

# **TRAVEL DEMAND MANAGEMENT PLAN**

for

## **Currie Park Lofts**

in

## **Minneapolis, MN**

**May 3, 2013**



RLK Project No. 2011-194-M

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# TRAVEL DEMAND MANAGEMENT PLAN

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## Minneapolis, MN

May 3, 2013

I hereby certify that this plan, specification, or report was prepared by me, or under my direct supervision, and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota:



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Stephen J. Manhart, P.E., PTOE, PTP

Date: May 3, 2013 Lic. No.: 22428

RLK Project No. 2011-194-M

# TRAVEL DEMAND MANAGEMENT PLAN

## Currie Park Lofts

## Minneapolis, MN

May 3, 2013

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Prepared For:

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RLK Project No. 2011-194-M

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## I. INTRODUCTION

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Fine Associates, LLC plans to redevelop a site in the Cedar/Riverside neighborhood of the City of Minneapolis. The redevelopment will occur in two phases. Phase 1 plans for the site include a six-level, 259-unit mid-rise apartment building, as well as 3,000 square feet of child day-care, 1,950 square feet of restaurant, and 700 square feet of office use. The Phase 1 site will also include surface and structured parking for 242 vehicles. Phase 2 plans for the site include a multi-level, 110 unit apartment building with off-street parking for 102 spaces.

In the future, it is possible that a third phase of the development would be proposed as Currie Park Developments, LLC, owns a building and related parking lot at 1501-1507 6<sup>th</sup> Street S., which is separated from the Currie Park Lofts development land by 6<sup>th</sup> Street S. At the time of this submittal of this TDM plan, the land uses for Phase 3 are not known. When a future phase of this land use is proposed for



development, an update or addendum to the TDMP will be prepared incorporating those future land uses, and will be assessed at that time.

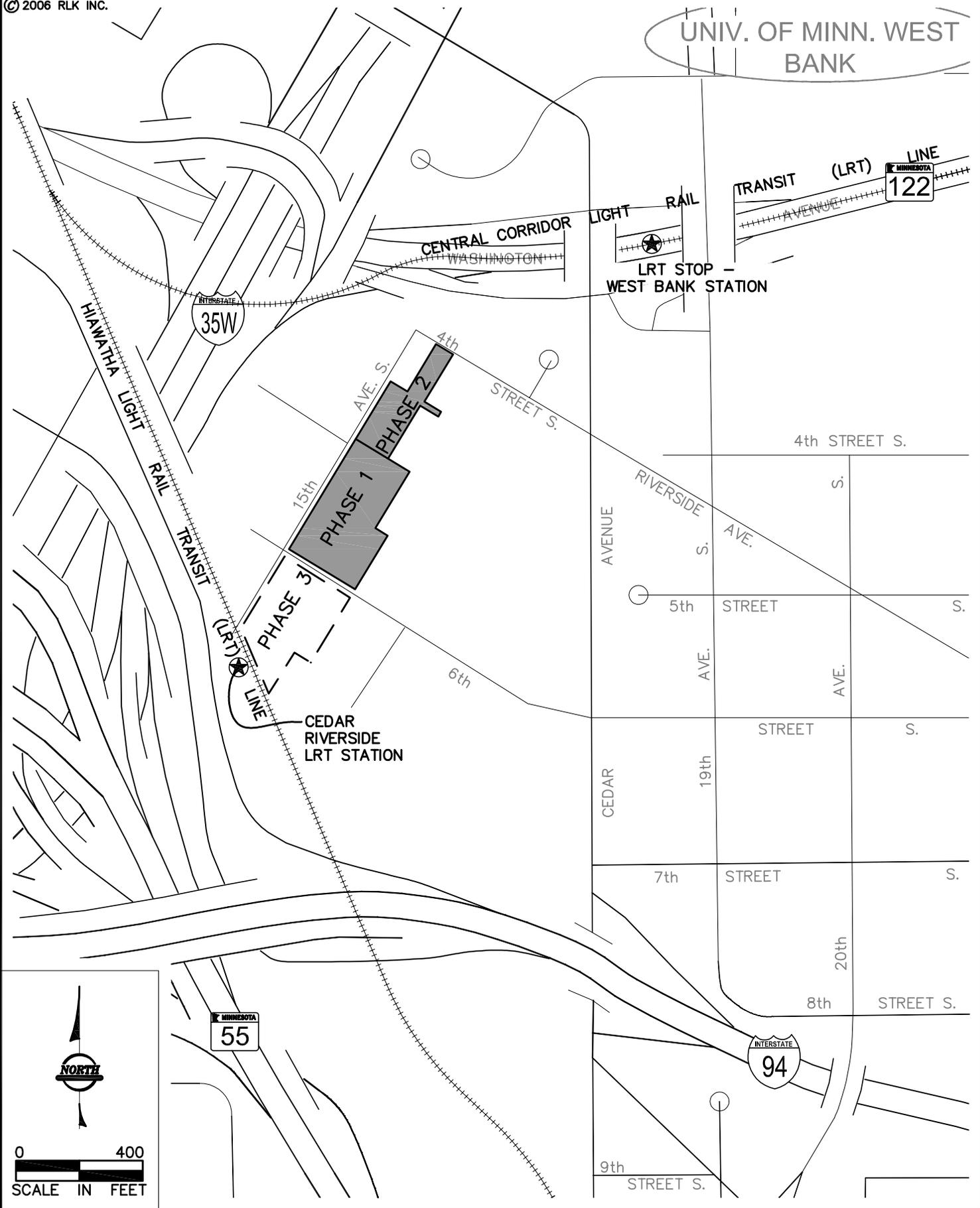
The site, situated just west of the Riverside Plaza high rise complex is located immediately adjacent to the Cedar Riverside Light Rail Transit (LRT) stop and near the University of Minnesota West Bank and Augsburg University (See Figure 1). Currently, the site is mostly vacant, with the exception of a house at the corner of South 6<sup>th</sup> Street and 15<sup>th</sup> Avenue South. Phase 1 development completion and occupancy are assumed by 2015 (See Figure 1).

The Phase 2 development area extends northeasterly to S. 4<sup>th</sup> Street on the east side of S. 15<sup>th</sup> Avenue (See Figure 2). Currently, this site is mostly vacant, with the exception of the Mixed Blood Theatre (not part of this development) at the corner of S. 4<sup>th</sup> Street and 15<sup>th</sup> Avenue South. Phase 2 development completion and occupancy are assumed to be late 2016, after the completion of Phase 1.

The site plan shows the Phase 1 apartment building encompassing the southerly portion of the site, with the off-street parking proposed through one access - from 15<sup>th</sup> Avenue South (See Figure 2). The access driveway will connect to at-grade and structured parking on site. Phase 2 will extend north from Phase 1 to S. 4<sup>th</sup> Street. An access driveway will connect to surface parking from S. 4<sup>th</sup> Street, and another proposed driveway will serve underground parking on-site from S. 15<sup>th</sup> Avenue.

This Travel Demand Management Plan outlines the ways in which Phases 1 and 2 of the proposed redevelopment will help Minneapolis achieve their goals of enhancing the local transportation system. These goals are to be achieved by proper land use selection, site design and implementation of specific vehicular demand reduction strategies to encourage use of alternate modes of travel, enhance pedestrian friendliness, and achieve a balance in the needs of all users of the transportation system.

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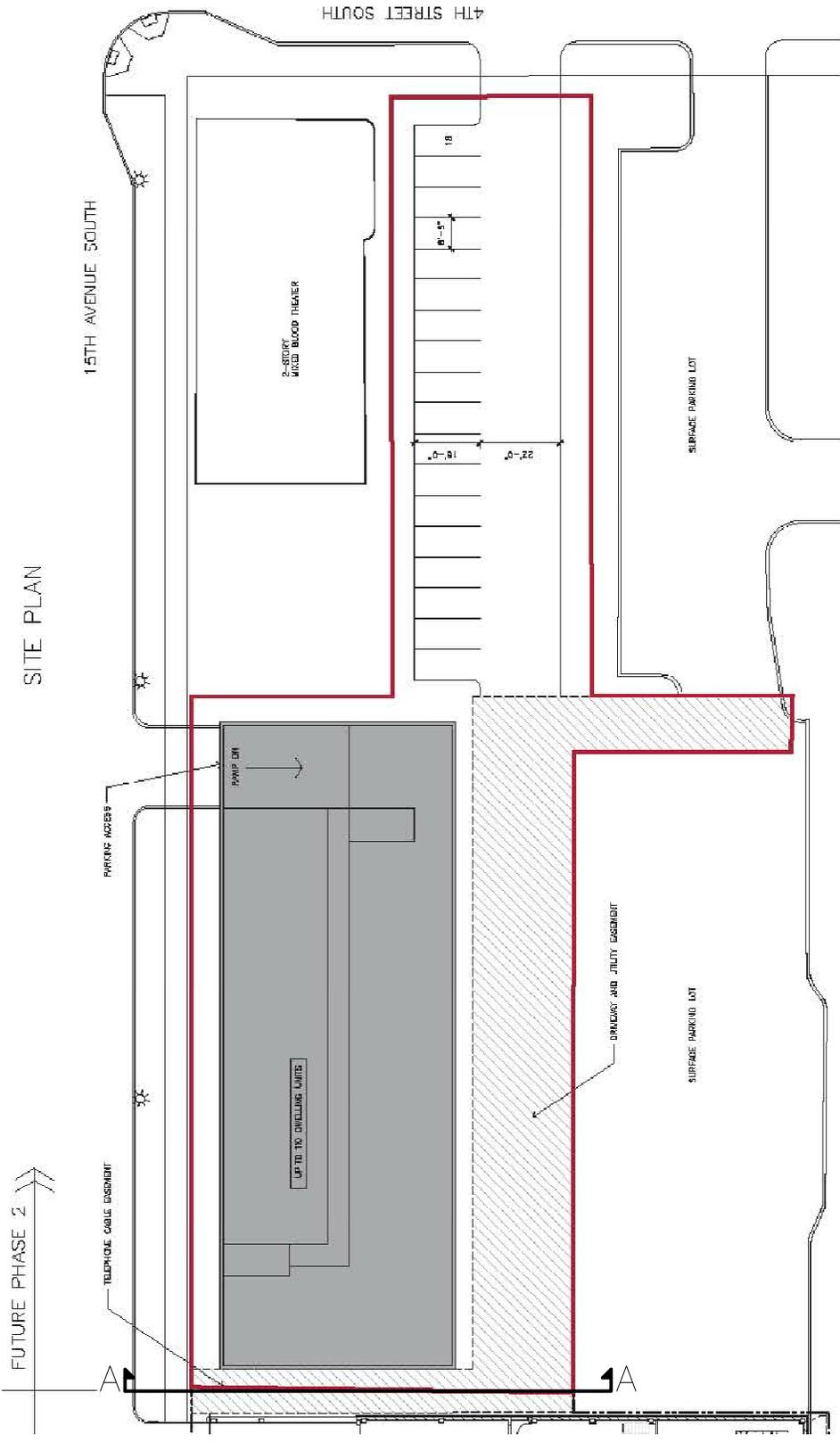
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# CURRIE PARK LOFTS VICINITY MAP

Figure #
1
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**APARTMENT UNITS**  
110 TOTAL

**PARKING**  
84 STALLS (BELOW GRADE)  
18 STALLS @ GROUND FLR

**BIKE PARKING**  
TOTAL: 110

102 TOTAL STALLS

# CURRIE PARK REDEVELOPMENT

## CONCEPT SITE PLAN - PHASE 2

Figure #  
**2B**

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## II. LAND USES AND ZONING

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The site is in an R6, Multi-Family, zoning district. The Minneapolis Zoning Code notes the following about the R6 zone:

- The R6 Multiple-family District is established to provide an environment of high density apartments, congregate living arrangements and cluster developments on lots with a minimum of five thousand (5,000) square feet of lot area and at least four hundred (400) square feet of lot area per dwelling unit. In addition to residential uses, institutional and public uses and public services and utilities may be allowed.

The site is also within a PO, Pedestrian Oriented, overlay zoning district, and a UA, University Area overlay zoning district. Minneapolis’ Zoning Code describes each Zoning District as follows:

- The PO Pedestrian Oriented Overlay District is established to preserve and encourage the pedestrian character of commercial areas and to promote street life and activity by regulating building orientation and design and accessory parking facilities, and by prohibiting certain high impact and automobile-oriented uses.
- The UA University Area Overlay District is established to ensure high quality residential development through site design and off-street parking regulations that acknowledge the unique demands on land uses near a major center of educational employment and enrollment.

The site, as currently proposed, fits within these zoning descriptions. To make way for the proposed residential land uses, one existing building totaling 4,650 square feet will be relocated. Table 1, below describes the changes that will occur with redevelopment of the site:

**Table 1  
Site Land Uses – Existing and Proposed**

	<b>Existing Land Uses</b>	<b>Proposed Land Uses</b>
Phase 1	Single Family Residential - 4,650 sq. ft./2-story building	Multi-Family Residential – 259 Units Child Day-Care – 3,000 sq. ft. Restaurant – 1,950 sq. ft. Office – 700 sq. ft. Off-Street Parking – 242 stalls
Phase 2	Vacant land	Multi-Family Residential – 110 Units Off-Street Parking – 102 stalls

The Franklin-Cedar/Riverside Area Master Plan, completed in 2001, outlines goals for transit-oriented redevelopment in the Cedar/Riverside Area.<sup>1</sup> Although the study predicts, “limited potential for additional development at the Cedar-Riverside station over the next 20 years,” it also goes on to note the potential for market rate and/or student housing. Additional medium- to high-density housing as the first of several recommended uses for Cedar/Riverside area transit-oriented redevelopment. The scale of housing proposed in this development is consistent with these plans.

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<sup>1</sup> Franklin-Cedar/Riverside Area Master Plan, adopted by Minneapolis City Planning Commission, 12/11/2001.

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### III. PEDESTRIAN, BICYCLE AND TRANSIT USE

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Due to its location just east of Downtown Minneapolis, within one block of the Cedar/Riverside LRT stop and within walking distance of the University of Minnesota West bank and Augsburg College campuses, the Currie Park Residential Redevelopment site is well-situated to facilitate use of alternate modes of transportation.

#### A. Pedestrian

The Franklin-Cedar/Riverside Area Master Plan (page 37) calls for the following improvements to promote pedestrian use in the vicinity of the site:

“...[P]lacement of a new development at the corner of 6<sup>th</sup> Street and 15<sup>th</sup> Avenue that will provide a “front door” to the station visible from Cedar Avenue and increase activity levels in the station block. Redevelopment of vacant and underutilized industrial buildings along 15<sup>th</sup> Avenue is also recommended to increase activity levels in the neighborhood...”

Review of the site plan reveals the following characteristics in support of the goals noted in the Master Plan:

- Creation of a 6-story residential building to serve as the “front door” to the Cedar/Riverside LRT station.
- Redevelopment of several of the vacant and underutilized 15<sup>th</sup> Avenue land uses.
- Creation of two at-grade courtyards.

In addition, the following will all promote pedestrian activity:

- Proximity of the site to the University of Minnesota West Bank (approximately 3 blocks)
- Proximity of the site to Augsburg College (approximately 4 blocks)

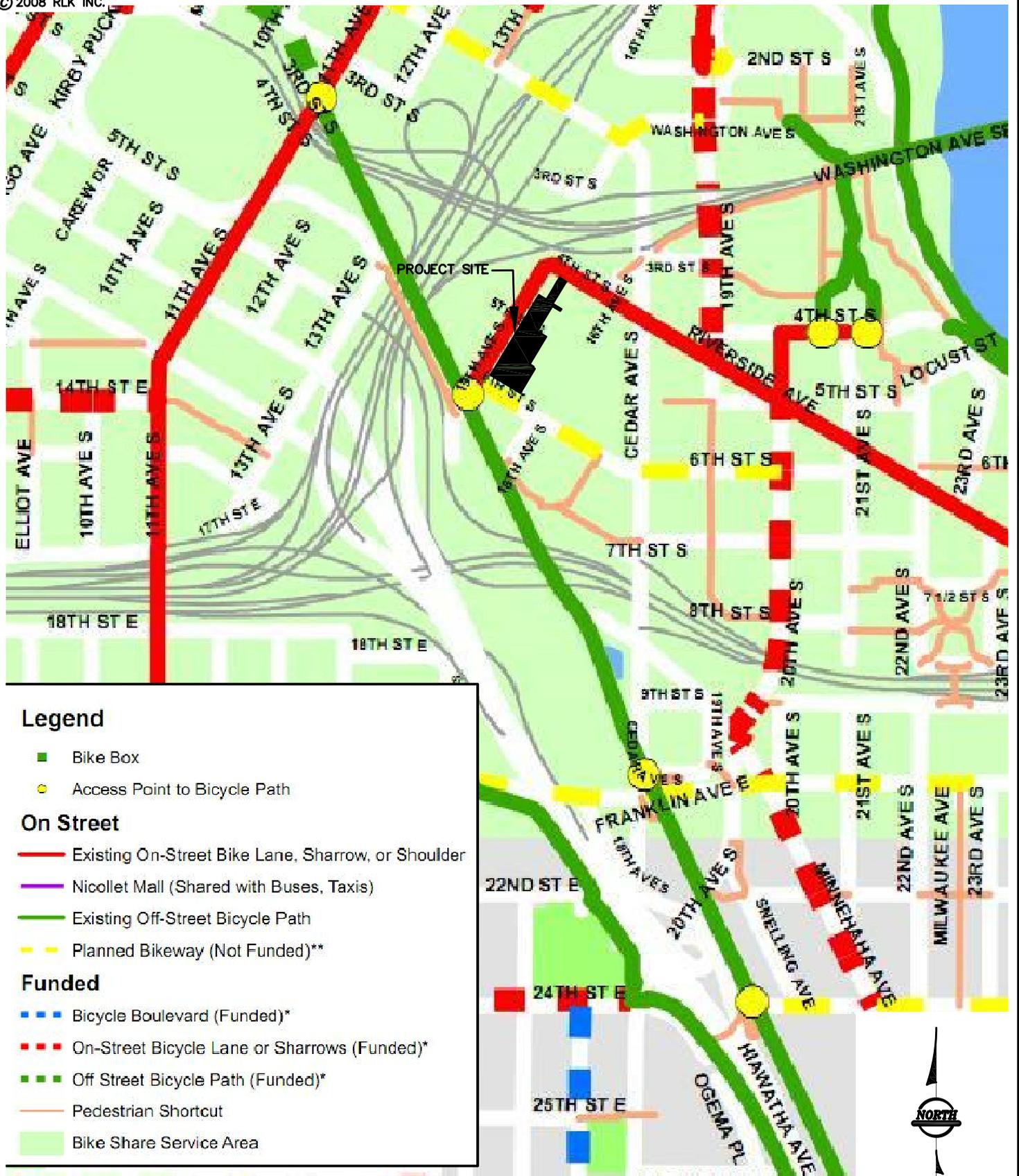
#### B. Bicycle

Figure 3 illustrates the downtown Minneapolis bicycle network. The Hiawatha Bike Trail crosses 15<sup>th</sup> Avenue South just south of 6<sup>th</sup> Street. There is also a NiceRide Minnesota shared bike facility in Currie Park just across the street from this proposed development.

The location of the site will enable residents to easily bike commute to downtown and to connect to the Mississippi River trails. From there bicyclists will be able to branch out throughout the extensive and growing metro bicycle trail and bike lane network.

#### C. Transit

This site is well-suited to transit use. This site is adjacent to two light rail transit (LRT) stations – one block north of the Cedar Riverside Station along the Hiawatha Line, and one less than a quarter-mile southwest of the West Bank Station on the future Central Corridor LRT line. Figure 4 schematically



**Legend**

- Bike Box
  - Access Point to Bicycle Path
- On Street**
- Existing On-Street Bike Lane, Sharrow, or Shoulder
  - Nicollet Mall (Shared with Buses, Taxis)
  - Existing Off-Street Bicycle Path
  - Planned Bikeway (Not Funded)\*\*
- Funded**
- Bicycle Boulevard (Funded)\*
  - On-Street Bicycle Lane or Sharrows (Funded)\*
  - Off Street Bicycle Path (Funded)\*
  - Pedestrian Shortcut
  - Bike Share Service Area

**NOTES**

MINNEAPOLIS BIKEWAYS: EXISTING, FUNDED & PLANNED  
 CITY OF MINNEAPOLIS WEBSITE, 2010.

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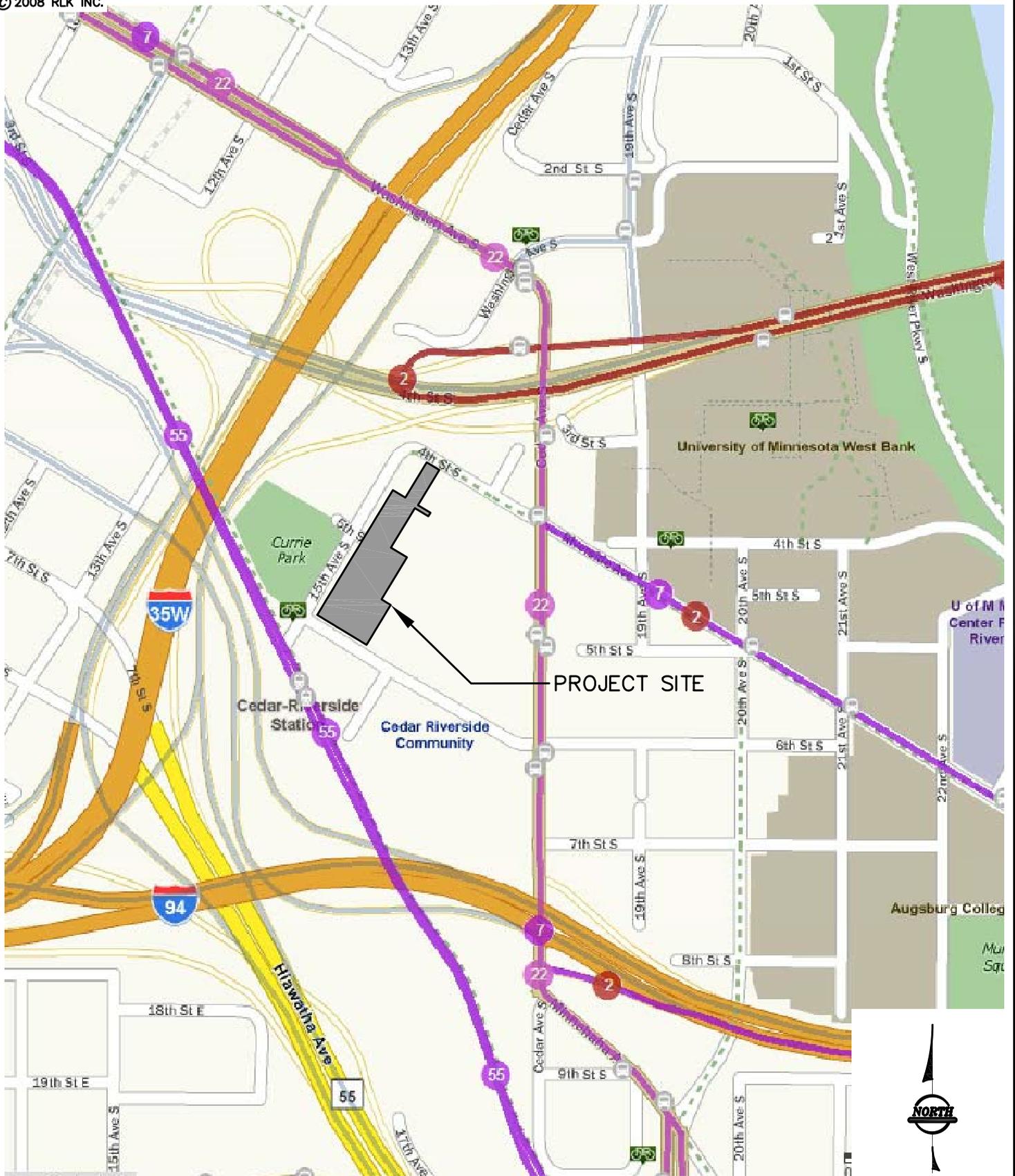


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**CURRIE PARK LOFTS  
 BIKE ROUTES**

Figure #	3
Project #	2011194M



**NOTES**

LOCATIONS OF BUS ROUTES ARE APPROXIMATE. DATA FROM METRO TRANSIT WEB PAGE, JUNE, 2011.

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**CURRIE PARK LOFTS  
BUS ROUTES**

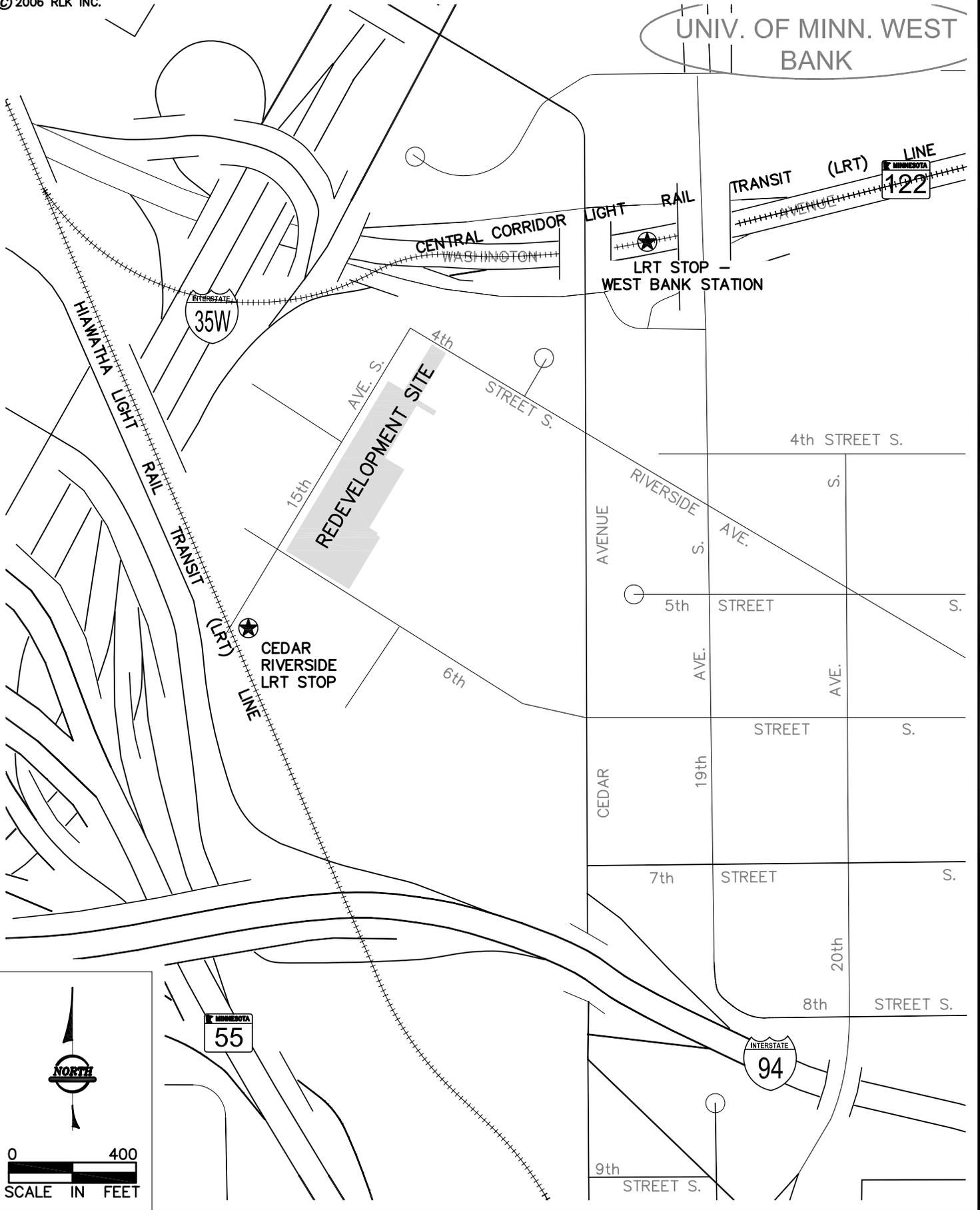
Figure #	4
Project #	2011194M

diagrams transit routes served by bus that will service the site. Figure 5 details transit route 55, the Hiawatha LRT route, plus the alignment for the Central Corridor LRT scheduled to begin service in 2014. The Central Corridor LRT will connect Downtown Minneapolis with Downtown Saint Paul via the University of Minnesota. Service is anticipated to mirror the operation and lead times of the Hiawatha LRT. Use of these routes will provide residents quick access throughout the metro area seven days per week, 365 days per year, either directly or by transfer. Other locations throughout the metro will be reachable via transfer.

The nearest bus stops are located two blocks east of the site on Cedar Avenue at 6<sup>th</sup> Street and at Riverside Avenue/4<sup>th</sup> Street. The transit routes serving the area include the following:

- **Route 2;** A regular (non-express) route along Franklin and Riverside Avenues connecting Uptown Minneapolis and NE Minneapolis via the University of Minnesota, Minneapolis Campus. Busses on this route run from 5:00 AM to 1:00 AM with time between busses ranging from 10-15 minutes during weekday peak periods to 20-30 minutes on Sundays and Holidays.
- **Route 7;** A regular route serving areas from Plymouth Avenue in North Minneapolis to the Lake/Midtown LRT station in Southeast Minneapolis. Busses run from 5:00 AM to 1:00 AM with lead times averaging 15-30 minutes for peak and 30 minutes for off-peak periods.
- **Route 22;** A regular route operating from Brooklyn Center to south Minneapolis via downtown Minneapolis. The 7-day/365-day service runs from 4:00 AM to 2AM. Peak period lead times average 11-15 minutes while off-peak lead times run 20-30 minutes.
- **Route 55;** the Hiawatha LRT line. The metro's only current LRT route connects Downtown Minneapolis with the Mall of America via MSP Airport. Service is available 7 days per week/365 days per year from 5:00 AM to 1:00 AM. During peak periods, lead times average 8 minutes. During off-peak times (including weekends and holidays), lead times average 13 minutes.

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# CURRIE PARK LOFTS

## LRT ROUTES

Figure #	5
Project #	2011194M

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## IV. PARKING

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### A. Off-Street Parking

There are 242 parking spaces proposed for Phase 1, of which 195 of these spaces are provided in a garage below grade and 47 spaces are provided at-grade. Of these stalls, 234 will be designated for residential use, and 8 stalls are provided for the mixed use commercial/retail and other uses, plus two drop-off spaces must be provided.

The parking demand for Phase 2 is also anticipated to be accommodated on-site. 102 off-street parking stalls will be constructed (84 underground and 18 surface stalls), all of which will be designated for residential use.

### B. On-Street Parking

In addition to dedicated off-street parking facilities, residents and guests can utilize on-street parking, although the number of spaces is limited. As noted the Franklin-Cedar/Riverside Master Plan, “residents expressed significant concern for current congested parking conditions near the station area and future impacts resulting from the station and additional development in the area.”<sup>2</sup>

On-street parking availability has become sparse since the onset of LRT service, particularly during daytime hours. However, because of the transit-oriented residential nature of this development, and an adequate off-street parking supply, less additional burden will be placed on the neighborhood parking supply than if more-intense retail land uses had been included.

### C. Parking Requirements per Minneapolis City Code

The parking demand for this development is anticipated to be accommodated on-site. Table 2 lists the parking requirements per the Minneapolis City Code.

The number of parking spaces required for the proposed redevelopment was calculated by two different sources. The first source is Minneapolis City Code of Ordinances. Chapter 541 of the City Code would typically require one off-street parking space per dwelling unit, or a total of 259 (for Phase 1) + 110 (for Phase 2) = 369 total parking spaces for the proposed residential component of the project. However, the site is located in the University Area (UA) Overlay District, which requires one-half (1/2) parking space per bedroom but not less than one (1) space per dwelling unit.

The UA Overlay District Phase 1 breakdown is as follows: 26 3-bedroom apartments; 84 2-bedroom apartments; 149 1-bedroom apartments. Therefore, the total number of bedrooms for Phase 1 is 395. Half of 395 is 197.5, which is less than the number of dwelling units (259). Therefore, Phase 1 receives no reduction, and the number of parking stalls from this calculation remains 259 for Phase 1.

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<sup>2</sup> Frankin-Cedar/Riverside Master Plan, 2001.

**Table 2  
Required Parking Guidelines per Minneapolis City Code <sup>a</sup>**

<b>Phase</b>	<b>Land Use</b>	<b>GLA (SF)</b>	<b>Requirement</b>	<b>Minimum Required Spaces per Code</b>	<b>Maximum Required Spaces per Code</b>	<b>Spaces to be Provided</b>
1	Residential	259 Units	1 space/dwelling unit	259	No max.	234
	Child Care Center	3,000 SF	1 space per 500 sq. ft. of GFA + 2 drop off spaces (either off-street or on-street by permission of the city engineer)	6 + 2 drop-off spaces	15+ up to 4 drop-off spaces	8
	Restaurant	1,950 SF	1 space per 500 sq. ft. of GFA up to 2,000 sq. ft. + 1 space per 300 sq. ft. of GFA in excess of 2,000 sq. ft.	4	26	
2	Residential	110 Units	1 space/dwelling unit	110	No max.	102
<b>TOTAL</b>				<b>382</b>		<b>344</b>

<sup>a</sup>Parking is not required for accessory catering facility and uses of less than 1,000 sq. ft.

For UA Overlay District consideration, Phase 2 proposes 110 one-bedroom or studio apartments. Therefore, the total number of bedrooms remains 110. Half of 110 is 55, which means Phase 2 likewise receives no reduction from the UA Overlay District. Thus, the number of parking stalls from this calculation remains 110 for Phase 2. The total number of stalls required from Phases 1 and 2 after this calculation remains 369 off-street stalls.

The development is also located within the Transit Station Area Pedestrian Overlay (TSA PO) District. The Minneapolis City Code allows parking incentives for proximity to transit service. According to the Code, “The minimum parking requirement may be reduced ten (10) percent if the proposed use is located within three hundred (300) feet of a transit stop with midday service headways of thirty (30) minutes or less in each direction”. An LRT station exists just 300 feet from the Currie Park development where midday service headways are less than thirty minutes. Thus, the 10% transit incentive reduction (i.e., a 90% factor) may be applied here.

As a result,  $369 \times 90\% = 332$  off-street parking spaces are required for the residential component of the development. The applicant is proposing to provide a total of 234 stalls for residential use for Phase 1 plus 102 stalls for residential use for Phase 2. Thus the total number of off-street parking stalls for Phase 1 and Phase 2 residential use is 336 – four more than required under the TSA PO District calculation. Therefore, Currie Park Lofts complies with the City off-street parking requirement for residential use.

Further, Currie Park lofts will incorporate three additional non-residential uses: (1) a child care center totaling 3,000 square feet); (2) a 700 square-foot office use; and (3) a 1,950 square foot restaurant (sit down or delicatessen), with a maximum of 30 seats. Chapter 541 of the city Code would typically require 1 space per 500 square feet of gross floor area, plus 2 drop off spaces. Uses under 1,000 square feet are exempt from the minimum off-street parking requirement. The sit-down or delicatessen restaurant requires 1 space per 500 square feet of gross floor area up to 2,000 square feet plus 1 space per 300 square feet in excess of 2,000 square feet. Based on these requirements, 6 spaces plus 2 drop off spaces would be required for the child care center, zero

spaces would be required for the proposed office use and 4 spaces would be required for the sit down or delicatessen restaurant.

Because this site is located in the Pedestrian Overlay District, it is subject to 25% reductions in the non-residential parking requirements for each use. Therefore, the child care center parking requirement would reduce to 5 spaces plus 2 drop off spaces; the sit down or delicatessen restaurant parking requirement will reduce to 3 spaces; and the requirement for the office space remains zero stalls. Thus, the non-residential parking requirement is 8 stalls plus 2 drop off stalls.

Overall, the total parking requirement for Phases 1 and 2 is 340 off-street parking stalls plus 2 drop off stalls. The Currie Park Lofts Phases 1 and 2 will provide 342 stalls plus 2 drop off stalls.

Table 3 provides a summary of the parking requirements with the related overlay district reductions, as described above.

**Table 3  
Required Reductions per Minneapolis City Code**

<b>Land Use</b>	<b>Unadjusted Minimum Required Spaces per Code</b>	<b>University Area Overlay District (1/2 parking space per bedroom)</b>	<b>Transit Station Area Pedestrian Overlay District (10%)</b>	<b>Pedestrian Oriented Overlay District (75% of Non-res.)</b>	<b>Proposed Spaces to be Provided</b>
Phase 1 Residential	259	259	232	233	<b>234</b>
Phase 1 Non-Residential	10 + 2 drop off	10 + 2 drop off	10 + 2 drop off	8 + 2 drop off	<b>8 + 2 drop off</b>
Phase 2 Residential	110	110	99	99	<b>102</b>
<b>TOTAL</b>	<b>379 + 2 drop off</b>	<b>379 + 2 drop off</b>	<b>342 + 2 drop off</b>	<b>340 + 2 drop off</b>	<b>342 + 2 drop off</b>

Another significant consideration will be the impact of bicycle use. The plan calls for at least one bicycle parking space per unit in the garage. 280 bike parking spaces are shown to be installed in the parking garage for Phase 1. In Phase 2, 110 bike parking stalls will be provided in the underground parking ramp. The significant bicycle parking demand will offset vehicular demand on the site.

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## V. TRAFFIC OPERATIONS, ACCESS AND SITE CIRCULATION

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Traffic operations at the site accesses and nearby intersections were studied to determine if the addition of site-generated traffic would have adverse impacts. As identified in cooperation with the City of Minneapolis, the intersections most likely to be affected were:

- Cedar Avenue & the Washington Avenue (Trunk Highway 122) Westbound Ramps
- Cedar Avenue & the Washington Avenue (TH 122) Eastbound Ramps/3<sup>rd</sup> Street
- Cedar Avenue & Riverside Avenue/4<sup>th</sup> Street
- Cedar Avenue & the 5<sup>th</sup> Street Pedestrian Crossing
- Cedar Avenue & 6<sup>th</sup> Street
- Cedar Avenue & 7<sup>th</sup> Street
- Cedar Avenue & the Interstate 94 Westbound Off Ramp
- Cedar Avenue & the I-94 Eastbound On Ramp

Year 2011 existing traffic volumes at these intersections are found on Figure 6. To forecast the impact of site-generated traffic, existing operations at these intersections were first reviewed. Traffic to be generated by the site was then estimated, and added to the roadway network. Operations at the intersections were again reviewed and compared to existing conditions. In general, results of the operational analysis show that the addition of site-generated traffic to the local roadway network does not result in unacceptable, congested or unsafe operations.

Two alternatives were considered in evaluating traffic operations near the site. These two alternatives are:

1. **The No-Build alternative.** This alternative assumes the site will maintain its current land uses while the surrounding area continues to develop.
2. **The Build alternative.** This alternative assumes completion of Phase 1 in 2015, and completion of Phase 2 in late 2016. Typically, the year after full build-out is used for design purposes allowing traffic patterns time to readjust after construction. Accordingly, 2017 is assumed as the design year for this study.

In order to assess the traffic impacts associated with the proposed redevelopment, a two-step approach is presented in this report. First, an analysis of the predicted 2017 No-Build conditions is presented. After establishing the 2017 No-Build scenario as a means for comparison, the 2017 Build scenario analysis is presented. Finally, conclusions of the traffic operations are detailed.

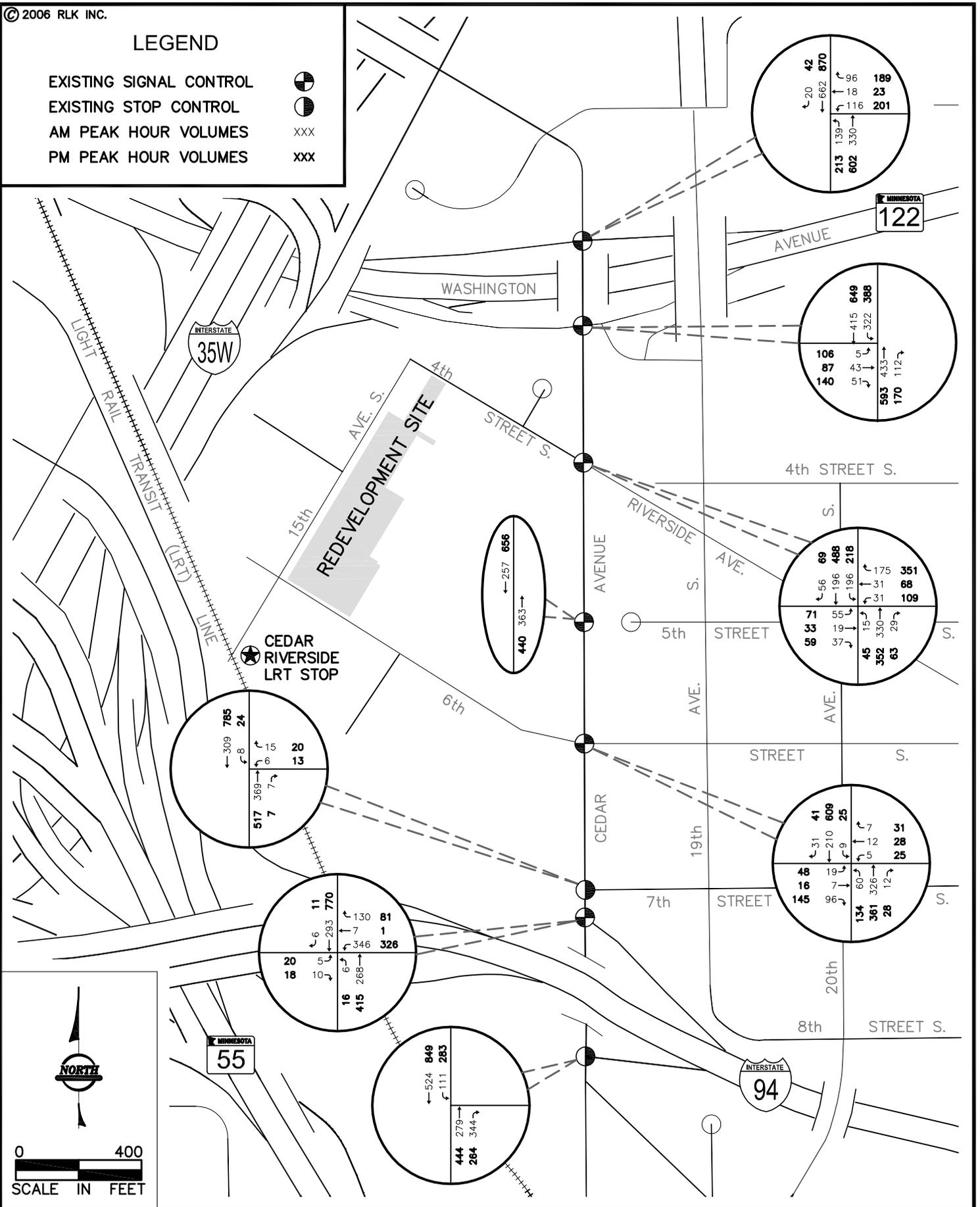
### A. No-Build Alternative

To address the impacts of a development on the surrounding roadway system, it is necessary to first analyze traffic conditions that would be present on the roadway system without the inclusion of the proposed development. This is considered the No-Build scenario, and serves as a basis with which to compare the Build scenario.

It is anticipated that in 2014, the Central Corridor LRT will be operational. In addition, the intersection ramp modifications at Cedar Avenue and Washington Avenue will be complete. These improvements will be incorporated in the 2017 No-Build and Build scenarios.

LEGEND

- EXISTING SIGNAL CONTROL 
- EXISTING STOP CONTROL 
- AM PEAK HOUR VOLUMES XXX
- PM PEAK HOUR VOLUMES XXX



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**CURRIE PARK LOFTS**  
**2011 EXISTING TRAFFIC VOLUMES**

Figure #  
**6**  
Project #  
**2011194M**

## **B. Operational Analysis Methodology**

Traffic operations for peak hour conditions within the study area were analyzed using the industry-standard Synchro/SimTraffic 6 software package, which uses the data and methodology contained in the 2000 Highway Capacity Manual, published by the Transportation Research Board. The software model was calibrated using existing conditions before being used to assess future conditions.

The operating conditions of transportation facilities, such as traffic signals and stop-controlled intersections, are evaluated based on the relationship of the theoretical capacity of a facility to the actual traffic volumes on that facility. Various factors affect capacity, including travel speed, roadway geometry, grade, number and width of travel lanes, and intersection control. The current standards for evaluating capacity and operating conditions are contained in the 2000 Highway Capacity Manual (HCM). The procedures describe operating conditions in terms of a Level of Service (LOS). Facilities are given letter designations from “A,” representing the best operating conditions, to “F,” representing the worst. Generally, Level of Service “D” represents the threshold for acceptable overall intersection operating conditions during a peak hour.

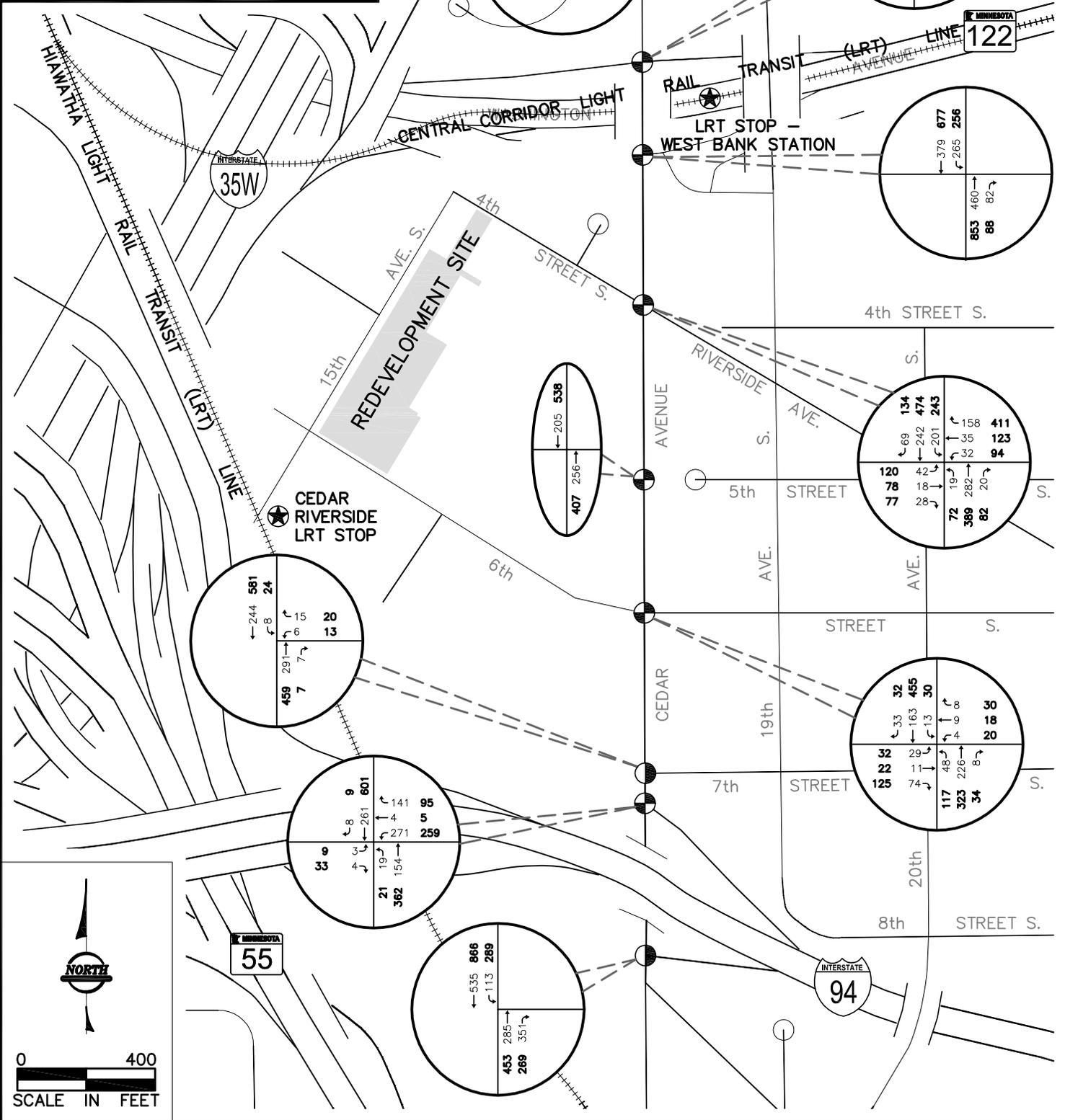
The acceptable threshold for a particular movement at an intersection depends on both the priority assigned to that movement and its traffic volume. In general, the higher the priority and the higher the traffic volume, the more stringent the acceptable threshold will be. For example, the acceptable threshold for a high-priority/high-volume suburban movement might be “C,” while LOS “F” on a low-priority/low-volume urban movement might be appropriate.

For side-street stop-controlled intersections, a key measure of operational effectiveness is the side street LOS. Long delays and poor LOS can sometimes result on the side street, even if the overall intersection is functioning well, making it a valuable design criterion. Again, depending on priority and traffic volume, acceptable side-street LOS can range from “D” to “F.”

A final fundamental component of operational analyses is a study of vehicular queuing, or the lineup of vehicles waiting to pass through an intersection. An intersection can operate with an acceptable level of service, but if queues from the intersection extend back to block entrances to turn lanes or accesses to adjacent land uses, unsafe operating conditions could result. The 95<sup>th</sup> percentile queue, or the length of queue with a 5% chance of occurring during the peak hour, is considered the standard for design purposes.

LEGEND

- EXISTING SIGNAL CONTROL 
- EXISTING STOP CONTROL 
- AM PEAK HOUR VOLUMES XXX
- PM PEAK HOUR VOLUMES XXX



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**CURRIE PARK LOFTS**  
**2017 NO-BUILD TRAFFIC VOLUMES**

Figure #  
**7**  
Project #  
**2011194M**

## C. Results of the Analysis for the No-Build Scenario

Table 7 summarizes the results of the 2017 No-Build operational analysis. The overall LOS for each study area intersection is listed along with the critical 95<sup>th</sup> percentile queues.

**Table 7**  
**2017 No-Build Alternative Operational Analysis Results**  
(Overall Intersection Levels of Service and Comments)<sup>1</sup>.

Intersection (Cedar Ave. &)	AM LOS	PM LOS	Comments
Washington Ave. WB Ramps	C/C	C/D	AM: 95 <sup>th</sup> NB LT queue 135 feet (135% of storage length). PM: 95 <sup>th</sup> NB LT queue 153 feet (153% of storage length).
Washington Ave. EB Ramps/3 <sup>rd</sup> Street	A/B	<b>A/B</b>	AM: 95 <sup>th</sup> SB LT queue 145 feet (145% of storage length). PM: 95 <sup>th</sup> SB LT queue 146 feet (146% of storage length).
Riverside Ave./4 <sup>th</sup> Street	A/C	B/C	AM: 95 <sup>th</sup> percentile queues OK. PM: 95 <sup>th</sup> percentile queues OK.
5 <sup>th</sup> Street (Pedestrian Crossing)	B/B	<b>B/B</b>	95 <sup>th</sup> percentile queues OK.
6 <sup>th</sup> Street	A/B	A/B	95 <sup>th</sup> percentile queues OK.
7 <sup>th</sup> Street <sup>2</sup> .	a	b	95 <sup>th</sup> percentile queues OK.
I-94 Westbound/LRT Shop & Yard	<b>B/B</b>	B/C	95 <sup>th</sup> percentile queues OK.
I-94 Eastbound <sup>3</sup> .	a	a	95 <sup>th</sup> percentile queues OK.

1. Overall LOS reported from Synchro. First letter represents intersection LOS, while second letter represents worst LOS of individual approach. Upper case letters indicate signalized intersections, and lower case letters indicate unsignalized intersections.

2. Level of Service changes from Existing in **Bold**.

3. Unsignalized intersection. LOS reported is for the critical westbound approach.

4. Unsignalized intersection. LOS reported is for the critical southbound left turn movement.

Results of the 2017 No-Build analysis indicate that all study area intersections are projected to operate at acceptable overall Levels of Service for the 2017 No-Build conditions. The northbound and southbound movements at the ramp intersection of Cedar and Washington Avenues will experience the most delay.

## D. Site-Generated Traffic

The number of vehicle trips generated by the proposed redevelopment has been estimated for the weekday AM and PM peak hours using the data and methodologies contained in the 8<sup>th</sup> Edition of Trip Generation, published by the Institute of Transportation Engineers (ITE). The trip generation estimates for the project as a whole have been developed by combining the trip generation characteristics of the individual land uses. The estimated volume of site-generated trips for each land use is summarized in Tables 8A and 8B. Additionally, the resulting “New” trips to be added to the roadway network are also shown in Tables 8A and 8B.

**Table 8A**  
**Trip Generation Estimates<sup>1</sup> – Phase 1 Proposed Land Uses**

Land Use	ITE Land Use Code	Size	Trips Generated:				Weekday ADT
			AM peak		PM Peak		
			Enter	Exit	Enter	Exit	
Mid-Rise Apartment	223	259 units	24	54	59	43	1,410
Day Care Center	565	3,000 s.f.	19	17	18	20	238
Office	710	700 s. f.	1	0	0	1	8
Coffee/Donut Shop – No Drive-Thru	936	1,950 s.f.	108	104	40	40	248
<b>Total – Gross</b>			152	175	117	104	1,904
			327		221		
Internal Capture Trips <sup>2</sup>			30	35	23	21	381
			65		44		
<b>Totals</b>			<b>122</b>	<b>140</b>	<b>94</b>	<b>83</b>	<b>1,523</b>
			<b>262</b>		<b>177</b>		

**Table 8B**  
**Trip Generation Estimates<sup>1</sup> – Phase 2 Proposed Land Uses**

Land Use	ITE Land Use Code	Size	Trips Generated:				Weekday ADT
			AM peak		PM Peak		
			Enter	Exit	Enter	Exit	
Mid-Rise Apartment	223	110 units	10	23	25	18	732
<b>Total – Gross</b>			10	23	25	18	732
			33		43		
Internal Capture Trips <sup>2</sup>			2	5	5	4	146
			7		9		
<b>Totals</b>			<b>8</b>	<b>18</b>	<b>20</b>	<b>14</b>	<b>586</b>
			<b>26</b>		<b>34</b>		

1. Per the data and methodologies in Trip Generation, 8th Edition, published by ITE.
2. An adjustment of 20% was applied to account for trip generation internal to the project and resulting from pedestrian trips

Tables 8A and 8B assume an internal capture rate of 20%. The City of Minneapolis has a modal shift goal of 45% (see Table 13 of this document). This assumes that 55% of the projected trip generation will travel by personal vehicle and the remaining 45% of the trips will travel by transit, bicycle or walking.

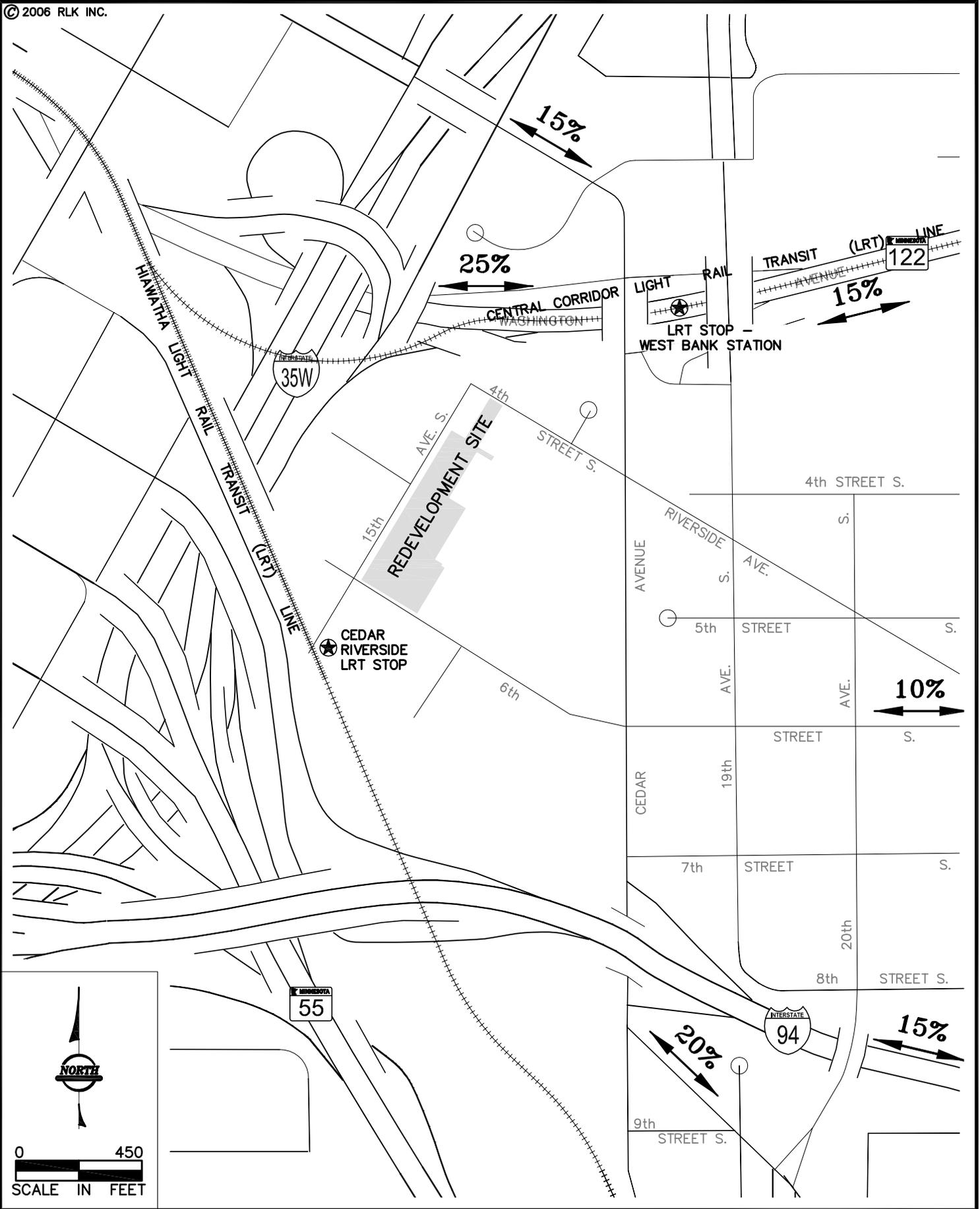
The proximity of other modes in the area will likely reduce the vehicular trips generated by the above developments. Although not directly applied, the modal share may significantly reduce to the AM and PM Peak Trips projected in Tables 8A and 8B. This is especially true for the “Coffee/Donut Shop – No Drive-Thru” land use in Phase 1, which will draw primarily pedestrians and transit riders from the

apartments and transit stops. (This is a neighborhood cafe. It is unlikely that a coffee shop without a drive-through lane located off of the arterial or collector street system will draw as many vehicular trips as a coffee shop in other, more vehicle-friendly coffee shops.)

The distribution pattern along study area intersections as a result of the proposed development are illustrated on Figure 8, Trip Distribution. Figure 9 shows the projected Trip Assignment.

Access to and from the site has been analyzed as part of this assessment. There is one access point for the Currie Park Residential Development Phase 1. It is a two-way access off of 15<sup>th</sup> Avenue South into the off-street parking area for the proposed residential and mixed uses.

There are two access points proposed for the development in Phase 2. One access is just south of 4<sup>th</sup> Street and is a driveway into and out of the underground parking lot that serves 84 stalls. The second access is a driveway onto 4<sup>th</sup> Street just east of the Mixed Blood Theatre that serves 18 surface stalls.



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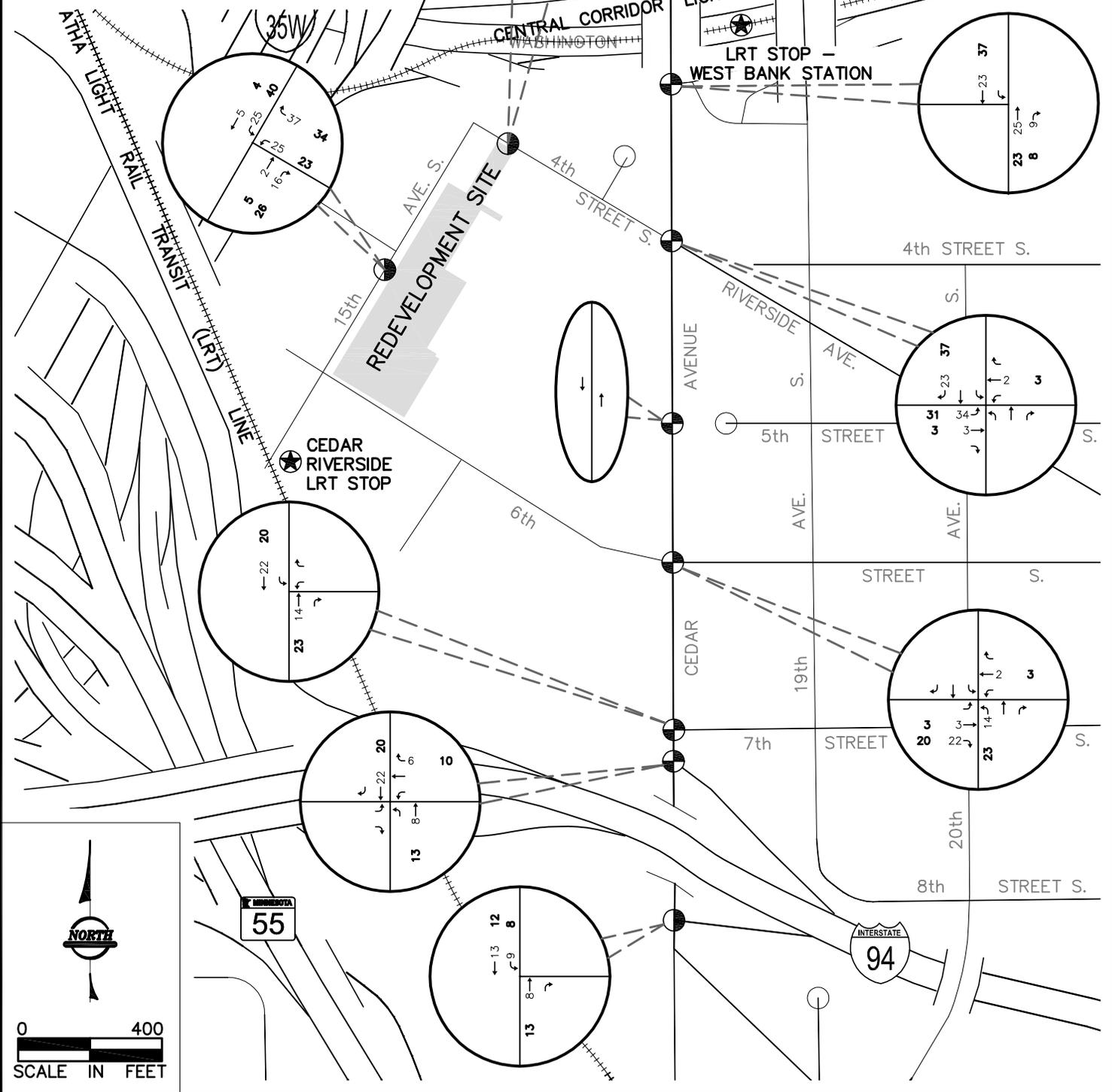
# CURRIE PARK LOFTS TRIP DISTRIBUTION

Figure #  
**8**  
 Project #  
 2011194M

LEGEND

- EXISTING SIGNAL CONTROL 
- EXISTING STOP CONTROL 
- AM PEAK HOUR VOLUMES XXX
- PM PEAK HOUR VOLUMES XXX

NOTE:  
ASSUMES 0% MODAL SHIFT (TO LIGHT RAIL, CARPOOL, PEDESTRIAN, OR BICYCLE)



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# CURRIE PARK LOFTS TRIP ASSIGNMENT VOLUMES

Figure #	9
Project #	2011194M

## E. Results of the Analysis for the Build Scenario

This section contains the results of the intersection operational analyses and provides recommendations for mitigating project related traffic impacts (as necessary). A summary of results for the 2017 Build scenario is provided in Table 9, below. The 2017 Build scenario volumes result when the trip assignment volumes are combined with the No-Build traffic volumes, as shown in Figure 10.

**Table 9**  
**2017 Build Alternative Operational Analysis Results**  
 (Overall Intersection Levels of Service and Comments)<sup>1</sup>.

Intersection (Cedar Ave. &)	AM LOS	PM LOS	Comments
Washington Ave. WB Ramps	B/C	B/C	AM: 95 <sup>th</sup> NB LT queue 149 feet (149% of storage length). PM: 95 <sup>th</sup> NB LT queue 116 feet (116% of storage length).
Washington Ave. EB Ramps/3 <sup>rd</sup> Street	A/B	B/B	AM: 95 <sup>th</sup> percentile queues OK. PM: 95 <sup>th</sup> SB LT queue 129 feet (129% of storage length).
Riverside Ave./4 <sup>th</sup> Street	B/B	B/C	AM: 95 <sup>th</sup> percentile queues OK. PM: 95 <sup>th</sup> percentile queues OK.
5 <sup>th</sup> Street (Pedestrian Crossing)	A/B	B/B	95 <sup>th</sup> percentile queues OK.
6 <sup>th</sup> Street	A/B	A/B	95 <sup>th</sup> percentile queues OK.
7 <sup>th</sup> Street <sup>2</sup>	a	a	95 <sup>th</sup> percentile queues OK.
I-94 Westbound/LRT Shop & Yard	B/B	B/B	95 <sup>th</sup> percentile queues OK.
I-94 Eastbound <sup>3</sup>	a	a	95 <sup>th</sup> percentile queues OK.

1. Overall LOS reported from Synchro. First letter represents intersection LOS, while second letter represents worst LOS of individual approach. Upper case letters indicate signalized intersections, and lower case letters indicate unsignalized intersections.

2. Level of Service changes from Existing in **Bold**.

3. Unsignalized intersection. LOS reported is for the critical westbound approach.

4. Unsignalized intersection. LOS reported is for the critical southbound left turn movement.

Results of the AM and PM peak hour analysis for the 2017 Build conditions show that the operations of study area intersections and the proposed site access are predicted to be acceptable with the addition of site-generated traffic. Specifically, the overall Level of Service for all intersections is not anticipated to change and the 95<sup>th</sup> percentile queue lengths increase slightly with the addition of site-generated traffic.

## F. Conclusions

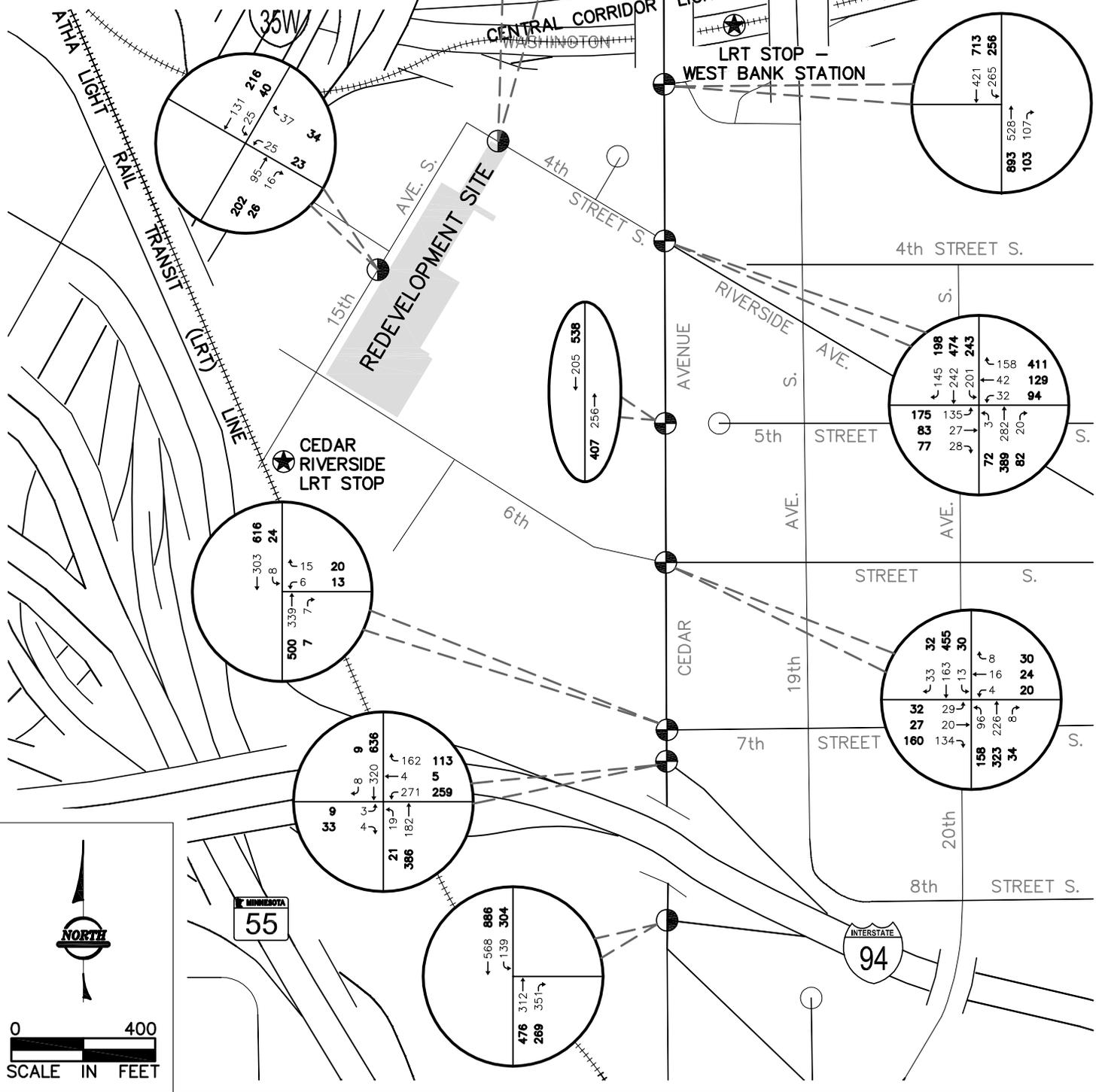
Results of the operational analyses indicate that the study area intersections operate acceptably for both the No-Build and Build scenarios. Analysis indicates acceptable operations at all intersections.

Because of the transit, bicycle and walking amenities that exist in the area, the 45% mode share seems achievable for this development. Nevertheless, a smaller internal capture percentage (20%) was tested, with acceptable results. As a result, the peak hour vehicular traffic generated by this site will have negligible impacts on the surrounding roadway network.

LEGEND

- EXISTING SIGNAL CONTROL 
- EXISTING STOP CONTROL 
- AM PEAK HOUR VOLUMES XXX
- PM PEAK HOUR VOLUMES XXX

NOTE:  
ASSUMES 0% MODAL SHIFT (TO LIGHT RAIL, CARPOOL, PEDESTRIAN, OR BICYCLE)



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# CURRIE PARK LOFTS

## 2017 BUILD TRAFFIC VOLUMES

Figure #  
**10**  
Project #  
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## VI. TRAVEL DEMAND MANAGEMENT STRATEGIES

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### A. City of Minneapolis Transportation Goals

The City of Minneapolis has developed a Ten-Year Transportation Action Plan that provides a vision of the future that states, “Minneapolis will build, maintain and enhance access to multi-modal transportation options for residents and business through a balanced system of transportation modes that supports the city’s land use vision, reduces adverse transportation impacts, decreases the overall dependency on automobiles, and reflects the city’s pivotal role as the center of the regional transportation network.” – The Minneapolis Plan for Sustainable Growth, (2008).

From this has emerged their “Transportation Vision for Minneapolis”:

- Transportation is important to the economic viability of the city, the region and the state. *Access Minneapolis* will lay the transportation groundwork for achieving the long-range vision of Minneapolis as a vital and thriving metropolitan urban center that is a great place to live, work, play, visit and conduct business.
- The city must remain livable and walkable to maintain its regional and national competitiveness. In most cases, it is not feasible or desirable to increase the curb-to-curb width of roadways in the city. However, there are many opportunities for improving the operational capacity of the transportation system without street widening. *Access Minneapolis* will result in a city that is livable and walkable while optimizing the operational capacity of the transportation system.
- *Access Minneapolis* will result in a citywide transportation system that is multi-modal (pedestrian, bicycle, transit, automobile, freight), providing good transportation choices to people, including people with disabilities.
- *Access Minneapolis* will result in a citywide transportation system that serves anticipated employment and residential growth and optimizes access to destinations by all modes (pedestrian, bicycle, transit, automobile, freight) throughout the city, between neighborhoods, to/from and within downtown.
- Although all modes of transportation are important, transit is critical for maximizing the people carrying capacity of the transportation system. *Access Minneapolis* will result in a transit system that operates efficiently and effectively in downtown and throughout the city. Transit will become the mode of choice for Minneapolis residents, workers and visitors.

With this vision in mind, the City of Minneapolis has developed Transportation Policies from “The Minneapolis Plan for Sustainable Growth” (2008). Key goals of this include:

- Building the City through multi-modalism;
- Developing modal priorities in a neighborhood context;
- Creating a walkable city;
- Making transit more effective;
- Creating a bicycle-friendly city;

- Managing vehicle traffic;
- Managing freight movement;
- Managing Parking;
- Developing funding and pricing strategies; and
- Supporting a vibrant multi-modal Downtown.

## **B. City of Minneapolis Transportation Policy Points**

The following policy points for transportation are included in Chapter 2 of the Minneapolis Plan for Sustainable Growth<sup>3</sup>:

- Policy 1: Encourage growth and reinvestment by sustaining the development of a multi-modal transportation system.
- Policy 2: Support successful streets and communities by balancing the needs of all modes of transportation with land use policy.
- Policy 3: Encourage walking throughout the city by ensuring that routes are safe, comfortable, pleasant, and accessible.
- Policy 4: Make transit a more attractive option for both new and existing riders.
- Policy 5: Ensure that bicycling throughout the city is safe, comfortable and pleasant.
- Policy 6: Manage the role and impact of automobiles in a multi-modal transportation system.
- Policy 7: Ensure that freight movement and facilities throughout the city meet the needs of the local and regional economy while remaining sensitive to impacts on surrounding land uses.
- Policy 8: Balance the demand for parking with objectives for improving the environment for transit, walking and bicycling, while supporting the city's business community.
- Policy 9: Promote reliable funding and pricing strategies to manage transportation demand and improve alternative modes.
- Policy 10: Support the development of a multi-modal Downtown transportation system that encourages an increasingly dense and vibrant regional center.
- Policy 11: Minneapolis recognizes the economic value of Minneapolis-St. Paul International Airport and encourages its healthy competition to reach global markets in an environmentally responsible manner.

## **C. Goal of the Travel Demand Management Plan**

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<sup>3</sup> [http://www.ci.minneapolis.mn.us/cped/docs/02\\_Transportation\\_100209.pdf](http://www.ci.minneapolis.mn.us/cped/docs/02_Transportation_100209.pdf)

To succeed, this Travel Demand Management (TDM) plan must assist the City of Minneapolis to achieve their transportation goals. Based on previous TDM Plans in the area and the types of proposed land uses, the following mode split goals for the project have been identified by the developer:

**Table 13  
Mode Split Goals**

Mode Split	Goal
Auto	55%
Transit	35%
Bike/Walk	10%

This section outlines specific Travel Demand Management strategies to be implemented by the owner/end user/property manager/etc. of this site. The strategies detail the responsibilities of the site's responsible party in addressing the issues regarding transportation cited above.

Fine Associates, and their successors, by accepting the responsibility of implementing the items below, desire to help Minneapolis to achieve their goals of enhancing the local transportation system. Implementation of the items noted will help to encourage use of alternate modes of travel, enhance pedestrian friendliness, and achieve a balance in the needs of all users of the transportation system.

Fine Associates and their successors agree to the implementation of the following measures:

i. General

1. The owners and/or property managers of the various pieces of the development will appoint designated TDM Liaisons to coordinate the various TDM strategies that require ongoing attention. The responsibilities of the TDM Liaison would include upkeep of transit information displays and other communications, carpool program coordination, as appropriate for each individual land use. (More detail on individual programs is provided below.)
2. The owner/TDM Liaison of the apartment building will maintain commuter information in common areas for residents/guests. Information should include items such as transit schedules, Metro Transit commuter/carpool program information (Rideshare and the Guaranteed Ride Home), and bicycle/pedestrian commuter information or maps.
3. Assemble and disseminate a move-in package for all new residents. The move-in package will include all the pertinent information on travel information such as parking, alternate modes of travel, bus routes and bike routes.
4. The developer or building owner will monitor the implementation of the proposed TDMP actions and progress made toward achieving the TDMP mode split goals through the following monitoring program:
  - With the assistance of Commuter Connection conduct a statistically valid baseline resident, employee and visitor commuter survey within the first six months of the opening of the proposed development.

- With the assistance of Commuter Connection conduct a resident, employee and visitor commuter survey every two years after the original baseline survey, for ten years or until the TDMP non-SUV mode split goals of 45% alternative mode of transportation are achieved.
  - After each round of biennial commuter surveys, review the TDMP in conjunction with Commuter Connection, to determine its effectiveness. During this survey, information will be gathered regarding the retail/commercial patrons' parking habits. Then prepare a status report for Commuter Connection and the City of Minneapolis CPED and Public Works Departments to review and approve with recommendations. These recommendations may require an alternative compliance program if significant progress toward achieving the TDMP goal is not demonstrated.
5. The owners/property managers of the site shall maintain clear, well-lit sidewalks for pedestrian ease of use.

#### ii. Transit/Carpool

1. The location of the site, near the LRT Trail bicycle trail, as well as Hiawatha and Central Corridor light-rail corridors and all their related amenities offer tremendous opportunities to utilize alternative modes of transportation to and from the site. Appropriate signage shall be placed on-site directing users to these corridors.
2. Three Metro transit bus routes (2, 7, and 22) provide service to the site. The nearest bus stops are along both Cedar Avenue South and are within two blocks. In addition, the Cedar-Riverside Station for the Hiawatha LRT is a block away. Further, the proposed Central Corridor LRT will have the West Bank Station less than a quarter-mile away. Residents will be informed of Met Transit's "Go-Card" passes for hassle-free transit. The link <http://www.metrotransit.org/passes-go-to-cards.aspx> will be provided to residents at move-in.

#### iii. Bicycles

1. The apartment building will provide more than one lockable bicycle rack or storage locker per dwelling unit (280 bike parking spaces in garage). Exterior and/or covered bike racks will be provided for guests.
2. The developer or subsequent building owner will identify space to expand on-site bicycle storage if and when the demand is found.
3. NiceRide Minnesota has placed a station across the street in Currie Park. The property manager/TDM liaison will include information on NiceRideMN in the residential move-in packets.

#### iv. Deliveries

1. Owners/property managers shall develop and maintain a policy that provides for truck and service deliveries to occur outside of peak traffic times. This would not include FedEx/UPS-type deliveries.

v. Parking

1. The off-street parking will be segregated between the residential and non-residential (retail/other) parking. Residential garage parking will be secured by use of access cards or other similar measures to open the garage access. The surface retail/non-residential off-street parking will be offered at the market rate for hourly or monthly use.
2. Residential parking will be leased to the resident at a rate separate from the monthly apartment rent. Excluding the monthly cost of leasing residential parking stalls from the monthly apartment rent is believed to be an effective way to reduce overall residential parking demand.
3. General-use public parking spaces will not be provided. All parking within the development will be for apartment residents and guests, and commercial/retail users. This does not allow the development site to sell parking to the general public. Any such change must result in an amended TDM Plan.

**TRAVEL DEMAND MANAGEMENT PLAN  
CURRIE PARK LOFTS  
MINNEAPOLIS, MN**

**PLAN APPROVAL**

**Fine Associates, LLC**

By: \_\_\_\_\_ Dated: \_\_\_\_\_  
Bianca Fine, President  
Fine Associates LLC  
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IDS Center  
Minneapolis, MN 55402

**Minneapolis Community and Economic Development Department**

By: \_\_\_\_\_ Dated: \_\_\_\_\_  
Steve Poor, CPED Interim Development Services Director

**Minneapolis Public Works Department**

By: \_\_\_\_\_ Dated: \_\_\_\_\_  
Steve Mosing, Traffic Operations Engineer