



TRAFFIC IMPACT STUDY

56TH & PICADILLY

Aurora, CO

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- B. LOS Descriptions
- C. Traffic Counts
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Executive Summary

Site Location and Study Area

The property that comprises the application area for the proposed development is approximately 26.95 acres in size and is identified as part of Adams County Parcel Number 182113200004. It is located south of E 56th Ave and east of Picadilly Rd in Aurora, CO. It is zoned Mixed-Use Airport (MU-A) and is currently vacant.

The study area is generally bounded by E 56th Ave to the north, Picadilly Rd to the west, and property lines to the east and south. The study area for the project includes intersections that could be affected by the proposed development:

- E 56th Ave & Picadilly Rd
- Maxwell PI & Picadilly Rd
- E 54th Ave & Picadilly Rd
- Future Site Accesses

Description of Proposed Development

The Applicant seeks to develop the property with a mix of commercial/retail uses anchored by a grocery store and gas station use. Site access is proposed via a right-in right-out (RIRO) access at Maxwell PI, a $\frac{3}{4}$ movement access on Picadilly Rd, a signalized full movement access at E 54th Ave & Picadilly Rd, a RIRO access on E 56th Ave, and a signalized full movement access on E 56th Ave.

Conclusions and Recommendations

Conclusions

Based on the results of this traffic impact study, the following may be concluded:

- Under existing traffic conditions, the unsignalized intersection movements within the study area currently operate at overall acceptable levels of service (LOS) "D" or better during the weekday AM and PM peak hours with the exception of the eastbound through, the northbound through/right, and southbound through/right movements at E 56th Ave & Picadilly Rd which operate at LOS "E" or "F". All queues remain within their respective storage lengths.
- Under background future 2026 conditions the unsignalized intersection movements would operate at acceptable LOS "B" or better and the signalized intersections would operate at acceptable overall LOS "C" or better. All queues would be contained within the available storage during background 2026 conditions.
- During background 2050 conditions, the unsignalized intersection movements would operate at acceptable LOS "D" or better with the exception of the eastbound right turn at Maxwell PI & Picadilly Rd which would operate at LOS "F" during the weekday peak hours as well as the eastbound left and southbound right movements at E 56th Ave & Skydance Access which would operate at LOS "F" during the weekday peak hours due to regional growth. The signalized intersections are forecasted to operate at acceptable overall LOS "D" or better with the exception of the E 56th Ave & Picadilly Rd intersection which would operate at LOS "F" during the weekday peak hours, the E 54th Ave & Picadilly Rd intersection which would operate at LOS "E" during the AM peak hour, and

the E 56th Ave & Road A intersection which would operate at LOS “E” during the AM peak hour and LOS “F” during the PM peak hour.

- During background 2050 conditions, all queues are expected to be contained in their respective storage with the exception of the eastbound left, westbound left, northbound left, northbound right, and southbound left movements at the E 56th Ave & Picadilly Rd intersection during weekday peak hours
- The proposed site development would generate, upon completion and full occupancy, 624 net new weekday AM and 955 net new weekday PM peak hour vehicle trips as well as 11,586 net new weekday daily trips.
- During total future 2026 conditions, the unsignalized intersection movements would operate at acceptable LOS “C” or better and the signalized intersections would operate at acceptable overall LOS “D” or better. The W Site Access on Picadilly Rd would operate acceptably as both a $\frac{3}{4}$ movement or a RIRO movement during 2026 conditions from both an operations and queueing standpoint.
- During total future 2050 conditions, the signalized intersections would operate at LOS “F” during the weekday AM and PM peak hours. The unsignalized intersection movements would operate at acceptable LOS “D” or better with the exception of:
 - The eastbound right and westbound right movements at Maxwell PI & Picadilly Rd which would operate at LOS “F”,
 - The eastbound left, northbound right, and southbound right movements at E 56th Ave & Skydance/N Site Access which would operate at LOS “F”.
 - The westbound right and southbound left movements at W Site Access & Picadilly Rd which would operate at LOS “F”.
- Queues in total future conditions remain within their respective storage lengths except for the eastbound left, westbound left, northbound left, northbound right and southbound left movements at the intersection of E 56th Ave & Picadilly Rd during 2050 weekday peak hours as well as the westbound left movement at E 56th Ave & Road A during the 2050 PM peak hour.

Recommendations

- It is recommended that the Applicant provide access consistent with the site plan contained herein.
- Site access should be provided via:
 - Northbound through/right lane at Maxwell PI & Picadilly Rd.
 - 100’ southbound left lane, northbound through/right lane, and eastbound through/right lane at E 54th Ave & Picadilly Rd.
 - Eastbound through/right lane and 350’ westbound left lane at E 56th Ave & Road A.
 - Eastbound through/right lane at E 56th Ave & N Site Access.
 - Northbound through/right lane at W Site Access & Picadilly Rd.
 - 250’ southbound left turn lane at W Site Access & Picadilly Rd upon ISP Amendment.

- The intersection of E 56th Ave & Picadilly Rd is being temporarily signalized by the City of Aurora and will eventually have a final signal installed. Coordination with the City of Aurora and pipeline developments will be required to determine cost sharing for this signal.
- The intersections of E 56th Ave & Road A and E 54th Ave & Picadilly Rd shall be constructed by the applicant. Coordination with the City of Aurora and Denver County will be required to determine cost sharing for the quadrants of the signals not encompassed by the site plan.

I. Introduction

Overview

This report presents the results of a Traffic Impact Study (TIS) conducted in support of a site plan to develop a mix of commercial/retail uses with a grocery store use and gas station use as an anchor in Aurora, CO. Currently the site is vacant. For planning and analysis purposes, Strip Retail, a Drive-In Bank, 3 Fast-Food Restaurants with Drive-Throughs, a Coffee Shop with Drive-Through, an Automobile Parts and Service Center, and an Automated Car Wash use were assumed for the mix of commercial/retail uses on site.

Per the requirements of the City of Aurora, a TIS is required to support the proposed development.

Site Location and Study Area

The property that comprises the application area for the proposed development is approximately 26.95 acres in size and is identified as portion of Adams County Parcel Number 182113200004. It is located south of E 56th Ave and east of Picadilly Rd in Aurora, CO, as shown in Figure 1-1. It is zoned Mixed-Use Airport (MU-A) and is currently vacant. Site access is proposed via a RIRO access at Maxwell Pl, a $\frac{3}{4}$ movement access on Picadilly Rd, a signalized full movement access at E 54th Ave & Picadilly Rd, a RIRO access on E 56th Ave, and a signalized full movement access on E 56th Ave.

The Applicant seeks to develop the property with a grocery store and gas station use. The remainder of the site would be available for out parcel development and these lots were assumed as Retail stores, a Drive-In Bank, 3 Fast-Food Restaurants with Drive-Throughs, a Coffee Shop with Drive-Through, an Automobile Parts and Service Center, and an Automated Car Wash use. A reduction of the Applicant's proposed conceptual site plan is provided in Figure 1-2. A full-size copy of the plan is provided in Appendix A.

The study area is generally bounded by E 56th Ave to the north, Picadilly Rd to the west, and property boundaries to the east and south.

Tasks undertaken during this study included the following:

1. Reviewed the Applicant's proposed development plans and other background data.
2. Conducted a virtual field reconnaissance of existing roadway and intersection geometries, traffic controls, and speed limits.
3. Collected peak hour turning movement counts at the key intersections.
4. Analyzed existing levels of service at each of the key study intersections based on the methodologies set forth in the Highway Capacity Guidelines (HCM) 7th Edition and reports generated by Synchro as reported by Synchro version 12.
5. Forecasted background future traffic volumes based on baseline traffic counts, pipeline projects, and regional traffic growth for 2026 (build-out) and 2050 (long-range) conditions.
6. Calculated background levels of service at each of the key study intersections for the projected build-out years based on background future traffic forecasts and the future lane use and traffic controls.
7. Estimated the number of AM and PM peak hour trips that would be generated by the proposed uses based on the Institute of Transportation Engineers (ITE) Trip Generation 11th Edition rates/equations and methodologies.

8. Prepared AM and PM peak hour total future traffic forecasts based on background traffic forecasts plus site traffic assignments for the 2026 (build-out) and 2050 (long-range) conditions.
9. Calculated total future levels of service for each of the key study intersections based on projected total future traffic forecasts along with existing/future traffic controls and intersection geometries.
10. Identified roadway improvements required to accommodate future traffic volumes, as necessary.

Sources of data for this analysis included the Institute of Transportation Engineers (ITE) Trip Generation, 11th edition, the Highway Capacity Guidelines HCM 7th, Synchro 12, City of Aurora, Colorado, Adams County, and the files/library of Galloway.

Site Description and Access

Site Conditions

The terrain proximate to and surrounding the site is generally classified as “level”.

Hazardous Conditions

Based on the field reconnaissance in the vicinity of the subject site, no hazardous features or constraints were identified.

Proposed Site Access

Access to the site is proposed via:

- An additional east leg of the Maxwell PI & Picadilly Rd intersection which will operate as a right-in right-out (RIRO) stop-controlled intersection.
- An additional east leg of the E 54th Ave & Picadilly Rd intersection which will operate under signalized control.
- A new $\frac{3}{4}$ movement access on Picadilly Rd between Maxwell PI and E 54th Ave that will operate under stop control.
- A new RIRO access on E 56th Ave that will operate under stop control.
- A new signalized full movement intersection on E 56th Ave.

Existing Zoning

The subject site is currently zoned Mixed-Use Airport (MU-A) and is currently vacant. Figure 1-3 depicts the existing zoning associated with the subject property, as well as neighboring properties as shown on the Town of Aurora zoning map.

Nearby Uses

The developed properties west and south of the subject site are mostly residential, and the other properties surrounding the subject site are generally planned to be developed with commercial and residential uses. The proposed uses would be consistent with area development.



FIGURE 1-1
SITE LOCATION

56TH & PICADILLY
AURORA, CO



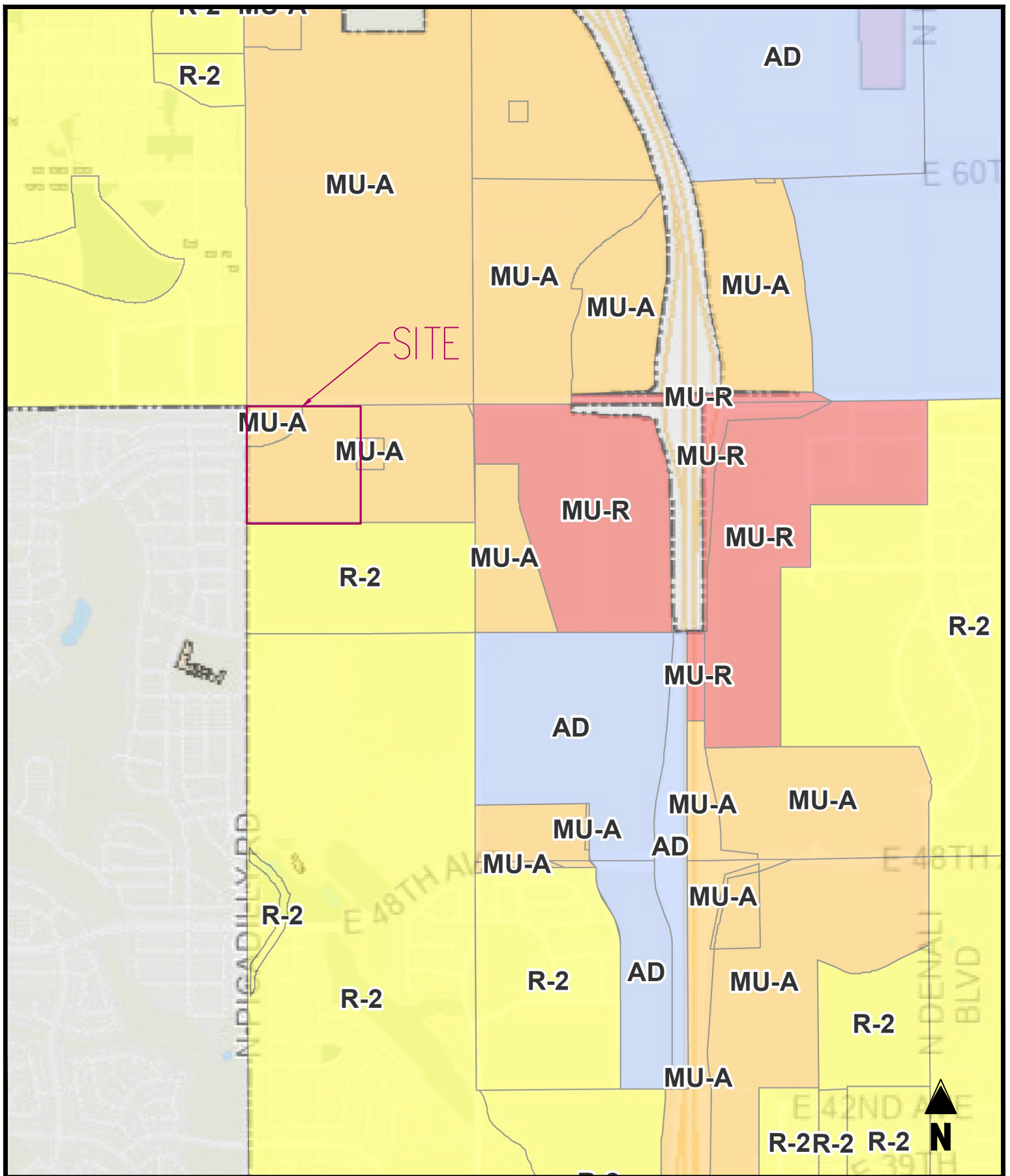


FIGURE 1-3
EXISTING ZONING



II. Background Information

Study Area

The study area was determined by a review of intersections that would experience a significant portion of turning movement volumes generated by the site. As such, the traffic study focuses primarily on the following intersections:

Study Intersections

- E 56th Ave & Picadilly Rd
- Maxwell Pl & Picadilly Rd
- E 54th Ave & Picadilly Rd
- Future Site Accesses

Study Assumptions

For purposes of this analysis only, the proposed use was assumed to be built and occupied in one distinct phase. It was assumed that the use would be built and operational in the study year 2026. A long-term analysis of 2050 is also provided.

Study Methodology

Synchro software version 12 was used to evaluate levels of service at each of the study intersections during the weekday AM and PM peak hours. Synchro is a macroscopic model used for optimizing traffic signal timing and performing capacity analyses. The software can model existing traffic signal timings or optimize splits, offsets, and cycle lengths for individual intersections, an arterial, or a complete network. Synchro allows the user to evaluate the effects of changing intersection geometrics, traffic demands, traffic control, and/or traffic signal settings as well as optimize traffic signal timings.

The levels of service reported for the signalized and unsignalized intersections analyzed herein were taken from the Highway Capacity Manual (HCM) 7th and reports generated by Synchro. Level of service descriptions are included in Appendix B.

A default percent heavy vehicle (%HV) factor of 2% was used for all movements in the study area.

Existing Roadway Network

Regional access to the subject site is provided by E 56th Ave and local access is provided via Picadilly Rd. Maxwell Pl and E 54th Ave are local roads that connect the residential neighborhood to the west of the subject site to Picadilly Rd. Figure 2-1 depicts existing lane use and traffic controls in the vicinity of the subject site. The following provides a description of each of the roadways within the study network.

E 56th Ave

E 56th Ave is constructed as a four-lane median divided section to the west of the subject site and as a two-lane section to the east of the site with turn lanes at major intersections. The posted speed limit is 45 mph in the vicinity of the subject site. The roadway functions as a Major Arterial and provides east west connection through the region. The intersection with Picadilly Rd currently operates under STOP control.

Picadilly Rd

Picadilly Rd is constructed as a two-lane roadway. The posted speed limit is 40 mph in the vicinity of the subject site. The roadway functions as a Major Arterial providing north-south connection for a number of residential neighborhoods. The intersections in the vicinity of the site operate under STOP control.

Maxwell PI

Maxwell PI is constructed as a two-lane roadway in the vicinity of the subject site with a speed limit of 30 mph. The roadway is in the City of Denver and is classified as a Residential Collector street type. Maxwell PI provides connection to the residential neighborhood located west of the subject site. Five foot bike lanes are located on the north and south side of the roadway and exist along the entire length of the road from Dunkirk St to Picadilly Rd. The intersections along its length operate under STOP control.

E 54th Ave

E 54th Ave is constructed as a two-lane roadway in the vicinity of the subject site with no posted speed limit. The roadway is in the City of Denver and is classified as a Residential Local street type. E 54th Ave provides connection to the residential neighborhood located west of the subject site. The intersections along its length operate under STOP control.

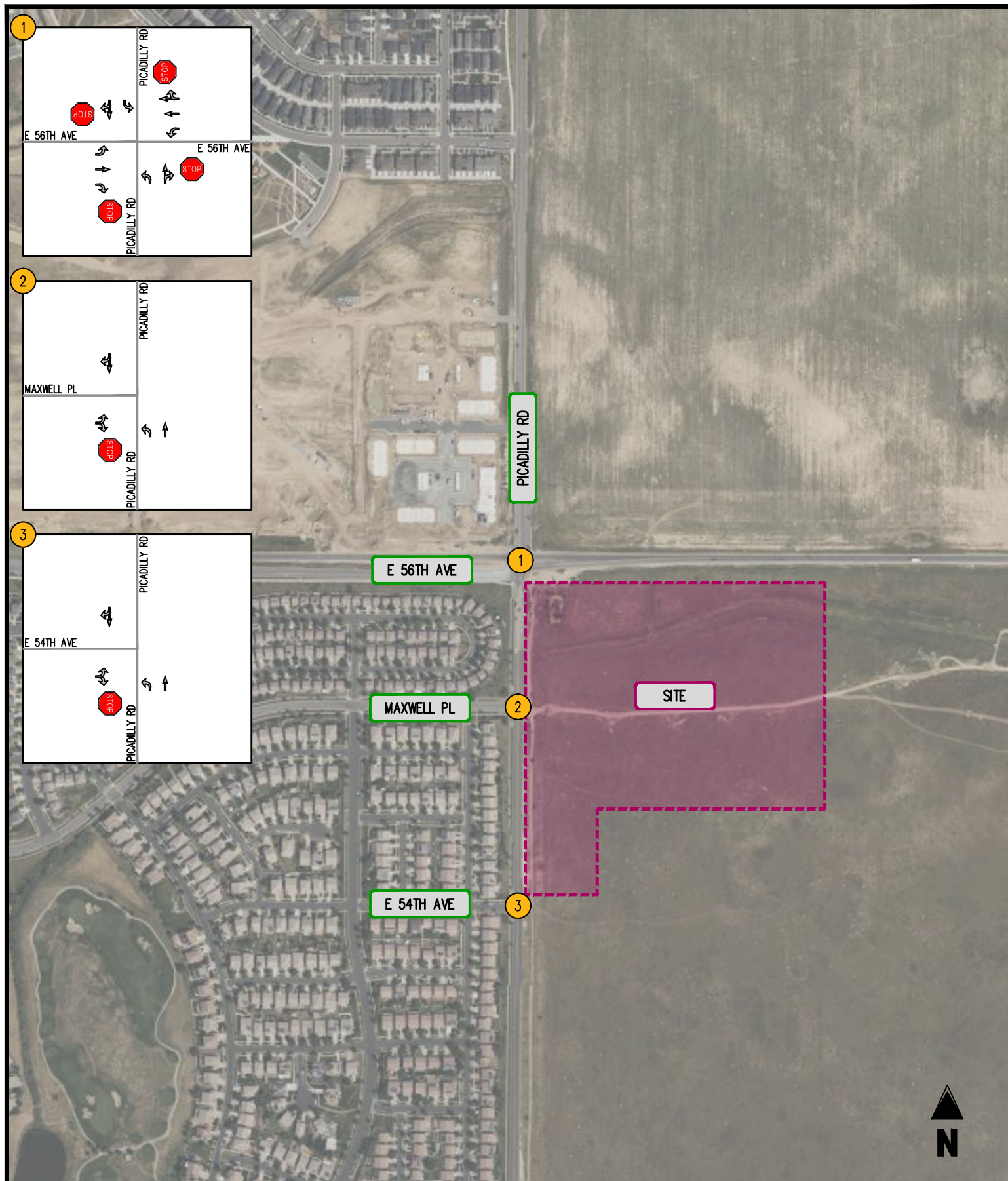
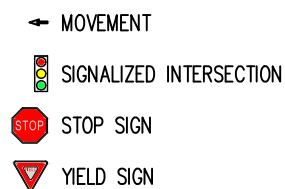


FIGURE 2-1
EXISTING LANE USE AND TRAFFIC CONTROL

56TH & PICADILLY
AURORA, CO



III. Analysis of Existing Conditions

Traffic Volumes

Weekday AM and PM peak hour traffic volumes counts were conducted on Thursday September 12, 2024, from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM for the Maxwell Pl & Picadilly Rd intersection and from 7:00 AM to 7:00 PM for the E 56th Ave & Picadilly Rd and E 54th Ave & Picadilly Rd intersections by IDAX Data Solutions.

The existing peak hour volumes are summarized in Figure 3-1. Copies of traffic counts are included in Appendix C. Existing peak hour factors (PHF) were also computed by approach from the traffic counts and applied to the analysis with a minimum of 0.85 and a maximum of 0.92.

Existing Level of Service

Capacity/level of service (LOS) analyses were conducted at the study intersections based on the existing lane use and traffic controls shown in Figure 2-1 and existing baseline vehicular traffic volumes shown in Figure 3-1. The capacity analysis results are presented in Appendix D and summarized in Table 3-1 and in Figure 3-2.

As shown in Table 3-1, the unsignalized intersection movements operate at LOS “D” or better during the weekday peak hours with the exception of the eastbound through, the northbound through/right, and southbound through/right movements at E 56th Ave & Picadilly Rd which operate at LOS “E” or “F”.

Existing Queueing

An analysis of intersection 95th-percentile queues was performed at key locations. The results of the queueing analysis, as reported by Synchro, are summarized in Table 3-2. As shown in the table, queues are contained within their respective storage.

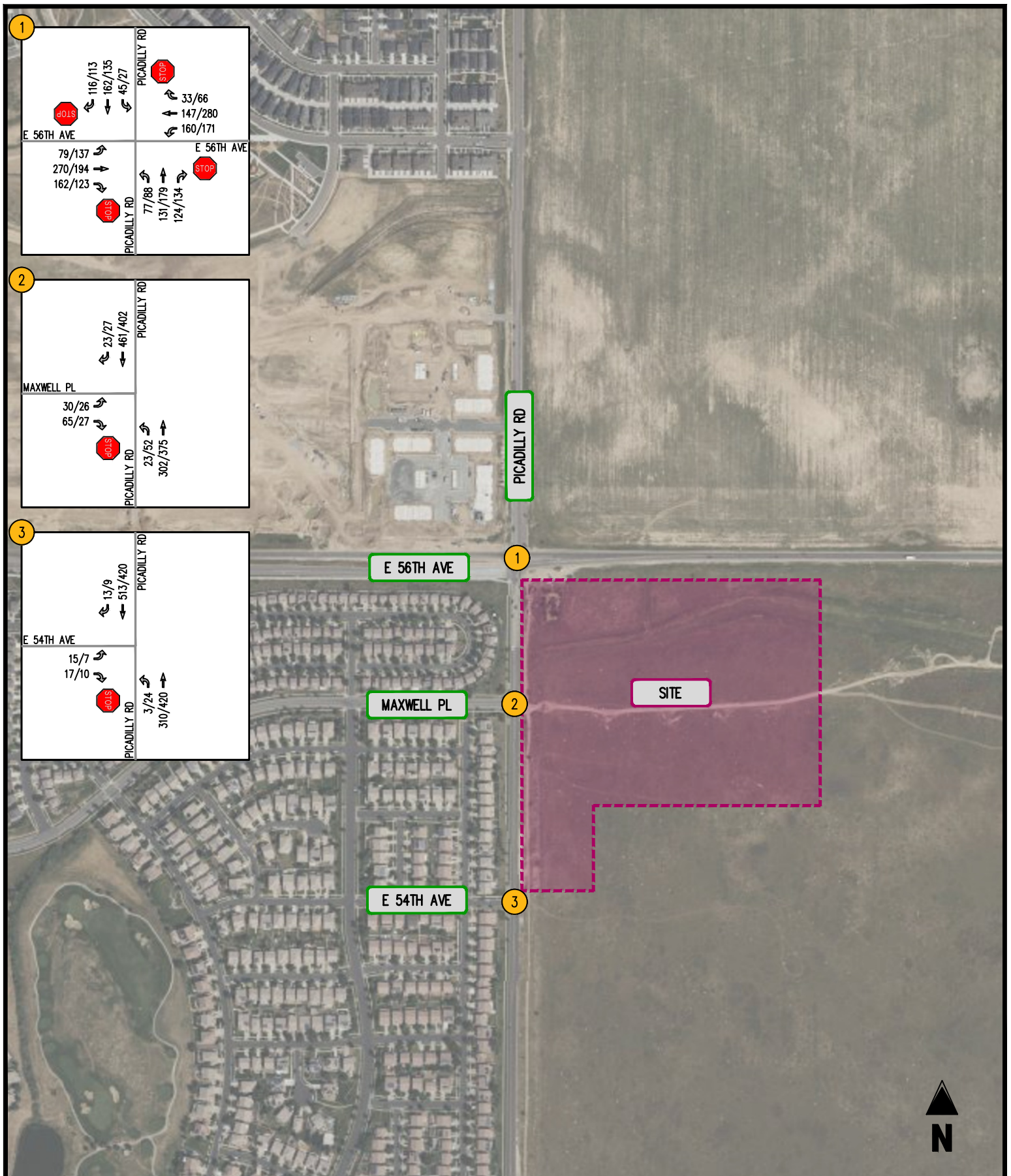


FIGURE 3-1
EXISTING VOLUMES

56TH & PICADILLY
AURORA, CO

(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

- ← MOVEMENT
- ◻ SIGNALIZED INTERSECTION
- STOP STOP SIGN
- ▽ YIELD SIGN



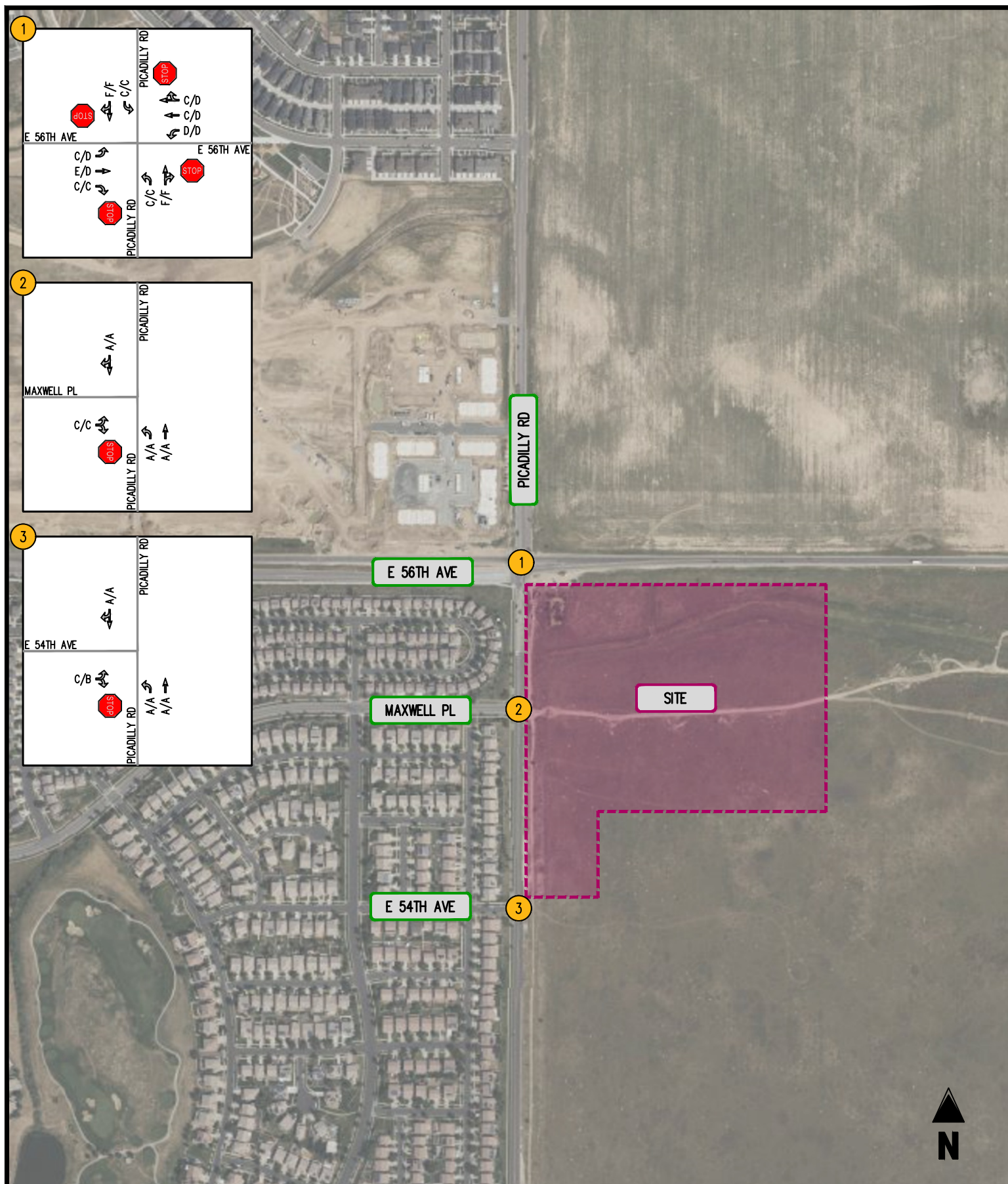


FIGURE 3-2
EXISTING LEVELS OF SERVICE

56TH & PICADILLY
AURORA, CO

(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



Table 3-1
56th & Picadilly - Aurora, CO
Existing Intersection Level of Service Summary (1) (2)

Intersection	Operating Condition	Street Name	Approach/ Movement	Existing 2024	
				AM Peak Hour	PM Peak Hour
1 E 56th Ave & Picadilly Rd	STOP	E 56th Ave	EBL	C [17.0]	D [25.7]
			EBT	E [46.9]	D [34.6]
			EBR	C [19.9]	C [19.9]
			WBL	D [28.0]	D [31.0]
	STOP	Picadilly Rd	WBT	C [18.6]	D [31.3]
			WBTR	C [16.8]	C [24.8]
			NBL	C [17.5]	C [19.6]
			NBTR	E [45.8]	F [105.6]
			SBL	C [15.5]	C [16.0]
			SBTR	F [58.3]	F [54.9]
2 Maxwell Pl & Picadilly Rd	STOP	Maxwell Pl	EBLR	C [16.3]	C [17.0]
		Picadilly Rd	NBL	A [8.6]	A [8.5]
		Picadilly Rd	NBT	A [0.0]	A [0.0]
			SBTR	A [0.0]	A [0.0]
3 E 54th Ave & Picadilly Rd	STOP	E 54th Ave	EBLR	C [15.7]	B [14.5]
		Picadilly Rd	NBL	A [8.7]	A [8.4]
		Picadilly Rd	NBT	A [0.0]	A [0.0]
			SBTR	A [0.0]	A [0.0]

Notes : (1) Numbers in brackets [] represent delay at unsignalized intersections in seconds per vehicle.

Table 3-2
56th & Picadilly - Aurora, CO
Existing Intersection Queueing Summary ⁽¹⁾

Intersection	Operating Condition	Street Name	Approach/ Movement	Available Storage	Existing 2024	
					AM Peak Hour	PM Peak Hour
1 E 56th Ave & Picadilly Rd	STOP	E 56th Ave	EBL	400	25	68
			EBT	-	185	118
			EBR	-	60	48
			WBL	150	85	95
	STOP	E 56th Ave	WBT	-	38	105
			WBTR	-	28	75
		Picadilly Rd	NBL	225	28	35
			NBTR	-	183	340
		Picadilly Rd	SBL	225	15	8
			SBTR	-	228	193
2 Maxwell Pl & Picadilly Rd	STOP	Maxwell Pl	EBLR	-	25	15
		Picadilly Rd	NBL	125	3	5
		Picadilly Rd	NBT	-	0	0
			SBTR	-	0	0
3 E 54th Ave & Picadilly Rd	STOP	E 54th Ave	EBLR	-	8	5
		Picadilly Rd	NBL	125	0	3
		Picadilly Rd	NBT	-	0	0
			SBTR	-	0	0

Notes : (1) Queue length, in feet, is based on the 95th percentile queue as reported by Synchro, Version 12.

IV. Analysis of Future Conditions without Site Development

Methodology

The future traffic forecasts, without the proposed new use, were developed for 2026 and 2050 conditions based on a composite of existing baseline traffic volumes, pipeline developments, and regional traffic growth. An 8.5% growth factor per year was applied to movements of existing traffic on the study intersections.

Regional Growth

Increases in traffic associated with regional growth was assumed as 8.5 percent per year compounded for movements on study intersections up to 2026 as well as to 2050 per the Green Valley Master Plan (MP) Traffic Impact Study (TIS) performed by Felsburg Holt & Ullevig in November 2024. This growth accounts for increases in traffic resulting from influences outside of the immediate study area. The resulting increases in volumes within the study area are reflected in Figure 4-1 for 2026 conditions and Figure 4-2 for 2050 conditions.

Pipeline Developments

Approved but unbuilt/unoccupied (i.e., “pipeline”) developments were identified for consideration within the study. The location of the pipeline developments in relation to the Applicant’s property is shown in Figure 4-3. The Green Valley MP TIS was last updated in November 2024, and the Skydance Development TIS was last updated in October 2024.

The Green Valley MP is the master study for the ~290-acre area which includes the current subject site that is being analyzed. The following pipeline development program was included in the background and total future analysis for 2026 and 2050 conditions:

Green Valley Master Plan (without planning areas from proposed subject site)

526	DU	Senior Housing Attached
1,322	DU	Multi-Family (Low-Rise)
33	DU	Single Family Detached
44	DU	Single Family Attached
1,800	SF	Fast-food Restaurant with Drive-Through
384,900	SF	General Office
35,500	SF	Shopping Plaza (40-150k)
311,500	SF	Strip Retail Plaza (<40k)
8	FP	Gas Station with Convenience Store
5,000	SF	High-Turnover Sit-Down Restaurant
100	Rooms	Hotel
111,000	SF	Hardware Store
9,100	SF	Medical Office Building
12,000	SF	Day Care

These pipeline development site trips were obtained from removing the assumed uses for the current subject site area from the Green Valley MP TIS. This site was accounted for in planning areas 47 and 54 in the Master Plan and had assumed uses of the following:

Proposed Site uses from Green Valley Master Plan

220	DU	Multi-Family (Low-Rise)
4,800	SF	Drive-in Bank

12,700	SF	Fast-food Restaurant with Drive-Through
1,500	SF	Coffee/Donut Shop with Drive-Thru
13,000	SF	Strip Retail Plaza (<40k)
16	FP	Gas Station with Convenience Store
7,200	SF	Automobile Parts Sales
1	TUNNEL	Car Wash
122,900	SF	Grocery Store/Supermarket
32,000	SF	Fitness Center

The trips for these uses were tabulated and removed from the total Master Plan trips and the pipeline trips were calculated for the trips to and from the other areas/sites of the master plan.

The Skydance development is located directly north of the site. The following pipeline development and development program was included in the background and total future analysis for 2050 conditions:

Skydance Development TIS

159	DU	Single-Family Homes (Detached)
227	DU	Single-Family Homes (Attached)
694	DU	Multi-Family Housing (Mid-Rise)
160,300	SF	Shopping Center (>150k)
64,000	SF	Supermarket
12	FP	Gas Station with Convenience Store Use
1	TUNNEL	Car Wash
4,800	SF	Fast-Food Restaurant with Drive-Through

The pipeline trips are shown in Figure 4-4 for 2026 conditions and Figure 4-5 for 2050 conditions. The intersections of E 56th Ave & Picadilly Rd, E 54th Ave & Picadilly Rd, and E 56th Ave & Road A were identified in the Pipeline TIS's to be signalized once developments are completed. Relevant excerpts from the pipeline developments TIS's are included in Appendix E.

Background Future Lane Use and Traffic Control Improvements

Overview

Background lane use and traffic control were determined based on the Picadilly Road Widening Project from 38th to E 56th Ave as well as the pipeline development's lane use and traffic control shown in the TIS reports. The assumed lane use and traffic control are described below.

Picadilly Road Widening Project

An infrastructure plan is being drafted for Picadilly Rd from 38th Ave to E 56th Ave. This is being done by the Aerotropolis Regional Transportation Authority (ARTA) and AECOM. The date of completion for this project is unknown, but it was assumed that these improvements would be completed by 2026 conditions. The lane use improvements for each intersection within our study area include:

- E 56th Ave & Picadilly Rd (*Signalized*)
 - Dual Northbound left turn lanes (250' storage)
 - Three northbound through lanes
 - Northbound right turn lane (175' storage)
- Maxwell Pl & Picadilly Rd
 - Eastbound right turn lane only
 - Two northbound through lanes
 - Northbound through/right lane
 - Two southbound through lanes
 - Southbound through/right lane

- E 54th Ave & Picadilly Rd (*Signalized*)
 - Eastbound left turn lane
 - Eastbound through/right lane
 - Westbound left turn lane
 - Westbound through/right lane
 - Northbound left turn lane (125' storage)
 - Two Northbound through lanes
 - Northbound through/right lane
 - Southbound left turn lane (100' storage)
 - Two Southbound through lanes
 - Southbound through/right lane

Green Valley MP TIS

The lane geometry shown in Figure 11 (2025) and Figure 12 (2040) in the Green Valley MP TIS were used to assume lane use and traffic control for the analysis of the proposed subject site. This information was used for intersections along E 56th Ave that the widening project did not cover. For 2026 conditions, with the Picadilly Road Widening Project, the following lane use was assumed for legs and intersections not included in the widening plan:

- E 56th Ave & Picadilly Rd
 - Eastbound left lane
 - Eastbound through lane
 - Eastbound right lane
 - Dual Westbound left lanes
 - Two Westbound through lanes
 - Westbound right lane
 - Southbound left lane
 - Southbound through lane
 - Southbound right lane
- E 56th Ave & Road A (*Signalized*)
 - Two Eastbound through lanes
 - Eastbound through/right lane
 - Westbound left lane
 - Two Westbound through lanes
 - Northbound left lane
 - Northbound right lane

For 2050 conditions, the lane use and traffic control was similar to 2025 conditions with a few changes shown in **bold** below. The following lane use was assumed for legs and intersections not included in the widening plan during 2050 conditions:

- E 56th Ave & Picadilly Rd
 - Eastbound left lane
 - **Three** Eastbound through lanes
 - Eastbound right lane
 - Dual Westbound left lanes
 - **Three** Westbound through lanes
 - Westbound right lane
 - Southbound left lane
 - **Three** Southbound through lanes
 - Southbound right lane
- E 56th Ave & Road A (*Signalized*)
 - Two Eastbound through lanes
 - Eastbound through/right lane
 - Westbound left lane
 - **Three** Westbound through lanes
 - Northbound left lane
 - Northbound right lane

Skydance TIS

The lane geometry shown in Figure 11A and Figure 11B in the Skydance TIS was used to assume lane use and traffic control for the analysis of the proposed subject site. This information was used for 2050 conditions at intersections along E 56th Ave that will have access to the Skydance development. At the intersections that overlap with the Green Valley MP TIS, the lane use was fairly consistent with the addition of the **bold** bullets below. For 2050 conditions the following lane use and traffic control was assumed:

- E 56th Ave & Picadilly Rd (*Signalized*)
 - **Dual** Eastbound left lanes
 - Three Eastbound through lanes
 - Eastbound right lane
 - Dual Westbound left lanes

- Three Westbound through lanes
 - Westbound right lane
 - **Dual** Southbound left lanes
- E 56th Ave & Road A (*Signalized*)
 - **Eastbound left turn lane**
 - Three Eastbound through lanes
 - Three Westbound through lanes
- E 56th Ave & Skydance/N Site Access
 - **Eastbound left turn lane (273' storage)**
 - Three Eastbound through lanes
- Three Southbound through lanes
 - Southbound right lane
- **Westbound right turn lane**
 - **Southbound left turn lane**
 - **Southbound right turn lane**
- Three Westbound through lanes
 - **Westbound right turn lane**
 - **Southbound right turn lane**

For any discrepancies in the lane use between the Picadilly Road Widening Project, Green Valley MP TIS, and the Skydance TIS, the greatest capacity improvement shown was used. The background future lane use and traffic control can be seen in Figure 4-6 for 2026 conditions and Figure 4-7 for 2050 conditions.

Background Future Traffic Forecasts

The existing traffic forecasts depicted in Figure 3-1, the regional growth shown in Figure 4-1 (2026) and Figure 4-2 (2050), and the pipeline development site trips shown in Figure 4-4 (2026) and Figure 4-5 (2050) were added together to yield the background future traffic forecasts shown in Figure 4-8 for 2026 conditions and Figure 4-9 for 2050 conditions.

Background Future Levels of Service

Capacity analyses of 2026 and 2050 future traffic conditions without the proposed development are provided in Appendix F and summarized in Table 4-1. The forecasted levels of service are also depicted graphically in Figure 4-10 for 2026 conditions and Figure 4-11 for 2050 conditions.

As shown on Table 4-1, during 2026 conditions the unsignalized intersection movements would operate at acceptable LOS “B” or better and the signalized intersections would operate at acceptable overall LOS “C” or better.

During 2050 conditions, the unsignalized intersection movements would operate at acceptable LOS “D” or better with the exception of the eastbound right turn at Maxwell PI & Picadilly Rd which would operate at LOS “F” during the weekday peak hours as well as the eastbound left and southbound right movements at E 56th Ave & Skydance Access which would operate at LOS “F” during the weekday peak hours due to regional growth. The signalized intersections are forecasted to operate at acceptable overall LOS “D” or better in 2050 conditions with the exception of the E 56th Ave & Picadilly Rd intersection which would operate at LOS “F” during the weekday peak hours, the E 54th Ave & Picadilly Rd intersection which would operate at LOS “E” during the AM peak hour, and the E 56th Ave & Road A intersection which would operate at LOS “E” during the AM peak hour and LOS “F” during the PM peak hour.

Background Future Queueing

An analysis of intersection queues was performed at key locations under background future traffic conditions. The results of the queueing analysis are summarized in Table 4-2.

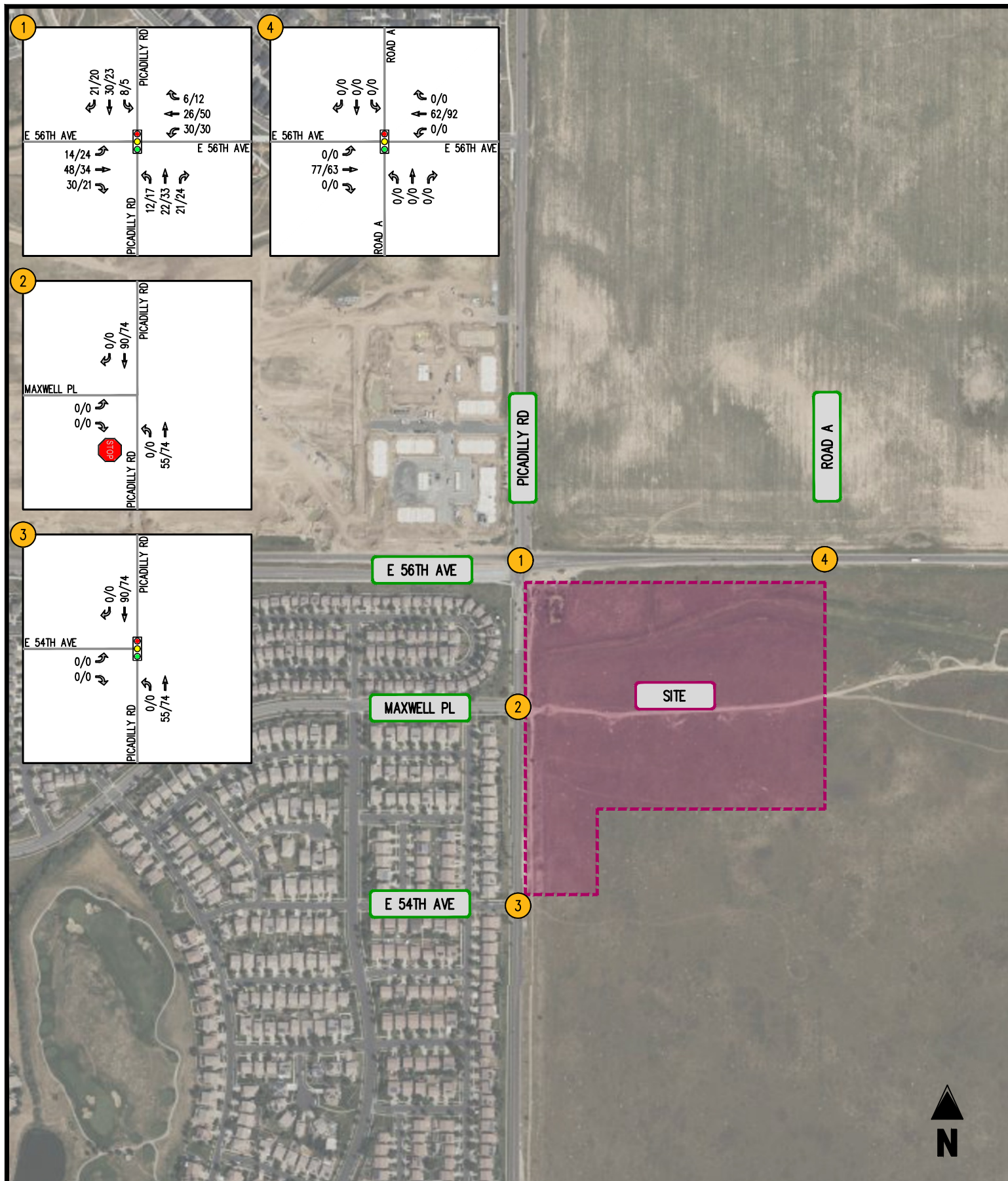
As shown in the table, queues within the study network will increase due to regional traffic growth. All queues are expected to be contained in their respective storage during 2026 conditions. During 2050

conditions, all queues are expected to be contained in their respective storage with the exception of the following queues at the E 56th Ave & Picadilly Rd intersection:

- Eastbound left
- Westbound left
- Northbound left
- Northbound right
- Southbound left

These movements would exceed the available storage in both the AM and PM 2050 peak hours.

Operational and queueing deficiencies have been identified for 2050 long range conditions and suggests that further study should be required as growth/development occurs in the area.



**FIGURE 4-1
BACKGROUND GROWTH 2026**

56TH & PICADILLY
AURORA, CO

(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



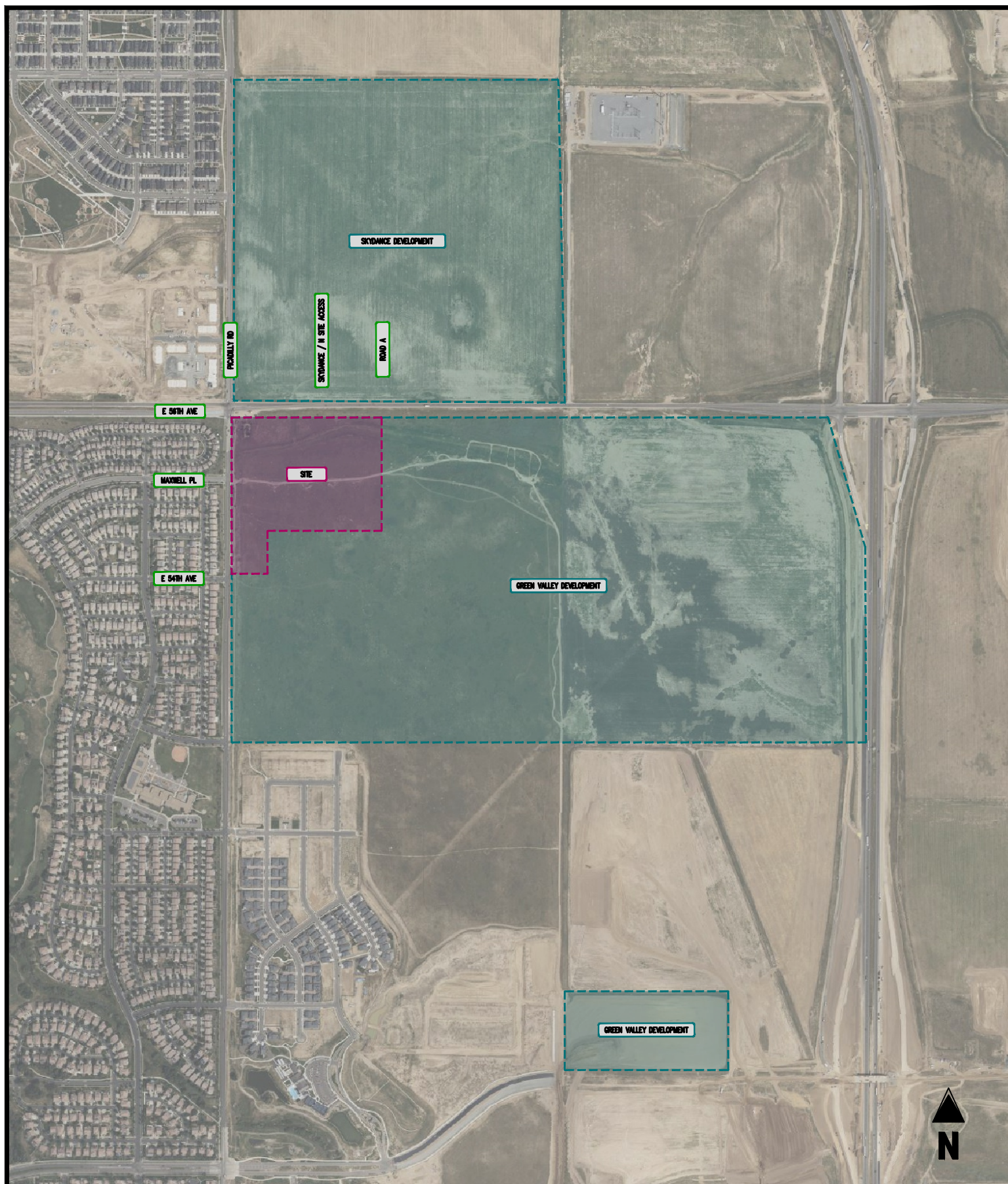


FIGURE 4-3
PIPELINE LOCATIONS



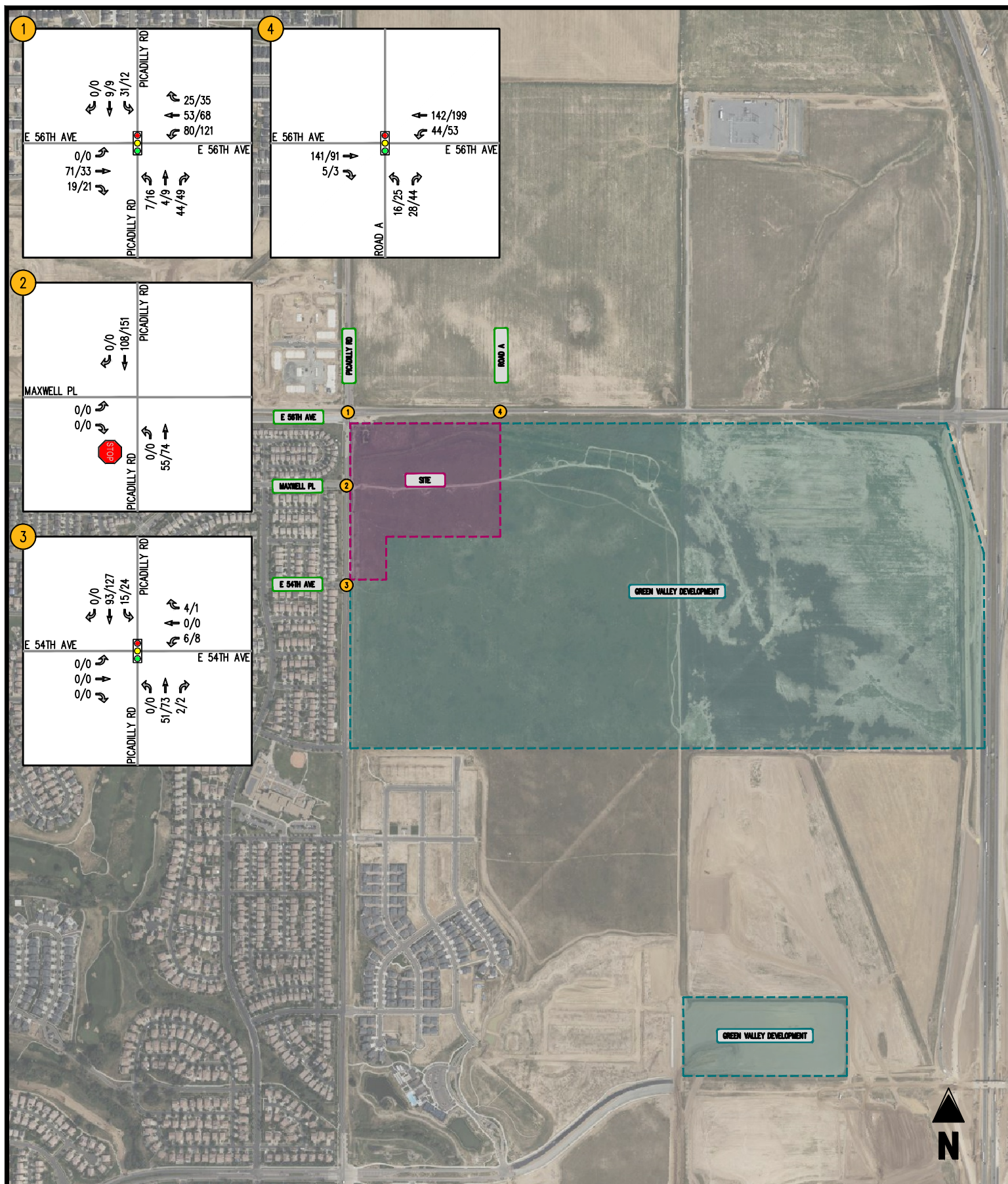


FIGURE 4-4
PIPELINE SITE TRIPS 2026

56TH & PICADILLY
AURORA, CO

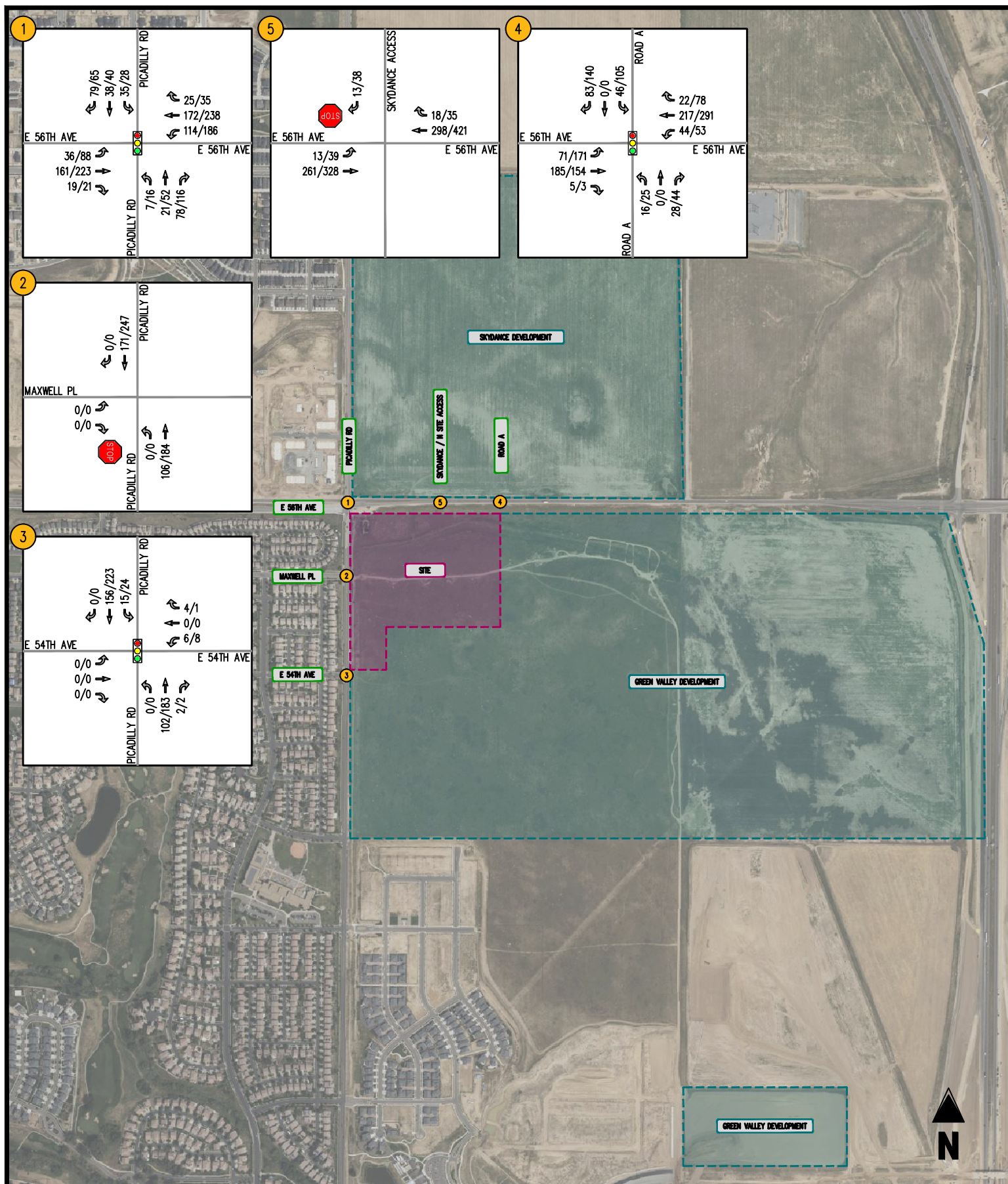


FIGURE 4-5
PIPELINE SITE TRIPS 2050

56TH & PICADILLY
AURORA, CO

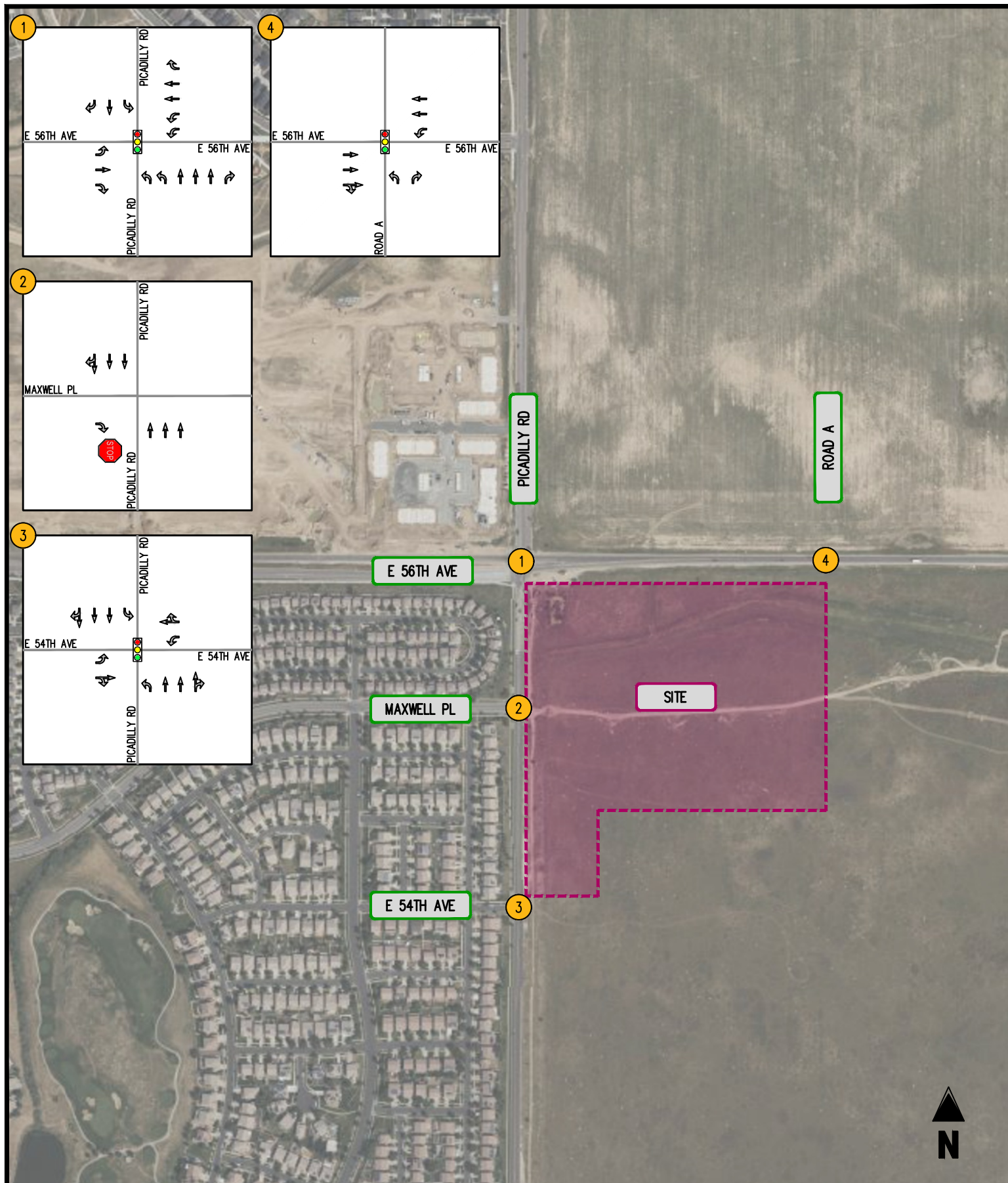
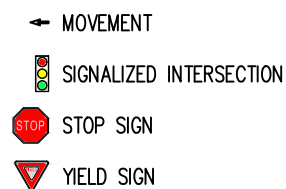


FIGURE 4-6
BACKGROUND LANE USE AND TRAFFIC CONTROL 2026

56TH & PICADILLY
 AURORA, CO



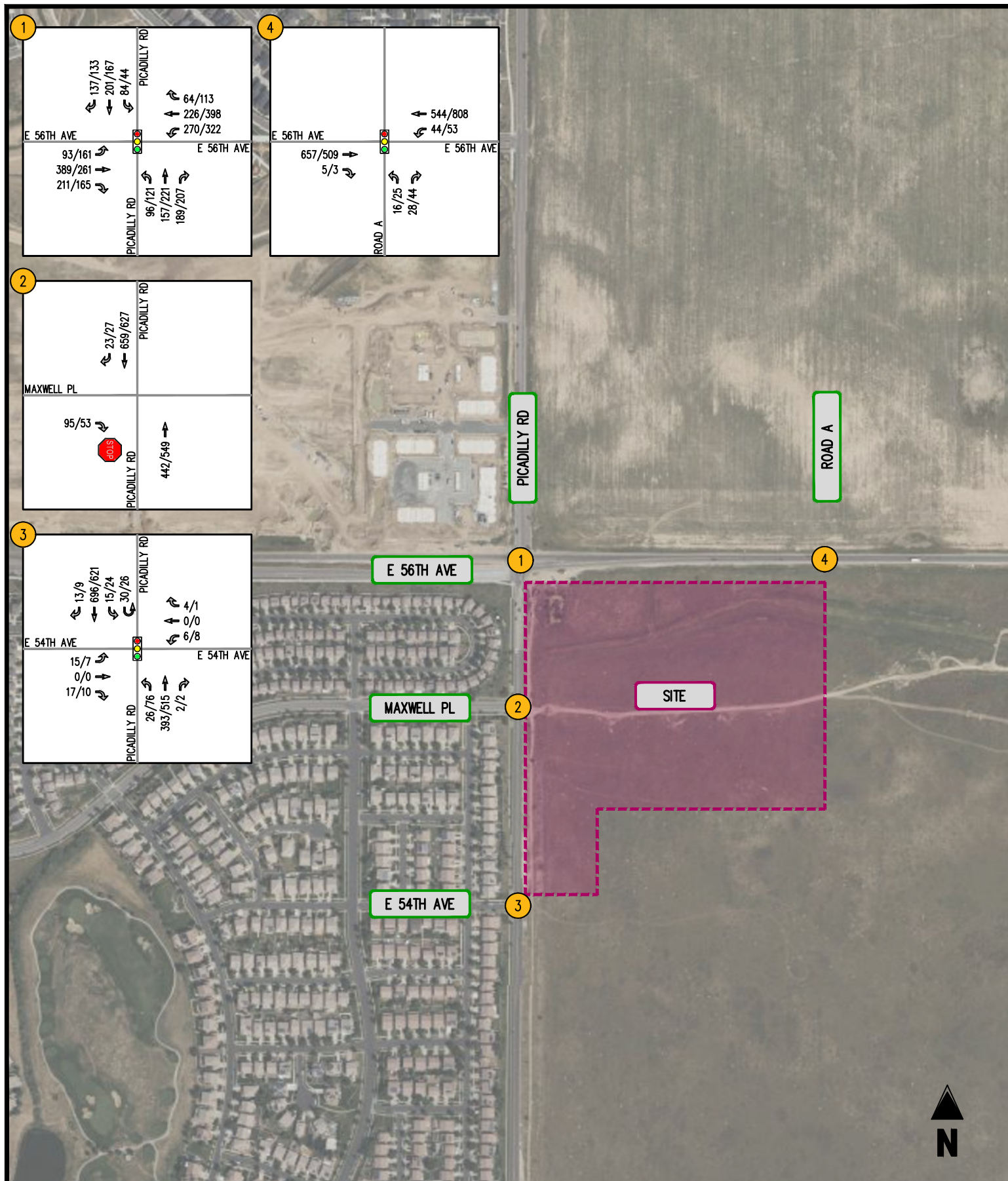





FIGURE 4-8
BACKGROUND FORECASTS 2026

56TH & PICADILLY
AURORA, CO

(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



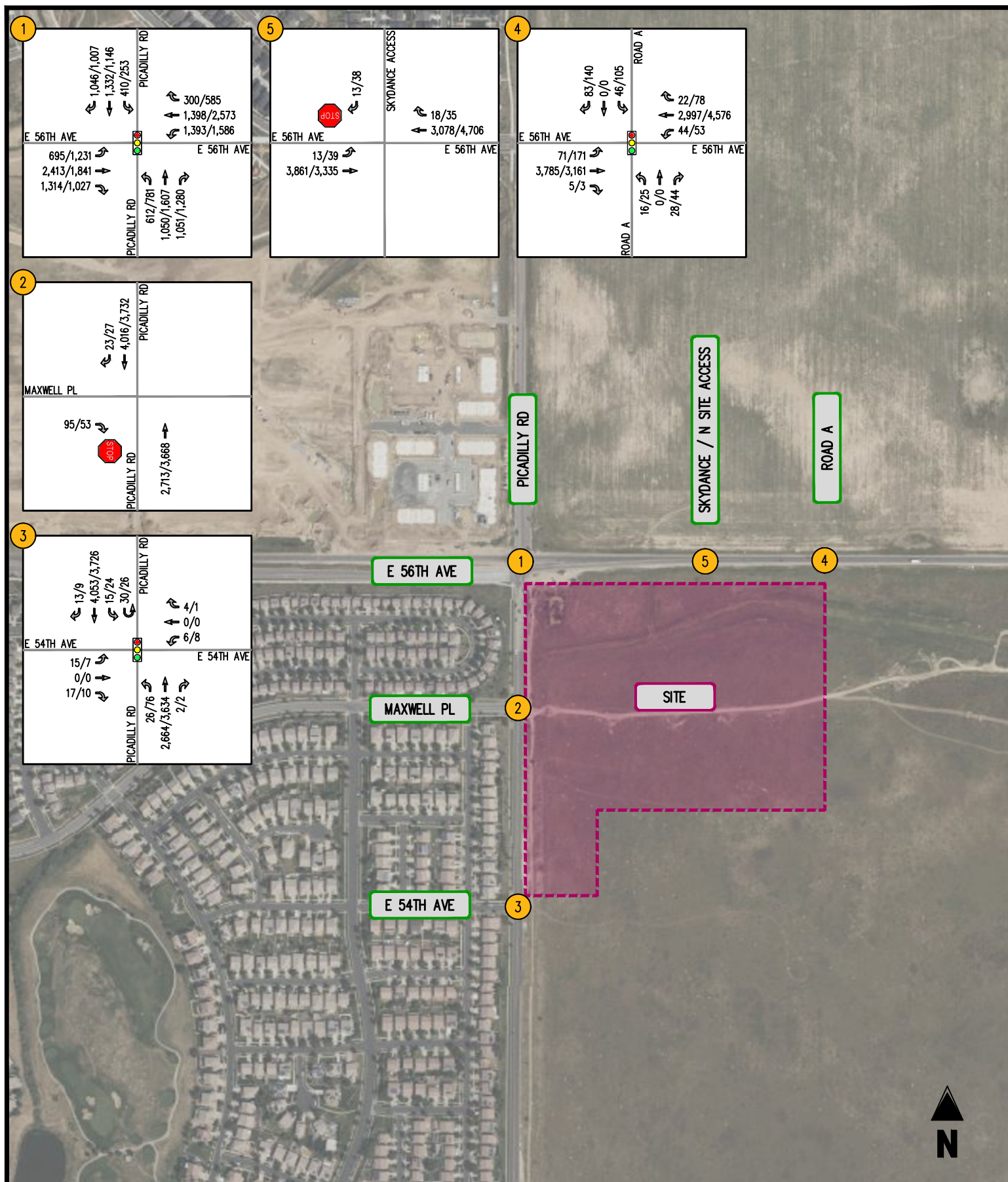





FIGURE 4-9
BACKGROUND FORECASTS 2050

56TH & PICADILLY
AURORA, CO

(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



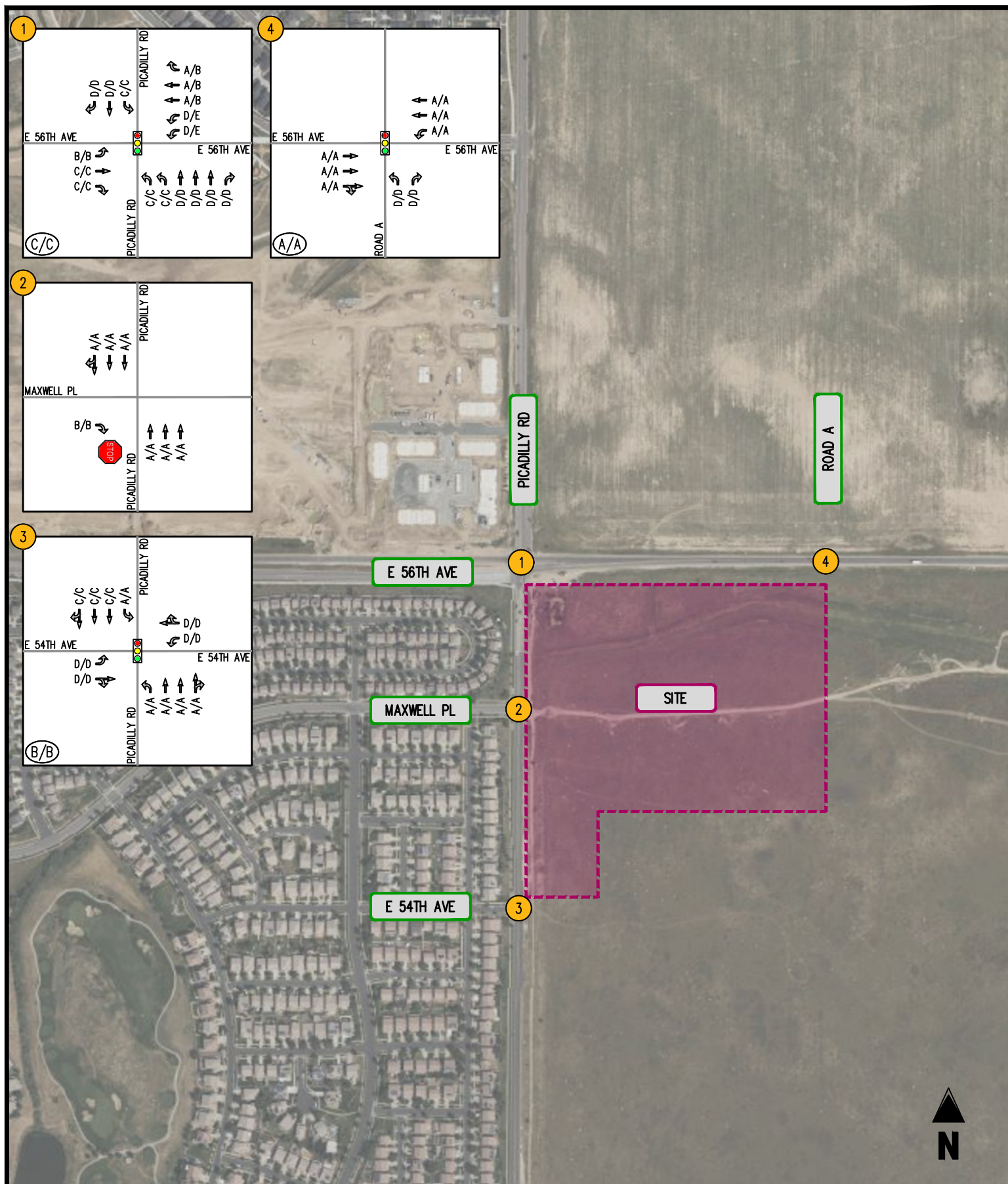


FIGURE 4-10
BACKGROUND LEVELS OF SERVICE 2026

56TH & PICADILLY
AURORA, CO

(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

- ← MOVEMENT
- 🚦 SIGNALIZED INTERSECTION
- 🛑 STOP SIGN
- 🚧 YIELD SIGN



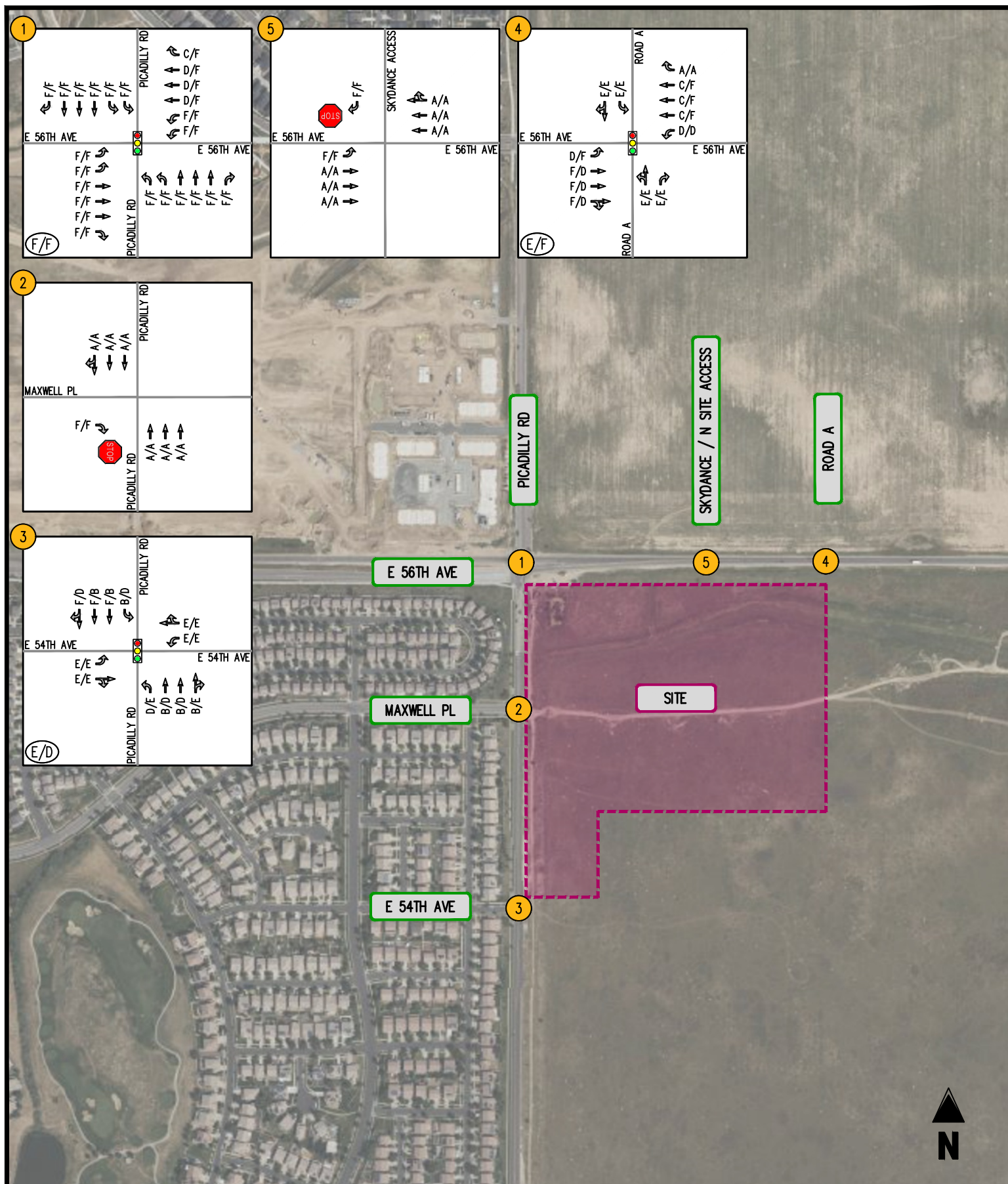


FIGURE 4-11
BACKGROUND LEVELS OF SERVICE 2050

56TH & PICADILLY
AURORA, CO

(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

- ← MOVEMENT
- 🚦 SIGNALIZED INTERSECTION
- 🛑 STOP SIGN
- 🚶 YIELD SIGN



Table 4-1
56th & Picadilly - Aurora, CO
Background Future Intersection Level of Service Summary^{(1) (2)}

Intersection	Operating Condition	Street Name	Approach/ Movement	Existing 2024		Background 2026		Background 2050	
				AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
1 E 56th Ave & Picadilly Rd	STOP	E 56th Ave	EBL	C [17.0]	D [25.7]	-	-	-	-
			EBT	E [46.9]	D [34.6]	-	-	-	-
			EBR	C [19.9]	C [19.9]	-	-	-	-
		E 56th Ave	WBL	D [28.0]	D [31.0]	-	-	-	-
			WBT	C [18.6]	D [31.3]	-	-	-	-
			WBTR	C [16.8]	C [24.8]	-	-	-	-
	STOP	Picadilly Rd	NBL	C [17.5]	C [19.6]	-	-	-	-
			NBTR	E [45.8]	F [105.6]	-	-	-	-
		Picadilly Rd	SBL	C [15.5]	C [16.0]	-	-	-	-
			SBTR	F [58.3]	F [54.9]	-	-	-	-
	Signalization + Lane Improvements	E 56th Ave	EBL	-	-	B (15.6)	B (16.5)	F (214.5)	F (622.6)
			EBT	-	-	C (26.9)	C (24.2)	F (342.1)	F (223.1)
			EBR	-	-	C (23.1)	C (22.8)	F (579.9)	F (380.1)
		E 56th Ave	WBL	-	-	D (53.6)	E (66.9)	F (625.3)	F (660.3)
			WBT	-	-	A (8.5)	B (10.4)	D (36.2)	F (349.7)
			WBR	-	-	A (8.4)	B (10.2)	C (30.8)	F (161.3)
		Picadilly Rd	NBL	-	-	C (32.0)	C (33.2)	F (499.1)	F (551.7)
			NBT	-	-	D (36.8)	D (41.0)	F (122.3)	F (201.5)
			NBR	-	-	D (47.0)	D (51.6)	F (417.1)	F (422.5)
		Picadilly Rd	SBL	-	-	C (32.5)	C (32.2)	F (90.2)	F (130.2)
			SBT	-	-	D (44.0)	D (41.0)	F (233.0)	F (186.7)
		Overall	SBR	-	-	D (41.5)	D (40.8)	F (467.9)	F (451.8)
				-	-	C (32.4)	C (33.3)	F (336.3)	F (375.8)
2 Maxwell Pl & Picadilly Rd	STOP	Maxwell Pl	EBLR	C [16.3]	C [17.0]	-	-	-	-
		Picadilly Rd	NBL	A [8.6]	A [8.5]	-	-	-	-
		Picadilly Rd	NBT	A [0.0]	A [0.0]	-	-	-	-
		Picadilly Rd	SBTR	A [0.0]	A [0.0]	-	-	-	-
	Picadilly Road Widening Project	Maxwell Pl	EBR	-	-	B [13.3]	B [12.4]	F [1311.6]	F [458.2]
		Picadilly Rd	NBT	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Picadilly Rd	NBR	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Picadilly Rd	SBT	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Picadilly Rd	SBR	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]
				-	-				
3 E 54th Ave & Picadilly Rd	STOP	E 54th Ave	EBLR	C [15.7]	B [14.5]	-	-	-	-
		Picadilly Rd	NBL	A [8.7]	A [8.4]	-	-	-	-
		Picadilly Rd	NBT	A [0.0]	A [0.0]	-	-	-	-
		Picadilly Rd	SBTR	A [0.0]	A [0.0]	-	-	-	-
	Added East Leg + Signal	E 54th Ave	EBL	-	-	D (45.1)	D (46.8)	E (69.2)	E (70.8)
			EBTR	-	-	D (45.5)	D (47.5)	E (69.8)	E (71.7)
			WBL	-	-	D (49.0)	D (50.2)	E (73.3)	E (74.7)
		SW Site Access	WBTR	-	-	D (48.5)	D (47.9)	E (72.7)	E (72.0)
			NBL	-	-	A (7.7)	A (7.1)	D (44.0)	E (57.8)
			NBT	-	-	A (8.5)	A (8.3)	B (15.9)	D (49.0)
		Picadilly Rd	NBR	-	-	A (8.6)	A (8.5)	B (17.7)	E (55.1)
			SBL	-	-	A (7.5)	A (7.3)	B (16.1)	D (42.8)
			SBT	-	-	C (21.6)	C (21.1)	F (88.4)	B (16.4)
		Picadilly Rd	SBTR	-	-	C (21.8)	C (21.3)	F (92.6)	D (52.0)
			Overall	-	-	B (17.7)	B (15.4)	E (60.7)	D (49.9)
4 E 56th Ave & Road A 3-Leg Intersection	SIGNAL	E 56th Ave	EBT	-	-	A (0.2)	A (0.1)	-	-
			EBTR	-	-	A (0.3)	A (0.3)	-	-
			WBL	-	-	A (3.6)	A (4.0)	-	-
			WBT	-	-	A (2.9)	A (3.7)	-	-
		Road A	NBL	-	-	D (43.8)	D (42.8)	-	-
			NBR	-	-	D (45.0)	D (44.4)	-	-
		Overall		-	-	A (2.9)	A (4.4)	-	-
				-	-			-	-
	4-Leg Intersection	E 56th Ave	EBL	-	-	-	-	D (45.4)	F (280.7)
			EBT	-	-	-	-	F (108.0)	D (42.4)
			EBTR	-	-	-	-	F (112.1)	D (49.2)
			WBL	-	-	-	-	D (41.8)	D (41.9)
		E 56th Ave	WBT	-	-	-	-	C (33.0)	F (248.6)
			WBR	-	-	-	-	A (8.8)	A (9.7)
		Road A	NBLT	-	-	-	-	E (66.6)	E (67.5)
			NBR	-	-	-	-	E (68.1)	E (70.4)
		Road A	SBL	-	-	-	-	E (60.4)	E (67.0)
			SBTR	-	-	-	-	E (57.8)	E (60.8)
		Overall		-	-	-	-	E (74.6)	F (161.6)
				-	-	-	-		
5 E 56th Ave & Skydance/N Site Access 3-Leg Intersection (With North Leg for Skydance Development)	STOP	E 56th Ave	EBL	-	-	-	-	F [279.4]	F [9935.6]
		E 56th Ave	EBT	-	-	-	-	A [0.0]	A [0.0]
		E 56th Ave	WBTR	-	-	-	-	A [0.0]	A [0.0]
		Skydance Access	SBR	-	-	-	-	F [67.7]	F [1157.2]

Notes : (1) Numbers in brackets [] represent delay at unsignalized intersections in seconds per vehicle.
(2) Numbers in parenthesis () represent delay at signalized intersections in seconds per vehicle.

Table 4-2
56th & Picadilly - Aurora, CO
Background Future Intersection Queueing Summary⁽¹⁾

Intersection	Operating Condition	Street Name	Approach/ Movement	Available Storage	Existing 2024		Background 2026		Background 2050	
					AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
1 E 56th Ave & Picadilly Rd	STOP	E 56th Ave	EBL	400	25	68	-	-	-	-
			EBT	-	185	118	-	-	-	-
			EBR	-	60	48	-	-	-	-
		E 56th Ave	WBL	150	85	95	-	-	-	-
			WBT	-	38	105	-	-	-	-
			WBTR	-	28	75	-	-	-	-
	STOP	Picadilly Rd	NBL	225	28	35	-	-	-	-
			NBTR	-	183	340	-	-	-	-
			SBL	225	15	8	-	-	-	-
	Signalization + Lane Improvements	E 56th Ave	SBTR	-	228	193	-	-	-	-
			EBL ⁽⁴⁾	400	-	-	64	96	619	1225
			EBT	-	-	-	416	241	1438	1037
		E 56th Ave	EBR	-	-	-	56	41	2359	1725
			WBL ⁽²⁾	375	-	-	136	129	1294	658
			WBT	-	-	-	93	162	472	498
		Picadilly Rd	WBR	125	-	-	3	35	79	83
			NBL ⁽³⁾	250	-	-	52	63	641	672
			NBT	-	-	-	63	87	570	805
		Picadilly Rd	NBR	175	-	-	144	164	1773	1869
			SBL	225	-	-	72	46	299	197
			SBT	-	-	-	194	171	783	657
		Picadilly Rd	SBR	-	-	-	23	22	1818	1679
2 Maxwell Pl & Picadilly Rd	STOP	Maxwell Pl	EBLR	-	25	15	-	-	-	-
		Picadilly Rd	NBL	125	3	5	-	-	-	-
		Picadilly Rd	NBT	-	0	0	-	-	-	-
		Picadilly Rd	SBTR	-	0	0	-	-	-	-
	Picadilly Road Widening Project	Maxwell Pl	EBR	-	-	-	18	10	305	148
		Picadilly Rd	NBT	-	-	-	0	0	0	0
		Picadilly Rd	NBR	-	-	-	0	0	0	0
		Picadilly Rd	SBT	-	-	-	0	0	0	0
		Picadilly Rd	SBR	-	-	-	0	0	0	0
3 E 54th Ave & Picadilly Rd	STOP	E 54th Ave	EBLR	-	8	5	-	-	-	-
		Picadilly Rd	NBL	125	0	3	-	-	-	-
		Picadilly Rd	NBT	-	0	0	-	-	-	-
		Picadilly Rd	SBTR	-	0	0	-	-	-	-
	Added East Leg + Signal	E 54th Ave	EBL	-	-	-	30	19	41	27
			EBTR	-	-	-	0	0	0	0
			WBL	-	-	-	18	21	24	28
		E 54th Ave	WBTR	-	-	-	0	0	0	0
			NBL	125	-	-	18	42	16	25
			NBT	-	-	-	81	106	949	1817
		Picadilly Rd	NBR	-	-	-	0	0	0	0
			SBL	100	-	-	11	8	5	5
			SBT	-	-	-	95	79	528	472
		Picadilly Rd	SBTR	-	-	-	0	0	0	0
4 E 56th Ave & Road A	3-Leg Intersection	E 56th Ave	EBTR	-	-	-	145	104	-	-
		E 56th Ave	WBL	350	-	-	14	16	-	-
			WBT	-	-	-	62	98	-	-
		Road A	NBL	-	-	-	31	43	-	-
			NBR	-	-	-	28	34	-	-
	4-Leg Intersection	E 56th Ave	EBL	325	-	-	-	-	27	74
			EBTR	-	-	-	-	-	819	725
			WBL	350	-	-	-	-	41	51
		E 56th Ave	WBT	-	-	-	-	-	1310	2686
			WBR	-	-	-	-	-	0	5
			NBLT	-	-	-	-	-	43	60
		Road A	NBR	-	-	-	-	-	0	0
			SBL	-	-	-	-	-	84	163
			SBTR	-	-	-	-	-	54	128
5 E 56th Ave & Skydance/N Site Access	3-Leg Intersection (With North Leg for Skydance Development)	E 56th Ave	EBL	273 *	-	-	-	-	45	180
			EBT	-	-	-	-	-	0	0
		E 56th Ave	WBTR	-	-	-	-	-	0	0
		Skydance Access	SBR	-	-	-	-	-	18	145

Notes : (1) Queue length, in feet, is based on the 95th percentile queue as reported by Synchro, Version 12.
(2) Dual left in 2026 and 2050 Background Future and Total Future conditions
(3) Dual left in 2050 Background Future conditions and 2026 and 2050 Total Future conditions
(4) Dual left in 2050 Background Future and Total Future conditions
* Storage length per Skydance Development T1

V. Site Analysis

Overview

The Applicant is proposing to develop the approximately 26.95-acre site with a mix of commercial and retail uses. For purposes of this study, the site is assumed complete and occupied in 2026. For analysis purposes the following use and development programs were assumed:

Build-Out 2026:

168,112	SF	Shopping Center (>150k)
18	FP	Gas Station
4,750	SF	Drive-In Bank
4,500	SF	Fast-Food Restaurant w/Drive Thru
1,500	SF	Coffee Shop w/Drive-Thru
4,500	SF	Fast-Food Restaurant w/Drive Thru
3,700	SF	Fast-Food Restaurant w/Drive Thru
7,200	SF	Automobile Parts and Service Center
1	TUNNEL	Automated Car Wash

Proposed Site Access & Total Future Lane Use and Traffic Control

As shown on the Applicant's conceptual plan (Figure 1-2), access to the development is being proposed via:

- An additional east leg of the Maxwell PI & Picadilly Rd intersection which will operate as a stop-controlled RIRO access.
- An additional east leg of the E 54th Ave & Picadilly Rd intersection which will operate under signalized control.
- A $\frac{3}{4}$ movement access or interim RIRO access on Picadilly Rd that will operate under stop control about 400 feet south of the proposed RIRO access to the north.
- A RIRO access on E 56th Ave that will operate under stop control.
- A signalized full movement intersection on E 56th Ave at Road A.

It is unknown when the $\frac{3}{4}$ movement access to the south of Maxwell PI will be constructed, therefore an analysis was performed with and without the southbound left turn at this intersection for 2026 conditions. It was assumed that this lane will be constructed by long range (2050) conditions.

Total Future lane use and traffic control were determined based on the background future lane use and traffic control along with the additional lanes necessary for the site accesses. The N Site Access and Road A intersections with E 56th Ave will have different lane use for 2026 conditions than 2050 conditions since the Skydance development to the north will not be constructed by 2026. The assumed lane use and traffic control for these intersections during 2026 conditions are described below:

- E 56th Ave & Road A (*Signalized*)
 - Two Eastbound through lanes
 - Eastbound through/right lane
 - Westbound left turn lane
 - Three Westbound through lanes
 - Northbound left turn lane
 - Northbound right turn lane
- E 56th Ave & N Site Access
 - Two Eastbound through lanes
 - Eastbound through/right lane
 - Three Westbound through lanes
 - Northbound right turn lane

The assumed lane use and traffic control for these intersections during 2050 conditions are shown below and are similar to 2026 conditions with additional north legs and turn lanes shown in **bold**:

- E 56th Ave & Road A (*Signalized*)
 - **Eastbound left turn lane**
 - Two Eastbound through lanes
 - Eastbound through/right lane
 - Westbound left turn lane
 - Three Westbound through lanes
 - **Westbound right turn lane**
 - Northbound left turn lane
 - Northbound **through**/right lane
 - **Southbound left turn lane**
 - **Southbound through/right lane**
- E 56th Ave & N Site Access
 - **Eastbound left turn lane**
 - Two Eastbound through lanes
 - Eastbound through/right lane
 - Three Westbound through lanes
 - **Westbound right turn lane**
 - Northbound right turn lane
 - **Southbound right turn lane**

The proposed lane use and traffic control are shown in Figure 5-1 for 2026 and Figure 5-2 for 2050.

Trip Generation

Overview

Trip generation estimates for the weekday AM and PM peak hours, as well as the weekday average daily traffic (ADT), were derived from the standard Institute of Transportation Engineers (ITE) Trip Generation Manual rates/equations, as published in the 11th edition. The trip generation analysis is presented in Table 5-1.

Pass-by Trips

According to ITE, in some cases the driveway volumes at a particular land use are different from the amount of traffic added to the adjacent street system. Uses such as retail establishments attract a portion of their trips from traffic that is already present on the road network. Pass-by trips are those trips which are made as intermediate stops on the way to a primary destination. An example of a pass-by trip would be one in which a driver stops at a coffee shop on his/her way to work.

Some of the proposed uses would experience pass-by trips consistent with the primary uses located on site. In recognition of this phenomenon and consistent with ITE published data, the following pass-by reductions were applied to the trip generation analysis:

- Shopping Center: 0% AM / 29% PM
- Gas Station: 63% AM / 57% PM
- Drive-In Bank: 29% AM / 35% PM
- Fast-Food Restaurant w/Drive-Thru: 50% AM / 55% PM
- Coffee Shop w/Drive-Thru: 50% AM / 55% PM

As shown in Table 5-1, the site in total is anticipated to generate 433 weekday AM, and 610 weekday PM peak hour pass-by trips. Therefore, these trips would be drawn from the existing road network and assigned to the future site entrances accordingly. Pass-by trips were routed for the scenario with the $\frac{3}{4}$ movement access as well as the interim RIRO access at intersection #6, therefore the trips are shown for each scenario for 2026. Pass-by trip assignments at key study intersections are shown in Figure 5-3 for the scenario with the RIRO access and Figure 5-4 for the scenario with the $\frac{3}{4}$ movement access.

Net Site Trips

The vehicle trips that would be generated by the proposed development plan are summarized in Table 5-1. As shown in Table 5-1, the site would generate upon completion and full occupancy 624 net new weekday AM and 955 net new weekday PM peak hour vehicle trips, as well as 11,586 net new weekday daily trips.

Site Trip Distributions

The distribution of the anticipated trips generated by the completion of the proposed development was based on the Green Valley MP. Existing travel patterns indicate the following distribution is appropriate in the forecasting of future site traffic:

- To/from the west on E 56th Ave: 10%
- To/from the east on E 56th Ave: 30%
- To/from the north on Picadilly Rd: 5%
- To/from the south on Picadilly Rd: 55%

Site Trip Assignments

The assignment of the new vehicle trips generated upon the future build-out of the development project was based on the above distribution. Site trips were routed for the scenario with the $\frac{3}{4}$ movement access as well as the interim RIRO access at intersection #6, therefore the trips are shown for each scenario for 2026. The net new trips assignments are depicted in Figure 5-5 for the scenario with the RIRO access and Figure 5-6 for the scenario with the $\frac{3}{4}$ movement access.

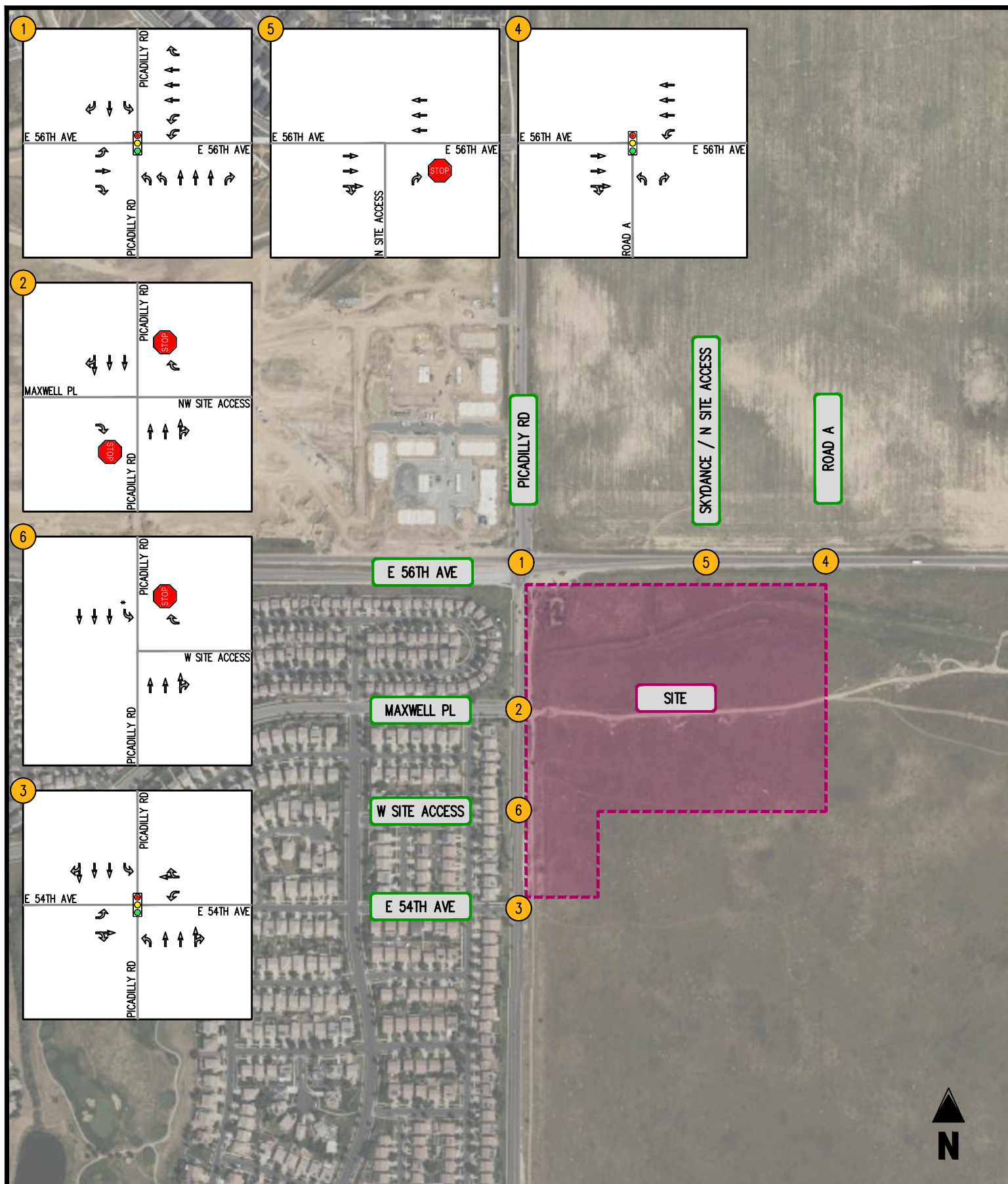


FIGURE 5-1
TOTAL FUTURE LANE USE AND TRAFFIC CONTROL 2026

56TH & PICADILLY
AURORA, CO

* SBL LANE POSSIBLE FOR $\frac{3}{4}$
MOVEMENT SCENARIO

- ← MOVEMENT
- ◫ SIGNALIZED INTERSECTION
- STOP STOP SIGN
- ▽ YIELD SIGN



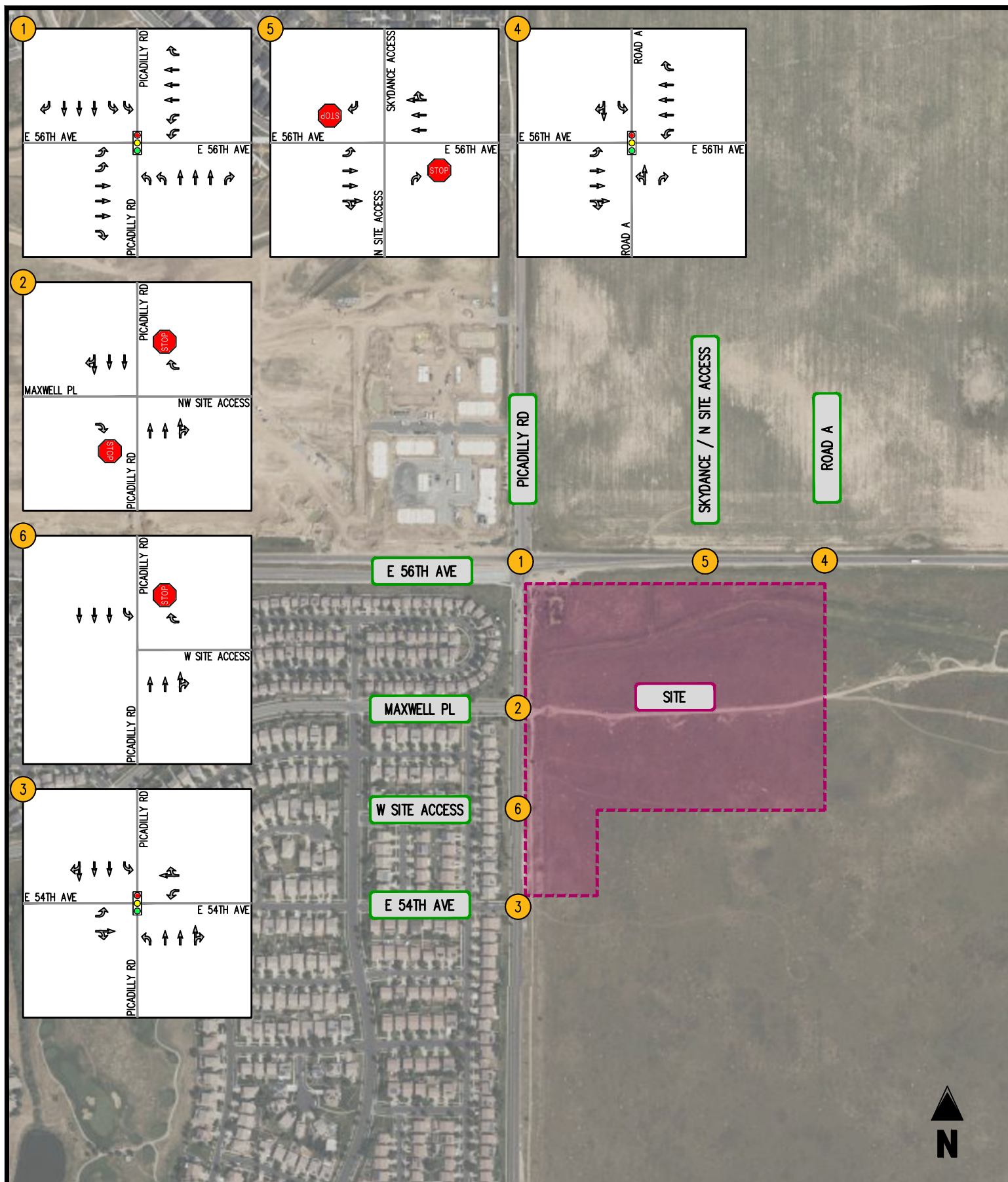
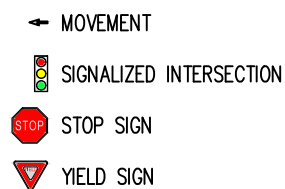


FIGURE 5-2
TOTAL FUTURE LANE USE AND TRAFFIC CONTROL 2050

56TH & PICADILLY
AURORA, CO



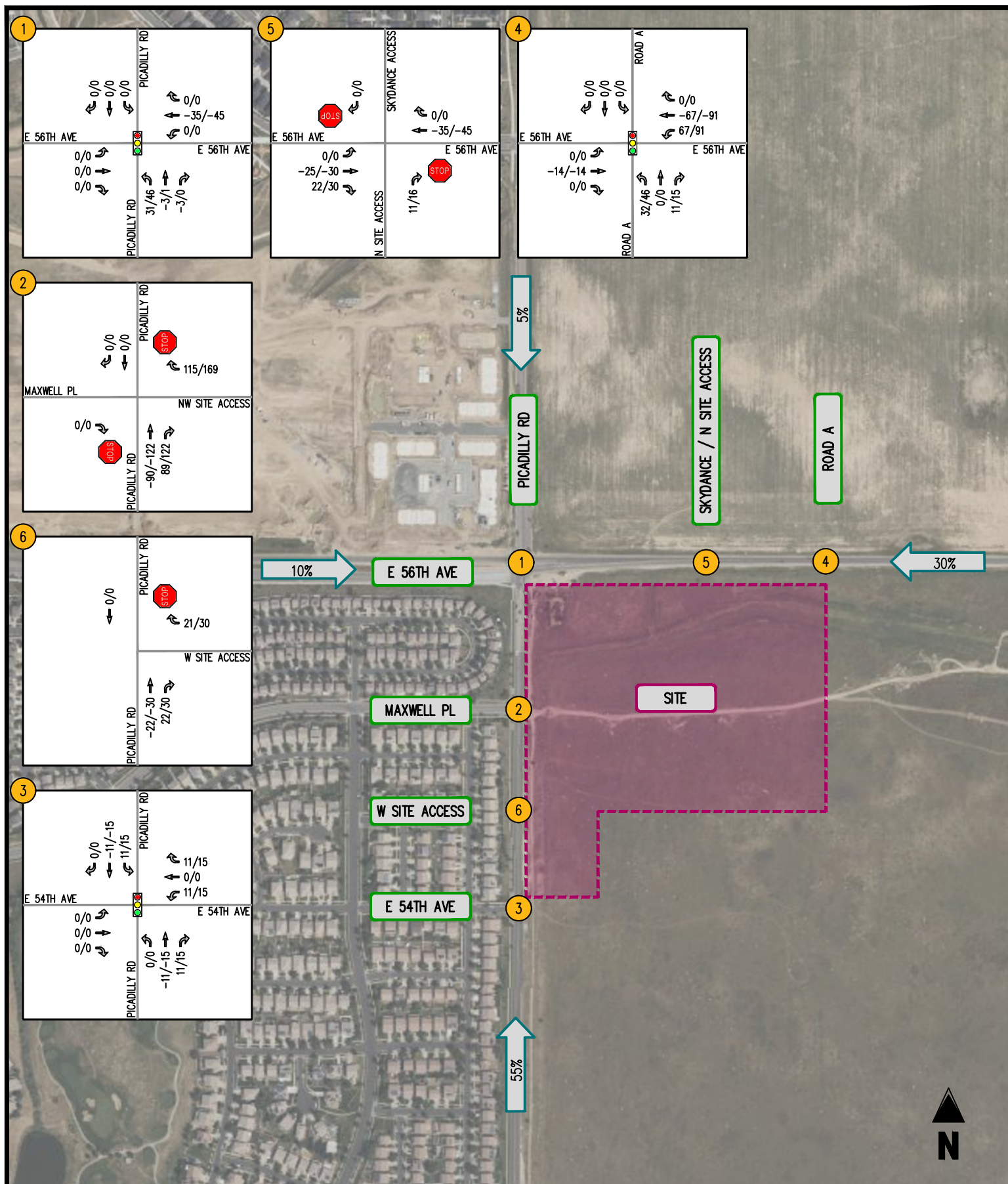


FIGURE 5-3
PASS-BY TRIPS (RIRO)

56TH & PICADILLY
AURORA, CO

(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN

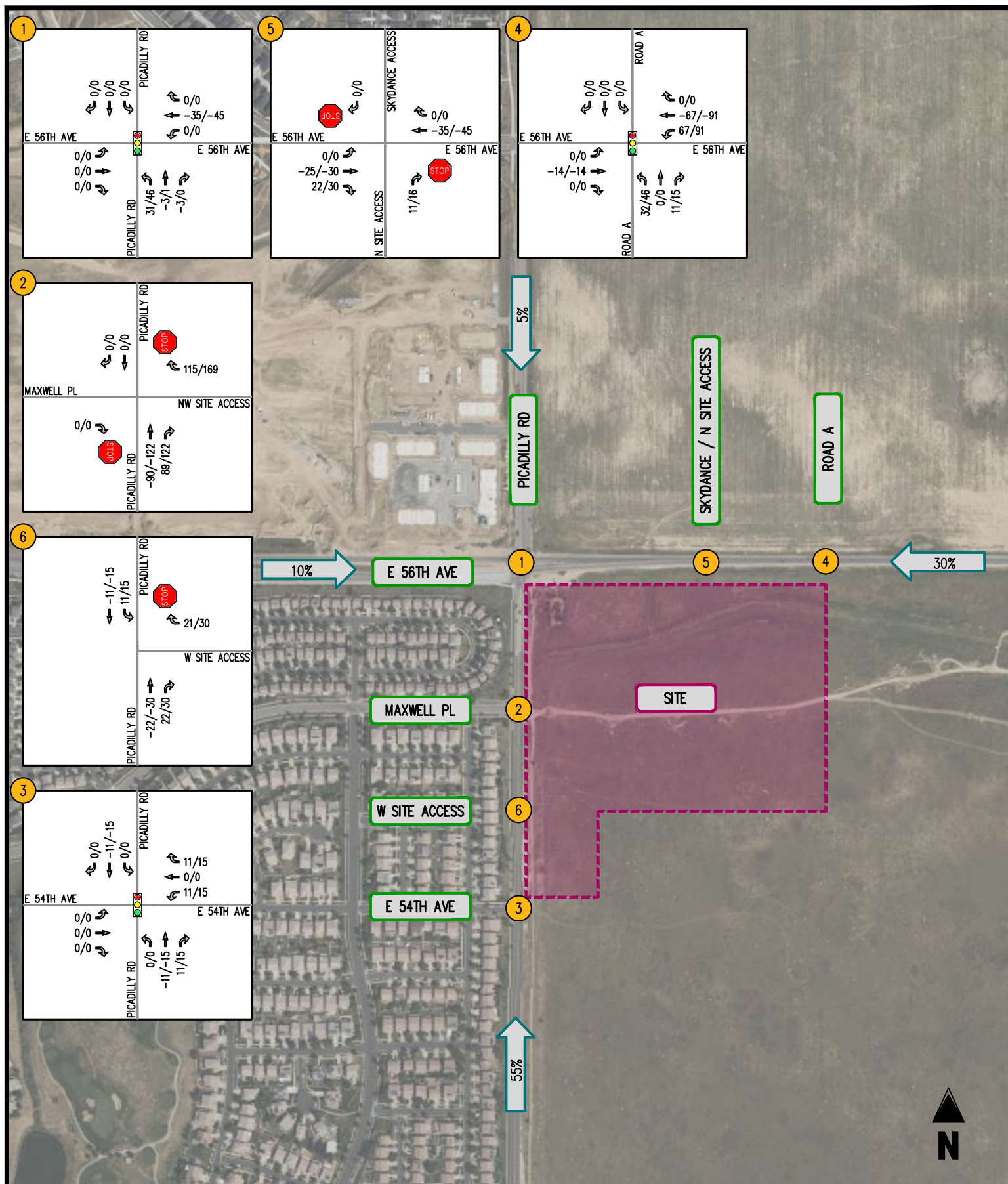


FIGURE 5-4
PASS-BY TRIPS (3/4 MOVEMENT)

56TH & PICADILLY
AURORA, CO

(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN

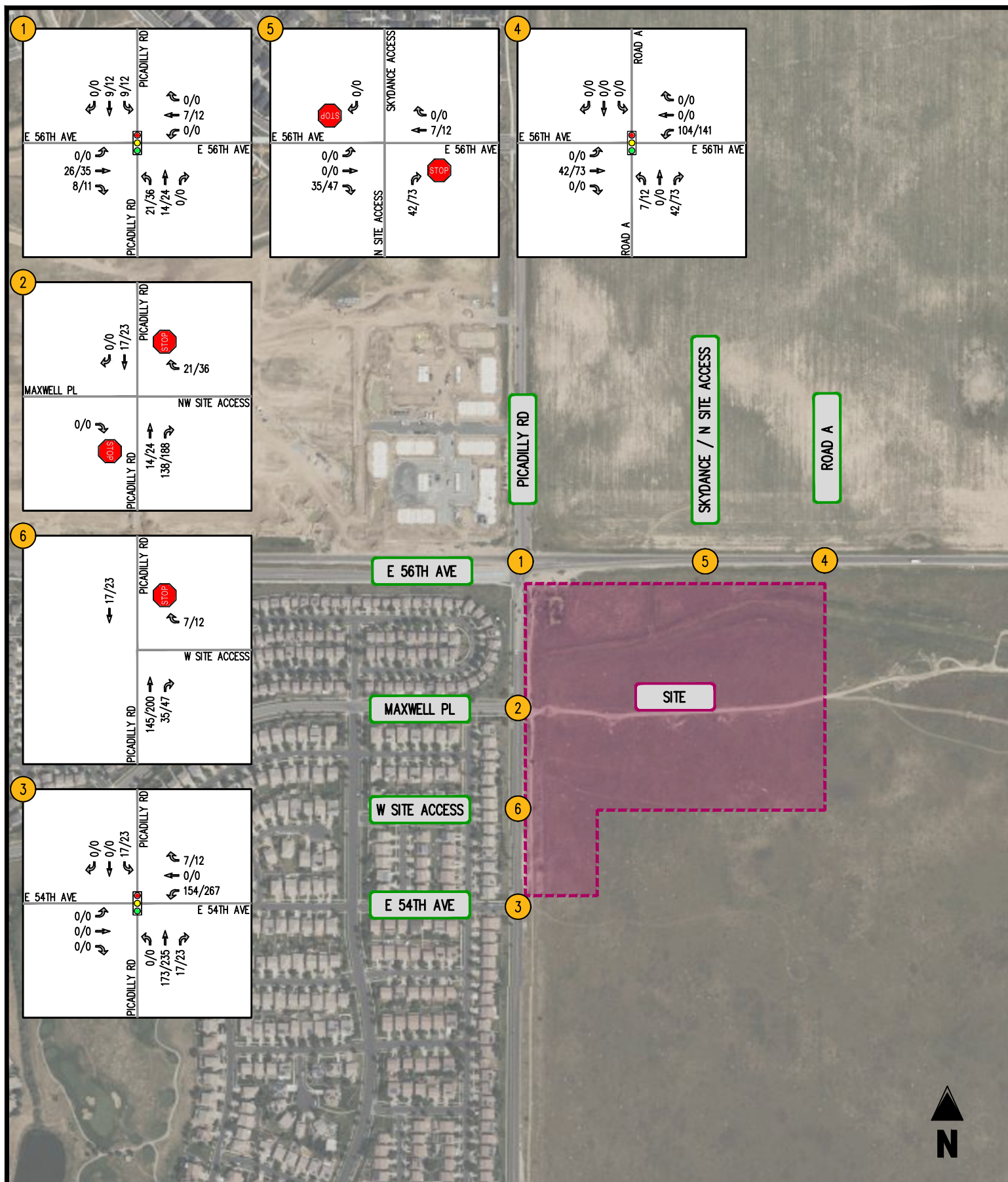


FIGURE 5-5
SITE TRIPS (RIRO)

56TH & PICADILLY
AURORA, CO

(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

← MOVEMENT
🚦 SIGNALIZED INTERSECTION
STOP SIGN
YIELD SIGN



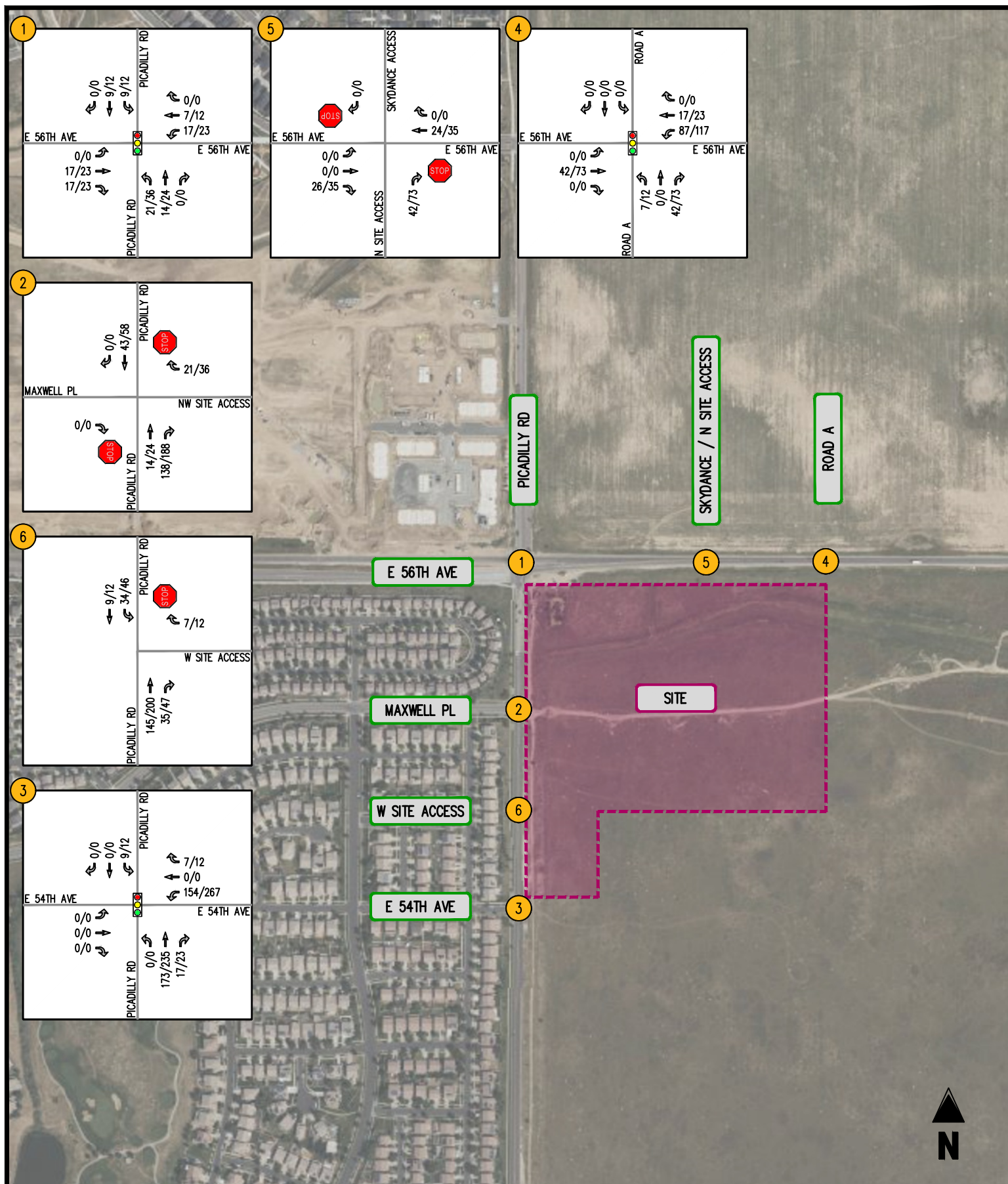


FIGURE 5-6
SITE TRIPS (3/4 MOVEMENT)

56TH & PICADILLY
AURORA, CO

Table 5-1
56th & Picadilly - Aurora, CO
Site Trip Generation ⁽¹⁾

Land Use	Land Use Code	Amount	Units	AM Peak Hour			PM Peak Hour			Average Daily Trips
				In	Out	Total	In	Out	Total	
<u>Proposed</u>										
Shopping Center (>150k)	820	168,112	SF	144	89	233	394	426	820	10,253
Internal Capture (10%)				-14	-9	-23	-39	-43	-82	-1,025
External Trips				130	80	210	355	383	738	9,228
Pass-by (AM 0%/PM 29%)				0	0	0	-103	-111	-214	-2,676
Net New Trips				130	80	210	252	272	524	6,552
Gas Station	944	18	FP	93	92	185	125	125	250	3,096
Internal Capture (10%)				-9	-9	-19	-13	-13	-25	-310
External Trips				84	83	166	112	112	224	2,786
Pass-by (AM 63%/PM 57%)				-53	-52	-105	-64	-64	-128	-1,588
Net New Trips				31	31	61	48	48	96	1,198
Drive-In Bank	912	4,750	SF	27	20	47	50	50	100	477
Internal Capture (10%)				-3	-2	-5	-5	-5	-10	-48
External Trips				24	18	42	45	45	90	429
Pass-by (AM 29%/PM 35%)				-7	-5	-12	-16	-16	-32	-150
Net New Trips				17	13	30	29	29	58	279
Fast-Food Restaurant w/ Drive-Thru	934	4,500	SF	103	98	201	77	72	149	2,104
Internal Capture (10%)				-10	-10	-20	-8	-7	-15	-210
External Trips				93	88	181	69	65	134	1,894
Pass-by (AM 50%/PM 55%)				-47	-44	-91	-38	-36	-74	-1,042
Net New Trips				46	44	90	31	29	60	852
Coffee Shop w/Drive-Thru	937	1,500	SF	66	63	129	29	29	58	800
Internal Capture (10%)				-7	-6	-13	-3	-3	-6	-80
External Trips				59	57	116	26	26	52	720
Pass-by (AM 50%/PM 55%)				-30	-29	-59	-14	-14	-28	-378
Net New Trips				29	28	57	12	12	24	342
Fast-Food Restaurant w/ Drive-Thru	934	4,500	SF	103	98	201	77	72	149	2,104
Internal Capture (10%)				-10	-10	-20	-8	-7	-15	-210
External Trips				93	88	181	69	65	134	1,894
Pass-by (AM 50%/PM 55%)				-47	-44	-91	-38	-36	-74	-1,042
Net New Trips				46	44	90	31	29	60	852
Fast-Food Restaurant w/ Drive-Thru	934	3,700	SF	84	81	165	63	59	122	1,730
Internal Capture (10%)				-8	-8	-17	-6	-6	-12	-173
External Trips				76	73	148	57	53	110	1,557
Pass-by (AM 50%/PM 55%)				-38	-37	-75	-31	-29	-60	-856
Net New Trips				38	36	73	26	24	50	701
Automobile Parts and Service Center	943	7,200	SF	10	4	14	6	9	15	120
Internal Capture (10%)				-1	0	-1	-1	-1	-2	-12
Net New Trips				9	4	13	5	8	13	108
Automated Car Wash	948	1	TUNNEL	0	0	0	39	39	78	780
Internal Capture (10%)				0	0	0	-4	-4	-8	-78
Net New Trips				0	0	0	35	35	70	702
Total External Trips				568	491	1,057	773	792	1,565	19,318
Pass-by Total				-222	-211	-433	-304	-306	-610	-7,732
Net Total				346	280	624	469	486	955	11,586

Note(s):

(1) Trip generation based on the Institute of Transportation Engineers' Trip Generation Manual, 11th Edition

VI. Analysis of Future Conditions with Site Development

Total Future Traffic Forecasts

The 2026 and 2050 total future traffic forecasts associated with the proposed development were developed by combining the background future forecasts shown in Figure 4-8 (2026) and Figure 4-9 (2050), the pass-by trips shown in Figure 5-3 (RIRO) or Figure 5-4 ($\frac{3}{4}$ Movement), and the site trip assignments shown in Figure 5-5 (RIRO) or Figure 5-6 ($\frac{3}{4}$ Movement). The resulting total future traffic forecasts are provided in Figure 6-1 for 2026 conditions with the RIRO access, Figure 6-2 for 2026 conditions with the $\frac{3}{4}$ movement access, and Figure 6-3 for 2050 conditions.

Total Future Levels of Service with Proposed Development

Future levels of service with the proposed development plan were estimated at key study intersections based on the future traffic volumes shown in Figure 6-1 (2026 RIRO), Figure 6-2 (2026 $\frac{3}{4}$ Movement), and Figure 6-3 (2050), the total future lane use in Figure 5-1 (2026) and Figure 5-2 (2050), and the HCM 7th methodologies for signalized and unsignalized intersections. The results of these analyses are provided in Appendix G and presented in Table 6-1. Total future levels of service are also presented graphically in Figure 6-4 (2026 RIRO), Figure 6-5 (2026 $\frac{3}{4}$ Movement), and Figure 6-6 (2050).

As shown in Table 6-1, levels of service under future site development conditions would remain generally consistent with future background conditions (i.e., without site development). Overall delays would experience an increase due to site trips. During 2026 conditions, with the RIRO access and with the $\frac{3}{4}$ movement, the unsignalized intersection movements would operate at acceptable LOS “C” or better and the signalized intersections would operate at acceptable overall LOS “D” or better.

During 2050 conditions, the unsignalized intersection movements would operate at acceptable LOS “D” or better with the exception of

- The eastbound right and westbound right movements at Maxwell PI & Picadilly Rd which would operate at LOS “F”.
- The eastbound left, northbound right, and southbound right movements at E 56th Ave & Skydance/N Site Access which would operate at LOS “F”.
- The westbound right and southbound left movements at W Site Access & Picadilly Rd which would operate at LOS “F”.

During 2050 conditions, the signalized intersections would operate at LOS “F” during the weekday AM and PM peak hours.

Total Future Queuing

Total future queues were forecasted using Synchro software. The results of the queuing analysis are summarized in Table 6-2. All queues are expected to be contained in their respective storage during 2026 conditions with the RIRO access and with the $\frac{3}{4}$ movement access. During 2050 conditions, all queues are expected to be contained in their respective storage with the exception of the following queues:

- | | |
|---|-----------------------------------|
| • E 56 th Ave & Picadilly Rd | • E 56 th Ave & Road A |
| ○ Eastbound left | ○ Westbound left |
| ○ Westbound left | |
| ○ Northbound left | |
| ○ Northbound right | |
| ○ Southbound left | |

The movements at E 56th Ave & Picadilly Rd would exceed the available storage in both the AM and PM 2050 peak hours and the westbound left movement at E 56th Ave & Road A would exceed the available storage during the PM peak hour.

Operational and queueing deficiencies have been identified for 2050 long range conditions and suggests that further study should be required as growth/development occurs in the area.

Total Future Signal Warrants

The Manual on Uniform Traffic Control Devices (MUTCD) contains nine traffic signal warrants that help determine if installing a traffic signal at a particular location is justified. The Signal Warrants are listed below.

- #1 – Eight-Hour Vehicular Volume
- #2 – Four-Hour Vehicular Volume
- #3 – Peak Hour
- #4 – Pedestrian Volume
- #5 – School Crossing
- #6 – Coordinated Signal System
- #7 – Crash Experience
- #8 – Roadway Network
- #9 – Intersection Near a (Railroad) Grade Crossing

The Eight-Hour Vehicular Volume (#1) and Four-Hour Vehicular Volume (#2) warrants were used to analyze the intersections of E 56th Ave & Picadilly Rd, E 54th Ave & Picadilly Rd, and E 56th Ave & Road A. The other Signal Warrants are either not applicable, or it is not possible at this time to accurately forecast the data needed to evaluate a particular Signal Warrant.

12-hour counts were taken at the intersections of E 56th Ave & Picadilly Rd and E 54th Ave & Picadilly Rd from 7:00 AM to 7:00 PM. Since the intersection of E 56th Ave & Road A is not yet constructed, the eastbound/westbound volumes were calculated using the 12-hour counts from the E 56th Ave & Picadilly Rd intersection. These existing volume counts were used along with the proposed new AADT of the site, the site trip distributions, and the hourly distribution of vehicle trips for Shopping Centers (Land Use Code 820) from the ITE Trip Generation Manual 11th Edition to forecast the hourly approach volumes at each intersection for an average day. These values were used for both warrants. Pipeline development trips were not considered in these warrant analyses. All signal warrant analysis tables and graphs are included in Appendix H.

E 56th Ave & Picadilly Rd

Warrant 1 (Eight-Hour Vehicular Volume) was met for this intersection in existing conditions due to the high volume of traffic on both E 56th Ave and Picadilly Rd. The existing volumes for every hour from 7:00 AM – 7:00 PM were calculated for the major road and each minor road approach and were compared to Table 4C-1 from the MUTCD. All twelve of the hours exceeded the requirements for Condition A-Minimum Vehicular Volume.

Warrant 2 (Four-Hour Vehicular Volume) was met for this intersection during existing conditions since there were over four hours that the major/minor street volumes fall above the '2 or More Lanes & 2 or More Lanes' curve in Figure 4C-2.

E 54th Ave & Picadilly Rd

The Green Valley Master Plan identified this intersection of E 54th Ave & Picadilly Rd to warrant a signal in background future conditions. Signal warrants were also analyzed within this study for total future conditions.

Warrant 1 (Eight-Hour Vehicular Volume) was met for this intersection in total future conditions with the site development in 2026 and 2050. The projected volumes for every hour from 7:00 AM – 7:00 PM were calculated for the major road and each minor road approach using the existing volumes, 8.5% growth, and subject site trips, and were compared to Table 4C-1 from the MUTCD. Eleven (11) of the hours exceeded requirements for Condition A – Minimum Vehicular Volume during both 2026 and 2050 total future conditions.

Warrant 2 (Four-Hour Vehicular Volume) was met for this intersection during total future conditions in 2026 and 2050 since there were over four hours that the major/minor street volumes fall above the ‘2 or More Lanes & 1 Lane’ curve shown in Figure 4C-1. The graph for Warrant 2 is provided in Appendix H with volumes plotted for future conditions, but due to the high projected volumes for 2050 conditions, those plotted points do not appear on the graph provided.

E 56th Ave & Road A

The Green Valley Master Plan identified this intersection of E 56th Ave & Road A to warrant a signal in background future conditions. Signal warrants were also analyzed within this study for total future conditions.

Warrant 1 (Eight-Hour Vehicular Volume) was met for this intersection in total future conditions with the site development in 2026 and 2050. The projected volumes for every hour from 7:00 AM – 7:00 PM were calculated for the major and minor road approach using the existing volumes, 8.5% growth, and subject site trips, and were compared to Table 4C-1 from the MUTCD. Nine of the hours exceeded requirements for Condition B – Interruption of Continuous Traffic during both 2026 and 2050 total future conditions.

Warrant 2 (Four-Hour Vehicular Volume) was met for this intersection during total future conditions in 2026 and 2050 since there were over four hours that the major/minor street volumes fall above the ‘2 or More Lanes & 2 or More Lanes’ curve in Figure 4C-2. The graph for Warrant 2 is provided in Appendix H with volumes plotted for future conditions, but due to high projected 2050 volumes, those plotted points do not appear on the graph provided.

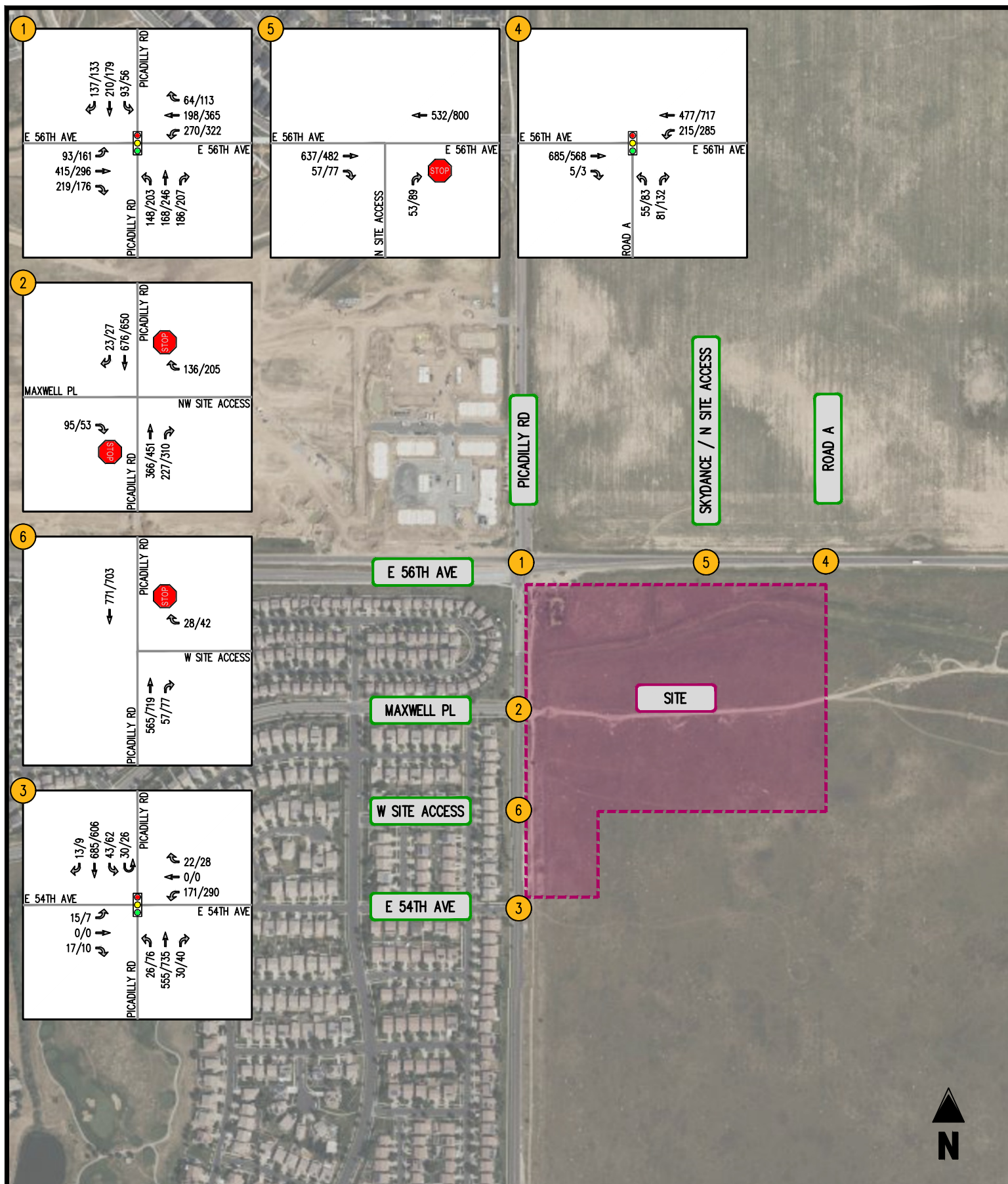





FIGURE 6-1
TOTAL FUTURE FORECASTS 2026 (RIRO)

56TH & PICADILLY
AURORA, CO

(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



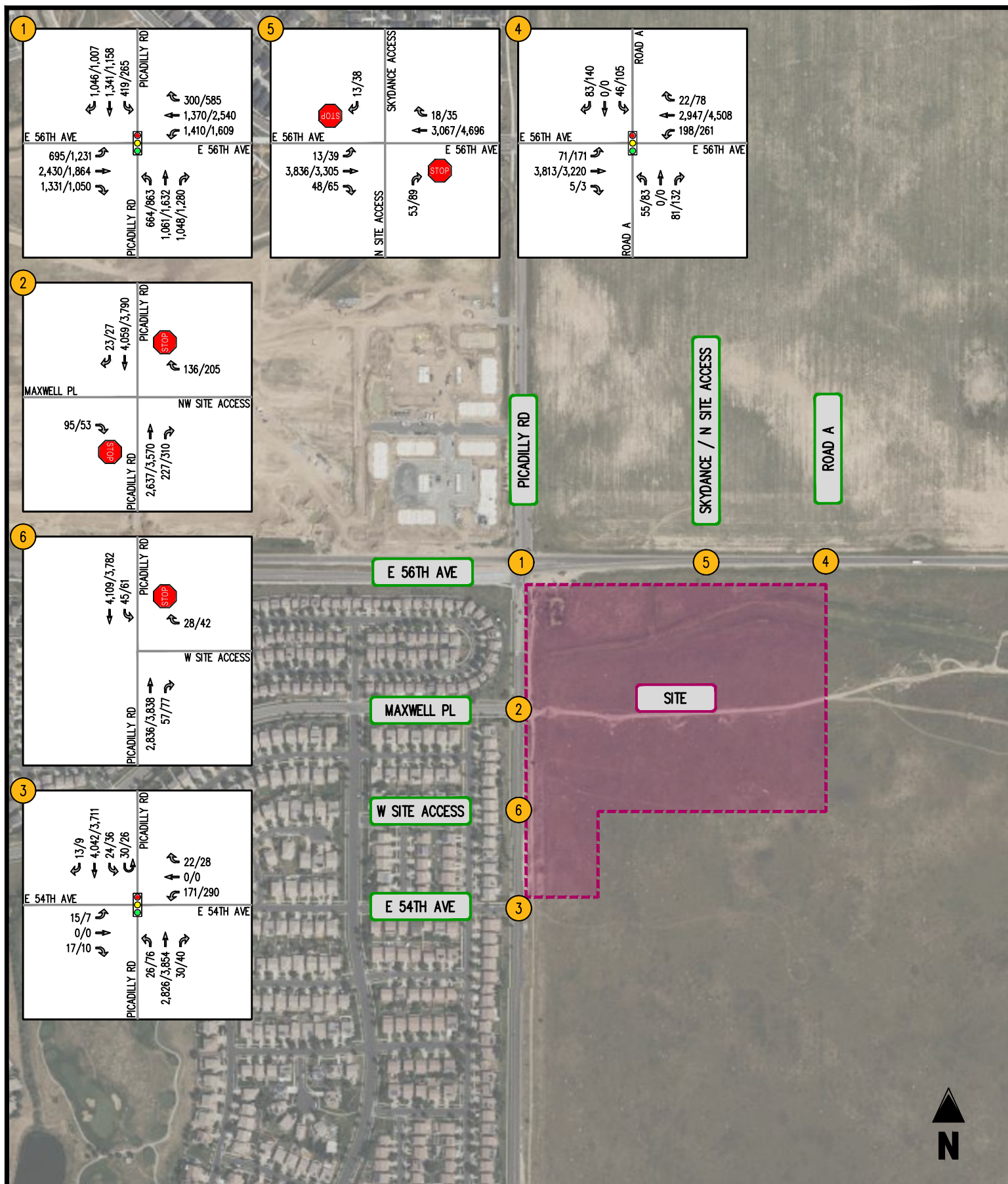


FIGURE 6-3
TOTAL FUTURE FORECASTS 2050

56TH & PICADILLY
AURORA, CO

(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



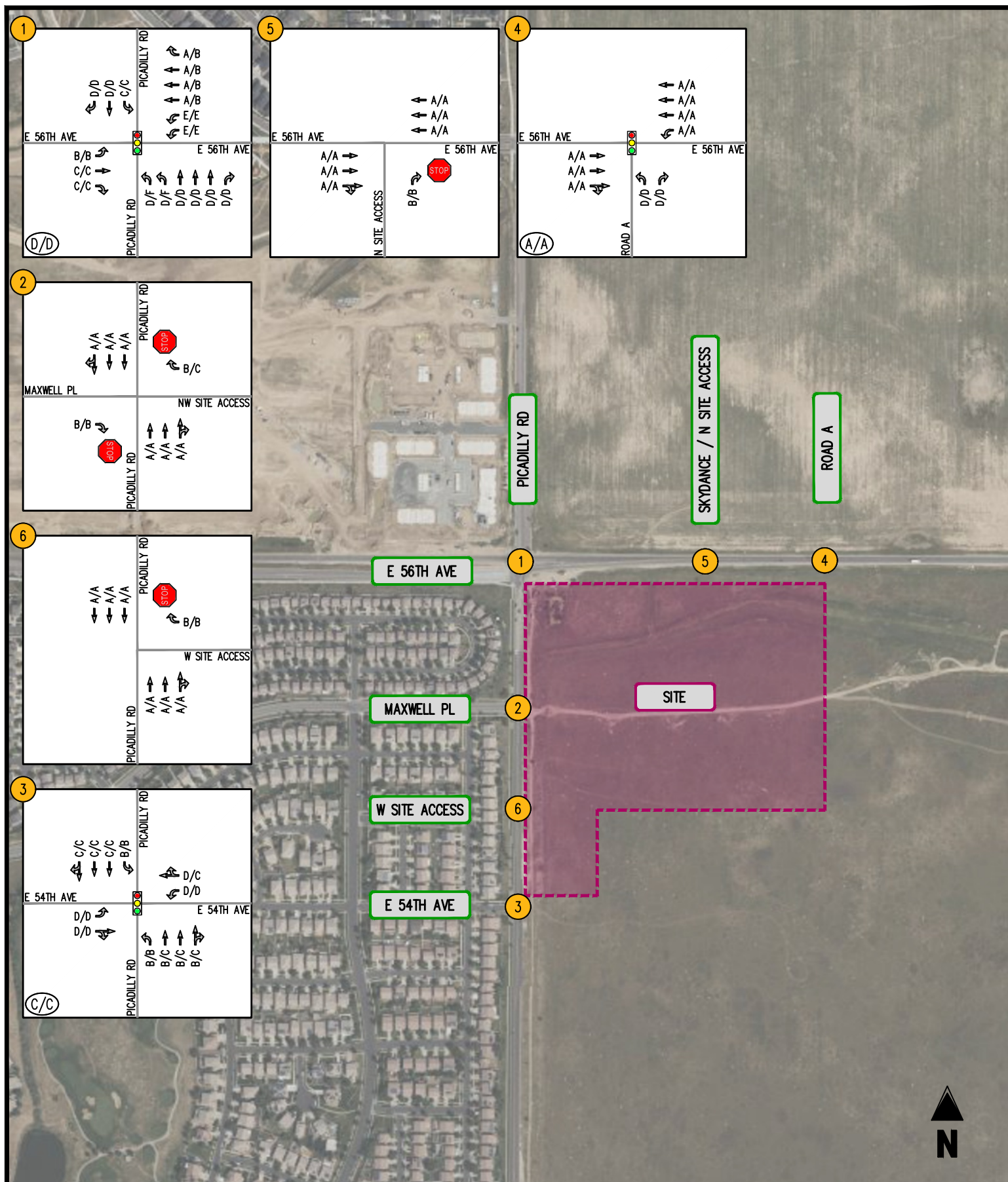


FIGURE 6-4
TOTAL FUTURE LOS 2026 (RIRO)

56TH & PICADILLY
AURORA, CO

(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



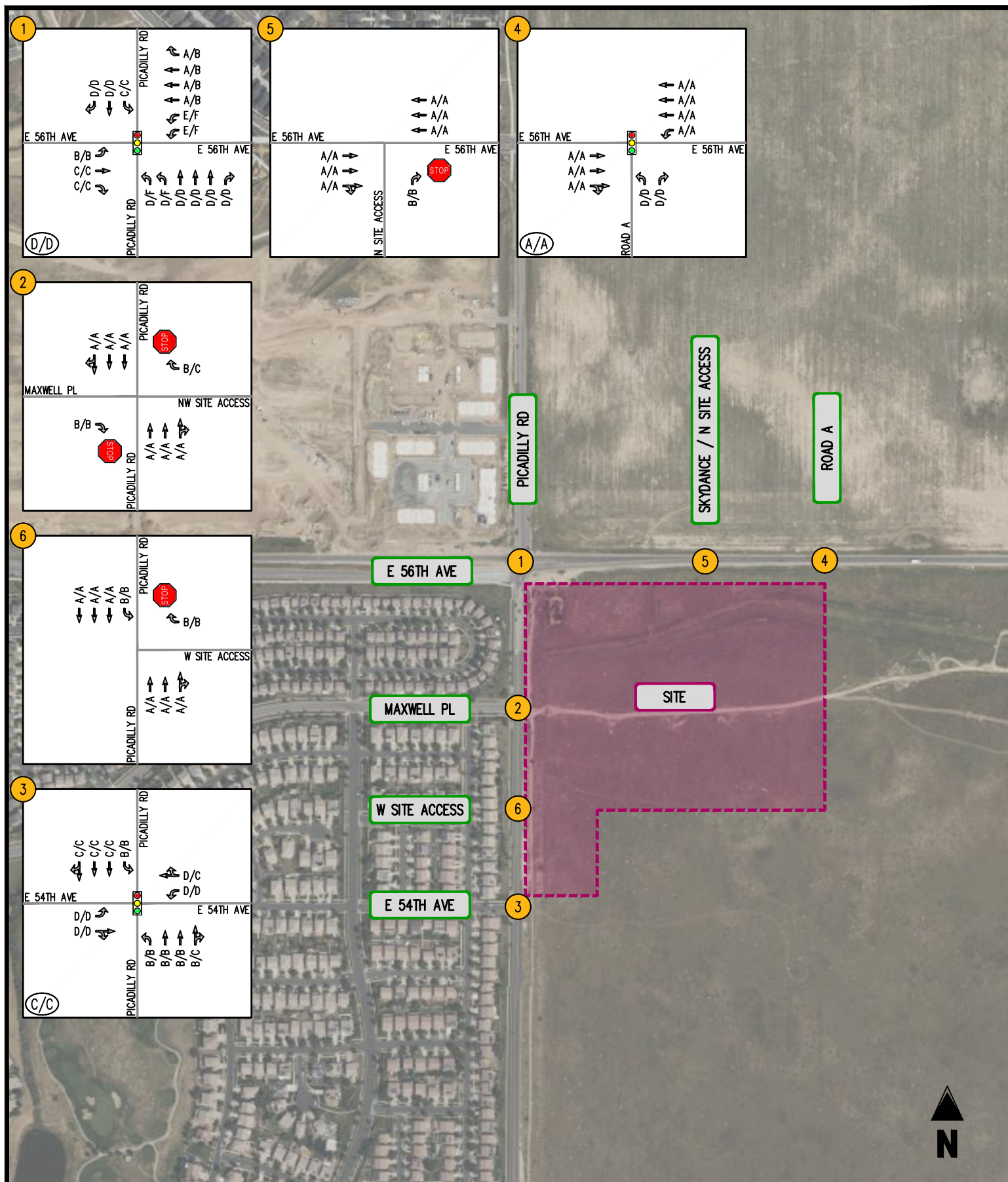





FIGURE 6-5
TOTAL FUTURE LOS 2026 (3/4 MOVEMENT)

56TH & PICADILLY
 AURORA, CO

(A/A) INTERSECTION LOS
 0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



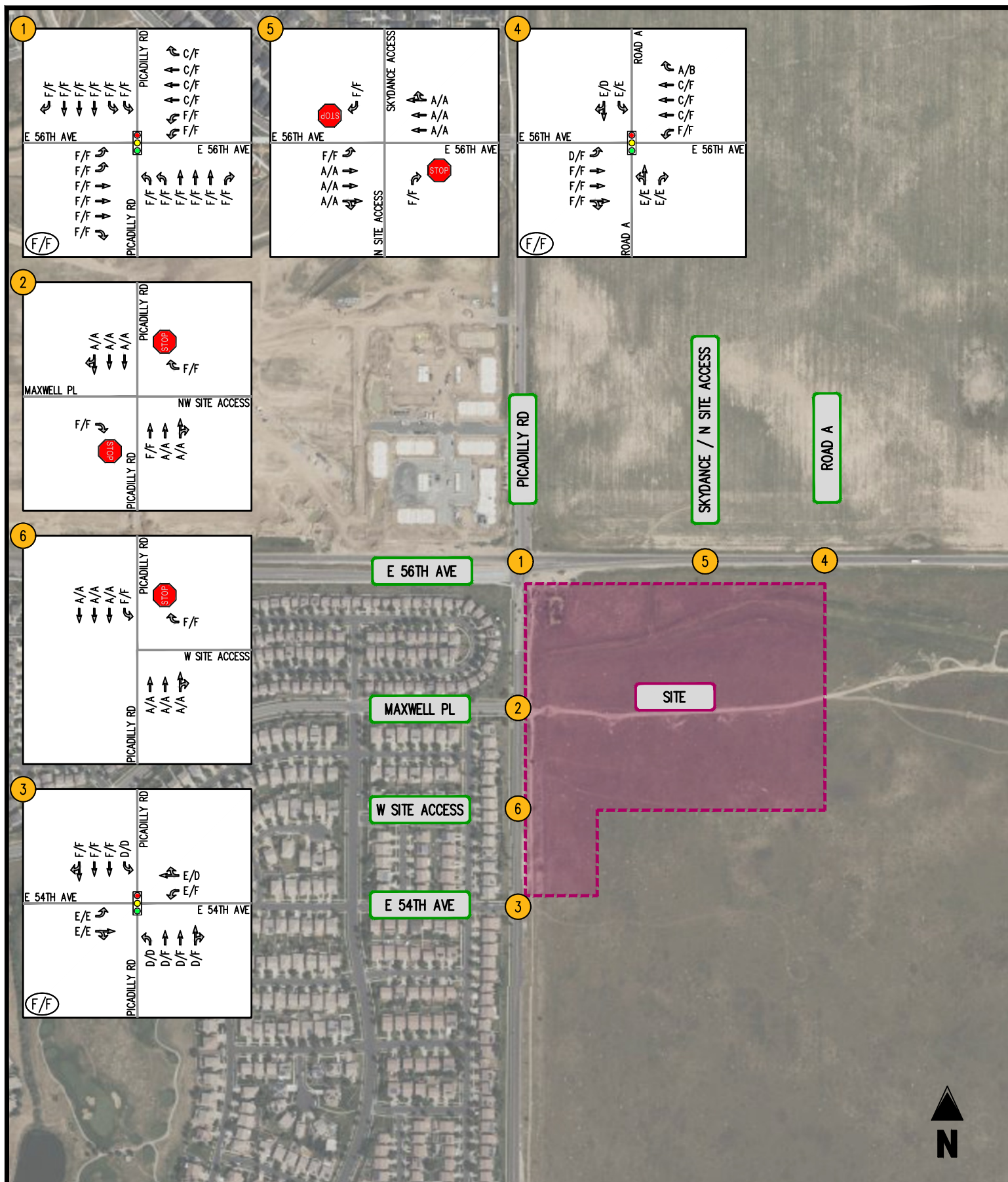


FIGURE 6-6
TOTAL FUTURE LOS 2050

56TH & PICADILLY
AURORA, CO

(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)




← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



Table 6-1
56th & Picadilly - Aurora, CO
Total Future Intersection Level of Service Summary^{(1) (2)}

Intersection	Operating Condition	Street Name	Approach/ Movement	Background 2026		Background 2050		Total Future 2026 (R/R/O)		Total Future 2026 (3/4 Movement)		Total Future 2050	
				AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
1 E 56th Ave & Picadilly Rd <i>Signalization + Lane Improvements</i>	SIGNAL	E 56th Ave	EBL	B (15.6)	B (16.5)	F (214.5)	F (622.6)	B (15.6)	B (16.9)	B (15.6)	B (16.9)	F (326.7)	F (663.3)
			EBT	C (26.9)	C (24.2)	F (342.1)	F (223.1)	C (27.9)	C (25.8)	C (27.6)	C (25.4)	F (331.2)	F (245.9)
			EBR	C (23.1)	C (22.8)	F (579.9)	F (380.1)	C (23.4)	C (23.7)	C (23.6)	C (24.0)	F (576.8)	F (397.4)
		E 56th Ave	WBL	D (53.6)	E (66.9)	F (625.3)	F (660.3)	E (58.5)	E (67.7)	E (67.0)	F (83.2)	F (675.8)	F (675.5)
			A (8.5)	B (10.4)	D (36.2)	F (349.7)	A (8.4)	B (10.3)	A (8.4)	B (10.3)	C (28.4)	F (340.0)	F (340.0)
			WBR	A (8.4)	B (10.2)	C (30.8)	F (161.3)	A (8.6)	B (10.7)	A (8.6)	B (10.7)	C (25.8)	F (161.3)
		Picadilly Rd	NBL	C (32.0)	C (33.2)	F (499.1)	F (551.7)	D (54.8)	F (84.1)	D (54.8)	F (84.1)	F (567.5)	F (593.8)
			NBT	D (36.8)	D (41.0)	F (122.3)	F (201.5)	D (51.5)	D (41.2)	D (41.5)	D (41.2)	F (103.1)	F (196.0)
			NBR	D (47.0)	D (51.6)	F (417.1)	F (422.5)	D (51.4)	D (51.2)	D (51.4)	D (51.2)	F (409.7)	F (410.8)
		Picadilly Rd	SBL	C (32.5)	C (32.2)	F (90.2)	F (130.2)	C (32.7)	C (31.7)	C (32.7)	C (31.7)	F (115.2)	F (146.7)
			SBT	D (44.0)	D (41.0)	F (233.0)	F (186.7)	D (45.0)	D (41.0)	D (45.0)	D (41.0)	F (237.2)	F (192.3)
			SBR	D (41.5)	D (40.8)	F (467.9)	F (451.8)	D (41.6)	D (40.1)	D (41.6)	D (40.1)	F (536.4)	F (468.0)
		Overall		C (32.4)	C (33.3)	F (336.3)	F (375.8)	D (35.9)	D (38.1)	D (37.1)	D (40.5)	F (354.0)	F (386.4)
2 Maxwell Pl & Picadilly Rd <i>Picadilly Road Widening Project</i>	STOP	Maxwell Pl	EBR	B (13.3)	B (12.4)	F (1311.6)	F (458.2)	-	-	-	-	-	-
		Picadilly Rd	NBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-	-	-	-	-
		Picadilly Rd	NBR	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-	-	-	-	-
		Picadilly Rd	SBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-	-	-	-	-
		Picadilly Rd	SBR	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-	-	-	-	-
	STOP	Maxwell Pl	EBR	-	-	-	-	B [13.5]	B [12.5]	B [13.7]	B [12.7]	F (1378.3)	F (498.7)
		NW Site Access	WBR	-	-	-	-	B [13.4]	C [17.8]	B [13.4]	C [17.8]	F (441.1)	F (2571.6)
		Picadilly Rd	NBT	-	-	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Picadilly Rd	NBR	-	-	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Picadilly Rd	SBT	-	-	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Picadilly Rd	SBR	-	-	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
3 E 54th Ave & Picadilly Rd <i>Added East Leg + Signal</i>	SIGNAL	E 54th Ave	EBL	D (45.1)	D (46.8)	E (69.2)	E (70.8)	D (45.1)	D (46.8)	D (45.1)	D (46.8)	E (64.3)	E (70.8)
			EBTR	D (45.5)	D (47.5)	E (69.8)	E (71.7)	D (45.5)	D (47.5)	D (45.5)	D (47.5)	E (64.9)	E (71.7)
			WBL	D (49.0)	D (50.2)	E (73.3)	E (74.7)	D (49.9)	D (52.1)	D (49.9)	D (52.1)	E (73.4)	F (106.6)
		SW Site Access	WBTR	D (48.5)	D (47.9)	E (72.7)	E (72.0)	D (39.0)	C (32.8)	D (39.0)	C (32.8)	E (55.3)	D (51.6)
			NBL	A (7.7)	A (7.1)	D (44.0)	E (57.8)	B (12.5)	B (15.2)	B (12.0)	B (15.2)	D (35.8)	D (46.1)
			NBT	A (8.5)	A (8.3)	B (15.9)	D (49.0)	B (15.7)	C (20.8)	B (14.8)	B (19.9)	D (45.2)	F (215.6)
		Picadilly Rd	NBR	A (8.6)	A (8.5)	B (17.7)	E (65.1)	B (16.0)	C (21.5)	B (15.1)	C (20.5)	D (33.6)	F (221.4)
			SBL	A (7.5)	A (7.3)	B (16.1)	D (42.8)	B (12.0)	B (15.8)	B (11.8)	B (15.8)	D (35.8)	D (36.4)
			SBT	C (21.6)	C (21.1)	F (88.4)	B (16.4)	C (26.9)	C (30.7)	C (26.9)	C (30.7)	F (214.1)	F (164.1)
		Picadilly Rd	SBR	C (21.8)	C (21.3)	F (92.6)	D (52.0)	C (27.3)	C (31.1)	C (27.3)	C (31.1)	F (217.5)	F (167.6)
			SBTR	B (17.7)	B (15.4)	E (60.7)	D (49.9)	C (25.2)	C (29.1)	C (25.1)	C (28.9)	F (143.1)	F (186.2)
4 E 56th Ave & Road A <i>3-Leg Intersection</i>	SIGNAL	E 56th Ave	EBT	A (0.2)	A (0.1)	-	-	A (0.3)	A (0.2)	A (0.3)	A (0.2)	-	-
		E 56th Ave	EBTR	A (0.3)	A (0.3)	-	-	A (0.5)	A (0.4)	A (0.5)	A (0.4)	-	-
		E 56th Ave	WBL	A (3.6)	A (4.0)	-	-	A (5.2)	A (6.1)	A (5.1)	A (5.9)	-	-
		E 56th Ave	WBT	A (2.9)	A (3.7)	-	-	A (3.2)	A (3.9)	A (3.2)	A (4.0)	-	-
		Road A	NBL	D (43.8)	D (42.8)	-	-	D (43.2)	D (42.8)	D (43.2)	D (42.8)	-	-
	Overall	Road A	NBR	D (45.0)	D (44.4)	-	-	D (46.2)	D (50.6)	D (46.2)	D (50.6)	-	-
				A (2.9)	A (4.4)	-	-	A (5.9)	A (8.4)	A (5.9)	A (8.3)	-	-
	SIGNAL	E 56th Ave	EBL	-	-	D (45.4)	F (280.7)	-	-	-	-	D (44.9)	F (278.2)
		E 56th Ave	EBT	-	-	F (108.0)	D (42.4)	-	-	-	-	F (143.3)	F (112.0)
		E 56th Ave	EBTR	-	-	F (112.1)	D (49.2)	-	-	-	-	F (147.0)	F (117.0)
		E 56th Ave	WBL	-	-	D (41.8)	D (41.9)	-	-	-	-	F (314.0)	F (344.6)
		E 56th Ave	WBT	-	-	C (33.0)	F (248.6)	-	-	-	-	C (31.9)	F (284.9)
4-Leg Intersection	SIGNAL	Road A	WBR	-	-	A (8.9)	A (9.7)	-	-	-	-	A (9.0)	B (12.0)
		Road A	NBLT	-	-	E (66.6)	E (67.6)	-	-	-	-	E (68.8)	E (66.7)
		Road A	NBR	-	-	E (68.1)	E (70.4)	-	-	-	-	E (79.5)	E (76.7)
		Road A	SBL	-	-	E (60.4)	E (67.0)	-	-	-	-	E (60.5)	E (66.2)
		Road A	SBTR	-	-	E (57.8)	E (60.8)	-	-	-	-	E (57.1)	D (54.2)
	Overall			-	-	E (74.6)	F (161.6)	-	-	-	-	F (99.7)	F (209.1)
				-	-	-	-	-	-	-	-	-	-
5 E 56th Ave & Skydance/N Site Access <i>3-Leg Intersection (With North Leg for Skydance Development)</i>	STOP	E 56th Ave	EBL	-	-	F (279.4)	F (9935.6)	-	-	-	-	-	-
		E 56th Ave	EBT	-	-	A [0.0]	A [0.0]	-	-	-	-	-	-
		E 56th Ave	WBTR	-	-	A [0.0]	A [0.0]	-	-	-	-	-	-
		Skydance Access	SBR	-	-	F (67.7)	F (1157.2)	-	-	-	-	-	-
	STOP	E 56th Ave	EBTR	-	-	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
		E 56th Ave	WBT	-	-	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
		N Site Access	NBR	-	-	-	-	B [12.6]	B [12.3]	B [12.6]	B [12.2]	-	-
	STOP	E 56th Ave	EBL	-	-	-	-	-	-	-	-	F (273.5)	F (9790.9)
		E 56th Ave	EBT	-	-	-	-	-	-	-	-	A [0.0]	A [0.0]
		E 56th Ave	EBR	-	-	-	-	-	-	-	-	A [0.0]	A [0.0]
		E 56th Ave	WBT	-	-	-	-	-	-	-	-	A [0.0]	A [0.0]
6 W Site Access & Picadilly Rd	STOP	W Site Access	WBR	-	-	-	-	B [11.8]	B [13.1]	B [11.8]	B [13.1]	F (69.5)	F (437.7)
		Picadilly Rd	NBT	-	-	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Picadilly Rd	NBR	-	-	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Picadilly Rd	SBL	-	-	-	-	-	-	B [12.1]	B [14.3]	F (546.6)	F (4232.4)
	STOP	Picadilly Rd	SBT	-	-	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
				-	-	-	-	-	-	-	-	-	-
				-	-	-	-	-	-	-	-	-	-
				-	-	-	-	-	-	-	-	-	-
	STOP	W Site Access	WBR	-	-	-	-	-	-	-	-	-	-
		Picadilly Rd	NBT	-	-	-	-	-	-	-	-	-	-
		Picadilly Rd	NBR	-	-	-	-	-	-	-	-	-	-
		Picadilly Rd	SBT	-	-	-	-	-	-	-	-	-	-

Notes : (1) Numbers in brackets [] represent delay at unsignalized intersections in seconds per vehicle.
(2) Numbers in parenthesis () represent delay at signalized intersections in seconds per vehicle.

Table 6-2
56th & Picadilly - Aurora, CO
Total Future Intersection Queueing Summary⁽¹⁾

Intersection	Operating Condition	Street Name	Approach/ Movement	Available Storage	Background 2026		Background 2050		Total Future 2026 (RIRO)		Total Future 2026 (3/4 Movement)		Total Future 2050	
					AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
1 E 56th Ave & Picadilly Rd <i>Signalization + Lane Improvements</i>	SIGNAL	E 56th Ave	EBL ⁽⁴⁾	400	64	96	619	1225	64	100	64	100	667	1238
			EBT	-	416	241	1438	1037	446	275	430	263	1438	1068
			EBR	-	56	41	2359	1725	56	49	57	53	2388	1776
			WBL ⁽²⁾	375	136	129	1294	658	148	113	147	131	1301	686
		E 56th Ave	WBT	-	93	162	472	498	41	103	58	103	365	498
			WBR	125	3	35	79	83	1	9	1	11	41	83
			NBL ⁽³⁾	250	52	63	641	672	94	134	70	94	704	485
			NBT	-	63	87	570	805	63	89	56	67	550	481
		Picadilly Rd	NBR	175	144	164	1773	1869	119	131	113	94	1732	1068
			SBL	225	72	46	299	197	77	54	77	54	322	212
			SBT	-	194	171	783	657	201	178	201	178	790	668
			SBR	-	23	22	1818	1679	23	22	23	22	1857	1688
2 Maxwell Pl & Picadilly Rd <i>Picadilly Road Widening Project</i>	STOP	Maxwell Pl	EBR	-	18	10	305	148	-	-	-	-	-	-
			NBT	-	0	0	0	0	-	-	-	-	-	-
			NBR	-	0	0	0	0	-	-	-	-	-	-
			SBT	-	0	0	0	0	-	-	-	-	-	-
		Picadilly Rd	SBR	-	0	0	0	0	-	-	-	-	-	-
		Picadilly Road Widening Project Added East Leg	Maxwell Pl	EBR	-	-	-	-	18	10	18	10	308	150
			NW Site Access	WBR	-	-	-	-	25	55	25	55	305	863
			NBT	-	-	-	-	-	0	0	0	0	0	0
			NBR	-	-	-	-	-	0	0	0	0	0	0
		Picadilly Rd	SBT	-	-	-	-	-	0	0	0	0	0	0
			SBR	-	-	-	-	-	0	0	0	0	0	0
3 E 54th Ave & Picadilly Rd <i>Added East Leg + Signal</i>	SIGNAL	E 54th Ave	EBL	-	30	19	41	27	30	19	30	19	39	27
			EBTR	-	0	0	0	0	0	0	0	0	0	0
			WBL	-	18	21	24	28	174	269	174	269	237	489
			WBTR	-	0	0	0	0	0	0	0	0	0	0
		Picadilly Rd	NBL	125	18	42	16	25	24	63	24	63	24	103
			NBT	-	81	106	949	1817	152	214	149	214	1378	2215
			NBR	-	0	0	0	0	0	0	0	0	0	0
			SBL	100	11	8	5	5	25	39	19	28	58	9
		Picadilly Rd	SBT	-	95	79	528	472	123	109	121	105	2235	871
			SBTR	-	0	0	0	0	0	0	0	0	0	0
4 E 56th Ave & Road A <i>3-Leg Intersection</i>	SIGNAL	E 56th Ave	EBTR	-	145	104	-	-	177	135	172	133	-	-
			WBL	350	14	16	-	-	60	91	56	82	-	-
			WBT	-	62	98	-	-	39	66	40	69	-	-
			NBL	-	31	43	-	-	75	101	75	101	-	-
		Road A	NBR	-	28	34	-	-	45	54	45	54	-	-
		E 56th Ave	EBL	325	-	-	27	74	-	-	-	-	29	83
			EBTR	-	-	-	819	725	-	-	-	-	1050	845
			WBL	350	-	-	41	51	-	-	-	-	302	497
			WBT	-	-	-	1310	2686	-	-	-	-	1376	2634
		Road A	WBR	-	-	-	0	5	-	-	-	-	0	5
			NBLT	-	-	-	43	60	-	-	-	-	105	142
			NBR	-	-	-	0	0	-	-	-	-	15	75
			SBL	-	-	-	84	163	-	-	-	-	79	148
		Road A	SBTR	-	-	-	54	128	-	-	-	-	49	112
5 E 56th Ave & Skydance/N Site Access <i>3-Leg Intersection (With North Leg for Skydance Development)</i>	STOP	E 56th Ave	EBL	273 *	-	-	45	180	-	-	-	-	-	-
			EBT	-	-	-	0	0	-	-	-	-	-	-
			WBTR	-	-	-	0	0	-	-	-	-	-	-
			SBR	-	-	-	18	145	-	-	-	-	-	-
		E 56th Ave	EBTR	-	-	-	-	-	0	0	0	0	-	-
			WBT	-	-	-	-	-	0	0	0	0	-	-
			NBR	-	-	-	-	-	10	15	10	15	-	-
		E 56th Ave	EBL	273 *	-	-	-	-	-	-	-	-	43	180
			EBT	-	-	-	-	-	-	-	-	-	0	0
			EBR	-	-	-	-	-	-	-	-	-	0	0
			WBT	-	-	-	-	-	-	-	-	-	0	0
		N Site Access	WBR	200	-	-	-	-	-	-	-	-	0	0
			NBR	-	-	-	-	-	-	-	-	-	155	228
			SBR	-	-	-	-	-	-	-	-	-	18	145
6 W Site Access & Picadilly Rd	STOP	W Site Access	WBR	-	-	-	-	-	5	8	5	8	35	123
			NBT	-	-	-	-	-	0	0	0	0	0	0
			NBR	-	-	-	-	-	0	0	0	0	0	0
			SBL	250	-	-	-	-	-	-	8	13	138	245
		Picadilly Rd	SBT	-	-	-	-	-	0	0	0	0	0	0

Notes : (1) Queue length, in feet, is based on the 95th percentile queue as reported by Synchro, Version 12.

(2) Dual left in 2026 and 2050 Background Future and Total Future conditions

(3) Dual left in 2050 Background Future conditions and 2026 and 2050 Total Future conditions

(4) Dual left in 2050 Background Future and Total Future conditions

* Storage length per Skydance Development TIS

VII. Conclusions and Recommendations

Conclusions

Based on the results of this traffic impact study, the following may be concluded:

- Under existing traffic conditions, the unsignalized intersection movements within the study area currently operate at overall acceptable levels of service (LOS) “D” or better during the weekday AM and PM peak hours with the exception of the eastbound through, the northbound through/right, and southbound through/right movements at E 56th Ave & Picadilly Rd which operate at LOS “E” or “F”. All queues remain within their respective storage lengths.
- Under background future 2026 conditions the unsignalized intersection movements would operate at acceptable LOS “B” or better and the signalized intersections would operate at acceptable overall LOS “C” or better. All queues would be contained within the available storage during background 2026 conditions.
- During background 2050 conditions, the unsignalized intersection movements would operate at acceptable LOS “D” or better with the exception of the eastbound right turn at Maxwell PI & Picadilly Rd which would operate at LOS “F” during the weekday peak hours as well as the eastbound left and southbound right movements at E 56th Ave & Skydance Access which would operate at LOS “F” during the weekday peak hours due to regional growth. The signalized intersections are forecasted to operate at acceptable overall LOS “D” or better with the exception of the E 56th Ave & Picadilly Rd intersection which would operate at LOS “F” during the weekday peak hours, the E 54th Ave & Picadilly Rd intersection which would operate at LOS “E” during the AM peak hour, and the E 56th Ave & Road A intersection which would operate at LOS “E” during the AM peak hour and LOS “F” during the PM peak hour.
- During background 2050 conditions, all queues are expected to be contained in their respective storage with the exception of the eastbound left, westbound left, northbound left, northbound right, and southbound left movements at the E 56th Ave & Picadilly Rd intersection during weekday peak hours
- The proposed site development would generate, upon completion and full occupancy, 624 net new weekday AM and 955 net new weekday PM peak hour vehicle trips as well as 11,586 net new weekday daily trips.
- During total future 2026 conditions, the unsignalized intersection movements would operate at acceptable LOS “C” or better and the signalized intersections would operate at acceptable overall LOS “D” or better. The W Site Access on Picadilly Rd would operate acceptably as both a $\frac{3}{4}$ movement or a RIRO movement during 2026 conditions from both an operations and queueing standpoint.
- During total future 2050 conditions, the signalized intersections would operate at LOS “F” during the weekday AM and PM peak hours. The unsignalized intersection movements would operate at acceptable LOS “D” or better with the exception of:
 - The eastbound right and westbound right movements at Maxwell PI & Picadilly Rd which would operate at LOS “F”,
 - The eastbound left, northbound right, and southbound right movements at E 56th Ave & Skydance/N Site Access which would operate at LOS “F”.

- The westbound right and southbound left movements at W Site Access & Picadilly Rd which would operate at LOS “F”.
- Queues in total future conditions remain within their respective storage lengths except for the eastbound left, westbound left, northbound left, northbound right and southbound left movements at the intersection of E 56th Ave & Picadilly Rd during 2050 weekday peak hours as well as the westbound left movement at E 56th Ave & Road A during the 2050 PM peak hour.

Recommendations

- It is recommended that the Applicant provide access consistent with the site plan contained herein.
- Site access should be provided via:
 - Northbound through/right lane at Maxwell PI & Picadilly Rd.
 - 100' southbound left lane, northbound through/right lane, and eastbound through/right lane at E 54th Ave & Picadilly Rd.
 - Eastbound through/right lane and 350' westbound left lane at E 56th Ave & Road A.
 - Eastbound through/right lane at E 56th Ave & N Site Access.
 - Northbound through/right lane at W Site Access & Picadilly Rd.
 - 250' southbound left turn lane at W Site Access & Picadilly Rd upon ISP Amendment.
- The intersection of E 56th Ave & Picadilly Rd is being temporarily signalized by the City of Aurora and will eventually have a final signal installed. Coordination with the City of Aurora and pipeline developments will be required to determine cost sharing for this signal.
- The intersections of E 56th Ave & Road A and E 54th Ave & Picadilly Rd shall be constructed by the applicant. Coordination with the City of Aurora and Denver County will be required to determine cost sharing for the quadrants of the signals not encompassed by the site plan.

APPENDIX A – Full Sized Conceptual Plan

NOT FOR
CONSTRUCTION

56TH & PICADILLY MARKETPLACE AT GVRE SITE PLAN SET

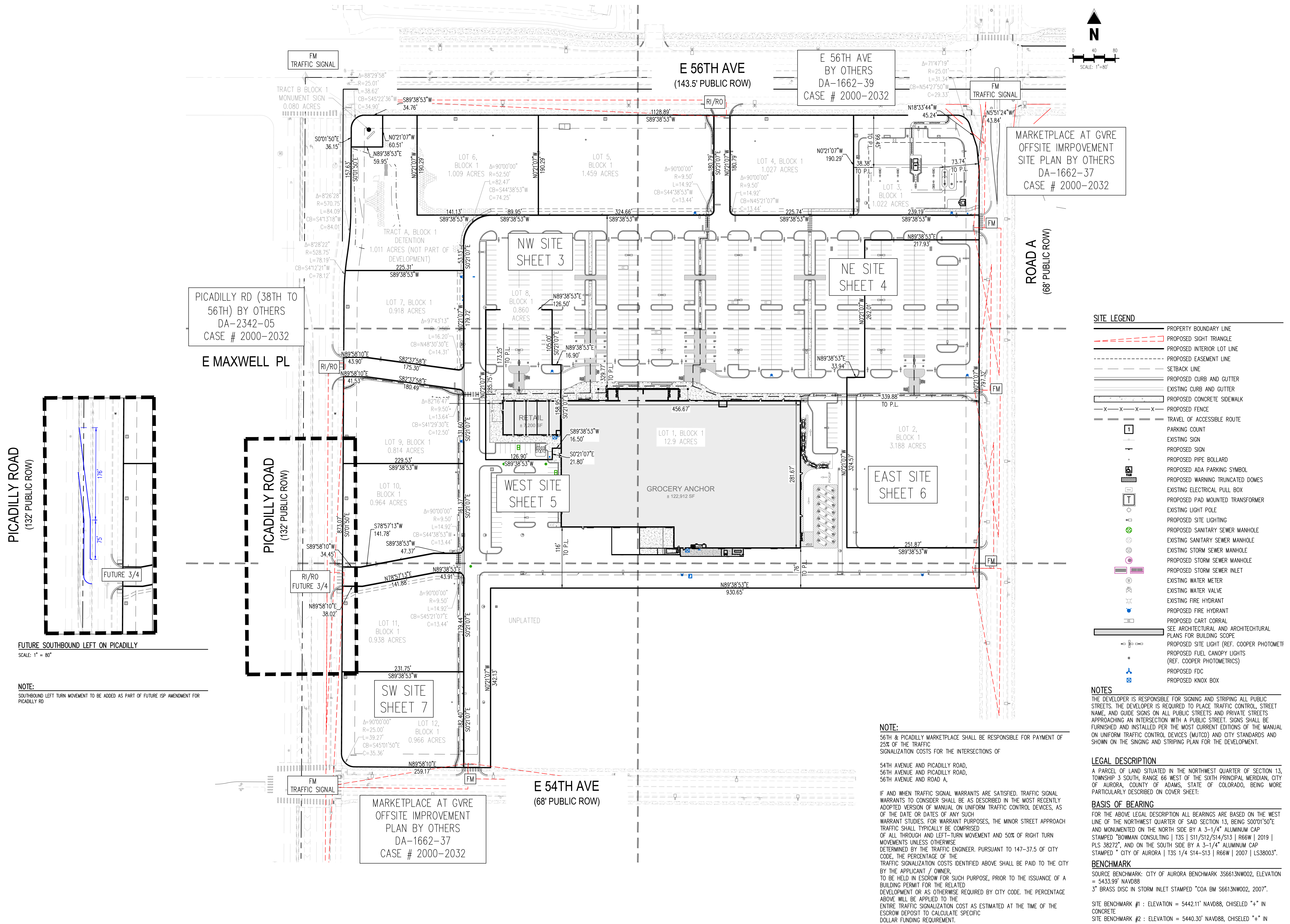
DA-166Z-36
AURORA, COLORADO

F	Date	Issue / Description	Init.
A	10/02/24	1ST SP SUBMITTAL	AJP
B	02/04/25	2ND SP SUBMITTAL	AJP
C	03/13/25	3RD SP SUBMITTAL	AJP
D			
E			
F			
G			
H			
I			
J			
K			
L			
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U			
V			
W			
X			
Y			
Z			

Project No:	KSS000156
Drawn By:	JKS
Checked By:	TDK
Date:	FEBRUARY 2025

OVERALL SITE PLAN

2



APPENDIX B – LOS Descriptions

Level of Service for Signalized Intersections

Level of service for signalized intersections is defined in terms of delay, which is a measure of driver discomfort and frustration, fuel consumption, and lost travel time. Specifically, level-of-service (LOS) criteria are stated in terms of the average stopped delay per vehicle for a 15-min analysis period. The criteria are given in Exhibit 16-2. Delay may be measured in the field or estimated using procedures presented later in this chapter. Delay is a complex measure and is dependent on a number of variables, including the quality of progression, the cycle length, the green ratio, and the v/c ratio for the lane group in question.

LOS A describes operations with very low delay, up to 10 sec per vehicle. This level of service occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.

LOS B describes operations with delay greater than 10 and up to 20 sec per vehicle. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of average delay.

Exhibit 16-2. Level-of-Service Criteria for Signalized Intersections

LEVEL OF SERVICE	STOPPED DELAY PER VEHICLE (SEC)
A	≤ 10.0
B	> 10.0 and ≤ 20.0
C	> 20.0 and ≤ 35.0
D	> 35.0 and ≤ 55.0
E	> 55.0 and ≤ 80.0
F	> 80.0

LOS C describes operations with delay greater than 20 and up to 35 sec per vehicle. These higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.

LOS D describes operations with delay greater than 35 and up to 55 sec per vehicle. At level D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.

LOS E describes operations with delay greater than 55 and up to 80 sec per vehicle. This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent occurrences.

LOS F describes operations with delay in excess of 80 sec per vehicle. This level, considered to be unacceptable to most drivers, often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection. It may also occur at high v/c ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.

Source: Highway Capacity Manual, 2000. Transportation Research Board, National Research Council

Level of Service Criteria for Stop Sign Controlled Intersections

The level of service criteria are given in Table 17-2. As used here, control delay is defined as the total elapsed time from the time a vehicle stops at the end of the queue until the vehicle departs from the stop line; this time includes the time required for the vehicle to travel from the last-in-queue position to the first-in-queue position, including deceleration of vehicles from free-flow speed to the speed of vehicles in queue.

The average total delay for any particular minor movement is a function of the service rate or capacity of the approach and the degree of saturation. . . .

Table 17-2. Level of Service Criteria for TWSC Intersections

LEVEL OF SERVICE	AVERAGE CONTROL DELAY (sec/veh)
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50

Average total delay less than 10 sec/veh is defined as Level of Service (LOS) A. Follow-up times of less than 5 sec have been measured when there is no conflicting traffic for a minor street movement, so control delays of less than 10 sec/veh are appropriate for low flow conditions. To remain consistent with the AWSC intersection analysis procedure described later in this chapter, a total delay of 50 sec/veh is assumed as the break point between LOS E and F.

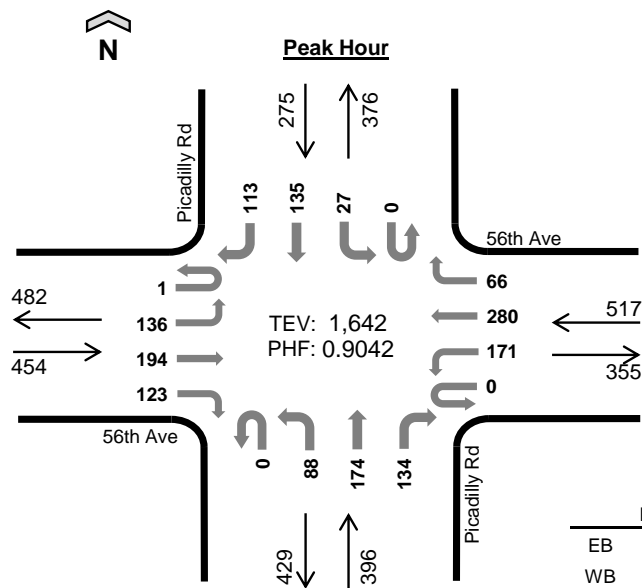
The proposed level of service criteria for TWSC intersections are somewhat different from the criteria used in Chapter 16 for signalized intersections. The primary reason for this difference is that drivers expect different levels of performance from different kinds of transportation facilities. The expectation is that a signalized intersection is designed to carry higher traffic volumes than an unsignalized intersection. Additionally, several driver behavior considerations combine to make delays at signalized intersections less onerous than at unsignalized intersections. For example, drivers at signalized intersections are able to relax during the red interval, where drivers on the minor approaches to unsignalized intersections must remain attentive to the task of identifying acceptable gaps and vehicle conflicts. Also, there is often much more variability in the amount of delay experienced by individual drivers at unsignalized than signalized intersections. For these reasons, it is considered that the total delay threshold for any given level of service is less for an unsignalized intersection than for a signalized intersection. . . .

LOS F exists when there are insufficient gaps of suitable size to allow a side street demand to cross safely through a major street traffic stream. This level of service is generally evident from extremely long total delays experienced by side street traffic and by queueing on the minor approaches. The method, however, is based on a constant critical gap size - that is, the critical gap remains constant, no matter how long the side street motorist waits. LOS F may also appear in the form of side street vehicles' selecting smaller-than-usual gaps. In such cases, safety may be a problem and some disruption to the major traffic stream may result. It is important to note that LOS F may not always result in long queues but may result in adjustments to normal gap acceptance behavior. The latter is more difficult to observe on the field than queueing, which is more obvious.

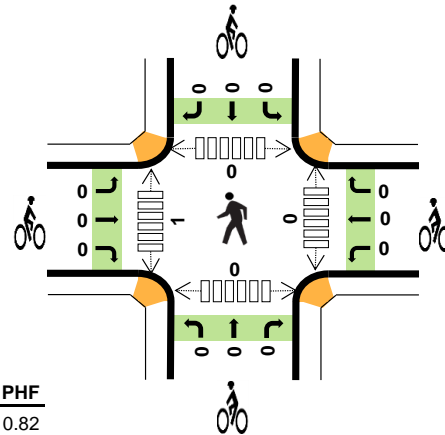
Source: Highway Capacity Manual, 2000. Transportation Research Board, National Research Council

APPENDIX C – Traffic Counts

Picadilly Rd 56th Ave



Date: 9/12/2024
Count Period: 7:00 AM to 7:00 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV%	PHF
EB	6%	0.82
WB	8%	0.85
NB	7%	0.85
SB	3%	0.87
TOTAL	6%	0.90

Peak Hour Count Summaries

Peak Hour Interval Start		56th Ave				56th Ave				Picadilly Rd				Picadilly Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:30 PM		0	32	35	37	0	44	55	10	0	25	41	24	0	7	35	29	374	0
4:45 PM		0	26	51	28	0	49	59	13	0	20	46	33	0	4	37	29	395	0
5:00 PM		0	36	45	26	0	40	86	26	0	30	39	47	0	13	37	29	454	0
5:15 PM		1	42	63	32	0	38	80	17	0	13	48	30	0	3	26	26	419	1,642
Pk Hr	All	1	136	194	123	0	171	280	66	0	88	174	134	0	27	135	113	1,642	
	HV	0	2	23	4	0	18	21	1	0	9	8	12	0	2	4	2	106	
	HV%	0%	1%	12%	3%	-	11%	8%	2%	-	10%	5%	9%	-	7%	3%	2%	6%	

Note: For complete count summary (all intervals), see following pages.

** Heavy Vehicle Classifications include FHWA Classes 4-13.

** Count Summaries include heavy vehicles, but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:30 PM	7	12	8	2	29	0	0	0	0	0	0	0	0	0	0
4:45 PM	7	12	6	2	27	0	0	0	0	0	0	0	0	0	0
5:00 PM	7	7	9	1	24	0	0	0	0	0	0	0	0	0	0
5:15 PM	8	9	6	3	26	0	0	0	0	0	0	1	0	0	1
Peak Hour	29	40	29	8	106	0	0	0	0	0	0	1	0	0	1

Count Summaries - All Vehicles																			
Interval Start		56th Ave				56th Ave				Picadilly Rd				Picadilly Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
	7:00 AM	0	25	67	27	0	14	35	5	0	14	29	37	0	4	46	27	330	0
	7:15 AM	0	23	65	30	0	37	26	6	0	11	24	28	0	14	47	38	349	0
	7:30 AM	0	17	66	32	0	36	32	11	0	24	43	35	0	12	44	25	377	0
	7:45 AM	0	22	76	41	0	45	42	11	0	23	36	34	0	12	27	24	393	1,449
	8:00 AM	0	17	63	54	0	37	47	5	0	19	28	27	0	7	39	29	372	1,491
	8:15 AM	0	24	38	43	0	25	42	7	0	32	23	25	0	7	24	17	307	1,449
	8:30 AM	1	27	53	29	0	21	35	6	0	26	30	25	0	7	31	19	310	1,382
	8:45 AM	0	23	51	29	0	20	45	7	0	8	19	27	0	3	27	26	285	1,274
	9:00 AM	0	22	45	18	0	20	44	6	0	9	19	19	0	5	12	24	243	1,145
	9:15 AM	0	12	46	19	0	12	35	1	0	18	20	19	1	4	19	21	227	1,065
	9:30 AM	0	22	47	15	0	12	33	5	0	10	12	19	3	3	17	35	233	988
	9:45 AM	0	21	33	14	0	11	44	2	0	9	14	17	0	4	10	17	196	899
	10:00 AM	2	20	44	19	0	19	33	1	0	14	19	14	0	7	12	29	233	889
	10:15 AM	1	19	27	17	0	10	38	4	0	10	17	19	0	5	19	30	216	878
	10:30 AM	0	8	34	10	0	13	25	2	0	8	12	17	0	4	16	11	160	805
	10:45 AM	0	21	44	18	0	14	32	2	0	7	20	19	0	4	17	26	224	833
	11:00 AM	0	18	37	17	0	11	47	5	0	13	20	20	0	3	16	25	232	832
	11:15 AM	0	16	48	18	0	12	39	5	0	16	17	23	0	1	19	25	239	855
	11:30 AM	0	13	56	17	0	21	38	5	0	12	15	17	0	1	29	23	247	942
	11:45 AM	0	22	56	25	0	22	46	4	0	5	13	24	0	3	17	20	257	975
	12:00 PM	1	21	46	19	0	22	53	3	0	13	18	19	0	6	21	34	276	1,019
	12:15 PM	1	22	41	19	0	16	35	3	0	20	23	14	0	7	26	31	258	1,038
	12:30 PM	0	35	39	21	0	19	41	10	0	12	16	14	0	1	17	16	241	1,032
	12:45 PM	1	22	45	12	0	27	42	5	0	16	26	27	0	9	11	17	260	1,035
	1:00 PM	0	18	50	23	0	21	45	3	0	8	18	28	0	9	23	34	280	1,039
	1:15 PM	0	27	42	16	0	28	53	3	0	16	19	24	0	1	19	28	276	1,057
	1:30 PM	0	25	44	25	0	16	68	2	0	17	17	26	0	3	20	33	296	1,112
	1:45 PM	1	26	49	19	0	33	34	3	0	16	22	24	0	2	24	21	274	1,126
	2:00 PM	1	16	44	20	0	39	64	6	0	21	20	11	0	4	35	21	302	1,148
	2:15 PM	0	21	45	25	0	21	52	2	0	17	30	17	0	7	29	27	293	1,165
	2:30 PM	0	25	32	32	0	21	72	5	0	17	36	23	0	8	38	14	323	1,192
	2:45 PM	1	20	31	24	0	28	60	9	0	22	43	10	0	5	35	34	322	1,240
	3:00 PM	0	26	28	50	0	40	52	5	0	12	30	27	0	4	37	34	345	1,283
	3:15 PM	0	25	34	43	0	39	63	5	0	30	35	28	0	5	47	25	379	1,369
	3:30 PM	0	19	50	34	0	32	66	9	0	34	42	25	0	8	35	29	383	1,429
	3:45 PM	0	20	47	36	0	47	78	5	0	8	41	37	0	0	35	24	378	1,485
	4:00 PM	0	17	44	36	0	46	61	12	0	19	36	19	0	11	41	19	361	1,501
	4:15 PM	0	33	49	35	0	29	57	9	0	18	44	30	0	2	35	30	371	1,493
	4:30 PM	0	32	35	37	0	44	55	10	0	25	41	24	0	7	35	29	374	1,484
	4:45 PM	0	26	51	28	0	49	59	13	0	20	46	33	0	4	37	29	395	1,501
	5:00 PM	0	36	45	26	0	40	86	26	0	30	39	47	0	13	37	29	454	1,594
	5:15 PM	1	42	63	32	0	38	80	17	0	13	48	30	0	3	26	26	419	1,642
	5:30 PM	0	23	39	42	0	37	53	13	0	26	39	22	0	6	37	29	366	1,634
	5:45 PM	0	32	27	27	0	36	52	6	0	38	49	19	0	5	23	20	334	1,573
	6:00 PM	0	32	40	24	0	28	52	9	0	24	51	26	0	2	30	28	346	1,465
	6:15 PM	0	26	28	35	0	32	33	6	0	17	27	16	0	6	27	19	272	1,318
	6:30 PM	2	37	25	27	0	17	53	3	0	15	34	18	0	2	18	25	276	1,228
	6:45 PM	0	39	55	25	0	24	36	1	0	9	25	17	0	7	28	20	286	1,180
Count Total		13	1,135	2,164	1,284	0	1,281	2,313	303	0	821	1,345	1,120	4	257	1,314	1,216	14,570	
Pk Hr	All	1	136	194	123	0	171	280	66	0	88	174	134	0	27	135	113	1,642	
	HV	0	2	23	4	0	18	21	1	0	9	8	12	0	2	4	2	106	
	HV%	0%	1%	12%	3%	-	11%	8%	2%	-	10%	5%	9%	-	7%	3%	2%	6%	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	8	5	7	5	25	0	0	0	0	0	0	0	0	0	0
7:15 AM	9	7	5	2	23	0	0	0	0	0	0	0	0	0	0
7:30 AM	8	8	6	1	23	0	0	0	0	0	0	0	0	0	0
7:45 AM	13	12	5	3	33	0	0	0	0	0	0	0	0	0	0
8:00 AM	6	8	10	1	25	0	0	0	0	0	0	0	0	0	0
8:15 AM	12	13	10	2	37	0	0	0	0	0	0	0	0	0	0
8:30 AM	12	10	8	5	35	0	0	0	0	0	0	0	0	0	0
8:45 AM	9	9	5	5	28	0	0	0	0	0	0	0	1	0	1
9:00 AM	7	10	6	4	27	0	0	0	0	0	0	0	0	0	0
9:15 AM	9	15	9	1	34	0	0	0	0	0	0	0	0	0	0
9:30 AM	14	20	4	6	44	0	0	0	0	0	0	0	0	0	0
9:45 AM	7	24	6	1	38	0	0	0	0	0	0	0	0	0	0
10:00 AM	8	13	7	3	31	0	0	0	0	0	0	0	0	0	0
10:15 AM	6	14	6	5	31	0	0	0	0	0	0	0	0	0	0
10:30 AM	7	9	3	2	21	0	0	0	0	0	0	1	0	0	1
10:45 AM	8	9	8	3	28	0	0	0	0	0	2	1	0	0	3
11:00 AM	10	11	3	2	26	0	0	0	0	0	2	0	0	0	2
11:15 AM	10	14	7	4	35	0	0	0	0	0	1	0	3	0	4
11:30 AM	9	6	8	4	27	0	0	0	0	0	0	1	0	0	1
11:45 AM	9	12	10	6	37	0	0	0	0	0	0	1	0	0	1
12:00 PM	3	8	9	3	23	0	0	0	0	0	0	0	0	0	0
12:15 PM	8	5	7	0	20	0	0	0	0	0	0	0	0	0	0
12:30 PM	12	8	9	1	30	0	0	0	0	0	0	1	0	0	1
12:45 PM	10	10	8	2	30	0	0	0	0	0	0	1	0	0	1
1:00 PM	9	12	6	3	30	0	0	0	0	0	0	0	0	0	0
1:15 PM	8	10	10	2	30	0	0	0	0	0	0	1	0	0	1
1:30 PM	1	7	6	3	17	0	0	0	0	0	0	0	0	0	0
1:45 PM	11	10	8	4	33	0	0	0	0	0	0	0	0	0	0
2:00 PM	10	6	5	2	23	0	0	0	0	0	0	0	0	0	0
2:15 PM	10	7	11	2	30	0	0	0	0	0	0	1	0	0	1
2:30 PM	6	9	6	4	25	0	0	0	0	0	0	0	0	0	0
2:45 PM	9	7	6	5	27	0	0	0	0	0	0	0	0	0	0
3:00 PM	9	7	3	5	24	0	0	0	0	0	0	0	0	0	0
3:15 PM	5	15	6	3	29	0	0	0	0	0	0	0	0	0	0
3:30 PM	10	10	12	3	35	0	0	0	0	0	0	1	0	0	1
3:45 PM	7	11	4	2	24	0	0	0	0	0	0	1	0	0	1
4:00 PM	5	9	2	8	24	0	0	0	0	0	0	2	0	0	2
4:15 PM	6	3	3	2	14	0	0	0	0	0	0	0	0	0	0
4:30 PM	7	12	8	2	29	0	0	0	0	0	0	0	0	0	0
4:45 PM	7	12	6	2	27	0	0	0	0	0	0	0	0	0	0
5:00 PM	7	7	9	1	24	0	0	0	0	0	0	0	0	0	0
5:15 PM	8	9	6	3	26	0	0	0	0	0	0	1	0	0	1
5:30 PM	5	4	6	2	17	0	0	0	0	0	0	0	0	0	0
5:45 PM	2	4	2	0	8	0	0	0	0	0	0	0	0	0	0
6:00 PM	3	5	4	1	13	0	0	1	0	1	1	1	0	0	2
6:15 PM	4	0	3	0	7	0	0	0	0	0	0	0	0	0	0
6:30 PM	1	10	3	1	15	0	0	0	0	0	0	0	0	0	0
6:45 PM	9	2	4	0	15	0	0	0	0	0	0	1	0	0	1
Count Total	373	448	305	131	1257	0	0	1	0	1	6	15	4	0	25
Peak Hour	29	40	29	8	106	0	0	0	0	0	0	1	0	0	1

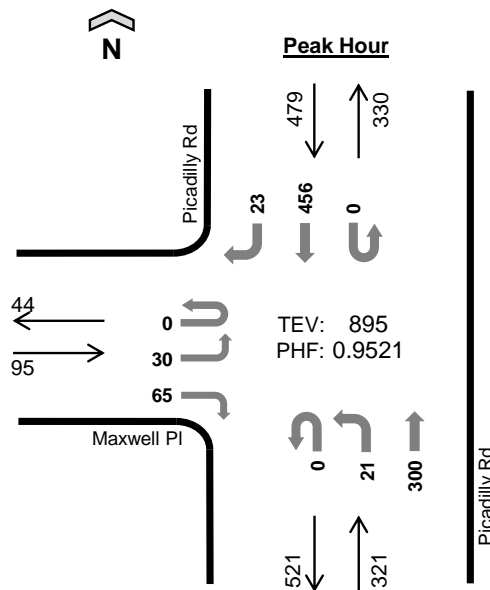
Count Summaries - Heavy Vehicles

Interval Start	56th Ave				56th Ave				Picadilly Rd				Picadilly Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	2	3	3	0	2	3	0	0	0	2	5	0	1	4	0	25	0
7:15 AM	0	5	2	2	0	2	4	1	0	1	3	1	0	0	1	1	23	0
7:30 AM	0	0	6	2	0	4	3	1	0	2	1	3	0	0	1	0	23	0
7:45 AM	0	1	10	2	0	6	6	0	0	0	1	4	0	1	1	1	33	104
8:00 AM	0	0	5	1	0	5	3	0	0	0	4	6	0	0	0	1	25	104
8:15 AM	0	2	7	3	0	4	8	1	0	3	3	4	0	0	1	1	37	118
8:30 AM	0	1	9	2	0	1	7	2	0	0	2	6	0	0	3	2	35	130
8:45 AM	0	4	3	2	0	5	3	1	0	0	2	3	0	0	3	2	28	125
9:00 AM	0	1	5	1	0	2	8	0	0	0	2	4	0	1	3	0	27	127
9:15 AM	0	1	4	4	0	2	13	0	0	1	5	3	0	1	0	0	34	124
9:30 AM	0	2	6	6	0	3	15	2	0	1	0	3	0	1	4	1	44	133
9:45 AM	0	0	5	2	0	3	21	0	0	2	2	2	0	0	1	0	38	143
10:00 AM	0	0	8	0	0	3	10	0	0	2	2	3	0	2	0	1	31	147
10:15 AM	0	1	4	1	0	4	7	3	0	2	1	3	0	1	3	1	31	144
10:30 AM	0	0	5	2	0	2	7	0	0	0	1	2	0	0	2	0	21	121
10:45 AM	0	1	6	1	0	3	5	1	0	1	4	3	0	0	2	1	28	111
11:00 AM	0	2	6	2	0	2	9	0	0	0	0	3	0	0	2	0	26	106
11:15 AM	0	0	7	3	0	5	8	1	0	4	0	3	0	0	3	1	35	110
11:30 AM	0	0	3	6	0	2	4	0	0	2	1	5	0	0	4	0	27	116
11:45 AM	0	1	4	4	0	2	10	0	0	0	5	5	0	1	5	0	37	125
12:00 PM	0	0	0	3	0	4	4	0	0	1	3	5	0	1	2	0	23	122
12:15 PM	0	2	2	4	0	0	4	1	0	1	4	2	0	0	0	0	20	107
12:30 PM	0	1	8	3	0	1	5	2	0	2	2	5	0	0	1	0	30	110
12:45 PM	0	1	8	1	0	4	4	2	0	4	1	3	0	1	1	0	30	103
1:00 PM	0	2	6	1	0	7	5	0	0	0	1	5	0	1	0	2	30	110
1:15 PM	0	0	6	2	0	3	6	1	0	4	2	4	0	0	0	2	30	120
1:30 PM	0	0	1	0	0	2	5	0	0	1	1	4	0	0	2	1	17	107
1:45 PM	0	1	7	3	0	6	2	2	0	2	2	4	0	0	3	1	33	110
2:00 PM	0	0	8	2	0	4	1	1	0	1	1	3	0	0	1	1	23	103
2:15 PM	0	0	8	2	0	0	7	0	0	5	5	1	0	1	1	0	30	103
2:30 PM	0	0	5	1	0	4	5	0	0	1	2	3	0	2	1	1	25	111
2:45 PM	0	1	6	2	0	4	3	0	0	2	2	2	0	1	3	1	27	105
3:00 PM	0	0	3	6	0	5	0	2	0	1	2	0	0	0	3	2	24	106
3:15 PM	0	0	3	2	0	8	5	2	0	2	2	2	0	0	3	0	29	105
3:30 PM	0	0	6	4	0	3	7	0	0	1	3	8	0	1	2	0	35	115
3:45 PM	0	0	5	2	0	5	5	1	0	1	1	2	0	0	2	0	24	112
4:00 PM	0	1	2	2	0	6	3	0	0	0	1	1	0	3	5	0	24	112
4:15 PM	0	1	4	1	0	2	1	0	0	1	2	0	0	0	0	2	14	97
4:30 PM	0	0	6	1	0	6	6	0	0	3	3	2	0	0	1	1	29	91
4:45 PM	0	2	3	2	0	4	8	0	0	2	1	3	0	1	1	0	27	94
5:00 PM	0	0	7	0	0	2	4	1	0	3	3	3	0	1	0	0	24	94
5:15 PM	0	0	7	1	0	6	3	0	0	1	1	4	0	0	2	1	26	106
5:30 PM	0	0	4	1	0	1	2	1	0	0	2	4	0	0	2	0	17	94
5:45 PM	0	0	2	0	0	2	1	1	0	1	0	1	0	0	0	0	8	75
6:00 PM	0	0	2	1	0	3	2	0	0	0	1	3	0	0	1	0	13	64
6:15 PM	0	1	2	1	0	0	0	0	0	0	1	2	0	0	0	0	7	45
6:30 PM	0	0	0	1	0	6	4	0	0	1	0	2	0	0	1	0	15	43
6:45 PM	0	0	7	2	0	2	0	0	0	1	0	3	0	0	0	0	15	50
Count Total	0	37	236	100	0	162	256	30	0	63	90	152	0	22	81	28	1,257	
Pk Hr Heavy	0	2	23	4	0	18	21	1	0	9	8	12	0	2	4	2	106	

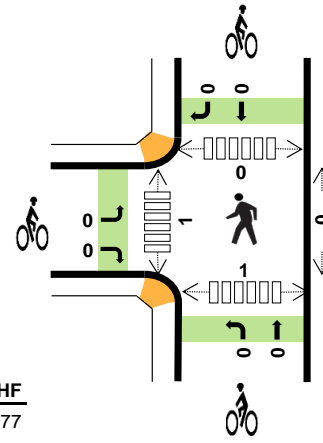
Count Summaries - Bikes

Interval Start	56th Ave				56th Ave				Picadilly Rd				Picadilly Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Count Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	
Pk Hr Bike	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

Picadilly Rd Maxwell PI



Date: 9/12/2024
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM



	HV%	PHF
EB	5%	0.77
WB	--	--
NB	8%	0.83
SB	6%	0.91
TOTAL	7%	0.95

Peak Hour Count Summaries

Peak Hour Interval Start	Maxwell PI				n/a				Picadilly Rd				Picadilly Rd				15-min Total	Rolling Hour Total	
	Eastbound				Westbound				Northbound				Southbound						
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
7:15 AM	0	10	0	21	0	0	0	0	0	4	59	0	0	0	108	3	205	0	
7:30 AM	0	7	0	17	0	0	0	0	0	5	86	0	0	0	108	7	230	0	
7:45 AM	0	7	0	9	0	0	0	0	0	6	91	0	0	0	114	8	235	0	
8:00 AM	0	6	0	18	0	0	0	0	0	6	64	0	0	0	126	5	225	895	
Pk Hr	All	0	30	0	65	0	0	0	0	0	21	300	0	0	0	456	23	895	
	HV	0	1	0	4	0	0	0	0	0	0	27	0	0	0	24	3	59	
	HV%	-	3%	-	6%	-	-	-	-	-	0%	9%	-	-	-	5%	13%	7%	

Note: For complete count summary (all intervals), see following pages.

** Heavy Vehicle Classifications include FHWA Classes 4-13.

** Count Summaries include heavy vehicles, but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:15 AM	0	0	5	5	10	0	0	0	0	0	0	0	0	0	0
7:30 AM	2	0	6	7	15	0	0	0	0	0	0	0	0	0	0
7:45 AM	2	0	5	9	16	0	0	0	0	0	0	0	0	0	0
8:00 AM	1	0	11	6	18	0	0	0	0	0	0	1	0	1	2
Peak Hour	5	0	27	27	59	0	0	0	0	0	0	1	0	1	2

Count Summaries - All Vehicles

Interval Start		Maxwell PI				n/a				Picadilly Rd				Picadilly Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	6	0	8	0	0	0	0	0	3	71	0	0	0	70	5	163	0
7:15 AM		0	10	0	21	0	0	0	0	0	4	59	0	0	0	108	3	205	0
7:30 AM		0	7	0	17	0	0	0	0	0	5	86	0	0	0	108	7	230	0
7:45 AM		0	7	0	9	0	0	0	0	0	6	91	0	0	0	114	8	235	833
8:00 AM		0	6	0	18	0	0	0	0	0	6	64	0	0	0	126	5	225	895
8:15 AM		0	8	0	12	0	0	0	0	0	4	71	0	0	0	99	0	194	884
8:30 AM		0	8	0	9	0	0	0	0	0	6	76	0	0	0	74	5	178	832
8:45 AM		0	3	0	8	0	0	0	0	0	1	55	0	0	0	74	2	143	740
Count Total		0	55	0	102	0	0	0	0	0	35	573	0	0	0	773	35	1,573	
P k Hr	All	0	30	0	65	0	0	0	0	0	21	300	0	0	0	456	23	895	
	HV	0	1	0	4	0	0	0	0	0	0	27	0	0	0	24	3	59	
	HV%	-	3%	-	6%	-	-	-	-	-	0%	9%	-	-	-	5%	13%	7%	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	0	0	7	9	16	0	0	0	0	0	0	1	0	0	1
7:15 AM	0	0	5	5	10	0	0	0	0	0	0	0	0	0	0
7:30 AM	2	0	6	7	15	0	0	0	0	0	0	0	0	0	0
7:45 AM	2	0	5	9	16	0	0	0	0	0	0	0	0	0	0
8:00 AM	1	0	11	6	18	0	0	0	0	0	0	1	0	1	2
8:15 AM	0	0	10	7	17	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	6	7	13	0	0	0	0	0	0	0	0	0	0
8:45 AM	1	0	6	10	17	0	0	0	0	0	0	0	0	0	0
Count Total	6	0	56	60	122	0	0	0	0	0	0	2	0	1	3
Peak Hour	5	0	27	27	59	0	0	0	0	0	0	1	0	1	2

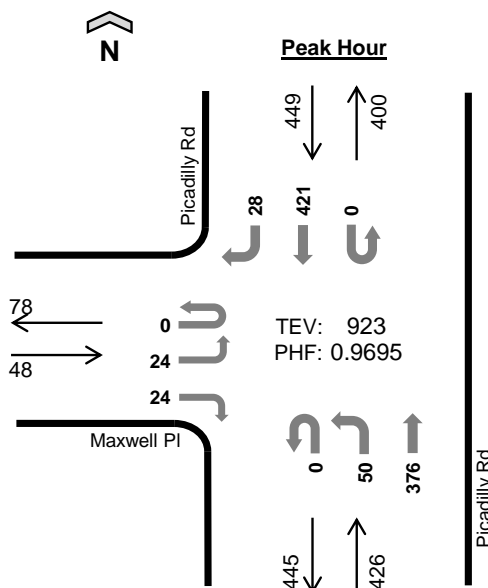
Count Summaries - Heavy Vehicles

Interval Start	Maxwell PI				n/a				Picadilly Rd				Picadilly Rd				15-min Total	Rolling Hour Total	
	Eastbound				Westbound				Northbound				Southbound						
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
7:00 AM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	9	0	16	0	
7:15 AM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	0	10	0	
7:30 AM	0	1	0	1	0	0	0	0	0	0	6	0	0	0	7	0	15	0	
7:45 AM	0	0	0	2	0	0	0	0	0	0	5	0	0	0	8	1	16	57	
8:00 AM	0	0	0	1	0	0	0	0	0	0	11	0	0	0	4	2	18	59	
8:15 AM	0	0	0	0	0	0	0	0	0	0	10	0	0	0	7	0	17	66	
8:30 AM	0	0	0	0	0	0	0	0	0	0	6	0	0	0	7	0	13	64	
8:45 AM	0	0	0	1	0	0	0	0	0	0	5	0	0	0	10	0	17	65	
Count Total	0	1	0	5	0	0	0	0	0	0	1	55	0	0	0	57	3	122	
Pk Hr Heavy	0	1	0	4	0	0	0	0	0	0	0	27	0	0	0	24	3	59	

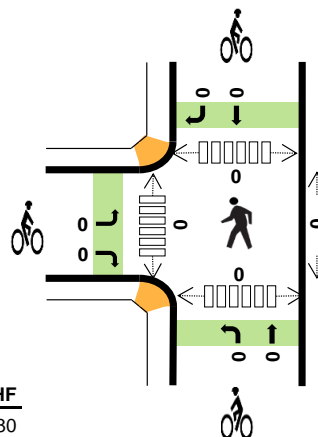
Count Summaries - Bikes

Interval Start	Maxwell PI				n/a				Picadilly Rd				Picadilly Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Picadilly Rd Maxwell PI



Date: 9/12/2024
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM



	HV%	PHF
EB	2%	0.80
WB	--	--
NB	7%	0.87
SB	5%	0.97
TOTAL	6%	0.97

Peak Hour Count Summaries

Peak Hour Interval Start		Maxwell PI				n/a				Picadilly Rd				Picadilly Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:15 PM		0	4	0	5	0	0	0	0	0	12	87	0	0	0	108	8	224	0
4:30 PM		0	7	0	8	0	0	0	0	0	13	82	0	0	0	105	9	224	0
4:45 PM		0	6	0	7	0	0	0	0	0	13	97	0	0	0	111	4	238	0
5:00 PM		0	7	0	4	0	0	0	0	0	12	110	0	0	0	97	7	237	923
Pk Hr	All	0	24	0	24	0	0	0	0	0	50	376	0	0	0	421	28	923	
	HV	0	0	0	1	0	0	0	0	0	0	29	0	0	0	24	0	54	
	HV%	-	0%	-	4%	-	-	-	-	-	0%	8%	-	-	-	6%	0%	6%	

Note: For complete count summary (all intervals), see following pages.

** Heavy Vehicle Classifications include FHWA Classes 4-13.

** Count Summaries include heavy vehicles, but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:15 PM	0	0	3	6	9	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	8	7	15	0	0	0	0	0	0	0	0	0	0
4:45 PM	1	0	7	8	16	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	11	3	14	0	0	0	0	0	0	0	0	0	0
Peak Hour	1	0	29	24	54	0	0	0	0	0	0	0	0	0	0

Count Summaries - All Vehicles

Interval Start		Maxwell PI				n/a				Picadilly Rd				Picadilly Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	3	0	8	0	0	0	0	0	10	70	0	0	0	100	4	195	0
4:15 PM		0	4	0	5	0	0	0	0	0	12	87	0	0	0	108	8	224	0
4:30 PM		0	7	0	8	0	0	0	0	0	13	82	0	0	0	105	9	224	0
4:45 PM		0	6	0	7	0	0	0	0	0	13	97	0	0	0	111	4	238	881
5:00 PM		0	7	0	4	0	0	0	0	0	12	110	0	0	0	97	7	237	923
5:15 PM		0	6	0	8	0	0	0	0	0	14	83	0	0	0	94	7	212	911
5:30 PM		0	5	0	10	0	0	0	0	0	11	84	0	0	0	103	4	217	904
5:45 PM		0	5	0	7	0	0	0	0	0	6	97	0	0	0	92	3	210	876
Count Total		0	43	0	57	0	0	0	0	0	91	710	0	0	0	810	46	1,757	
Pk Hr	All	0	24	0	24	0	0	0	0	0	50	376	0	0	0	421	28	923	
	HV	0	0	0	1	0	0	0	0	0	0	29	0	0	0	24	0	54	
	HV%	-	0%	-	4%	-	-	-	-	-	0%	8%	-	-	-	6%	0%	6%	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	0	0	1	12	13	0	0	0	0	0	0	2	0	0	2
4:15 PM	0	0	3	6	9	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	8	7	15	0	0	0	0	0	0	0	0	0	0
4:45 PM	1	0	7	8	16	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	11	3	14	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	6	7	13	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	4	4	8	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	3	1	4	0	0	0	0	0	0	0	0	0	0
Count Total	1	0	43	48	92	0	0	0	0	0	0	2	0	0	2
Peak Hour	1	0	29	24	54	0	0	0	0	0	0	0	0	0	0

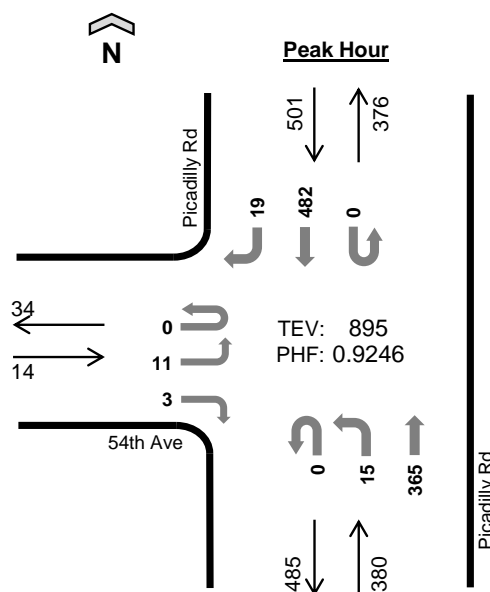
Count Summaries - Heavy Vehicles

Interval Start	Maxwell PI				n/a				Picadilly Rd				Picadilly Rd				15-min Total	Rolling Hour Total	
	Eastbound				Westbound				Northbound				Southbound						
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	12	0	13	0	
4:15 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	6	0	9	0	
4:30 PM	0	0	0	0	0	0	0	0	0	0	8	0	0	0	7	0	15	0	
4:45 PM	0	0	0	1	0	0	0	0	0	0	7	0	0	0	8	0	16	53	
5:00 PM	0	0	0	0	0	0	0	0	0	0	11	0	0	0	3	0	14	54	
5:15 PM	0	0	0	0	0	0	0	0	0	0	6	0	0	0	7	0	13	58	
5:30 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	8	51	
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	1	4	39	
Count Total	0	0	0	1	0	0	0	0	0	0	1	42	0	0	0	48	0	92	
Pk Hr Heavy	0	0	0	1	0	0	0	0	0	0	0	29	0	0	0	24	0	54	

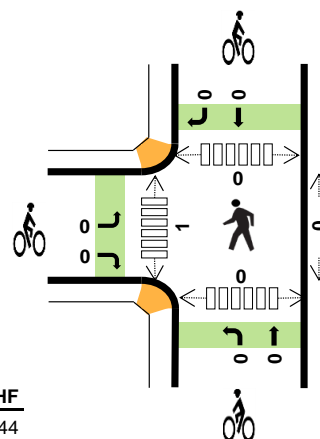
Count Summaries - Bikes

Interval Start	Maxwell PI				n/a				Picadilly Rd				Picadilly Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Pk Hr Bike	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

Picadilly Rd 54th Ave



Date: 9/12/2024
Count Period: 7:00 AM to 7:00 PM
Peak Hour: 3:15 PM to 4:15 PM



	HV%	PHF
EB	0%	0.44
WB	--	--
NB	7%	0.90
SB	9%	0.94
TOTAL	8%	0.92

Peak Hour Count Summaries

Peak Hour Interval Start		54th Ave				n/a				Picadilly Rd				Picadilly Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:15 PM		0	6	0	2	0	0	0	0	0	5	96	0	0	0	133	0	242	0
3:30 PM		0	3	0	0	0	0	0	0	0	2	103	0	0	0	111	5	224	0
3:45 PM		0	2	0	0	0	0	0	0	0	4	87	0	0	0	122	6	221	0
4:00 PM		0	0	0	1	0	0	0	0	0	4	79	0	0	0	116	8	208	895
Pk Hr	All	0	11	0	3	0	0	0	0	0	15	365	0	0	0	482	19	895	
	HV	0	0	0	0	0	0	0	0	0	1	24	0	0	0	42	2	69	
	HV%	-	0%	-	0%	-	-	-	-	-	7%	7%	-	-	-	9%	11%	8%	

Note: For complete count summary (all intervals), see following pages.

** Heavy Vehicle Classifications include FHWA Classes 4-13.

** Count Summaries include heavy vehicles, but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
3:15 PM	0	0	7	12	19	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	10	10	20	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	5	11	16	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	3	11	14	0	0	0	0	0	0	1	0	0	1
Peak Hour	0	0	25	44	69	0	0	0	0	0	0	1	0	0	1

Count Summaries - All Vehicles																			
Interval Start		54th Ave				n/a				Picadilly Rd				Picadilly Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	3	0	6	0	0	0	0	0	0	71	0	0	0	74	3	157	0
7:15 AM		0	4	0	5	0	0	0	0	0	0	57	0	0	0	136	2	204	0
7:30 AM		0	1	0	3	0	0	0	0	0	0	99	0	0	0	117	5	225	0
7:45 AM		0	6	0	6	0	0	0	0	0	2	84	0	0	0	114	4	216	802
8:00 AM		0	4	0	3	0	0	0	0	0	1	70	0	0	0	146	2	226	871
8:15 AM		0	5	0	4	0	0	0	0	0	2	70	0	0	0	100	2	183	850
8:30 AM		0	5	0	4	0	0	0	0	0	2	76	0	0	0	86	3	176	801
8:45 AM		0	1	0	3	0	0	0	0	0	3	51	0	0	0	75	2	135	720
9:00 AM		0	0	0	2	0	0	0	0	0	1	45	0	0	0	57	2	107	601
9:15 AM		0	2	0	2	0	0	0	0	0	0	59	0	0	0	50	2	115	533
9:30 AM		0	0	0	0	0	0	0	0	0	1	44	0	0	0	45	0	90	447
9:45 AM		0	3	0	2	0	0	0	0	0	0	34	0	0	0	38	2	79	391
10:00 AM		0	0	0	4	0	0	0	0	0	1	47	0	0	0	49	1	102	386
10:15 AM		0	0	0	0	0	0	0	0	0	1	45	0	0	0	47	1	94	365
10:30 AM		0	0	0	1	0	0	0	0	0	0	37	0	0	0	46	1	85	360
10:45 AM		0	2	0	0	0	0	0	0	0	1	45	0	0	0	47	1	96	377
11:00 AM		0	2	0	0	0	0	0	0	0	1	52	0	1	0	38	0	94	369
11:15 AM		0	2	0	3	0	0	0	0	0	2	50	0	0	0	45	4	106	381
11:30 AM		0	3	0	4	0	0	0	0	0	8	40	0	1	0	62	6	124	420
11:45 AM		0	3	0	1	0	0	0	0	0	6	44	0	0	0	64	4	122	446
12:00 PM		0	1	0	4	0	0	0	0	0	6	38	0	0	0	67	3	119	471
12:15 PM		0	2	0	5	0	0	0	0	0	3	55	0	0	0	59	3	127	492
12:30 PM		0	1	0	4	0	0	0	0	0	1	33	0	0	0	52	1	92	460
12:45 PM		0	3	0	2	0	0	0	0	0	2	68	0	0	0	50	1	126	464
1:00 PM		0	1	0	0	0	0	0	0	0	1	51	0	0	0	55	5	113	458
1:15 PM		0	3	0	1	0	0	0	0	0	1	53	0	0	0	58	5	121	452
1:30 PM		0	4	0	3	0	0	0	0	0	0	17	0	0	0	58	3	85	445
1:45 PM		0	2	0	2	0	0	0	0	0	2	57	0	0	0	67	2	132	451
2:00 PM		0	2	0	0	0	0	0	0	0	3	50	0	0	0	87	3	145	483
2:15 PM		0	1	0	5	0	0	0	0	0	2	66	0	0	0	83	1	158	520
2:30 PM		0	2	0	3	0	0	0	0	0	2	75	0	0	0	89	6	177	612
2:45 PM		0	1	0	3	0	0	0	0	0	1	67	0	0	0	84	1	157	637
3:00 PM		0	0	0	2	0	0	0	0	0	0	68	0	0	0	114	4	188	680
3:15 PM		0	6	0	2	0	0	0	0	0	5	96	0	0	0	133	0	242	764
3:30 PM		0	3	0	0	0	0	0	0	0	2	103	0	0	0	111	5	224	811
3:45 PM		0	2	0	0	0	0	0	0	0	4	87	0	0	0	122	6	221	875
4:00 PM		0	0	0	1	0	0	0	0	0	4	79	0	0	0	116	8	208	895
4:15 PM		0	3	0	0	0	0	0	0	0	2	97	0	0	0	101	1	204	857
4:30 PM		0	3	0	4	0	0	0	0	0	6	103	0	0	0	110	2	228	861
4:45 PM		0	1	0	2	0	0	0	0	0	3	99	0	0	0	111	3	219	859
5:00 PM		0	3	0	1	0	0	0	0	0	6	116	0	0	0	96	2	224	875
5:15 PM		0	0	0	3	0	0	0	0	1	8	102	0	0	0	103	2	219	890
5:30 PM		0	1	0	0	0	0	0	0	0	5	91	0	0	0	106	8	211	873
5:45 PM		0	2	0	4	0	0	0	0	0	1	104	0	0	0	90	5	206	860
6:00 PM		0	4	0	1	0	0	0	0	0	6	101	0	0	0	79	5	196	832
6:15 PM		0	2	0	8	0	0	0	0	0	5	64	0	0	0	84	2	165	778
6:30 PM		0	3	0	4	0	0	0	0	0	2	61	0	0	0	62	1	133	700
6:45 PM		0	0	0	3	0	0	0	0	0	1	46	0	0	0	74	1	125	619
Count Total		0	102	0	120	0	0	0	0	1	116	3,167	0	2	0	3,857	136	7,501	
Pk Hr	All	0	11	0	3	0	0	0	0	0	15	365	0	0	0	482	19	895	
	HV	0	0	0	0	0	0	0	0	0	1	24	0	0	0	42	2	69	
	HV%	-	0%	-	0%	-	-	-	-	-	7%	7%	-	-	-	9%	11%	8%	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	0	0	6	9	15	0	0	0	0	0	0	1	0	0	1
7:15 AM	0	0	5	6	11	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	7	9	16	0	0	0	0	0	0	1	0	0	1
7:45 AM	0	0	5	8	13	0	0	0	0	0	0	2	0	0	2
8:00 AM	0	0	11	6	17	0	0	0	0	0	0	2	0	0	2
8:15 AM	0	0	9	5	14	0	0	0	0	0	0	1	0	0	1
8:30 AM	0	0	8	8	16	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	5	11	16	0	0	0	0	0	0	1	0	0	1
9:00 AM	1	0	6	5	12	0	0	0	0	0	0	2	0	0	2
9:15 AM	0	0	10	7	17	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	4	14	18	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	7	6	13	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	6	3	9	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	6	8	14	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	4	8	12	0	0	0	0	0	0	1	0	0	1
10:45 AM	1	0	6	7	14	0	0	0	0	0	0	1	0	0	1
11:00 AM	0	0	3	5	8	0	0	0	0	0	0	2	0	0	2
11:15 AM	0	0	6	10	16	0	0	0	0	0	0	1	0	0	1
11:30 AM	0	0	12	10	22	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	10	14	24	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	6	10	16	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	8	7	15	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	7	5	12	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	11	7	18	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	7	9	16	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	10	5	15	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	7	4	11	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	7	12	19	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	5	8	13	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	9	5	14	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	7	6	13	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	5	8	13	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	4	15	19	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	7	12	19	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	10	10	20	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	5	11	16	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	3	11	14	0	0	0	0	0	0	1	0	0	1
4:15 PM	0	0	3	3	6	0	0	0	0	0	0	2	0	0	2
4:30 PM	0	0	8	9	17	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	6	6	12	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	9	5	14	0	0	0	0	0	0	1	0	0	1
5:15 PM	0	0	7	8	15	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	4	6	10	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	4	1	5	0	0	0	0	0	0	2	0	0	2
6:00 PM	0	0	4	6	10	0	0	0	0	0	0	1	0	0	1
6:15 PM	0	0	3	3	6	0	0	0	0	0	0	5	0	0	5
6:30 PM	0	0	3	7	10	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	2	4	6	0	0	0	0	0	0	1	0	0	1
Count Total	2	0	307	362	671	0	0	0	0	0	0	28	0	0	28
Peak Hour	0	0	25	44	69	0	0	0	0	0	0	1	0	0	1

Count Summaries - Heavy Vehicles










Interval Start	54th Ave				n/a				Picadilly Rd				Picadilly Rd				15-min Total	Rolling Hour Total	
	Eastbound				Westbound				Northbound				Southbound						
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
7:00 AM	0	0	0	0	0	0	0	0	0	0	6	0	0	0	8	1	15	0	
7:15 AM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	6	0	11	0	
7:30 AM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	9	0	16	0	
7:45 AM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	8	0	13	55	
8:00 AM	0	0	0	0	0	0	0	0	0	0	11	0	0	0	6	0	17	57	
8:15 AM	0	0	0	0	0	0	0	0	0	0	9	0	0	0	5	0	14	60	
8:30 AM	0	0	0	0	0	0	0	0	0	0	8	0	0	0	8	0	16	60	
8:45 AM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	11	0	16	63	
9:00 AM	0	0	0	1	0	0	0	0	0	0	6	0	0	0	5	0	12	58	
9:15 AM	0	0	0	0	0	0	0	0	0	0	10	0	0	0	7	0	17	61	
9:30 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	14	0	18	63	
9:45 AM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	6	0	13	60	
10:00 AM	0	0	0	0	0	0	0	0	0	0	6	0	0	0	3	0	9	57	
10:15 AM	0	0	0	0	0	0	0	0	0	0	6	0	0	0	8	0	14	54	
10:30 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	8	0	12	48	
10:45 AM	0	1	0	0	0	0	0	0	0	0	6	0	0	0	7	0	14	49	
11:00 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	5	0	8	48	
11:15 AM	0	0	0	0	0	0	0	0	0	0	6	0	0	0	10	0	16	50	
11:30 AM	0	0	0	0	0	0	0	0	0	2	10	0	1	0	9	0	22	60	
11:45 AM	0	0	0	0	0	0	0	0	0	0	10	0	0	0	14	0	24	70	
12:00 PM	0	0	0	0	0	0	0	0	0	0	6	0	0	0	10	0	16	78	
12:15 PM	0	0	0	0	0	0	0	0	0	0	8	0	0	0	7	0	15	77	
12:30 PM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	5	0	12	67	
12:45 PM	0	0	0	0	0	0	0	0	0	0	11	0	0	0	7	0	18	61	
1:00 PM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	9	0	16	61	
1:15 PM	0	0	0	0	0	0	0	0	0	0	10	0	0	0	5	0	15	61	
1:30 PM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	4	0	11	60	
1:45 PM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	12	0	19	61	
2:00 PM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	7	1	13	58	
2:15 PM	0	0	0	0	0	0	0	0	0	0	9	0	0	0	5	0	14	57	
2:30 PM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	6	0	13	59	
2:45 PM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	8	0	13	53	
3:00 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	15	0	19	59	
3:15 PM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	12	0	19	64	
3:30 PM	0	0	0	0	0	0	0	0	0	0	10	0	0	0	10	0	20	71	
3:45 PM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	10	1	16	74	
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	2	0	0	10	1	14	69	
4:15 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	6	56	
4:30 PM	0	0	0	0	0	0	0	0	0	0	8	0	0	0	9	0	17	53	
4:45 PM	0	0	0	0	0	0	0	0	0	0	6	0	0	0	6	0	12	49	
5:00 PM	0	0	0	0	0	0	0	0	0	0	9	0	0	0	5	0	14	49	
5:15 PM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	8	0	15	58	
5:30 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	6	0	10	51	
5:45 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	0	5	44	
6:00 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	6	0	10	40	
6:15 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	6	31	
6:30 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	7	0	10	31	
6:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	4	0	6	32	
Count Total	0	1	0	1	0	0	0	0	0	0	3	304	0	1	0	357	4	671	
Pk Hr Heavy	0	0	0	0	0	0	0	0	0	0	1	24	0	0	0	42	2	69	

APPENDIX D – Existing Synchro Outputs

HCM 7th AWSC
1: Picadilly Rd & E 56th Ave

01/23/2025

Intersection												
Intersection Delay, s/veh	36.5											
Intersection LOS	E											






Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	79	270	162	160	147	33	77	131	124	45	162	116
Future Vol, veh/h	79	270	162	160	147	33	77	131	124	45	162	116
Peak Hour Factor	0.91	0.91	0.91	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	87	297	178	188	173	39	91	154	146	53	191	136
Number of Lanes	1	1	1	1	2	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	3	3
HCM Control Delay, s/veh	33.7	22.6	39.2	52.3
HCM LOS	D	C	E	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	51%	0%	100%	0%	0%	100%	60%	0%	58%
Vol Right, %	0%	49%	0%	0%	100%	0%	0%	40%	0%	42%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	77	255	79	270	162	160	98	82	45	278
LT Vol	77	0	79	0	0	160	0	0	45	0
Through Vol	0	131	0	270	0	0	98	49	0	162
RT Vol	0	124	0	0	162	0	0	33	0	116
Lane Flow Rate	91	300	87	297	178	188	115	96	53	327
Geometry Grp	6	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0.271	0.825	0.255	0.829	0.461	0.578	0.337	0.274	0.158	0.903
Departure Headway (Hd)	10.765	9.901	10.585	10.06	9.324	11.048	10.52	10.223	10.749	9.936
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	333	366	339	359	386	326	341	351	334	366
Service Time	8.536	7.672	8.356	7.83	7.094	8.823	8.295	7.998	8.52	7.706
HCM Lane V/C Ratio	0.273	0.82	0.257	0.827	0.461	0.577	0.337	0.274	0.159	0.893
HCM Control Delay, s/veh	17.5	45.8	17	46.9	19.9	28	18.6	16.8	15.5	58.3
HCM Lane LOS	C	E	C	E	C	D	C	C	C	F
HCM 95th-tile Q	1.1	7.3	1	7.4	2.4	3.4	1.5	1.1	0.6	9.1

HCM 7th TWSC
2: Picadilly Rd & Maxwell PI

01/23/2025

Intersection						
Int Delay, s/veh	2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	30	65	23	302	461	23
Future Vol, veh/h	30	65	23	302	461	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	125	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	35	76	27	355	507	25






Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	929	519	532	0	-	0
Stage 1	519	-	-	-	-	-
Stage 2	409	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	297	557	1036	-	-	-
Stage 1	597	-	-	-	-	-
Stage 2	670	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	289	557	1036	-	-	-
Mov Cap-2 Maneuver	289	-	-	-	-	-
Stage 1	581	-	-	-	-	-
Stage 2	670	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v16.25		0.61	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1036	-	431	-	-
HCM Lane V/C Ratio	0.026	-	0.259	-	-
HCM Control Delay (s/veh)	8.6	-	16.3	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	1	-	-

HCM 7th TWSC
3: Picadilly Rd & E 54th Ave

01/23/2025

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	15	17	3	310	513	13
Future Vol, veh/h	15	17	3	310	513	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	125	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	20	4	365	576	15

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	955	584	591	0	-	0
Stage 1	584	-	-	-	-	-
Stage 2	372	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	286	512	985	-	-	-
Stage 1	558	-	-	-	-	-
Stage 2	697	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	285	512	985	-	-	-
Mov Cap-2 Maneuver	285	-	-	-	-	-
Stage 1	556	-	-	-	-	-
Stage 2	697	-	-	-	-	-










Approach	EB	NB	SB
HCM Control Delay, s/v15.73		0.08	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	985	-	373	-	-
HCM Lane V/C Ratio	0.004	-	0.101	-	-
HCM Control Delay (s/veh)	8.7	-	15.7	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

HCM 7th AWSC
1: Picadilly Rd & E 56th Ave

01/23/2025

Intersection												
Intersection Delay, s/veh	46.5											
Intersection LOS	E											






Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	137	194	123	171	280	66	88	179	134	27	135	113
Future Vol, veh/h	137	194	123	171	280	66	88	179	134	27	135	113
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.87	0.87	0.87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	161	228	145	201	329	78	104	211	158	31	155	130
Number of Lanes	1	1	1	1	2	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	3	3
HCM Control Delay, s/veh	27.9	29.2	86.7	51.1
HCM LOS	D	D	F	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	57%	0%	100%	0%	0%	100%	59%	0%	54%
Vol Right, %	0%	43%	0%	0%	100%	0%	0%	41%	0%	46%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	88	313	137	194	123	171	187	159	27	248
LT Vol	88	0	137	0	0	171	0	0	27	0
Through Vol	0	179	0	194	0	0	187	93	0	135
RT Vol	0	134	0	0	123	0	0	66	0	113
Lane Flow Rate	104	368	161	228	145	201	220	187	31	285
Geometry Grp	6	6	6	6	6	6	6	6	6	6
Degree of Util (X)	0.328	1.081	0.503	0.679	0.401	0.616	0.641	0.531	0.1	0.858
Departure Headway (Hd)	11.395	10.572	11.705	11.176	10.434	11.485	10.955	10.648	11.996	11.15
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	317	346	309	326	347	316	332	341	300	328
Service Time	9.111	8.288	9.405	8.876	8.134	9.185	8.655	8.348	9.696	8.85
HCM Lane V/C Ratio	0.328	1.064	0.521	0.699	0.418	0.636	0.663	0.548	0.103	0.869
HCM Control Delay, s/veh	19.6	105.6	25.7	34.6	19.9	31	31.3	24.8	16	54.9
HCM Lane LOS	C	F	D	D	C	D	D	C	C	F
HCM 95th-tile Q	1.4	13.6	2.7	4.7	1.9	3.8	4.2	3	0.3	7.7

HCM 7th TWSC
2: Picadilly Rd & Maxwell PI

01/23/2025

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	26	27	52	375	402	27
Future Vol, veh/h	26	27	52	375	402	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	125	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	87	87	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	31	60	431	437	29





Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1002	452	466	0	-	0
Stage 1	452	-	-	-	-	-
Stage 2	551	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	269	608	1095	-	-	-
Stage 1	641	-	-	-	-	-
Stage 2	578	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	254	608	1095	-	-	-
Mov Cap-2 Maneuver	254	-	-	-	-	-
Stage 1	606	-	-	-	-	-
Stage 2	578	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v16.95		1.03	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1095	-	361	-	-
HCM Lane V/C Ratio	0.055	-	0.167	-	-
HCM Control Delay (s/veh)	8.5	-	17	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.2	-	0.6	-	-

HCM 7th TWSC
3: Picadilly Rd & E 54th Ave

01/23/2025

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	10	24	420	420	9
Future Vol, veh/h	7	10	24	420	420	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	125	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	91	91	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	12	26	462	457	10

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	976	461	466
Stage 1	461	-	-
Stage 2	514	-	-
Critical Hdwy	6.42	6.22	4.12
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.218
Pot Cap-1 Maneuver	279	600	1095
Stage 1	635	-	-
Stage 2	600	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	272	600	1095
Mov Cap-2 Maneuver	272	-	-
Stage 1	619	-	-
Stage 2	600	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	14.45	0.45	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1095	-	401	-	-
HCM Lane V/C Ratio	0.024	-	0.05	-	-
HCM Control Delay (s/veh)	8.4	-	14.5	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

APPENDIX E – Pipeline Development Excerpts

GREEN VALLEY MP AMENDMENT 2

TRAFFIC IMPACT STUDY

Prepared for:

Oakwood Homes
4908 Tower Rd.
Denver, CO 80249

Prepared by:

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FHU Reference No. 121372-01

Original Report: December 2021

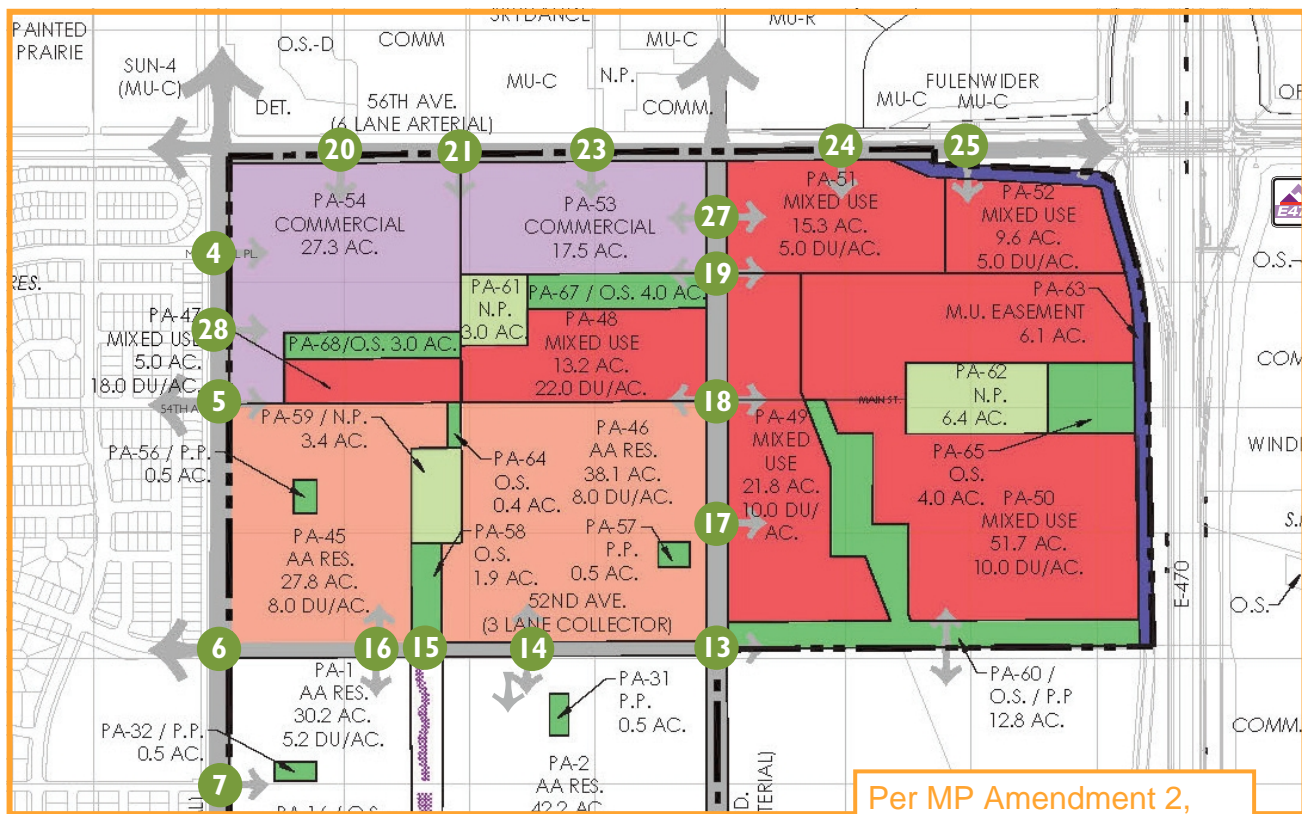
Second Edition: February 2022

Third Edition: June 2022

Fourth Edition: December 2022

Fifth Edition: July 2023

Current Edition: September 2023



Green Valley MP Amendment 2

Traffic Impact Study

Table 2. Trip Generation

Planning Area	Land Use	ITE Code	Unit	Quantity	Daily	AM Peak			PM Peak		
						In	Out	Total	In	Out	Total
45	Senior Housing Attached	251	DU	222	1,167	23	48	71	51	32	83
46	Senior Housing Attached	251	DU	304	1,525	30	60	90	65	41	106
47	Multi-Family (Low-Rise)	220	DU	90	652	12	39	51	37	22	59
48	Multi-Family (Low-Rise)	220	DU	281	1,877	26	84	110	89	52	141
49	Single Family Detached	210	DU	33	364	7	20	27	22	13	35
	Single Family Attached	215	DU	44	285	4	13	17	13	9	22
	Multi-Family (Low-Rise)	220	DU	141	979	16	51	67	51	30	81
	Drive-Thru Restaurant	934	KSF	1.8	840	41	39	80	31	28	59
	General Office	710	KSF	45.3	491	61	8	69	11	54	65
	Shopping Center	822	KSF	12.1	742	17	12	29	40	40	80
	General Office	710	KSF	11.3	123	15	2	17	3	13	16
	Gas Station	945	FP	8	2,121	64	64	128	74	73	147
Subtotal					5,945	225	209	434	245	260	505
50	Multi-Family (Low-Rise)	220	DU	517	3,389	44	139	183	153	90	243
	Shopping Center	821	KSF	140.8	9,504	151	93	244	358	373	731
	General Office	710	KSF	281.5	3,052	377	51	428	69	336	405
	Subtotal				15,945	572	283	855	580	799	1,379
51	Multi-Family (Low-Rise)	220	DU	77	569	11	36	47	34	20	54
	High-Turnover Sit-Down Restaurant	932	KSF	5.0	535	26	22	48	27	18	45
	Shopping Center	821	KSF	112.2	7,577	120	74	194	285	297	582
	Subtotal				8,681	157	132	289	346	335	681

Quantity reduced, all
totals incorrect

Planning Area	Land Use	ITE Code	Unit	Quantity	Daily	AM Peak			PM Peak		
						In	Out	Total	In	Out	Total
52	Multi-Family (Low-Rise)	220	DU	48	383	9	29	38	26	15	41
	Hotel	310	Rooms	100	799	26	20	46	30	29	59
	Subtotal				1,496	39	60	99	69	52	121
53	Hardware Store	862	KSF	111	3,412	96	72	168	124	130	254
	Shopping Center	821	KSF	58.5	3,948	63	38	101	148	155	303
	Medical Office Building	720	KSF	9.1	283	22	6	28	10	24	34
	Day Care	565	KSF	12	571	70	62	132	63	70	133
	Subtotal				8,214	251	178	429	345	379	724
54	Drive-in Bank	912	KSF	4.8	482	28	20	48	51	50	101
	Fast-Food Restaurant with Drive-Thru	934	KSF	4.5	2,104	103	98	201	77	72	149
	Coffee/Donut Shop with Drive-Thru	937	KSF	1.5	800	66	63	129	29	29	58
	Fast-Food Restaurant with Drive-Thru	934	KSF	4.5	2,104	103	98	201	77	72	149
	Strip Retail Plaza	822	KSF	6.0	483	8	6	14	20	20	40
	Fast-Food Restaurant with Drive-Thru	934	KSF	3.7	1,730	84	81	165	63	59	122
	Gas Station	945	FP	16	4,242	129	128	257	148	147	295
	Automobile Parts Sales	843	KSF	7.2	384	10	8	18	17	18	35
	Car Wash	948	Tunnels	1	780	0	0	0	39	39	78
	Strip Retail Plaza	822	KSF	7.0	525	10	7	17	23	23	46
	Grocery Store	850	KSF	122.9	11,533	207	144	351	550	550	1,100
	Fitness Center	492	KSF	32.0	42	21	21	42	63	47	110
	Subtotal				25,209	769	674	1,443	1,157	1,126	2,283

Planning Area	Land Use	ITE Code	Unit	Quantity	Daily	AM Peak			PM Peak		
						In	Out	Total	In	Out	Total
55	Multi-Family (Low-Rise)	220	DU	258	1,729	25	78	103	83	48	131
	Shopping Center	822	KSF	23.4	1,218	33	22	55	77	77	154
	General Office	710	KSF	46.8	508	62	9	71	11	56	67
	Subtotal				3,455	120	109	229	171	181	352
Subtotal Trips					73,852	2,220	1,865	4,085	3,142	3,271	6,413
Total Internal Trips					10,432	446	446	892	954	954	1,908
Total Passby Trips					7,844	247	247	494	735	735	1,470
Total New External Trips					55,576	1,527	1,172	2,699	1,453	1,582	3,035

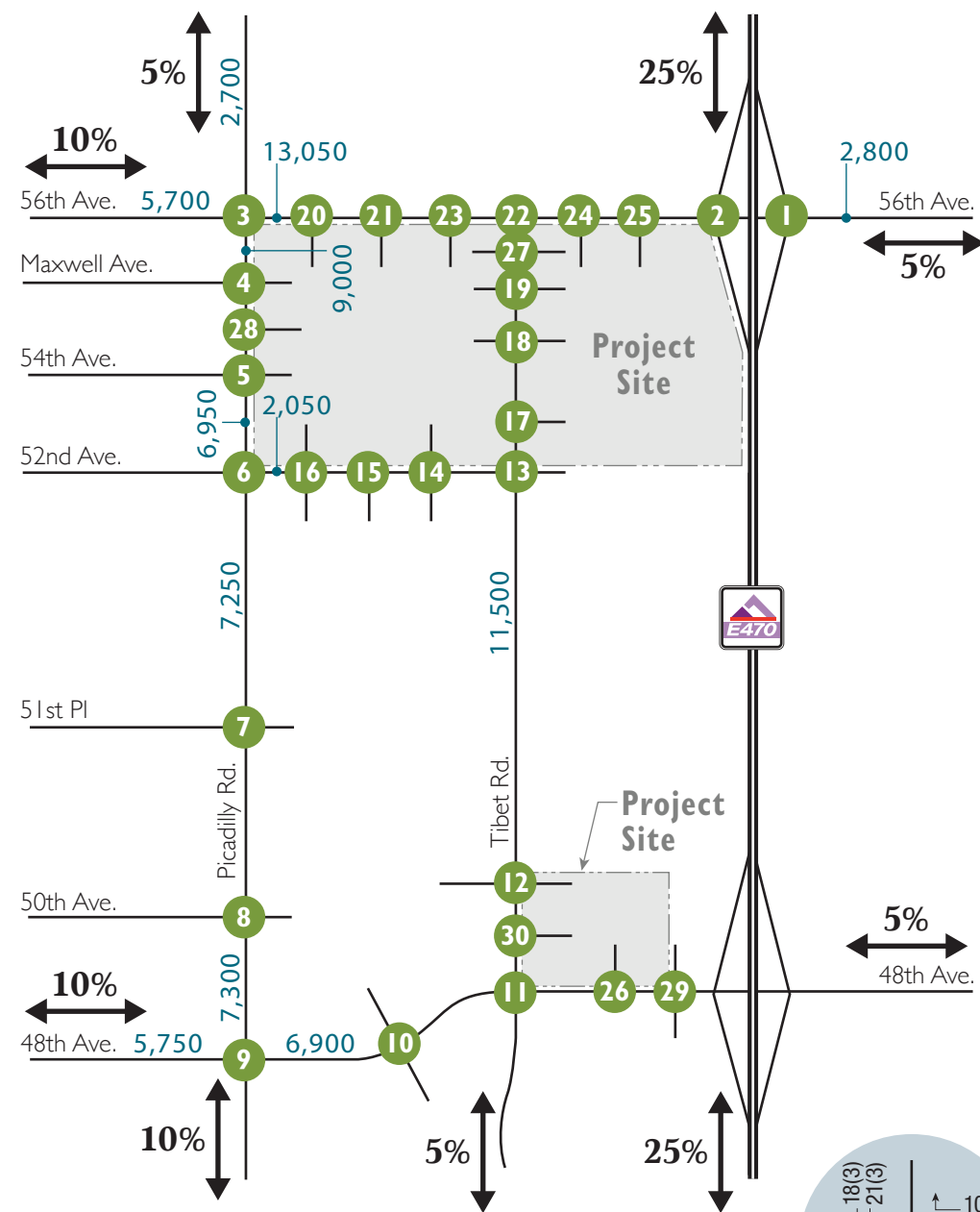
III.B. Site Trip Distribution and Site-Generated Traffic Assignment

For the Short-Range Future scenario, it is expected that the Green Valley Ranch East MP Amendment 1 development will include construction (partial cross-sections) of the roadways immediately adjacent to the Green Valley MP Amendment 2 site, including 48th Avenue, Tibet Street, and 52nd Avenue. It is estimated that the existing two-lane cross-section on Picadilly Road would remain sufficient in the near term for purposes of this study.

The trip generation estimates from **Table 2** were assigned to the adjacent roadway system based on existing travel patterns, travel demand modeling information, and engineering judgment. The following distribution percentages were used to assign the site generated trips to the roadway network:

- 5 percent oriented to/from the north on Picadilly Road
- 10 percent oriented to/from the west on 56th Avenue
- 25 percent oriented to/from the north on E-470
- 25 percent oriented to/from the south on E-470
- 5 percent oriented to/from the east on 48th Avenue
- 5 percent oriented to/from the south on Tibet Street
- 10 percent oriented to/from the south on Picadilly Road
- 10 percent oriented to/from the west on 48th Avenue
- 5 percent oriented to/from the east on 56th Avenue

Internal trips were deducted from the trip generation total before assignments and are not reflected in the site generated trips. It should be noted that some internal trips may cross Tibet Street to reach other planning areas; however, these trips were not accounted for and Tibet is anticipated to see more east-west through volumes at site accesses than shown. Pass-by trips were assumed to travel through on 56th Avenue, Picadilly Road, 48th Avenue, and Tibet Street. Using an industry software tool, VISTRO, net new site generated trips were assigned to the network along with pass-by trips. **Figure 4** shows the site trip distribution and resultant traffic assignment including pass-by trips. As indicated, Picadilly Road would carry between 2,600 and 7,900 VPD of site traffic, 56th Avenue would carry about 5,200 west of Picadilly Road and 11,650 VPD east of Picadilly Road. 48th Avenue would carry between 5,200 VPD west of Picadilly and 6,500 VPD east of Picadilly Road in site-generated traffic.

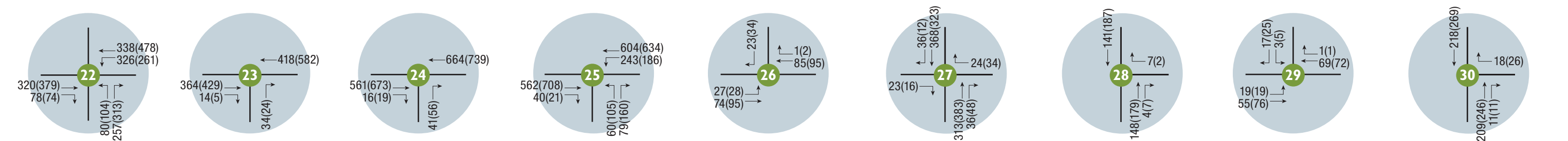


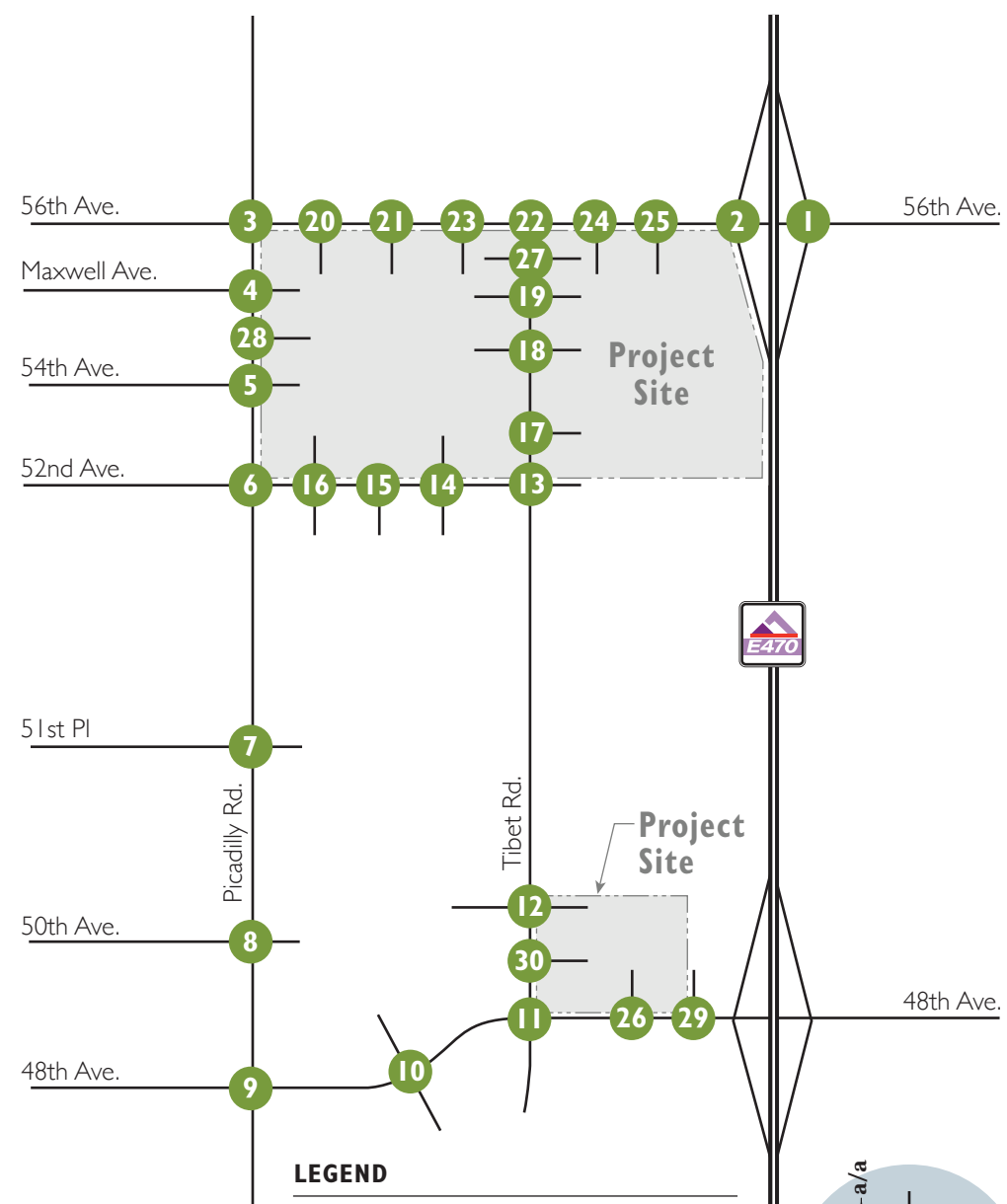
LEGEND

XXX(XXX) = AM(PM) Peak Hour Traffic Volumes

XXXX = Daily Traffic Volumes

XX% = Site Trip Distribution






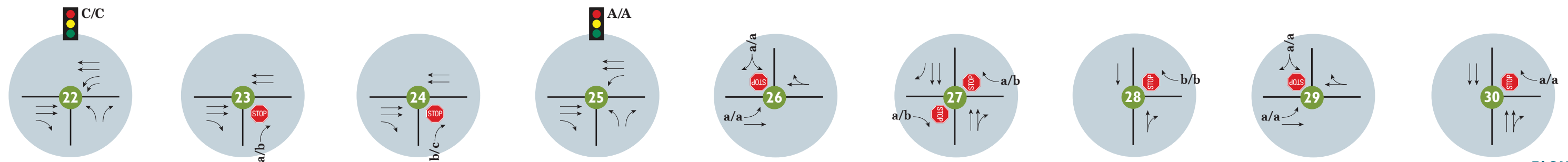
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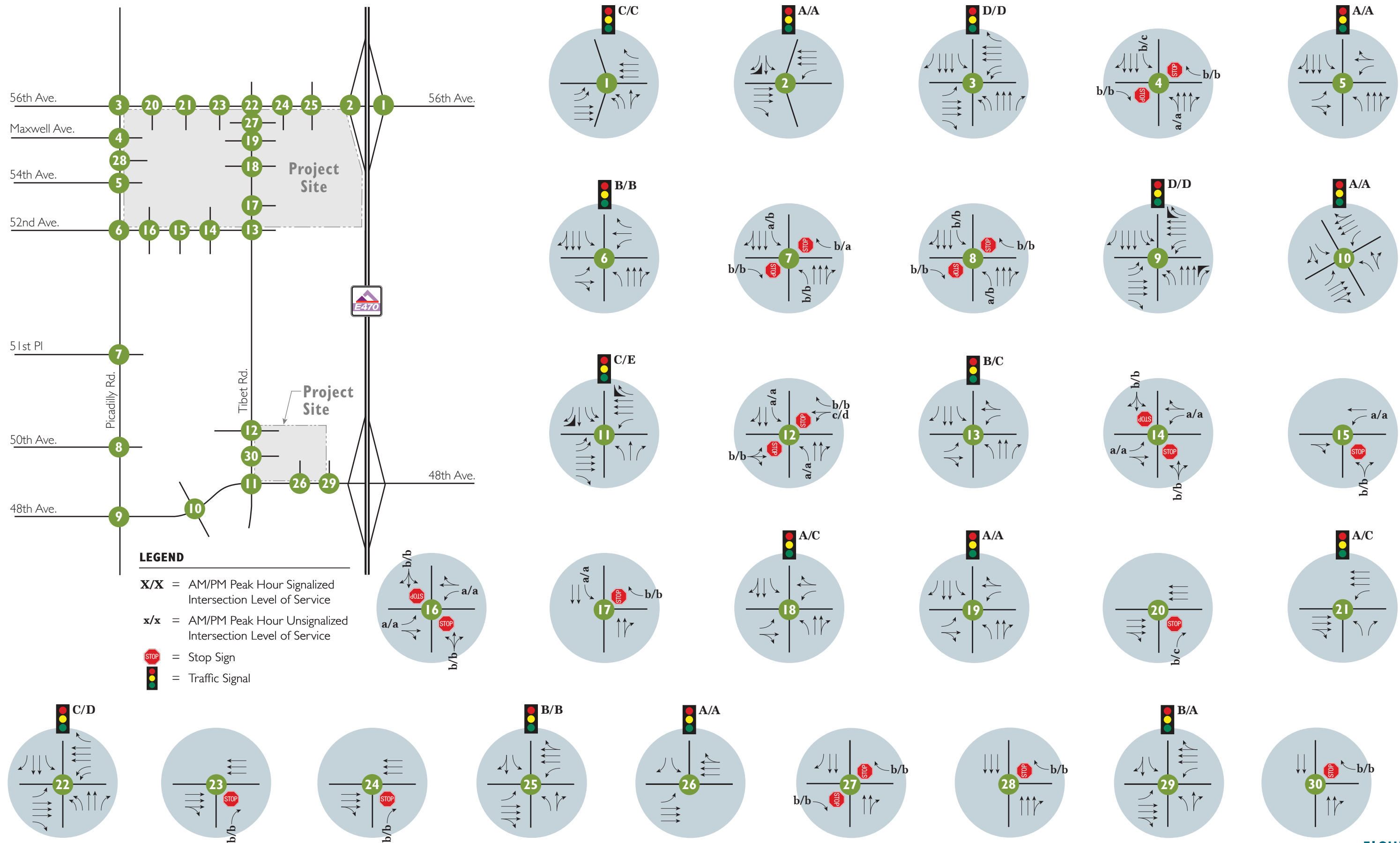
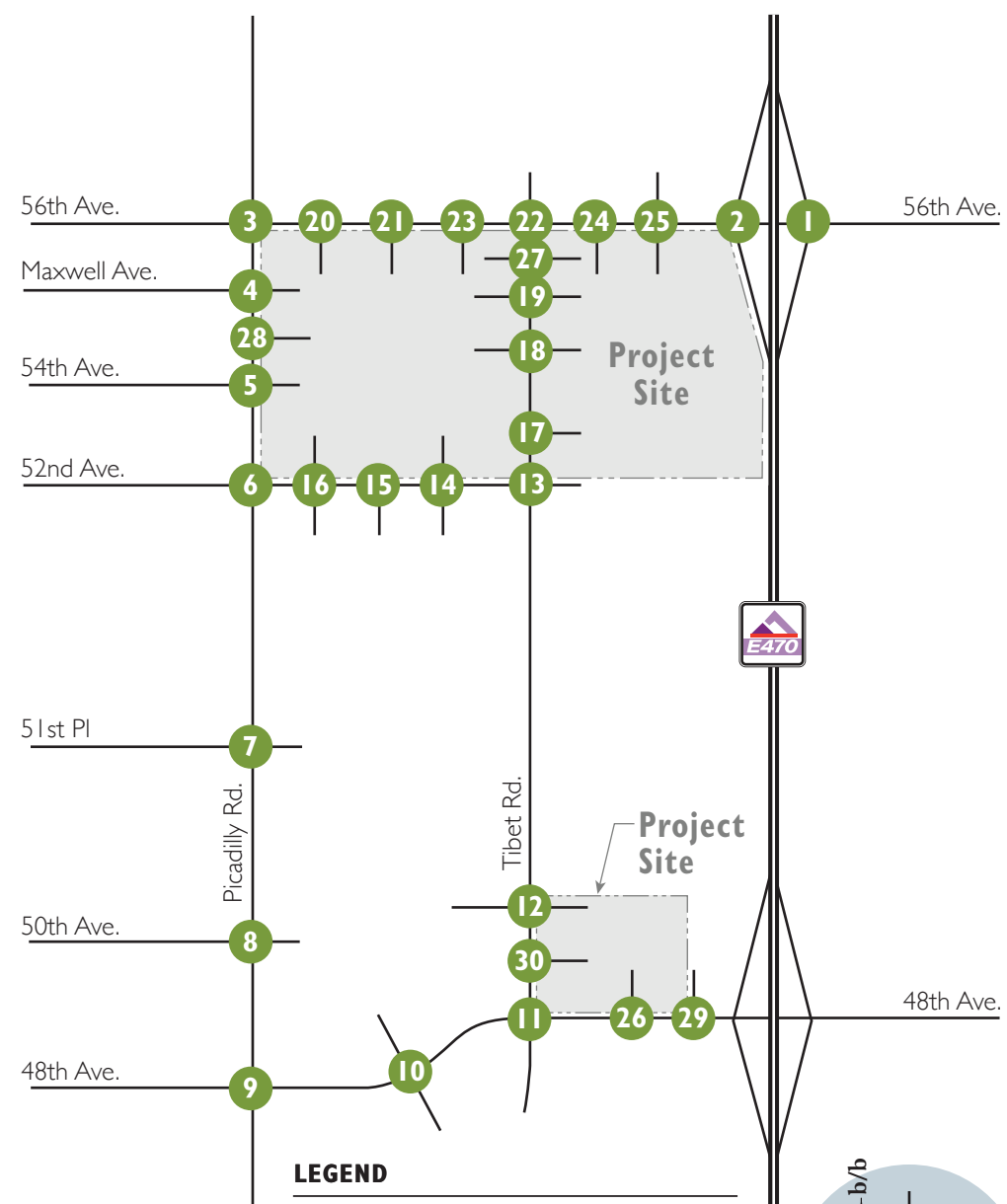
X/X = AM/PM Peak Hour Signalized Intersection Level of Service

x/x = AM/PM Peak Hour Unsignalized Intersection Level of Service

 = Stop Sign

 = Traffic Signal





Skydance Development

Traffic Impact Study



1st Submittal Date: July 21, 2021

2nd Submittal Date: November 16, 2021

Updated Date: February 2, 2022

Submitted To:

Westside Investment Partners, Inc.
4100 East Mississippi Avenue, Suite 500
Denver, CO 80246

Submitted By:

Fox Tuttle Transportation Group, LLC
1624 Market Street, Suite 202
Denver, CO 80202



5.2 Year 2030 Anticipated Transportation Network

For comparison purposes, this traffic study assumes that many of the planned roadways shown in the *NEATS Refresh* report and auxiliary lanes shown in other development traffic studies will be completed by Year 2030 background. If the future scenario was evaluated with the existing roadway network, then it would be difficult to compare intersection operates when many of the intersections will be altered and/or relocated and roadways widened which impacts the volumes, capacity, and routing. The following roadway and intersection improvements were assumed to be completed by Year 2030:

- **56th Avenue** – Widen to three lanes per direction.
- **64th Avenue** – Widen to three lanes per direction.
- **Picadilly Road** – Widen to three lanes per direction.
- **Tibet Road** – Constructed as a four-lane, minor arterial from south of 56th Avenue to north of 64th Avenue.
- **56th Avenue at Dunkirk Street** – Add second eastbound left-turn lane and add one eastbound right-turn lane. Add second westbound left-turn lane and add one westbound right-turn lane.
- **56th Avenue at Picadilly Road** – Signalize. Provide three through lanes on the east and west approaches (per *NEATS Refresh*). Provide three through lanes on the north and south approaches (per *NEATS Refresh*). Add dual left-turn lanes on each approach. Add one right-turn lane per approach.
- **56th Avenue at E-470 Southbound Ramps** – Signalize. Provide three through lanes on the east and west approaches (per *NEATS Refresh*). Add second westbound left-turn lane. Reconstruct off-ramp with dual southbound left-turn lanes and one southbound through lane.
- **56th Avenue at E-470 Southbound Ramps** – Signalize. Provide three through lanes on the east and west approaches (per *NEATS Refresh*). Reconstruct off-ramp with dual northbound left-turn lanes.
- **64th Avenue at Picadilly Road** – Signalize. Provide three through lanes on the east and west approaches (per *NEATS Refresh*). Provide three through lanes on the north and south approaches (per *NEATS Refresh*). Add dual left-turn lanes on each approach. Add one right-turn lane per approach.

Table 6 says 57

Table 5 - Trip Generation Summary

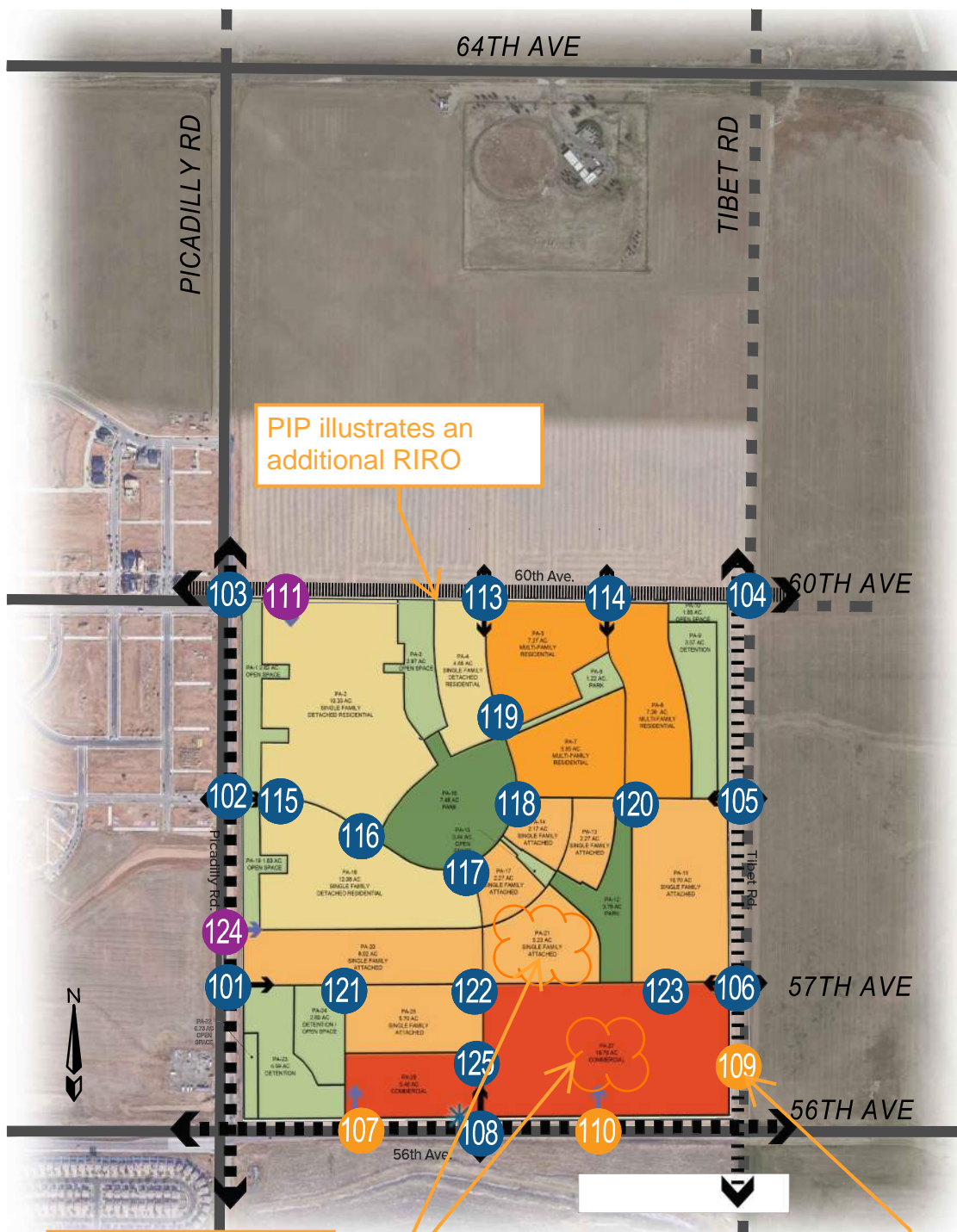
Planning Area	Land Use	Size	Unit	Internal Capture	Non-Auto Factor	Average Daily Trips				AM Peak Hour Trips				PM Peak Hour Trips			
						Rate	Total	In	Out	Rate	Total	In	Out	Rate	Total	In	Out
PA-5, 7, 8	ITE 221 - Multi-Family Housing (Mid Rise)	400 ✓	DU	0.95	0.95	4.54	1,639 ✓	820	819	0.37	134 ✓	31	103	0.39	141 ✓	86	55
PA-4	ITE 210: Single-Family Detached Housing	22 ✓	DU	0.95	0.95	9.43	187 ✓	94	93	0.70	14 ✓	4	10	0.94	19 ✓	12	7
PA-2	ITE 210: Single-Family Detached Housing	86 ✓	DU	0.95	0.95	9.43	732 ✓	366	366	0.70	54 ✓	14	40	0.94	73 ✓	46	27
PA-13, 14, 17	ITE 215 - Single-Family Attached [duplexes]	50 ✓	DU	0.95	0.95	7.20	325 ✓	163	162	0.48	22 ✓	6	16	0.57	26 ✓	15	11
PA-18	ITE 210: Single-Family Detached Housing	51 ✓	DU	0.95	0.95	9.43	434 ✓	217	217	0.70	32 ✓	8	24	0.94	43 ✓	27	16
PA-20	ITE 215 - Single-Family Attached [duplexes]	62 ✓	DU	0.95	0.95	7.20	403 ✓	202	201	0.48	27 ✓	7	20	0.57	32 ✓	19	13
PA-21	ITE 215 - Single-Family Attached [duplexes]	34 ✓	DU	0.95	0.95	7.20	221 ✓	111	110	0.48	15 ✓	4	11	0.57	17 ✓	10	7
PA-25	ITE 215 - Single-Family Attached [duplexes]	58 ✓	DU	0.95	0.95	7.20	377 ✓	189	188	0.48	25 ✓	6	19	0.57	30 ✓	18	12
PA-26	ITE 820 - Shopping Center	44.40 ✓	ksf	0.95	0.95	37.01	1,483 ✓	742	741	0.84	34 ✓	21	13	3.40	136 ✓	65	71
	ITE 945 - Gas/Service Station w/ Convenience Market	12.00 ✓	fueling stations	0.75	1.00	265.12	2,386 ✓	1,193	1,193	16.06	145 ✓	73	72	18.42	166 ✓	83	83
	ITE 948 - Car Wash	1.00 ✓	tunnel	0.75	1.00		580	290	290		0	0	0	77.50	58 ✓	29	29
Subtotal of Trips							4,826	2,414	2,412		204	100	104		390	195	195
Pass-by Trips: Shopping Center (PM)						29% ✓	430	215	215		0	0	0		39	19	20
Pass-by Trips: Gas Station (AM)						76% ✓	1,813	907	906		110	55	55		0	0	0
Pass-by Trips: Gas Station (PM)						75% ✓	0	0	0		0	0	0		125	62	63
Subtotal of Pass-By Trips							2,243	1,122	1,121		110	55	55		164	81	83
Subtotal of New Trips (PA25 & PA-26)							2,583	1,292	1,291		94	45	49		226	114	112
PA-27 (west)	ITE 820 - Shopping Center	28.30 ✓	ksf	0.95	0.95	37.01	945 ✓	473	472	0.84	21 ✓	13	8	3.40	87 ✓	42	45
	ITE 850 - Supermarket	64.00 ✓	ksf	0.95	0.95	93.84	5,420 ✓	2,710	2,710	2.86	165 ✓	97	68	8.95	517 ✓	259	258
Subtotal of Trips							6,365	3,183	3,182		186	110	76		604	301	303
Pass-by Trips: Shopping Center						29% ✓	274	137	137		0	0	0		25	12	13
Pass-by Trips: Supermarket (AM)						24% ✓	0	0	0		5	3	2		0	0	0
Pass-by Trips: Supermarket (PM)						24% ✓	1,301	650	651		0	0	0		124	62	62
Subtotal of Pass-By Trips							1575	787	788		5	3	2		149	74	75
Subtotal of Commercial New Trips							4790	2396	2394		181	107	74		455	227	228
Subtotal of New Trips (PA-27 west)							4,790	2,396	2,394		181	107	74		455	227	228
PA-27 (east)	ITE 820 - Shopping Center	87.6 ✓	ksf	0.95	0.95	37.01	2,924 ✓	1,462	1,462	0.84	66 ✓	41	25	3.40	269 ✓	129	140
	ITE 934 - Fast-Food Restaurant with Drive-Thru Window	4.8 ✓	ksf	0.95	0.95	467.48	2,004 ✓	1,002	1,002	44.61	191 ✓	97	94	33.03	142 ✓	74	68
Subtotal of Trips							4,928	2,464	2,464		257	138	119		411	203	208
Pass-by Trips: Shopping Center						29% ✓	848	424	424		0	0	0		78	37	41
Pass-by Trips: Fast-Food (AM)						50% ✓	0	0	0		96	49	47		0	0	0
Pass-by Trips: Fast-Food (PM)						55% ✓	1102	551	551		0	0	0		78	41	37
Subtotal of Pass-By Trips							1950	975	975		96	49	47		156	78	78
Subtotal of Commercial New Trips							2978	1489	1489		161	89	72		255	125	130
Subtotal of New Trips (PA-27 east PA-29, PA-30)							2,978	1,489	1,489		161	89	72		255	125	130
PA-11	ITE 221 - Multi-Family Housing (Mid Rise)	294 ✓	DU	0.95	0.95	4.54	1,205 ✓	603	602	0.37	98 ✓	23	75	0.39	103 ✓	63	40
Subtotal of New Trips (PA-11)							1,205	603	602		98	23	75		103	63	40
Total New Trips:							15,497	7,753	7,744	AM >	832	338	494	PM >	1,390	744	646
Total Pass-By Trips:							5,768	2,884	2,884	AM >	211	107	104	PM >	469	233	236
Total Trips:							21,265	10,637	10,628	AM >	1,043	445	598	PM >	1,859	977	882

Source: ITE Trip Generation 11th Edition, 2021.

Update per trip gen revisions

Table 11 - Peak Hour Estimated Queues and Proposed Auxiliary Lanes

Intersection and Lanes Groups	2021 Existing		2030 Background		2030 Bkgrd + Project		2040 Background		2040 Bkgrd + Project		Max. Queue	CDOT SHAC Requirement (NR-B)				Proposed Future Storage
	95th % Q		95th % Q		95th % Q		95th % Q		95th % Q			Speed (mph)	Total (feet)	Storage (feet)	Taper (feet)	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM						
#107. 56th Avenue at PA-26 Access (3/4 mvmt)					Stop-Control (SB)				Stop-Control (SB)							
Eastbound Left					8'	23'			10'	43'	43'	45	435	273	162	273'
Southbound Right					5'	15'			5'	25'	25'	25	180	90	90	90'
#108. 56th Avenue at Street H					Signalized				Signalized							
Eastbound Left					142'	254'			127'	227'	227'	45	435	273	162	273'
Eastbound Through					116'	128'			216'	167'	-	-	-	-	-	-
Westbound Through					78'	111'			216'	384'	-	-	-	-	-	-
Westbound Right					7'	7'			26'	42'	42'	45	435	273	162	273'
Southbound Left					72'	122'			75'	120'	120'	30	250	154	96	154'
Southbound Right					44'	54'			46'	53'	53'	30	250	154	96	154'
#109. Tibet Road at PA-30 Access					Stop-Control (EB)				Stop-Control (EB)							
Eastbound Left+Right					3'	10'			5'	23'	23'	45	435	273	162	273'
Northbound Left					0'	3'			0'	3'	3'	30	250	154	96	154'
Northbound Through					0'	0'			0'	0'	0'	45	435	273	162	273'
Southbound Through+Right					0'	0'			0'	0'	0'	30	250	154	96	154'
#110. 56th Avenue at PA-30 Access (3/4 mvmt)					Stop-Control (SB)				Stop-Control (SB)							
Eastbound Left					3'	8'			5'	15'	15'	45	435	273	162	273'
Southbound Right					3'	5'			3'	8'	8'	30	250	154	96	154'
#111. 60th Avenue at Street A (RIRO)					Stop-Control (NB)				Stop-Control (NB)							
Northbound Right					0'	0'			0'	0'	-	-	-	-	-	-
#112. 60th Avenue at Street C (RIRO)					Stop-Control (NB/SB)				Stop-Control (NB/SB)							
Northbound Right					0'	0'			0'	0'	-	-	-	-	-	-
Southbound Right					5'	8'			13'	20'	-	-	-	-	-	-
#113. 60th Avenue at Street D					Stop-Control (NB/SB)				Stop-Control (NB/SB)							
Eastbound Left					0'	0'			0'	3'	3'	30	250	154	96	154'
Westbound Left					0'	0'			0'	0'	0'	30	250	154	96	154'
Northbound Left					3'	3'			5'	3'	5'	25	180	90	90	90'
Northbound Through+Right					0'	0'			3'	3'	-	-	-	-	-	-
Southbound Left					0'	0'			3'	0'	3'	25	180	90	90	90'
Southbound Through+Right					3'	3'			3'	3'	-	-	-	-	-	-
#114. 60th Avenue at PA-5 & PA-8 Access					Stop-Control (NB)				Stop-Control (NB)							
Westbound Left					0'	0'			0'	0'	0'	30	250	154	96	154'
Northbound Left+Right					3'	0'			3'	3'	-	-	-	-	-	-
#115. Street D at Street A					Stop-Control (SB)				Stop-Control (SB)							
Eastbound Left+Through+Right					0'	0'			0'	0'	-	-	-	-	-	-
Westbound Left+Through+Right					0'	0'			0'	0'	-	-	-	-	-	-
Northbound Left+Through+Right					3'	0'			3'	0'	-	-	-	-	-	-
Southbound Left+Through+Right					3'	0'			3'	0'	-	-	-	-	-	-
#116. Street D at Street I / Street E (offset)					Stop-Control (NB/SB)				Stop-Control (NB/SB)							
Eastbound Left+Through+Right					0'	0'			0'	0'	-	-	-	-	-	-
Westbound Left+Through+Right					0'	0'			0'	0'	-	-	-	-	-	-
Northbound Left+Through+Right					0'	0'			0'	0'	-	-	-	-	-	-
Southbound Left+Through+Right					3'	0'			3'	0'	-	-	-	-	-	-



- PA-1 OPEN SPACE
- PA-2 SINGLE FAMILY DETACHED RESIDENTIAL
- PA-3 OPEN SPACE
- PA-4 SINGLE FAMILY DETACHED RESIDENTIAL
- PA-5 MULTI-FAMILY RESIDENTIAL
- PA-6 PARK
- PA-7 MULTI-FAMILY RESIDENTIAL
- PA-8 MULTI-FAMILY RESIDENTIAL
- PA-9 DETENTION
- PA-10 OPEN SPACE
- PA-11 SINGLE FAMILY DETACHED RESIDENTIAL
- PA-12 PARK
- PA-13 SINGLE FAMILY ATTACHED RESIDENTIAL
- PA-14 SINGLE FAMILY ATTACHED RESIDENTIAL
- PA-15 OPEN SPACE
- PA-16 PARK
- PA-17 SINGLE FAMILY ATTACHED RESIDENTIAL
- PA-18 SINGLE FAMILY DETACHED RESIDENTIAL
- PA-19 OPEN SPACE
- PA-20 SINGLE FAMILY ATTACHED RESIDENTIAL
- PA-21 SINGLE FAMILY ATTACHED RESIDENTIAL
- PA-22 OPEN SPACE
- PA-23 OPEN SPACE
- PA-24 DETENTION
- PA-25 SINGLE FAMILY ATTACHED RESIDENTIAL
- PA-26 COMMERCIAL
- PA-27 COMMERCIAL

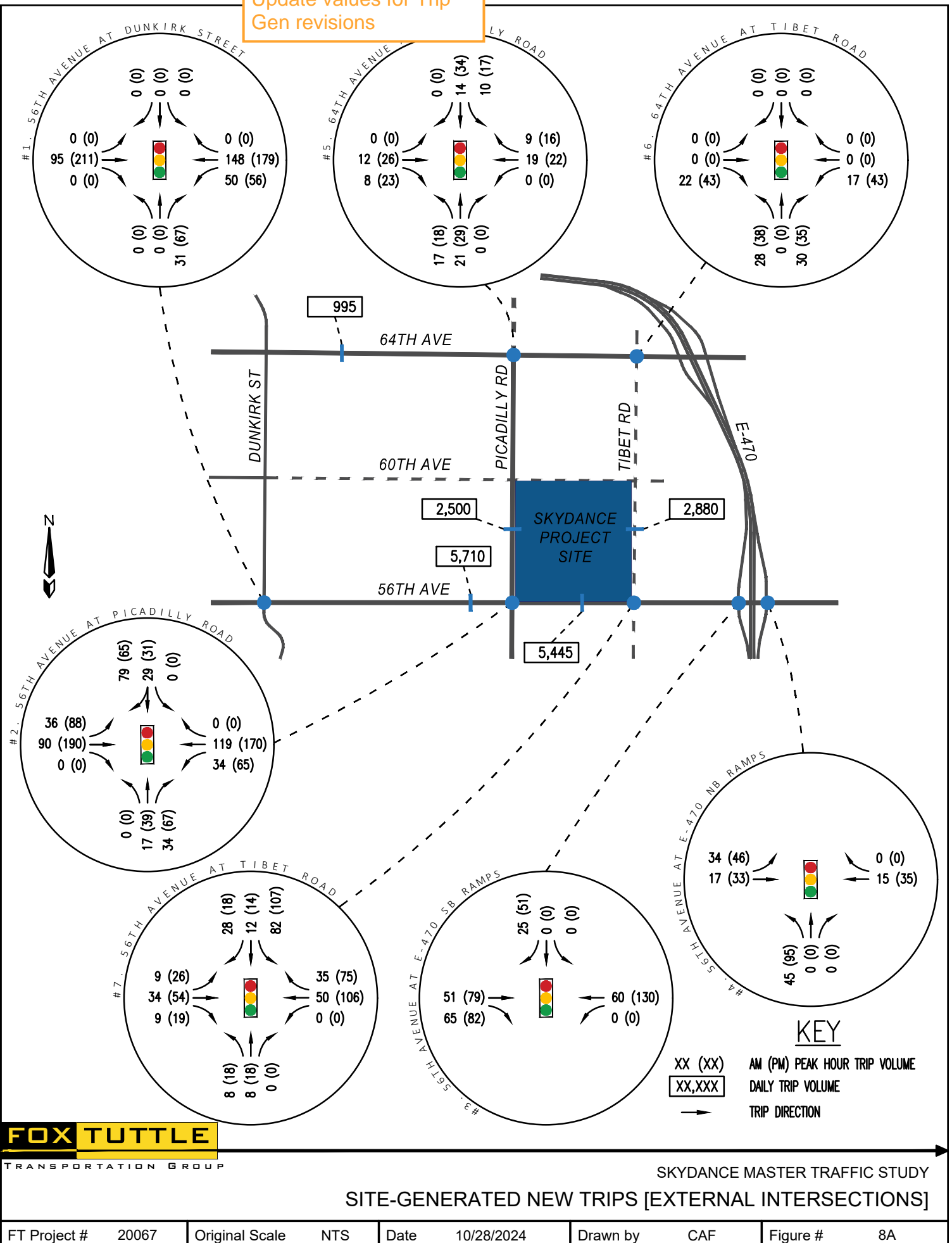
Trip Gen revisions, adjacent intersection revisions needed

KEY

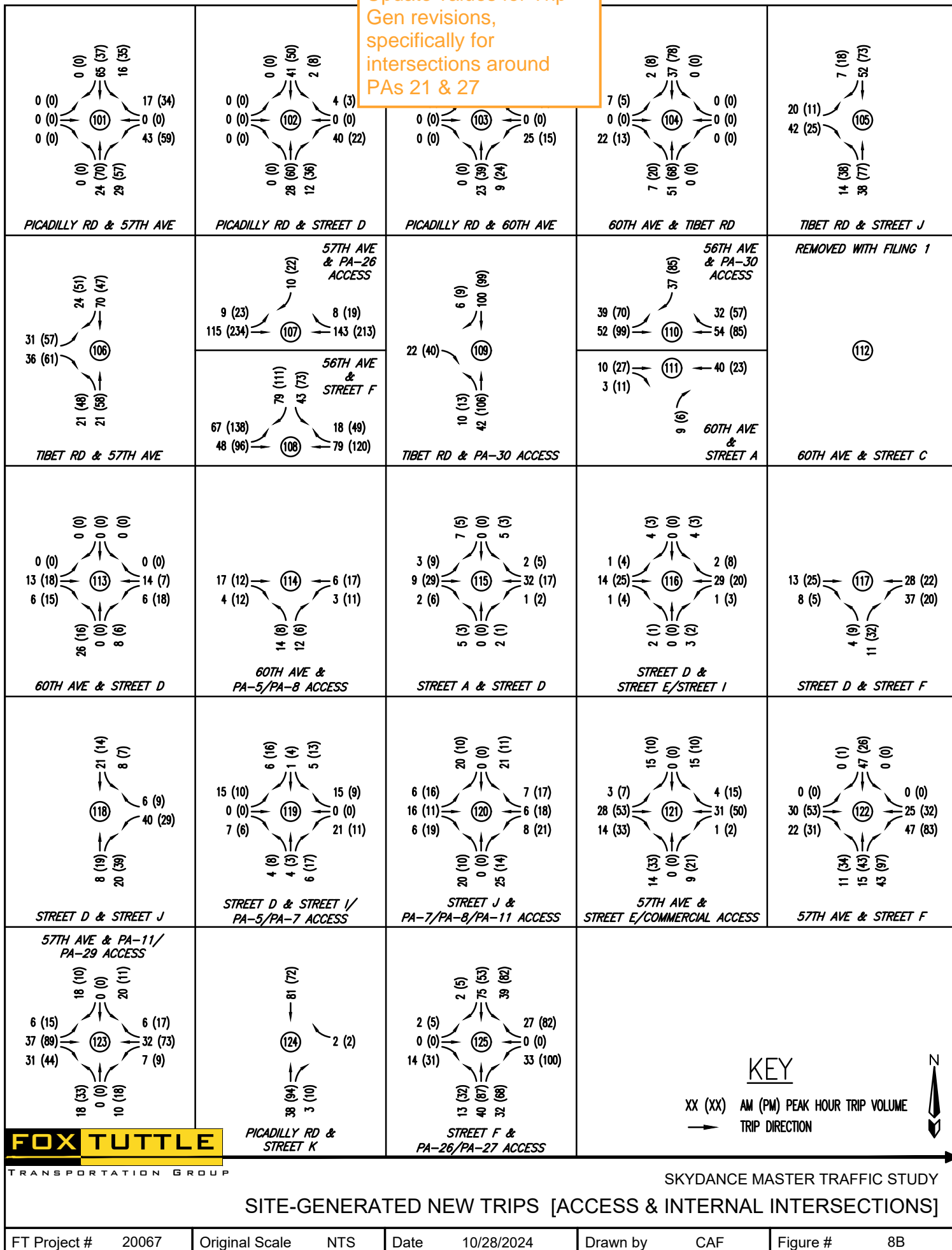
- # FULL MOVEMENT INTERSECTION
- # 3/4 MOVEMENT INTERSECTION
- # RI/RO MOVEMENT INTERSECTION

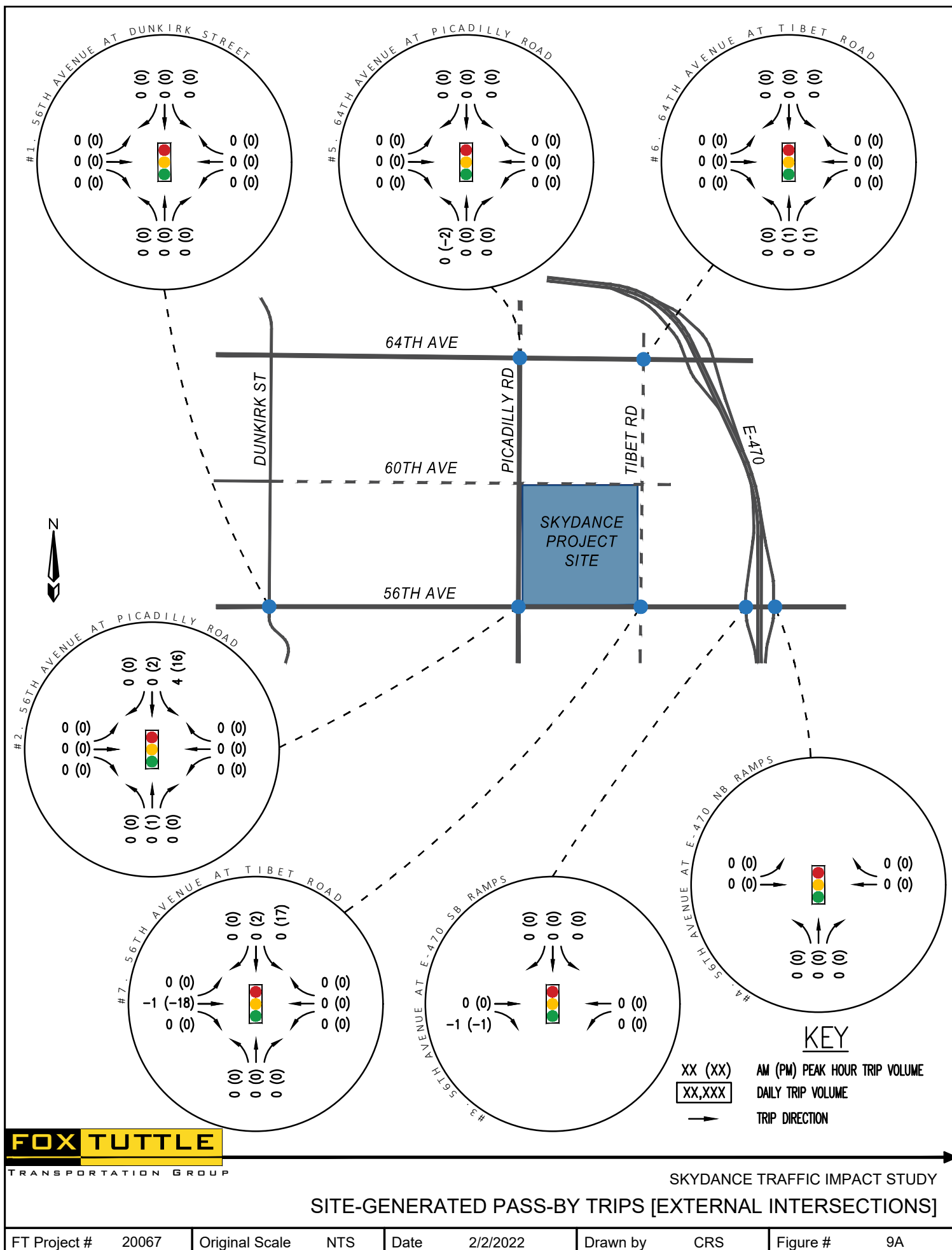
PIP does not illustrate 3/4 here

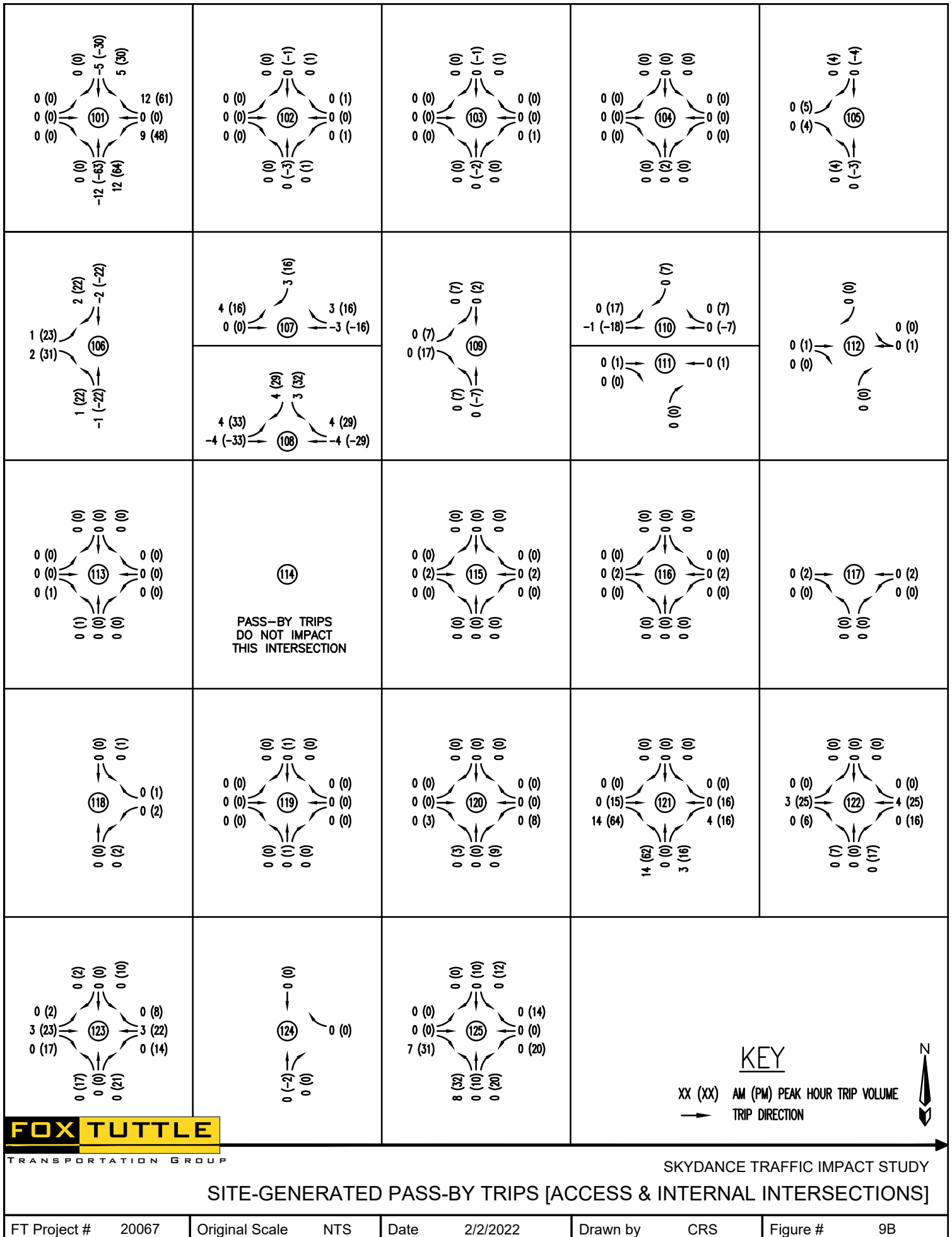
Update values for Trip
Gen revisions



Update values for Trip Gen revisions, specifically for intersections around PAs 21 & 27



















APPENDIX F – Background (without site development) Synchro Outputs

Queues

1: Picadilly Rd & E 56th Ave

02/04/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	101	423	229	293	246	70	104	171	205	91	218	149
v/c Ratio	0.18	0.61	0.31	0.64	0.15	0.09	0.21	0.20	0.47	0.29	0.68	0.34
Control Delay (s/veh)	13.5	33.5	5.1	44.6	18.2	2.0	26.4	38.3	22.5	26.8	49.4	4.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.5	33.5	5.1	44.6	18.2	2.0	26.4	38.3	22.5	26.8	49.4	4.1
Queue Length 50th (ft)	29	229	0	69	53	0	28	39	37	42	132	0
Queue Length 95th (ft)	64	#416	56	136	93	3	52	63	144	72	194	23
Internal Link Dist (ft)	2771			1527			510			1611		
Turn Bay Length (ft)	400			375		125	250		175	225		
Base Capacity (vph)	564	694	734	463	1595	821	502	1372	577	310	503	570
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.61	0.31	0.63	0.15	0.09	0.21	0.12	0.36	0.29	0.43	0.26

Intersection Summary























95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

1: Picadilly Rd & E 56th Ave

02/04/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	389	211	270	226	64	96	157	189	84	201	137
Future Volume (veh/h)	93	389	211	270	226	64	96	157	189	84	201	137
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	101	423	229	293	246	70	104	171	205	91	218	149
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	609	738	625	355	1533	684	462	809	251	317	293	249
Arrive On Green	0.07	0.39	0.39	0.17	0.72	0.72	0.07	0.16	0.16	0.06	0.16	0.16
Sat Flow, veh/h	1781	1870	1585	3456	3554	1585	3456	5106	1585	1781	1870	1585
Grp Volume(v), veh/h	101	423	229	293	246	70	104	171	205	91	218	149
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1777	1585	1728	1702	1585	1781	1870	1585
Q Serve(g_s), s	3.2	17.7	10.2	8.2	2.2	1.3	2.4	2.9	12.5	4.2	11.1	8.7
Cycle Q Clear(g_c), s	3.2	17.7	10.2	8.2	2.2	1.3	2.4	2.9	12.5	4.2	11.1	8.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	609	738	625	355	1533	684	462	809	251	317	293	249
V/C Ratio(X)	0.17	0.57	0.37	0.83	0.16	0.10	0.23	0.21	0.82	0.29	0.74	0.60
Avail Cap(c_a), veh/h	616	738	625	380	1533	684	476	1379	428	327	505	428
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.99	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.4	23.7	21.4	40.6	8.3	8.1	31.8	36.6	40.7	32.0	40.2	39.2
Incr Delay (d2), s/veh	0.1	3.2	1.7	13.1	0.2	0.3	0.2	0.1	6.4	0.5	3.7	2.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	7.9	3.9	3.8	0.8	0.5	1.0	1.2	5.2	1.8	5.3	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.6	26.9	23.1	53.6	8.5	8.4	32.0	36.8	47.0	32.5	44.0	41.5
LnGrp LOS	B	C	C	D	A	A	C	D	D	C	D	D
Approach Vol, veh/h	753			609			480			458		
Approach Delay, s/veh	24.2			30.2			40.1			40.9		
Approach LOS	C			C			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.3	46.4	13.6	22.7	13.6	50.1	13.4	22.9				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	11.0	27.0	7.0	27.0	7.0	31.0	7.0	27.0				
Max Q Clear Time (g_c+I1), s	10.2	19.7	4.4	13.1	5.2	4.2	6.2	14.5				
Green Ext Time (p_c), s	0.1	1.9	0.1	1.4	0.0	1.6	0.0	1.4				
Intersection Summary												
HCM 7th Control Delay, s/veh	32.4											
HCM 7th LOS	C											

HCM 7th TWSC
2: Picadilly Rd & Maxwell PI









02/04/2025

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑↑	↑↑↑	
Traffic Vol, veh/h	0	95	0	442	659	23
Future Vol, veh/h	0	95	0	442	659	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	103	0	480	716	25
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	-	371	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	535	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	535	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB	SB			
HCM Control Delay, s/v13.33		0	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR		
Capacity (veh/h)	-	535	-	-		
HCM Lane V/C Ratio	-	0.193	-	-		
HCM Control Delay (s/veh)	-	13.3	-	-		
HCM Lane LOS	-	B	-	-		
HCM 95th %tile Q(veh)	-	0.7	-	-		

Queues

3: Picadilly Rd & E 54th Ave/SW Site Access





















02/04/2025

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	16	18	7	4	28	429	49	771
v/c Ratio	0.09	0.03	0.04	0.01	0.05	0.12	0.07	0.21
Control Delay (s/veh)	42.3	0.1	41.3	0.0	5.8	8.7	2.8	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	42.3	0.1	41.3	0.0	5.8	8.7	2.8	3.9
Queue Length 50th (ft)	9	0	4	0	4	38	2	26
Queue Length 95th (ft)	30	0	18	0	18	81	m11	95
Internal Link Dist (ft)		571		430		580		707
Turn Bay Length (ft)					125		100	
Base Capacity (vph)	177	694	477	733	555	3525	737	3741
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.03	0.01	0.01	0.05	0.12	0.07	0.21
Intersection Summary								
m Volume for 95th percentile queue is metered by upstream signal.								

HCM 7th Signalized Intersection Summary

3: Picadilly Rd & E 54th Ave/SW Site Access

02/04/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	15	0	17	6	0	4	26	393	2	30	15	696
Future Volume (veh/h)	15	0	17	6	0	4	26	393	2	30	15	696
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0		0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00		1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870		1870	1870
Adj Flow Rate, veh/h	16	0	18	7	0	4	28	427	2		16	757
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2		2	2
Cap, veh/h	109	0	97	47	0	42	468	3186	15		666	3070
Arrive On Green	0.06	0.00	0.06	0.03	0.00	0.03	0.04	0.61	0.61		0.01	0.20
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	5245	25		1781	5162
Grp Volume(v), veh/h	16	0	18	7	0	4	28	277	152		16	499
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1702	1866		1781	1702
Q Serve(g_s), s	0.9	0.0	1.1	0.4	0.0	0.2	0.6	3.5	3.5		0.3	12.4
Cycle Q Clear(g_c), s	0.9	0.0	1.1	0.4	0.0	0.2	0.6	3.5	3.5		0.3	12.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.01		1.00	
Lane Grp Cap(c), veh/h	109	0	97	47	0	42	468	2068	1133		666	2024
V/C Ratio(X)	0.15	0.00	0.19	0.15	0.00	0.10	0.06	0.13	0.13		0.02	0.25
Avail Cap(c_a), veh/h	178	0	159	481	0	428	525	2068	1133		746	2024
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	44.5	0.0	44.6	47.6	0.0	47.5	7.7	8.4	8.4		7.4	21.3
Incr Delay (d2), s/veh	0.6	0.0	0.9	1.4	0.0	1.0	0.1	0.1	0.2		0.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.4	0.2	0.0	0.1	0.2	1.2	1.3		0.1	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	45.1	0.0	45.5	49.0	0.0	48.5	7.7	8.5	8.6		7.5	21.6
LnGrp LOS	D		D	D		D	A	A	A		A	C
Approach Vol, veh/h	34			11			457			787		
Approach Delay, s/veh	45.3			48.8			8.5			21.4		
Approach LOS	D			D			A			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.5	67.7		13.1	10.8	66.5		9.6				
Change Period (Y+Rc), s	7.0	7.0		7.0	7.0	7.0		7.0				
Max Green Setting (Gmax), s	7.0	28.0		10.0	7.0	28.0		27.0				
Max Q Clear Time (g_c+I1), s	2.3	5.5		3.1	2.6	14.4		2.4				
Green Ext Time (p_c), s	0.0	2.4		0.0	0.0	3.9		0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	17.7											
HCM 7th LOS	B											
Notes												
User approved ignoring U-Turning movement.												

HCM 7th Signalized Intersection Summary 3: Picadilly Rd & E 54th Ave/SW Site Access

02/04/2025








Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	13
Future Volume (veh/h)	13
Initial Q (Qb), veh	0
Lane Width Adj.	1.00
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1870
Adj Flow Rate, veh/h	14
Peak Hour Factor	0.92
Percent Heavy Veh, %	2
Cap, veh/h	57
Arrive On Green	0.20
Sat Flow, veh/h	95
Grp Volume(v), veh/h	272
Grp Sat Flow(s),veh/h/ln	1853
Q Serve(g_s), s	12.4
Cycle Q Clear(g_c), s	12.4
Prop In Lane	0.05
Lane Grp Cap(c), veh/h	1102
V/C Ratio(X)	0.25
Avail Cap(c_a), veh/h	1102
HCM Platoon Ratio	0.33
Upstream Filter(l)	1.00
Uniform Delay (d), s/veh	21.3
Incr Delay (d2), s/veh	0.5
Initial Q Delay(d3), s/veh	0.0
%ile BackOfQ(50%),veh/ln	6.2
Unsig. Movement Delay, s/veh	
LnGrp Delay(d), s/veh	21.8
LnGrp LOS	C
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

Queues

4: Road A & E 56th Ave

02/04/2025

					
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	719	48	591	17	30
v/c Ratio	0.18	0.08	0.20	0.10	0.16
Control Delay (s/veh)	11.2	3.0	2.6	42.4	17.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	11.2	3.0	2.6	42.4	17.0
Queue Length 50th (ft)	129	6	46	10	0
Queue Length 95th (ft)	145	14	62	31	28
Internal Link Dist (ft)	1527		1121	547	
Turn Bay Length (ft)		325		75	
Base Capacity (vph)	3921	639	3029	495	464
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.18	0.08	0.20	0.03	0.06
Intersection Summary					

HCM 7th Signalized Intersection Summary

4: Road A & E 56th Ave













02/04/2025

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↘	↑↑	↘	↗
Traffic Volume (veh/h)	657	5	44	544	16	28
Future Volume (veh/h)	657	5	44	544	16	28
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	714	5	48	591	17	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	3482	24	652	2797	130	116
Arrive On Green	1.00	1.00	0.05	0.79	0.07	0.07
Sat Flow, veh/h	5400	37	1781	3647	1781	1585
Grp Volume(v), veh/h	464	255	48	591	17	30
Grp Sat Flow(s),veh/h/ln	1702	1864	1781	1777	1781	1585
Q Serve(g_s), s	0.0	0.0	0.7	4.2	0.9	1.8
Cycle Q Clear(g_c), s	0.0	0.0	0.7	4.2	0.9	1.8
Prop In Lane		0.02	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2266	1240	652	2797	130	116
V/C Ratio(X)	0.21	0.21	0.07	0.21	0.13	0.26
Avail Cap(c_a), veh/h	2266	1240	756	2797	499	444
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.84	0.84	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	3.6	2.7	43.4	43.8
Incr Delay (d2), s/veh	0.2	0.3	0.0	0.2	0.5	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.2	0.9	0.4	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.2	0.3	3.6	2.9	43.8	45.0
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	719			639	47	
Approach Delay, s/veh	0.2			2.9	44.6	
Approach LOS	A			A	D	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	12.2	73.6			85.7	14.3
Change Period (Y+Rc), s	7.0	7.0			7.0	7.0
Max Green Setting (Gmax), s	11.0	40.0			58.0	28.0
Max Q Clear Time (g_c+I1), s	2.7	2.0			6.2	3.8
Green Ext Time (p_c), s	0.0	2.5			2.1	0.1
Intersection Summary						
HCM 7th Control Delay, s/veh			2.9			
HCM 7th LOS			A			

Queues

1: Picadilly Rd & E 56th Ave























02/04/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	175	284	179	350	433	123	132	240	225	48	182	145
v/c Ratio	0.35	0.45	0.27	0.64	0.31	0.17	0.24	0.23	0.44	0.16	0.65	0.36
Control Delay (s/veh)	14.3	30.4	4.4	40.9	20.2	3.0	27.8	37.6	21.5	25.8	50.1	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.3	30.4	4.4	40.9	20.2	3.0	27.8	37.6	21.5	25.8	50.1	4.3
Queue Length 50th (ft)	50	142	0	82	100	5	37	57	31	22	111	0
Queue Length 95th (ft)	96	241	41	129	162	35	63	87	164	46	171	22
Internal Link Dist (ft)	2771			1527			510			1611		
Turn Bay Length (ft)	400			375		125	250		175	225		
Base Capacity (vph)	514	629	664	550	1392	741	556	1372	591	291	503	570
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.45	0.27	0.64	0.31	0.17	0.24	0.17	0.38	0.16	0.36	0.25
Intersection Summary												

HCM 7th Signalized Intersection Summary

1: Picadilly Rd & E 56th Ave

02/04/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	161	261	165	322	398	113	121	221	207	44	167	133
Future Volume (veh/h)	161	261	165	322	398	113	121	221	207	44	167	133
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	175	284	179	350	433	123	132	240	225	48	182	145
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	524	713	605	380	1466	654	522	904	281	286	300	254
Arrive On Green	0.08	0.38	0.38	0.18	0.69	0.69	0.02	0.06	0.06	0.05	0.16	0.16
Sat Flow, veh/h	1781	1870	1585	3456	3554	1585	3456	5106	1585	1781	1870	1585
Grp Volume(v), veh/h	175	284	179	350	433	123	132	240	225	48	182	145
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1777	1585	1728	1702	1585	1781	1870	1585
Q Serve(g_s), s	5.9	11.1	7.9	10.0	4.8	2.8	3.1	4.5	14.0	2.2	9.1	8.5
Cycle Q Clear(g_c), s	5.9	11.1	7.9	10.0	4.8	2.8	3.1	4.5	14.0	2.2	9.1	8.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	524	713	605	380	1466	654	522	904	281	286	300	254
V/C Ratio(X)	0.33	0.40	0.30	0.92	0.30	0.19	0.25	0.27	0.80	0.17	0.61	0.57
Avail Cap(c_a), veh/h	561	713	605	380	1466	654	529	1379	428	319	505	428
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.96	0.96	0.96	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.2	22.6	21.6	40.4	9.9	9.6	32.9	40.9	45.3	32.0	39.1	38.8
Incr Delay (d2), s/veh	0.4	1.7	1.2	26.5	0.5	0.6	0.3	0.2	6.2	0.3	2.0	2.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	4.9	3.0	5.1	1.7	1.0	1.3	1.9	6.4	0.9	4.2	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.5	24.2	22.8	66.9	10.4	10.2	33.2	41.0	51.6	32.2	41.0	40.8
LnGrp LOS	B	C	C	E	B	B	C	D	D	C	D	D
Approach Vol, veh/h	638			906			597			375		
Approach Delay, s/veh	21.7			32.2			43.3			39.8		
Approach LOS	C			C			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.0	45.1	13.8	23.0	14.9	48.2	12.2	24.7				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	11.0	27.0	7.0	27.0	10.0	28.0	7.0	27.0				
Max Q Clear Time (g_c+I1), s	12.0	13.1	5.1	11.1	7.9	6.8	4.2	16.0				
Green Ext Time (p_c), s	0.0	1.8	0.1	1.2	0.1	2.9	0.0	1.7				
Intersection Summary												
HCM 7th Control Delay, s/veh	33.3											
HCM 7th LOS	C											

HCM 7th TWSC
2: Picadilly Rd & Maxwell PI

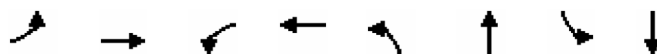
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Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑↑	↑↑↑	
Traffic Vol, veh/h	0	53	0	549	627	27
Future Vol, veh/h	0	53	0	549	627	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	58	0	597	682	29
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	355	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	547	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	547	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s/v12.35		0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT EBLn1		SBT	SBR		
Capacity (veh/h)	- 547		-	-		
HCM Lane V/C Ratio	- 0.105		-	-		
HCM Control Delay (s/veh)	- 12.4		-	-		
HCM Lane LOS	- B		-	-		
HCM 95th %tile Q(veh)	- 0.4		-	-		

Queues

3: Picadilly Rd & E 54th Ave/SW Site Access

02/04/2025



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	8	11	9	1	83	562	54	685
v/c Ratio	0.05	0.02	0.05	0.00	0.13	0.15	0.08	0.19
Control Delay (s/veh)	41.4	0.0	41.6	0.0	5.0	7.8	2.1	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	41.4	0.0	41.6	0.0	5.0	7.8	2.1	3.0
Queue Length 50th (ft)	5	0	5	0	1	24	1	8
Queue Length 95th (ft)	19	0	21	0	42	106	m8	79
Internal Link Dist (ft)		571		430		580		707
Turn Bay Length (ft)					125		100	
Base Capacity (vph)	177	696	477	722	625	3696	688	3681
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.02	0.02	0.00	0.13	0.15	0.08	0.19





















Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

3: Picadilly Rd & E 54th Ave/SW Site Access

02/04/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	7	0	10	8	0	1	76	515	2	26	24	621
Future Volume (veh/h)	7	0	10	8	0	1	76	515	2	26	24	621
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0		0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00		1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870		1870	1870
Adj Flow Rate, veh/h	8	0	11	9	0	1	83	560	2		26	675
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2		2	2
Cap, veh/h	73	0	65	43	0	38	549	3250	12		622	3067
Arrive On Green	0.04	0.00	0.04	0.02	0.00	0.02	0.06	0.62	0.62		0.01	0.20
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	5252	19		1781	5184
Grp Volume(v), veh/h	8	0	11	9	0	1	83	363	199		26	443
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1702	1867		1781	1702
Q Serve(g_s), s	0.4	0.0	0.7	0.5	0.0	0.1	1.7	4.5	4.6		0.6	10.9
Cycle Q Clear(g_c), s	0.4	0.0	0.7	0.5	0.0	0.1	1.7	4.5	4.6		0.6	10.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.01		1.00	
Lane Grp Cap(c), veh/h	73	0	65	43	0	38	549	2106	1155		622	2014
V/C Ratio(X)	0.11	0.00	0.17	0.21	0.00	0.03	0.15	0.17	0.17		0.04	0.22
Avail Cap(c_a), veh/h	178	0	159	481	0	428	561	2106	1155		683	2014
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	46.2	0.0	46.3	47.8	0.0	47.6	6.9	8.1	8.1		7.2	20.8
Incr Delay (d2), s/veh	0.7	0.0	1.2	2.4	0.0	0.3	0.1	0.2	0.3		0.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.3	0.2	0.0	0.0	0.6	1.5	1.7		0.2	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	46.8	0.0	47.5	50.2	0.0	47.9	7.1	8.3	8.5		7.3	21.1
LnGrp LOS	D		D	D		D	A	A	A		A	C
Approach Vol, veh/h	19			10			645			711		
Approach Delay, s/veh	47.2			50.0			8.2			20.7		
Approach LOS	D			D			A			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.6	68.9		11.1	13.3	66.2		9.4				
Change Period (Y+Rc), s	7.0	7.0		7.0	7.0	7.0		7.0				
Max Green Setting (Gmax), s	7.0	28.0		10.0	7.0	28.0		27.0				
Max Q Clear Time (g_c+I1), s	2.6	6.6		2.7	3.7	13.0		2.5				
Green Ext Time (p_c), s	0.0	3.3		0.0	0.0	3.6		0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	15.4											
HCM 7th LOS	B											
Notes												
User approved ignoring U-Turning movement.												

HCM 7th Signalized Intersection Summary 3: Picadilly Rd & E 54th Ave/SW Site Access

02/04/2025



Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	9
Future Volume (veh/h)	9
Initial Q (Qb), veh	0
Lane Width Adj.	1.00
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1870
Adj Flow Rate, veh/h	10
Peak Hour Factor	0.92
Percent Heavy Veh, %	2
Cap, veh/h	45
Arrive On Green	0.20
Sat Flow, veh/h	77
Grp Volume(v), veh/h	242
Grp Sat Flow(s),veh/h/ln	1857
Q Serve(g_s), s	11.0
Cycle Q Clear(g_c), s	11.0
Prop In Lane	0.04
Lane Grp Cap(c), veh/h	1099
V/C Ratio(X)	0.22
Avail Cap(c_a), veh/h	1099
HCM Platoon Ratio	0.33
Upstream Filter(l)	1.00
Uniform Delay (d), s/veh	20.8
Incr Delay (d2), s/veh	0.5
Initial Q Delay(d3), s/veh	0.0
%ile BackOfQ(50%),veh/ln	5.3
Unsig. Movement Delay, s/veh	
LnGrp Delay(d), s/veh	21.3
LnGrp LOS	C
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

Queues

4: Road A & E 56th Ave







02/04/2025

	→	↘	←	↙	↗
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	556	58	878	27	48
v/c Ratio	0.16	0.09	0.31	0.15	0.24
Control Delay (s/veh)	14.2	3.3	3.6	43.4	15.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.2	3.3	3.6	43.4	15.5
Queue Length 50th (ft)	94	8	77	16	0
Queue Length 95th (ft)	104	16	98	43	34
Internal Link Dist (ft)	1527		1121	547	
Turn Bay Length (ft)		325		75	
Base Capacity (vph)	3534	713	2859	548	523
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.16	0.08	0.31	0.05	0.09
Intersection Summary					

HCM 7th Signalized Intersection Summary

4: Road A & E 56th Ave













02/04/2025

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↰	↑↑	↰	↱
Traffic Volume (veh/h)	509	3	53	808	25	44
Future Volume (veh/h)	509	3	53	808	25	44
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	553	3	58	878	27	48
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	3388	18	723	2745	156	139
Arrive On Green	1.00	1.00	0.06	0.77	0.09	0.09
Sat Flow, veh/h	5409	28	1781	3647	1781	1585
Grp Volume(v), veh/h	359	197	58	878	27	48
Grp Sat Flow(s), veh/h/ln	1702	1865	1781	1777	1781	1585
Q Serve(g_s), s	0.0	0.0	0.9	7.5	1.4	2.8
Cycle Q Clear(g_c), s	0.0	0.0	0.9	7.5	1.4	2.8
Prop In Lane		0.02	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2200	1206	723	2745	156	139
V/C Ratio(X)	0.16	0.16	0.08	0.32	0.17	0.35
Avail Cap(c_a), veh/h	2200	1206	855	2745	552	491
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	4.0	3.4	42.3	42.9
Incr Delay (d2), s/veh	0.1	0.3	0.0	0.3	0.5	1.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.3	1.7	0.6	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.1	0.3	4.0	3.7	42.8	44.4
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	556			936	75	
Approach Delay, s/veh	0.2			3.8	43.8	
Approach LOS	A			A	D	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	12.6	71.6			84.2	15.8
Change Period (Y+Rc), s	7.0	7.0			7.0	7.0
Max Green Setting (Gmax), s	13.0	35.0			55.0	31.0
Max Q Clear Time (g_c+l1), s	2.9	2.0			9.5	4.8
Green Ext Time (p_c), s	0.1	1.8			3.3	0.2
Intersection Summary						
HCM 7th Control Delay, s/veh			4.4			
HCM 7th LOS			A			

Queues

1: Picadilly Rd & E 56th Ave

04/09/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	755	2623	1428	1514	1520	326	665	1141	1142	446	1448	1137
v/c Ratio	1.32	1.65	1.85	2.28	0.88	0.52	1.94	1.09	1.52	1.02	1.38	1.60
Control Delay (s/veh)	202.8	327.1	414.0	608.2	36.2	13.8	459.0	113.1	271.4	87.7	219.8	305.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	202.8	327.1	414.0	608.2	36.2	13.8	459.0	113.1	271.4	87.7	219.8	305.4
Queue Length 50th (ft)	~490	~1357	~2087	~1236	446	75	~521	~469	~1499	~180	~685	~1548
Queue Length 95th (ft)	#619	#1438	#2359	m#1294	m472	m79	#641	#570	#1773	#299	#783	#1818
Internal Link Dist (ft)	2771				802				510			
Turn Bay Length (ft)	400			375			250			225		
Base Capacity (vph)	572	1593	771	663	1728	624	343	1050	751	439	1050	711
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.32	1.65	1.85	2.28	0.88	0.52	1.94	1.09	1.52	1.02	1.38	1.60

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

























Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

1: Picadilly Rd & E 56th Ave

04/09/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	695	2413	1314	1393	1398	300	612	1050	1051	410	1332	1046
Future Volume (veh/h)	695	2413	1314	1393	1398	300	612	1050	1051	410	1332	1046
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	755	2623	1428	1514	1520	326	665	1141	1142	446	1448	1137
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	576	1600	655	668	1736	539	346	1055	634	442	1055	592
Arrive On Green	0.17	0.31	0.31	0.32	0.57	0.57	0.03	0.07	0.07	0.10	0.21	0.21
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	755	2623	1428	1514	1520	326	665	1141	1142	446	1448	1137
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	25.0	47.0	47.0	29.0	38.4	20.3	15.0	31.0	31.0	15.0	31.0	31.0
Cycle Q Clear(g_c), s	25.0	47.0	47.0	29.0	38.4	20.3	15.0	31.0	31.0	15.0	31.0	31.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	576	1600	655	668	1736	539	346	1055	634	442	1055	592
V/C Ratio(X)	1.31	1.64	2.18	2.27	0.88	0.60	1.92	1.08	1.80	1.01	1.37	1.92
Avail Cap(c_a), veh/h	576	1600	655	668	1736	539	346	1055	634	442	1055	592
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.5	51.5	44.0	50.8	29.7	25.8	72.5	69.9	50.3	44.9	59.5	47.0
Incr Delay (d2), s/veh	152.0	290.6	535.9	574.5	6.5	5.0	426.5	52.4	366.8	45.4	173.5	420.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	22.9	62.5	121.1	64.3	13.2	6.9	27.5	19.4	86.3	9.2	30.1	90.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	214.5	342.1	579.9	625.3	36.2	30.8	499.1	122.3	417.1	90.2	233.0	467.9
LnGrp LOS	F	F	F	F	D	C	F	F	F	F	F	F
Approach Vol, veh/h	4806			3360			2948			3031		
Approach Delay, s/veh	392.7			301.1			321.5			300.1		
Approach LOS	F			F			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	36.0	54.0	22.0	38.0	32.0	58.0	22.0	38.0				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	29.0	47.0	15.0	31.0	25.0	51.0	15.0	31.0				
Max Q Clear Time (g_c+I1), s	31.0	49.0	17.0	33.0	27.0	40.4	17.0	33.0				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	7.4	0.0	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	336.3											
HCM 7th LOS	F											

Intersection						
Int Delay, s/veh	18.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑↑	↑↑↑	
Traffic Vol, veh/h	0	95	0	2713	4016	23
Future Vol, veh/h	0	95	0	2713	4016	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	103	0	2949	4365	25

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	- 2195	- 0	- 0
Stage 1	- -	- -	- -
Stage 2	- -	- -	- -
Critical Hdwy	- 7.14	- -	- -
Critical Hdwy Stg 1	- -	- -	- -
Critical Hdwy Stg 2	- -	- -	- -
Follow-up Hdwy	- 3.92	- -	- -
Pot Cap-1 Maneuver	0 ~ 31	0 -	- -
Stage 1	0 -	0 -	- -
Stage 2	0 -	0 -	- -
Platoon blocked, %		- -	- -
Mov Cap-1 Maneuver	- ~ 31	- -	- -
Mov Cap-2 Maneuver	- -	- -	- -
Stage 1	- -	- -	- -
Stage 2	- -	- -	- -

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	\$ 1311.6	0	0
HCM LOS	F		

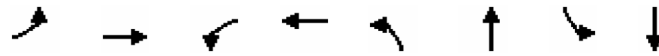
Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	- 31	- -	- -
HCM Lane V/C Ratio	- 3.323	- -	- -
HCM Ctrl Dly (s/v)	\$ 1311.6	- -	- -
HCM Lane LOS	- F	- -	- -
HCM 95th %tile Q(veh)	- 12.2	- -	- -

Notes	
~: Volume exceeds capacity	\$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Queues

3: Picadilly Rd & E 54th Ave/SW Site Access

04/09/2025



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	16	18	7	4	28	2898	49	4419
v/c Ratio	0.14	0.04	0.06	0.02	0.21	0.74	0.35	1.08
Control Delay (s/veh)	68.8	0.2	67.0	0.3	8.9	15.9	23.5	57.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	68.8	0.2	67.0	0.3	8.9	15.9	23.5	57.4
Queue Length 50th (ft)	15	0	7	0	4	548	4	~1895
Queue Length 95th (ft)	41	0	24	0	16	949	m5	m528
Internal Link Dist (ft)		571		430		580		707
Turn Bay Length (ft)					125		100	
Base Capacity (vph)	118	403	318	392	135	3925	140	4081
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.04	0.02	0.01	0.21	0.74	0.35	1.08

Intersection Summary





















~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary 3: Picadilly Rd & E 54th Ave/SW Site Access

04/09/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	15	0	17	6	0	4	26	2664	2	30	15	4053
Future Volume (veh/h)	15	0	17	6	0	4	26	2664	2	30	15	4053
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0		0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00		1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870		1870	1870
Adj Flow Rate, veh/h	16	0	18	7	0	4	28	2896	2		16	4405
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2		2	2
Cap, veh/h	90	0	80	44	0	39	105	3771	3		121	3711
Arrive On Green	0.05	0.00	0.05	0.02	0.00	0.02	0.03	0.72	0.72		0.05	1.00
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	5270	4		1781	5255
Grp Volume(v), veh/h	16	0	18	7	0	4	28	1870	1028		16	2852
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1702	1870		1781	1702
Q Serve(g_s), s	1.3	0.0	1.6	0.6	0.0	0.4	0.6	52.0	52.1		0.4	105.9
Cycle Q Clear(g_c), s	1.3	0.0	1.6	0.6	0.0	0.4	0.6	52.0	52.1		0.4	105.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00		1.00	
Lane Grp Cap(c), veh/h	90	0	80	44	0	39	105	2436	1338		121	2404
V/C Ratio(X)	0.18	0.00	0.22	0.16	0.00	0.10	0.27	0.77	0.77		0.13	1.19
Avail Cap(c_a), veh/h	119	0	106	321	0	285	131	2436	1338		164	2404
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	68.2	0.0	68.4	71.6	0.0	71.5	42.6	13.5	13.5		15.6	0.0
Incr Delay (d2), s/veh	0.9	0.0	1.4	1.7	0.0	1.1	1.3	2.4	4.3		0.5	88.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.7	0.3	0.0	0.2	0.8	18.5	21.0		0.2	29.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	69.2	0.0	69.8	73.3	0.0	72.7	44.0	15.9	17.7		16.1	88.4
LnGrp LOS	E		E	E		E	D	B	B		B	F
Approach Vol, veh/h	34			11			2926			4435		
Approach Delay, s/veh	69.5			73.1			16.8			89.6		
Approach LOS	E			E			B			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.4	114.3		14.6	11.8	112.9		10.7				
Change Period (Y+Rc), s	7.0	7.0		7.0	7.0	7.0		7.0				
Max Green Setting (Gmax), s	7.0	78.0		10.0	7.0	78.0		27.0				
Max Q Clear Time (g_c+I1), s	2.4	54.1		3.6	2.6	107.9		2.6				
Green Ext Time (p_c), s	0.0	21.2		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	60.7											
HCM 7th LOS	E											
Notes												
User approved ignoring U-Turning movement.												

HCM 7th Signalized Intersection Summary
3: Picadilly Rd & E 54th Ave/SW Site Access










04/09/2025

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	13
Future Volume (veh/h)	13
Initial Q (Qb), veh	0
Lane Width Adj.	1.00
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1870
Adj Flow Rate, veh/h	14
Peak Hour Factor	0.92
Percent Heavy Veh, %	2
Cap, veh/h	12
Arrive On Green	1.00
Sat Flow, veh/h	17
Grp Volume(v), veh/h	1567
Grp Sat Flow(s),veh/h/ln	1867
Q Serve(g_s), s	105.9
Cycle Q Clear(g_c), s	105.9
Prop In Lane	0.01
Lane Grp Cap(c), veh/h	1319
V/C Ratio(X)	1.19
Avail Cap(c_a), veh/h	1319
HCM Platoon Ratio	2.00
Upstream Filter(I)	1.00
Uniform Delay (d), s/veh	0.0
Incr Delay (d2), s/veh	92.6
Initial Q Delay(d3), s/veh	0.0
%ile BackOfQ(50%),veh/ln	33.9
Unsig. Movement Delay, s/veh	
LnGrp Delay(d), s/veh	92.6
LnGrp LOS	F
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

Queues

4: Road A & E 56th Ave

04/09/2025

									
Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	77	4119	48	3258	24	17	30	50	90
v/c Ratio	0.52	1.18	0.35	0.97	0.02	0.20	0.13	0.31	0.30
Control Delay (s/veh)	16.7	118.1	19.5	34.0	0.0	71.8	1.2	60.3	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	16.7	118.1	19.5	34.0	0.0	71.8	1.2	60.3	13.9
Queue Length 50th (ft)	44	~1794	11	1067	0	16	0	43	3
Queue Length 95th (ft)	m27	m819	41	#1310	0	43	0	84	54
Internal Link Dist (ft)		645		1121		547			102
Turn Bay Length (ft)	325		325		200				
Base Capacity (vph)	148	3497	137	3372	1094	234	392	160	495
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.52	1.18	0.35	0.97	0.02	0.07	0.08	0.31	0.18

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.























Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

4: Road A & E 56th Ave

04/09/2025













												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	3785	5	44	2997	22	16	0	28	46	0	83
Future Volume (veh/h)	71	3785	5	44	2997	22	16	0	28	46	0	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	77	4114	5	48	3258	24	17	0	30	50	0	90
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	132	3506	4	120	3376	1048	135	0	105	195	0	244
Arrive On Green	0.04	0.67	0.67	0.04	0.66	0.66	0.07	0.00	0.07	0.04	0.00	0.15
Sat Flow, veh/h	1781	5267	6	1781	5106	1585	1307	0	1585	1781	0	1585
Grp Volume(v), veh/h	77	2658	1461	48	3258	24	17	0	30	50	0	90
Grp Sat Flow(s),veh/h/ln	1781	1702	1869	1781	1702	1585	1307	0	1585	1781	0	1585
Q Serve(g_s), s	2.0	99.9	99.9	1.2	89.6	0.8	1.8	0.0	2.7	3.8	0.0	7.6
Cycle Q Clear(g_c), s	2.0	99.9	99.9	1.2	89.6	0.8	1.8	0.0	2.7	3.8	0.0	7.6
Prop In Lane	1.00		0.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	132	2266	1244	120	3376	1048	135	0	105	195	0	244
V/C Ratio(X)	0.59	1.17	1.17	0.40	0.96	0.02	0.13	0.00	0.28	0.26	0.00	0.37
Avail Cap(c_a), veh/h	135	2266	1244	131	3376	1048	283	0	285	206	0	433
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.3	25.1	25.1	39.7	23.8	8.7	66.2	0.0	66.6	59.7	0.0	56.9
Incr Delay (d2), s/veh	6.1	83.0	87.0	2.1	9.2	0.0	0.4	0.0	1.5	0.7	0.0	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	63.6	71.2	1.2	34.6	0.3	0.6	0.0	1.1	1.8	0.0	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	45.4	108.0	112.1	41.8	33.0	8.8	66.6	0.0	68.1	60.4	0.0	57.8
LnGrp LOS	D	F	F	D	C	A	E		E	E		E
Approach Vol, veh/h	4196			3330			47			140		
Approach Delay, s/veh	108.3			33.0			67.6			58.8		
Approach LOS	F			C			E			E		
Timer - Assigned Phs	1	2	3	4	5	6	8					
Phs Duration (G+Y+Rc), s	13.1	106.9	13.1	17.0	13.7	106.2	30.1					
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0					
Max Green Setting (Gmax), s	7.0	81.0	7.0	27.0	7.0	81.0	41.0					
Max Q Clear Time (g_c+I1), s	3.2	101.9	5.8	4.7	4.0	91.6	9.6					
Green Ext Time (p_c), s	0.0	0.0	0.0	0.1	0.0	0.0	0.3					
Intersection Summary												
HCM 7th Control Delay, s/veh	74.6											
HCM 7th LOS	E											

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑↑↑↑	↑↑↑↱			↱
Traffic Vol, veh/h	13	3861	3078	18	0	13
Future Vol, veh/h	13	3861	3078	18	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	250	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	4197	3346	20	0	14
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	3365	0	-	0	-	1683
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	5.34	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	3.12	-	-	-	-	3.92
Pot Cap-1 Maneuver	24	-	-	-	0	71
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	24	-	-	-	-	71
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Ctrl Dly, s/v	0.94	0		67.68		
HCM LOS	F					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	24	-	-	-	-	71
HCM Lane V/C Ratio	0.585	-	-	-	-	0.198
HCM Ctrl Dly (s/v)	279.4	-	-	-	-	67.7
HCM Lane LOS	F	-	-	-	-	F
HCM 95th %tile Q(veh)	1.8	-	-	-	-	0.7

Queues

1: Picadilly Rd & E 56th Ave

04/09/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	1338	2001	1116	1724	2797	636	849	1747	1391	275	1246	1095
v/c Ratio	2.25	1.37	1.47	2.36	1.68	1.00	2.07	1.29	1.60	1.07	1.27	1.50
Control Delay (s/veh)	594.4	212.7	247.2	640.2	335.8	33.7	508.4	180.2	299.3	114.8	176.1	260.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	594.4	212.7	247.2	640.2	335.8	33.7	508.4	180.2	299.3	114.8	176.1	260.7
Queue Length 50th (ft)	~1088	~945	~1456	~1415	~1450	365	~680	~815	~1900	~101	~560	~1410
Queue Length 95th (ft)	#1225	#1037	#1725	m#658	m498	m83	m#672	m#805	m#1869	#197	#657	#1679
Internal Link Dist (ft)	2771				762				510			
Turn Bay Length (ft)	400			375			125			175		
Base Capacity (vph)	595	1457	761	732	1661	639	411	1356	871	256	983	731
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	2.25	1.37	1.47	2.36	1.68	1.00	2.07	1.29	1.60	1.07	1.27	1.50

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.






























Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

1: Picadilly Rd & E 56th Ave

04/09/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  		 	  		 	  				
Traffic Volume (veh/h)	1231	1841	1027	1586	2573	585	781	1607	1280	253	1146	1007
Future Volume (veh/h)	1231	1841	1027	1586	2573	585	781	1607	1280	253	1146	1007
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1338	2001	1116	1724	2797	636	849	1747	1391	275	1246	1095
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	599	1464	645	737	1668	518	415	1362	761	257	987	581
Arrive On Green	0.17	0.29	0.29	0.28	0.43	0.43	0.04	0.09	0.09	0.05	0.19	0.19
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	1338	2001	1116	1724	2797	636	849	1747	1391	275	1246	1095
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	26.0	43.0	43.0	32.0	49.0	49.0	18.0	40.0	40.0	7.0	29.0	29.0
Cycle Q Clear(g_c), s	26.0	43.0	43.0	32.0	49.0	49.0	18.0	40.0	40.0	7.0	29.0	29.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	599	1464	645	737	1668	518	415	1362	761	257	987	581
V/C Ratio(X)	2.23	1.37	1.73	2.34	1.68	1.23	2.05	1.28	1.83	1.07	1.26	1.88
Avail Cap(c_a), veh/h	599	1464	645	737	1668	518	415	1362	761	257	987	581
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.0	53.5	44.5	53.7	42.4	42.4	72.0	68.4	44.6	54.6	60.5	47.5
Incr Delay (d2), s/veh	560.6	169.6	335.6	606.6	307.2	118.9	479.6	133.1	377.9	75.6	126.2	404.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	57.8	40.9	83.3	75.0	65.9	34.6	36.0	35.1	103.7	4.3	23.9	86.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	622.6	223.1	380.1	660.3	349.7	161.3	551.7	201.5	422.5	130.2	186.7	451.8
LnGrp LOS	F	F	F	F	F	F	F	F	F	F	F	F
Approach Vol, veh/h	4455			5157			3987			2616		
Approach Delay, s/veh	382.4			430.3			353.2			291.7		
Approach LOS	F			F			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	39.0	50.0	25.0	36.0	33.0	56.0	14.0	47.0				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	32.0	43.0	18.0	29.0	26.0	49.0	7.0	40.0				
Max Q Clear Time (g_c+l1), s	34.0	45.0	20.0	31.0	28.0	51.0	9.0	42.0				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	375.8											
HCM 7th LOS	F											

Intersection						
Int Delay, s/veh	3.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑↑	↑↑↑	
Traffic Vol, veh/h	0	53	0	3668	3732	27
Future Vol, veh/h	0	53	0	3668	3732	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	58	0	3987	4057	29

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	- 2043	- 0	- 0
Stage 1	- -	- -	- -
Stage 2	- -	- -	- -
Critical Hdwy	- 7.14	- -	- -
Critical Hdwy Stg 1	- -	- -	- -
Critical Hdwy Stg 2	- -	- -	- -
Follow-up Hdwy	- 3.92	- -	- -
Pot Cap-1 Maneuver	0 ~ 40	0 -	- -
Stage 1	0 -	0 -	- -
Stage 2	0 -	0 -	- -
Platoon blocked, %		- -	- -
Mov Cap-1 Maneuver	- ~ 40	- -	- -
Mov Cap-2 Maneuver	- -	- -	- -
Stage 1	- -	- -	- -
Stage 2	- -	- -	- -

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	\$ 458.24	0	0
HCM LOS	F		

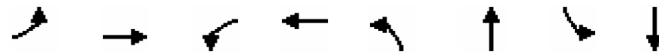
Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	- 40	- -	- -
HCM Lane V/C Ratio	- 1.446	- -	- -
HCM Ctrl Dly (s/v)	\$ 458.2	- -	- -
HCM Lane LOS	- F	- -	- -
HCM 95th %tile Q(veh)	- 5.9	- -	- -

Notes	
~: Volume exceeds capacity	\$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Queues

3: Picadilly Rd & E 54th Ave/SW Site Access

04/09/2025



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	8	11	9	1	83	3952	54	4060
v/c Ratio	0.07	0.03	0.08	0.00	0.54	1.01	0.38	1.08
Control Delay (s/veh)	67.1	0.1	67.4	0.0	37.5	37.0	25.7	55.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	67.1	0.1	67.4	0.0	37.5	37.0	25.7	55.7
Queue Length 50th (ft)	8	0	8	0	25	~1526	7	~1628
Queue Length 95th (ft)	27	0	28	0	90	#1817	m5	m472
Internal Link Dist (ft)		571		430		580		707
Turn Bay Length (ft)					125		100	
Base Capacity (vph)	118	399	318	404	153	3919	143	3747
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.03	0.03	0.00	0.54	1.01	0.38	1.08

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.





















95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary 3: Picadilly Rd & E 54th Ave/SW Site Access

04/09/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	7	0	10	8	0	1	76	3634	2	26	24	3726
Future Volume (veh/h)	7	0	10	8	0	1	76	3634	2	26	24	3726
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0		0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00		1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870		1870	1870
Adj Flow Rate, veh/h	8	0	11	9	0	1	83	3950	2		26	4050
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2		2	2
Cap, veh/h	65	0	58	40	0	36	129	3813	2		103	3728
Arrive On Green	0.04	0.00	0.04	0.02	0.00	0.02	0.05	0.72	0.72		0.06	1.00
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	5271	3		1781	5259
Grp Volume(v), veh/h	8	0	11	9	0	1	83	2551	1401		26	2620
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1702	1870		1781	1702
Q Serve(g_s), s	0.7	0.0	1.0	0.7	0.0	0.1	2.8	108.5	108.5		0.6	106.3
Cycle Q Clear(g_c), s	0.7	0.0	1.0	0.7	0.0	0.1	2.8	108.5	108.5		0.6	106.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00		1.00	
Lane Grp Cap(c), veh/h	65	0	58	40	0	36	129	2462	1352		103	2413
V/C Ratio(X)	0.12	0.00	0.19	0.22	0.00	0.03	0.65	1.04	1.04		0.25	1.09
Avail Cap(c_a), veh/h	119	0	106	321	0	285	131	2462	1352		131	2413
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	69.9	0.0	70.1	72.0	0.0	71.7	47.6	20.8	20.8		41.5	0.0
Incr Delay (d2), s/veh	0.8	0.0	1.6	2.7	0.0	0.3	10.2	28.2	34.4		1.3	46.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.4	0.4	0.0	0.0	3.4	46.2	53.0		0.7	15.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	70.8	0.0	71.7	74.7	0.0	72.0	57.8	49.0	55.1		42.8	46.4
LnGrp LOS	E		E	E		E	E	F	F		D	F
Approach Vol, veh/h	19			10			4035			4086		
Approach Delay, s/veh	71.3			74.4			51.3			48.4		
Approach LOS	E			E			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.6	115.5		12.5	13.8	113.3		10.4				
Change Period (Y+Rc), s	7.0	7.0		7.0	7.0	7.0		7.0				
Max Green Setting (Gmax), s	7.0	78.0		10.0	7.0	78.0		27.0				
Max Q Clear Time (g_c+I1), s	2.6	110.5		3.0	4.8	108.3		2.7				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	49.9											
HCM 7th LOS	D											
Notes												
User approved ignoring U-Turning movement.												

HCM 7th Signalized Intersection Summary 3: Picadilly Rd & E 54th Ave/SW Site Access

04/09/2025












Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	9
Future Volume (veh/h)	9
Initial Q (Qb), veh	0
Lane Width Adj.	1.00
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1870
Adj Flow Rate, veh/h	10
Peak Hour Factor	0.92
Percent Heavy Veh, %	2
Cap, veh/h	9
Arrive On Green	1.00
Sat Flow, veh/h	13
Grp Volume(v), veh/h	1440
Grp Sat Flow(s),veh/h/ln	1868
Q Serve(g_s), s	106.3
Cycle Q Clear(g_c), s	106.3
Prop In Lane	0.01
Lane Grp Cap(c), veh/h	1324
V/C Ratio(X)	1.09
Avail Cap(c_a), veh/h	1324
HCM Platoon Ratio	2.00
Upstream Filter(I)	1.00
Uniform Delay (d), s/veh	0.0
Incr Delay (d2), s/veh	52.0
Initial Q Delay(d3), s/veh	0.0
%ile BackOfQ(50%),veh/ln	19.1
Unsig. Movement Delay, s/veh	
LnGrp Delay(d), s/veh	52.0
LnGrp LOS	F
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

Queues

4: Road A & E 56th Ave

04/09/2025

									
Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	186	3439	58	4974	85	27	48	114	152
v/c Ratio	0.54	0.99	0.41	1.78	0.09	0.31	0.21	0.71	0.50
Control Delay (s/veh)	29.6	42.5	26.7	379.5	0.7	75.8	2.0	81.6	30.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	29.6	42.5	26.7	379.5	0.7	75.8	2.0	81.6	30.5
Queue Length 50th (ft)	128	~1291	13	~2657	0	26	0	102	56
Queue Length 95th (ft)	m74	m725	51	#2686	5	60	0	163	128
Internal Link Dist (ft)		685		1121		547			331
Turn Bay Length (ft)	325		325		200				
Base Capacity (vph)	345	3466	141	2789	927	221	392	161	495
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.99	0.41	1.78	0.09	0.12	0.12	0.71	0.31

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.


























Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

4: Road A & E 56th Ave

04/09/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  							
Traffic Volume (veh/h)	171	3161	3	53	4576	78	25	0	44	105	0	140
Future Volume (veh/h)	171	3161	3	53	4576	78	25	0	44	105	0	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	186	3436	3	58	4974	85	27	0	48	114	0	152
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	131	3464	3	124	3336	1036	130	0	106	193	0	254
Arrive On Green	0.05	0.66	0.66	0.04	0.65	0.65	0.07	0.00	0.07	0.05	0.00	0.16
Sat Flow, veh/h	1781	5269	5	1781	5106	1585	1235	0	1585	1781	0	1585
Grp Volume(v), veh/h	186	2219	1220	58	4974	85	27	0	48	114	0	152
Grp Sat Flow(s),veh/h/ln	1781	1702	1870	1781	1702	1585	1235	0	1585	1781	0	1585
Q Serve(g_s), s	7.0	96.3	96.4	1.5	98.0	2.9	3.1	0.0	4.4	7.0	0.0	13.4
Cycle Q Clear(g_c), s	7.0	96.3	96.4	1.5	98.0	2.9	3.1	0.0	4.4	7.0	0.0	13.4
Prop In Lane	1.00		0.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	131	2238	1229	124	3336	1036	130	0	106	193	0	254
V/C Ratio(X)	1.42	0.99	0.99	0.47	1.49	0.08	0.21	0.00	0.45	0.59	0.00	0.60
Avail Cap(c_a), veh/h	131	2238	1229	132	3336	1036	270	0	285	193	0	433
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.7	25.3	25.3	39.2	26.0	9.5	66.8	0.0	67.4	62.3	0.0	58.5
Incr Delay (d2), s/veh	226.9	17.2	23.9	2.7	222.6	0.2	0.8	0.0	3.0	4.7	0.0	2.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.3	41.6	48.1	1.5	103.6	1.0	1.0	0.0	1.9	1.1	0.0	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	280.7	42.4	49.2	41.9	248.6	9.7	67.6	0.0	70.4	67.0	0.0	60.8
LnGrp LOS	F	D	D	D	F	A	E		E	E		E
Approach Vol, veh/h	3625			5117			75			266		
Approach Delay, s/veh	56.9			242.3			69.4			63.5		
Approach LOS	E			F			E			E		
Timer - Assigned Phs	1	2	3	4	5	6	8					
Phs Duration (G+Y+Rc), s	13.4	105.6	14.0	17.0	14.0	105.0	31.0					
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0					
Max Green Setting (Gmax), s	7.0	81.0	7.0	27.0	7.0	81.0	41.0					
Max Q Clear Time (g_c+I1), s	3.5	98.4	9.0	6.4	9.0	100.0	15.4					
Green Ext Time (p_c), s	0.0	0.0	0.0	0.2	0.0	0.0	0.5					
Intersection Summary												
HCM 7th Control Delay, s/veh	161.6											
HCM 7th LOS	F											

Intersection						
Int Delay, s/veh	52.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↱	↱↱↱	↱↱↱			↱
Traffic Vol, veh/h	39	3335	4706	35	0	38
Future Vol, veh/h	39	3335	4706	35	0	38
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	3625	5115	38	0	41

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	5153	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	5.34	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	3.12	-	-
Pot Cap-1 Maneuver	~ 2	-	0
Stage 1	-	-	0
Stage 2	-	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	~ 2	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	114.85	0	\$ 1157.16
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	~ 2	-	-	-	17
HCM Lane V/C Ratio	16.979	-	-	-	2.496
HCM Ctrl Dly (s/v)	\$ 9935.6	-	-	-	\$ 1157.2
HCM Lane LOS	F	-	-	-	F
HCM 95th %tile Q(veh)	7.2	-	-	-	5.8













Notes	
~: Volume exceeds capacity	\$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

APPENDIX G – Total Future (with site development) Synchro Outputs

Queues

1: Picadilly Rd & E 56th Ave

03/12/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	101	451	238	293	215	70	161	183	202	101	228	149
v/c Ratio	0.19	0.71	0.34	0.64	0.10	0.09	0.67	0.18	0.42	0.31	0.70	0.34
Control Delay (s/veh)	14.1	38.1	5.3	59.0	17.5	0.5	47.1	29.4	14.2	26.2	49.4	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.1	38.1	5.3	59.0	17.5	0.5	47.1	29.4	14.2	26.2	49.4	3.9
Queue Length 50th (ft)	29	252	0	97	24	0	52	41	53	46	138	0
Queue Length 95th (ft)	64	#446	56	148	41	1	#94	63	119	77	201	23
Internal Link Dist (ft)	2771			652			510			1611		
Turn Bay Length (ft)	400				375	125	250				175	225
Base Capacity (vph)	534	633	695	458	2130	777	240	1372	574	331	503	570
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.71	0.34	0.64	0.10	0.09	0.67	0.13	0.35	0.31	0.45	0.26

Intersection Summary
























95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

1: Picadilly Rd & E 56th Ave

03/12/2025

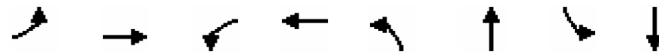
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	415	219	270	198	64	148	168	186	93	210	137
Future Volume (veh/h)	93	415	219	270	198	64	148	168	186	93	210	137
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	101	451	238	293	215	70	161	183	202	101	228	149
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	620	737	625	346	2188	679	239	817	254	315	293	248
Arrive On Green	0.07	0.39	0.39	0.17	0.72	0.72	0.02	0.05	0.05	0.07	0.16	0.16
Sat Flow, veh/h	1781	1870	1585	3456	5106	1585	3456	5106	1585	1781	1870	1585
Grp Volume(v), veh/h	101	451	238	293	215	70	161	183	202	101	228	149
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1702	1585	1728	1702	1585	1781	1870	1585
Q Serve(g_s), s	3.2	19.2	10.7	8.2	1.3	1.4	4.6	3.4	12.6	4.7	11.7	8.8
Cycle Q Clear(g_c), s	3.2	19.2	10.7	8.2	1.3	1.4	4.6	3.4	12.6	4.7	11.7	8.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	620	737	625	346	2188	679	239	817	254	315	293	248
V/C Ratio(X)	0.16	0.61	0.38	0.85	0.10	0.10	0.67	0.22	0.80	0.32	0.78	0.60
Avail Cap(c_a), veh/h	628	737	625	346	2188	679	242	1379	428	322	505	428
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.5	24.2	21.6	40.9	8.3	8.3	47.7	41.4	45.7	32.1	40.5	39.3
Incr Delay (d2), s/veh	0.1	3.8	1.8	17.6	0.1	0.3	7.0	0.1	5.7	0.6	4.5	2.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	8.6	4.1	4.0	0.5	0.5	2.2	1.4	5.7	2.0	5.6	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.6	27.9	23.4	58.5	8.4	8.6	54.8	41.5	51.4	32.7	45.0	41.6
LnGrp LOS	B	C	C	E	A	A	D	D	D	C	D	D
Approach Vol, veh/h	790			578			546			478		
Approach Delay, s/veh	25.0			33.8			49.1			41.3		
Approach LOS	C			C			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.0	46.4	13.9	22.7	13.6	49.8	13.6	23.0				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	10.0	28.0	7.0	27.0	7.0	31.0	7.0	27.0				
Max Q Clear Time (g_c+l1), s	10.2	21.2	6.6	13.7	5.2	3.4	6.7	14.6				
Green Ext Time (p_c), s	0.0	1.9	0.0	1.4	0.0	1.5	0.0	1.4				
Intersection Summary												
HCM 7th Control Delay, s/veh	35.9											
HCM 7th LOS	D											

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗		↑↑↑			↑↑↑	
Traffic Vol, veh/h	0	0	95	0	0	136	0	366	227	0	676	23
Future Vol, veh/h	0	0	95	0	0	136	0	366	227	0	676	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	103	0	0	148	0	398	247	0	735	25
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	-	380	-	-	322	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.14	-	-	7.14	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.92	-	-	3.92	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	528	0	0	575	0	-	-	0	-	-
Stage 1	0	0	-	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	0	-	0	-	-	0	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	528	-	-	575	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Ctrl Dly, s/v	13.47		13.42		0		0					
HCM LOS	B		B									
Minor Lane/Major Mvmt	NBT		NBR EBLn1WBLn1		SBT		SBR					
Capacity (veh/h)	-		528 575		-		-					
HCM Lane V/C Ratio	-		0.196 0.257		-		-					
HCM Ctrl Dly (s/v)	-		13.5 13.4		-		-					
HCM Lane LOS	-		B B		-		-					
HCM 95th %tile Q(veh)	-		0.7 1		-		-					

Queues

3: Picadilly Rd & E 54th Ave/SW Site Access

03/12/2025



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	16	18	186	24	28	636	80	759
v/c Ratio	0.09	0.04	0.67	0.04	0.07	0.26	0.17	0.29
Control Delay (s/veh)	42.3	0.2	50.7	0.1	13.2	19.6	6.1	10.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	42.3	0.2	50.7	0.1	13.2	19.6	6.1	10.0
Queue Length 50th (ft)	9	0	113	0	8	101	9	98
Queue Length 95th (ft)	30	0	174	0	24	152	m25	123
Internal Link Dist (ft)		571		430		580		317
Turn Bay Length (ft)					125		100	
Base Capacity (vph)	177	457	477	694	425	2409	475	2611
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.04	0.39	0.03	0.07	0.26	0.17	0.29





















Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

3: Picadilly Rd & E 54th Ave/SW Site Access

03/12/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	15	0	17	171	0	22	26	555	30	30	43	685
Future Volume (veh/h)	15	0	17	171	0	22	26	555	30	30	43	685
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0		0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00		1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No			No				No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870		1870	1870
Adj Flow Rate, veh/h	16	0	18	186	0	24	28	603	33		47	745
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2		2	2
Cap, veh/h	109	0	97	226	0	201	399	2384	130		486	2550
Arrive On Green	0.06	0.00	0.06	0.13	0.00	0.13	0.04	0.48	0.48		0.02	0.16
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	4956	270		1781	5160
Grp Volume(v), veh/h	16	0	18	186	0	24	28	413	223		47	491
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1702	1822		1781	1702
Q Serve(g_s), s	0.9	0.0	1.1	10.2	0.0	1.3	0.8	7.2	7.2		1.3	12.7
Cycle Q Clear(g_c), s	0.9	0.0	1.1	10.2	0.0	1.3	0.8	7.2	7.2		1.3	12.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.15		1.00	
Lane Grp Cap(c), veh/h	109	0	97	226	0	201	399	1637	876		486	1682
V/C Ratio(X)	0.15	0.00	0.19	0.82	0.00	0.12	0.07	0.25	0.25		0.10	0.29
Avail Cap(c_a), veh/h	178	0	159	481	0	428	456	1637	876		520	1682
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	44.5	0.0	44.6	42.6	0.0	38.7	12.4	15.3	15.3		11.9	26.5
Incr Delay (d2), s/veh	0.6	0.0	0.9	7.3	0.0	0.3	0.1	0.4	0.7		0.1	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.4	4.9	0.0	0.5	0.3	2.7	3.0		0.5	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	45.1	0.0	45.5	49.9	0.0	39.0	12.5	15.7	16.0		12.0	26.9
LnGrp LOS	D		D	D		D	B	B	B		B	C
Approach Vol, veh/h	34			210			664			806		
Approach Delay, s/veh	45.3			48.6			15.7			26.2		
Approach LOS	D			D			B			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.1	55.1		13.1	10.8	56.4		19.7				
Change Period (Y+Rc), s	7.0	7.0		7.0	7.0	7.0		7.0				
Max Green Setting (Gmax), s	7.0	28.0		10.0	7.0	28.0		27.0				
Max Q Clear Time (g_c+I1), s	3.3	9.2		3.1	2.8	14.7		12.2				
Green Ext Time (p_c), s	0.0	3.6		0.0	0.0	3.8		0.5				
Intersection Summary												
HCM 7th Control Delay, s/veh	25.2											
HCM 7th LOS	C											
Notes												
User approved ignoring U-Turning movement.												

HCM 7th Signalized Intersection Summary
 3: Picadilly Rd & E 54th Ave/SW Site Access






03/12/2025

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	13
Future Volume (veh/h)	13
Initial Q (Qb), veh	0
Lane Width Adj.	1.00
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1870
Adj Flow Rate, veh/h	14
Peak Hour Factor	0.92
Percent Heavy Veh, %	2
Cap, veh/h	48
Arrive On Green	0.16
Sat Flow, veh/h	97
Grp Volume(v), veh/h	268
Grp Sat Flow(s),veh/h/ln	1853
Q Serve(g_s), s	12.7
Cycle Q Clear(g_c), s	12.7
Prop In Lane	0.05
Lane Grp Cap(c), veh/h	916
V/C Ratio(X)	0.29
Avail Cap(c_a), veh/h	916
HCM Platoon Ratio	0.33
Upstream Filter(I)	1.00
Uniform Delay (d), s/veh	26.5
Incr Delay (d2), s/veh	0.8
Initial Q Delay(d3), s/veh	0.0
%ile BackOfQ(50%),veh/ln	6.4
Unsig. Movement Delay, s/veh	
LnGrp Delay(d), s/veh	27.3
LnGrp LOS	C
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

Queues

4: Road A & E 56th Ave

03/12/2025

					
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	750	234	518	60	88
v/c Ratio	0.24	0.41	0.13	0.32	0.36
Control Delay (s/veh)	15.2	5.4	3.1	46.4	13.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	15.2	5.4	3.1	46.4	13.6
Queue Length 50th (ft)	97	34	26	36	0
Queue Length 95th (ft)	177	60	39	75	45
Internal Link Dist (ft)	795		1121	547	
Turn Bay Length (ft)		325		75	
Base Capacity (vph)	3185	668	4086	513	521
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.24	0.35	0.13	0.12	0.17
Intersection Summary					

HCM 7th Signalized Intersection Summary

4: Road A & E 56th Ave

03/12/2025

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↘	↑↑↑	↘	↗
Traffic Volume (veh/h)	685	5	215	477	55	81
Future Volume (veh/h)	685	5	215	477	55	81
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	745	5	234	518	60	88
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	3254	22	639	3889	175	156
Arrive On Green	1.00	1.00	0.07	0.76	0.10	0.10
Sat Flow, veh/h	5401	35	1781	5274	1781	1585
Grp Volume(v), veh/h	484	266	234	518	60	88
Grp Sat Flow(s),veh/h/ln	1702	1864	1781	1702	1781	1585
Q Serve(g_s), s	0.0	0.0	4.4	2.7	3.1	5.3
Cycle Q Clear(g_c), s	0.0	0.0	4.4	2.7	3.1	5.3
Prop In Lane		0.02	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2116	1159	639	3889	175	156
V/C Ratio(X)	0.23	0.23	0.37	0.13	0.34	0.56
Avail Cap(c_a), veh/h	2116	1159	818	3889	517	460
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	4.8	3.2	42.1	43.0
Incr Delay (d2), s/veh	0.3	0.5	0.4	0.1	1.2	3.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	1.3	0.6	1.4	2.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.3	0.5	5.2	3.2	43.2	46.2
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	750			752	148	
Approach Delay, s/veh	0.3			3.8	45.0	
Approach LOS	A			A	D	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	14.0	69.2			83.2	16.8
Change Period (Y+Rc), s	7.0	7.0			7.0	7.0
Max Green Setting (Gmax), s	17.0	33.0			57.0	29.0
Max Q Clear Time (g_c+I1), s	6.4	2.0			4.7	7.3
Green Ext Time (p_c), s	0.5	5.5			3.5	0.4
Intersection Summary						
HCM 7th Control Delay, s/veh			5.9			
HCM 7th LOS			A			

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↑
Traffic Vol, veh/h	637	57	0	532	0	53
Future Vol, veh/h	637	57	0	532	0	53
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	692	62	0	578	0	58




Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	377
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	0	-	530
Stage 1	-	-	0	-	-
Stage 2	-	-	0	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	530
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	12.62
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	530	-	-	-
HCM Lane V/C Ratio	0.109	-	-	-
HCM Ctrl Dly (s/v)	12.6	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.4	-	-	-

Intersection

Int Delay, s/veh 0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	28	565	57	0	771
Future Vol, veh/h	0	28	565	57	0	771
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	30	614	62	0	838

Major/Minor

	Minor1	Major1	Major2
Conflicting Flow All	-	338	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	7.14	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.92	-
Pot Cap-1 Maneuver	0	561	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	-	561	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach

	WB	NB	SB
HCM Ctrl Dly, s/v	11.78	0	0
HCM LOS	B		













Minor Lane/Major Mvmt

	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	- 561	-
HCM Lane V/C Ratio	-	- 0.054	-
HCM Ctrl Dly (s/v)	-	- 11.8	-
HCM Lane LOS	-	- B	-
HCM 95th %tile Q(veh)	-	- 0.2	-

Queues

1: Picadilly Rd & E 56th Ave

02/04/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	101	441	248	312	215	70	161	183	202	101	228	149
v/c Ratio	0.19	0.71	0.36	0.64	0.10	0.09	0.67	0.18	0.42	0.31	0.70	0.34
Control Delay (s/veh)	14.2	38.6	5.3	42.8	18.6	2.0	47.4	29.7	14.4	26.2	49.4	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.2	38.6	5.3	42.8	18.6	2.0	47.4	29.7	14.4	26.2	49.4	3.9
Queue Length 50th (ft)	29	249	0	75	33	0	52	41	53	46	138	0
Queue Length 95th (ft)	64	#430	57	#147	58	1	#94	63	119	77	201	23
Internal Link Dist (ft)	2771			652			510			1611		
Turn Bay Length (ft)	400			375		125	250		175	225		
Base Capacity (vph)	525	619	691	485	2130	777	240	1372	574	331	503	570
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.71	0.36	0.64	0.10	0.09	0.67	0.13	0.35	0.31	0.45	0.26

Intersection Summary




























95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

1: Picadilly Rd & E 56th Ave

02/04/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				 	  		 	  				
Traffic Volume (veh/h)	93	406	228	287	198	64	148	168	186	93	210	137
Future Volume (veh/h)	93	406	228	287	198	64	148	168	186	93	210	137
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	101	441	248	312	215	70	161	183	202	101	228	149
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	620	737	625	346	2188	679	239	817	254	315	293	248
Arrive On Green	0.07	0.39	0.39	0.17	0.72	0.72	0.02	0.05	0.05	0.07	0.16	0.16
Sat Flow, veh/h	1781	1870	1585	3456	5106	1585	3456	5106	1585	1781	1870	1585
Grp Volume(v), veh/h	101	441	248	312	215	70	161	183	202	101	228	149
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1702	1585	1728	1702	1585	1781	1870	1585
Q Serve(g_s), s	3.2	18.7	11.2	8.9	1.3	1.4	4.6	3.4	12.6	4.7	11.7	8.8
Cycle Q Clear(g_c), s	3.2	18.7	11.2	8.9	1.3	1.4	4.6	3.4	12.6	4.7	11.7	8.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	620	737	625	346	2188	679	239	817	254	315	293	248
V/C Ratio(X)	0.16	0.60	0.40	0.90	0.10	0.10	0.67	0.22	0.80	0.32	0.78	0.60
Avail Cap(c_a), veh/h	628	737	625	346	2188	679	242	1379	428	322	505	428
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.5	24.0	21.8	41.2	8.3	8.3	47.7	41.4	45.7	32.1	40.5	39.3
Incr Delay (d2), s/veh	0.1	3.6	1.9	25.8	0.1	0.3	7.0	0.1	5.7	0.6	4.5	2.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	8.4	4.3	4.6	0.5	0.5	2.2	1.4	5.7	2.0	5.6	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.6	27.6	23.6	67.0	8.4	8.6	54.8	41.5	51.4	32.7	45.0	41.6
LnGrp LOS	B	C	C	E	A	A	D	D	D	C	D	D
Approach Vol, veh/h	790			597			546			478		
Approach Delay, s/veh	24.8			39.0			49.1			41.3		
Approach LOS	C			D			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.0	46.4	13.9	22.7	13.6	49.8	13.6	23.0				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	10.0	28.0	7.0	27.0	7.0	31.0	7.0	27.0				
Max Q Clear Time (g_c+l1), s	10.9	20.7	6.6	13.7	5.2	3.4	6.7	14.6				
Green Ext Time (p_c), s	0.0	2.0	0.0	1.4	0.0	1.5	0.0	1.4				
Intersection Summary												
HCM 7th Control Delay, s/veh	37.1											
HCM 7th LOS	D											

HCM 7th TWSC

2: Picadilly Rd & Maxwell PI/NW Site Access









02/04/2025

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗		↑↑↑			↑↑↑	
Traffic Vol, veh/h	0	0	95	0	0	136	0	366	227	0	702	23
Future Vol, veh/h	0	0	95	0	0	136	0	366	227	0	702	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	103	0	0	148	0	398	247	0	763	25
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	-	394	-	-	322	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.14	-	-	7.14	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.92	-	-	3.92	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	517	0	0	575	0	-	-	0	-	-
Stage 1	0	0	-	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	0	-	0	-	-	0	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	517	-	-	575	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s/v13.69			13.42		0		0					
HCM LOS	B		B									
Minor Lane/Major Mvmt	NBT		NBR		EBLn1WBLn1		SBT		SBR			
Capacity (veh/h)	-		-		517 575		-		-			
HCM Lane V/C Ratio	-		-		0.2 0.257		-		-			
HCM Control Delay (s/veh)	-		-		13.7 13.4		-		-			
HCM Lane LOS	-		-		B B		-		-			
HCM 95th %tile Q(veh)	-		-		0.7 1		-		-			

Queues

3: Picadilly Rd & E 54th Ave/SW Site Access





















02/04/2025

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	16	18	186	24	28	636	59	759
v/c Ratio	0.09	0.04	0.67	0.04	0.07	0.26	0.13	0.29
Control Delay (s/veh)	42.3	0.2	50.7	0.1	13.1	19.1	6.1	9.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	42.3	0.2	50.7	0.1	13.1	19.1	6.1	9.8
Queue Length 50th (ft)	9	0	113	0	8	100	7	96
Queue Length 95th (ft)	30	0	174	0	24	149	m19	121
Internal Link Dist (ft)		571		430		580		317
Turn Bay Length (ft)					125		100	
Base Capacity (vph)	177	457	477	695	425	2433	471	2611
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.04	0.39	0.03	0.07	0.26	0.13	0.29
Intersection Summary								
m Volume for 95th percentile queue is metered by upstream signal.								

HCM 7th Signalized Intersection Summary

3: Picadilly Rd & E 54th Ave/SW Site Access

02/04/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	15	0	17	171	0	22	26	555	30	30	24	685
Future Volume (veh/h)	15	0	17	171	0	22	26	555	30	30	24	685
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0		0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00		1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No			No				No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870		1870	1870
Adj Flow Rate, veh/h	16	0	18	186	0	24	28	603	33		26	745
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2		2	2
Cap, veh/h	109	0	97	226	0	201	399	2458	134		473	2550
Arrive On Green	0.06	0.00	0.06	0.13	0.00	0.13	0.04	0.50	0.50		0.01	0.16
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	4956	270		1781	5160
Grp Volume(v), veh/h	16	0	18	186	0	24	28	413	223		26	491
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1702	1822		1781	1702
Q Serve(g_s), s	0.9	0.0	1.1	10.2	0.0	1.3	0.7	7.0	7.0		0.7	12.7
Cycle Q Clear(g_c), s	0.9	0.0	1.1	10.2	0.0	1.3	0.7	7.0	7.0		0.7	12.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.15		1.00	
Lane Grp Cap(c), veh/h	109	0	97	226	0	201	399	1688	904		473	1682
V/C Ratio(X)	0.15	0.00	0.19	0.82	0.00	0.12	0.07	0.24	0.25		0.05	0.29
Avail Cap(c_a), veh/h	178	0	159	481	0	428	456	1688	904		534	1682
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	44.5	0.0	44.6	42.6	0.0	38.7	12.0	14.5	14.5		11.7	26.5
Incr Delay (d2), s/veh	0.6	0.0	0.9	7.3	0.0	0.3	0.1	0.3	0.7		0.0	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.4	4.9	0.0	0.5	0.3	2.6	2.9		0.3	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	45.1	0.0	45.5	49.9	0.0	39.0	12.0	14.8	15.1		11.8	26.9
LnGrp LOS	D		D	D		D	B	B	B		B	C
Approach Vol, veh/h	34			210			664			785		
Approach Delay, s/veh	45.3			48.6			14.8			26.5		
Approach LOS	D			D			B			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.6	56.6		13.1	10.8	56.4		19.7				
Change Period (Y+Rc), s	7.0	7.0		7.0	7.0	7.0		7.0				
Max Green Setting (Gmax), s	7.0	28.0		10.0	7.0	28.0		27.0				
Max Q Clear Time (g_c+I1), s	2.7	9.0		3.1	2.7	14.7		12.2				
Green Ext Time (p_c), s	0.0	3.6		0.0	0.0	3.8		0.5				
Intersection Summary												
HCM 7th Control Delay, s/veh	25.1											
HCM 7th LOS	C											
Notes												
User approved ignoring U-Turning movement.												

HCM 7th Signalized Intersection Summary 3: Picadilly Rd & E 54th Ave/SW Site Access

02/04/2025








Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	13
Future Volume (veh/h)	13
Initial Q (Qb), veh	0
Lane Width Adj.	1.00
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1870
Adj Flow Rate, veh/h	14
Peak Hour Factor	0.92
Percent Heavy Veh, %	2
Cap, veh/h	48
Arrive On Green	0.16
Sat Flow, veh/h	97
Grp Volume(v), veh/h	268
Grp Sat Flow(s),veh/h/ln	1853
Q Serve(g_s), s	12.7
Cycle Q Clear(g_c), s	12.7
Prop In Lane	0.05
Lane Grp Cap(c), veh/h	916
V/C Ratio(X)	0.29
Avail Cap(c_a), veh/h	916
HCM Platoon Ratio	0.33
Upstream Filter(I)	1.00
Uniform Delay (d), s/veh	26.5
Incr Delay (d2), s/veh	0.8
Initial Q Delay(d3), s/veh	0.0
%ile BackOfQ(50%),veh/ln	6.4
Unsig. Movement Delay, s/veh	
LnGrp Delay(d), s/veh	27.3
LnGrp LOS	C
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

Queues

4: Road A & E 56th Ave

02/04/2025

					
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	750	215	537	60	88
v/c Ratio	0.23	0.37	0.13	0.32	0.36
Control Delay (s/veh)	16.8	5.1	3.1	46.4	13.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	16.8	5.1	3.1	46.4	13.6
Queue Length 50th (ft)	126	31	27	36	0
Queue Length 95th (ft)	172	56	40	75	45
Internal Link Dist (ft)	795		1121	547	
Turn Bay Length (ft)		325		75	
Base Capacity (vph)	3200	668	4086	513	521
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.23	0.32	0.13	0.12	0.17
Intersection Summary					

HCM 7th Signalized Intersection Summary

4: Road A & E 56th Ave

02/04/2025

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↘	↑↑↑	↘	↗
Traffic Volume (veh/h)	685	5	198	494	55	81
Future Volume (veh/h)	685	5	198	494	55	81
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	745	5	215	537	60	88
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	3254	22	639	3889	175	156
Arrive On Green	1.00	1.00	0.07	0.76	0.10	0.10
Sat Flow, veh/h	5401	35	1781	5274	1781	1585
Grp Volume(v), veh/h	484	266	215	537	60	88
Grp Sat Flow(s),veh/h/ln	1702	1864	1781	1702	1781	1585
Q Serve(g_s), s	0.0	0.0	4.0	2.8	3.1	5.3
Cycle Q Clear(g_c), s	0.0	0.0	4.0	2.8	3.1	5.3
Prop In Lane		0.02	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2117	1159	639	3889	175	156
V/C Ratio(X)	0.23	0.23	0.34	0.14	0.34	0.56
Avail Cap(c_a), veh/h	2117	1159	818	3889	517	460
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	4.8	3.2	42.1	43.0
Incr Delay (d2), s/veh	0.3	0.5	0.3	0.1	1.2	3.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	1.1	0.6	1.4	2.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.3	0.5	5.1	3.2	43.2	46.2
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	750			752	148	
Approach Delay, s/veh	0.3			3.8	45.0	
Approach LOS	A			A	D	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	14.0	69.2			83.2	16.8
Change Period (Y+Rc), s	7.0	7.0			7.0	7.0
Max Green Setting (Gmax), s	17.0	33.0			57.0	29.0
Max Q Clear Time (g_c+I1), s	6.0	2.0			4.8	7.3
Green Ext Time (p_c), s	0.4	5.5			3.7	0.4
Intersection Summary						
HCM 7th Control Delay, s/veh			5.9			
HCM 7th LOS			A			

HCM 7th TWSC
5: N Site Access & E 56th Ave

02/04/2025

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↑
Traffic Vol, veh/h	637	48	0	549	0	53
Future Vol, veh/h	637	48	0	549	0	53
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	692	52	0	597	0	58

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	372
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	0	-	534
Stage 1	-	-	0	-	-
Stage 2	-	-	0	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	534
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	12.56
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	534	-	-	-
HCM Lane V/C Ratio	0.108	-	-	-
HCM Control Delay (s/veh)	12.6	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.4	-	-	-

HCM 7th TWSC
6: Picadilly Rd & W Site Access













02/04/2025

Intersection						
Int Delay, s/veh	0.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗ ↘ ↘	↗ ↘ ↘		↗ ↘ ↘	↗ ↘ ↘
Traffic Vol, veh/h	0	28	565	57	45	752
Future Vol, veh/h	0	28	565	57	45	752
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	75	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	30	614	62	49	817
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	-	338	0	0	676	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	5.34	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	3.12	-
Pot Cap-1 Maneuver	0	561	-	-	559	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	561	-	-	559	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s/v11.78		0		0.68		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	-	561	559	-	
HCM Lane V/C Ratio	-	-	0.054	0.087	-	
HCM Control Delay (s/veh)	-	-	11.8	12.1	-	
HCM Lane LOS	-	-	B	B	-	
HCM 95th %tile Q(veh)	-	-	0.2	0.3	-	

Queues

1: Picadilly Rd & E 56th Ave

03/12/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	175	322	191	350	397	123	221	267	225	61	195	145
v/c Ratio	0.35	0.52	0.29	0.65	0.20	0.17	0.92	0.28	0.47	0.21	0.66	0.35
Control Delay (s/veh)	14.7	32.1	5.2	40.1	19.7	3.1	76.5	30.1	13.4	25.7	49.7	4.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.7	32.1	5.2	40.1	19.7	3.1	76.5	30.1	13.4	25.7	49.7	4.1
Queue Length 50th (ft)	51	166	0	84	64	0	73	62	36	28	118	0
Queue Length 95th (ft)	100	275	49	113	103	9	#134	89	131	54	178	22
Internal Link Dist (ft)	2771			652			510			1611		
Turn Bay Length (ft)	400				375	125			250	175		
Base Capacity (vph)	507	621	659	539	1968	733	240	1372	591	295	503	570
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.52	0.29	0.65	0.20	0.17	0.92	0.19	0.38	0.21	0.39	0.25

Intersection Summary
























95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

1: Picadilly Rd & E 56th Ave

03/12/2025

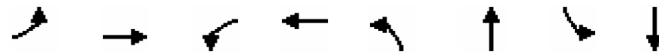
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	161	296	176	322	365	113	203	246	207	56	179	133
Future Volume (veh/h)	161	296	176	322	365	113	203	246	207	56	179	133
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	175	322	191	350	397	123	221	267	225	61	195	145
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	544	701	594	380	2069	642	242	910	283	290	309	262
Arrive On Green	0.08	0.37	0.37	0.18	0.68	0.68	0.02	0.06	0.06	0.06	0.17	0.17
Sat Flow, veh/h	1781	1870	1585	3456	5106	1585	3456	5106	1585	1781	1870	1585
Grp Volume(v), veh/h	175	322	191	350	397	123	221	267	225	61	195	145
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1702	1585	1728	1702	1585	1781	1870	1585
Q Serve(g_s), s	5.9	13.0	8.6	10.0	2.9	2.9	6.4	5.0	14.0	2.8	9.7	8.4
Cycle Q Clear(g_c), s	5.9	13.0	8.6	10.0	2.9	2.9	6.4	5.0	14.0	2.8	9.7	8.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	544	701	594	380	2069	642	242	910	283	290	309	262
V/C Ratio(X)	0.32	0.46	0.32	0.92	0.19	0.19	0.91	0.29	0.80	0.21	0.63	0.55
Avail Cap(c_a), veh/h	563	701	594	380	2069	642	242	1379	428	313	505	428
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.5	23.6	22.2	40.4	10.1	10.1	48.5	41.0	45.3	31.4	38.9	38.3
Incr Delay (d2), s/veh	0.3	2.2	1.4	27.3	0.2	0.7	35.5	0.2	6.0	0.4	2.1	1.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	5.8	3.3	5.2	1.0	1.0	4.0	2.1	6.4	1.2	4.5	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.9	25.8	23.7	67.7	10.3	10.7	84.1	41.2	51.2	31.7	41.0	40.1
LnGrp LOS	B	C	C	E	B	B	F	D	D	C	D	D
Approach Vol, veh/h	688			870			713			401		
Approach Delay, s/veh	22.9			33.4			57.7			39.3		
Approach LOS	C			C			E			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.0	44.5	14.0	23.5	14.9	47.5	12.7	24.8				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	11.0	27.0	7.0	27.0	9.0	29.0	7.0	27.0				
Max Q Clear Time (g_c+l1), s	12.0	15.0	8.4	11.7	7.9	4.9	4.8	16.0				
Green Ext Time (p_c), s	0.0	1.9	0.0	1.3	0.0	2.8	0.0	1.8				
Intersection Summary												
HCM 7th Control Delay, s/veh	38.1											
HCM 7th LOS	D											

Intersection												
Int Delay, s/veh	2.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗		↑↑↑			↑↑↑	
Traffic Vol, veh/h	0	0	53	0	0	205	0	451	310	0	650	27
Future Vol, veh/h	0	0	53	0	0	205	0	451	310	0	650	27
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	58	0	0	223	0	490	337	0	707	29
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	-	368	-	-	414	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.14	-	-	7.14	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.92	-	-	3.92	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	537	0	0	502	0	-	-	0	-	-
Stage 1	0	0	-	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	0	-	0	-	-	0	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	537	-	-	502	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Ctrl Dly, s/v	12.5		17.76		0		0					
HCM LOS	B		C									
Minor Lane/Major Mvmt	NBT		NBR EBLn1WBLn1		SBT		SBR					
Capacity (veh/h)	-		537 502		-		-					
HCM Lane V/C Ratio	-		0.107 0.444		-		-					
HCM Ctrl Dly (s/v)	-		12.5 17.8		-		-					
HCM Lane LOS	-		B C		-		-					
HCM 95th %tile Q(veh)	-		0.4 2.2		-		-					

Queues

3: Picadilly Rd & E 54th Ave/SW Site Access

03/12/2025























Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	8	11	315	30	83	842	95	669
v/c Ratio	0.05	0.03	0.79	0.05	0.20	0.37	0.26	0.29
Control Delay (s/veh)	41.4	0.1	51.1	0.1	15.3	22.3	8.2	11.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	41.4	0.1	51.1	0.1	15.3	22.3	8.2	11.0
Queue Length 50th (ft)	5	0	189	0	19	115	7	42
Queue Length 95th (ft)	19	0	269	0	63	214	m39	109
Internal Link Dist (ft)		571		430		580		317
Turn Bay Length (ft)					125		100	
Base Capacity (vph)	177	387	495	711	425	2276	359	2288
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.03	0.64	0.04	0.20	0.37	0.26	0.29

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary 3: Picadilly Rd & E 54th Ave/SW Site Access

03/12/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	7	0	10	290	0	28	76	735	40	26	62	606
Future Volume (veh/h)	7	0	10	290	0	28	76	735	40	26	62	606
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0		0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00		1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No			No				No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870		1870	1870
Adj Flow Rate, veh/h	8	0	11	315	0	30	83	799	43		67	659
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2		2	2
Cap, veh/h	73	0	65	356	0	316	416	2084	112		379	2157
Arrive On Green	0.04	0.00	0.04	0.20	0.00	0.20	0.06	0.42	0.42		0.02	0.14
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	4960	266		1781	5182
Grp Volume(v), veh/h	8	0	11	315	0	30	83	548	294		67	433
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1702	1822		1781	1702
Q Serve(g_s), s	0.4	0.0	0.7	17.2	0.0	1.5	2.5	11.1	11.2		2.1	11.4
Cycle Q Clear(g_c), s	0.4	0.0	0.7	17.2	0.0	1.5	2.5	11.1	11.2		2.1	11.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.15		1.00	
Lane Grp Cap(c), veh/h	73	0	65	356	0	316	416	1430	766		379	1417
V/C Ratio(X)	0.11	0.00	0.17	0.89	0.00	0.09	0.20	0.38	0.38		0.18	0.31
Avail Cap(c_a), veh/h	178	0	159	499	0	444	428	1430	766		398	1417
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	46.2	0.0	46.3	38.9	0.0	32.6	15.0	20.0	20.0		15.6	30.1
Incr Delay (d2), s/veh	0.7	0.0	1.2	13.2	0.0	0.1	0.2	0.8	1.5		0.2	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.3	8.7	0.0	0.6	1.0	4.3	4.8		0.8	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	46.8	0.0	47.5	52.1	0.0	32.8	15.2	20.8	21.5		15.8	30.7
LnGrp LOS	D		D	D		C	B	C	C		B	C
Approach Vol, veh/h	19				345				925			
Approach Delay, s/veh	47.2				50.4				20.5			
Approach LOS	D				D				C			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.9	49.0		11.1	13.3	48.6		27.0				
Change Period (Y+Rc), s	7.0	7.0		7.0	7.0	7.0		7.0				
Max Green Setting (Gmax), s	7.0	27.0		10.0	7.0	27.0		28.0				
Max Q Clear Time (g_c+I1), s	4.1	13.2		2.7	4.5	13.5		19.2				
Green Ext Time (p_c), s	0.0	4.4		0.0	0.0	3.3		0.8				
Intersection Summary												
HCM 7th Control Delay, s/veh	29.1											
HCM 7th LOS	C											
Notes												
User approved ignoring U-Turning movement.												

HCM 7th Signalized Intersection Summary
3: Picadilly Rd & E 54th Ave/SW Site Access






03/12/2025

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	9
Future Volume (veh/h)	9
Initial Q (Qb), veh	0
Lane Width Adj.	1.00
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1870
Adj Flow Rate, veh/h	10
Peak Hour Factor	0.92
Percent Heavy Veh, %	2
Cap, veh/h	33
Arrive On Green	0.14
Sat Flow, veh/h	79
Grp Volume(v), veh/h	236
Grp Sat Flow(s),veh/h/ln	1856
Q Serve(g_s), s	11.5
Cycle Q Clear(g_c), s	11.5
Prop In Lane	0.04
Lane Grp Cap(c), veh/h	773
V/C Ratio(X)	0.31
Avail Cap(c_a), veh/h	773
HCM Platoon Ratio	0.33
Upstream Filter(l)	1.00
Uniform Delay (d), s/veh	30.1
Incr Delay (d2), s/veh	1.0
Initial Q Delay(d3), s/veh	0.0
%ile BackOfQ(50%),veh/ln	5.8
Unsig. Movement Delay, s/veh	
LnGrp Delay(d), s/veh	31.1
LnGrp LOS	C
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

Queues

4: Road A & E 56th Ave

03/12/2025

					
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	620	310	779	90	143
v/c Ratio	0.22	0.50	0.21	0.45	0.47
Control Delay (s/veh)	18.4	7.0	4.1	48.2	12.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.4	7.0	4.1	48.2	12.1
Queue Length 50th (ft)	101	48	43	55	0
Queue Length 95th (ft)	135	91	66	101	54
Internal Link Dist (ft)	795		1121	547	
Turn Bay Length (ft)		325		75	
Base Capacity (vph)	2871	710	3793	513	560
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.22	0.44	0.21	0.18	0.26
Intersection Summary					

4: Road A & E 56th Ave

03/12/2025

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↘	↑↑↑	↘	↗
Traffic Volume (veh/h)	568	3	285	717	83	132
Future Volume (veh/h)	568	3	285	717	83	132
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	617	3	310	779	90	143
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	3069	15	704	3809	203	181
Arrive On Green	1.00	1.00	0.09	0.75	0.11	0.11
Sat Flow, veh/h	5413	25	1781	5274	1781	1585
Grp Volume(v), veh/h	400	220	310	779	90	143
Grp Sat Flow(s),veh/h/ln	1702	1866	1781	1702	1781	1585
Q Serve(g_s), s	0.0	0.0	6.4	4.6	4.7	8.8
Cycle Q Clear(g_c), s	0.0	0.0	6.4	4.6	4.7	8.8
Prop In Lane		0.01	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1992	1092	704	3809	203	181
V/C Ratio(X)	0.20	0.20	0.44	0.20	0.44	0.79
Avail Cap(c_a), veh/h	1992	1092	881	3809	517	460
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	5.6	3.8	41.3	43.1
Incr Delay (d2), s/veh	0.2	0.4	0.4	0.1	1.5	7.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	1.9	1.1	2.1	3.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.2	0.4	6.1	3.9	42.8	50.6
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	620			1089	233	
Approach Delay, s/veh	0.3			4.5	47.6	
Approach LOS	A			A	D	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	16.1	65.5			81.6	18.4
Change Period (Y+Rc), s	7.0	7.0			7.0	7.0
Max Green Setting (Gmax), s	19.0	31.0			57.0	29.0
Max Q Clear Time (g_c+I1), s	8.4	2.0			6.6	10.8
Green Ext Time (p_c), s	0.7	4.3			5.7	0.6
Intersection Summary						
HCM 7th Control Delay, s/veh			8.4			
HCM 7th LOS			A			













Intersection						
Int Delay, s/veh	0.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑↱			↑↑↑↑		↱
Traffic Vol, veh/h	482	77	0	800	0	89
Future Vol, veh/h	482	77	0	800	0	89
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	524	84	0	870	0	97
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	304
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	0	-	0	590
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	590
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		WB		NB	
HCM Ctrl Dly, s/v	0		0		12.29	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT		
Capacity (veh/h)	590	-	-	-		
HCM Lane V/C Ratio	0.164	-	-	-		
HCM Ctrl Dly (s/v)	12.3	-	-	-		
HCM Lane LOS	B	-	-	-		
HCM 95th %tile Q(veh)	0.6	-	-	-		

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗ ↘ ↘ ↘	↗ ↘ ↘ ↘			↗ ↘ ↘ ↘
Traffic Vol, veh/h	0	42	719	77	0	703
Future Vol, veh/h	0	42	719	77	0	703
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	46	782	84	0	764
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	-	433	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	488	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	488	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	WB	NB		SB		
HCM Ctrl Dly, s/v	13.13	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBT		
Capacity (veh/h)	-	- 488		-		
HCM Lane V/C Ratio	-	- 0.093		-		
HCM Ctrl Dly (s/v)	-	- 13.1		-		
HCM Lane LOS	-	- B		-		
HCM 95th %tile Q(veh)	-	- 0.3		-		

Queues

1: Picadilly Rd & E 56th Ave

02/04/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	175	309	204	375	397	123	221	267	225	61	195	145
v/c Ratio	0.36	0.52	0.32	0.64	0.20	0.17	0.92	0.28	0.47	0.21	0.66	0.35
Control Delay (s/veh)	15.0	32.8	5.6	38.6	19.6	3.1	76.6	30.2	13.5	25.7	49.7	4.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	15.0	32.8	5.6	38.6	19.6	3.1	76.6	30.2	13.5	25.7	49.7	4.1
Queue Length 50th (ft)	51	161	0	89	64	0	73	62	36	28	118	0
Queue Length 95th (ft)	100	263	53	131	103	11	#134	89	131	54	178	22
Internal Link Dist (ft)	2771			652			510			1611		
Turn Bay Length (ft)	400				375	125			250	175		
Base Capacity (vph)	494	596	645	586	1968	733	240	1372	591	295	503	570
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.52	0.32	0.64	0.20	0.17	0.92	0.19	0.38	0.21	0.39	0.25

Intersection Summary























95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

1: Picadilly Rd & E 56th Ave

02/04/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	161	284	188	345	365	113	203	246	207	56	179	133
Future Volume (veh/h)	161	284	188	345	365	113	203	246	207	56	179	133
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	175	309	204	375	397	123	221	267	225	61	195	145
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	544	701	594	380	2069	642	242	910	283	290	309	262
Arrive On Green	0.08	0.37	0.37	0.18	0.68	0.68	0.02	0.06	0.06	0.06	0.17	0.17
Sat Flow, veh/h	1781	1870	1585	3456	5106	1585	3456	5106	1585	1781	1870	1585
Grp Volume(v), veh/h	175	309	204	375	397	123	221	267	225	61	195	145
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1702	1585	1728	1702	1585	1781	1870	1585
Q Serve(g_s), s	5.9	12.4	9.2	10.8	2.9	2.9	6.4	5.0	14.0	2.8	9.7	8.4
Cycle Q Clear(g_c), s	5.9	12.4	9.2	10.8	2.9	2.9	6.4	5.0	14.0	2.8	9.7	8.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	544	701	594	380	2069	642	242	910	283	290	309	262
V/C Ratio(X)	0.32	0.44	0.34	0.99	0.19	0.19	0.91	0.29	0.80	0.21	0.63	0.55
Avail Cap(c_a), veh/h	563	701	594	380	2069	642	242	1379	428	313	505	428
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.5	23.4	22.4	40.7	10.1	10.1	48.5	41.0	45.3	31.4	38.9	38.3
Incr Delay (d2), s/veh	0.3	2.0	1.6	42.4	0.2	0.7	35.5	0.2	6.0	0.4	2.1	1.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	5.5	3.5	6.3	1.0	1.0	4.0	2.1	6.4	1.2	4.5	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.9	25.4	24.0	83.2	10.3	10.7	84.1	41.2	51.2	31.7	41.0	40.1
LnGrp LOS	B	C	C	F	B	B	F	D	D	C	D	D
Approach Vol, veh/h	688			895			713			401		
Approach Delay, s/veh	22.8			40.9			57.7			39.3		
Approach LOS	C			D			E			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.0	44.5	14.0	23.5	14.9	47.5	12.7	24.8				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	11.0	27.0	7.0	27.0	9.0	29.0	7.0	27.0				
Max Q Clear Time (g_c+l1), s	12.8	14.4	8.4	11.7	7.9	4.9	4.8	16.0				
Green Ext Time (p_c), s	0.0	1.9	0.0	1.3	0.0	2.8	0.0	1.8				
Intersection Summary												
HCM 7th Control Delay, s/veh	40.5											
HCM 7th LOS	D											

HCM 7th TWSC

2: Picadilly Rd & Maxwell PI/NW Site Access









02/04/2025

Intersection												
Int Delay, s/veh	2.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗		↑↑↑			↑↑↑	
Traffic Vol, veh/h	0	0	53	0	0	205	0	451	310	0	685	27
Future Vol, veh/h	0	0	53	0	0	205	0	451	310	0	685	27
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	58	0	0	223	0	490	337	0	745	29
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	-	387	-	-	414	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.14	-	-	7.14	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.92	-	-	3.92	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	522	0	0	502	0	-	-	0	-	-
Stage 1	0	0	-	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	0	-	0	-	-	0	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	522	-	-	502	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s/v12.74			17.76		0		0					
HCM LOS	B		C									
Minor Lane/Major Mvmt	NBT		NBR		EBLn1WBLn1		SBT		SBR			
Capacity (veh/h)	-		-		522 502		-		-			
HCM Lane V/C Ratio	-		-		0.11 0.444		-		-			
HCM Control Delay (s/veh)	-		-		12.7 17.8		-		-			
HCM Lane LOS	-		-		B C		-		-			
HCM 95th %tile Q(veh)	-		-		0.4 2.2		-		-			

Queues

3: Picadilly Rd & E 54th Ave/SW Site Access





















02/04/2025

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	8	11	315	30	83	842	67	669
v/c Ratio	0.05	0.03	0.79	0.05	0.20	0.37	0.19	0.29
Control Delay (s/veh)	41.4	0.1	51.1	0.1	15.3	22.2	7.5	10.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	41.4	0.1	51.1	0.1	15.3	22.2	7.5	10.9
Queue Length 50th (ft)	5	0	189	0	19	114	5	41
Queue Length 95th (ft)	19	0	269	0	63	214	m28	105
Internal Link Dist (ft)		571		430		580		317
Turn Bay Length (ft)					125		100	
Base Capacity (vph)	177	387	495	711	425	2286	357	2288
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.03	0.64	0.04	0.20	0.37	0.19	0.29
Intersection Summary								
m Volume for 95th percentile queue is metered by upstream signal.								

HCM 7th Signalized Intersection Summary

3: Picadilly Rd & E 54th Ave/SW Site Access

02/04/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	7	0	10	290	0	28	76	735	40	26	36	606
Future Volume (veh/h)	7	0	10	290	0	28	76	735	40	26	36	606
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0		0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00		1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No			No				No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870		1870	1870
Adj Flow Rate, veh/h	8	0	11	315	0	30	83	799	43		39	659
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2		2	2
Cap, veh/h	73	0	65	356	0	316	416	2148	115		366	2157
Arrive On Green	0.04	0.00	0.04	0.20	0.00	0.20	0.06	0.43	0.43		0.02	0.14
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	4960	266		1781	5182
Grp Volume(v), veh/h	8	0	11	315	0	30	83	548	294		39	433
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1702	1822		1781	1702
Q Serve(g_s), s	0.4	0.0	0.7	17.2	0.0	1.5	2.5	10.9	10.9		1.2	11.4
Cycle Q Clear(g_c), s	0.4	0.0	0.7	17.2	0.0	1.5	2.5	10.9	10.9		1.2	11.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.15		1.00	
Lane Grp Cap(c), veh/h	73	0	65	356	0	316	416	1474	789		366	1417
V/C Ratio(X)	0.11	0.00	0.17	0.89	0.00	0.09	0.20	0.37	0.37		0.11	0.31
Avail Cap(c_a), veh/h	178	0	159	499	0	444	428	1474	789		408	1417
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	46.2	0.0	46.3	38.9	0.0	32.6	15.0	19.2	19.2		15.7	30.1
Incr Delay (d2), s/veh	0.7	0.0	1.2	13.2	0.0	0.1	0.2	0.7	1.4		0.1	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.3	8.7	0.0	0.6	1.0	4.2	4.7		0.5	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	46.8	0.0	47.5	52.1	0.0	32.8	15.2	19.9	20.5		15.8	30.7
LnGrp LOS	D		D	D		C	B	B	C		B	C
Approach Vol, veh/h	19				345				925			
Approach Delay, s/veh	47.2				50.4				19.7			
Approach LOS	D				D				B			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.6	50.3		11.1	13.3	48.6		27.0				
Change Period (Y+Rc), s	7.0	7.0		7.0	7.0	7.0		7.0				
Max Green Setting (Gmax), s	7.0	27.0		10.0	7.0	27.0		28.0				
Max Q Clear Time (g_c+I1), s	3.2	12.9		2.7	4.5	13.5		19.2				
Green Ext Time (p_c), s	0.0	4.4		0.0	0.0	3.3		0.8				
Intersection Summary												
HCM 7th Control Delay, s/veh	28.9											
HCM 7th LOS	C											
Notes												
User approved ignoring U-Turning movement.												

HCM 7th Signalized Intersection Summary 3: Picadilly Rd & E 54th Ave/SW Site Access

02/04/2025








Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	9
Future Volume (veh/h)	9
Initial Q (Qb), veh	0
Lane Width Adj.	1.00
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1870
Adj Flow Rate, veh/h	10
Peak Hour Factor	0.92
Percent Heavy Veh, %	2
Cap, veh/h	33
Arrive On Green	0.14
Sat Flow, veh/h	79
Grp Volume(v), veh/h	236
Grp Sat Flow(s),veh/h/ln	1856
Q Serve(g_s), s	11.5
Cycle Q Clear(g_c), s	11.5
Prop In Lane	0.04
Lane Grp Cap(c), veh/h	773
V/C Ratio(X)	0.31
Avail Cap(c_a), veh/h	773
HCM Platoon Ratio	0.33
Upstream Filter(l)	1.00
Uniform Delay (d), s/veh	30.1
Incr Delay (d2), s/veh	1.0
Initial Q Delay(d3), s/veh	0.0
%ile BackOfQ(50%),veh/ln	5.8
Unsig. Movement Delay, s/veh	
LnGrp Delay(d), s/veh	31.1
LnGrp LOS	C
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

Queues

4: Road A & E 56th Ave

02/04/2025

					
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	620	284	804	90	143
v/c Ratio	0.21	0.46	0.21	0.45	0.47
Control Delay (s/veh)	18.3	6.6	4.1	48.2	12.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.3	6.6	4.1	48.2	12.1
Queue Length 50th (ft)	98	43	44	55	0
Queue Length 95th (ft)	133	82	69	101	54
Internal Link Dist (ft)	795		1121	547	
Turn Bay Length (ft)		325		75	
Base Capacity (vph)	2899	711	3793	513	560
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.21	0.40	0.21	0.18	0.26
Intersection Summary					

HCM 7th Signalized Intersection Summary

4: Road A & E 56th Ave

02/04/2025

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↘	↑↑↑	↘	↗
Traffic Volume (veh/h)	568	3	261	740	83	132
Future Volume (veh/h)	568	3	261	740	83	132
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	617	3	284	804	90	143
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	3106	15	697	3809	203	181
Arrive On Green	1.00	1.00	0.08	0.75	0.11	0.11
Sat Flow, veh/h	5413	25	1781	5274	1781	1585
Grp Volume(v), veh/h	400	220	284	804	90	143
Grp Sat Flow(s),veh/h/ln	1702	1866	1781	1702	1781	1585
Q Serve(g_s), s	0.0	0.0	5.8	4.7	4.7	8.8
Cycle Q Clear(g_c), s	0.0	0.0	5.8	4.7	4.7	8.8
Prop In Lane		0.01	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2016	1105	697	3809	203	181
V/C Ratio(X)	0.20	0.20	0.41	0.21	0.44	0.79
Avail Cap(c_a), veh/h	2016	1105	886	3809	517	460
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	5.5	3.8	41.3	43.1
Incr Delay (d2), s/veh	0.2	0.4	0.4	0.1	1.5	7.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	1.7	1.2	2.1	3.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.2	0.4	5.9	4.0	42.8	50.6
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	620			1088	233	
Approach Delay, s/veh	0.3			4.5	47.6	
Approach LOS	A			A	D	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	15.4	66.2			81.6	18.4
Change Period (Y+Rc), s	7.0	7.0			7.0	7.0
Max Green Setting (Gmax), s	19.0	31.0			57.0	29.0
Max Q Clear Time (g_c+I1), s	7.8	2.0			6.7	10.8
Green Ext Time (p_c), s	0.6	4.3			5.9	0.6
Intersection Summary						
HCM 7th Control Delay, s/veh			8.3			
HCM 7th LOS			A			

HCM 7th TWSC
5: N Site Access & E 56th Ave

02/04/2025

Intersection						
Int Delay, s/veh	0.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↑
Traffic Vol, veh/h	482	65	0	823	0	89
Future Vol, veh/h	482	65	0	823	0	89
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	524	71	0	895	0	97





Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	297
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	0	-	596
Stage 1	-	-	0	-	-
Stage 2	-	-	0	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	596
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	12.21
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	596	-	-	-
HCM Lane V/C Ratio	0.162	-	-	-
HCM Control Delay (s/veh)	12.2	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.6	-	-	-

HCM 7th TWSC
6: Picadilly Rd & W Site Access













02/04/2025

Intersection						
Int Delay, s/veh	0.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	42	719	77	61	677
Future Vol, veh/h	0	42	719	77	61	677
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	75	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	46	782	84	66	736
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	-	433	0	0	865	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	5.34	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	3.12	-
Pot Cap-1 Maneuver	0	488	-	-	454	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	488	-	-	454	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s/v13.13		0		1.18		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	-	488	454	-	
HCM Lane V/C Ratio	-	-	0.093	0.146	-	
HCM Control Delay (s/veh)	-	-	13.1	14.3	-	
HCM Lane LOS	-	-	B	B	-	
HCM 95th %tile Q(veh)	-	-	0.3	0.5	-	

Queues

1: Picadilly Rd & E 56th Ave

04/09/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	755	2641	1447	1533	1489	326	722	1153	1139	455	1458	1137
v/c Ratio	1.57	1.62	1.85	2.40	0.80	0.49	2.10	1.06	1.52	1.09	1.39	1.69
Control Delay (s/veh)	307.7	316.8	414.0	656.4	27.0	8.5	537.2	101.1	268.9	110.2	223.7	347.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	307.7	316.8	414.0	656.4	27.0	8.5	537.2	101.1	268.9	110.2	223.7	347.4
Queue Length 50th (ft)	~538	~1357	~2117	~1269	387	66	~575	~453	~1513	~205	~693	~1588
Queue Length 95th (ft)	#667	#1438	#2388	m#1301	m365	m41	#704	#550	#1782	#322	#790	#1857
Internal Link Dist (ft)		2771			652			510			1611	
Turn Bay Length (ft)	400			375		125	250		175	225		
Base Capacity (vph)	480	1627	781	640	1864	666	343	1084	751	416	1050	671
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.57	1.62	1.85	2.40	0.80	0.49	2.10	1.06	1.52	1.09	1.39	1.69

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

























Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

1: Picadilly Rd & E 56th Ave

04/09/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	695	2430	1331	1410	1370	300	664	1061	1048	419	1341	1046
Future Volume (veh/h)	695	2430	1331	1410	1370	300	664	1061	1048	419	1341	1046
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	755	2641	1447	1533	1489	326	722	1153	1139	455	1458	1137
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	484	1634	666	645	1872	581	346	1089	634	419	1055	549
Arrive On Green	0.14	0.32	0.32	0.31	0.61	0.61	0.10	0.21	0.21	0.09	0.21	0.21
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	755	2641	1447	1533	1489	326	722	1153	1139	455	1458	1137
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	21.0	48.0	48.0	28.0	33.1	18.2	15.0	32.0	32.0	14.0	31.0	31.0
Cycle Q Clear(g_c), s	21.0	48.0	48.0	28.0	33.1	18.2	15.0	32.0	32.0	14.0	31.0	31.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	484	1634	666	645	1872	581	346	1089	634	419	1055	549
V/C Ratio(X)	1.56	1.62	2.17	2.38	0.80	0.56	2.09	1.06	1.80	1.09	1.38	2.07
Avail Cap(c_a), veh/h	484	1634	666	645	1872	581	346	1089	634	419	1055	549
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.5	51.0	43.5	51.6	24.8	21.9	67.5	59.0	45.0	45.7	59.5	49.0
Incr Delay (d2), s/veh	262.2	280.2	533.1	624.2	3.6	3.9	500.0	44.1	364.7	69.5	177.7	487.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	26.7	62.2	122.5	66.6	10.5	5.9	30.5	18.0	87.1	10.2	30.5	94.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	326.7	331.2	576.6	675.8	28.4	25.8	567.5	103.1	409.7	115.2	237.2	536.4
LnGrp LOS	F	F	F	F	C	C	F	F	F	F	F	F
Approach Vol, veh/h	4843			3348			3014			3050		
Approach Delay, s/veh	403.8			324.6			330.2			330.5		
Approach LOS	F			F			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	35.0	55.0	22.0	38.0	28.0	62.0	21.0	39.0				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	28.0	48.0	15.0	31.0	21.0	55.0	14.0	32.0				
Max Q Clear Time (g_c+I1), s	30.0	50.0	17.0	33.0	23.0	35.1	16.0	34.0				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	11.3	0.0	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	354.0											
HCM 7th LOS	F											

Intersection

Int Delay, s/veh 26.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗	↑↑↑	↑↑↑		↑↑↑	↑↑↑	
Traffic Vol, veh/h	0	0	95	0	0	136	0	2637	227	0	4059	23
Future Vol, veh/h	0	0	95	0	0	136	0	2637	227	0	4059	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	103	0	0	148	0	2866	247	0	4412	25

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	-	2218	-	-	1557	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.14	-	-	7.14	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.92	-	-	3.92	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	~ 30	0	0	~ 87	0	-	-	0	-	-
Stage 1	0	0	-	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	0	-	0	-	-	0	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	~ 30	-	-	~ 87	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	\$ 1378.28	\$ 441.08	0	0
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1WBLn1	SBT	SBR
Capacity (veh/h)	-	-	30 87	-	-
HCM Lane V/C Ratio	-	-	3.453 1.699	-	-
HCM Ctrl Dly (s/v)	-	-	\$ 1378.3\$ 441.1	-	-
HCM Lane LOS	-	-	F F	-	-
HCM 95th %tile Q(veh)	-	-	12.3 12.2	-	-

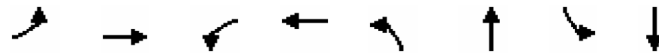
Notes

~: Volume exceeds capacity \$: Delay exceeds 300s
 +: Computation Not Defined *: All major volume in platoon

Queues

3: Picadilly Rd & E 54th Ave/SW Site Access

04/09/2025



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	16	18	186	24	28	3105	59	4407
v/c Ratio	0.13	0.07	0.74	0.07	0.19	1.02	0.40	1.39
Control Delay (s/veh)	63.5	0.5	74.4	0.4	13.8	49.1	23.8	201.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	63.5	0.5	74.4	0.4	13.8	49.1	23.8	201.3
Queue Length 50th (ft)	14	0	165	0	9	~1214	19	~2107
Queue Length 95th (ft)	39	0	237	0	24	#1378	58	#2235
Internal Link Dist (ft)		571		430		580		317
Turn Bay Length (ft)					125		100	
Base Capacity (vph)	126	258	341	423	144	3059	147	3175
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.07	0.55	0.06	0.19	1.02	0.40	1.39

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.





















95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

3: Picadilly Rd & E 54th Ave/SW Site Access

04/09/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	15	0	17	171	0	22	26	2826	30	30	24	4042
Future Volume (veh/h)	15	0	17	171	0	22	26	2826	30	30	24	4042
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0		0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00		1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No			No				No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870		1870	1870
Adj Flow Rate, veh/h	16	0	18	186	0	24	28	3072	33		26	4393
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2		2	2
Cap, veh/h	93	0	83	214	0	190	111	3103	33		109	3123
Arrive On Green	0.05	0.00	0.05	0.12	0.00	0.12	0.03	0.60	0.60		0.03	0.59
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	5209	56		1781	5255
Grp Volume(v), veh/h	16	0	18	186	0	24	28	2004	1101		26	2844
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1702	1860		1781	1702
Q Serve(g_s), s	1.2	0.0	1.5	14.4	0.0	1.9	0.8	81.0	82.1		0.8	83.2
Cycle Q Clear(g_c), s	1.2	0.0	1.5	14.4	0.0	1.9	0.8	81.0	82.1		0.8	83.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.03		1.00	
Lane Grp Cap(c), veh/h	93	0	83	214	0	190	111	2028	1108		109	2023
V/C Ratio(X)	0.17	0.00	0.22	0.87	0.00	0.13	0.25	0.99	0.99		0.24	1.41
Avail Cap(c_a), veh/h	127	0	113	344	0	306	140	2028	1108		141	2023
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	63.4	0.0	63.6	60.5	0.0	55.0	34.6	27.8	28.0		34.6	28.4
Incr Delay (d2), s/veh	0.9	0.0	1.3	12.9	0.0	0.3	1.2	17.4	25.6		1.1	185.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.6	7.3	0.0	0.8	0.6	35.1	41.4		0.5	83.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	64.3	0.0	64.9	73.4	0.0	55.3	35.8	45.2	53.6		35.8	214.1
LnGrp LOS	E		E	E		E	D	D	D		D	F
Approach Vol, veh/h	34			210			3133			4433		
Approach Delay, s/veh	64.6			71.3			48.1			214.3		
Approach LOS	E			E			D			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.5	90.4		14.3	11.6	90.2		23.8				
Change Period (Y+Rc), s	7.0	7.0		7.0	7.0	7.0		7.0				
Max Green Setting (Gmax), s	7.0	68.0		10.0	7.0	68.0		27.0				
Max Q Clear Time (g_c+I1), s	2.8	84.1		3.5	2.8	85.2		16.4				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.5				
Intersection Summary												
HCM 7th Control Delay, s/veh	143.1											
HCM 7th LOS	F											
Notes												
User approved ignoring U-Turning movement.												

HCM 7th Signalized Intersection Summary
3: Picadilly Rd & E 54th Ave/SW Site Access

04/09/2025

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	13
Future Volume (veh/h)	13
Initial Q (Qb), veh	0
Lane Width Adj.	1.00
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1870
Adj Flow Rate, veh/h	14
Peak Hour Factor	0.92
Percent Heavy Veh, %	2
Cap, veh/h	10
Arrive On Green	0.59
Sat Flow, veh/h	17
Grp Volume(v), veh/h	1563
Grp Sat Flow(s),veh/h/ln	1867
Q Serve(g_s), s	83.2
Cycle Q Clear(g_c), s	83.2
Prop In Lane	0.01
Lane Grp Cap(c), veh/h	1110
V/C Ratio(X)	1.41
Avail Cap(c_a), veh/h	1110
HCM Platoon Ratio	1.00
Upstream Filter(I)	1.00
Uniform Delay (d), s/veh	28.4
Incr Delay (d2), s/veh	189.1
Initial Q Delay(d3), s/veh	0.0
%ile BackOfQ(50%),veh/ln	92.3
Unsig. Movement Delay, s/veh	
LnGrp Delay(d), s/veh	217.5
LnGrp LOS	F
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

Queues

4: Road A & E 56th Ave

04/09/2025



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	77	4150	215	3203	24	60	88	50	90
v/c Ratio	0.51	1.53	0.63	0.98	0.02	0.54	0.34	0.28	0.27
Control Delay (s/veh)	16.9	276.9	47.1	38.8	0.0	82.5	5.8	55.1	11.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	16.9	276.9	47.1	38.8	0.0	82.5	5.8	55.1	11.9
Queue Length 50th (ft)	40	~2102	146	1077	0	58	0	42	2
Queue Length 95th (ft)	m29	m#1050	#302	#1376	0	105	15	79	49
Internal Link Dist (ft)		795		1121		547			506
Turn Bay Length (ft)	325		325		200				
Base Capacity (vph)	152	2712	344	3261	1062	234	392	181	496
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	1.53	0.63	0.98	0.02	0.26	0.22	0.28	0.18

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.























Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

4: Road A & E 56th Ave

04/09/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	3813	5	198	2947	22	55	0	81	46	0	83
Future Volume (veh/h)	71	3813	5	198	2947	22	55	0	81	46	0	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	77	4145	5	215	3203	24	60	0	88	50	0	90
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	133	3413	4	143	3352	1041	141	0	113	155	0	252
Arrive On Green	0.03	0.43	0.43	0.05	0.66	0.66	0.07	0.00	0.07	0.04	0.00	0.16
Sat Flow, veh/h	1781	5267	6	1781	5106	1585	1307	0	1585	1781	0	1585
Grp Volume(v), veh/h	77	2678	1472	215	3203	24	60	0	88	50	0	90
Grp Sat Flow(s),veh/h/ln	1781	1702	1869	1781	1702	1585	1307	0	1585	1781	0	1585
Q Serve(g_s), s	2.1	97.2	97.2	8.0	86.7	0.8	6.7	0.0	8.2	3.8	0.0	7.6
Cycle Q Clear(g_c), s	2.1	97.2	97.2	8.0	86.7	0.8	6.7	0.0	8.2	3.8	0.0	7.6
Prop In Lane	1.00		0.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	133	2206	1211	143	3352	1041	141	0	113	155	0	252
V/C Ratio(X)	0.58	1.21	1.22	1.50	0.96	0.02	0.43	0.00	0.78	0.32	0.00	0.36
Avail Cap(c_a), veh/h	136	2206	1211	143	3352	1041	283	0	285	166	0	433
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.1	42.4	42.4	54.6	23.7	9.0	67.8	0.0	68.5	59.3	0.0	56.3
Incr Delay (d2), s/veh	5.8	100.9	104.6	259.4	8.2	0.0	2.0	0.0	11.0	1.2	0.0	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	73.1	81.6	15.7	33.4	0.3	2.3	0.0	3.7	1.8	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	44.9	143.3	147.0	314.0	31.9	9.0	69.8	0.0	79.5	60.5	0.0	57.1
LnGrp LOS	D	F	F	F	C	A	E		E	E		E
Approach Vol, veh/h	4227			3442			148			140		
Approach Delay, s/veh	142.8			49.4			75.6			58.3		
Approach LOS	F			D			E			E		
Timer - Assigned Phs	1	2	3	4	5	6	8					
Phs Duration (G+Y+Rc), s	15.0	104.2	13.1	17.7	13.7	105.5	30.8					
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0					
Max Green Setting (Gmax), s	8.0	80.0	7.0	27.0	7.0	81.0	41.0					
Max Q Clear Time (g_c+I1), s	10.0	99.2	5.8	10.2	4.1	88.7	9.6					
Green Ext Time (p_c), s	0.0	0.0	0.0	0.5	0.0	0.0	0.5					
Intersection Summary												
HCM 7th Control Delay, s/veh	99.7											
HCM 7th LOS	F											

Intersection

Int Delay, s/veh 4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↑↑↑			↑↑↑ ↰					↰			↰
Traffic Vol, veh/h	13	3836	48	0	3067	18	0	0	53	0	0	13
Future Vol, veh/h	13	3836	48	0	3067	18	0	0	53	0	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	4170	52	0	3334	20	0	0	58	0	0	14

Major/Minor	Major1		Major2			Minor1			Minor2			
Conflicting Flow All	3353	0	0	-	-	0	-	-	2111	-	-	1677
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.34	-	-	-	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.12	-	-	-	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	25	-	-	0	-	-	0	0	~ 36	0	0	72
Stage 1	-	-	-	0	-	-	0	0	-	0	0	-
Stage 2	-	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	25	-	-	-	-	-	-	-	~ 36	-	-	72
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.91	0	\$ 548.62	66.96
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	36	25	-	-	-	-	72
HCM Lane V/C Ratio	1.615	0.576	-	-	-	-	0.197
HCM Ctrl Dly (s/v)	\$ 548.6	273.5	-	-	-	-	67
HCM Lane LOS	F	F	-	-	-	-	F
HCM 95th %tile Q(veh)	6.2	1.7	-	-	-	-	0.7

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s
 +: Computation Not Defined *: All major volume in platoon

Intersection

Int Delay, s/veh 3.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑↑↑	↑↑↑		↑↑↑	↑↑↑
Traffic Vol, veh/h	0	28	2836	57	45	4109
Future Vol, veh/h	0	28	2836	57	45	4109
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	75	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	30	3083	62	49	4466

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	1572	0 0 3145 0
Stage 1	-	-	- - -
Stage 2	-	-	- - -
Critical Hdwy	-	7.14	- - 5.34 -
Critical Hdwy Stg 1	-	-	- - -
Critical Hdwy Stg 2	-	-	- - -
Follow-up Hdwy	-	3.92	- - 3.12 -
Pot Cap-1 Maneuver	0	85	- - ~ 32 -
Stage 1	0	-	- - -
Stage 2	0	-	- - -
Platoon blocked, %		-	- - -
Mov Cap-1 Maneuver	-	85	- - ~ 32 -
Mov Cap-2 Maneuver	-	-	- - -
Stage 1	-	-	- - -
Stage 2	-	-	- - -

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	69.46	0	5.92
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	- 85	~ 32	-
HCM Lane V/C Ratio	-	- 0.359	1.542	-
HCM Ctrl Dly (s/v)	-	- 69.5\$	546.6	-
HCM Lane LOS	-	- F	F	-
HCM 95th %tile Q(veh)	-	- 1.4	5.5	-













Notes

~: Volume exceeds capacity \$: Delay exceeds 300s
 +: Computation Not Defined *: All major volume in platoon

Queues

1: Picadilly Rd & E 56th Ave

04/09/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	1338	2026	1141	1749	2761	636	938	1774	1391	288	1259	1095
v/c Ratio	2.34	1.42	1.50	2.39	1.66	1.00	2.16	1.28	1.58	1.13	1.28	1.52
Control Delay (s/veh)	634.2	234.0	261.2	655.1	326.5	34.3	546.4	172.4	296.7	130.0	181.3	269.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	634.2	234.0	261.2	655.1	326.5	34.3	546.4	172.4	296.7	130.0	181.3	269.8
Queue Length 50th (ft)	~1100	~976	~1507	~1441	~1425	362	~764	~822	~1871	~114	~570	~1419
Queue Length 95th (ft)	#1238	#1068	#1776	m#686	m498	m83	m#485	m481	m#1068	#212	#668	#1688
Internal Link Dist (ft)	2771				652				510			
Turn Bay Length (ft)	400			375			125			175		
Base Capacity (vph)	572	1423	761	732	1661	639	434	1389	881	256	983	721
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	2.34	1.42	1.50	2.39	1.66	1.00	2.16	1.28	1.58	1.13	1.28	1.52

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.































Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

1: Picadilly Rd & E 56th Ave

04/09/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  		 	  		 	  				
Traffic Volume (veh/h)	1231	1864	1050	1609	2540	585	863	1632	1280	265	1158	1007
Future Volume (veh/h)	1231	1864	1050	1609	2540	585	863	1632	1280	265	1158	1007
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1338	2026	1141	1749	2761	636	938	1774	1391	288	1259	1095
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	576	1430	645	737	1668	518	438	1396	771	257	987	571
Arrive On Green	0.17	0.28	0.28	0.28	0.43	0.43	0.04	0.09	0.09	0.05	0.19	0.19
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	1338	2026	1141	1749	2761	636	938	1774	1391	288	1259	1095
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	25.0	42.0	42.0	32.0	49.0	49.0	19.0	41.0	41.0	7.0	29.0	29.0
Cycle Q Clear(g_c), s	25.0	42.0	42.0	32.0	49.0	49.0	19.0	41.0	41.0	7.0	29.0	29.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	576	1430	645	737	1668	518	438	1396	771	257	987	571
V/C Ratio(X)	2.32	1.42	1.77	2.37	1.66	1.23	2.14	1.27	1.80	1.12	1.28	1.92
Avail Cap(c_a), veh/h	576	1430	645	737	1668	518	438	1396	771	257	987	571
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.5	54.0	44.5	53.7	42.4	42.4	71.9	68.2	44.2	54.6	60.5	48.0
Incr Delay (d2), s/veh	600.8	191.9	352.9	621.8	297.6	118.9	521.9	127.8	366.6	92.0	131.8	420.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	58.8	42.9	86.4	76.6	64.5	34.6	40.6	35.3	102.4	4.9	24.4	87.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	663.3	245.9	397.4	675.5	340.0	161.3	593.8	196.0	410.8	146.7	192.3	468.0
LnGrp LOS	F	F	F	F	F	F	F	F	F	F	F	F
Approach Vol, veh/h	4505			5146			4103			2642		
Approach Delay, s/veh	408.2			431.9			359.8			301.6		
Approach LOS	F			F			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	39.0	49.0	26.0	36.0	32.0	56.0	14.0	48.0				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	32.0	42.0	19.0	29.0	25.0	49.0	7.0	41.0				
Max Q Clear Time (g_c+l1), s	34.0	44.0	21.0	31.0	27.0	51.0	9.0	43.0				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	386.4											
HCM 7th LOS	F											

Intersection

Int Delay, s/veh 69.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↱			↱		↱↱↱			↱↱↱	
Traffic Vol, veh/h	0	0	53	0	0	205	0	3570	310	0	3790	27
Future Vol, veh/h	0	0	53	0	0	205	0	3570	310	0	3790	27
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	58	0	0	223	0	3880	337	0	4120	29

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	-	2074	-	-	2109	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.14	-	-	7.14	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.92	-	-	3.92	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	~ 38	0	0	~ 36	0	-	-	0	-	-
Stage 1	0	0	-	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	0	-	0	-	-	0	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	~ 38	-	-	~ 36	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	\$ 498.67	\$ 2571.57	0	0
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1WBLn1	SBT	SBR
Capacity (veh/h)	-	-	38 36	-	-
HCM Lane V/C Ratio	-	-	1.522 6.226	-	-
HCM Ctrl Dly (s/v)	-	-	\$ 498.67 \$ 2571.6	-	-
HCM Lane LOS	-	-	F F	-	-
HCM 95th %tile Q(veh)	-	-	6 26.5	-	-

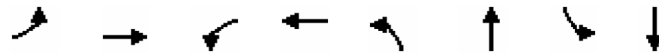
Notes

~: Volume exceeds capacity \$: Delay exceeds 300s
 +: Computation Not Defined *: All major volume in platoon

Queues

3: Picadilly Rd & E 54th Ave/SW Site Access

04/09/2025



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	8	11	315	30	83	4232	67	4044
v/c Ratio	0.07	0.05	0.88	0.07	0.62	1.46	0.50	1.44
Control Delay (s/veh)	67.1	0.4	83.5	0.3	43.2	238.0	28.5	224.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	67.1	0.4	83.5	0.3	43.2	238.0	28.5	224.8
Queue Length 50th (ft)	8	0	306	0	32	~2179	14	~2056
Queue Length 95th (ft)	27	0	#489	0	#103	#2215	m9	m871
Internal Link Dist (ft)		571		430		580		317
Turn Bay Length (ft)					125		100	
Base Capacity (vph)	141	247	357	452	134	2893	133	2801
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.04	0.88	0.07	0.62	1.46	0.50	1.44

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.





















Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

3: Picadilly Rd & E 54th Ave/SW Site Access

04/09/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	7	0	10	290	0	28	76	3854	40	26	36	3711
Future Volume (veh/h)	7	0	10	290	0	28	76	3854	40	26	36	3711
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0		0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00		1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No			No				No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870		1870	1870
Adj Flow Rate, veh/h	8	0	11	315	0	30	83	4189	43		39	4034
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2		2	2
Cap, veh/h	65	0	58	321	0	285	129	2985	31		115	2971
Arrive On Green	0.04	0.00	0.04	0.18	0.00	0.18	0.05	0.57	0.57		0.07	1.00
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	5212	53		1781	5259
Grp Volume(v), veh/h	8	0	11	315	0	30	83	2731	1501		39	2610
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1702	1861		1781	1702
Q Serve(g_s), s	0.7	0.0	1.0	26.4	0.0	2.4	2.9	85.9	85.9		1.3	84.8
Cycle Q Clear(g_c), s	0.7	0.0	1.0	26.4	0.0	2.4	2.9	85.9	85.9		1.3	84.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.03		1.00	
Lane Grp Cap(c), veh/h	65	0	58	321	0	285	129	1950	1066		115	1923
V/C Ratio(X)	0.12	0.00	0.19	0.98	0.00	0.11	0.65	1.40	1.41		0.34	1.36
Avail Cap(c_a), veh/h	143	0	127	321	0	285	131	1950	1066		131	1923
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	69.9	0.0	70.1	61.3	0.0	51.4	35.9	32.0	32.0		34.7	0.0
Incr Delay (d2), s/veh	0.8	0.0	1.6	45.3	0.0	0.2	10.2	183.6	189.3		1.7	164.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.4	16.0	0.0	1.0	2.0	82.7	92.1		0.8	43.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	70.8	0.0	71.7	106.6	0.0	51.6	46.1	215.6	221.4		36.4	164.1
LnGrp LOS	E		E	F		D	D	F	F		D	F
Approach Vol, veh/h	19			345			4315			4083		
Approach Delay, s/veh	71.3			101.8			214.4			164.1		
Approach LOS	E			F			F			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.6	92.9		10.5	13.8	91.8		34.0				
Change Period (Y+Rc), s	7.0	7.0		5.0	7.0	7.0		7.0				
Max Green Setting (Gmax), s	7.0	78.0		12.0	7.0	78.0		27.0				
Max Q Clear Time (g_c+l1), s	3.3	87.9		3.0	4.9	86.8		28.4				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	186.2											
HCM 7th LOS	F											
Notes												
User approved ignoring U-Turning movement.												

HCM 7th Signalized Intersection Summary
3: Picadilly Rd & E 54th Ave/SW Site Access










04/09/2025

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	9
Future Volume (veh/h)	9
Initial Q (Qb), veh	0
Lane Width Adj.	1.00
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1870
Adj Flow Rate, veh/h	10
Peak Hour Factor	0.92
Percent Heavy Veh, %	2
Cap, veh/h	7
Arrive On Green	1.00
Sat Flow, veh/h	13
Grp Volume(v), veh/h	1434
Grp Sat Flow(s),veh/h/ln	1868
Q Serve(g_s), s	84.8
Cycle Q Clear(g_c), s	84.8
Prop In Lane	0.01
Lane Grp Cap(c), veh/h	1055
V/C Ratio(X)	1.36
Avail Cap(c_a), veh/h	1055
HCM Platoon Ratio	2.00
Upstream Filter(I)	1.00
Uniform Delay (d), s/veh	0.0
Incr Delay (d2), s/veh	167.6
Initial Q Delay(d3), s/veh	0.0
%ile BackOfQ(50%),veh/ln	49.1
Unsig. Movement Delay, s/veh	
LnGrp Delay(d), s/veh	167.6
LnGrp LOS	F
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

Queues

4: Road A & E 56th Ave

04/09/2025

									
Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	186	3503	284	4900	85	90	143	114	152
v/c Ratio	0.73	1.34	0.94	1.79	0.09	0.67	0.49	0.51	0.39
Control Delay (s/veh)	36.5	194.2	84.0	380.4	0.7	86.6	17.3	58.3	23.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	36.5	194.2	84.0	380.4	0.7	86.6	17.3	58.3	23.2
Queue Length 50th (ft)	136	~1609	226	~2620	0	86	11	96	50
Queue Length 95th (ft)	m83	m845	#497	#2634	5	142	75	148	112
Internal Link Dist (ft)		795		1121		547			506
Turn Bay Length (ft)	325		325		200				
Base Capacity (vph)	256	2610	303	2745	915	221	392	225	498
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.73	1.34	0.94	1.79	0.09	0.41	0.36	0.51	0.31

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.


























Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

4: Road A & E 56th Ave

04/09/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  				 			
Traffic Volume (veh/h)	171	3220	3	261	4508	78	83	0	132	105	0	140
Future Volume (veh/h)	171	3220	3	261	4508	78	83	0	132	105	0	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	186	3500	3	284	4900	85	90	0	143	114	0	152
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	131	3090	3	179	3131	972	180	0	169	177	0	317
Arrive On Green	0.03	0.39	0.39	0.07	0.61	0.61	0.11	0.00	0.11	0.05	0.00	0.20
Sat Flow, veh/h	1781	5269	5	1781	5106	1585	1235	0	1585	1781	0	1585
Grp Volume(v), veh/h	186	2261	1242	284	4900	85	90	0	143	114	0	152
Grp Sat Flow(s),veh/h/ln	1781	1702	1870	1781	1702	1585	1235	0	1585	1781	0	1585
Q Serve(g_s), s	7.0	88.0	88.0	11.0	92.0	3.3	10.5	0.0	13.3	7.0	0.0	12.7
Cycle Q Clear(g_c), s	7.0	88.0	88.0	11.0	92.0	3.3	10.5	0.0	13.3	7.0	0.0	12.7
Prop In Lane	1.00		0.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	131	1997	1097	179	3131	972	180	0	169	177	0	317
V/C Ratio(X)	1.42	1.13	1.13	1.59	1.57	0.09	0.50	0.00	0.84	0.64	0.00	0.48
Avail Cap(c_a), veh/h	131	1997	1097	179	3131	972	270	0	285	177	0	433
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.2	45.5	45.5	54.3	29.0	11.9	64.5	0.0	65.8	58.3	0.0	53.1
Incr Delay (d2), s/veh	226.9	66.5	71.5	290.3	255.8	0.2	2.1	0.0	10.9	7.8	0.0	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.4	56.9	64.0	21.1	108.1	1.2	3.4	0.0	5.9	1.2	0.0	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	278.2	112.0	117.0	344.6	284.9	12.0	66.7	0.0	76.7	66.2	0.0	54.2
LnGrp LOS	F	F	F	F	F	B	E		E	E		D
Approach Vol, veh/h	3689			5269			233			266		
Approach Delay, s/veh	122.1			283.7			72.8			59.3		
Approach LOS	F			F			E			E		
Timer - Assigned Phs	1	2	3	4	5	6	8					
Phs Duration (G+Y+Rc), s	18.0	95.0	14.0	23.0	14.0	99.0	37.0					
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0					
Max Green Setting (Gmax), s	11.0	77.0	7.0	27.0	7.0	81.0	41.0					
Max Q Clear Time (g_c+I1), s	13.0	90.0	9.0	15.3	9.0	94.0	14.7					
Green Ext Time (p_c), s	0.0	0.0	0.0	0.7	0.0	0.0	0.9					
Intersection Summary												
HCM 7th Control Delay, s/veh	209.1											
HCM 7th LOS	F											

Intersection

Int Delay, s/veh 56.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑			↑↑↑					↑			↑
Traffic Vol, veh/h	39	3305	65	0	4696	35	0	0	89	0	0	38
Future Vol, veh/h	39	3305	65	0	4696	35	0	0	89	0	0	38
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	42	3592	71	0	5104	38	0	0	97	0	0	41

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	5142	0	0	-	-	0	-	-	1832	-	-	2571
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.34	-	-	-	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.12	-	-	-	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	~ 3	-	-	0	-	-	0	0	~ 56	0	0	~ 17
Stage 1	-	-	-	0	-	-	0	0	-	0	0	-
Stage 2	-	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	~ 3	-	-	-	-	-	-	-	~ 56	-	-	~ 17
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	112.01	0	\$ 508.88	\$ 1143.62
HCM LOS			F	F





Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	56	~ 3	-	-	-	-	17
HCM Lane V/C Ratio	1.725	16.741	-	-	-	-	2.473
HCM Ctrl Dly (s/v)	\$ 508.88	\$ 9790.9	-	-	-	-	\$ 1143.6
HCM Lane LOS	F	F	-	-	-	-	F
HCM 95th %tile Q(veh)	9.1	7.2	-	-	-	-	5.8

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s
 +: Computation Not Defined *: All major volume in platoon

Intersection

Int Delay, s/veh 35.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		 			 	
Traffic Vol, veh/h	0	42	3838	77	61	3782
Future Vol, veh/h	0	42	3838	77	61	3782
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	75	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	46	4172	84	66	4111

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	2128	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	7.14	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.92	-
Pot Cap-1 Maneuver	0	~ 35	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	-	~ 35	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	\$ 437.65	0	67.18
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	35	~ 8
HCM Lane V/C Ratio	-	-	1.316	8.375
HCM Ctrl Dly (s/v)	-	-	\$ 437.65	\$ 4232.4
HCM Lane LOS	-	-	F	F
HCM 95th %tile Q(veh)	-	-	4.9	9.8

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s
 +: Computation Not Defined *: All major volume in platoon

APPENDIX H – Signal Warrant Analysis Tables & Figures

Timeframe	Existing		
	Major	Minor - NB	Minor - SB
7:00 AM - 8:00 AM	791	338	320
8:00 AM - 9:00 AM	749	289	236
9:00 AM - 10:00 AM	539	185	175
10:00 AM - 11:00 AM	477	176	180
11:00 AM - 12:00 PM	598	195	182
12:00 PM - 1:00 PM	621	218	196
1:00 PM - 2:00 PM	674	235	217
2:00 PM - 3:00 PM	716	267	257
3:00 PM - 4:00 PM	853	349	283
4:00 PM - 5:00 PM	867	355	279
5:00 PM - 6:00 PM	919	400	254
6:00 PM - 7:00 PM	689	279	212

INTERSECTION: E 56th Ave & Picadilly Rd

Table 4C-1. Warrant 1, Eight-Hour Vehicular Volume

Condition A—Minimum Vehicular Volume

Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)				Vehicles per hour on higher-volume minor-street approach (one direction only)			
Major Street	Minor Street	100% ^a	80% ^b	70% ^c	56% ^d	100% ^a	80% ^b	70% ^c	56% ^d
1	1	500	400	350	280	150	120	105	84
2 or more	1	600	480	420	336	150	120	105	84
2 or more	2 or more	600	480	420	336	200	160	140	112
1	2 or more	500	400	350	280	200	160	140	112

Condition B—Interruption of Continuous Traffic

Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)				Vehicles per hour on higher-volume minor-street approach (one direction only)			
Major Street	Minor Street	100% ^a	80% ^b	70% ^c	56% ^d	100% ^a	80% ^b	70% ^c	56% ^d
1	1	750	600	525	420	75	60	53	42
2 or more	1	900	720	630	504	75	60	53	42
2 or more	2 or more	900	720	630	504	100	80	70	56
1	2 or more	750	600	525	420	100	80	70	56

^a Basic minimum hourly volume

^b Used for combination of Conditions A and B after adequate trial of other remedial measures

^c May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

^d May be used for combination of Conditions A and B after adequate trial of other remedial measures when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

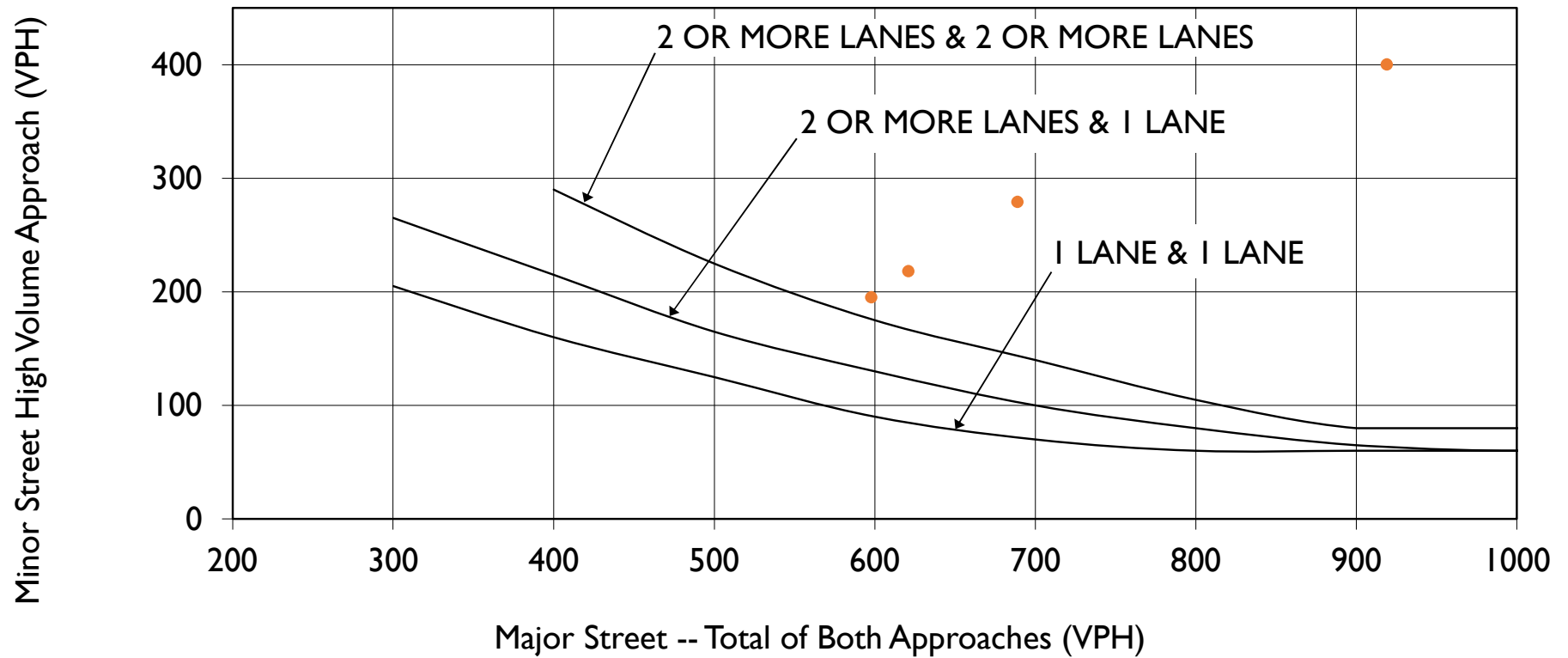
INPUT VOLUMES

Condition	Major Street (total of both approaches)	Minor Street (high volume approach)	Lane Types
Existing 11 am - 12 pm	598	195	2 or More Lanes & 2 or More Lanes
Existing 12 pm - 1 pm	621	218	2 or More Lanes & 2 or More Lanes
Existing 5pm - 6 pm	919	400	2 or More Lanes & 2 or More Lanes
Existing 6 pm - 7 pm	689	279	2 or More Lanes & 2 or More Lanes

INTERSECTION: E 56th Ave & Picadilly Rd

● Existing

Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)



Timeframe	Total Future 2026			Total Future 2050		
	Major	Minor - EB	Minor - WB	Major	Minor - EB	Minor - WB
7:00 AM - 8:00 AM	1,063	40	129	6,566	284	129
8:00 AM - 9:00 AM	1,048	34	194	5,998	242	194
9:00 AM - 10:00 AM	848	13	330	3,571	92	330
10:00 AM - 11:00 AM	1,046	8	501	3,695	59	501
11:00 AM - 12:00 PM	1,287	21	643	4,354	150	643
12:00 PM - 1:00 PM	1,440	26	756	4,608	183	756
1:00 PM - 2:00 PM	1,395	19	724	4,510	133	724
2:00 PM - 3:00 PM	1,551	20	674	5,993	142	674
3:00 PM - 4:00 PM	1,837	18	677	7,996	125	677
4:00 PM - 5:00 PM	1,857	16	708	7,910	116	708
5:00 PM - 6:00 PM	1,876	16	721	7,935	117	721
6:00 PM - 7:00 PM	1,469	30	634	5,725	208	634

INTERSECTION: E 54th Ave & Picadilly Rd

Table 4C-1. Warrant 1, Eight-Hour Vehicular Volume

Condition A—Minimum Vehicular Volume

Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)				Vehicles per hour on higher-volume minor-street approach (one direction only)			
Major Street	Minor Street	100% ^a	80% ^b	70% ^c	56% ^d	100% ^a	80% ^b	70% ^c	56% ^d
1	1	500	400	350	280	150	120	105	84
2 or more	1	600	480	420	336	150	120	105	84
2 or more	2 or more	600	480	420	336	200	160	140	112
1	2 or more	500	400	350	280	200	160	140	112

Condition B—Interruption of Continuous Traffic

Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)				Vehicles per hour on higher-volume minor-street approach (one direction only)			
Major Street	Minor Street	100% ^a	80% ^b	70% ^c	56% ^d	100% ^a	80% ^b	70% ^c	56% ^d
1	1	750	600	525	420	75	60	53	42
2 or more	1	900	720	630	504	75	60	53	42
2 or more	2 or more	900	720	630	504	100	80	70	56
1	2 or more	750	600	525	420	100	80	70	56

^a Basic minimum hourly volume

^b Used for combination of Conditions A and B after adequate trial of other remedial measures

^c May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

^d May be used for combination of Conditions A and B after adequate trial of other remedial measures when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

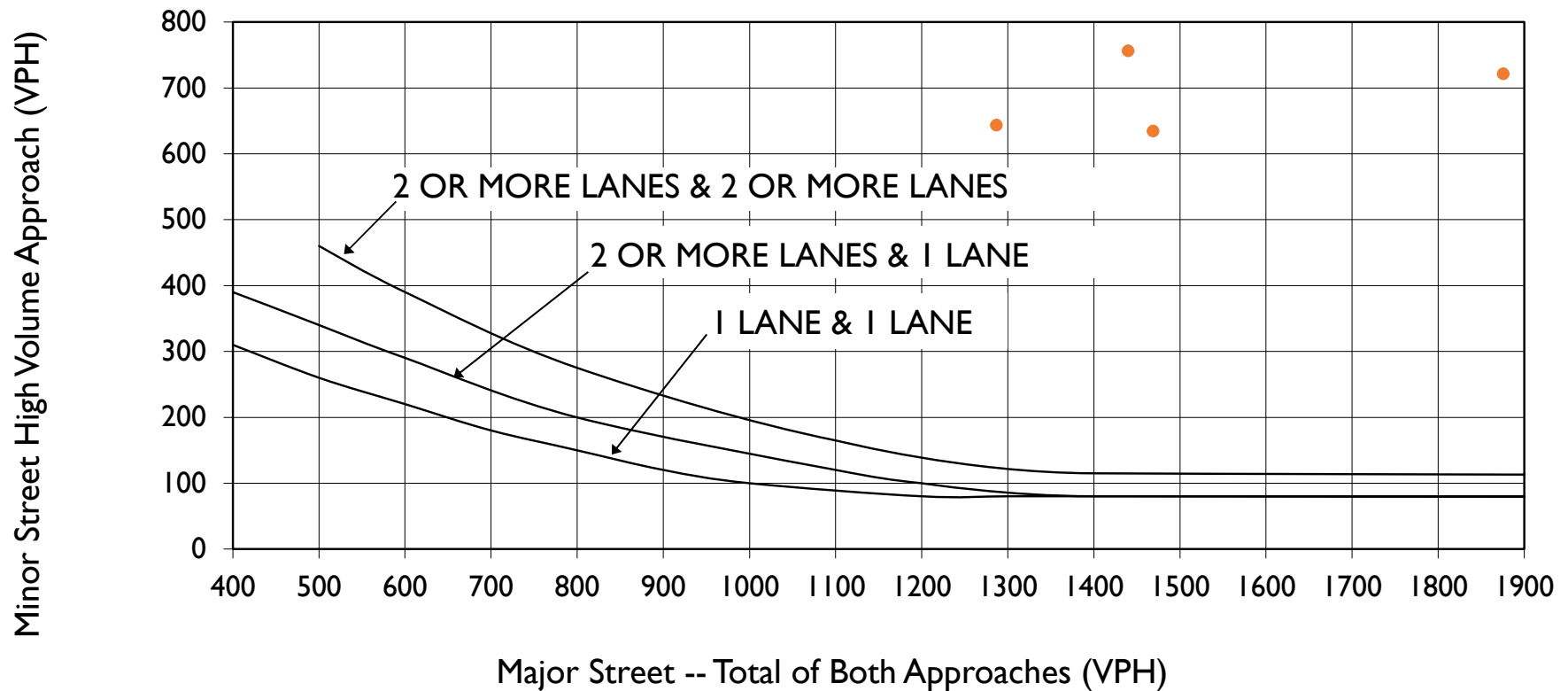
INPUT VOLUMES

Condition	Major Street (total of both approaches)	Minor Street (high volume approach)	Lane Types
TF 2026 11am - 12 pm	1,287	643	2 or More Lanes & 1 Lane
TF 2026 12 pm - 1 pm	1,440	756	2 or More Lanes & 1 Lane
TF 2026 5pm - 6 pm	1,876	721	2 or More Lanes & 1 Lane
TF 2026 6 pm - 7 pm	1,469	634	2 or More Lanes & 1 Lane
TF 2050 11am - 12 pm	4,354	643	2 or More Lanes & 1 Lane
TF 2050 12pm - 1 pm	4,608	756	2 or More Lanes & 1 Lane
TF 2050 5 pm - 6 pm	7,935	721	2 or More Lanes & 1 Lane
TF 2050 6 pm - 7 pm	5,725	634	2 or More Lanes & 1 Lane

INTERSECTION: E 54th Ave & Picadilly Rd

- TF 2026
- TF 2050

Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



Timeframe	Total Future 2026		Total Future 2050	
	Major	Minor - NB	Major	Minor - NB
7:00 AM - 8:00 AM	1,017	29	6,389	29
8:00 AM - 9:00 AM	942	44	5,454	44
9:00 AM - 10:00 AM	911	74	4,393	74
10:00 AM - 11:00 AM	1,020	112	4,108	112
11:00 AM - 12:00 PM	1,301	144	5,198	144
12:00 PM - 1:00 PM	1,416	169	5,313	169
1:00 PM - 2:00 PM	1,463	162	5,839	162
2:00 PM - 3:00 PM	1,417	152	5,830	152
3:00 PM - 4:00 PM	1,559	152	6,817	152
4:00 PM - 5:00 PM	1,614	159	7,007	159
5:00 PM - 6:00 PM	1,687	162	7,439	162
6:00 PM - 7:00 PM	1,283	142	5,122	142

INTERSECTION: E 56th Ave & Road A

Table 4C-1. Warrant 1, Eight-Hour Vehicular Volume

Condition A—Minimum Vehicular Volume

Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)				Vehicles per hour on higher-volume minor-street approach (one direction only)			
Major Street	Minor Street	100% ^a	80% ^b	70% ^c	56% ^d	100% ^a	80% ^b	70% ^c	56% ^d
1	1	500	400	350	280	150	120	105	84
2 or more	1	600	480	420	336	150	120	105	84
2 or more	2 or more	600	480	420	336	200	160	140	112
1	2 or more	500	400	350	280	200	160	140	112

Condition B—Interruption of Continuous Traffic

Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)				Vehicles per hour on higher-volume minor-street approach (one direction only)			
Major Street	Minor Street	100% ^a	80% ^b	70% ^c	56% ^d	100% ^a	80% ^b	70% ^c	56% ^d
1	1	750	600	525	420	75	60	53	42
2 or more	1	900	720	630	504	75	60	53	42
2 or more	2 or more	900	720	630	504	100	80	70	56
1	2 or more	750	600	525	420	100	80	70	56

^a Basic minimum hourly volume

^b Used for combination of Conditions A and B after adequate trial of other remedial measures

^c May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

^d May be used for combination of Conditions A and B after adequate trial of other remedial measures when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

INPUT VOLUMES

Condition	Major Street (total of both approaches)	Minor Street (high volume approach)	Lane Types
TF 2026 11am - 12 pm	1,301	144	2 or More Lanes & 2 or More Lanes
TF 2026 12 pm - 1 pm	1,416	169	2 or More Lanes & 2 or More Lanes
TF 2026 5pm - 6 pm	1,687	162	2 or More Lanes & 2 or More Lanes
TF 2026 6 pm - 7 pm	1,283	142	2 or More Lanes & 2 or More Lanes
TF 2050 11am - 12 pm	5,198	144	2 or More Lanes & 2 or More Lanes
TF 2050 12pm - 1 pm	5,313	169	2 or More Lanes & 2 or More Lanes
TF 2050 5 pm - 6 pm	7,439	162	2 or More Lanes & 2 or More Lanes
TF 2050 6 pm - 7 pm	5,122	142	2 or More Lanes & 2 or More Lanes

INTERSECTION: E 56th Ave & Road A

- TF 2026
- TF 2050

Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)

