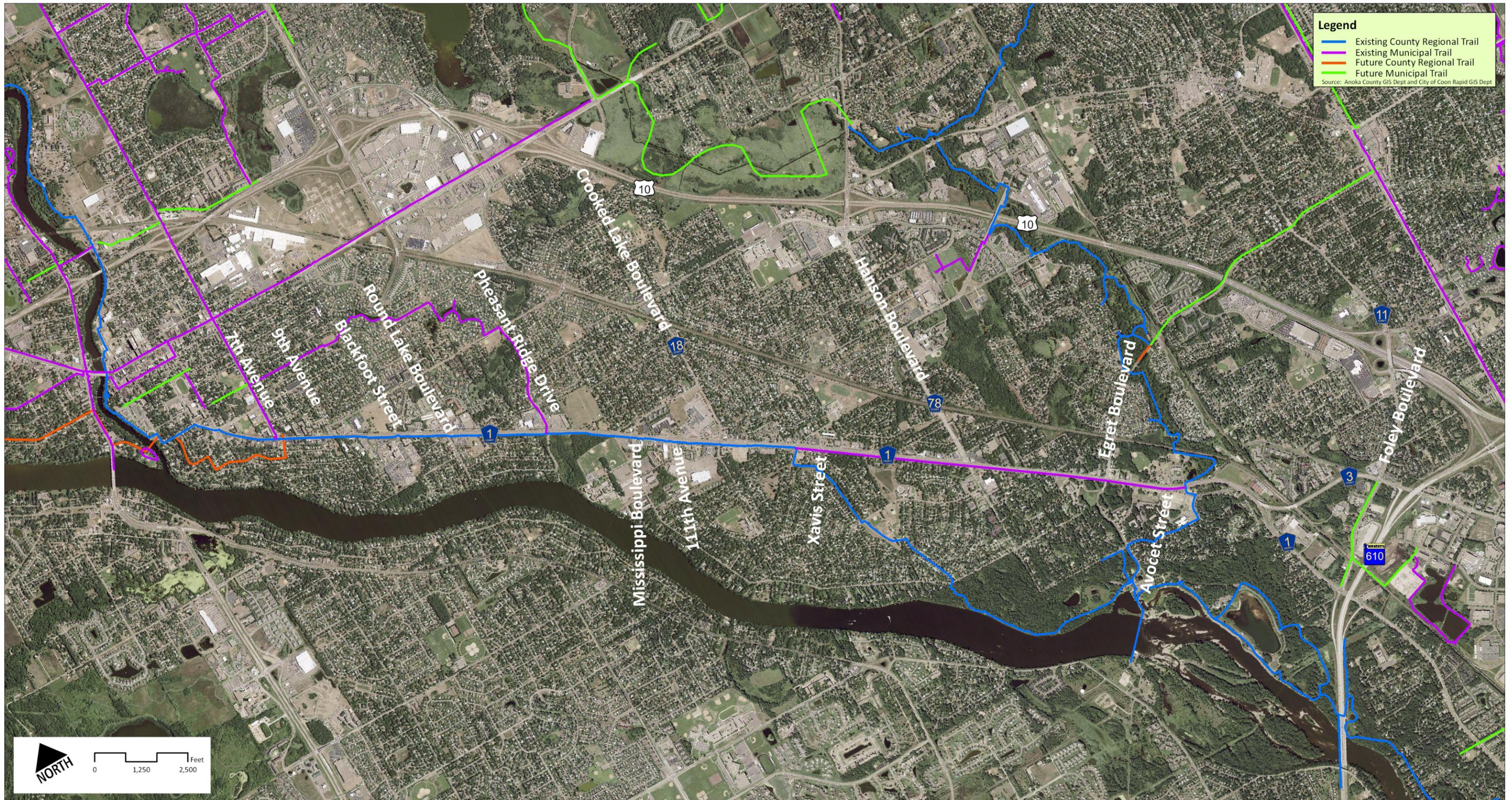


EXHIBIT 2-23 Trails

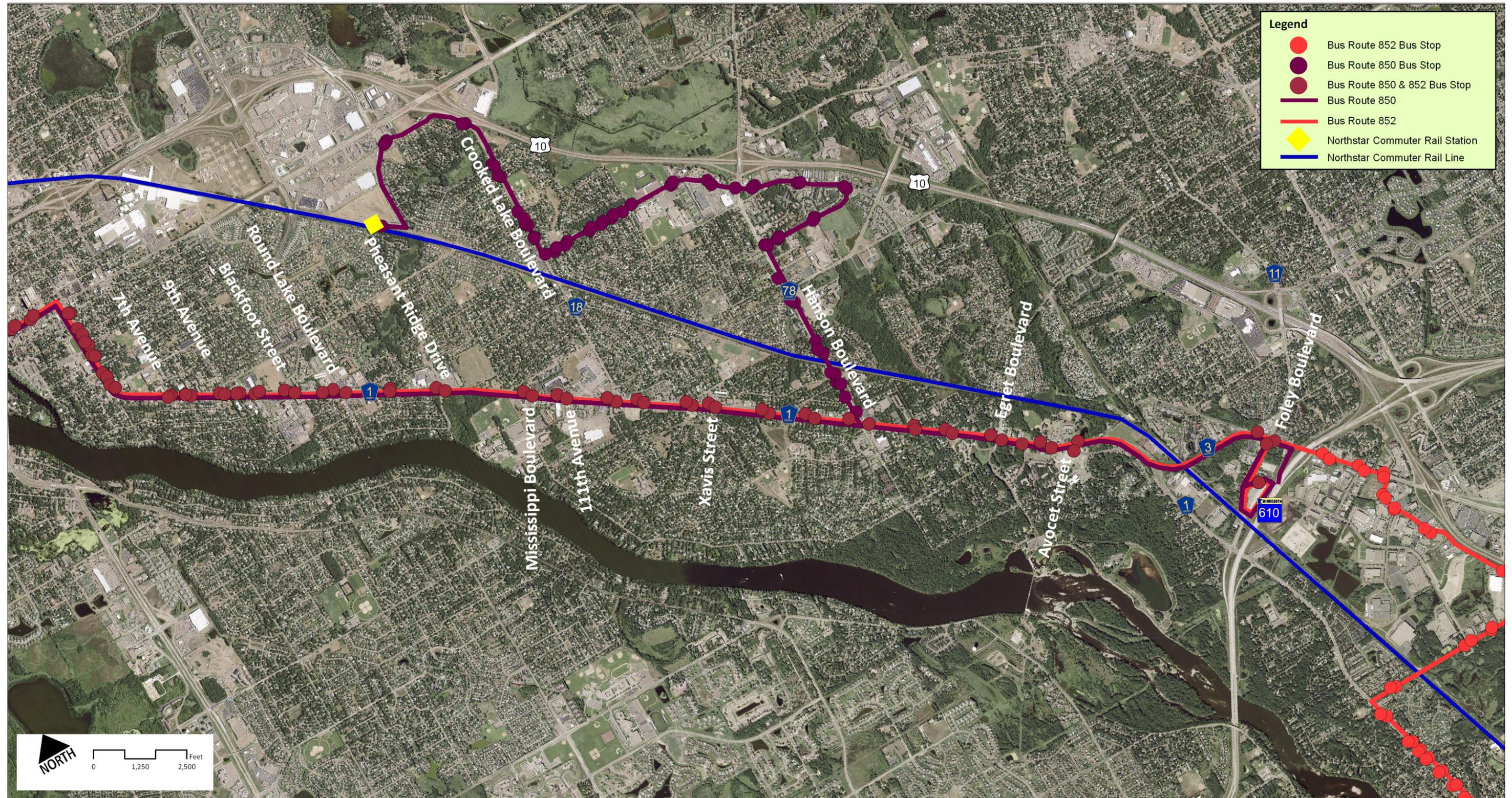


EXHIBIT 2-24 Transit Service

2.11.2 Water Resources

The DNR Public Waters Inventory identifies this section of Coon Creek as a public water; therefore any modifications to the existing culverts under Coon Rapids Boulevard/East River Road would require a permit and coordination with the DNR. Any activities in and around the Coon Creek Watershed District would also require review and approval. Management of storm water runoff is a key concern related to any road improvement given the proximity of Coon Creek and the Mississippi River.

2.11.3 Mississippi National River and Recreation Area

The Mississippi National River and Recreation Area (MNRRA) and Mississippi River Critical Area (Critical Area) boundaries extend into the project study area as shown in **Exhibit 2-25**. The DNR and National Park Service (NPS) provide oversight of the MNRRA and Critical Area program and would review the project with respect to the MNRRA guidelines. The guidelines that are applicable to this project corridor include:

- **7c.** In planning and designing the construction or reconstruction of all public transportation facilities which occur within the river corridor, consideration shall be given to the provision of scenic overlooks for motorists, safe pedestrian crossings and facilities along the river corridor, access to the riverfront in public ownership and reasonable use of the land between the river and the transportation facility.

2.11.4 Cultural Resources

A records search was conducted to determine if any known cultural resources are located within or proximate to the corridor. Several historic structures were documented in downtown Anoka; however, all are located outside the expected area of influence of the project corridor. A historic farmstead (Aranda Giddings Farmstead) was identified north of Coon Rapids Boulevard and west of Round Lake Boulevard, but is believed to no longer exist in this location. Also noted were the Old Anoka Township Hall near Xavis Street and an old brick factory near the intersection of Foley Boulevard and East River Road. Additional investigation will be required to determine if any of these structures remain intact, and if so, coordination with the State Historic Preservation Office (SHPO) would be needed to determine the potential for impacts.

2.11.5 Hazardous Materials

A Minnesota Pollution Control Agency database search (“What’s in my Neighborhood?” and leaking underground storage tank (LUST)/underground storage tank (UST) site database) was conducted for potentially contaminated sites along the corridor. As expected with the types of land uses within the corridor, there were several records of known spills, tanks and leaks, and dump sites within or near the corridor. **Exhibit 2-26** lists the type of potentially contaminated properties, site identification number, and location (address) of the potential contamination. There are 62 sites documented, with some sites having more than one associated record. This list only identifies sites previously documented; it does not represent a comprehensive list of all potential for contamination, nor does it mean that each of the sites listed are contaminated or would require mitigation. A Phase I Environmental Site Assessment (ESA) should be completed prior to acquisition of any right-of-way to determine the effects these sites may have on construction, and the presence of other sites not previously documented.

Site ID	Type of Site	Address
165	LUST	3155 Coon Rapids Blvd, Coon Rapids, MN
764	LUST	2111 Coon Rapids Blvd., Coon Rapids, MN
2341	LUST	871 East River Road, Anoka, MN
2700	LUST	2600 Coon Rapids Blvd, Coon Rapids, MN
4346	LUST	3237 Coon Rapids Blvd, Coon Rapids, MN
5563	LUST	9687 East River Road, Coon Rapids, MN
6439	LUST	1700 Coon Rapids Blvd, Coon Rapids, MN
7833	LUST	9838 East River Road, Coon Rapids, MN
9402	LUST	623 Coon Rapids Blvd, Coon Rapids, MN
10014	LUST	1531 Coon Rapids Blvd, Coon Rapids, MN
10207	LUST	3815 Coon Rapids Blvd, Coon Rapids, MN
10980	LUST	11200 Mississippi Blvd NW, Coon Rapids, MN
11100	LUST	2600 Coon Rapids Blvd, Coon Rapids, MN
13074	LUST	4050 Coon Rapids Blvd, Coon Rapids, MN
14426	LUST	3401 Coon Rapids Blvd, Coon Rapids, MN
15651	LUST	2710 Coon Rapids Blvd, Coon Rapids, MN
16539	LUST	700 East River Road, Anoka, MN
16630	LUST	2111 Coon Rapids Blvd, Coon Rapids, MN
16661	LUST	1937 Coon Rapids Blvd, Coon Rapids, MN
57	UST	1930 Coon Rapids Blvd, Coon Rapids, MN
64	UST	2600 Coon Rapids Blvd, Coon Rapids, MN
97	UST	1700 Coon Rapids Blvd, Coon Rapids, MN
112	UST	2841 Coon Rapids Blvd, Coon Rapids, MN
141	UST	11200 Mississippi Blvd, Coon Rapids, MN
163	UST	3815 Coon Rapids Blvd, Coon Rapids, MN
182	UST	1531 Coon Rapids Blvd, Coon Rapids, MN
184	UST	2111 Coon Rapids Blvd, Coon Rapids, MN
202	UST	3155 Coon Rapids Blvd, Coon Rapids, MN
203	UST	1937 Coon Rapids Blvd, Coon Rapids, MN
219	UST	601 Coon Rapids Blvd, Coon Rapids, MN
4521	UST	3237 Coon Rapids Blvd, Coon Rapids, MN
4532	UST	2710 Coon Rapids Blvd, Coon Rapids, MN
4545	UST	3401 Coon Rapids Blvd, Coon Rapids, MN
4559	UST	2825 Coon Rapids Blvd, Coon Rapids, MN
4587	UST	700 East River Road, Anoka, MN
4632	UST	2721 Coon Rapids Blvd, Coon Rapids, MN
4635	UST	1350 Coon Rapids Blvd, Coon Rapids, MN

EXHIBIT 2-26
Potentially Contaminated Properties



LUST= Leaking Underground Storage Tank

Continued on page 2-24



EXHIBIT 2-25 MNRRRA and Critical Area Boundaries

**EXHIBIT 2-26
(continued)
Potentially
Contaminated
Properties**

Site ID	Type of Site	Address
10305	UST	703 East River Road, Anoka, MN
11796	UST	3397 Coon Rapids Blvd, Coon Rapids, MN
14306	UST	854 East River Road, Anoka, MN
17089	UST	9687 East River Road, Coon Rapids, MN
18177	UST	1925 Coon Rapids Blvd, Coon Rapids, MN
18979	UST	3960 Coon Rapids Blvd, Coon Rapids, MN
19992	UST	623 Coon Rapids Blvd, Coon Rapids, MN
20036	UST	3815 Coon Rapids Blvd, Coon Rapids, MN
20451	UST	1930 Coon Rapids Blvd, Coon Rapids, MN
21158	UST	4050 Coon Rapids Blvd, Coon Rapids, MN
50194	UST	1201 Coon Rapids Blvd, Coon Rapids, MN
51910	UST	2650 Coon Rapids Blvd, Coon Rapids, MN
54335	UST	2620 Coon Rapids Blvd, Coon Rapids, MN
54489	UST	2831 Coon Rapids Blvd, Coon Rapids, MN
55329	UST	9687 Coon Rapids Blvd, Coon Rapids, MN
55545	UST	4101 Coon Rapids Blvd, Coon Rapids, MN
124415	UST	3789 Coon Rapids Blvd, Coon Rapids, MN
124465	UST	3815 Coon Rapids Blvd, Coon Rapids, MN
124796	UST	15351 Coon Rapids Blvd, Coon Rapids, MN
5129	VIC	1312 Coon Rapids Blvd, Coon Rapids, MN
6066	VIC	1430 100th Ave, Coon Rapids, MN
6351	VIC	2710 Coon Rapids Blvd, Coon Rapids, MN
6487	VIC	9534 Foley Blvd NW
573	Unpermitted Dump Site	Coon Rapids Blvd, Coon Rapids, MN
1231	Permitted Solid Waste Dump Site	Highway 1 and Highway 11, Coon Rapids, MN

UST= Underground Storage Tank

VIC = Volunteer Investigation and Clean-up

2.11.6 Environmental Justice

Population, racial/ethnic, and economic data from the 2000 Census were reviewed at the Census Tract and Block Group level. The project area crosses five Census Tracts with 11 Block Groups.

The 2000 Census reported minority population levels in all Block Groups in the project area ranging from zero to 12 percent. This compares to about seven percent in Anoka County as a whole. The population is predominantly white. Specific concentrations or groups of minority populations have not been identified within or near the project corridor.

Low-income populations are defined as persons with incomes below poverty level. The 2000 Census reported low-income population levels in the general study area between zero percent and 11 percent. This compares to about four percent for Anoka County as a whole. Subsidized (Section 8) housing has been identified within or near the project corridor.

2.11.7 Noise

There are expected to be areas of the corridor that currently exceed the federal noise threshold of 70 dBA. Without conducting a detailed noise model for any proposed roadway improvements as compared to the existing conditions, identifying specific noise impacts or the need for noise abatement mitigation is not possible. The areas likely to have the greatest potential for current or future noise impacts are where medium or high density residential uses are located adjacent to the Coon Rapids Boulevard/East River Road right-of-way. Currently there are five areas with medium density residential use along the corridor. These areas are found near Coon Rapids Boulevard/East River Road intersections with 7th Street, Round Lake Boulevard, Crooked Lake Boulevard, Egret Boulevard, and north of the Coon Rapids Boulevard/East River Road split.

Depending on the funding sources for any projects along the corridor, a detailed noise analysis will be required at these and any areas that may be redeveloped to medium density residential use to determine the potential for noise impacts, and determine if noise abatement is required/applicable.

2.11.8 Permits and Approvals

Exhibit 2-27 identifies the permits and approvals that may be required for proposed road improvement projects within this corridor.

Permit	Agency	Action Required
Federal		
Environmental Document	FHWA	
Mn/DOT	Approval (if Federal Funding Used)	
Section 404 Permit	U.S. Army Corp of Engineers	Approval (if needed)
State		
Wetland Conservation Act (Replacement Plan) for new roads and capacity expansion projects	Mn/DOT with review by Board of Soil and Water Resources, and DNR	Approval/Review
Public Water Works Permit	DNR	Permit (if needed)
National Pollutant Discharge Elimination System	MPCA	Permit
General Stormwater Permit for Construction Activity	MPCA	Permit
Section 106 (Historic/ Archeological)	Minnesota SHPO	Consultation (if needed)
Local		
Municipal Consent	Cities of Coon Rapids and Anoka	Approval
Wetland Conservation Act, Restoration Plan	Cities of Coon Rapids and Anoka, Coon Creek Watershed District, Six Cities Water Management Organization, and Lower Rum River Water Management Organization	Consultation
Watershed Management Organization / Watershed District	Coon Creek Watershed District, Six Cities Water Management Organization, and Lower Rum River Water Management Organization	Consultation



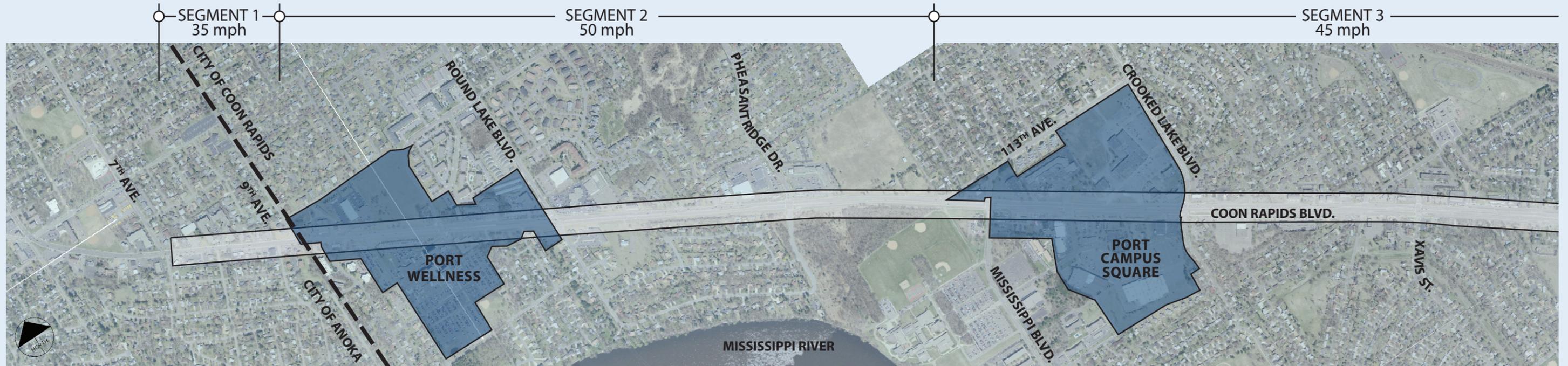
**EXHIBIT 2-27
Permits and
Approvals**

2.12 Visual Quality

Visual quality is defined as the measure of how pleasing a visual perception is to someone. Corridor users, residents and business owners have all expressed dissatisfaction with their visual perceptions of the corridor. Visual clutter, a lack of consistency, limited and unmaintained landscaping, deterioration of infrastructure and significantly expansive pavements all contribute to the poor visual quality of the corridor. An overview of the corridor and its existing visual quality is shown in **Exhibits 2-28** and **2-29**. The photographs in **Exhibits 2-28** and **2-29** document the major areas of concern related to the corridor's existing visual quality.

The existing roadway conditions are displayed graphically for the entire corridor in **Exhibits 2-30** through **2-45**. The exhibits are overlaid on an aerial and display an overview of existing roadway features, sidewalks, mid-block median openings, and frontage roads/access.

Corridor Map - West



Existing Visual Quality Inventory



Segment 1 - Anoka

Streetscape has no organization or design character - no Anoka-themed enhancements to reinforce community identity.

Sidewalks located at the street edge do not provide physical and visual separation, and contribute to continuous, expansive pavements

Segment 2 - Coon Rapids

Parking and service area pavements are expansive and are not screened from public view.

Site furniture and seating/rest areas for sidewalk and trail users are not provided, except for the occasional unmaintained revenue bench.

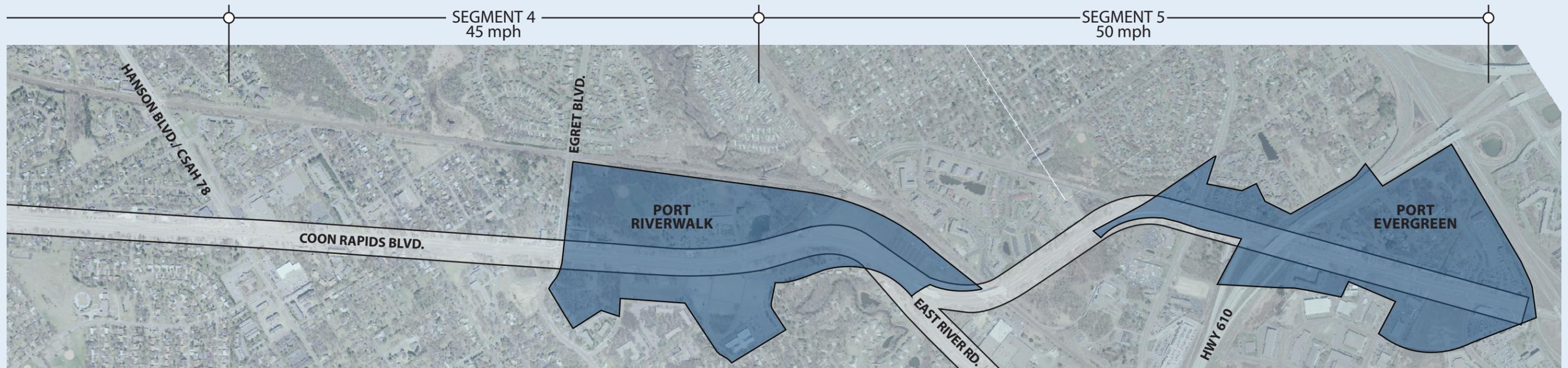
Segment 3 - Coon Rapids

Unkept and limited landscape medians provide very little 'greenspace' within this expansive, heavily-paved corridor.

Overhead power lines are unsightly and restrict the opportunity for large overstory tree growth.

EXHIBIT 4-6 Visual Quality Overview (1 of 2)

Corridor Map - East



Segment 4 - Coon Rapids

The many signs, traffic signals and light poles create 'visual clutter' which is distracting to pedestrians and motorists.

Large and inconsistent business signs dominate the corridor edge and create unsafe conditions for pedestrians

Segment 5 - Coon Rapids

Pedestrian paths suggest a lack of concern for pedestrians and reinforce the need for improving sidewalk and trail connectivity.

Limited decorative fencing, pylons and landscaping begin to create a unique character for the Port Riverwalk area, an area within the corridor with much-improved visual quality.

EXHIBIT 4-6 Visual Quality Overview (2 of 2)

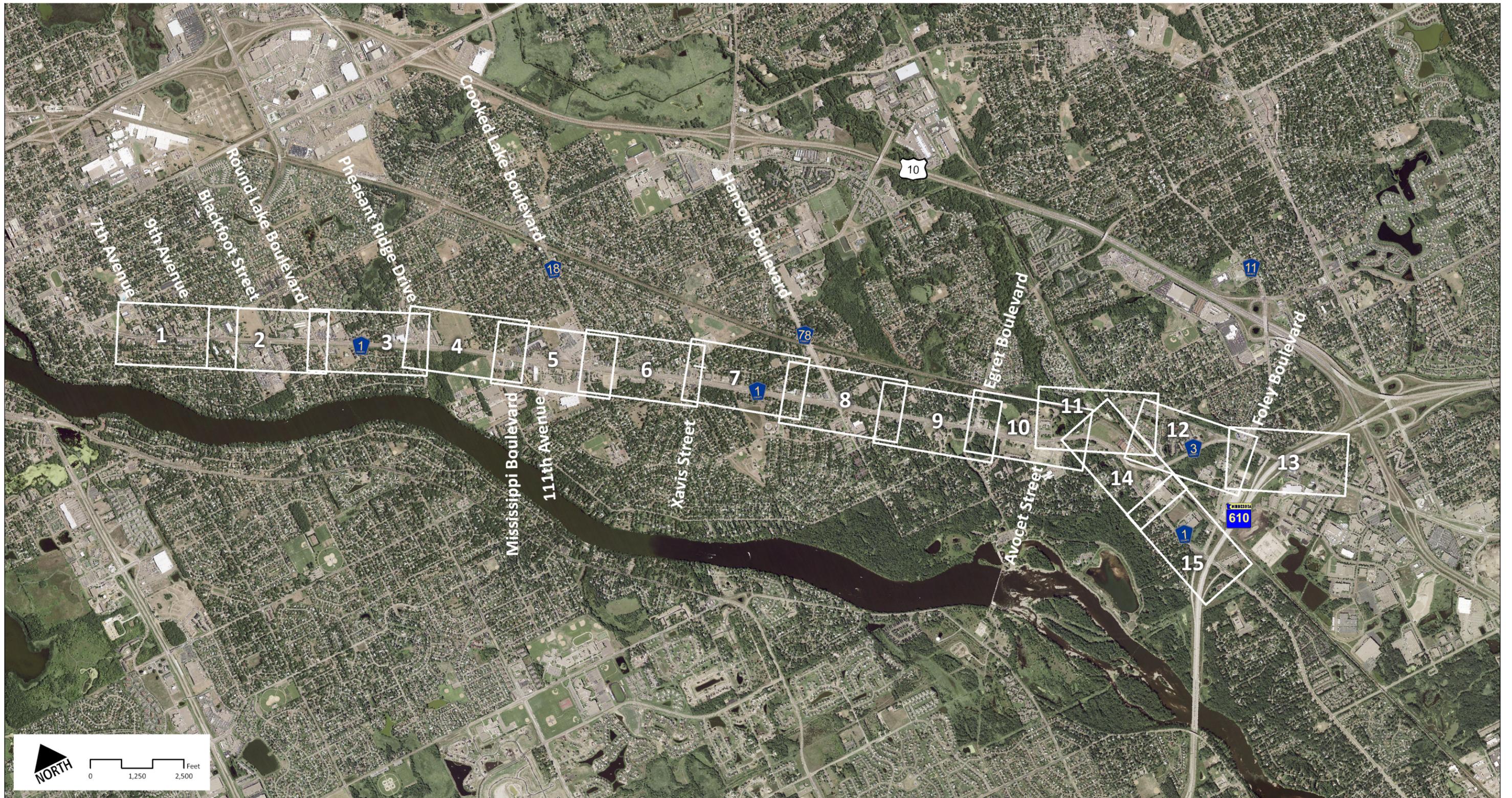


EXHIBIT 2-30 Existing Roadway Features (Index)

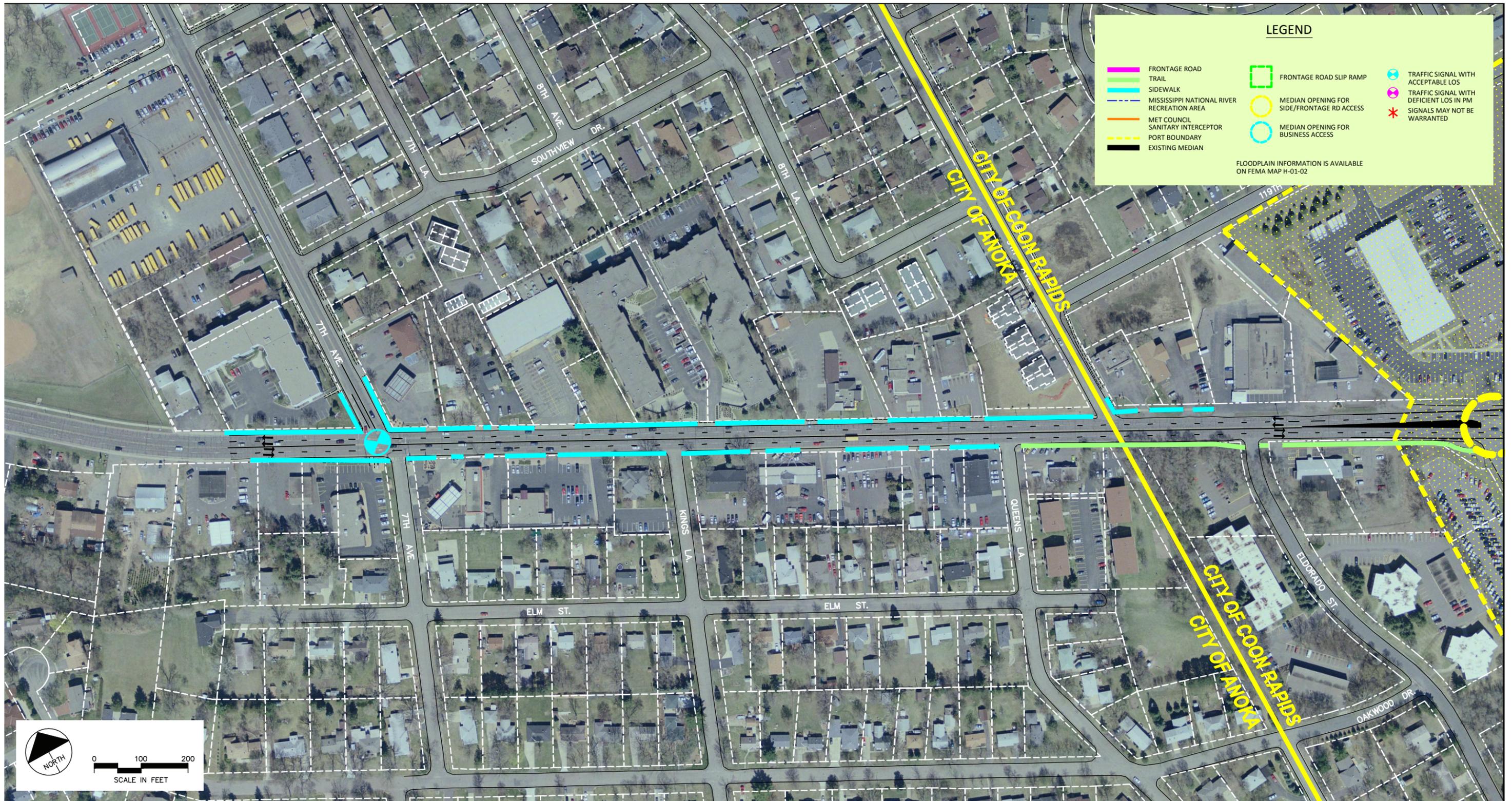


EXHIBIT 2-31 Existing Roadway Features (1 of 15)

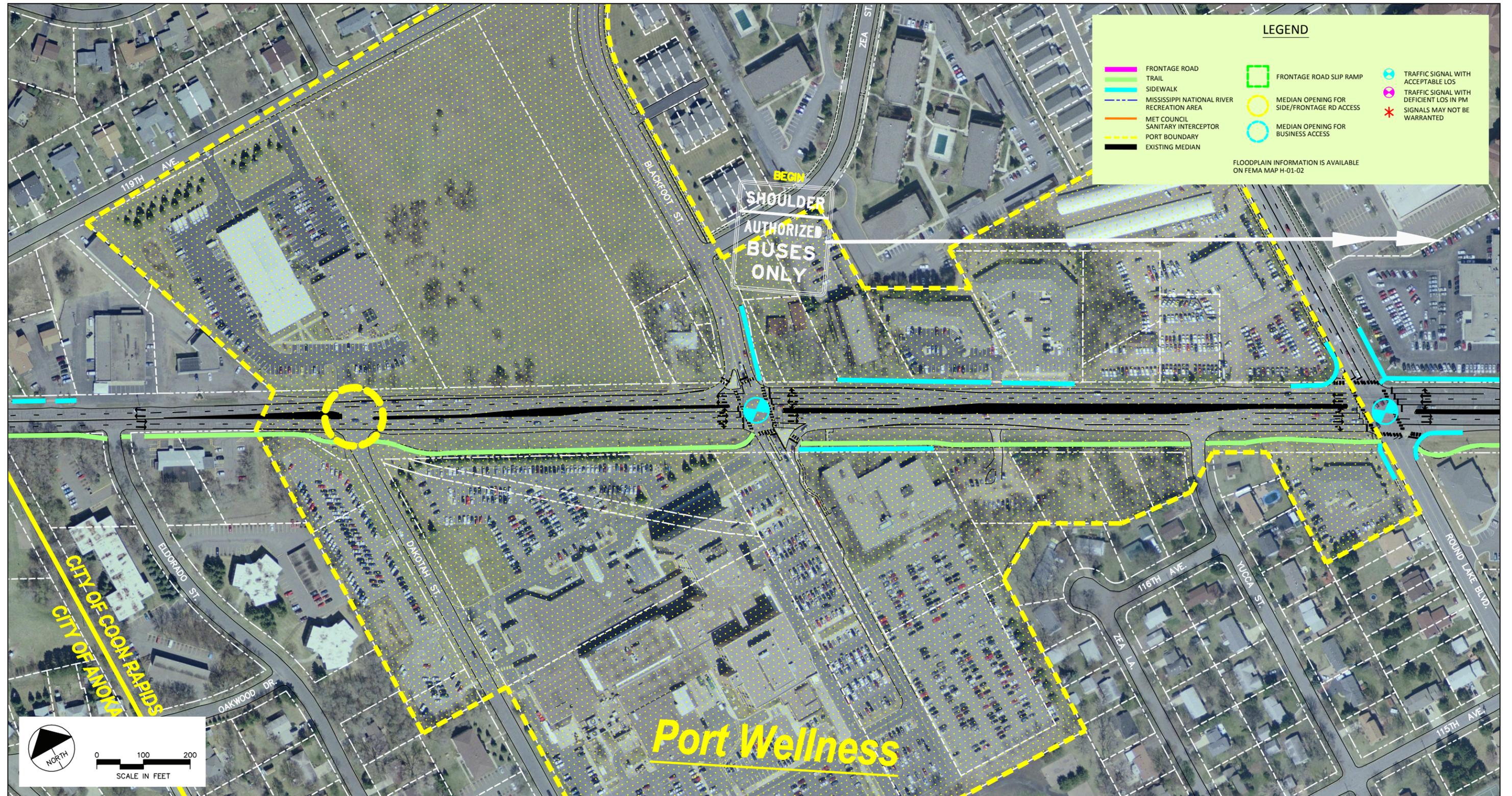


EXHIBIT 2-32 Existing Roadway Features (2 of 15)

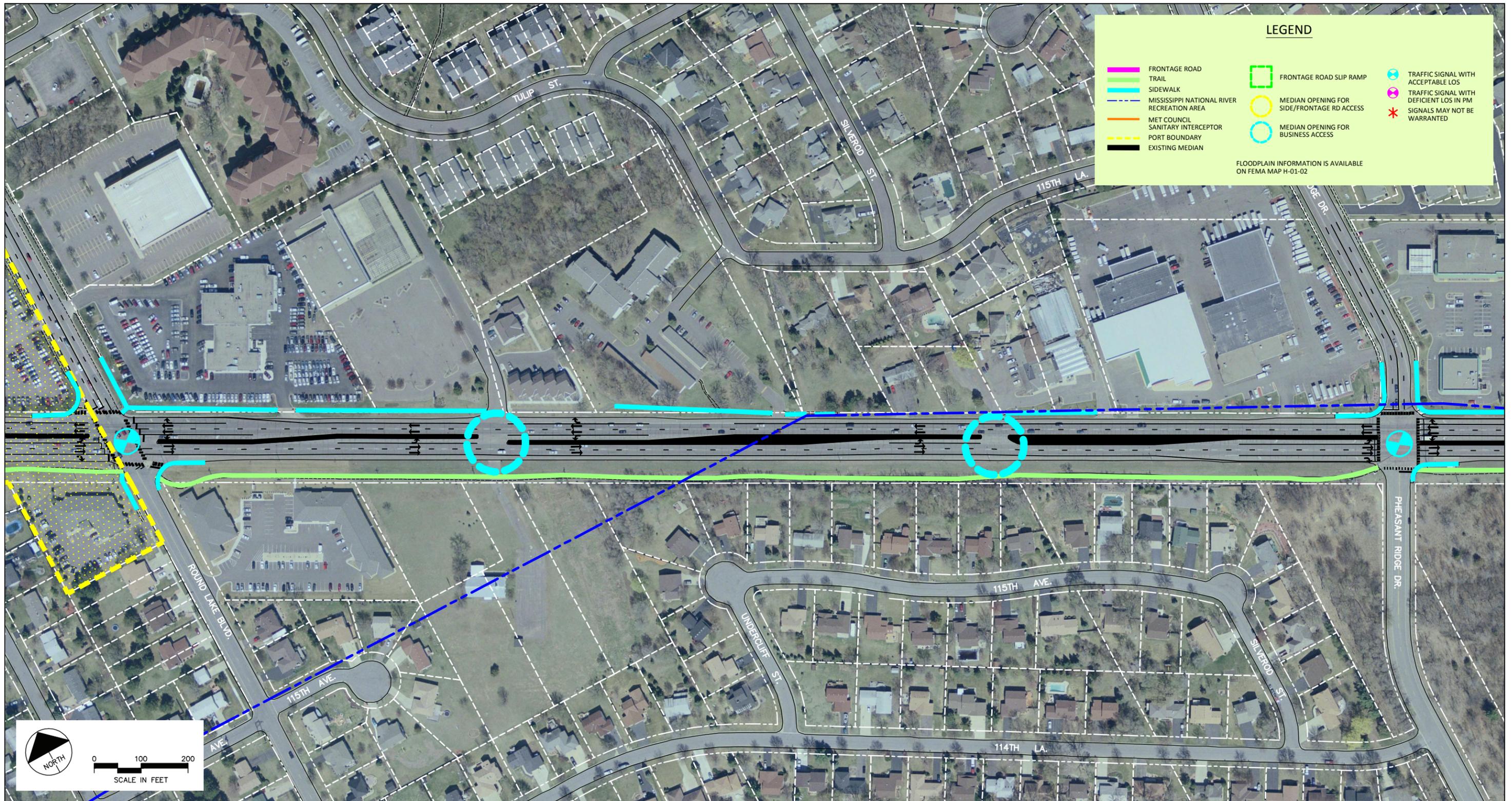


EXHIBIT 2-33 Existing Roadway Features (3 of 15)



EXHIBIT 2-34 Existing Roadway Features (4 of 15)

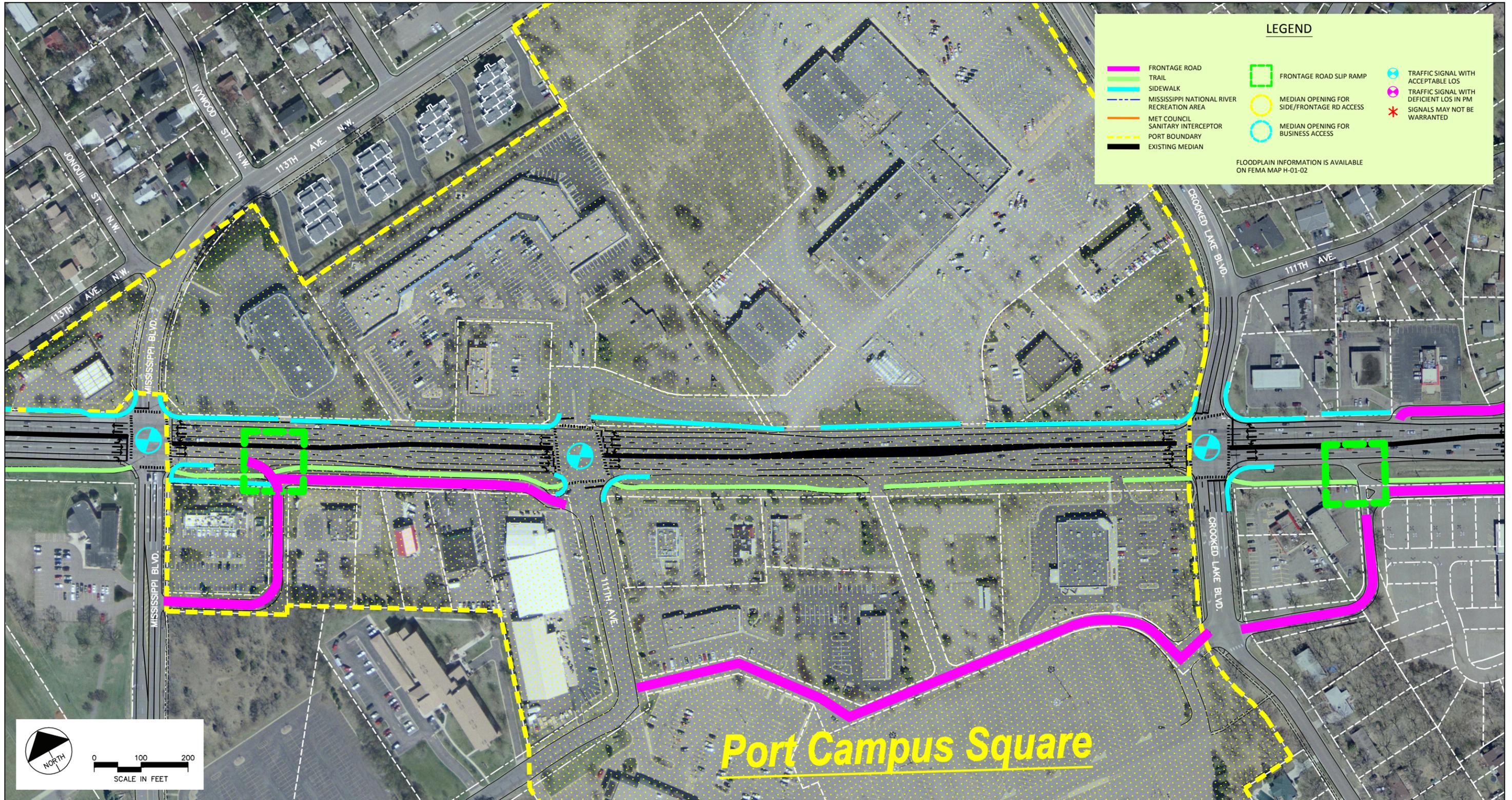


EXHIBIT 2-35 Existing Roadway Features (5 of 15)

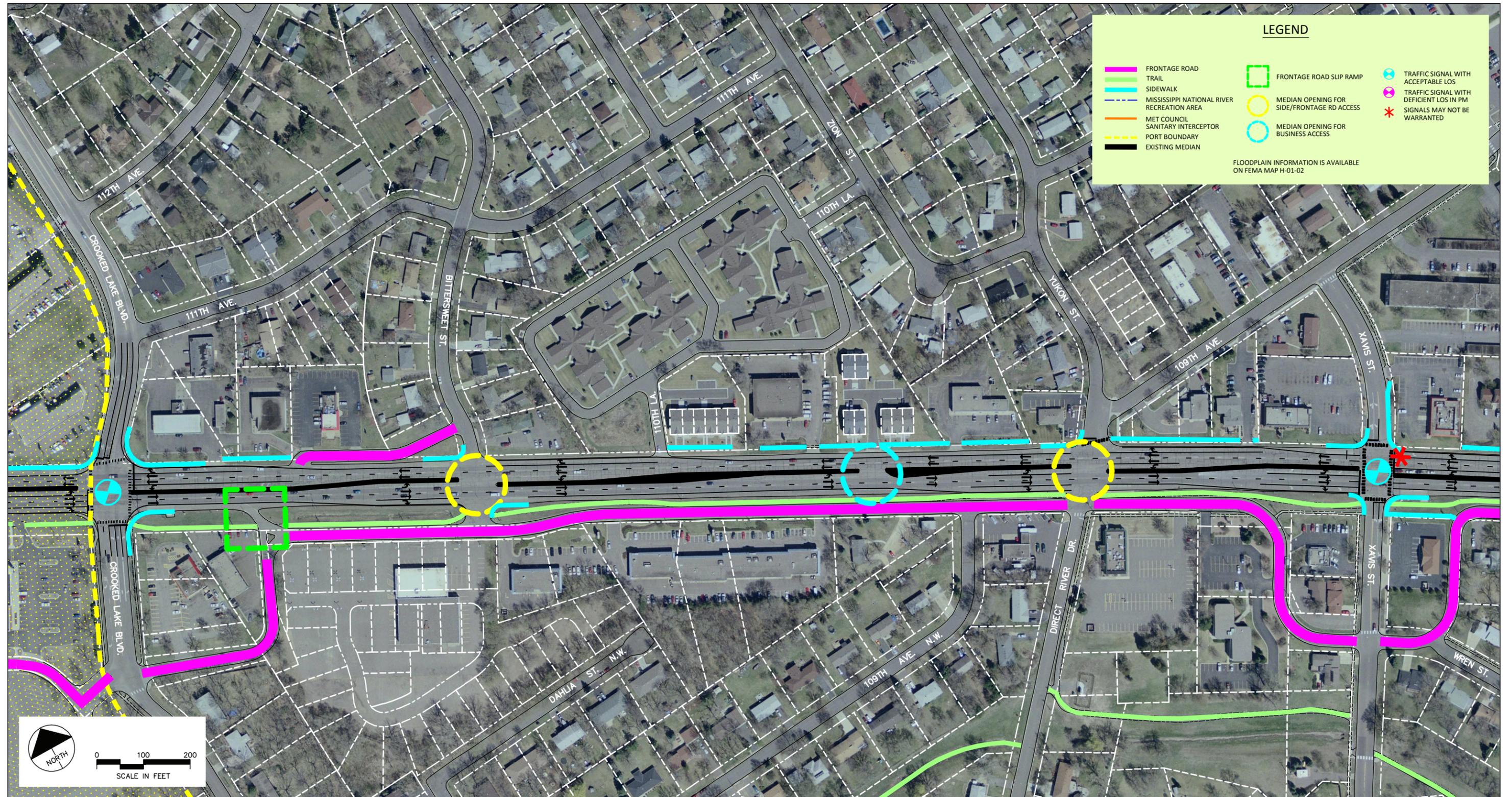


EXHIBIT 2-36 Existing Roadway Features (6 of 15)

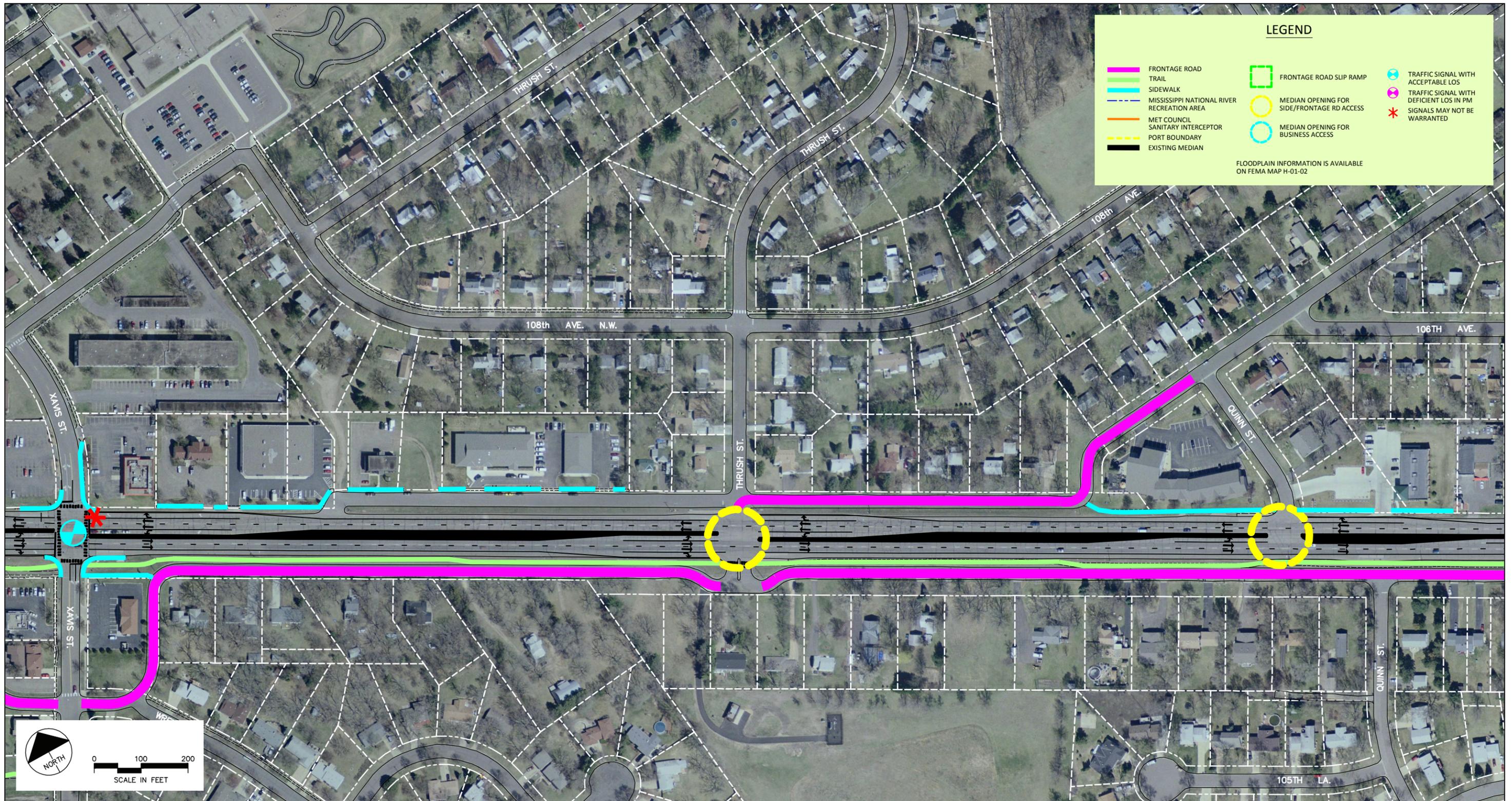


EXHIBIT 2-37 Existing Roadway Features (7 of 15)

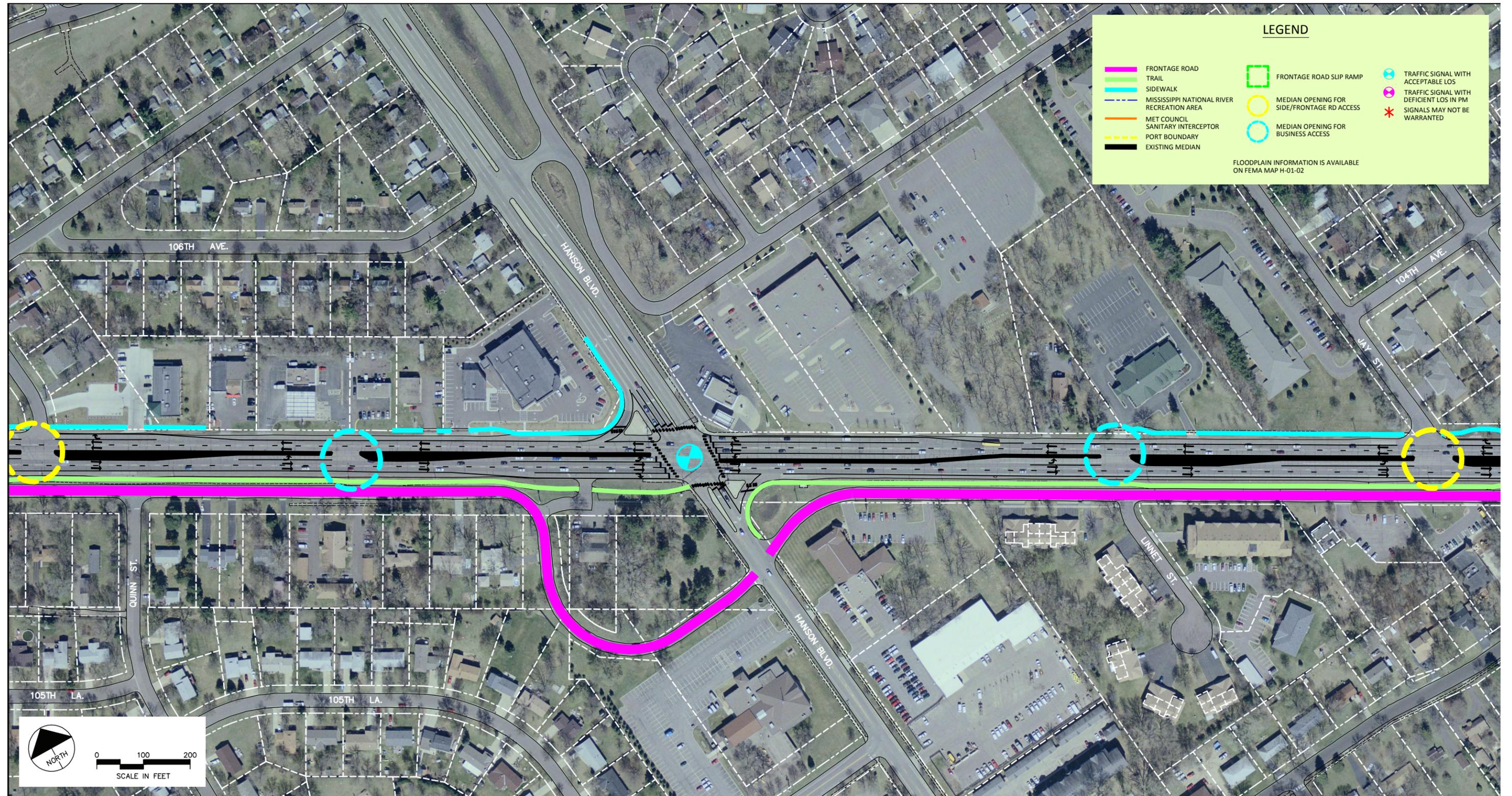


EXHIBIT 2-38 Existing Roadway Features (8 of 15)

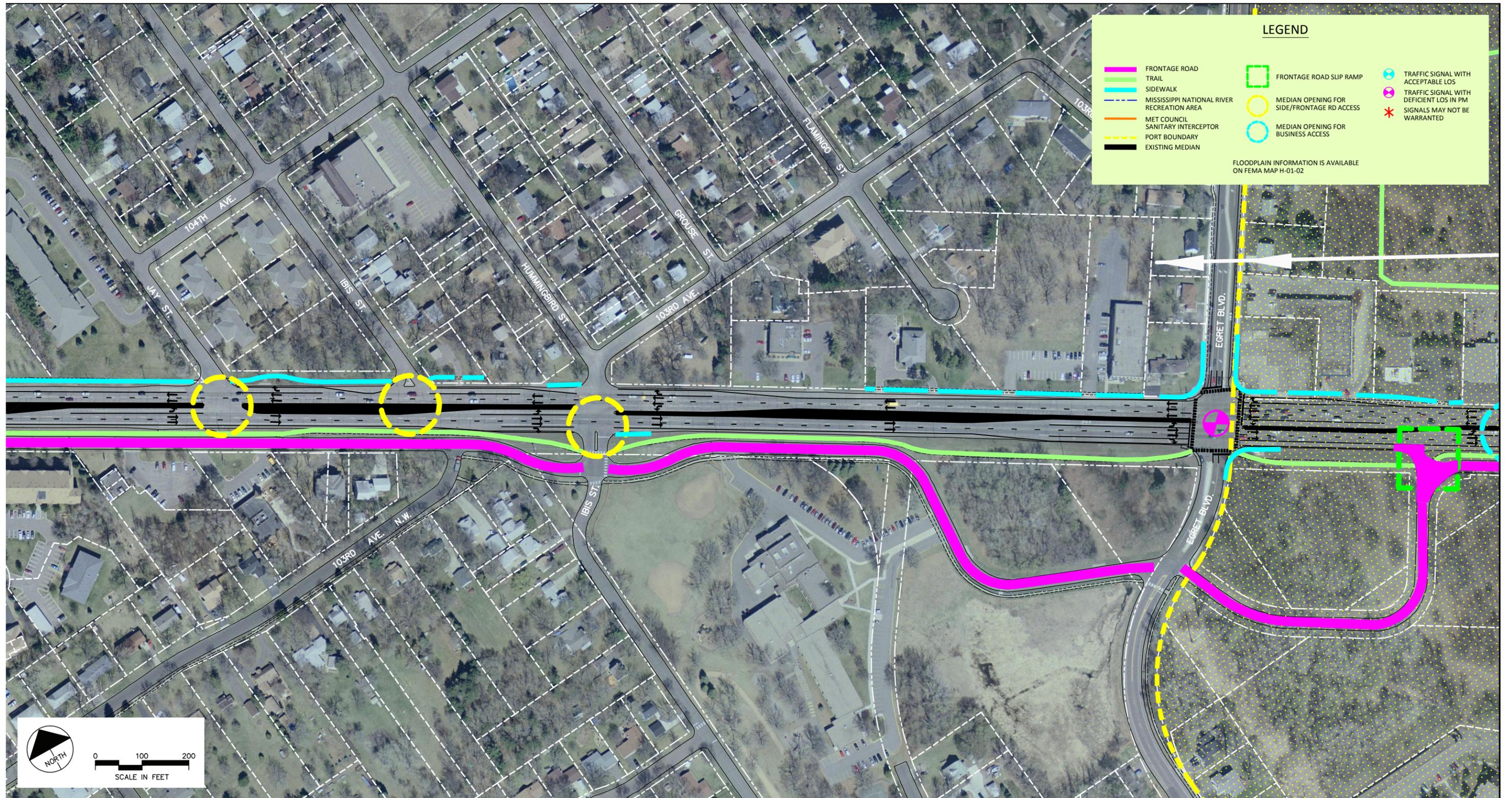


EXHIBIT 2-39 Existing Roadway Features (9 of 15)

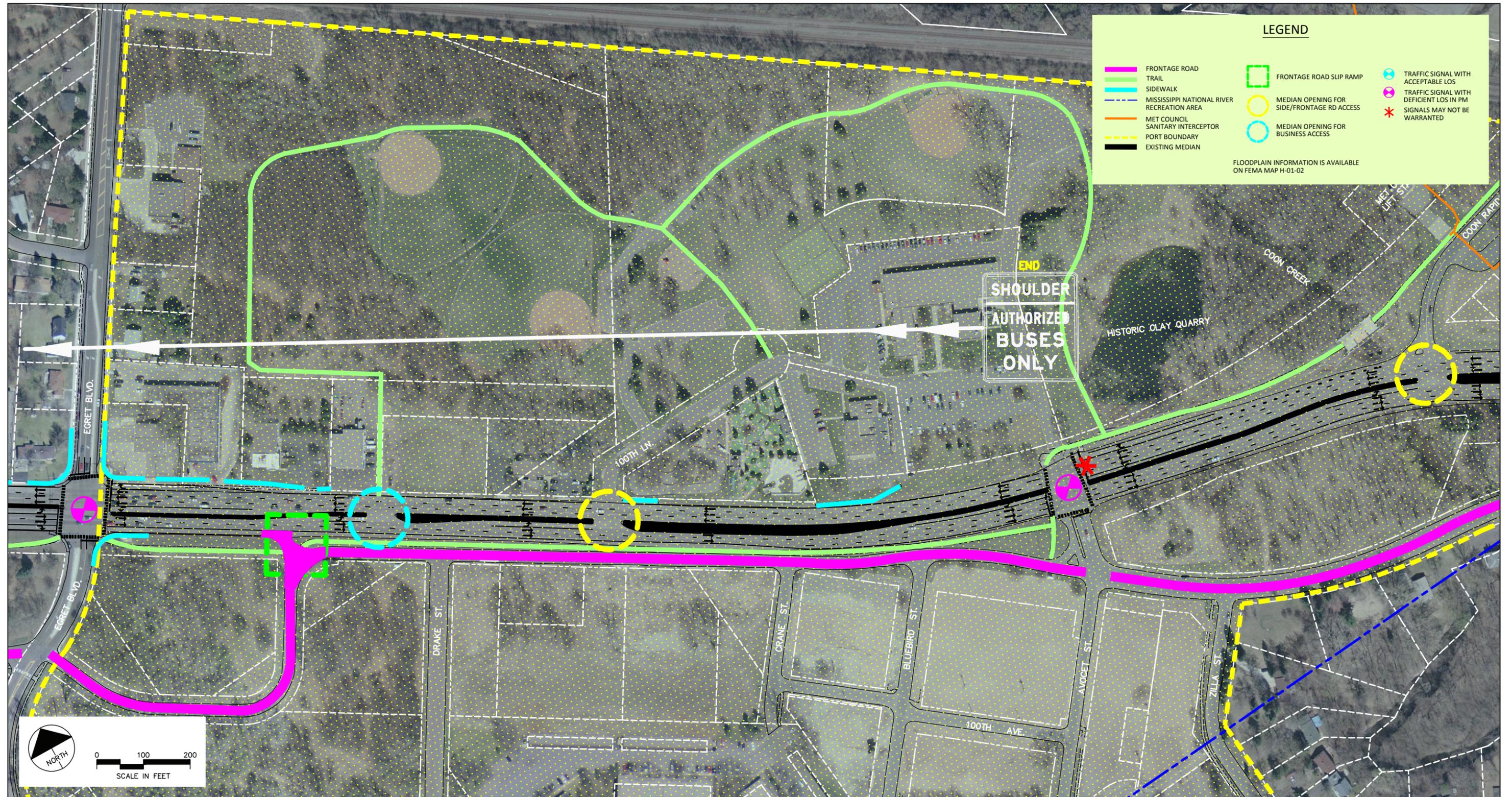


EXHIBIT 2-40 Existing Roadway Features (10 of 15)

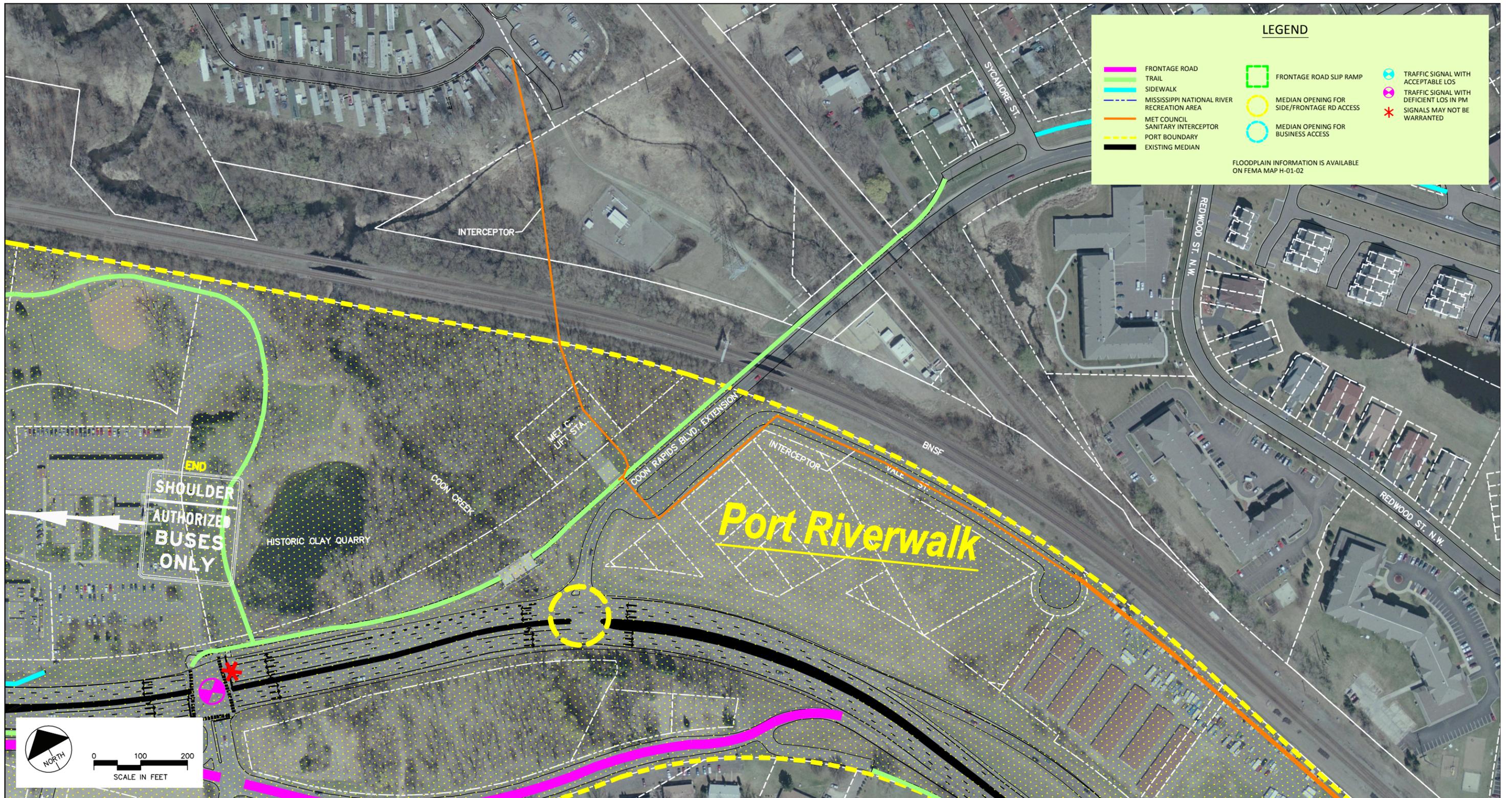


EXHIBIT 2-41 Existing Roadway Features (11 of 15)

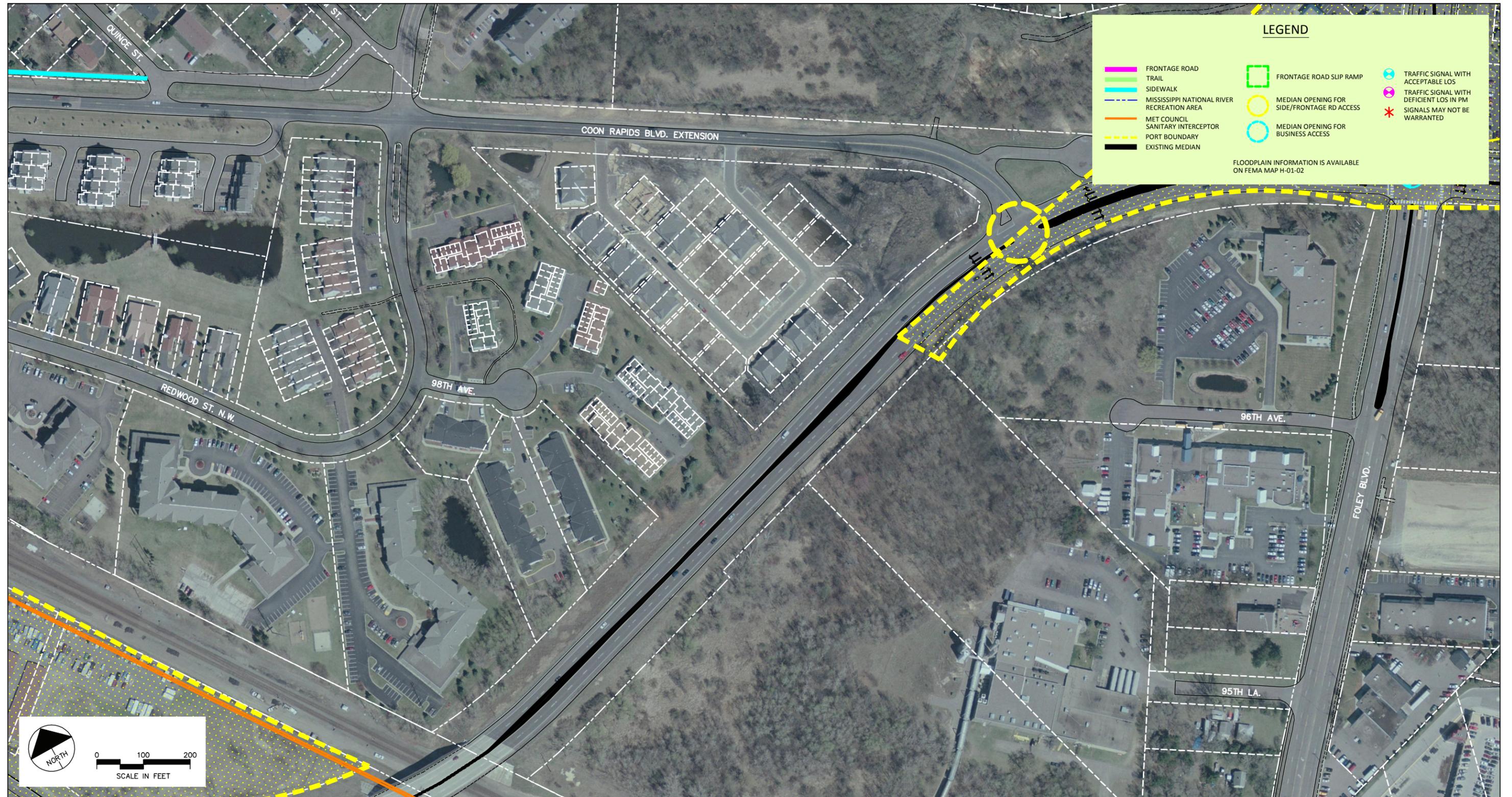


EXHIBIT 2-42 Existing Roadway Features (12 of 15)

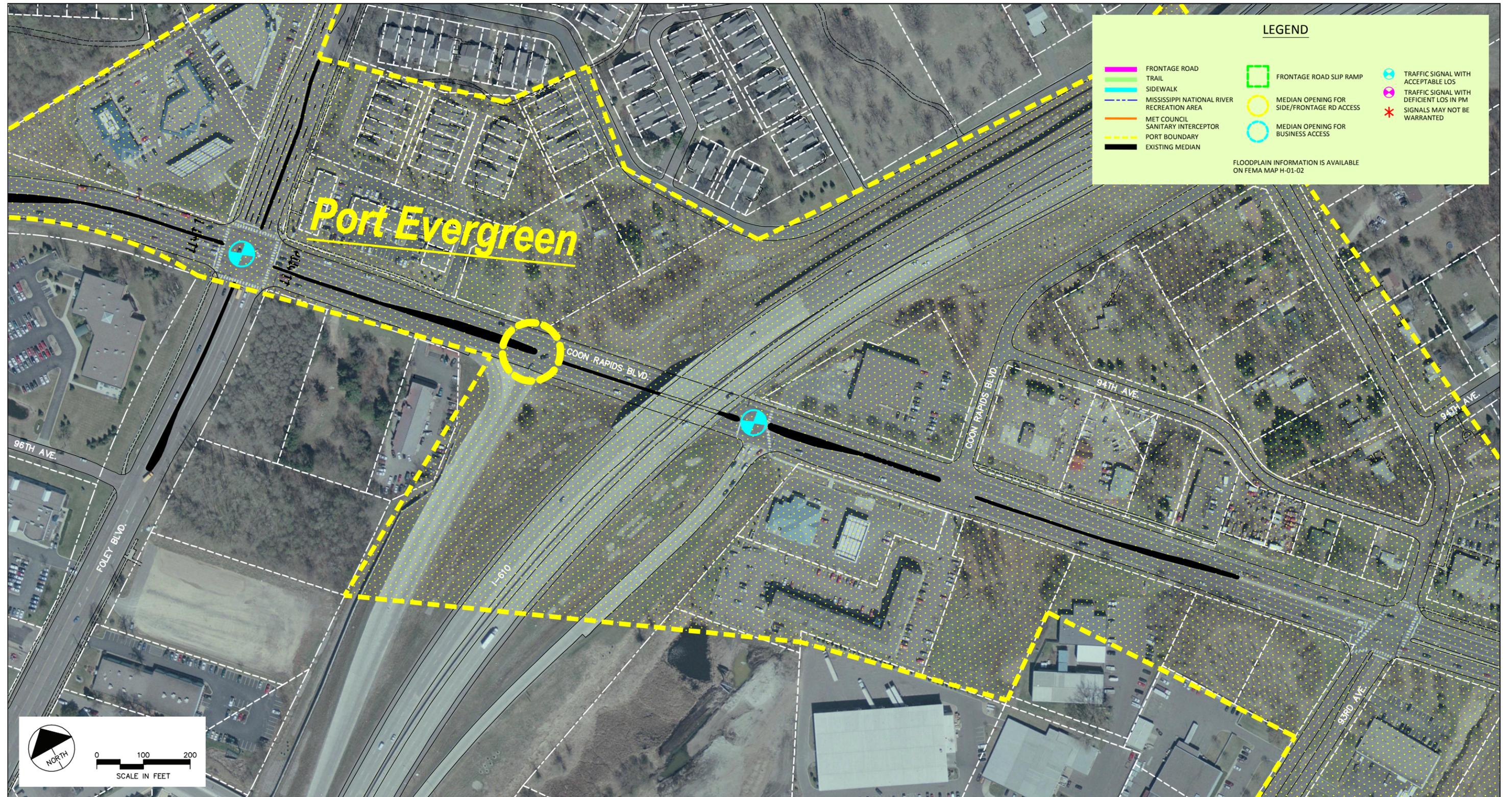


EXHIBIT 2-43 Existing Roadway Features (13 of 15)

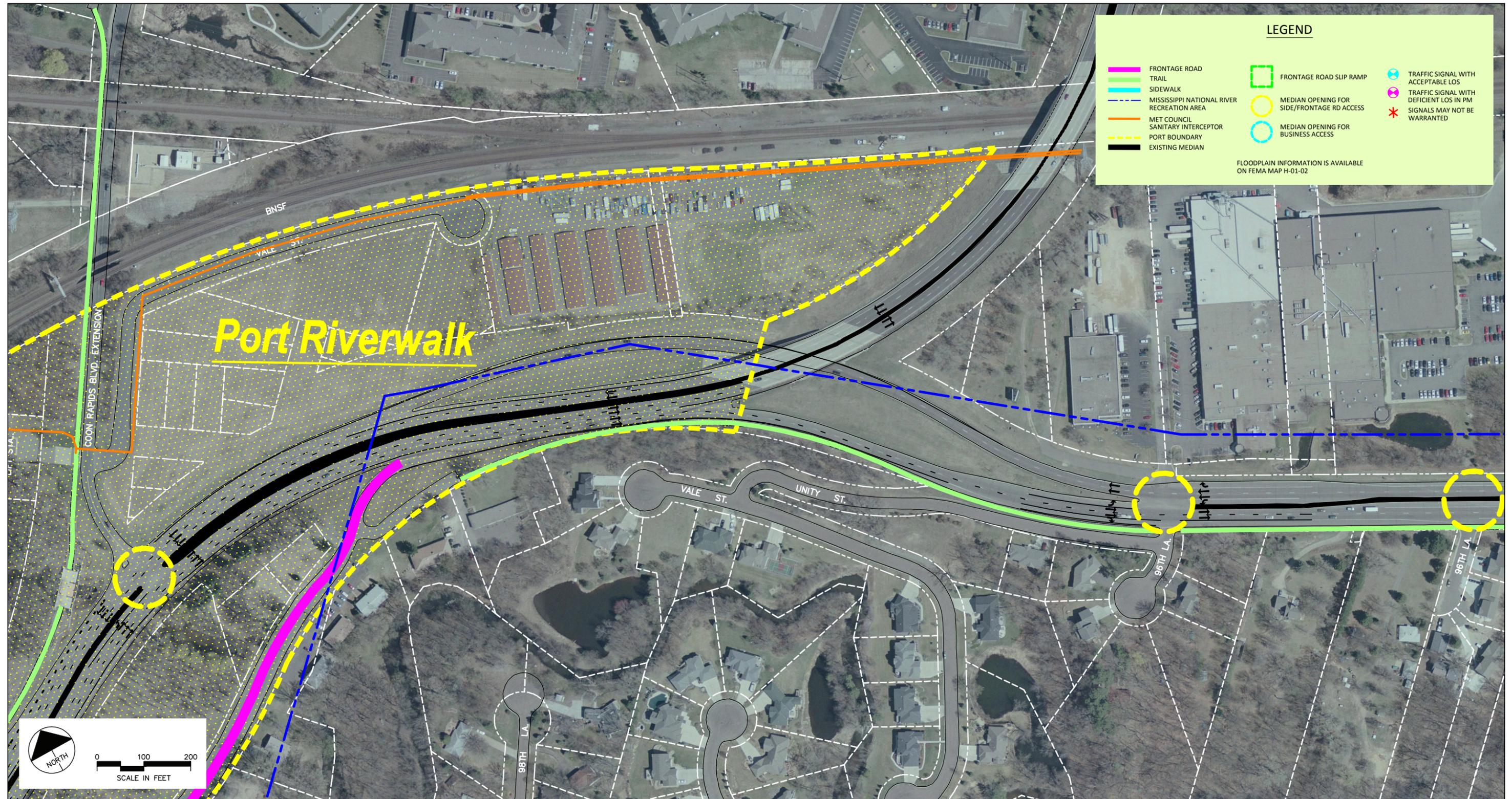


EXHIBIT 2-44 Existing Roadway Features (14 of 15)

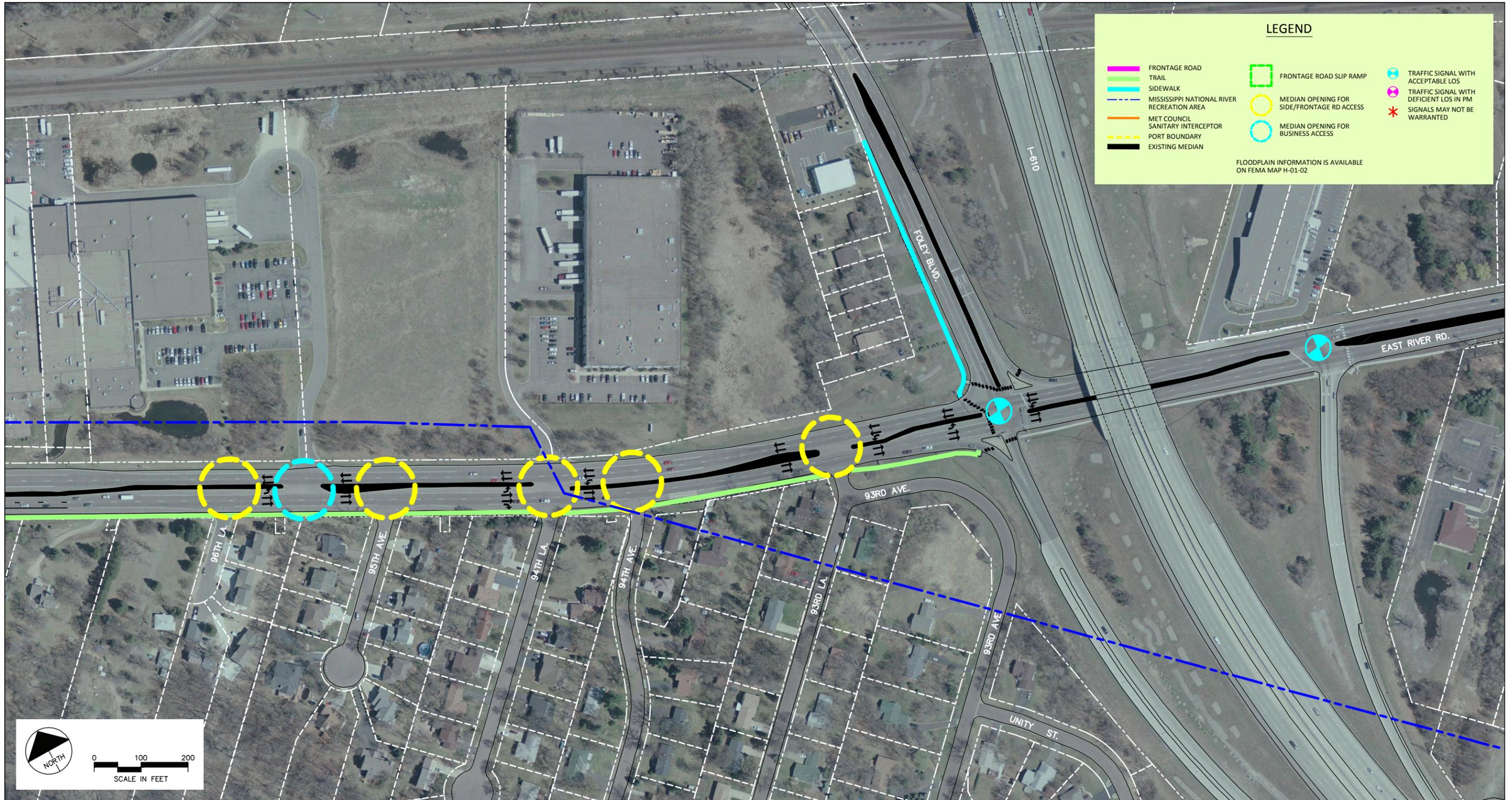


EXHIBIT 2-45 Existing Roadway Features (15 of 15)