TRAFFIC IMPACT STUDY FOR

6000 CONDOR DRIVE WAREHOUSING/DISTRIBUTION FACILITY

DATE:
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LOCATION:
Moorpark, CA

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Moorpark Planning Division

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A. Executive Summary

An existing 189,364 square foot industrial building is proposed to be redeveloped to operate as a distribution center at 6000 Condor Drive in Moorpark, California. The proposed project is anticipated to generate the majority of traffic outside of the AM (7:00-9:00) and PM (4:00-6:00) peak periods. While the site will generate two (2) trips during the traffic network's AM peak hour (1 in, 1 out) and 61 trips during the PM peak hour (41 in, 20 out), taking a trip credit for the existing warehouse use on-site would result in a net -17 trips (-6 in, -11 out) in the AM peak hour and 12 trips (29 in, -17 out) in the PM peak hour. The project is anticipated to be complete by 2022. Site access is provided by one driveway on Condor Drive. Traffic capacity analyses were completed for Existing, Existing with the Proposed Project, No-Build (future without the proposed project), and Build (future with the proposed project) conditions.

The study network includes the following intersections:

1. Princeton Avenue/High Street & Spring Road
2. Princeton Avenue & Condor Drive (South)
3. Princeton Avenue & Condor Drive (North)
4. Princeton Avenue & SR 118 EB Ramps
5. Princeton Avenue & SR 118 WB Ramps
6. Princeton Avenue & Campus Park Drive
7. Collins Drive & Campus Park Drive

Analysis results indicate that the transportation network experiences congested conditions at multiple study area intersections in one or more peak hours in the existing condition. However, site-generated traffic is not anticipated to cause degradation of LOS beyond LOS C at any intersections in the study area. Therefore, mitigation is not proposed at any study area intersection to accommodate site traffic.

B. Introduction

B.1. Project Description

An existing 189,364 square foot industrial building is proposed to be redeveloped to operate as a distribution center at 6000 Condor Drive in Moorpark, California. Access to the site will be via one (1) driveway entrance on Condor Drive. Parking for up to 375 passenger cars and vans will be available on-site.

B.2. Project Location

The proposed site location is along Condor Drive and just south of California State Route 118 (SR 118). The site is located on the eastern portion of Moorpark, approximately 1,500 feet southeast of the SR 118 entrance and exit ramps to Princeton Avenue. Condor Drive serves several other commercial buildings adjacent to the project site.

B.3. Project Purpose

The purpose of this report is to identify the effects of traffic expected to be generated by the new development at intersections in the study area, as well as identify potential mitigation measures to alleviate traffic congestion caused by the new development. The report includes a discussion of existing traffic volumes, future traffic volumes with and without the new development, trip generation, directional distribution, and the impacts of new development generated traffic at the study area intersections.

The scope of this traffic impact analysis was coordinated with staff from the Moorpark Planning Division. The study area included seven intersections, which are shown on Figure 1 and listed below:

1. Princeton Avenue/High Street & Spring Road
2. Princeton Avenue & Condor Drive (South)
3. Princeton Avenue & Condor Drive (North)
4. Princeton Avenue & SR 118 EB Ramps
5. Princeton Avenue & SR 118 WB Ramps
6. Princeton Avenue & Campus Park Drive
7. Collins Drive & Campus Park Drive

The report summarizes the data collected, background and projected traffic at the study locations, analysis of traffic impacts including levels of service (LOS), assessment of the site entrance, and conclusions/recommendations from the analysis.

Figure 1 shows the site's location in Moorpark and the traffic analysis locations. Figure 2 illustrates the lane configuration at each traffic analysis location. Appendix A includes a copy of the site development concept plan.

Figure 1. Site and Traffic Analysis Locations

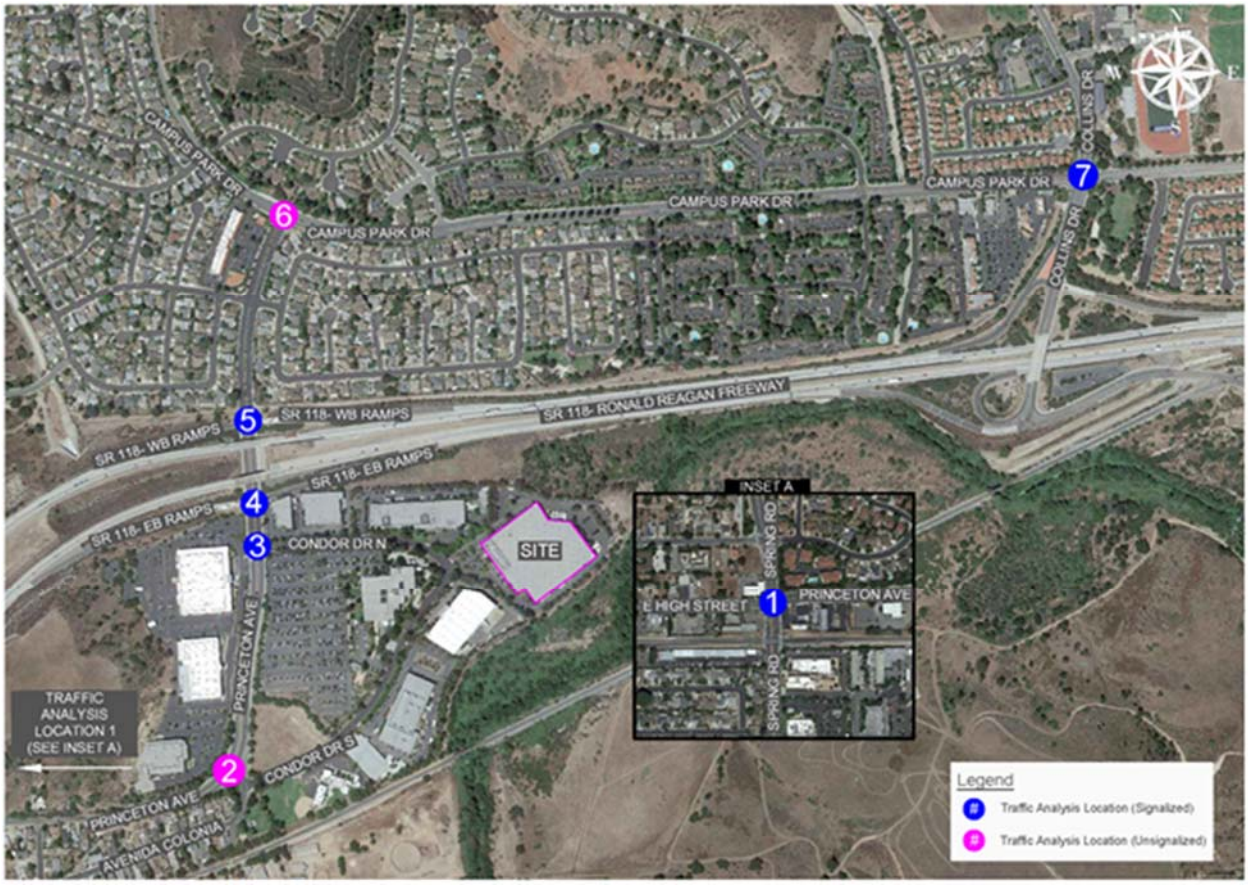
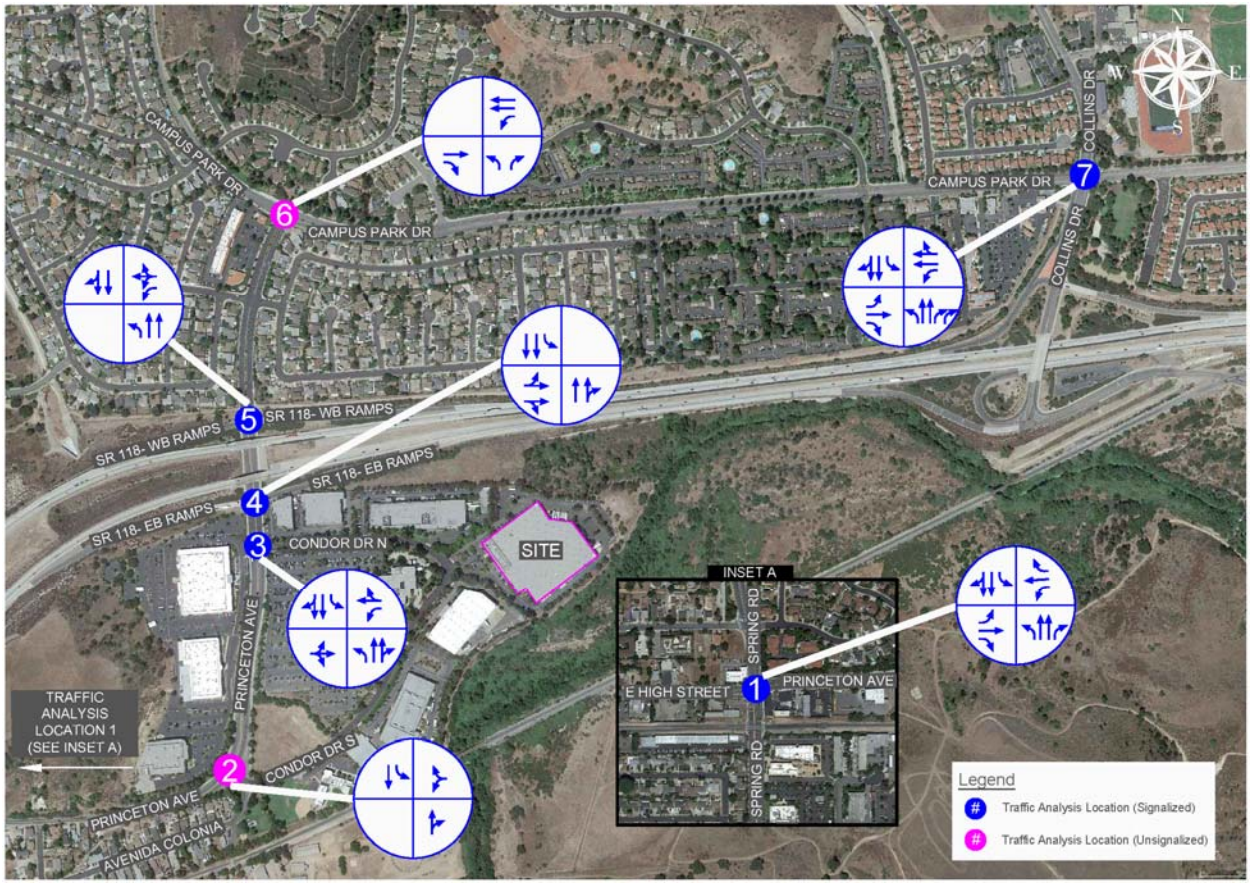


Figure 2. Lane Configuration



C. Existing Conditions

C.1. Transportation Facilities

PRINCETON AVENUE is a northeast-southwest arterial roadway classified by CalTrans as a principle arterial south SR 118, and a minor arterial north of SR 118. It has a posted speed of 40 MPH. The majority of Princeton Avenue has two travel lanes in each direction with left-turn bays typically provided at intersections, with the exception of an ¾-mile long segment south of Condor Drive (south) which operates with one lane in each direction. The roadway terminates in the north at Campus Park Drive, and continues as High Street west of Spring Road. Princeton Avenue facilitates travel to SR 118, a residential neighborhood north of SR 118 including Moorpark College, and the majority of the City of Moorpark located to the west. Land use along the roadway in the vicinity of the project site is primarily industrial and commercial.

SPRING ROAD is a four-lane north-south divided roadway classified by CalTrans as a minor arterial south of Princeton Avenue, and a local road north of Princeton Avenue. The roadway intersects with several major east-west roadways in the city before terminating at Tierra Rejada Road in the south. The roadway's posted speed is 40 MPH. Land use along Spring Road is primarily undeveloped north of Princeton Avenue. However, the land-use transitions to a mix of residential and commercial south of Princeton Avenue.

CAMPUS PARK DRIVE is a four-lane divided east-west roadway with a posted speed of 45 MPH, serving as the primary roadway for the residential neighborhood north of SR 118 in Moorpark. Campus Park Drive is classified as a minor arterial east of Princeton Avenue, and major collector west of Princeton Avenue. The roadway begins in the west, continuing from Happy Camp Canyon Road and terminates at Campus Road near Moorpark College in the east. Land uses along the roadway are primarily residential.

CONDOR DRIVE is a two-lane local road that provides the primary access to the site as well as several other commercial developments. Condor Drive is a loop road which terminates at Princeton Avenue at both the north and southern ends. Condor Drive has a posted speed limit of 30 MPH. Land uses served by the roadway is primarily commercial (light industrial and office).

CALIFORNIA STATE ROUTE 118 (SR 118) is a limited access freeway with two lanes in each direction near the site that provides access to Simi Valley, Los Angeles, and other locations to the east. The limited access freeway continues as SR 23 further south of the site, continuing into the neighboring town of Thousand Oaks. At this point, SR 118 diverts onto Los Angeles Avenue continuing west through Moorpark as a six lane divided principle arterial.

C.2. Traffic Counts

As new traffic data could not be collected due to the present abnormal traffic conditions caused by the Covid-19 pandemic, historical turning movement count data (pre-2020) was sought for the study area intersections. Manual TMC data was available for only two intersections: (1) Princeton Avenue/High Street & Spring Road and (2) Princeton Avenue & Condor Drive (South). For Princeton Avenue/High Street & Spring Road, TMC data from April 2019 provided the Moorpark Planning Division was utilized. For Princeton Avenue & Condor Drive (South), weekday AM and PM peak hour volumes from the 5850 Condor Drive Traffic Study (collected September 2019) were utilized. For the remaining five intersections, historical TMC data from the Fall of 2019 was extracted from the Streetlight Insight Data platform, which utilizes anonymized location records from smartphones and GPS devices to measure traffic activity on roadways in North America. TMC reports for all intersections are provided in Appendix B

The data from these counts help to establish an overall picture of the existing traffic conditions within the study area. Figure 3 presents the Existing Condition peak hour volumes for these locations. It should be noted that as traffic data was obtained for 2019, all traffic volumes were increased by a compounded background growth rate of 2.1 percent for one year to account for minor changes in the traffic network between 2019 and 2020[1].

C.3. Existing Capacity Analysis

Traffic Analysis Methodology

Signalized traffic analysis was conducted using the Intersection Control Utilization (ICU) methodology. The ICU methodology can provide insight into the function of an intersection and the additional capacity available to deal with changes in traffic demand. The ICU LOS reports on the amount of reserve capacity or capacity deficit.

Level of service (a rating ranging from excellent operating conditions at LOS A to failing operating conditions at LOS H) is a concept developed to quantify the degree of comfort experienced by drivers. The LOS designations for signalized intersection analyses based on volume to capacity ratios are provided in Table 1. Per City of Moorpark Guidelines for Preparing Traffic and Circulation Studies, the minimum acceptable operating standard LOS for intersections is LOS C. If the LOS for a traffic analysis location falls below LOS C attributable to traffic generated by the proposed project, additional mitigation measures must be considered to improve LOS with the proposed project.

It should be noted that per City of Moorpark Guidelines for Preparing Traffic and Circulation Studies include lane capacities of 1,500 vph for left and right turn lanes and 1,600 vph for through lanes that should be assumed throughout the ICU analysis.

[1] TMC counts obtained at the intersection of Princeton Avenue/High Street & Spring Road during 2015 and 2019 were compared to develop an annual compounded background growth rate for traffic volumes.

As the ICU methodology is not applicable to unsignalized intersections, the Highway Capacity Manual (HCM) methodology was utilized for unsignalized intersections in the study area. The measures of effectiveness for unsignalized intersection analyses include volume-to-capacity ratio (v/c), delay, and level of service (LOS). V/c ratio is an indicator of the degree of saturation that occurs at a particular location. A v/c ratio equal to or greater than 1.0 indicates traffic operations at or above capacity (high levels of congestion); a v/c less than 1.0 indicates traffic operations below capacity (lower levels of congestion).

Table 1: ICU LOS Criteria for Signalized Intersections

LEVEL OF SERVICE	VOLUME to CAPACITY RATIO
A	0.0 to 0.60
B	0.61 to 0.70
C	0.71 to 0.80
D	0.81 to 0.90
E	0.91 to 1.00
F	> 1.00

Source: Intersection Capacity Utilization: Evaluation Procedures for Intersections and Interchanges (2000)

Delay, typically provided as seconds per vehicle (sec/veh), includes what is termed control delay, which generally encompasses delays associated with acceleration, deceleration, and stoppages from downstream traffic control devices. In the Synchro® 10 traffic analysis software, the delay for signalized intersections also includes queue delay, a measure of queue interaction between closely spaced intersections. Queue delay is due to queue spillback from nearby intersections, and can be significant at closely spaced intersections where the queue from one intersection propagates into another. The total delay reported is the sum of the control and queue delays.

In the HCM methodology, level of service (a rating ranging from excellent operating conditions at LOS A to failing operating conditions at LOS F) is based on delay. The LOS designations for unsignalized intersection analyses are provided in Table 2.

Table 2: HCM LOS Criteria for Unsignalized Intersections

LOS	Delay (sec/veh)
A	≤ 10
B	> 10 to 15
C	> 15 to 25
D	> 25 to 35
E	> 35 to 50
F	> 50

Source: Highway Capacity Manual 2010

Traffic Analysis – Existing Conditions

The analysis in each of the scenarios for the study was performed using the Trafficware ICU worksheet for signalized intersections and traffic analysis software Synchro® 10 for unsignalized intersections. ICU analysis worksheets and detailed Synchro® output reports are included in the Appendix D. The results of the existing capacity analysis are shown in Tables 3 and 4, and include analysis of the Existing Condition traffic volumes presented in Figures 3 and 4.

Table 3: Existing Capacity Analysis – Signalized Intersections

Intersection	Traffic Control[2]	Intersection Approach Lanes[1]												ICU | Level of Service[3]			
		Eastbound			Westbound			Northbound			Southbound			Weekday AM Peak Hour		Weekday PM Peak Hour	
		L	T	R	L	T	R	L	T	R	L	T	R				
1. Spring Road(NB-SB) & E High St/ Princeton Ave(EB-WB)	TS	1	1	1	1	1	1	1	2	1	1	1.5	0.5	0.739	C	0.790	C
3. Princeton Ave(NB-SB) & Condor Dr North(WB)	TS	0.5	0.5	1	1	0.5	0.5	1	1.5	0.5	1	1.5	0.5	0.544	A	0.884	D
4. Princeton Ave(NB-SB) & SR 118 EB Ramps(EB)	TS	0.5	1	0.5	0	0	0	0	1.5	0.5	1	2	0	0.992	**E**	0.995	**E**
5. Princeton Ave(NB-SB) & SR 118 WB Ramps(WB)	TS	0	0	0	1	0.5	0.5	1	2	0	0	1.5	0.5	0.828	D	0.634	B
7. Campus Park Dr(EB-EB) & Collins Dr(NB-SB)	TS	1	1	1	2	0.5	0.5	1	2	2	1	1.5	0.5	0.416	A	0.466	A

Notes:

1. L = Left; T = Through; R = Right; 0.5 = Shared Lane with Two Turning Movements.
2. TS = Traffic Signal; FF =Free Flow; OWSC = One-Way Stop Controlled; TWSC = Two-Way Stop Controlled; AWSC = All - Way Stop Controlled
3. Signalized Intersection: Intersection Capacity Utilization (ICU) Volume/Capacity (V/C) Ratio in the order of 3 decimal places. (0.001)

Table 4: Existing Capacity Analysis – Unsignalized Intersections

Intersection	Approach	Lane Group	Weekday AM Peak Hour			Weekday PM Peak Hour		
			v/c	Delay (sec/veh)	LOS	v/c	Delay (sec/veh)	LOS
Princeton Ave (NB-SB) & Condor Dr S (WB)	WB	LR	0.17	27.4	D	0.69	87.9	F
	SB	LT	0.05	10.5	B	0.03	9.9	A
Princeton Ave (NB) & Campus Park Dr (EB-WB)	WB	LT	0.23	8.4	A	0.23	8.3	A
	NB	LR	0.05	18.7	C	0.31	18.5	C

Notes:

* Synchro does not provide overall v/c ratio for signalized intersections.

v/c = volume-to-capacity ratio; LOS = Level-of-Service; NB = Northbound; SB = Southbound; EB = Eastbound; WB = Westbound

L = left-turn, R = right-turn, T = through movement, LTR = left/through/right, TR = through/right-turn, LT = left-turn/through, LR = left-turn/right-turn

Synchro does not provide overall delay or v/c ratios for unsignalized intersections.

As shown in Table 3, three signalized intersections operate with congested conditions in at least one peak hour. Princeton Avenue & Condor Drive (North) operates at LOS D in the weekday PM peak hour. The intersection of Princeton Avenue & SR 118 EB Ramps operates at LOS E in the weekday

AM and PM peak hours. The intersection of Princeton Avenue & SR 118 WB Ramps operates at LOS D in the weekday AM peak hour. The remaining signalized intersections operate at LOS C or better in the weekday AM and PM peak hours.

As shown in Table 4, the westbound lane group at Princeton Avenue & Condor Drive (South) operates at LOS D and F in the weekday AM and PM peak hours, respectively. The remaining lane groups at unsignalized intersections operate at LOS C or better in the remaining peak hours.

Figure 3: Existing Weekday AM Volumes

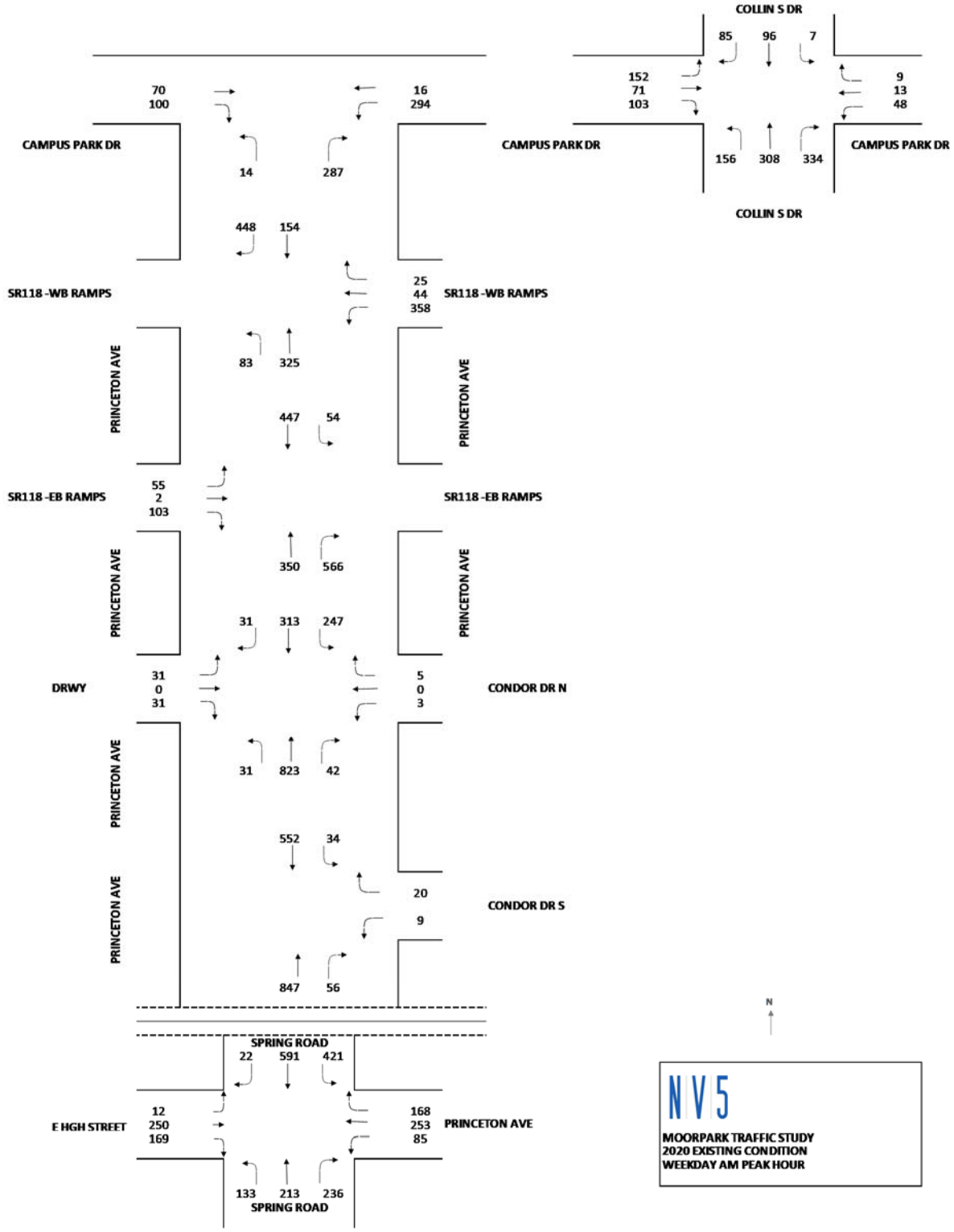
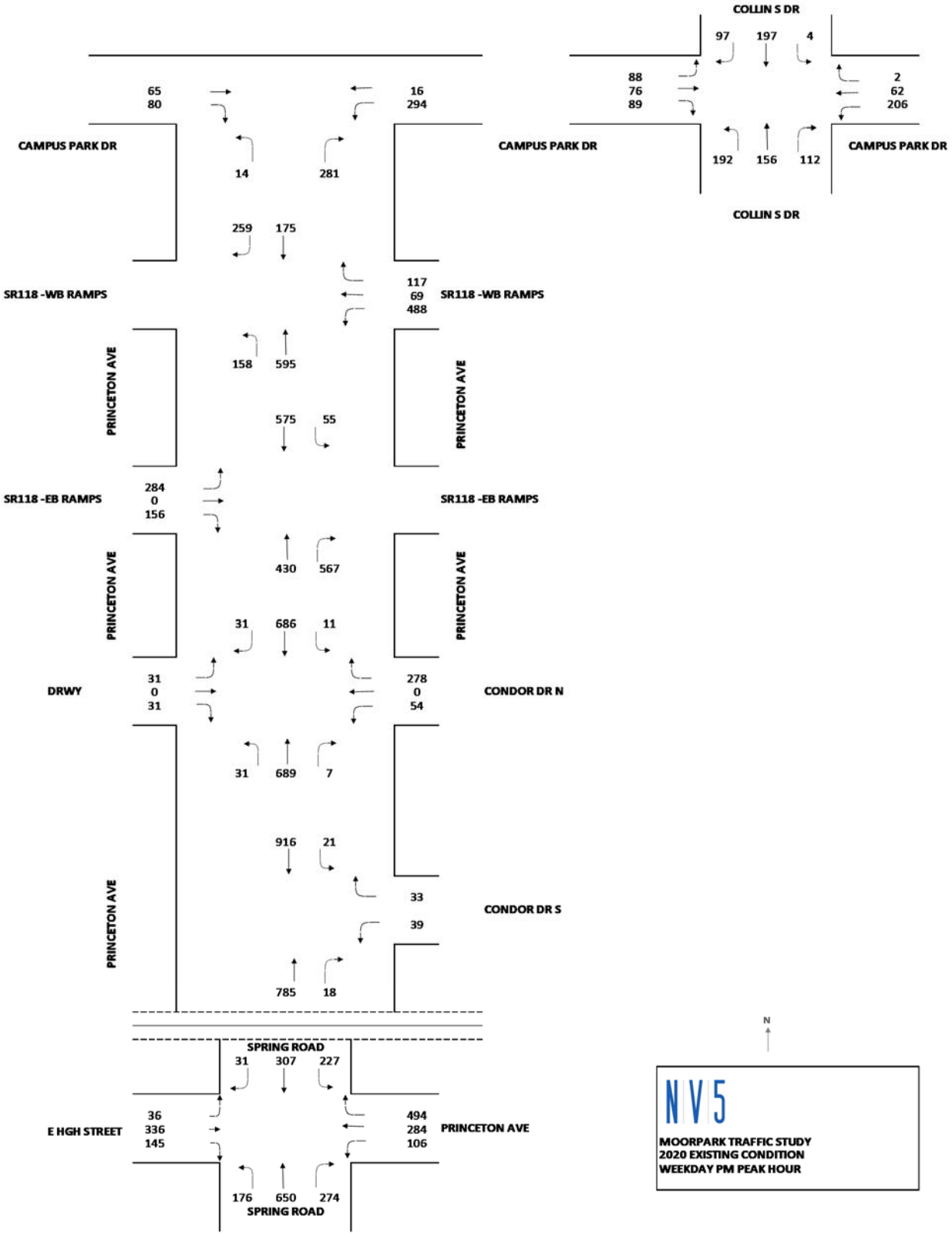


Figure 4: Existing Weekday PM Volumes



D. Existing with the Proposed Project Condition

D.1. Project Trip Generation

The operations of this site are unique and incorporate data collected from sites with similar size and operations. When compared to the trip generation data for the most applicable land use included in the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 10th Edition, 2017, the user-provided trip generation data reflects a more accurate estimation of the expected traffic to be generated to/from this specific type of commercial distribution center. Table 5 summarizes the project trip generation expected to and from the development. It also provides a comparison of the ITE Trip Generation rates and the user-provided trip generation data.

Table 5: Project Trip Generation

Land Use	Code	Project		Total	Inbound	Outbound
High-Cube Fulfillment Center Warehouse (Non-Sort)	155	189,364 s.f.	Daily	342	171	171
			AM	28	23	5
			PM	30	12	18
Warehousing Distribution Facility	Tenant Provided Data	189,364 s.f.	Daily	1,716	858	858
			AM	2	1	1
			PM	61	41	20

The development will generate a total of 2 trips (1 trips entering and 1 trips exiting) during the AM peak hour, and a total of 61 trips (41 trips entering and 20 trips exiting) during the PM peak hour. The facility's AM and PM peak hours are based on expected shift change times and are outside of the observed peak travel hours. However, for the purposes of providing a conservative assumption of trips generated by the proposed project, the trips generated by the ITE Trip Generation rates will be assumed for the weekday AM peak hour, while the tenant provided trip data will be used for the weekday PM peak hour.

As the existing building on-site was previously occupied by a warehouse use, a trip credit was applied onto the anticipated trip generation for the site to account for the net increase of trips by the proposed High-Cube Fulfillment Center Warehouse (non-sort). As shown in Table 6, applying a trip credit for ITE LU 150 (Warehouse) would result in a reduction of 17 trips in the AM peak hour, and an increase of 12 trips in the PM peak hour. Thus, the net difference of trips shown in Table 6 below will be applied to the existing and future No Build traffic networks and analyzed in the existing with the proposed project and Build conditions.

Table 6: Warehouse Trip Credit Trip Generation

Land Use	ITE Land Use Code	Size (sf)	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out
Proposed Project Trips Generated	-	189,364	28	23	5	61	41	20
Previous Use Trips Generated (Warehouse)	150	189,364	45	29	16	49	12	37
Net Difference	-	-	-17	-6	-11	12	29	-17

D.2. Trip Distribution and Assignment

The assignment and directional distribution of new project trips on the transportation network are based on AASHTO Census Transportation Planning Product (CTPP) 2012-2016 5-year American Community Survey (ACS) Journey to Work data, which includes origins of workers by census tract. The most logical routes on study area roadways from the origin census tracts to the site were determined and the resulting trip distribution is listed below:

To / From the East via SR 118	32%
To / From the North via Campus Park Drive	4%
To / From the North via Spring Road	11%
To / From the South-Southwest via Spring Road	25%
To / From the South-Southeast via SR 118/23	28%

All site-generated traffic is anticipated to use the existing driveway on Condor Drive. Figure 5 illustrates how the site generated project trips are expected to distribute across the transportation network. Figures 6 and 7 show the site-generated incremental trips on the study network based on the anticipated distribution of site-generated traffic.

D.3. Existing with the Proposed Project Condition Capacity Analysis

Per the City of Moorpark Guidelines for Preparing Traffic and Circulation Studies, a traffic analysis was conducted for a scenario where traffic anticipated to be generated by the site is included on top of the Existing Condition traffic volumes, referred to as the Existing with the Proposed Project Condition, shown in Figures 8 and 9. The results of the Existing with the Proposed Project Condition traffic capacity analysis are shown on Tables 7 and 8.

As shown in Table 7, three signalized intersections are anticipated to operate with congested conditions in one or more peak hours. Princeton Avenue & Condor Drive (North) is anticipated to continue operating at LOS D in the weekday PM peak hour. The intersection of Princeton Avenue & SR 118 EB Ramps is anticipated to continue operating at LOS E in the weekday AM and PM peak hours, respectively. The intersection of Princeton Avenue & SR 118 WB Ramps is anticipated to continue operating at LOS D in the weekday AM peak hour. The remaining signalized intersections operate at LOS C or better in the weekday AM and PM peak hours.

As shown in Table 8, the westbound lane group at Princeton Avenue & Condor Drive (South) is anticipated to continue operating at LOS D and F with an increase of delays of 0 sec/veh and 0.7 sec/veh between the Existing and Existing with the Proposed Project Conditions in the weekday AM and PM peak hours, respectively. The remaining lane groups at unsignalized intersections are anticipated to continue operating at LOS C or better in the remaining peak hours.

Table 7: Existing with the Proposed Project Capacity Analysis – Signalized Intersections

Intersectiion	Traffic Control[2]	ICU | Level of Service[3]								Project Change	
		EXISTING				EXISTING w/ PROJECT					
		Morning		Evening		Morning		Evening		AM	PM
1. Spring Road(NB-SB) & E High St/ Princeton Ave(EB-	TS	0.739	C	0.790	C	0.739	C	0.790	C	0.000	-0.001
3. Princeton Ave(NB-SB) & Condor Dr North(WB)	TS	0.544	A	0.884	D	0.488	A	0.870	D	-0.056	-0.014
4. Princeton Ave(NB-SB) & SR 118 EB Ramps(EB)	TS	0.992	**E**	0.995	**E**	0.986	**E**	0.988	**E**	-0.006	-0.006
5. Princeton Ave(NB-SB) & SR 118 WB Ramps(WB)	TS	0.828	D	0.634	B	0.826	D	0.636	B	-0.002	0.002
7. Campus Park Dr(EB-EB) & Collins Dr(NB-SB)	TS	0.416	A	0.466	A	0.416	A	0.466	A	0.000	0.000

Notes:

1. L = Left; T = Through; R = Right; 0.5 = Shared Lane with Two Turning Movements.
2. TS = Traffic Signal; FF =Free Flow; OWSC = One-Way Stop Controlled; TWSC = Two-Way Stop Controlled; AWSC = All - Way Stop Controlled
3. Signalized Intersection: Intersection Capacity Utilization (ICU) Volume/Capacity (V/C) Ratio in the order of 3 decimal places. (0.001)

Table 8: Existing with the Proposed Project Capacity Analysis – Unsignalized Intersections

Intersection	Approach	Lane Group	Weekday AM Peak Hour			Weekday PM Peak Hour		
			v/c	Delay (sec/veh)	LOS	v/c	Delay (sec/veh)	LOS
Princeton Ave (NB-SB) & Condor Dr S (WB)	WB	LR	0.17	27.3	D	0.69	88.6	F
	SB	LT	0.05	10.5	B	0.03	9.9	A
Princeton Ave (NB) & Campus Park Dr (EB-WB)	WB	LT	0.23	8.4	A	0.23	8.3	A
	NB	LR	0.05	18.7	C	0.31	18.5	C

Notes:

* Synchro does not provide overall v/c ratio for signalized intersections.

v/c = volume-to-capacity ratio; LOS = Level-of-Service; NB = Northbound; SB = Southbound; EB = Eastbound; WB = Westbound

L = left-turn, R = right-turn, T = through movement, LTR = left/through/right, TR = through/right-turn, LT = left-turn/through, LR = left-turn/right-turn

Synchro does not provide overall delay or v/c ratios for unsignalized intersections.

Figure 5: Trip Distribution

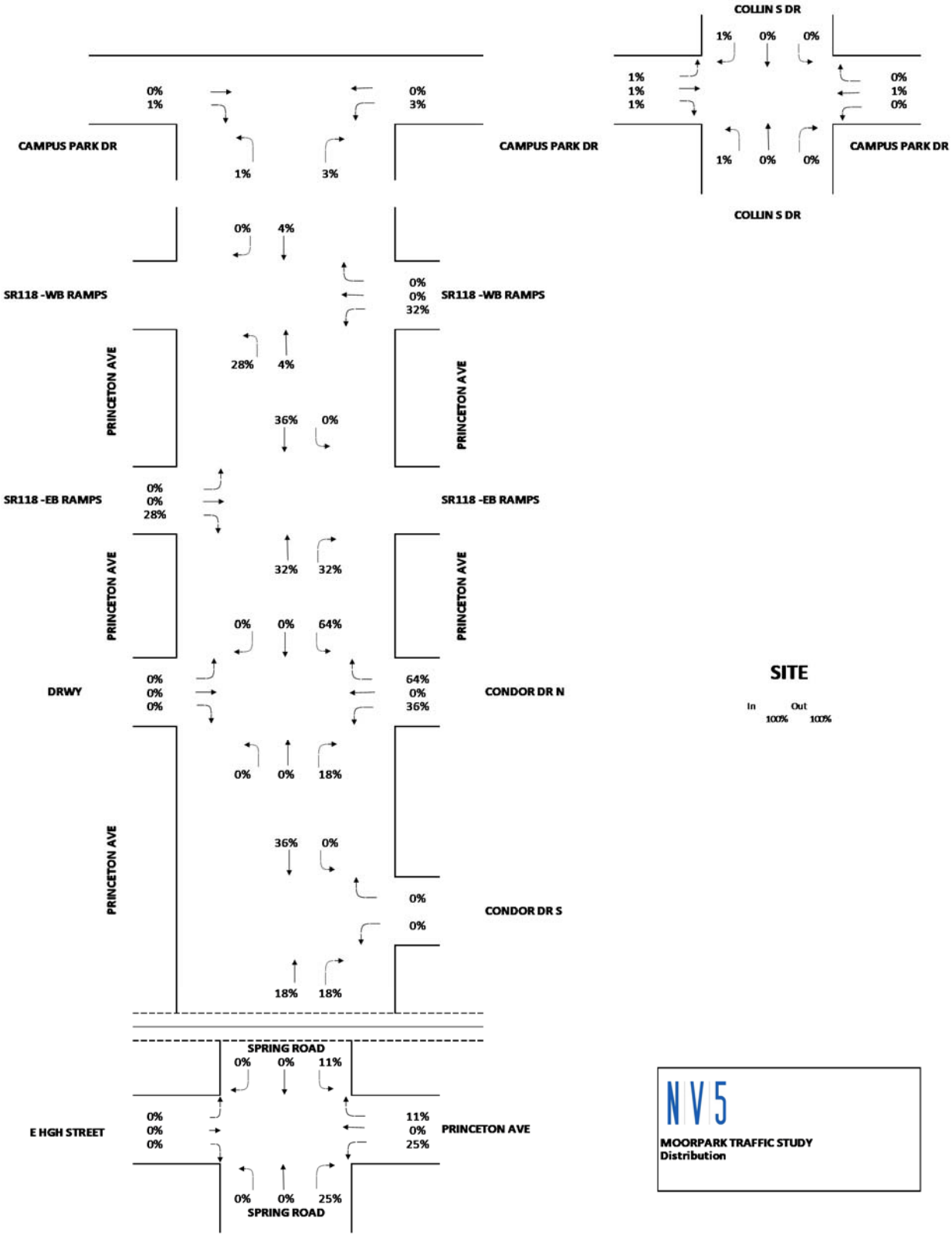


Figure 6: Site Generated Incremental AM Peak Hour Volumes

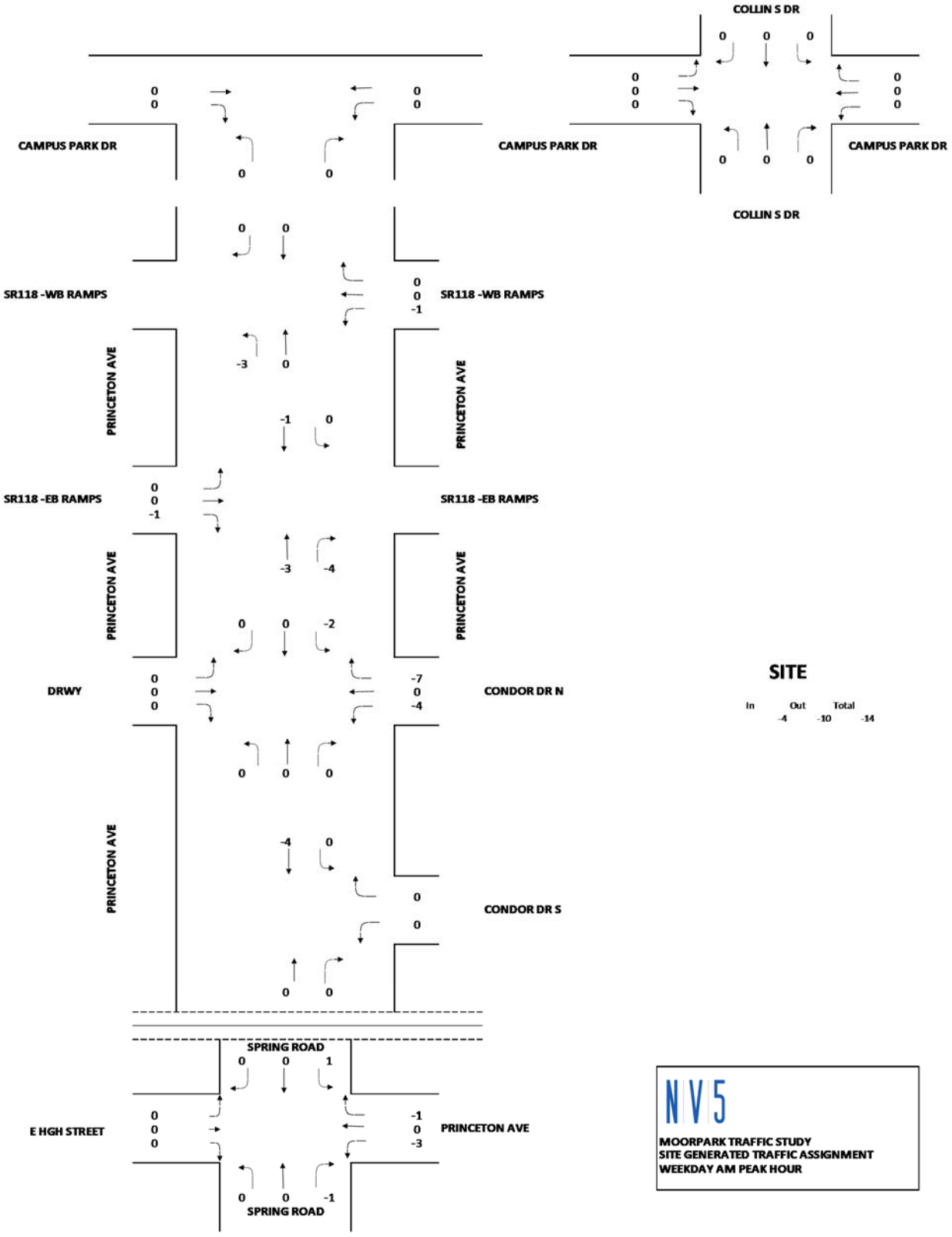


Figure 7: Site Generated Incremental PM Peak Hour Volumes

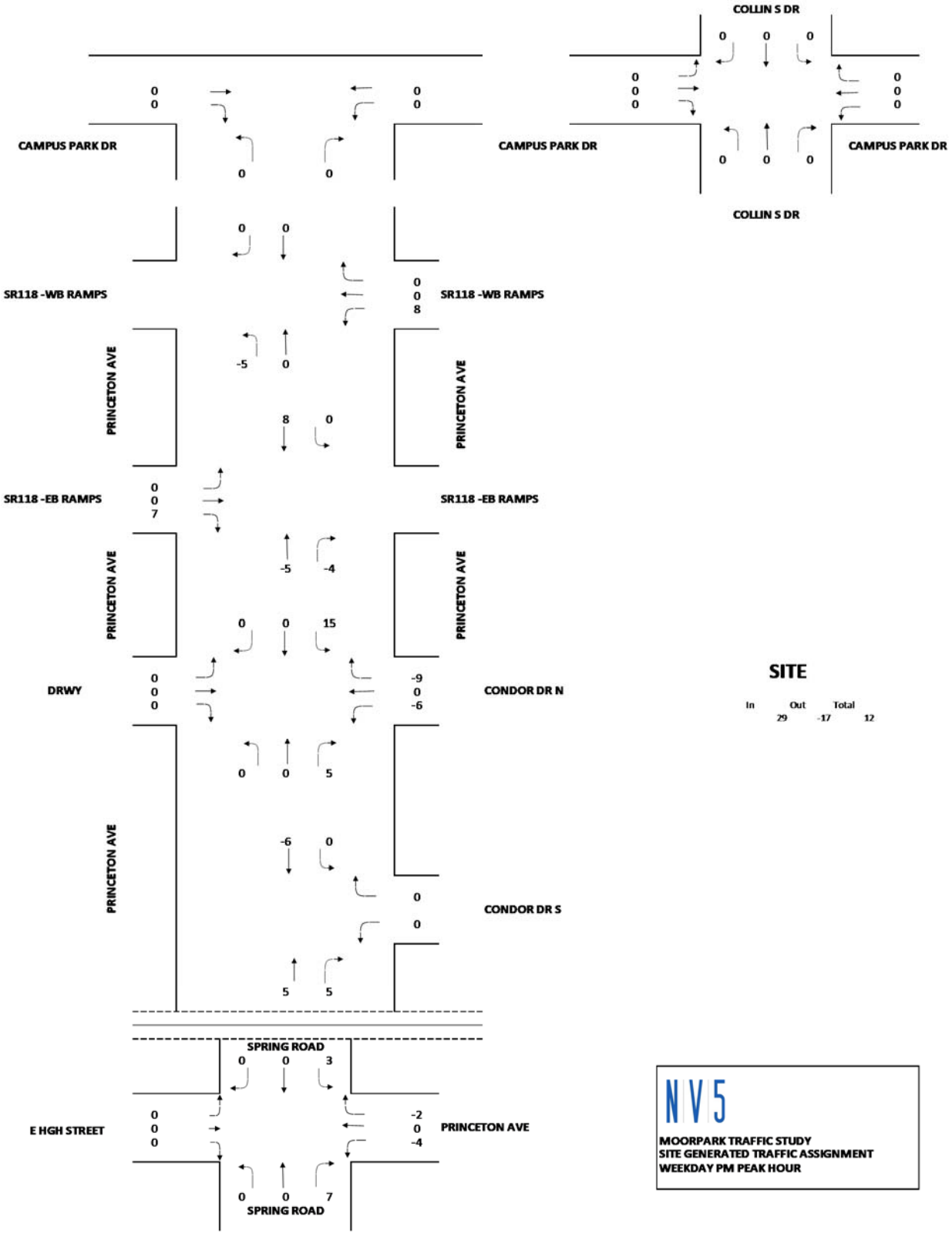


Figure 8: Existing Condition with the Proposed Project AM Peak Hour Traffic Volumes

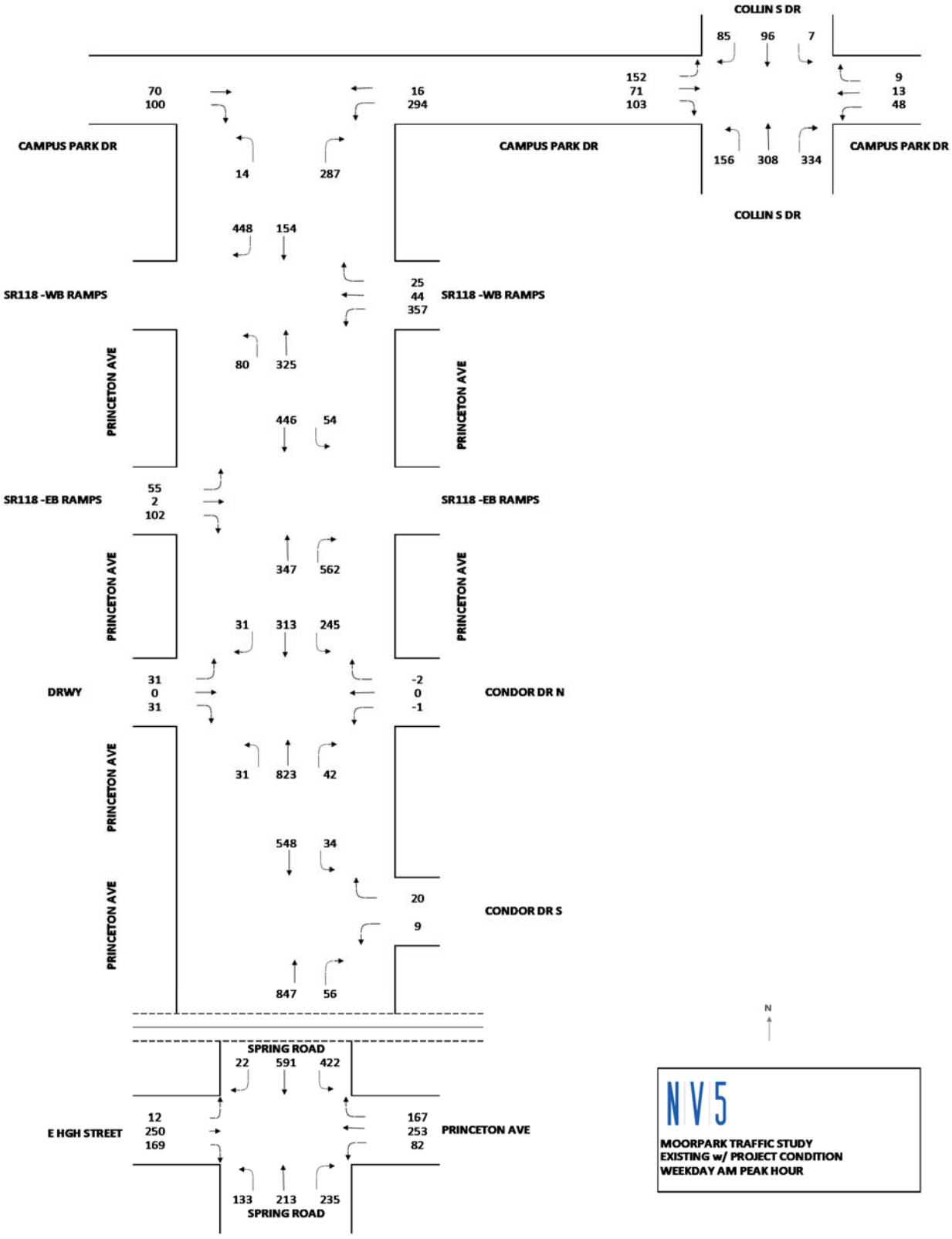
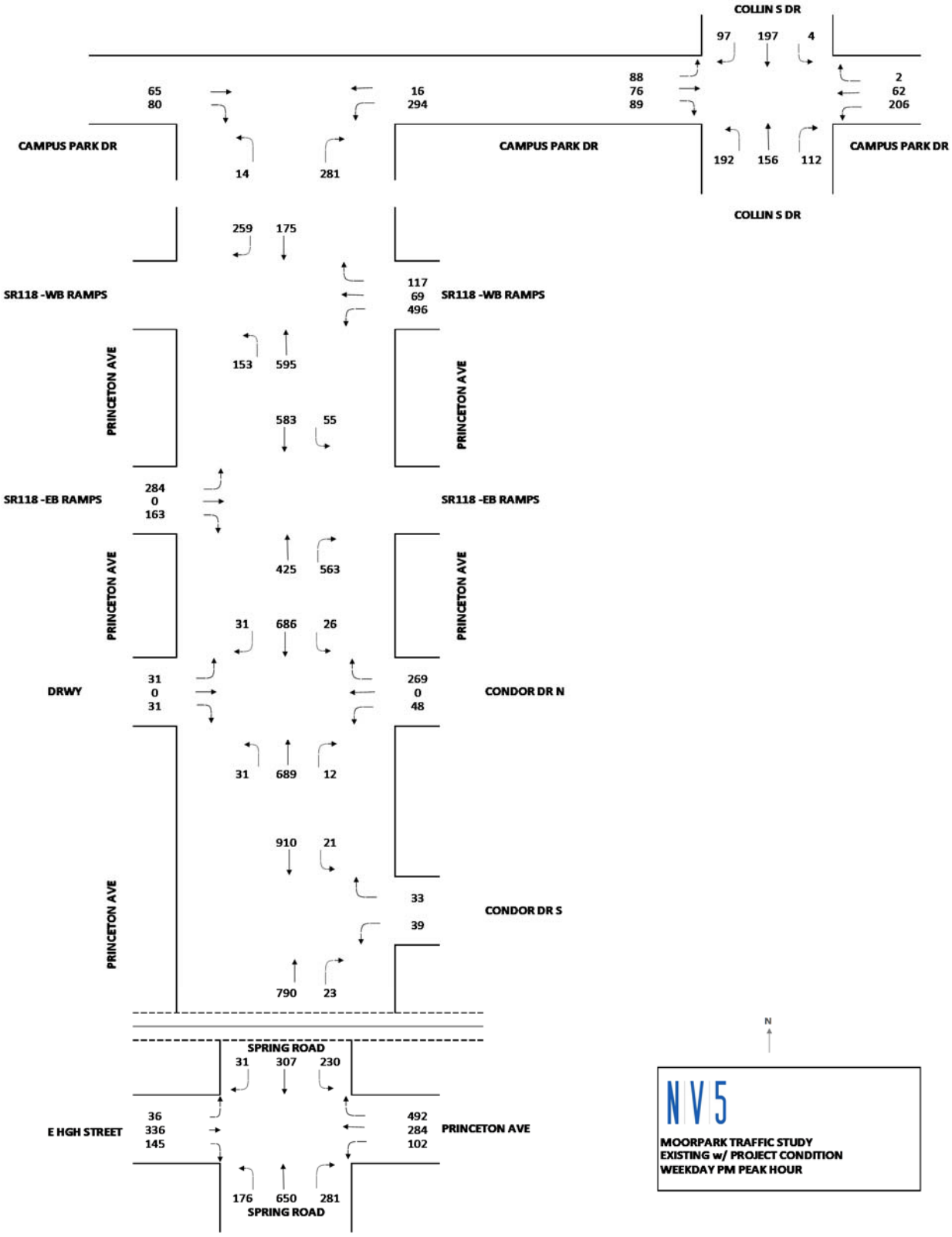


Figure 9: Existing Condition with the Proposed Project PM Peak Hour Traffic Volumes



E. No-Build Condition

E.1. Planned Developments

To establish future conditions that serve as a comparison of traffic operations with and without the proposed project, the No-Build Condition (future without the Proposed Project) was developed. As new developments other than the proposed project could affect the operation of study area intersections, new developments that are anticipated to open between the current year and the anticipated completion year of the proposed project were identified. The two new developments identified are listed below along with their intended development program.

- High Street Station Mixed-Use Development – 91 DUs and approx. 15,000 sf of Commercial Retail
- 5850 Condor Drive – Approx. 48,211 sf industrial development

Both new developments are anticipated to generate new traffic at study area intersections. These traffic volumes were incorporated into the No-Build Condition traffic volumes, along with general background growth as discussed further below.

E.2. Background Growth

Typically, traffic generated by general background growth in the study area are added over the Existing Condition traffic volumes to account for new minor developments and increase of traffic volumes which are anticipated to occur between the current year and the anticipated completion year of the project. Analysis of the changes in nearby traffic volumes, and the anticipated completion year of the project informed the calculation of a general background growth rate. Project build-out is anticipated by 2022. A compound annual growth rate of 2.1% was applied to the Existing Condition traffic volumes for a period of two-years to account for changes in the future traffic volumes. Figures 10 and 11 illustrate the future No-Build Condition traffic volumes, which include the new planned development-generated traffic as well as general background growth.

E.3. Future Analysis without the Proposed Project (No-Build Condition)

The results of the No-Build Condition capacity analysis are shown in Tables 9 and 10. ICU analysis worksheets and detailed Synchro® output reports for the No-Build Condition are included in the Appendix D.

As shown in Table 9, four signalized intersections are anticipated to operate with congested conditions in one or more peak hours. The intersection of Princeton Avenue/High Street & Spring Road is anticipated to operate at LOS D in the weekday PM peak hour. Princeton Avenue & Condor Drive (North) is anticipated to operate at LOS E in the weekday PM peak hour. The intersection of Princeton Avenue & SR 118 EB Ramps is anticipated to operate at LOS F in the weekday AM and PM peak hours. The intersection of Princeton Avenue & SR 118 WB Ramps is anticipated to operate at

LOS D in the weekday AM peak hour. The remaining signalized intersections operate at LOS C or better in the weekday AM and PM peak hours.

Table 9: No-Build Capacity Analysis – Signalized Intersections

Intersection	Traffic Control[2]	Intersection Approach Lanes[1]												ICU | Level of Service[3]			
		Eastbound			Westbound			Northbound			Southbound			Weekday AM Peak Hour		Weekday PM Peak Hour	
		L	T	R	L	T	R	L	T	R	L	T	R				
1. Spring Road(NB-SB) & E High St/ Princeton Ave(EB-WB)	TS	1	1	1	1	1	1	1	2	1	1	1.5	0.5	0.769	C	0.824	D
3. Princeton Ave(NB-SB) & Condor Dr North(WB)	TS	0.5	0.5	1	1	0.5	0.5	1	1.5	0.5	1	1.5	0.5	0.563	A	0.934	**E**
4. Princeton Ave(NB-SB) & SR 118 EB Ramps(EB)	TS	0.5	1	0.5	0	0	0	0	1.5	0.5	1	2	0	1.038	F	1.045	F
5. Princeton Ave(NB-SB) & SR 118 WB Ramps(WB)	TS	0	0	0	1	0.5	0.5	1	2	0	0	1.5	0.5	0.861	D	0.670	B
7. Campus Park Dr(EB-EB) & Collins Dr(NB-SB)	TS	1	1	1	2	0.5	0.5	1	2	2	1	1.5	0.5	0.427	A	0.482	A

Notes:

1. L = Left; T = Through; R = Right; 0.5 = Shared Lane with Two Turning Movements.
2. TS = Traffic Signal; FF =Free Flow; OWSC = One-Way Stop Controlled; TWSC = Two-Way Stop Controlled; AWSC = All - Way Stop Controlled
3. Signalized Intersection: Intersection Capacity Utilization (ICU) Volume/Capacity (V/C) Ratio in the order of 3 decimal places. (0.001)

Table 10: No-Build Capacity Analysis – Unsignalized Intersections

Intersection	Approach	Lane Group	Weekday AM Peak Hour			Weekday PM Peak Hour		
			v/c	Delay (sec/veh)	LOS	v/c	Delay (sec/veh)	LOS
Princeton Ave (NB-SB) & Condor Dr S (WB)	WB	LR	0.24	34.3	D	**1.03**	**167.5**	**F**
	SB	LT	0.10	11.1	B	0.04	10.1	B
Princeton Ave (NB) & Campus Park Dr (EB-WB)	WB	LT	0.24	8.5	A	0.24	8.3	A
	NB	LR	0.06	19.9	C	0.33	19.8	C

Notes:

* Synchro does not provide overall v/c ratio for signalized intersections.

v/c = volume-to-capacity ratio; LOS = Level-of-Service; NB = Northbound; SB = Southbound; EB = Eastbound; WB = Westbound

L = left-turn, R = right-turn, T = through movement, LTR = left/through/right, TR = through/right-turn, LT = left-turn/through, LR = left-turn/right-turn

Synchro does not provide overall delay or v/c ratios for unsignalized intersections.

As shown in Table 10, the westbound lane group at Princeton Avenue & Condor Drive (South) is anticipated to operate at LOS D and F in the weekday AM and PM peak hours, respectively. The remaining lane groups at unsignalized intersections are anticipated to continue operating at LOS C or better in the remaining peak hours.

Figure 10: No-Build AM Peak Hour Traffic Volumes

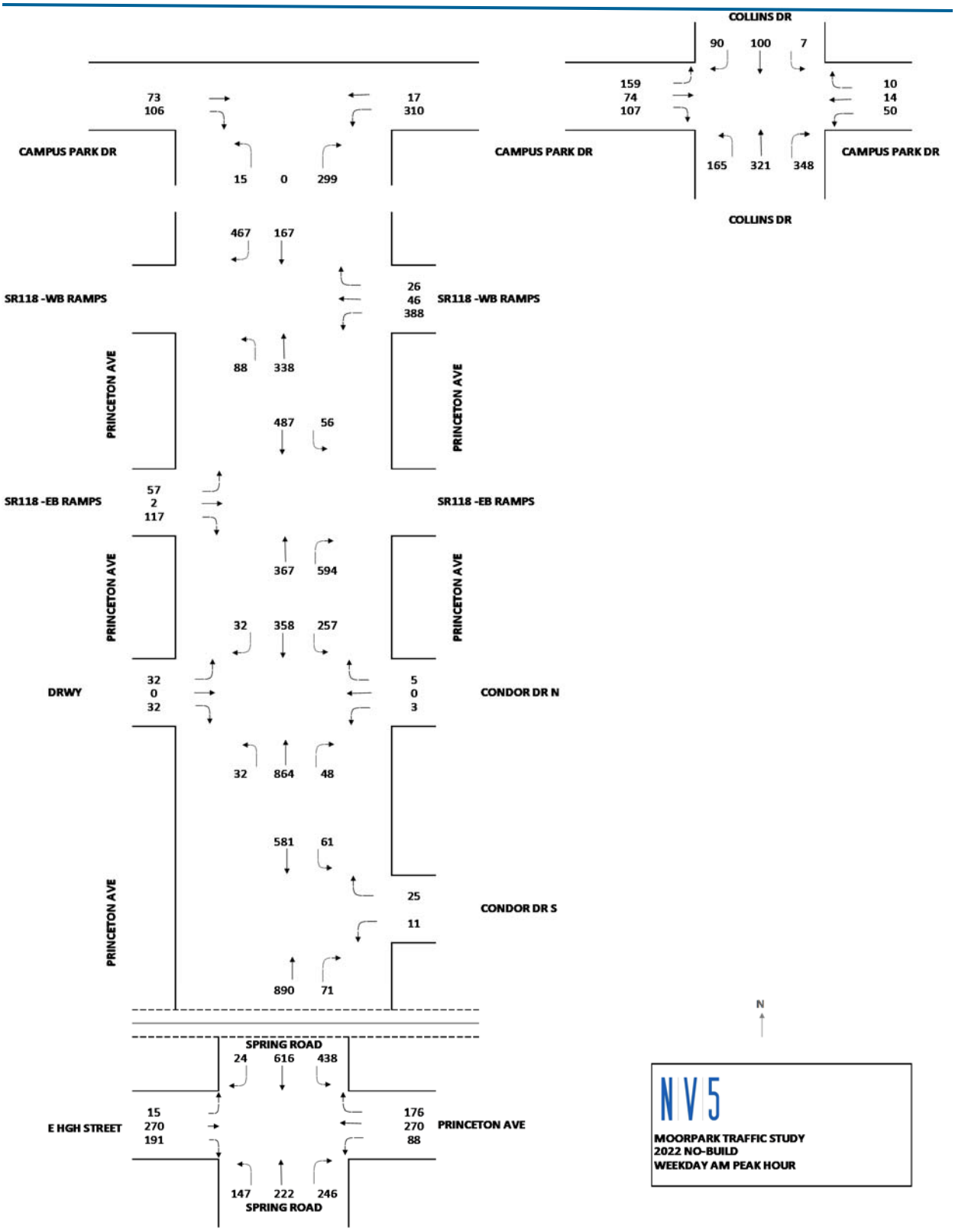
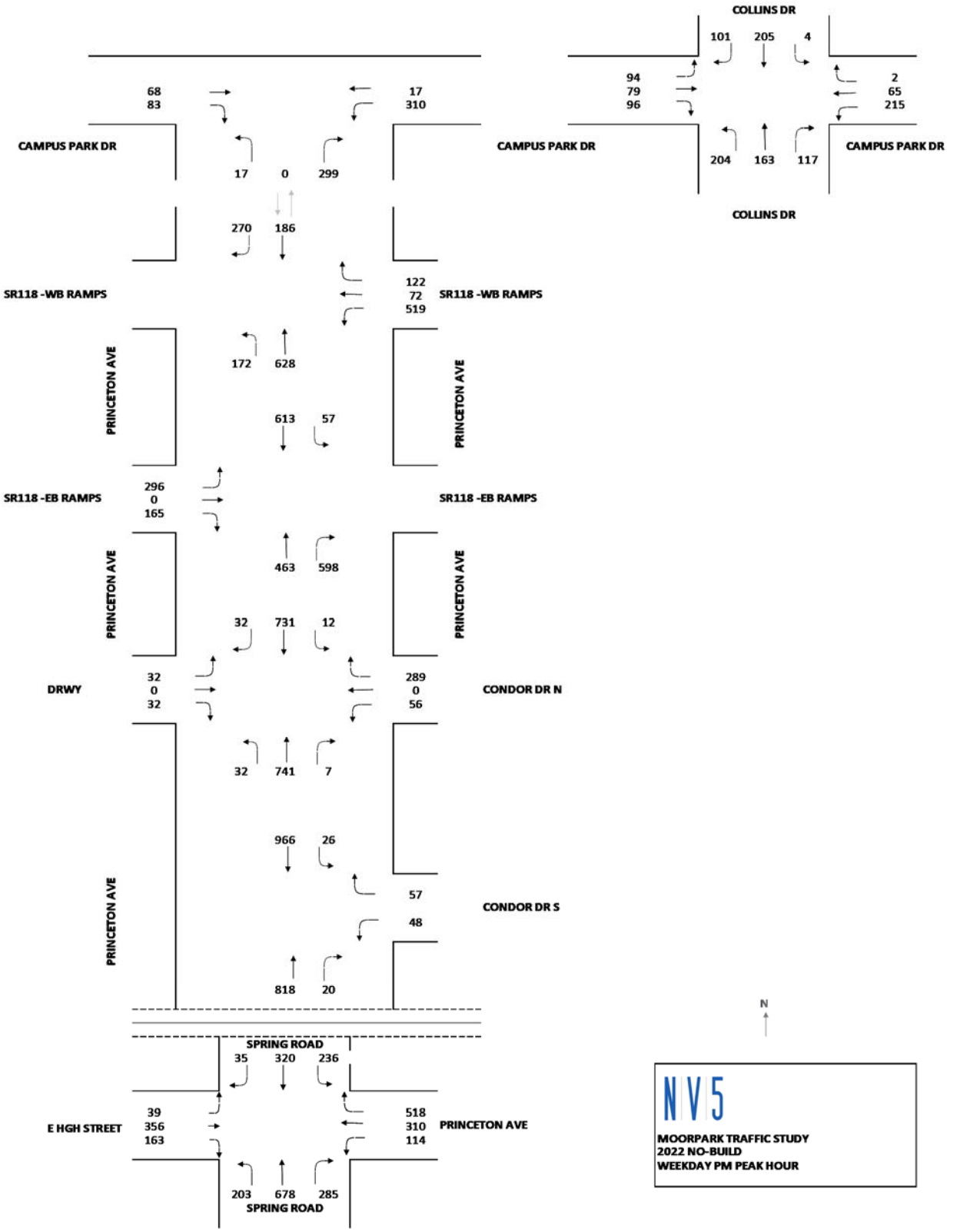


Figure 11: No-Build PM Peak Hour Traffic Volumes



F. Build Condition

F.1. Operational Analysis

Lastly, a traffic analysis was conducted for future traffic conditions including traffic anticipated to be generated by the proposed project, referred to as the Build Condition. Project-generated trip rates, distribution, and assignments for each peak hour are discussed in section D of this report. The resulting traffic volume flow maps for the Build Condition are shown on Figure 12 and 13.

The results of the Build Condition capacity analysis are shown in Tables 11 and 12. ICU analysis worksheets and detailed Synchro® output reports for the Build Condition are included in the Appendix D.

As shown in Table 11, four signalized intersections are anticipated to operate with congested conditions in one or more peak hours. The intersection of Princeton Avenue/High Street & Spring Road is anticipated to continue to operate at LOS D in the weekday PM peak hour (v/c ratio reduction of 0.001). Princeton Avenue & Condor Drive (North) is anticipated to continue operating at LOS E with a decrease in v/c ratio of 0.026 in the weekday PM peak hour. The intersection of Princeton Avenue & SR 118 EB Ramps is anticipated to continue operating at LOS F with a reduction of v/c ratio of 0.006 in both the weekday AM and PM peak hours. The intersection of Princeton Avenue & SR 118 WB Ramps is anticipated to continue operating at LOS D in the weekday AM peak hour. The remaining signalized intersections operate at LOS C or better in the weekday AM and PM peak hours.

As shown in Table 12, the westbound lane group at Princeton Avenue & Condor Drive (South) is anticipated to continue operating at LOS D and F with an increase of delays of 0 sec/veh and 1.7 sec/veh between the No-Build and Build Conditions in the weekday AM and PM peak hours, respectively. The remaining lane groups at unsignalized intersections are anticipated to continue operating at LOS C or better in the remaining peak hours.

Table 11: Build Capacity Analysis – Signalized Intersections

Intersectiion	Traffic Control[2]	ICU | Level of Service[3]								Project Change	
		NO-BUILD				BUILD					
		Morning		Evening		Morning		Evening		AM	PM
1. Spring Road(NB-SB) & E High St/ Princeton Ave(EB-	TS	0.769	C	0.824	D	0.769	C	0.823	D	0.000	-0.001
3. Princeton Ave(NB-SB) & Condor Dr North(WB)	TS	0.563	A	0.934	**E**	0.508	A	0.908	**E**	-0.055	-0.026
4. Princeton Ave(NB-SB) & SR 118 EB Ramps(EB)	TS	1.038	F	1.045	F	1.031	F	1.038	F	-0.006	-0.006
5. Princeton Ave(NB-SB) & SR 118 WB Ramps(WB)	TS	0.861	D	0.670	B	0.859	D	0.672	B	-0.002	0.002
7. Campus Park Dr(EB-EB) & Collins Dr(NB-SB)	TS	0.427	A	0.482	A	0.432	A	0.482	A	0.005	0.000

Notes:

1. L = Left; T = Through; R = Right; 0.5 = Shared Lane with Two Turning Movements.
2. TS = Traffic Signal; FF =Free Flow; OWSC = One-Way Stop Controlled; TWSC = Two-Way Stop Controlled; AWSC = All - Way Stop Controlled
3. Signalized Intersection: Intersection Capacity Utilization (ICU) Volume/Capacity (V/C) Ratio in the order of 3 decimal places. (0.001)

Table 12: Build Capacity Analysis – Unsignalized Intersections

Intersection	Approach	Lane Group	Weekday AM Peak Hour			Weekday PM Peak Hour		
			v/c	Delay (sec/veh)	LOS	v/c	Delay (sec/veh)	LOS
Princeton Ave (NB-SB) & Condor Dr S (WB)	WB	LR	0.24	34.1	D	**1.03**	**169.2**	**F**
	SB	LT	0.10	11.1	B	0.04	10.1	B
Princeton Ave (NB) & Campus Park Dr (EB-WB)	WB	LT	0.24	8.5	A	0.24	8.3	A
	NB	LR	0.06	19.9	C	0.33	19.8	C

Notes:

* Synchro does not provide overall v/c ratio for signalized intersections.

v/c = volume-to-capacity ratio; LOS = Level-of-Service; NB = Northbound; SB = Southbound; EB = Eastbound; WB = Westbound

L = left-turn, R = right-turn, T = through movement, LTR = left/through/right, TR = through/right-turn, LT = left-turn/through, LR = left-turn/right-turn

Synchro does not provide overall delay or v/c ratios for unsignalized intersections.

Figure 12: Build AM Peak Hour Traffic Volumes

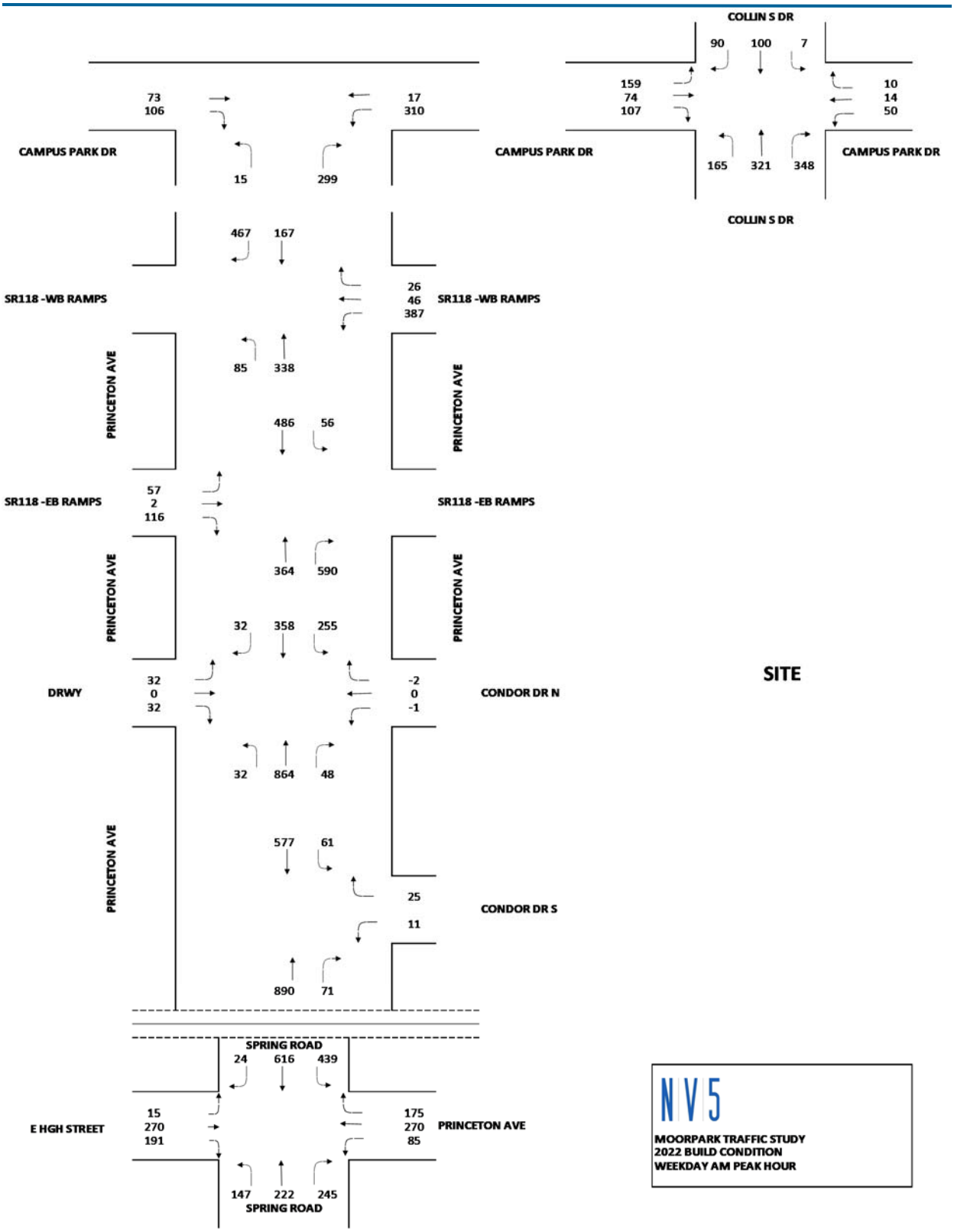
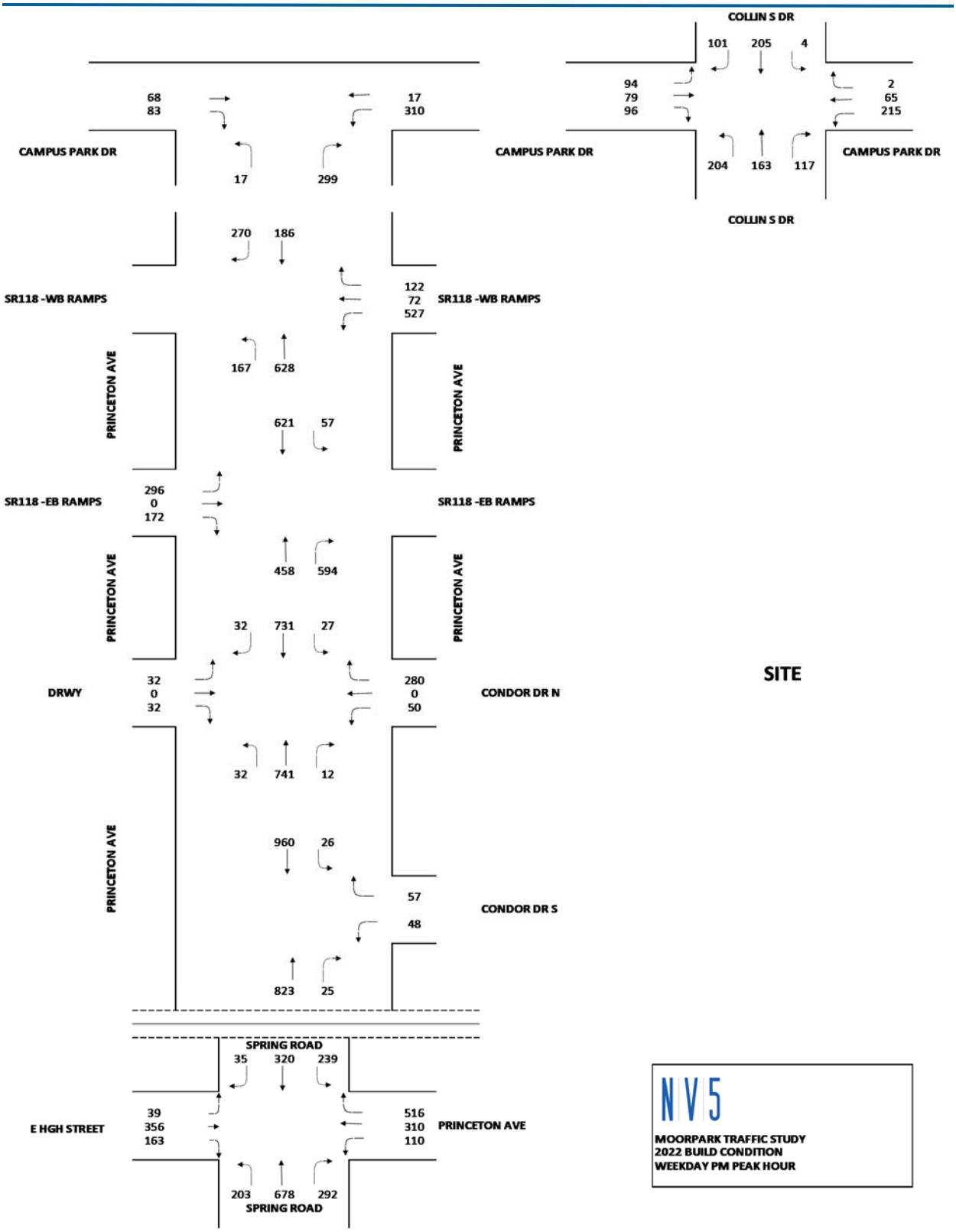


Figure 13: Build PM Peak Hour Traffic Volumes



G. Mitigation

Per the City of Moorpark Guidelines for Preparing Traffic and Circulation Studies, an LOS degradation of one level or greater below LOS C attributable to the project will be considered significant enough to require mitigation measures. In addition, depending on the circumstances, less than one level of LOS degradation may be considered significant as well. Based on these criteria, levels of service degradation were not identified at any study area intersections in the Existing with the Proposed Project Condition or Build condition. However, a new traffic signal at the unsignalized intersection of Princeton Avenue & Condor Drive (South) was considered as the intersection would continue to experience failing LOS conditions in the Build Condition.

G.1. Princeton Avenue & Condor Drive (South)

As discussed previously, the westbound approach of Condor Drive (South) at Princeton Avenue is anticipated to continue operating at LOS F in the Existing Condition through the Build Condition, with increasing amounts of delay of 4.6 and 10.4 sec/veh in the weekday PM peak hour in the Existing with the Proposed Project and Build Conditions, respectively. As the intersection is unsignalized, the Build Condition traffic volumes were checked against the MUTCD Traffic Signal Warrant criteria to see if a new traffic signal would be warranted. As shown in Table 13 below, the traffic volumes anticipated in the Build Condition would not warrant a traffic signal according to the Peak Hour Volume Warrant 3. Therefore, a traffic signal was not considered as appropriate mitigation at this intersection, and the intersection is anticipated to operate as described in the Build Condition section of this report.

Table 13: Princeton Avenue & Condor Drive (South) – Peak Hour Warrant 3 Determination

Scenario	Peak Hour	Major Street Volume (NB-SB) Total of Both Approaches	Minor Street Volume (WB) Highest Approach Only	Traffic Signal Warrant 3 Peak Hour Criteria B Met
No-Build Condition	AM	1603	36	No
	PM	1830	105	No
Build Condition	AM	1599	36	No
	PM	1834	105	No

Note: Peak Hour Criteria B based on Two or More Lanes on both Major and Minor Street Criteria

H. Conclusions

An existing 189,364 square foot industrial building is proposed to be redeveloped to operate as a distribution center at 6000 Condor Drive in Moorpark, California. Access to the site will be via one (1) driveway entrance on Condor Drive. Parking for up to 375 passenger cars and vans will be available on-site. After taking a trip credit for the existing warehouse use, the project will generate -6 entering trips and -11 exiting trips during the weekday AM peak hour, and 29 entering trips and -17 exiting trips during the weekday PM peak hour.

In the Build Condition, four signalized study area intersections are anticipated to operate with congested conditions in one or more peak hours, with two experiencing LOS D in at least one peak hour, one experiencing overall LOS E in one peak hour, and one experiencing failing LOS in both peak hours. In addition, the westbound approach of the unsignalized intersection of Princeton Avenue & Condor Drive (South) is expected to operate at LOS F during the weekday PM peak hour (consistent through all analyzed conditions). In addition to the project-opening year, the study intersections were evaluated at the existing condition year as well. The results of this analysis show that the intersections previously identified as experiencing delays would experience similar reductions in available intersection capacity but slightly better LOS conditions, as future background growth and traffic generated by other developments in the area would not yet be present in the traffic network. As no signalized intersection would experience a degradation of LOS of one level or greater beyond LOS C due to the proposed project, no mitigation is proposed at any study area intersection.

Site Plan Observations

Associates enter and exit the site using an existing driveway along the southern edge of the site. Associates enter the site and continue straight north to designated parking, while all other traffic turns right upon entering the driveway. Truck loading bays are located along the northeast of the building, with DSP/Flex traffic (Vans) parking in the northeast corner of the site. Staging occurs along the west edge of the building, with loading occurring inside of the building.

Based on the parking requirement table provided with the site plan, there is adequate parking available. A total of 113 passenger car spaces, 282 van spaces, and 7 loading docks are available on-site. There is adequate parking available on-site for the needs of the facility.

APPENDIX

APPENDICES

A. Site Plan

B. TMC Data Report

- a. Turning Movement Counts Historical Data
- b. Turning Movement Counts Historical Data -Streetlight

C. Physical Inventory Sketches

D. Existing Conditions Analysis Reports

- a. Existing Signalized Intersections - ICU Reports
- b. Existing Unsignalized Intersections -Synchro Reports

E. No-Build Conditions Analysis Reports

- a. No-Build Signalized Intersections - ICU Reports
- b. No-Build Unsignalized Intersections -Synchro Reports

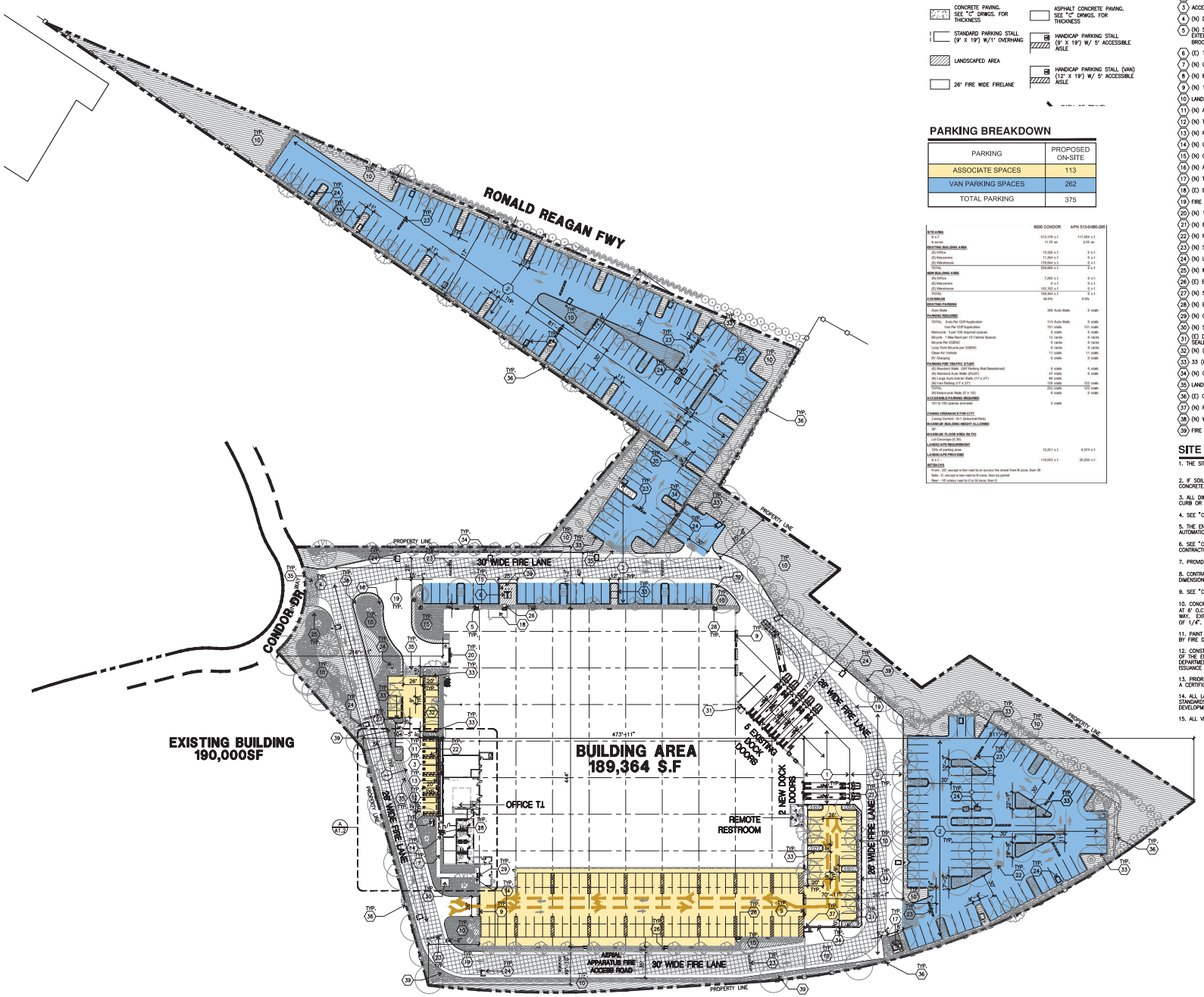
F. Build Conditions Analysis Reports

- a. Build Signalized Intersections - ICU Reports
- b. Build Unsignalized Intersections -Synchro Reports

G. Existing with Proposed Project Conditions Analysis Reports

- a. Existing with Proposed Project Signalized Intersections - ICU Reports
- b. Existing with Proposed Project Unsignalized Intersections -Synchro Reports

A. Site Plan



16. LANDSCAPED AREAS SHALL BE DELINEATED WITH A MINIMUM SIX INCHES (6") HIGH CURB.

SITE PLAN LEGEND

- CONCRETE PAVING. SEE "C" DRWGS. FOR THICKNESS
- ASPHALT CONCRETE PAVING. SEE "C" DRWGS. FOR THICKNESS
- STANDARD PARKING STALL (9' X 19') W/1' OVERHANG
- HANDICAP PARKING STALL (9' X 19') W/ 5' ACCESSIBLE AISLE
- LANDSCAPED AREA
- HANDICAP PARKING STALL (VAN) (12' X 19') W/ 5' ACCESSIBLE AISLE
- 26' FIRE WIDE FIRELANE

PARKING BREAKDOWN

PARKING	PROPOSED ON-SITE
ASSOCIATE SPACES	113
VAN PARKING SPACES	262
TOTAL PARKING	375

	6000 CONDOR	APN 513-0-060-295
SITE AREA		
in s.f.	513,179 s.f.	111,884 s.f.
in acres	11.78 ac	2.55 ac
EXISTING BUILDING AREA		
(E) Office	13,329 s.f.	0 s.f.
(E) Mezzanine	11,304 s.f.	0 s.f.
(E) Warehouse	178,064 s.f.	0 s.f.
TOTAL	200,668 s.f.	0 s.f.
NEW BUILDING AREA		
(N) Office	7,282 s.f.	0 s.f.
(E) Mezzanine	0 s.f.	0 s.f.
(E) Warehouse	182,102 s.f.	0 s.f.
TOTAL	189,364 s.f.	0 s.f.
COVERAGE	36.9%	0.0%
EXISTING PARKING		
Auto Stalls	366 Auto Stalls	0 stalls
PARKING REQUIRED		
TOTAL: Auto Per CUP Application	113 Auto Stalls	0 stalls
Use Per CUP Application	151 stalls	151 stalls
Motorcycle: 3 per 100 required spaces	6 stalls	0 stalls
Bicycle: 1 Bike Rack per 10 Vehicle Spaces	12 racks	0 racks
Bicycle Per CGBSC	6 racks	0 racks
Long Term Bicycle per CGBSC	6 racks	0 racks
Clean Air Vehicle	11 stalls	11 stalls
EV Charging	6 stalls	0 stalls
PARKING PER TRAFFIC STUDY		
(E) Standard Stalls (297 Parking Stall Demolished)	0 stalls	0 stalls
(N) Standard Auto Stalls (9'x20')	47 stalls	0 stalls
(N) Large Auto Interior Stalls (11'x 27')	68 stalls	
(N) Van Parking (11' x 27')	7 stalls	123 stalls
TOTAL	262 stalls	123 stalls
(N) Motorcycle Stalls (5' x 15')	0 stalls	0 stalls
ACCESSIBLE PARKING REQUIRED		
101 to 150 spaces provided	5 stalls	
ZONING ORDINANCE FOR CITY		
Zoning Current - M-1 (Industrial Park)		
MAXIMUM BUILDING HEIGHT ALLOWED		
35'		
MAXIMUM FLOOR AREA RATIO		
Lot Coverage (0.35)		
LANDSCAPE REQUIREMENT		
10% of parking area	12,251 s.f.	8,574 s.f.
LANDSCAPE PROVIDED		
in s.f.	110,043 s.f.	28,650 s.f.
SETBACKS		
Front - 20', except w hen road to or across the street from R zone, then 30		
Side - 5', except w hen road to R zone, then ley permit		
Rear - 10' unless road to C or M zone, then 0		

SITE PLAN KEYNOTES

1. (N)HEAVY BROOM FINISH CONCRETE PAVEMENT. SEE "C" DRAWINGS.
2. (N) ASHPALT CONCRETE (AC) PAVING.
3. ACCESSIBLE PATH OF TRAVEL.
4. (N) DRIVEWAY APRONS TO BE CONSTRUCTED PER "C" DRAWINGS.
5. (N) 5'-6"X5'-6"X4" THICK CONCRETE EXTERIOR LANDING PAD TYP. AT ALL EXTERIOR MAN DOORS TO LANDSCAPED AREAS. FINISH TO BE MEDIUM BROOM FINISH. SLOPE TO BE 1/4" : 12" MAX.
6. (E) TRANSFORMER
7. (N) CONCRETE WALKWAY, MEDIUM BROOM FINISH.
8. (N) BIKE RACK (10 RACK SPACES MIN.)
9. (N) 12' x 14' DRIVE IN DOOR
10. LANDSCAPE. ALL LANDSCAPE AREAS INDICATED BY SHADING.
11. (N) ACCESSIBLE PARKING STALL SIGN
12. (N) TRUNCATED DOME
13. (N) PRE-CAST CONCRETE WHEEL STOP
14. (N) CANOPY. SEE DETAILS ON T1-AD.8
15. (N) CONC. FILLED GUARD POST 6" DIA. U.N.O. 48" HIGH, SEE DETAIL 9/AD.5.
16. (N) ACCESSIBLE PARKING ENTRY SIGN.
17. (N) TRASH ENCLOSURE
18. (E) ELECTRICAL ROOM.
19. FIRE LANE
20. (N) 12'-0" X 16'-0" DRIVE IN DOOR
21. (N) 8'-0" HIGH CHAIN LINK FENCE WITH KNOX BOX AT PERSONNEL GATE
22. (N) PAINTED TRAFFIC MARKINGS
23. (N) SPEED BUMP
24. (N) LIGHT POLE
25. (N) MONUMENT SIGN
26. (E) EXISTING CONCRETE EXTERIOR LANDING PAD
27. (N) 5' x 10' MOTORCYCLE PARKING SPACE
28. (N) EMPLOYEE ENTRY
29. (N) CUSTOMER ENTRY
30. (N) SMOKER'S SHELTER. SEE DETAILS ON T1-AD.9
31. (E) DOCK POSITION TO BE ABANDONED. DOOR TO BE PERMANENTLY SEALED.
32. (N) (11) CLEAN AIR PARKING SPACES
33. 33 (N) 12" WIDE STEP OUT
34. (N) CONCRETE RETAINING WALL. SEE "C" DRAWINGS
35. LANDSCAPE PAVERS. SEE "L" DRAWINGS
36. (E) CHAIN LINK FENCE
37. (N) PERSONNEL ACCESS GATE WITH KNOX BOX
38. (N) WAYFINDING SIGNAGE
39. FIRE HYDRANT

SITE PLAN GENERAL NOTES

1. THE SITE PLAN BASED ON THE SOILS REPORT PREPARED BY:
2. IF SOILS ARE EXPANSIVE IN NATURE, USE STEEL REINFORCING FOR ALL SITE CONCRETE.
3. ALL DIMENSIONS ARE TO THE FACE OF CONCRETE WALL, FACE OF CONCRETE CURB OR GRID LINE U.N.O.
4. SEE "C" PLANS FOR ALL CONCRETE CURBS, GUTTERS AND SWALES.
5. THE ENTIRE PROJECT SHALL BE PERMANENTLY MAINTAINED WITH AN AUTOMATIC IRRIGATION SYSTEM.
6. SEE "C" DRAWINGS FOR POINT OF CONNECTIONS TO OFF-SITE UTILITIES. CONTRACTOR SHALL VERIFY ACTUAL UTILITY LOCATIONS.
7. PROVIDE POSITIVE DRAINAGE AWAY FROM BLDG. SEE "C" DRAWINGS.
8. CONTRACTOR TO REFER TO "C" DRAWINGS FOR ALL HORIZONTAL CONTROL DIMENSIONS. SITE PLANS ARE FOR GUIDANCE AND STARTING LAYOUT POINTS.
9. SEE "C"DRAWINGS FOR FINISH GRADE ELEVATIONS.
10. CONCRETE SIDEWALKS TO BE A MINIMUM OF 4" THICK W/ TOOLED JOINTS AT 6' O.C. EXPANSION/CONSTRUCTION JOINTS SHALL BE A MAXIMUM 12' EA. WAY. EXPANSION JOINTS TO HAVE COMPRESSIVE EXPANSION FILLER MATERIAL OF 1/4". FINISH TO BE A MEDIUM BROOM FINISH U.N.O.
11. PAINT CURBS AND PROVIDE SIGNS TO INFORM OF FIRE LANES AS REQUIRED BY FIRE DEPARTMENT.
12. CONSTRUCTION DOCUMENTS PERTAINING TO THE LANDSCAPE AND IRRIGATION OF THE ENTIRE PROJECT SITE SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT AND APPROVED BY PUBLIC FACILITIES DEVELOPMENT PRIOR TO ISSUANCE OF BUILDING PERMITS.
13. PRIOR TO FINAL CITY INSPECTION, THE LANDSCAPE ARCHITECT SHALL SUBMIT A CERTIFICATE OF COMPLETION TO PUBLIC FACILITIES DEVELOPMENT.
14. ALL LANDSCAPE AND IRRIGATION DESIGNS SHALL MEET CURRENT CITY STANDARDS AS LISTED IN GUIDELINES OR AS OBTAINED FROM PUBLIC FACILITIES DEVELOPMENT.
15. ALL VERTICAL MOUNTING POLES OF CHAIN LINK FENCING SHALL BE CAPPED.

OVERALL SITE PLAN (A)
scale: 1" = 50'-0"

SCALE: 1" = 50'-0"
0 50' 100' 150'
TRUE NORTH PLAN NORTH

CAUTION : IF THIS SHEET IS NOT A 30" X 42" IT IS A REDUCED PRINT

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LICENSED ARCHITECT — JAMES H. ANTHONY — No. C-28451 — 3-31-17 RENEWAL DATE — STATE OF CALIFORNIA

Owner:

Project:
MOORPARK DCX 6
6000 CONDOR DR.
MOORPARK, CA

Consultants:

Civil:	JENSEN DESIGN AND SURVEY
Structural:	BTI
Mechanical:	RPM
Plumbing:	RPM
Electrical:	RPM
Landscape:	HUNTER LANDSCAPE
Fire Protection:	-
Soils Engineer:	-

Title: OVERALL SITE PLAN

Project Number:	19470
Drawn by:	ML
Date:	07/14/2020

Revision:

REV #1	09/25/20
REV #2	09/25/20
REV #3	10/15/20

Sheet:
PSP R#4

B. TURNING MOVEMENT COUNTS

Data Report

B. TURNING MOVEMENT COUNTS

a. Turning Movement Counts Historical Data

Location: 1. Spring Rd & High S/Princeton Ave

City: Moorpark

Control: Signalized

Project ID: 19-05109-006

Date: 4/3/2019 & 4/4//2(

Total

NS/EW Streets:	Spring Rd				Spring Rd				High St				Princeton Ave				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	1	1.5	0.5	0	1	1	1	0	1	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
AM Wed																	
7:00:00 AM	17	44	47	0	96	125	8	0	2	26	28	0	13	29	33	0	468
7:15:00 AM	6	46	48	0	90	155	2	0	3	42	20	0	16	34	46	0	508
7:30:00 AM	13	45	45	0	111	165	3	0	0	41	22	0	12	41	43	0	541
7:45:00 AM	32	47	57	0	122	148	8	0	3	67	24	0	22	64	44	0	638
8:00:00 AM	38	44	57	0	96	126	4	0	3	63	49	0	14	74	44	0	612
8:15:00 AM	36	49	61	0	107	169	5	0	3	64	45	0	15	65	42	0	661
8:30:00 AM	24	65	52	0	84	137	7	0	2	45	39	0	31	50	37	0	573
8:45:00 AM	20	53	58	0	77	125	8	0	4	52	23	0	20	44	43	0	527
9:00:00 AM	17	50	35	0	53	89	6	0	6	49	20	0	13	31	37	0	406
9:15:00 AM	17	41	34	0	56	62	6	0	4	26	18	0	20	18	35	0	337
9:30:00 AM	18	37	32	0	58	78	12	0	7	34	15	0	12	29	35	0	367
9:45:00 AM	16	37	30	0	68	64	1	0	0	33	16	0	16	34	38	0	353
AM Thrus																	
7:00:00 AM	18	46	32	0	80	116	7	0	4	25	20	0	15	31	44	0	438
7:15:00 AM	8	38	29	0	105	149	4	0	1	36	22	0	15	42	46	0	495
7:30:00 AM	19	54	50	0	110	190	5	0	3	47	19	0	14	41	35	0	587
7:45:00 AM	31	47	54	0	123	158	9	0	2	48	34	0	21	66	24	0	617
8:00:00 AM	40	47	69	0	103	123	3	0	2	84	43	0	19	66	34	0	633
8:15:00 AM	26	58	46	0	83	124	5	0	4	65	49	0	19	61	44	1	585
8:30:00 AM	28	52	56	0	90	149	2	0	4	44	42	0	21	39	55	0	582
8:45:00 AM	24	57	59	0	86	123	9	0	5	49	32	0	21	35	30	0	530
9:00:00 AM	25	48	42	0	42	77	4	0	1	36	16	0	20	34	26	0	371
9:15:00 AM	28	49	25	0	42	53	6	0	9	28	14	0	17	29	17	0	317
9:30:00 AM	26	48	44	0	65	68	2	0	3	28	15	0	17	39	38	0	393
9:45:00 AM	24	40	35	0	63	68	5	0	2	36	18	0	20	28	25	0	364
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
AM Peak 2019	**128**	**205**	**226**	**0**	**404**	**567**	**22**	**0**	**12**	**240**	**163**	**0**	**81**	**243**	**162**	**1**	

GRF	Years	Present	2022
2.10%	1	2.10%	6.30%
	3	0.021	0.063

AM Peak 2020	130	209	231	0	412	579	22	0	12	245	166	0	83	248	165	1	
AM Peak 2022	136	217	240	0	429	603	23	0	12	255	173	0	86	258	172	1	
PM Wed																	
4:30:00 PM	45	147	65	0	52	69	5	0	5	87	33	0	22	57	124	0	711
4:45:00 PM	46	159	45	0	52	70	4	0	4	63	30	0	25	53	92	0	643
5:00:00 PM	37	165	79	0	56	69	5	0	9	67	52	0	20	67	119	0	745
5:15:00 PM	29	149	76	0	70	64	9	0	12	93	21	0	31	98	141	0	793
5:30:00 PM	36	150	46	0	54	66	8	0	7	62	19	0	13	63	118	0	642
5:45:00 PM	30	166	44	0	54	75	3	0	17	47	49	0	22	60	121	0	688
6:00:00 PM	25	109	46	0	36	55	11	0	11	48	24	0	21	48	102	0	536
6:15:00 PM	31	117	34	0	32	71	8	0	13	50	29	0	22	44	98	0	549
6:30:00 PM	23	98	32	0	54	39	6	0	17	49	31	0	22	32	65	0	468
6:45:00 PM	23	89	40	0	39	67	6	0	6	39	16	0	15	45	85	0	470
7:00:00 PM	26	85	38	0	38	70	5	0	7	35	18	0	16	48	88	0	474
7:15:00 PM	25	82	35	0	40	65	7	0	5	34	20	0	14	42	80	0	449
PM Thrus																	
4:30:00 PM	45	168	68	0	46	74	7	0	7	78	32	0	29	60	96	0	710
4:45:00 PM	36	151	64	0	44	84	11	0	13	84	30	0	27	75	112	0	731
5:00:00 PM	62	150	60	0	54	78	11	0	10	88	53	0	31	71	131	0	799
5:15:00 PM	36	159	68	0	61	81	6	0	9	84	27	0	18	64	133	0	746
5:30:00 PM	35	138	55	0	58	74	7	0	6	70	25	0	21	64	132	0	685
5:45:00 PM	38	126	56	0	36	79	3	0	12	63	42	0	37	85	111	0	688
6:00:00 PM	34	108	46	0	41	71	6	0	13	42	15	0	23	65	81	0	545
6:15:00 PM	27	118	37	0	44	66	7	0	7	46	26	0	14	40	96	0	528
6:30:00 PM	22	104	51	0	46	55	5	0	13	47	38	0	24	48	72	0	525
6:45:00 PM	33	88	41	0	41	48	5	0	11	42	12	0	21	35	72	0	449
7:00:00 PM	21	99	51	0	38	49	8	0	15	41	38	0	23	50	65	0	498
7:15:00 PM	31	89	40	0	41	49	6	0	12	42	10	0	22	34	61	0	437
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
PM Peak 2019	**168**	**624**	**263**	**0**	**218**	**295**	**29**	**0**	**35**	**322**	**139**	**0**	**102**	**273**	**474**	**0**	
PM Peak 2020	172	637	268	0	222	301	30	0	35	329	142	0	104	278	484	0	
PM Peak 2022	179	663	279	0	231	313	31	0	37	342	148	0	108	290	504	0	

Location: 2. Princeton Ave & Condor Dr S
City: Moorpark
Control: Signalized

Project ID: 19-05109-006
Date: Wed, Sep 18,19

Total

NS/EW Streets:		Princeton			Princeton			Condor			Condor			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
		X	1	0	1	1	X	X	X	X	0	X	0	
AM	7:00 AM	0	143	12	8	69	0	0	0	0	1	0	4	237
	7:15 AM	0	162	8	4	77	0	0	0	0	0	0	7	258
	7:30 AM	0	213	8	5	82	0	0	0	0	0	0	8	316
	7:45 AM	0	228	14	9	162	0	0	0	0	2	0	8	423
	8:00 AM	0	213	13	8	131	0	0	0	0	3	0	5	373
	8:15 AM	0	188	17	10	119	0	0	0	0	1	0	4	339
	8:30 AM	0	185	10	5	118	0	0	0	0	3	0	3	324
	8:45 AM	0	196	12	7	74	0	0	0	0	0	0	2	291
														2,561
AM Peak 2019		**0**	**746**	**42**	**26**	**390**	**0**	**0**	**0**	**0**	**3**	**0**	**27**	
		0	**782**	**52**	**30**	**442**	**0**	**0**	**0**	**0**	**7**	**0**	**14**	

GRF	**Years**	**Present**	**2022**
2.10%	1	2.10%	6.30%
	3	0.021	0.063

AM Peak 2020	0	762	43	27	398	0	0	0	0	3	0	28	
AM Peak 2022	0	793	45	28	415	0	0	0	0	3	0	29	

		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PM		X	1	0	1	1	X	X	X	X	0	X	0	
	4:00 PM	0	166	3	9	168	0	0	0	0	10	0	5	361
	4:15 PM	0	161	9	20	168	0	0	0	0	9	0	6	373
	4:30 PM	0	177	5	10	190	0	0	0	0	9	0	13	404
	4:45 PM	0	187	4	2	210	0	0	0	0	5	0	3	411
	5:00 PM	0	193	2	3	251	0	0	0	0	14	0	5	468
	5:15 PM	0	196	7	6	228	0	0	0	0	9	0	10	456
	5:30 PM	0	176	6	2	193	0	0	0	0	11	0	5	393
	5:45 PM	0	142	4	7	186	0	0	0	0	9	0	5	353
														3,219

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
PM Peak 2019	**0**	**691**	**21**	**41**	**736**	**0**	**0**	**0**	**0**	**33**	**0**	**27**
	0	**707**	**19**	**18**	**858**	**0**	**0**	**0**	**0**	**43**	**0**	**25**
PM Peak 2020	0	706	21	42	751	0	0	0	0	34	0	28
PM Peak 2022	0	735	22	44	782	0	0	0	0	35	0	29

B. TURNING MOVEMENT COUNTS

b. Turning Movement Counts Historical Data - Streetlight

Day Type

1: Weekday (Tu-Th)

TURNING MOVEMENT COUNTS

Location: 3. Princeton Ave & Condor Dr N

Day Part	EB Left	EB Thru	EB Right	WB Approach Condor N WB Left	WB Thru	WB Right	NB Approach Princeton NB Left	NB Thru	NB Right	SB Approach Princeton SB Left	SB Thru	SB Right	Total
0: All Day (12am-12am)	-	-	-	215	-	1,378	-	7,526	268	1,518	5,442	-	16,347
1: 6am (6am-7am)	-	-	-	-	-	10	-	367	51	198	158	-	784
2: 7am (7am-8am)	-	-	-	3	-	5	-	806	41	242	307	-	1,404
3: 8am (8am-9am)	-	-	-	3	-	7	-	626	61	368	270	-	1,335
4: 9am (9am-10am)	-	-	-	8	-	7	-	379	16	78	178	-	666
5: 3pm (3pm-4pm)	-	-	-	22	-	137	-	647	15	46	481	-	1,348
6: 4pm (4pm-5pm)	-	-	-	31	-	359	-	592	12	23	598	-	1,615
7: 5pm (5pm-6pm)	-	-	-	53	-	272	-	675	7	11	672	-	1,690
8: 6pm (6pm-7pm)	-	-	-	6	-	98	-	513	3	9	452	-	1,081
	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-
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TURNING MOVEMENT PERCENTAGE

Day Part	EB Left	EB Thru	EB Right	WB Approach Condor N WB Left	WB Thru	WB Right	NB Approach Princeton NB Left	NB Thru	NB Right	SB Approach Princeton SB Left	SB Thru	SB Right
0: All Day (12am-12am)	-	-	-	13%	0%	87%	0%	97%	3%	22%	78%	0%
1: 6am (6am-7am)	-	-	-	0%	0%	100%	0%	88%	12%	56%	44%	0%
2: 7am (7am-8am)	-	-	-	38%	0%	63%	0%	95%	5%	44%	56%	0%
3: 8am (8am-9am)	-	-	-	30%	0%	70%	0%	91%	9%	58%	42%	0%
4: 9am (9am-10am)	-	-	-	53%	0%	47%	0%	96%	4%	30%	70%	0%
5: 3pm (3pm-4pm)	-	-	-	14%	0%	86%	0%	98%	2%	9%	91%	0%
6: 4pm (4pm-5pm)	-	-	-	8%	0%	92%	0%	98%	2%	4%	96%	0%
7: 5pm (5pm-6pm)	-	-	-	16%	0%	84%	0%	99%	1%	2%	98%	0%
8: 6pm (6pm-7pm)	-	-	-	6%	0%	94%	0%	99%	1%	2%	98%	0%
	-	-	-	-	-	-	-	-	-	-	-	-
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Day Type

1: Weekday (Tu-Th)

TURNING MOVEMENT COUNTS

Location: 4. Princeton Ave & SR 118 EB Ram	EB Approach SR118 Ramp						NB Approach Princeton			SB Approach Princeton			
Day Part	EB Left	EB Thru	EB Right	WB Left	WB Thru	WB Right	NB Left	NB Thru	NB Right	SB Left	SB Thru	SB Right	Total
0: All Day (12am-12am)	2,365	6,249	1,266	-	-	-	-	3,659	5,975	707	5,774	-	25,995
1: 6am (6am-7am)	48	258	45	-	-	-	-	79	366	60	298	-	1,154
2: 7am (7am-8am)	54	525	101	-	-	-	-	343	554	53	438	-	2,068
3: 8am (8am-9am)	85	489	137	-	-	-	-	258	466	47	478	-	1,960
4: 9am (9am-10am)	86	522	51	-	-	-	-	153	270	32	217	-	1,331
5: 3pm (3pm-4pm)	343	333	81	-	-	-	-	396	438	45	455	-	2,091
6: 4pm (4pm-5pm)	221	263	97	-	-	-	-	369	619	72	544	-	2,185
7: 5pm (5pm-6pm)	278	382	153	-	-	-	-	421	555	54	563	-	2,406
8: 6pm (6pm-7pm)	230	445	93	-	-	-	-	239	415	36	374	-	1,832
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TURNING MOVEMENT PERCENTAGE

	EB Approach SR118 Ramp						NB Approach Princeton			SB Approach Princeton		
Day Part	EB Left	EB Thru	EB Right	WB Left	WB Thru	WB Right	NB Left	NB Thru	NB Right	SB Left	SB Thru	SB Right
0: All Day (12am-12am)	24%	63%	13%	-	-	-	0%	38%	62%	11%	89%	0%
1: 6am (6am-7am)	14%	74%	13%	-	-	-	0%	18%	82%	17%	83%	0%
2: 7am (7am-8am)	8%	77%	15%	-	-	-	0%	38%	62%	11%	89%	0%
3: 8am (8am-9am)	12%	69%	19%	-	-	-	0%	36%	64%	9%	91%	0%
4: 9am (9am-10am)	13%	79%	8%	-	-	-	0%	36%	64%	13%	87%	0%
5: 3pm (3pm-4pm)	45%	44%	11%	-	-	-	0%	47%	53%	9%	91%	0%
6: 4pm (4pm-5pm)	38%	45%	17%	-	-	-	0%	37%	63%	12%	88%	0%
7: 5pm (5pm-6pm)	34%	47%	19%	-	-	-	0%	43%	57%	9%	91%	0%
8: 6pm (6pm-7pm)	30%	58%	12%	-	-	-	0%	37%	63%	9%	91%	0%
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Day Type

1: Weekday (Tu-Th)

TURNING MOVEMENT COUNTS

Location: 5. Princeton Ave & SR 118 WB Ran	EB Left	EB Thru	EB Right	WB Approach SR118 WB Ramp WB Left	WB Thru	WB Right	NB Approach Princeton NB Left	NB Thru	NB Right	SB Approach Princeton SB Left	SB Thru	SB Right	Total
Day Part													
0: All Day (12am-12am)	-	-	-	5,175	737	1,204	1,075	5,073	-	-	1,687	2,774	17,725
1: 6am (6am-7am)	-	-	-	305	29	23	50	80	-	-	66	182	735
2: 7am (7am-8am)	-	-	-	351	43	24	81	318	-	-	151	439	1,407
3: 8am (8am-9am)	-	-	-	417	51	52	63	269	-	-	127	312	1,291
4: 9am (9am-10am)	-	-	-	204	30	38	34	205	-	-	59	111	681
5: 3pm (3pm-4pm)	-	-	-	386	53	103	75	656	-	-	138	132	1,543
6: 4pm (4pm-5pm)	-	-	-	512	59	144	136	463	-	-	136	140	1,590
7: 5pm (5pm-6pm)	-	-	-	478	68	115	155	583	-	-	171	254	1,824
8: 6pm (6pm-7pm)	-	-	-	316	49	112	61	421	-	-	116	168	1,243
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TURNING MOVEMENT PERCENTAGE

	EB Left	EB Thru	EB Right	WB Approach SR118 WB Ramp WB Left	WB Thru	WB Right	NB Approach Princeton NB Left	NB Thru	NB Right	SB Approach Princeton SB Left	SB Thru	SB Right
Day Part												
0: All Day (12am-12am)	-	-	-	73%	10%	17%	17%	83%	0%	0%	38%	62%
1: 6am (6am-7am)	-	-	-	85%	8%	6%	38%	62%	0%	0%	27%	73%
2: 7am (7am-8am)	-	-	-	84%	10%	6%	20%	80%	0%	0%	26%	74%
3: 8am (8am-9am)	-	-	-	80%	10%	10%	19%	81%	0%	0%	29%	71%
4: 9am (9am-10am)	-	-	-	75%	11%	14%	14%	86%	0%	0%	35%	65%
5: 3pm (3pm-4pm)	-	-	-	71%	10%	19%	10%	90%	0%	0%	51%	49%
6: 4pm (4pm-5pm)	-	-	-	72%	8%	20%	23%	77%	0%	0%	49%	51%
7: 5pm (5pm-6pm)	-	-	-	72%	10%	17%	21%	79%	0%	0%	40%	60%
8: 6pm (6pm-7pm)	-	-	-	66%	10%	23%	13%	87%	0%	0%	41%	59%
	-	-	-	-	-	-	-	-	-	-	-	-
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Day Type

1: Weekday (Tu-Th)

TURNING MOVEMENT COUNTS

Location: 6. Princeton Ave & Campus Park D	EB Approach Campus Park			WB Approach Campus Park			NB Approach Princeton						
Day Part	EB Left	EB Thru	EB Right	WB Left	WB Thru	WB Right	NB Left	NB Thru	NB Right	SB Left	SB Thru	SB Right	Total
0: All Day (12am-12am)	-	544	742	2,242	550	-	948	-	3,357	-	-	-	8,383
1: 6am (6am-7am)	-	13	82	94	9	-	22	-	33	-	-	-	253
2: 7am (7am-8am)	-	69	98	288	16	-	14	-	281	-	-	-	766
3: 8am (8am-9am)	-	36	44	236	29	-	21	-	241	-	-	-	607
4: 9am (9am-10am)	-	29	23	76	20	-	32	-	176	-	-	-	356
5: 3pm (3pm-4pm)	-	44	17	199	49	-	94	-	410	-	-	-	813
6: 4pm (4pm-5pm)	-	45	38	141	52	-	122	-	310	-	-	-	708
7: 5pm (5pm-6pm)	-	64	78	194	67	-	144	-	342	-	-	-	889
8: 6pm (6pm-7pm)	-	36	74	122	53	-	80	-	286	-	-	-	651
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TURNING MOVEMENT PERCENTAGE

	EB Approach Campus Park			WB Approach Campus Park			NB Approach Princeton					
Day Part	EB Left	EB Thru	EB Right	WB Left	WB Thru	WB Right	NB Left	NB Thru	NB Right	SB Left	SB Thru	SB Right
0: All Day (12am-12am)	0%	42%	58%	80%	20%	0%	22%	0%	78%	-	-	-
1: 6am (6am-7am)	0%	14%	86%	91%	9%	0%	40%	0%	60%	-	-	-
2: 7am (7am-8am)	0%	41%	59%	95%	5%	0%	5%	0%	95%	-	-	-
3: 8am (8am-9am)	0%	45%	55%	89%	11%	0%	8%	0%	92%	-	-	-
4: 9am (9am-10am)	0%	56%	44%	79%	21%	0%	15%	0%	85%	-	-	-
5: 3pm (3pm-4pm)	0%	72%	28%	80%	20%	0%	19%	0%	81%	-	-	-
6: 4pm (4pm-5pm)	0%	54%	46%	73%	27%	0%	28%	0%	72%	-	-	-
7: 5pm (5pm-6pm)	0%	45%	55%	74%	26%	0%	30%	0%	70%	-	-	-
8: 6pm (6pm-7pm)	0%	33%	67%	70%	30%	0%	22%	0%	78%	-	-	-
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Day Type

1: Weekday (Tu-Th)

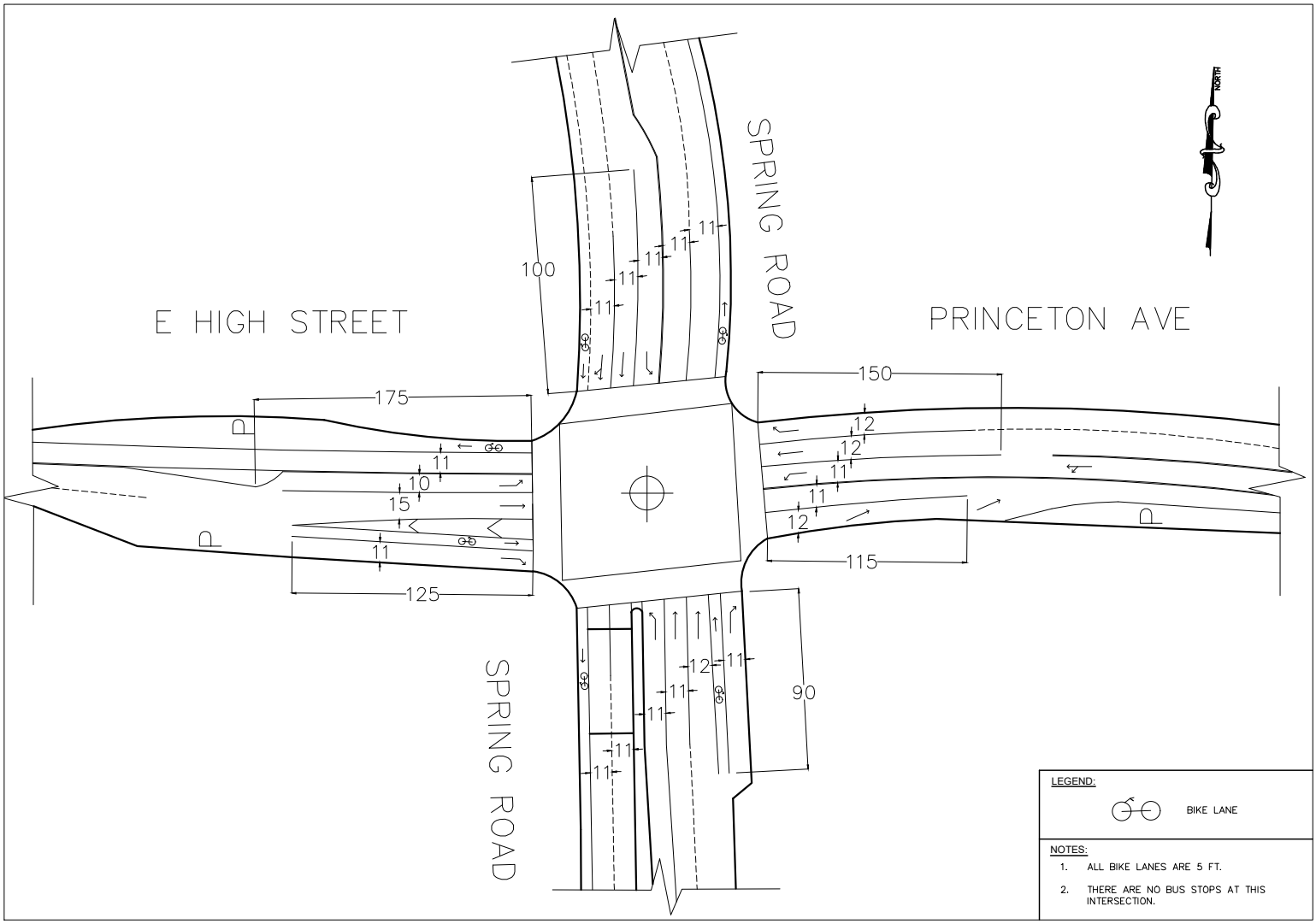
TURNING MOVEMENT COUNTS

Location: 7. Campus Park Dr & Collins Dr	EB Approach Campus Park			WB Approach Campus Park			NB Approach Collins			SB Approach Collins			
Day Part	EB Left	EB Thru	EB Right	WB Left	WB Thru	WB Right	NB Left	NB Thru	NB Right	SB Left	SB Thru	SB Right	Total
0: All Day (12am-12am)	1,265	1,000	1,235	2,317	802	69	2,241	2,808	2,320	109	3,017	1,231	18,414
1: 6am (6am-7am)	18	17	58	16	6	1	43	49	68	3	48	33	360
2: 7am (7am-8am)	149	70	101	47	13	9	153	302	327	7	94	83	1,355
3: 8am (8am-9am)	153	120	98	25	27	5	195	413	327	4	72	106	1,545
4: 9am (9am-10am)	147	136	83	108	69	4	127	497	458	11	190	39	1,869
5: 3pm (3pm-4pm)	77	84	74	243	57	5	201	124	173	10	308	128	1,484
6: 4pm (4pm-5pm)	94	79	78	142	55	6	175	90	71	8	214	69	1,081
7: 5pm (5pm-6pm)	86	74	87	202	61	2	188	153	110	4	193	95	1,255
8: 6pm (6pm-7pm)	59	74	90	155	62	3	165	179	108	6	158	65	1,124
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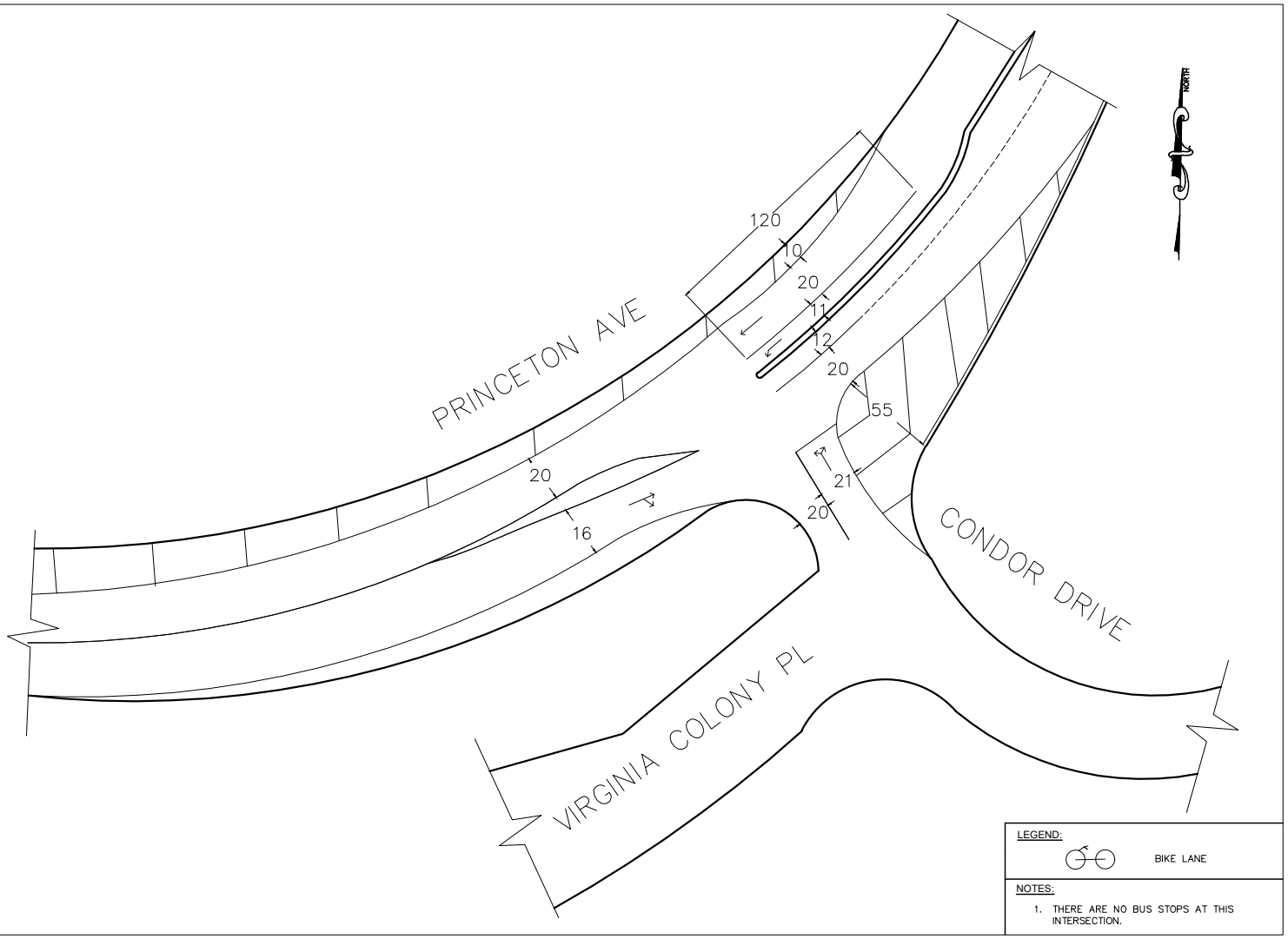
TURNING MOVEMENT PERCENTAGE

	EB Approach Campus Park			WB Approach Campus Park			NB Approach Collins			SB Approach Collins		
Day Part	EB Left	EB Thru	EB Right	WB Left	WB Thru	WB Right	NB Left	NB Thru	NB Right	SB Left	SB Thru	SB Right
0: All Day (12am-12am)	36%	29%	35%	73%	25%	2%	30%	38%	31%	3%	69%	28%
1: 6am (6am-7am)	19%	18%	62%	70%	26%	4%	27%	31%	43%	4%	57%	39%
2: 7am (7am-8am)	47%	22%	32%	68%	19%	13%	20%	39%	42%	4%	51%	45%
3: 8am (8am-9am)	41%	32%	26%	44%	47%	9%	21%	44%	35%	2%	40%	58%
4: 9am (9am-10am)	40%	37%	23%	60%	38%	2%	12%	46%	42%	5%	79%	16%
5: 3pm (3pm-4pm)	33%	36%	31%	80%	19%	2%	40%	25%	35%	2%	69%	29%
6: 4pm (4pm-5pm)	37%	31%	31%	70%	27%	3%	52%	27%	21%	3%	74%	24%
7: 5pm (5pm-6pm)	35%	30%	35%	76%	23%	1%	42%	34%	24%	1%	66%	33%
8: 6pm (6pm-7pm)	26%	33%	40%	70%	28%	1%	37%	40%	24%	3%	69%	28%
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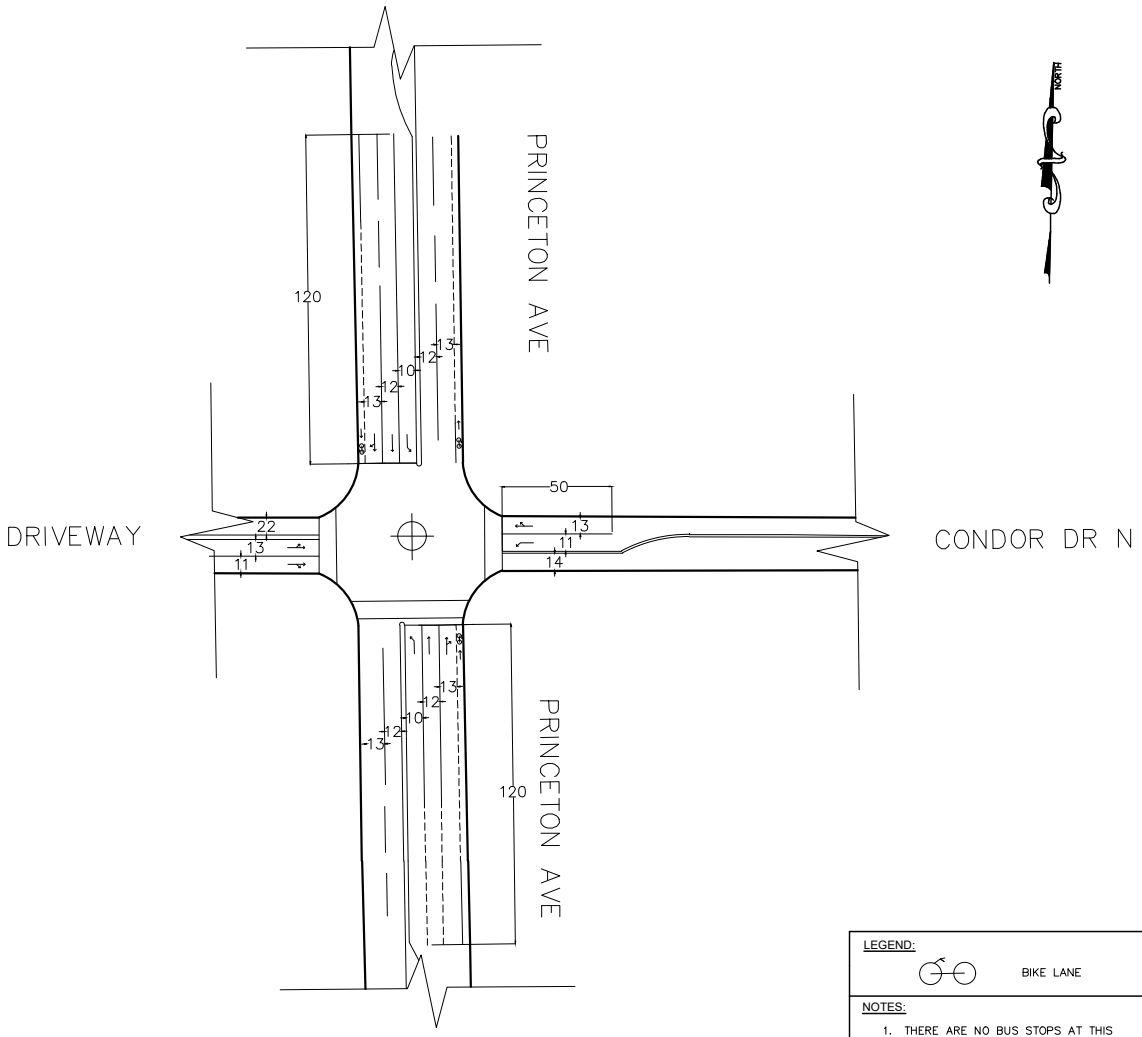
C. Physical Inventory Sketches



NV5	PREPARED BY: NV5 NAME OF CONSULTANT	SCALE: N.T.S.	TRAFFIC IMPACT STUDY	PHYSICAL INVENTORY	INTERSECTION 1 SPRING ROAD AND PRICETON AVE/HIGH STREET
					DATE: 6-15-2020 / SHEET 01 OF 07



NV5	PREPARED BY: NV5 NAME OF CONSULTANT	SCALE: N.T.S.	TRAFFIC IMPACT STUDY	PHYSICAL INVENTORY	INTERSECTION 2 CONOR DRIVE S AND PRICETON AVE DATE: 6-15-2020 SHEET 02 OF 07



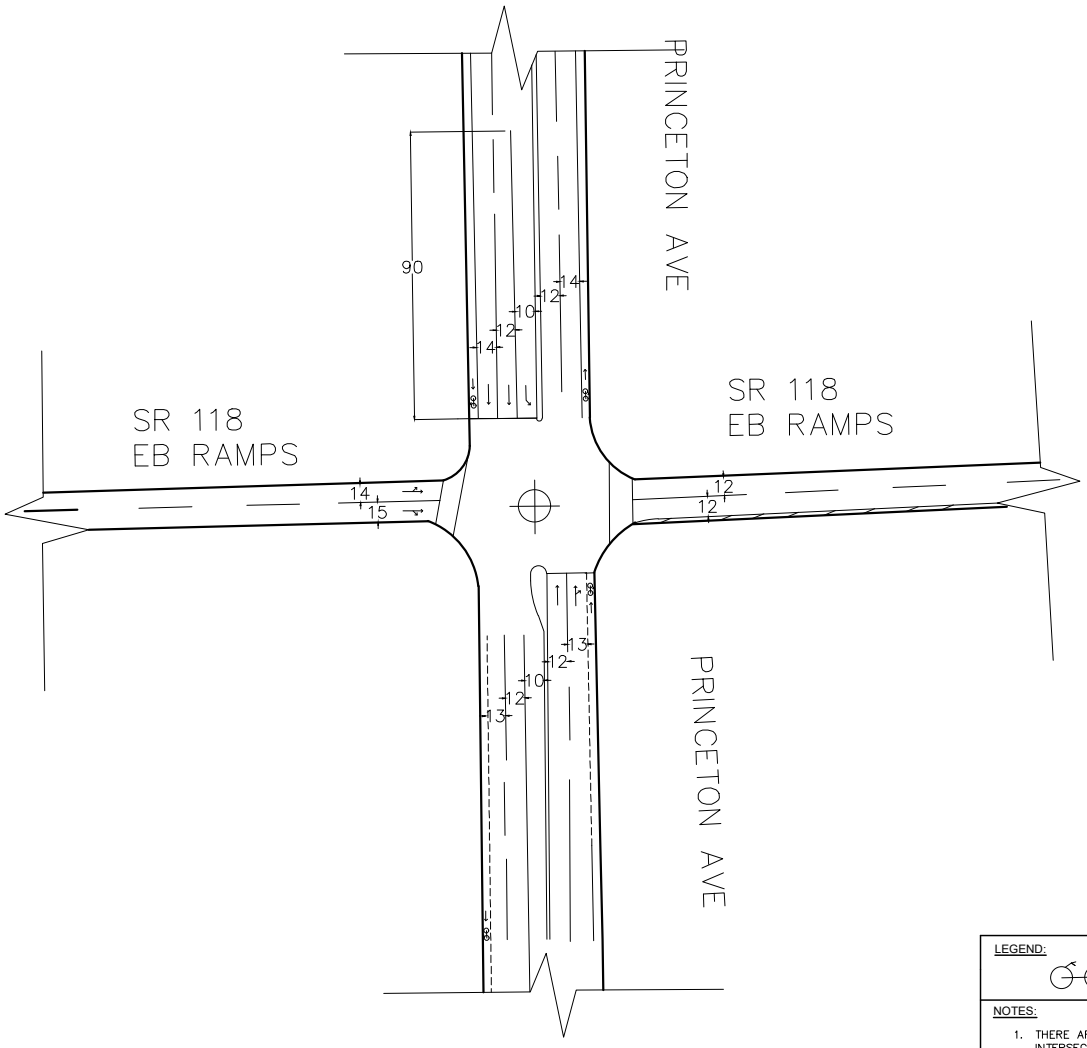
LEGEND:

BIKE LANE

NOTES:

1. THERE ARE NO BUS STOPS AT THIS INTERSECTION.

NV5	PREPARED BY: NV5 NAME OF CONSULTANT	SCALE: N.T.S.	TRAFFIC IMPACT STUDY	PHYSICAL INVENTORY	INTERSECTION 3 CONOR DRIVE N AND PRICETON AVE DATE: 6-15-2020 SHEET 03 OF 07



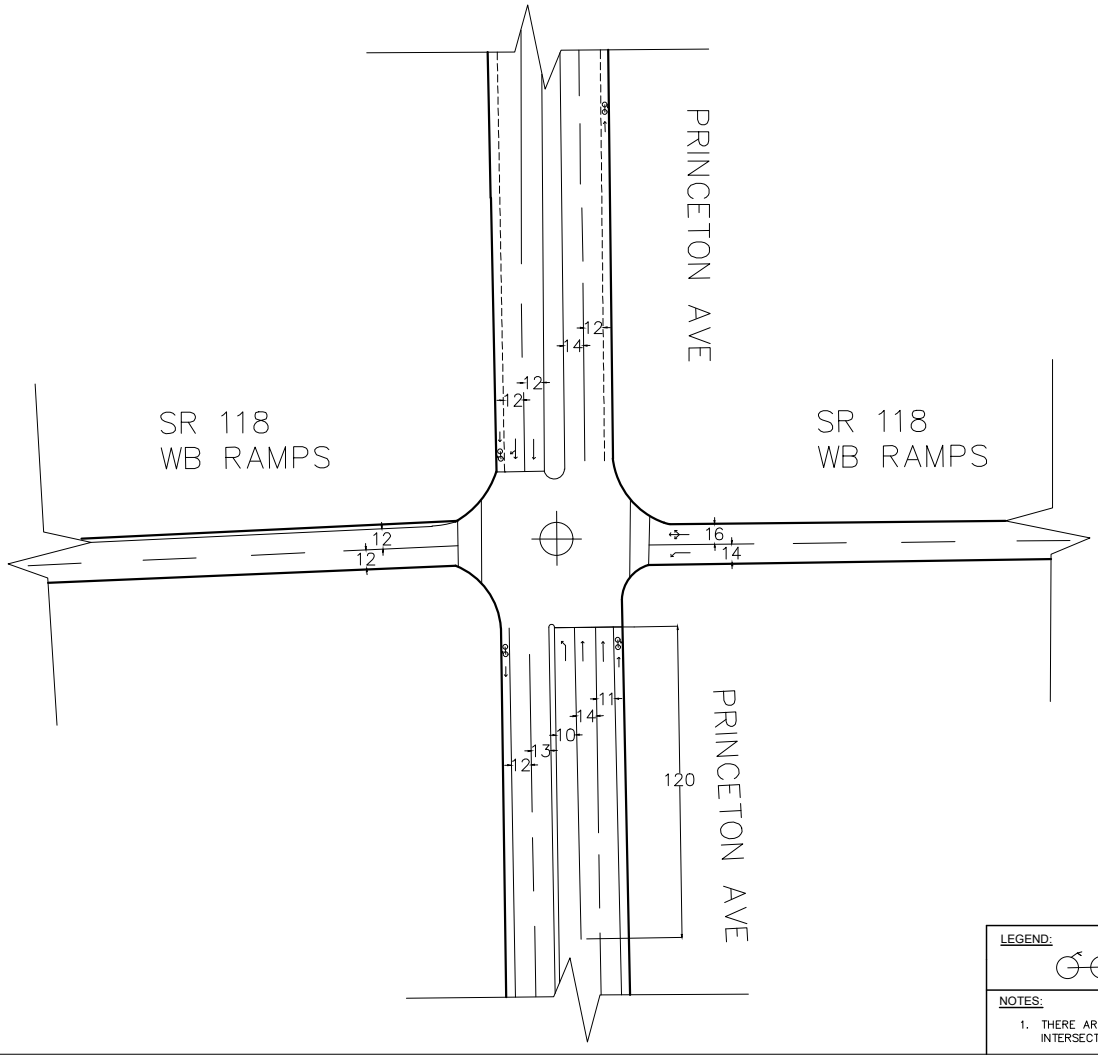
LEGEND:

BIKE LANE

NOTES:

1. THERE ARE NO BUS STOPS AT THIS INTERSECTION.

NV5	PREPARED BY: NV5 NAME OF CONSULTANT	SCALE: N.T.S.	TRAFFIC IMPACT STUDY	PHYSICAL INVENTORY	INTERSECTION 4 SR 118 EB RAMPS AND PRICETON AVE DATE: 6-15-2020 SHEET 04 OF 07



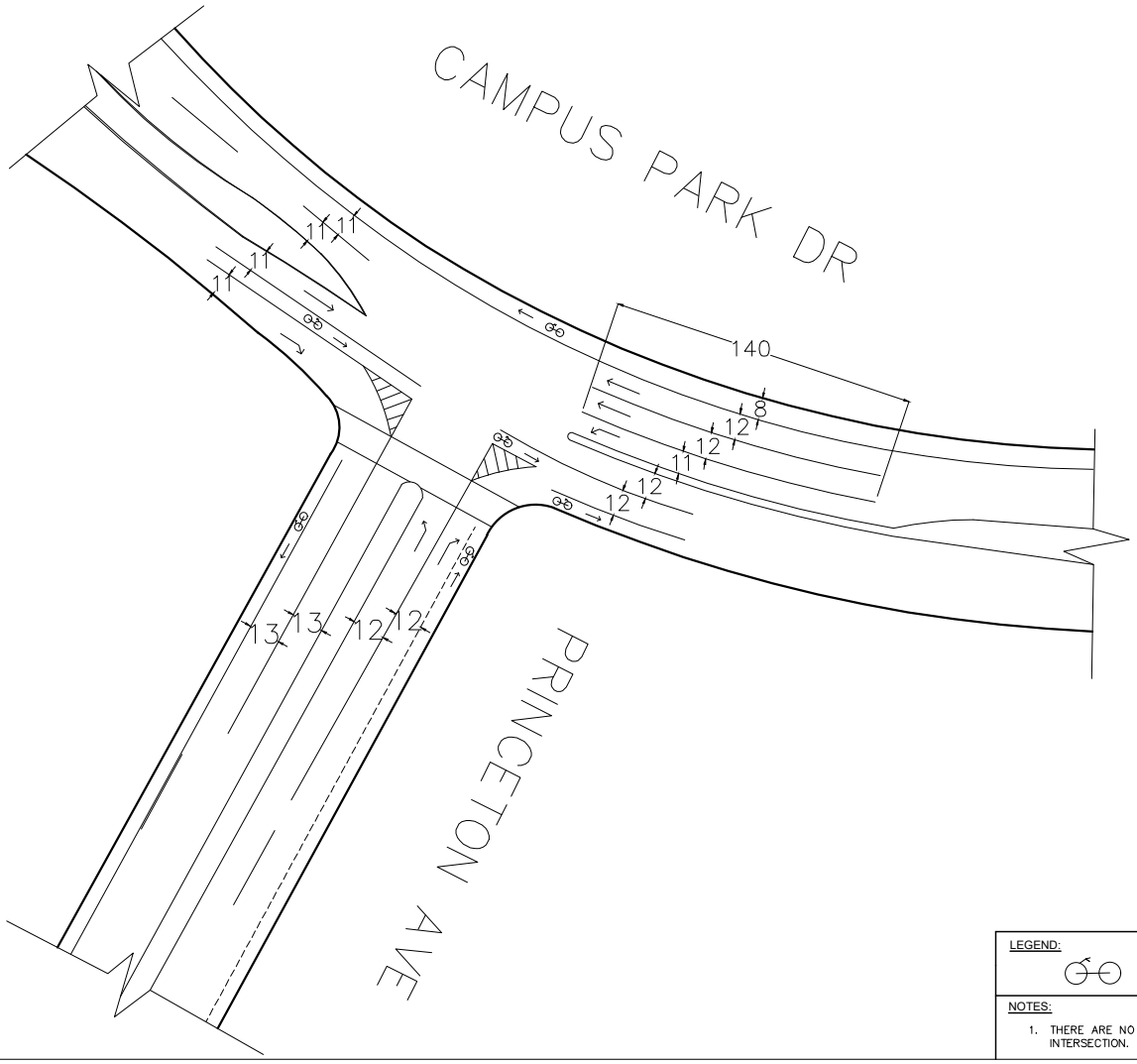
LEGEND:

BIKE LANE

NOTES:

1. THERE ARE NO BUS STOPS AT THIS INTERSECTION.

NV5	PREPARED BY: NV5 / NAME OF CONSULTANT	SCALE: N.T.S.	TRAFFIC IMPACT STUDY	PHYSICAL INVENTORY	INTERSECTION 5 SR 118 WB RAMPS AND PRICETON AVE DATE: 6-15-2020 / SHEET 05 OF 07



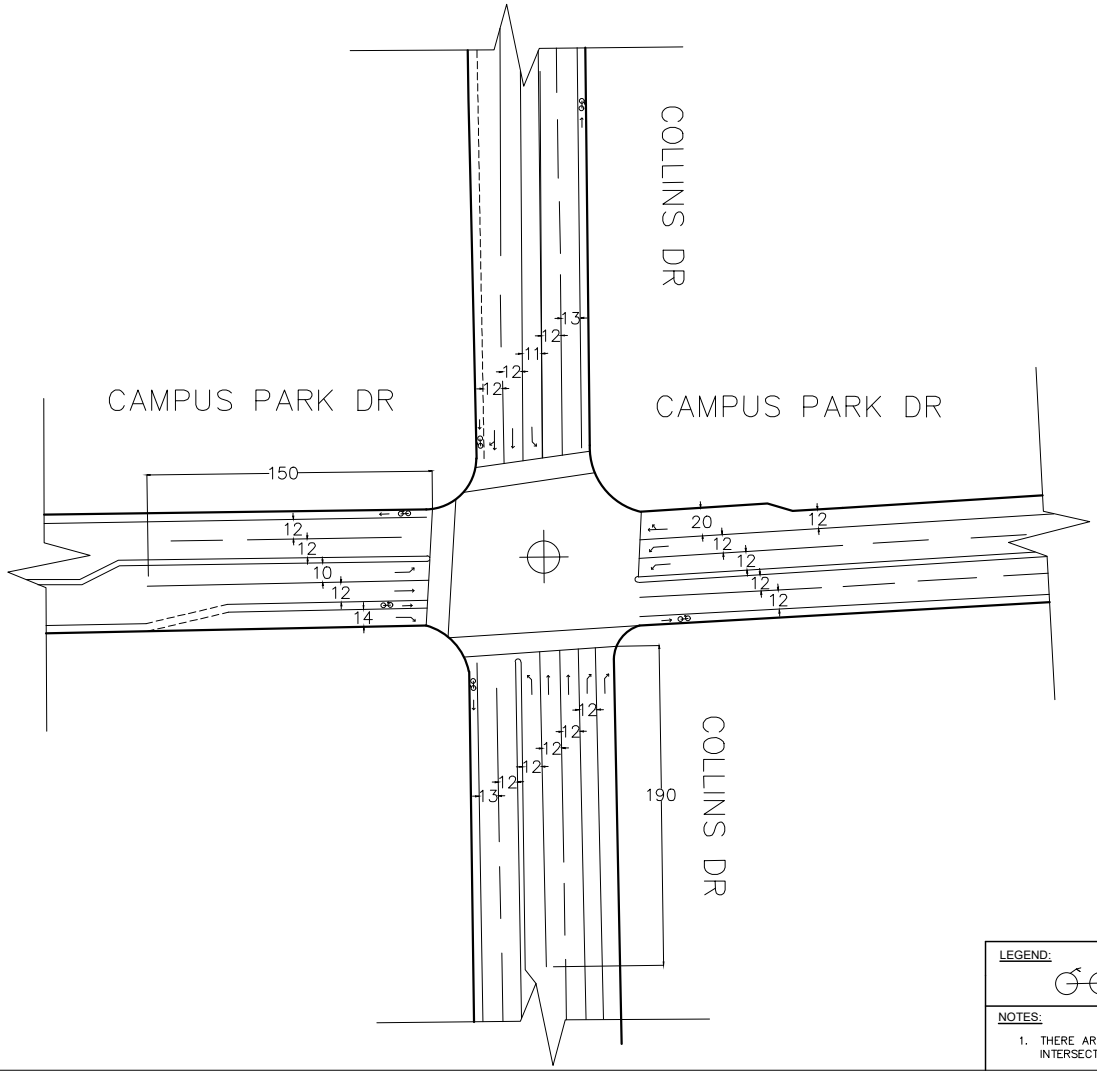
LEGEND:

BIKE LANE

NOTES:

1. THERE ARE NO BUS STOPS AT THIS INTERSECTION.

NV5	PREPARED BY: NV5 NAME OF CONSULTANT	SCALE: N.T.S.	TRAFFIC IMPACT STUDY	PHYSICAL INVENTORY	INTERSECTION 6 CAMPUS PARK DR AND PRICETON AVE	
					DATE: 6-15-2020	SHEET 06 OF 07



LEGEND:

BIKE LANE

NOTES:

1. THERE ARE NO BUS STOPS AT THIS INTERSECTION.

NV5	PREPARED BY: NV5 NAME OF CONSULTANT	SCALE: N.T.S.	TRAFFIC IMPACT STUDY	PHYSICAL INVENTORY	INTERSECTION 7 CAMPUS PARK DR AND COLLINS DR DATE: 6-15-2020 SHEET 07 OF 07

D. Existing Conditions Analysis Reports

D. Existing Conditions Analysis Reports

a. Existing Signalized Intersections ICU Reports

Intersection Capacity Utilization Worksheet

Intersection Location: Spring Rd & Princeton Ave/E High S
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: 2020 Existing Condition - AM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	1	1	1	1	1	1	1	2	1	1	1.5	0.5
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	12	250	169	85	253	168	133	213	236	421	591	22
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☑ Yes			☑ Yes			☑ Yes			☑ Yes	
7	Pedestrian Timing Required		30			30			30			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	12.0	250.0	169.0	85.0	253.0	168.0	133.0	213.0	236.0	421.0	591.0	22.0
14	Volume Separate Left	12.0	250.0		85.0	253.0		133.0	213.0		421.0	591.0	
15	Lane Utilization Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.952	1.000	1.000	0.908	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	1425.0	1600.0	1275.0	1425.0	1600.0	1275.0	1425.0	3046.4	1275.0	1425.0	2179.2	637.5
18	Saturated Flow Separate	1425.0	1600.0		1425.0	1600.0		1425.0	3046.4		1425.0	2179.2	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	1.0	18.8	15.9	7.2	19.0	15.8	11.2	8.4	22.2	35.5	32.5	4.1
23	Adjusted Reference Time	8.0	22.8	19.9	11.2	23.0	19.8	15.2	12.4	26.2	39.5	36.5	8.1
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	12	250		85	253		133	107		421	394	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	15.0	15.0		15.0	15.0		15.0	15.0		0.9	15.0	
28	Left turn Factor	0.07	1.00		0.07	1.00		0.07	1.00		1.07	1.00	
29	Permitted Sat Flow	95.0	1600.0		95.0	1600.0		95.0	1523.2		1520.0	1452.8	
30	Reference Time A	15.2	18.8		107.4	19.0		168.0	8.4		35.5	32.5	
31	Adjusted Saturation B		1600.0			1600.0			3046.4			2179.2	
32	Reference Time B		NA			NA			NA			NA	
33	Reference Time Lefts	NA			NA			NA			NA		
34	Reference Time		18.8			107.4			168.0			35.5	
35	Adjusted Reference Time		22.8			111.4			172.0			39.5	
	Split Timing												
36	Ref Time Combined		18.8			19.0			8.4			32.5	
37	Ref Time By Movement	1.0	18.8		7.2	19.0		11.2	8.4		35.5	32.5	
38	Reference Time		18.8			19.0			11.2			35.5	
39	Adjusted Reference Time	22.8	22.8		23.0	23.0		15.2	15.2		39.5	39.5	
40	Lane Group V/C Ratio	0.008	0.156	0.113	0.057	0.158	0.112	0.089	0.067	0.157	0.281	0.195	-

	Summary	East West	North South
41	Protected Option	33.9	51.8
42	Permitted Option	111.4	172.0
43	Split Option	45.7	54.7
44	Minimum	33.9	51.8
45	Combined	85.8	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	19.9	19.8	26.2	8.1
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	12.4	36.5	23.0	22.8
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	11.2	8.0	39.5	15.2
51	Combined	43.5	64.4	88.6	46.1

52	**Intersection Capacity Utilization**	**73.9%**
53	**Level Of Service**	**C**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Spring Rd & Princeton Ave/E High S
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: 2020 Existing Condition - PM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	1	1	1	1	1	1	1	2	1	1	1.5	0.5
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	36	336	145	106	284	494	176	650	274	227	307	31
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☑ Yes			☑ Yes			☑ Yes			☑ Yes	
7	Pedestrian Timing Required		30			30			30			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	36.0	336.0	145.0	106.0	284.0	494.0	176.0	650.0	274.0	227.0	307.0	31.0
14	Volume Separate Left	36.0	336.0		106.0	284.0		176.0	650.0		227.0	307.0	
15	Lane Utilization Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.952	1.000	1.000	0.908	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	1425.0	1600.0	1275.0	1425.0	1600.0	1275.0	1425.0	3046.4	1275.0	1425.0	2179.2	637.5
18	Saturated Flow Separate	1425.0	1600.0		1425.0	1600.0		1425.0	3046.4		1425.0	2179.2	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	3.0	25.2	13.6	8.9	21.3	46.5	14.8	25.6	25.8	19.1	16.9	5.8
23	Adjusted Reference Time	8.0	29.2	17.6	12.9	25.3	50.5	18.8	29.6	29.8	23.1	20.9	9.8
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	36	336		106	284		176	325		227	205	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	15.0	15.0		15.0	15.0		15.0	15.0		0.9	15.0	
28	Left turn Factor	0.07	1.00		0.07	1.00		0.07	1.00		1.07	1.00	
29	Permitted Sat Flow	95.0	1600.0		95.0	1600.0		95.0	1523.2		1520.0	1452.8	
30	Reference Time A	45.5	25.2		133.9	21.3		222.3	25.6		19.1	16.9	
31	Adjusted Saturation B		1600.0			1600.0			3046.4			2179.2	
32	Reference Time B		NA			NA			NA			NA	
33	Reference Time Lefts	NA			NA			NA			NA		
34	Reference Time		45.5			133.9			222.3			19.1	
35	Adjusted Reference Time		49.5			137.9			226.3			23.1	
	Split Timing												
36	Ref Time Combined		25.2			21.3			25.6			16.9	
37	Ref Time By Movement	3.0	25.2		8.9	21.3		14.8	25.6		19.1	16.9	
38	Reference Time		25.2			21.3			25.6			19.1	
39	Adjusted Reference Time	29.2	29.2		25.3	25.3		29.6	29.6		23.1	23.1	
40	Lane Group V/C Ratio	0.024	0.210	0.097	0.071	0.178	0.329	0.117	0.203	0.183	0.151	0.107	-

	Summary	East West	North South
41	Protected Option	42.1	52.7
42	Permitted Option	137.9	226.3
43	Split Option	54.5	52.7
44	Minimum	42.1	52.7
45	Combined	94.8	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	17.6	50.5	29.8	9.8
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	29.6	20.9	25.3	29.2
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	12.9	8.0	23.1	18.8
51	Combined	60.2	79.4	78.2	57.9

52	**Intersection Capacity Utilization**	**79.0%**
53	**Level Of Service**	**C**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Princeton Ave & Condor Dr N
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: 2020 Existing Condition - AM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	0.5	0.5	1	1	0.5	0.5	1	1.5	0.5	1	1.5	0.5
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	31	0	31	3	0	5	31	823	42	247	313	31
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☑ Yes			☑ Yes			☑ Yes			☑ Yes	
7	Pedestrian Timing Required		30			30			30			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	31.0	0.0	31.0	3.0	0.0	5.0	31.0	823.0	42.0	247.0	313.0	31.0
14	Volume Separate Left	31.0	0.0		3.0	0.0		31.0	823.0		247.0	313.0	
15	Lane Utilization Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.908	1.000	1.000	0.908	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	712.5	800.0	1275.0	1425.0	800.0	637.5	1425.0	2179.2	637.5	1425.0	2179.2	637.5
18	Saturated Flow Separate	712.5	800.0		1425.0	800.0		1425.0	2179.2		1425.0	2179.2	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	5.2	0.0	2.9	0.3	0.0	0.9	2.6	45.3	7.9	20.8	17.2	5.8
23	Adjusted Reference Time	9.2	0.0	8.0	8.0	0.0	8.0	8.0	49.3	11.9	24.8	21.2	9.8
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	62	0		3	0		31	549		247	209	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	15.0	15.0		15.0	15.0		15.0	15.0		0.9	15.0	
28	Left turn Factor	0.07	1.00		0.07	1.00		0.07	1.00		1.07	1.00	
29	Permitted Sat Flow	95.0	1600.0		95.0	1600.0		95.0	1452.8		1520.0	1452.8	
30	Reference Time A	78.3	0.0		3.8	0.0		39.2	45.3		20.8	17.2	
31	Adjusted Saturation B		800.0			800.0			2179.2			2179.2	
32	Reference Time B		0.0			0.0			NA			NA	
33	Reference Time Lefts	13.2			8.3			NA			NA		
34	Reference Time		13.2			3.8			45.3			20.8	
35	Adjusted Reference Time		17.2			8.0			49.3			24.8	
	Split Timing												
36	Ref Time Combined		0.0			0.0			45.3			17.2	
37	Ref Time By Movement	5.2	0.0		0.3	0.0		2.6	45.3		20.8	17.2	
38	Reference Time		5.2			0.3			45.3			20.8	
39	Adjusted Reference Time	9.2	9.2		8.0	8.0		49.3	49.3		24.8	24.8	
40	Lane Group V/C Ratio	-	0.020	0.021	0.002	0.003	-	0.021	0.279	-	0.165	0.109	-

	Summary	East West	North South
41	Protected Option	9.2	74.1
42	Permitted Option	17.2	49.3
43	Split Option	17.2	74.1
44	Minimum	9.2	49.3
45	Combined	58.5	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	8.0	8.0	11.9	9.8
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	49.3	21.2	0.0	0.0
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	8.0	9.2	24.8	8.0
51	Combined	65.3	38.5	36.7	17.8

52	**Intersection Capacity Utilization**	**54.4%**
53	**Level Of Service**	**A**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Princeton Ave & Condor Dr N
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: 2020 Existing Condition - PM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	0.5	0.5	1	1	0.5	0.5	1	1.5	0.5	1	1.5	0.5
3	Shared LT Lane (y/n)	☑ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	31	0	31	54	0	278	31	689	7	11	686	31
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☑ Yes			☑ Yes			☑ Yes			☑ Yes	
7	Pedestrian Timing Required		30			30			30			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	0.0	31.0	31.0	54.0	0.0	278.0	31.0	689.0	7.0	11.0	686.0	31.0
14	Volume Separate Left	31.0	0.0		54.0	0.0		31.0	689.0		11.0	686.0	
15	Lane Utilization Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.908	1.000	1.000	0.908	1.000
16	Turning Factor Adjust	0.950	0.950	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	0.0	1520.0	1275.0	1425.0	800.0	637.5	1425.0	2179.2	637.5	1425.0	2179.2	637.5
18	Saturated Flow Separate	2137.5	800.0		1425.0	800.0		1425.0	2179.2		1425.0	2179.2	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		FALSE			FALSE			TRUE			TRUE	
22	Reference Time	NA	NA	2.9	NA	NA	52.3	2.6	37.9	1.3	0.9	37.8	5.8
23	Adjusted Reference Time	NA	NA	8.0	NA	NA	56.3	8.0	41.9	8.0	8.0	41.8	9.8
	Permitted Option												
24	Proportion Lefts	1	1.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	0	186		54	0		31	459		11	457	
26	Proportion Lefts Left	1	0.17		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	15.0	16.1		15.0	15.0		15.0	15.0		0.9	15.0	
28	Left turn Factor	0.07	0.28		0.07	1.00		0.07	1.00		1.07	1.00	
29	Permitted Sat Flow	0.0	865.6		95.0	1600.0		95.0	1452.8		1520.0	1452.8	
30	Reference Time A	0.0	25.8		68.2	0.0		39.2	37.9		0.9	37.8	
31	Adjusted Saturation B		-800.0			800.0			2179.2			2179.2	
32	Reference Time B		14.7			0.0			NA			NA	
33	Reference Time Lefts	9.7			12.5			NA			NA		
34	Reference Time		14.7			12.5			39.2			37.8	
35	Adjusted Reference Time		18.7			16.5			43.2			41.8	
	Split Timing												
36	Ref Time Combined		2.4			0.0			37.9			37.8	
37	Ref Time By Movement	1.7	0.0		4.5	0.0		2.6	37.9		0.9	37.8	
38	Reference Time		2.4			4.5			37.9			37.8	
39	Adjusted Reference Time	8.0	8.0		8.5	8.5		41.9	41.9		41.8	41.8	
40	Lane Group V/C Ratio	-	0.020	0.021	0.036	0.179	-	0.021	0.225	-	0.007	0.228	-

	Summary	East West	North South
41	Protected Option	NA	49.9
42	Permitted Option	18.7	43.2
43	Split Option	16.5	83.7
44	Minimum	16.5	43.2
45	Combined	59.7	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	8.0	56.3	8.0	9.8
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	41.9	41.8	8.5	8.0
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	8.5	8.0	8.0	8.0
51	Combined	58.5	106.1	24.5	25.8

52	**Intersection Capacity Utilization**	**88.4%**
53	**Level Of Service**	**D**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Princeton Ave & EB Ramps
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: 2020 Existing Condition - AM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	0.5	1	0.5	0	0	0	0	1.5	0.5	1	2	0
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	55	2	103	0	0	0	0	350	566	54	447	0
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☐ Yes			☐ Yes			☐ Yes			☐ Yes	
7	Pedestrian Timing Required		30			30			30			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	55.0	2.0	103.0	0.0	0.0	0.0	0.0	350.0	566.0	54.0	447.0	0.0
14	Volume Separate Left	55.0	2.0		0.0	0.0		0.0	350.0		54.0	447.0	
15	Lane Utilization Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.908	1.000	1.000	0.952	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	712.5	1600.0	637.5	0.0	0.0	0.0	0.0	2179.2	637.5	1425.0	3046.4	0.0
18	Saturated Flow Separate	712.5	1600.0		0.0	0.0		0.0	2179.2		1425.0	3046.4	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	9.3	0.2	19.4	0.0	0.0	0.0	0.0	19.3	106.5	4.5	17.6	0.0
23	Adjusted Reference Time	13.3	8.0	23.4	0.0	0.0	0.0	0.0	23.3	110.5	8.5	21.6	0.0
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	110	2		0	0		0	233		54	224	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	0.9	15.0		15.0	15.0		15.0	15.0		15.0	15.0	
28	Left turn Factor	1.07	1.00		0.07	1.00		0.07	1.00		0.07	1.00	
29	Permitted Sat Flow	1520.0	1600.0		0.0	0.0		0.0	1452.8		95.0	1523.2	
30	Reference Time A	9.3	0.2		0.0	0.0		0.0	19.3		68.2	17.6	
31	Adjusted Saturation B		1600.0			0.0			2179.2			3046.4	
32	Reference Time B		0.2			0.0			NA			NA	
33	Reference Time Lefts	17.3			0.0			NA			NA		
34	Reference Time		9.3			0.0			19.3			68.2	
35	Adjusted Reference Time		13.3			8.0			23.3			72.2	
	Split Timing												
36	Ref Time Combined		0.2			0.0			19.3			17.6	
37	Ref Time By Movement	9.3	0.2		0.0	0.0		0.0	19.3		4.5	17.6	
38	Reference Time		9.3			0.0			19.3			17.6	
39	Adjusted Reference Time	13.3	13.3		0.0	0.0		23.3	23.3		21.6	21.6	
40	Lane Group V/C Ratio	-	0.052	-	-	-	-	-	0.291	-	0.036	0.140	-

	Summary	East West	North South
41	Protected Option	13.3	31.8
42	Permitted Option	13.3	72.2
43	Split Option	13.3	44.9
44	Minimum	13.3	31.8
45	Combined	45.1	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	23.4	0.0	110.5	0.0
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	23.3	21.6	0.0	8.0
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	0.0	13.3	8.5	0.0
51	Combined	46.7	34.9	119.1	8.0

52	**Intersection Capacity Utilization**	**99.2%**
53	**Level Of Service**	**E**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Princeton Ave & EB Ramps
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: 2020 Existing Condition - PM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	0.5	1	0.5	0	0	0	0	1.5	0.5	1	2	0
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	284	0	156	0	0	0	0	430	567	55	575	0
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☐ Yes			☐ Yes			☐ Yes			☐ Yes	
7	Pedestrian Timing Required		30			30			30			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	284.0	0.0	156.0	0.0	0.0	0.0	0.0	430.0	567.0	55.0	575.0	0.0
14	Volume Separate Left	284.0	0.0		0.0	0.0		0.0	430.0		55.0	575.0	
15	Lane Utilization Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.908	1.000	1.000	0.952	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	712.5	1600.0	637.5	0.0	0.0	0.0	0.0	2179.2	637.5	1425.0	3046.4	0.0
18	Saturated Flow Separate	712.5	1600.0		0.0	0.0		0.0	2179.2		1425.0	3046.4	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	47.8	0.0	29.4	0.0	0.0	0.0	0.0	23.7	106.7	4.6	22.6	0.0
23	Adjusted Reference Time	51.8	0.0	33.4	0.0	0.0	0.0	0.0	27.7	110.7	8.6	26.6	0.0
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	568	0		0	0		0	287		55	288	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	0.9	15.0		15.0	15.0		15.0	15.0		15.0	15.0	
28	Left turn Factor	1.07	1.00		0.07	1.00		0.07	1.00		0.07	1.00	
29	Permitted Sat Flow	1520.0	1600.0		0.0	0.0		0.0	1452.8		95.0	1523.2	
30	Reference Time A	47.8	0.0		0.0	0.0		0.0	23.7		69.5	22.6	
31	Adjusted Saturation B		1600.0			0.0			2179.2			3046.4	
32	Reference Time B		0.0			0.0			NA			NA	
33	Reference Time Lefts	55.8			0.0			NA			NA		
34	Reference Time		47.8			0.0			23.7			69.5	
35	Adjusted Reference Time		51.8			8.0			27.7			73.5	
	Split Timing												
36	Ref Time Combined		0.0			0.0			23.7			22.6	
37	Ref Time By Movement	47.8	0.0		0.0	0.0		0.0	23.7		4.6	22.6	
38	Reference Time		47.8			0.0			23.7			22.6	
39	Adjusted Reference Time	51.8	51.8		0.0	0.0		27.7	27.7		26.6	26.6	
40	Lane Group V/C Ratio	-	0.142	-	-	-	-	-	0.317	-	0.037	0.180	-

	Summary	East West	North South
41	Protected Option	51.8	36.3
42	Permitted Option	51.8	73.5
43	Split Option	51.8	54.3
44	Minimum	51.8	36.3
45	Combined	88.1	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	33.4	0.0	110.7	0.0
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	27.7	26.6	0.0	0.0
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	0.0	51.8	8.6	0.0
51	Combined	61.0	78.5	119.4	0.0

52	**Intersection Capacity Utilization**	**99.5%**
53	**Level Of Service**	**E**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Princeton Ave & WB Ramps
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: 2020 Existing Condition - AM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	0	0	0	1	0.5	0.5	1	2	0	0	1.5	0.5
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	0	0	0	358	44	25	83	325	0	0	154	448
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☐ Yes			☐ Yes			☐ Yes			☐ Yes	
7	Pedestrian Timing Required		30			30			30			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	0.0	0.0	0.0	358.0	44.0	25.0	83.0	325.0	0.0	0.0	154.0	448.0
14	Volume Separate Left	0.0	0.0		358.0	44.0		83.0	325.0		0.0	154.0	
15	Lane Utilization Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.952	1.000	1.000	0.908	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	0.0	0.0	0.0	1425.0	800.0	637.5	1425.0	3046.4	0.0	0.0	2179.2	637.5
18	Saturated Flow Separate	0.0	0.0		1425.0	800.0		1425.0	3046.4		0.0	2179.2	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	0.0	0.0	0.0	30.1	6.6	4.7	7.0	12.8	0.0	0.0	8.5	84.3
23	Adjusted Reference Time	0.0	0.0	0.0	34.1	10.6	8.7	11.0	16.8	0.0	0.0	12.5	88.3
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	0	0		358	88		83	163		0	103	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	15.0	15.0		15.0	15.0		15.0	15.0		0.9	15.0	
28	Left turn Factor	0.07	1.00		0.07	1.00		0.07	1.00		1.07	1.00	
29	Permitted Sat Flow	0.0	0.0		95.0	1600.0		95.0	1523.2		0.0	1452.8	
30	Reference Time A	0.0	0.0		452.2	6.6		104.8	12.8		0.0	8.5	
31	Adjusted Saturation B		0.0			800.0			3046.4			2179.2	
32	Reference Time B		0.0			6.6			NA			NA	
33	Reference Time Lefts	0.0			38.1			NA			NA		
34	Reference Time		0.0			38.1			104.8			8.5	
35	Adjusted Reference Time		8.0			42.1			108.8			12.5	
	Split Timing												
36	Ref Time Combined		0.0			6.6			12.8			8.5	
37	Ref Time By Movement	0.0	0.0		30.1	6.6		7.0	12.8		0.0	8.5	
38	Reference Time		0.0			30.1			12.8			8.5	
39	Adjusted Reference Time	0.0	0.0		34.1	34.1		16.8	16.8		12.5	12.5	
40	Lane Group V/C Ratio	-	-	-	0.239	0.045	-	0.055	0.102	-	-	0.191	-

	Summary	East West	North South
41	Protected Option	34.1	23.5
42	Permitted Option	42.1	108.8
43	Split Option	34.1	29.3
44	Minimum	34.1	23.5
45	Combined	57.6	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	0.0	8.7	0.0	88.3
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	16.8	12.5	10.6	0.0
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	34.1	0.0	0.0	11.0
51	Combined	50.9	21.2	10.6	99.3

52	**Intersection Capacity Utilization**	**82.8%**
53	**Level Of Service**	**D**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Princeton Ave & WB Ramps
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: 2020 Existing Condition - PM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	0	0	0	1	0.5	0.5	1	2	0	0	1.5	0.5
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	0	0	0	488	69	117	158	595	0	0	175	259
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☐ Yes			☐ Yes			☐ Yes			☐ Yes	
7	Pedestrian Timing Required		30			30			30			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	0.0	0.0	0.0	488.0	69.0	117.0	158.0	595.0	0.0	0.0	175.0	259.0
14	Volume Separate Left	0.0	0.0		488.0	69.0		158.0	595.0		0.0	175.0	
15	Lane Utilization Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.952	1.000	1.000	0.908	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	0.0	0.0	0.0	1425.0	800.0	637.5	1425.0	3046.4	0.0	0.0	2179.2	637.5
18	Saturated Flow Separate	0.0	0.0		1425.0	800.0		1425.0	3046.4		0.0	2179.2	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	0.0	0.0	0.0	41.1	10.4	22.0	13.3	23.4	0.0	0.0	9.6	48.8
23	Adjusted Reference Time	0.0	0.0	0.0	45.1	14.4	26.0	17.3	27.4	0.0	0.0	13.6	52.8
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	0	0		488	138		158	298		0	117	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	15.0	15.0		15.0	15.0		15.0	15.0		0.9	15.0	
28	Left turn Factor	0.07	1.00		0.07	1.00		0.07	1.00		1.07	1.00	
29	Permitted Sat Flow	0.0	0.0		95.0	1600.0		95.0	1523.2		0.0	1452.8	
30	Reference Time A	0.0	0.0		616.4	10.4		199.6	23.4		0.0	9.6	
31	Adjusted Saturation B		0.0			800.0			3046.4			2179.2	
32	Reference Time B		0.0			10.4			NA			NA	
33	Reference Time Lefts	0.0			49.1			NA			NA		
34	Reference Time		0.0			49.1			199.6			9.6	
35	Adjusted Reference Time		8.0			53.1			203.6			13.6	
	Split Timing												
36	Ref Time Combined		0.0			10.4			23.4			9.6	
37	Ref Time By Movement	0.0	0.0		41.1	10.4		13.3	23.4		0.0	9.6	
38	Reference Time		0.0			41.1			23.4			9.6	
39	Adjusted Reference Time	0.0	0.0		45.1	45.1		27.4	27.4		13.6	13.6	
40	Lane Group V/C Ratio	-	-	-	0.325	0.120	-	0.105	0.186	-	-	0.138	-

	Summary	East West	North South
41	Protected Option	45.1	30.9
42	Permitted Option	53.1	203.6
43	Split Option	45.1	41.1
44	Minimum	45.1	30.9
45	Combined	76.0	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	0.0	26.0	0.0	52.8
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	27.4	13.6	14.4	0.0
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	45.1	0.0	0.0	17.3
51	Combined	72.5	39.7	14.4	70.1

52	**Intersection Capacity Utilization**	**63.4%**
53	**Level Of Service**	**B**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Campus Park Dr & Collins Dr
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: 2020 Existing Condition - AM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	1	1	1	2	0.5	0.5	1	2	2	1	1.5	0.5
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	152	71	103	48	13	9	156	308	334	7	96	85
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☑ Yes			☑ Yes			☐ Yes			☑ Yes	
7	Pedestrian Timing Required		30			30			0			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	152.0	71.0	103.0	48.0	13.0	9.0	156.0	308.0	334.0	7.0	96.0	85.0
14	Volume Separate Left	152.0	71.0		48.0	13.0		156.0	308.0		7.0	96.0	
15	Lane Utilization Factor	1.000	1.000	1.000	0.971	1.000	1.000	1.000	0.952	0.885	1.000	0.908	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	1425.0	1600.0	1275.0	2767.4	800.0	637.5	1425.0	3046.4	2256.8	1425.0	2179.2	637.5
18	Saturated Flow Separate	1425.0	1600.0		2767.4	800.0		1425.0	3046.4		1425.0	2179.2	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	12.8	5.3	9.7	2.1	2.0	1.7	13.1	12.1	17.8	0.6	5.3	16.0
23	Adjusted Reference Time	16.8	9.3	13.7	8.0	8.0	8.0	17.1	16.1	21.8	8.0	9.3	20.0
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	152	71		24	26		156	154		7	64	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	15.0	15.0		15.0	15.0		15.0	15.0		0.9	15.0	
28	Left turn Factor	0.07	1.00		0.07	1.00		0.07	1.00		1.07	1.00	
29	Permitted Sat Flow	95.0	1600.0		92.2	1600.0		95.0	1523.2		1520.0	1452.8	
30	Reference Time A	192.0	5.3		31.2	2.0		197.1	12.1		0.6	5.3	
31	Adjusted Saturation B		1600.0			800.0			3046.4			2179.2	
32	Reference Time B		5.3			2.0			12.1			NA	
33	Reference Time Lefts	20.8			10.1			21.1			NA		
34	Reference Time		20.8			10.1			21.1			5.3	
35	Adjusted Reference Time		24.8			14.1			25.1			9.3	
	Split Timing												
36	Ref Time Combined		5.3			2.0			12.1			5.3	
37	Ref Time By Movement	12.8	5.3		2.1	2.0		13.1	12.1		0.6	5.3	
38	Reference Time		12.8			2.1			13.1			5.3	
39	Adjusted Reference Time	16.8	16.8		8.0	8.0		17.1	17.1		9.3	9.3	
40	Lane Group V/C Ratio	0.101	0.044	0.069	0.016	0.014	-	0.104	0.096	0.111	0.005	0.057	-

	Summary	East West	North South
41	Protected Option	24.8	26.4
42	Permitted Option	24.8	25.1
43	Split Option	24.8	26.4
44	Minimum	24.8	25.1
45	Combined	49.9	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	13.7	8.0	21.8	20.0
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	16.1	9.3	8.0	9.3
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	8.0	16.8	8.0	17.1
51	Combined	37.8	34.1	37.8	46.5

52	**Intersection Capacity Utilization**	**41.6%**
53	**Level Of Service**	**A**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Campus Park Dr & Collins Dr
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: 2020 Existing Condition - PM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	1	1	1	2	0.5	0.5	1	2	2	1	1.5	0.5
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	88	76	89	206	62	2	192	156	112	4	197	97
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☑ Yes			☑ Yes			☐ Yes			☑ Yes	
7	Pedestrian Timing Required		30			30			0			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	88.0	76.0	89.0	206.0	62.0	2.0	192.0	156.0	112.0	4.0	197.0	97.0
14	Volume Separate Left	88.0	76.0		206.0	62.0		192.0	156.0		4.0	197.0	
15	Lane Utilization Factor	1.000	1.000	1.000	0.971	1.000	1.000	1.000	0.952	0.885	1.000	0.908	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	1425.0	1600.0	1275.0	2767.4	800.0	637.5	1425.0	3046.4	2256.8	1425.0	2179.2	637.5
18	Saturated Flow Separate	1425.0	1600.0		2767.4	800.0		1425.0	3046.4		1425.0	2179.2	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	7.4	5.7	8.4	8.9	9.3	0.4	16.2	6.1	6.0	0.3	10.8	18.3
23	Adjusted Reference Time	11.4	9.7	12.4	12.9	13.3	8.0	20.2	10.1	10.0	8.0	14.8	22.3
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	88	76		103	124		192	78		4	131	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	15.0	15.0		15.0	15.0		15.0	15.0		0.9	15.0	
28	Left turn Factor	0.07	1.00		0.07	1.00		0.07	1.00		1.07	1.00	
29	Permitted Sat Flow	95.0	1600.0		92.2	1600.0		95.0	1523.2		1520.0	1452.8	
30	Reference Time A	111.2	5.7		134.0	9.3		242.5	6.1		0.3	10.8	
31	Adjusted Saturation B		1600.0			800.0			3046.4			2179.2	
32	Reference Time B		5.7			9.3			NA			NA	
33	Reference Time Lefts	15.4			16.9			NA			NA		
34	Reference Time		15.4			16.9			242.5			10.8	
35	Adjusted Reference Time		19.4			20.9			246.5			14.8	
	Split Timing												
36	Ref Time Combined		5.7			9.3			6.1			10.8	
37	Ref Time By Movement	7.4	5.7		8.9	9.3		16.2	6.1		0.3	10.8	
38	Reference Time		7.4			9.3			16.2			10.8	
39	Adjusted Reference Time	11.4	11.4		13.3	13.3		20.2	20.2		14.8	14.8	
40	Lane Group V/C Ratio	0.059	0.048	0.059	0.069	0.041	-	0.128	0.049	0.037	0.003	0.093	-

	Summary	East West	North South
41	Protected Option	24.7	35.0
42	Permitted Option	20.9	246.5
43	Split Option	24.7	35.0
44	Minimum	20.9	35.0
45	Combined	55.9	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	12.4	8.0	10.0	22.3
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	10.1	14.8	13.3	9.7
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	12.9	11.4	8.0	20.2
51	Combined	35.5	34.3	31.3	52.1

52	**Intersection Capacity Utilization**	**46.6%**
53	**Level Of Service**	**A**

Revision 2003.0

D. Existing Conditions Analysis Reports

b. Existing Unsignalized Intersections Synchro Reports



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	9	20	847	56	34	552
Future Volume (vph)	9	20	847	56	34	552
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	16	12	11	16
Storage Length (ft)	0	0		0	120	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.907		0.992			
Flt Protected	0.985				0.950	
Satd. Flow (prot)	1832	0	2034	0	1662	2051
Flt Permitted	0.985				0.950	
Satd. Flow (perm)	1832	0	2034	0	1662	2051
Link Speed (mph)	25		30			30
Link Distance (ft)	95		275			227
Travel Time (s)	2.6		6.3			5.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	10	22	921	61	37	600
Shared Lane Traffic (%)						
Lane Group Flow (vph)	32	0	982	0	37	600
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	16		11			11
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.85	0.85	0.85	1.00	1.04	0.85
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 58.0%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	9	20	847	56	34	552
Future Volume (Veh/h)	9	20	847	56	34	552
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	22	921	61	37	600
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1626	952			982	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1626	952			982	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	90	93			95	
cM capacity (veh/h)	105	311			691	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	32	982	37	600
Volume Left	10	0	37	0
Volume Right	22	61	0	0
cSH	192	1700	691	1700
Volume to Capacity	0.17	0.58	0.05	0.35
Queue Length 95th (ft)	15	0	4	0
Control Delay (s)	27.4	0.0	10.5	0.0
Lane LOS	D		B	
Approach Delay (s)	27.4	0.0	0.6	
Approach LOS	D			

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	58.0%	ICU Level of Service	B
Analysis Period (min)	15		



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	70	100	294	16	14	287
Future Volume (vph)	70	100	294	16	14	287
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		110	140		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1863	1583	1770	3539	1770	1583
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1863	1583	1770	3539	1770	1583
Link Speed (mph)	30			30	30	
Link Distance (ft)	242			254	271	
Travel Time (s)	5.5			5.8	6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	109	320	17	15	312
Shared Lane Traffic (%)						
Lane Group Flow (vph)	76	109	320	17	15	312
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.0%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	70	100	294	16	14	287
Future Volume (Veh/h)	70	100	294	16	14	287
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	76	109	320	17	15	312
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			185		724	76
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			185		724	76
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			77		95	68
cM capacity (veh/h)			1387		277	970

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	NB 2
Volume Total	76	109	320	8	8	15	312
Volume Left	0	0	320	0	0	15	0
Volume Right	0	109	0	0	0	0	312
cSH	1700	1700	1387	1700	1700	277	970
Volume to Capacity	0.04	0.06	0.23	0.01	0.01	0.05	0.32
Queue Length 95th (ft)	0	0	22	0	0	4	35
Control Delay (s)	0.0	0.0	8.4	0.0	0.0	18.7	10.5
Lane LOS			A			C	B
Approach Delay (s)	0.0		7.9			10.8	
Approach LOS						B	

Intersection Summary			
Average Delay	7.3		
Intersection Capacity Utilization	33.0%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	39	33	785	18	21	916
Future Volume (vph)	39	33	785	18	21	916
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	16	12	11	16
Storage Length (ft)	0	0		0	120	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.938		0.997			
Flt Protected	0.974				0.950	
Satd. Flow (prot)	1874	0	2045	0	1662	2051
Flt Permitted	0.974				0.950	
Satd. Flow (perm)	1874	0	2045	0	1662	2051
Link Speed (mph)	25		30			30
Link Distance (ft)	95		275			227
Travel Time (s)	2.6		6.3			5.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	42	36	853	20	23	996
Shared Lane Traffic (%)						
Lane Group Flow (vph)	78	0	873	0	23	996
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	16		11			11
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.85	0.85	0.85	1.00	1.04	0.85
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 59.1%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	39	33	785	18	21	916
Future Volume (Veh/h)	39	33	785	18	21	916
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	42	36	853	20	23	996
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1905	863			873	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1905	863			873	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	42	90			97	
cM capacity (veh/h)	72	350			760	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	78	873	23	996
Volume Left	42	0	23	0
Volume Right	36	20	0	0
cSH	113	1700	760	1700
Volume to Capacity	0.69	0.51	0.03	0.59
Queue Length 95th (ft)	91	0	2	0
Control Delay (s)	87.9	0.0	9.9	0.0
Lane LOS	F		A	
Approach Delay (s)	87.9	0.0	0.2	
Approach LOS	F			

Intersection Summary			
Average Delay	3.6		
Intersection Capacity Utilization	59.1%	ICU Level of Service	B
Analysis Period (min)	15		



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	65	80	294	16	14	281
Future Volume (vph)	65	80	294	16	14	281
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		110	140		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1863	1583	1770	3539	1770	1583
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1863	1583	1770	3539	1770	1583
Link Speed (mph)	30			30	30	
Link Distance (ft)	242			254	271	
Travel Time (s)	5.5			5.8	6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	71	87	320	17	15	305
Shared Lane Traffic (%)						
Lane Group Flow (vph)	71	87	320	17	15	305
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.0%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	65	80	294	16	14	281
Future Volume (Veh/h)	65	80	294	16	14	281
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	71	87	320	17	15	305
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			158		720	71
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			158		720	71
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			77		95	69
cM capacity (veh/h)			1419		281	977

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	NB 2
Volume Total	71	87	320	8	8	15	305
Volume Left	0	0	320	0	0	15	0
Volume Right	0	87	0	0	0	0	305
cSH	1700	1700	1419	1700	1700	281	977
Volume to Capacity	0.04	0.05	0.23	0.01	0.01	0.05	0.31
Queue Length 95th (ft)	0	0	22	0	0	4	34
Control Delay (s)	0.0	0.0	8.3	0.0	0.0	18.5	10.3
Lane LOS			A			C	B
Approach Delay (s)	0.0		7.9			10.7	
Approach LOS						B	

Intersection Summary			
Average Delay	7.5		
Intersection Capacity Utilization	33.0%	ICU Level of Service	A
Analysis Period (min)	15		

E. No-Build Conditions Analysis Reports

E. No-Build Conditions Analysis Reports

a. No-Build Signalized Intersections ICU Reports

Intersection Capacity Utilization Worksheet

Intersection Location: Spring Rd & Princeton Ave/E High S
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: No-Build Condition - AM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	1	1	1	1	1	1	1	2	1	1	1.5	0.5
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	15	270	191	88	270	176	147	222	246	438	616	24
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☑ Yes			☑ Yes			☑ Yes			☑ Yes	
7	Pedestrian Timing Required		30			30			30			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	15.0	270.0	191.0	88.0	270.0	176.0	147.0	222.0	246.0	438.0	616.0	24.0
14	Volume Separate Left	15.0	270.0		88.0	270.0		147.0	222.0		438.0	616.0	
15	Lane Utilization Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.952	1.000	1.000	0.908	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	1425.0	1600.0	1275.0	1425.0	1600.0	1275.0	1425.0	3046.4	1275.0	1425.0	2179.2	637.5
18	Saturated Flow Separate	1425.0	1600.0		1425.0	1600.0		1425.0	3046.4		1425.0	2179.2	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	1.3	20.3	18.0	7.4	20.3	16.6	12.4	8.7	23.2	36.9	33.9	4.5
23	Adjusted Reference Time	8.0	24.3	22.0	11.4	24.3	20.6	16.4	12.7	27.2	40.9	37.9	8.5
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	15	270		88	270		147	111		438	411	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	15.0	15.0		15.0	15.0		15.0	15.0		0.9	15.0	
28	Left turn Factor	0.07	1.00		0.07	1.00		0.07	1.00		1.07	1.00	
29	Permitted Sat Flow	95.0	1600.0		95.0	1600.0		95.0	1523.2		1520.0	1452.8	
30	Reference Time A	18.9	20.3		111.2	20.3		185.7	8.7		36.9	33.9	
31	Adjusted Saturation B		1600.0			1600.0			3046.4			2179.2	
32	Reference Time B		NA			NA			NA			NA	
33	Reference Time Lefts	NA			NA			NA			NA		
34	Reference Time		20.3			111.2			185.7			36.9	
35	Adjusted Reference Time		24.3			115.2			189.7			40.9	
	Split Timing												
36	Ref Time Combined		20.3			20.3			8.7			33.9	
37	Ref Time By Movement	1.3	20.3		7.4	20.3		12.4	8.7		36.9	33.9	
38	Reference Time		20.3			20.3			12.4			36.9	
39	Adjusted Reference Time	24.3	24.3		24.3	24.3		16.4	16.4		40.9	40.9	
40	Lane Group V/C Ratio	0.010	0.169	0.127	0.059	0.169	0.117	0.098	0.069	0.164	0.292	0.203	-

	Summary	East West	North South
41	Protected Option	35.7	54.3
42	Permitted Option	115.2	189.7
43	Split Option	48.5	57.3
44	Minimum	35.7	54.3
45	Combined	90.0	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	22.0	20.6	27.2	8.5
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	12.7	37.9	24.3	24.3
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	11.4	8.0	40.9	16.4
51	Combined	46.1	66.5	92.3	49.1

52	**Intersection Capacity Utilization**	**76.9%**
53	**Level Of Service**	**C**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Spring Rd & Princeton Ave/E High S
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: No-Build Condition - PM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	1	1	1	1	1	1	1	2	1	1	1.5	0.5
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	39	356	163	114	310	518	203	678	285	236	320	35
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☑ Yes			☑ Yes			☑ Yes			☑ Yes	
7	Pedestrian Timing Required		30			30			30			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	39.0	356.0	163.0	114.0	310.0	518.0	203.0	678.0	285.0	236.0	320.0	35.0
14	Volume Separate Left	39.0	356.0		114.0	310.0		203.0	678.0		236.0	320.0	
15	Lane Utilization Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.952	1.000	1.000	0.908	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	1425.0	1600.0	1275.0	1425.0	1600.0	1275.0	1425.0	3046.4	1275.0	1425.0	2179.2	637.5
18	Saturated Flow Separate	1425.0	1600.0		1425.0	1600.0		1425.0	3046.4		1425.0	2179.2	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	3.3	26.7	15.3	9.6	23.3	48.8	17.1	26.7	26.8	19.9	17.6	6.6
23	Adjusted Reference Time	8.0	30.7	19.3	13.6	27.3	52.8	21.1	30.7	30.8	23.9	21.6	10.6
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	39	356		114	310		203	339		236	213	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	15.0	15.0		15.0	15.0		15.0	15.0		0.9	15.0	
28	Left turn Factor	0.07	1.00		0.07	1.00		0.07	1.00		1.07	1.00	
29	Permitted Sat Flow	95.0	1600.0		95.0	1600.0		95.0	1523.2		1520.0	1452.8	
30	Reference Time A	49.3	26.7		144.0	23.3		256.4	26.7		19.9	17.6	
31	Adjusted Saturation B		1600.0			1600.0			3046.4			2179.2	
32	Reference Time B		NA			NA			NA			NA	
33	Reference Time Lefts	NA			NA			NA			NA		
34	Reference Time		49.3			144.0			256.4			19.9	
35	Adjusted Reference Time		53.3			148.0			260.4			23.9	
	Split Timing												
36	Ref Time Combined		26.7			23.3			26.7			17.6	
37	Ref Time By Movement	3.3	26.7		9.6	23.3		17.1	26.7		19.9	17.6	
38	Reference Time		26.7			23.3			26.7			19.9	
39	Adjusted Reference Time	30.7	30.7		27.3	27.3		30.7	30.7		23.9	23.9	
40	Lane Group V/C Ratio	0.026	0.223	0.109	0.076	0.194	0.345	0.135	0.212	0.190	0.157	0.113	-

	Summary	East West	North South
41	Protected Option	44.3	54.6
42	Permitted Option	148.0	260.4
43	Split Option	58.0	54.6
44	Minimum	44.3	54.6
45	Combined	98.9	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	19.3	52.8	30.8	10.6
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	30.7	21.6	27.3	30.7
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	13.6	8.0	23.9	21.1
51	Combined	63.6	82.4	81.9	62.4

52	**Intersection Capacity Utilization**	**82.4%**
53	**Level Of Service**	**D**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Princeton Ave & Condor Dr N
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: No-Build Condition - AM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	0.5	0.5	1	1	0.5	0.5	1	1.5	0.5	1	1.5	0.5
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	32	0	32	3	0	5	32	864	48	257	358	32
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☑ Yes			☑ Yes			☑ Yes			☑ Yes	
7	Pedestrian Timing Required		30			30			30			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	32.0	0.0	32.0	3.0	0.0	5.0	32.0	864.0	48.0	257.0	358.0	32.0
14	Volume Separate Left	32.0	0.0		3.0	0.0		32.0	864.0		257.0	358.0	
15	Lane Utilization Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.908	1.000	1.000	0.908	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	712.5	800.0	1275.0	1425.0	800.0	637.5	1425.0	2179.2	637.5	1425.0	2179.2	637.5
18	Saturated Flow Separate	712.5	800.0		1425.0	800.0		1425.0	2179.2		1425.0	2179.2	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	5.4	0.0	3.0	0.3	0.0	0.9	2.7	47.6	9.0	21.6	19.7	6.0
23	Adjusted Reference Time	9.4	0.0	8.0	8.0	0.0	8.0	8.0	51.6	13.0	25.6	23.7	10.0
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	64	0		3	0		32	576		257	239	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	15.0	15.0		15.0	15.0		15.0	15.0		0.9	15.0	
28	Left turn Factor	0.07	1.00		0.07	1.00		0.07	1.00		1.07	1.00	
29	Permitted Sat Flow	95.0	1600.0		95.0	1600.0		95.0	1452.8		1520.0	1452.8	
30	Reference Time A	80.8	0.0		3.8	0.0		40.4	47.6		21.6	19.7	
31	Adjusted Saturation B		800.0			800.0			2179.2			2179.2	
32	Reference Time B		0.0			0.0			NA			NA	
33	Reference Time Lefts	13.4			8.3			NA			NA		
34	Reference Time		13.4			3.8			47.6			21.6	
35	Adjusted Reference Time		17.4			8.0			51.6			25.6	
	Split Timing												
36	Ref Time Combined		0.0			0.0			47.6			19.7	
37	Ref Time By Movement	5.4	0.0		0.3	0.0		2.7	47.6		21.6	19.7	
38	Reference Time		5.4			0.3			47.6			21.6	
39	Adjusted Reference Time	9.4	9.4		8.0	8.0		51.6	51.6		25.6	25.6	
40	Lane Group V/C Ratio	-	0.021	0.021	0.002	0.003	-	0.021	0.294	-	0.171	0.124	-

	Summary	East West	North South
41	Protected Option	9.4	77.2
42	Permitted Option	17.4	51.6
43	Split Option	17.4	77.2
44	Minimum	9.4	51.6
45	Combined	61.0	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	8.0	8.0	13.0	10.0
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	51.6	23.7	0.0	0.0
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	8.0	9.4	25.6	8.0
51	Combined	67.6	41.1	38.7	18.0

52	**Intersection Capacity Utilization**	**56.3%**
53	**Level Of Service**	**A**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Princeton Ave & Condor Dr N
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: No-Build Condition - PM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	0.5	0.5	1	1	0.5	0.5	1	1.5	0.5	1	1.5	0.5
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	32	0	32	56	0	289	32	741	7	12	731	32
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☑ Yes			☑ Yes			☑ Yes			☑ Yes	
7	Pedestrian Timing Required		30			30			30			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	32.0	0.0	32.0	56.0	0.0	289.0	32.0	741.0	7.0	12.0	731.0	32.0
14	Volume Separate Left	32.0	0.0		56.0	0.0		32.0	741.0		12.0	731.0	
15	Lane Utilization Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.908	1.000	1.000	0.908	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	712.5	800.0	1275.0	1425.0	800.0	637.5	1425.0	2179.2	637.5	1425.0	2179.2	637.5
18	Saturated Flow Separate	712.5	800.0		1425.0	800.0		1425.0	2179.2		1425.0	2179.2	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	5.4	0.0	3.0	4.7	0.0	54.4	2.7	40.8	1.3	1.0	40.3	6.0
23	Adjusted Reference Time	9.4	0.0	8.0	8.7	0.0	58.4	8.0	44.8	8.0	8.0	44.3	10.0
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	64	0		56	0		32	494		12	487	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	15.0	15.0		15.0	15.0		15.0	15.0		0.9	15.0	
28	Left turn Factor	0.07	1.00		0.07	1.00		0.07	1.00		1.07	1.00	
29	Permitted Sat Flow	95.0	1600.0		95.0	1600.0		95.0	1452.8		1520.0	1452.8	
30	Reference Time A	80.8	0.0		70.7	0.0		40.4	40.8		1.0	40.3	
31	Adjusted Saturation B		800.0			800.0			2179.2			2179.2	
32	Reference Time B		0.0			0.0			NA			NA	
33	Reference Time Lefts	13.4			12.7			NA			NA		
34	Reference Time		13.4			12.7			40.8			40.3	
35	Adjusted Reference Time		17.4			16.7			44.8			44.3	
	Split Timing												
36	Ref Time Combined		0.0			0.0			40.8			40.3	
37	Ref Time By Movement	5.4	0.0		4.7	0.0		2.7	40.8		1.0	40.3	
38	Reference Time		5.4			4.7			40.8			40.3	
39	Adjusted Reference Time	9.4	9.4		8.7	8.7		44.8	44.8		44.3	44.3	
40	Lane Group V/C Ratio	-	0.021	0.021	0.037	0.186	-	0.021	0.241	-	0.008	0.242	-

	Summary	East West	North South
41	Protected Option	9.4	52.8
42	Permitted Option	17.4	44.8
43	Split Option	18.1	89.1
44	Minimum	9.4	44.8
45	Combined	54.2	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	8.0	58.4	8.0	10.0
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	44.8	44.3	0.0	0.0
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	8.7	9.4	8.0	8.0
51	Combined	61.5	112.0	16.0	18.0

52	**Intersection Capacity Utilization**	**93.4%**
53	**Level Of Service**	**E**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Princeton Ave & EB Ramps
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: No-Build Condition - AM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	0.5	1	0.5	0	0	0	0	1.5	0.5	1	2	0
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	57	2	117	0	0	0	0	367	594	56	487	0
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☐ Yes			☐ Yes			☐ Yes			☐ Yes	
7	Pedestrian Timing Required		30			30			30			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	57.0	2.0	117.0	0.0	0.0	0.0	0.0	367.0	594.0	56.0	487.0	0.0
14	Volume Separate Left	57.0	2.0		0.0	0.0		0.0	367.0		56.0	487.0	
15	Lane Utilization Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.908	1.000	1.000	0.952	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	712.5	1600.0	637.5	0.0	0.0	0.0	0.0	2179.2	637.5	1425.0	3046.4	0.0
18	Saturated Flow Separate	712.5	1600.0		0.0	0.0		0.0	2179.2		1425.0	3046.4	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	9.6	0.2	22.0	0.0	0.0	0.0	0.0	20.2	111.8	4.7	19.2	0.0
23	Adjusted Reference Time	13.6	8.0	26.0	0.0	0.0	0.0	0.0	24.2	115.8	8.7	23.2	0.0
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	114	2		0	0		0	245		56	244	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	0.9	15.0		15.0	15.0		15.0	15.0		15.0	15.0	
28	Left turn Factor	1.07	1.00		0.07	1.00		0.07	1.00		0.07	1.00	
29	Permitted Sat Flow	1520.0	1600.0		0.0	0.0		0.0	1452.8		95.0	1523.2	
30	Reference Time A	9.6	0.2		0.0	0.0		0.0	20.2		70.7	19.2	
31	Adjusted Saturation B		1600.0			0.0			2179.2			3046.4	
32	Reference Time B		0.2			0.0			NA			NA	
33	Reference Time Lefts	17.6			0.0			NA			NA		
34	Reference Time		9.6			0.0			20.2			70.7	
35	Adjusted Reference Time		13.6			8.0			24.2			74.7	
	Split Timing												
36	Ref Time Combined		0.2			0.0			20.2			19.2	
37	Ref Time By Movement	9.6	0.2		0.0	0.0		0.0	20.2		4.7	19.2	
38	Reference Time		9.6			0.0			20.2			19.2	
39	Adjusted Reference Time	13.6	13.6		0.0	0.0		24.2	24.2		23.2	23.2	
40	Lane Group V/C Ratio	-	0.057	-	-	-	-	-	0.305	-	0.037	0.152	-

	Summary	East West	North South
41	Protected Option	13.6	32.9
42	Permitted Option	13.6	74.7
43	Split Option	13.6	47.4
44	Minimum	13.6	32.9
45	Combined	46.5	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	26.0	0.0	115.8	0.0
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	24.2	23.2	0.0	8.0
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	0.0	13.6	8.7	0.0
51	Combined	50.2	36.8	124.5	8.0

52	**Intersection Capacity Utilization**	**103.8%**
53	**Level Of Service**	**F**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Princeton Ave & EB Ramps
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: No-Build Condition - PM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	0.5	1	0.5	0	0	0	0	1.5	0.5	1	2	0
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	296	0	165	0	0	0	0	463	598	57	613	0
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☐ Yes			☐ Yes			☐ Yes			☐ Yes	
7	Pedestrian Timing Required		30			30			30			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	296.0	0.0	165.0	0.0	0.0	0.0	0.0	463.0	598.0	57.0	613.0	0.0
14	Volume Separate Left	296.0	0.0		0.0	0.0		0.0	463.0		57.0	613.0	
15	Lane Utilization Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.908	1.000	1.000	0.952	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	712.5	1600.0	637.5	0.0	0.0	0.0	0.0	2179.2	637.5	1425.0	3046.4	0.0
18	Saturated Flow Separate	712.5	1600.0		0.0	0.0		0.0	2179.2		1425.0	3046.4	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	49.9	0.0	31.1	0.0	0.0	0.0	0.0	25.5	112.6	4.8	24.1	0.0
23	Adjusted Reference Time	53.9	0.0	35.1	0.0	0.0	0.0	0.0	29.5	116.6	8.8	28.1	0.0
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	592	0		0	0		0	309		57	307	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	0.9	15.0		15.0	15.0		15.0	15.0		15.0	15.0	
28	Left turn Factor	1.07	1.00		0.07	1.00		0.07	1.00		0.07	1.00	
29	Permitted Sat Flow	1520.0	1600.0		0.0	0.0		0.0	1452.8		95.0	1523.2	
30	Reference Time A	49.9	0.0		0.0	0.0		0.0	25.5		72.0	24.1	
31	Adjusted Saturation B		1600.0			0.0			2179.2			3046.4	
32	Reference Time B		0.0			0.0			NA			NA	
33	Reference Time Lefts	57.9			0.0			NA			NA		
34	Reference Time		49.9			0.0			25.5			72.0	
35	Adjusted Reference Time		53.9			8.0			29.5			76.0	
	Split Timing												
36	Ref Time Combined		0.0			0.0			25.5			24.1	
37	Ref Time By Movement	49.9	0.0		0.0	0.0		0.0	25.5		4.8	24.1	
38	Reference Time		49.9			0.0			25.5			24.1	
39	Adjusted Reference Time	53.9	53.9		0.0	0.0		29.5	29.5		28.1	28.1	
40	Lane Group V/C Ratio	-	0.149	-	-	-	-	-	0.337	-	0.038	0.192	-

	Summary	East West	North South
41	Protected Option	53.9	38.3
42	Permitted Option	53.9	76.0
43	Split Option	53.9	57.6
44	Minimum	53.9	38.3
45	Combined	92.1	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	35.1	0.0	116.6	0.0
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	29.5	28.1	0.0	0.0
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	0.0	53.9	8.8	0.0
51	Combined	64.6	82.0	125.4	0.0

52	**Intersection Capacity Utilization**	**104.5%**
53	**Level Of Service**	**F**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Princeton Ave & WB Ramps
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: No-Build Condition - AM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	0	0	0	1	0.5	0.5	1	2	0	0	1.5	0.5
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	0	0	0	388	46	26	88	338	0	0	167	467
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☐ Yes			☐ Yes			☐ Yes			☐ Yes	
7	Pedestrian Timing Required		30			30			30			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	0.0	0.0	0.0	388.0	46.0	26.0	88.0	338.0	0.0	0.0	167.0	467.0
14	Volume Separate Left	0.0	0.0		388.0	46.0		88.0	338.0		0.0	167.0	
15	Lane Utilization Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.952	1.000	1.000	0.908	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	0.0	0.0	0.0	1425.0	800.0	637.5	1425.0	3046.4	0.0	0.0	2179.2	637.5
18	Saturated Flow Separate	0.0	0.0		1425.0	800.0		1425.0	3046.4		0.0	2179.2	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	0.0	0.0	0.0	32.7	6.9	4.9	7.4	13.3	0.0	0.0	9.2	87.9
23	Adjusted Reference Time	0.0	0.0	0.0	36.7	10.9	8.9	11.4	17.3	0.0	0.0	13.2	91.9
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	0	0		388	92		88	169		0	111	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	15.0	15.0		15.0	15.0		15.0	15.0		0.9	15.0	
28	Left turn Factor	0.07	1.00		0.07	1.00		0.07	1.00		1.07	1.00	
29	Permitted Sat Flow	0.0	0.0		95.0	1600.0		95.0	1523.2		0.0	1452.8	
30	Reference Time A	0.0	0.0		490.1	6.9		111.2	13.3		0.0	9.2	
31	Adjusted Saturation B		0.0			800.0			3046.4			2179.2	
32	Reference Time B		0.0			6.9			NA			NA	
33	Reference Time Lefts	0.0			40.7			NA			NA		
34	Reference Time		0.0			40.7			111.2			9.2	
35	Adjusted Reference Time		8.0			44.7			115.2			13.2	
	Split Timing												
36	Ref Time Combined		0.0			6.9			13.3			9.2	
37	Ref Time By Movement	0.0	0.0		32.7	6.9		7.4	13.3		0.0	9.2	
38	Reference Time		0.0			32.7			13.3			9.2	
39	Adjusted Reference Time	0.0	0.0		36.7	36.7		17.3	17.3		13.2	13.2	
40	Lane Group V/C Ratio	-	-	-	0.259	0.046	-	0.059	0.106	-	-	0.201	-

	Summary	East West	North South
41	Protected Option	36.7	24.6
42	Permitted Option	44.7	115.2
43	Split Option	36.7	30.5
44	Minimum	36.7	24.6
45	Combined	61.3	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	0.0	8.9	0.0	91.9
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	17.3	13.2	10.9	0.0
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	36.7	0.0	0.0	11.4
51	Combined	54.0	22.1	10.9	103.3

52	**Intersection Capacity Utilization**	**86.1%**
53	**Level Of Service**	**D**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Princeton Ave & WB Ramps
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: No-Build Condition - PM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	0	0	0	1	0.5	0.5	1	2	0	0	1.5	0.5
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	0	0	0	519	72	122	172	628	0	0	186	270
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☐ Yes			☐ Yes			☐ Yes			☐ Yes	
7	Pedestrian Timing Required		30			30			30			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	0.0	0.0	0.0	519.0	72.0	122.0	172.0	628.0	0.0	0.0	186.0	270.0
14	Volume Separate Left	0.0	0.0		519.0	72.0		172.0	628.0		0.0	186.0	
15	Lane Utilization Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.952	1.000	1.000	0.908	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	0.0	0.0	0.0	1425.0	800.0	637.5	1425.0	3046.4	0.0	0.0	2179.2	637.5
18	Saturated Flow Separate	0.0	0.0		1425.0	800.0		1425.0	3046.4		0.0	2179.2	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	0.0	0.0	0.0	43.7	10.8	23.0	14.5	24.7	0.0	0.0	10.2	50.8
23	Adjusted Reference Time	0.0	0.0	0.0	47.7	14.8	27.0	18.5	28.7	0.0	0.0	14.2	54.8
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	0	0		519	144		172	314		0	124	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	15.0	15.0		15.0	15.0		15.0	15.0		0.9	15.0	
28	Left turn Factor	0.07	1.00		0.07	1.00		0.07	1.00		1.07	1.00	
29	Permitted Sat Flow	0.0	0.0		95.0	1600.0		95.0	1523.2		0.0	1452.8	
30	Reference Time A	0.0	0.0		655.6	10.8		217.3	24.7		0.0	10.2	
31	Adjusted Saturation B		0.0			800.0			3046.4			2179.2	
32	Reference Time B		0.0			10.8			NA			NA	
33	Reference Time Lefts	0.0			51.7			NA			NA		
34	Reference Time		0.0			51.7			217.3			10.2	
35	Adjusted Reference Time		8.0			55.7			221.3			14.2	
	Split Timing												
36	Ref Time Combined		0.0			10.8			24.7			10.2	
37	Ref Time By Movement	0.0	0.0		43.7	10.8		14.5	24.7		0.0	10.2	
38	Reference Time		0.0			43.7			24.7			10.2	
39	Adjusted Reference Time	0.0	0.0		47.7	47.7		28.7	28.7		14.2	14.2	
40	Lane Group V/C Ratio	-	-	-	0.346	0.125	-	0.115	0.196	-	-	0.145	-

	Summary	East West	North South
41	Protected Option	47.7	32.7
42	Permitted Option	55.7	221.3
43	Split Option	47.7	43.0
44	Minimum	47.7	32.7
45	Combined	80.4	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	0.0	27.0	0.0	54.8
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	28.7	14.2	14.8	0.0
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	47.7	0.0	0.0	18.5
51	Combined	76.4	41.2	14.8	73.3

52	**Intersection Capacity Utilization**	**67.0%**
53	**Level Of Service**	**B**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Campus Park Dr & Collins Dr
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: No-Build Condition - AM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	1	1	1	2	0.5	0.5	1	2	2	1	1.5	0.5
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	159	74	107	50	14	10	165	321	348	7	100	90
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☑ Yes			☑ Yes			☐ Yes			☑ Yes	
7	Pedestrian Timing Required		30			30			0			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	159.0	74.0	107.0	50.0	14.0	10.0	165.0	321.0	348.0	7.0	100.0	90.0
14	Volume Separate Left	159.0	74.0		50.0	14.0		165.0	321.0		7.0	100.0	
15	Lane Utilization Factor	1.000	1.000	1.000	0.971	1.000	1.000	1.000	0.952	0.885	1.000	0.908	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	1425.0	1600.0	1275.0	2767.4	800.0	637.5	1425.0	3046.4	2256.8	1425.0	2179.2	637.5
18	Saturated Flow Separate	1425.0	1600.0		2767.4	800.0		1425.0	3046.4		1425.0	2179.2	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	13.4	5.6	10.1	2.2	2.1	1.9	13.9	12.6	18.5	0.6	5.5	16.9
23	Adjusted Reference Time	17.4	9.6	14.1	8.0	8.0	8.0	17.9	16.6	22.5	8.0	9.5	20.9
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	159	74		25	28		165	161		7	67	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	15.0	15.0		15.0	15.0		15.0	15.0		0.9	15.0	
28	Left turn Factor	0.07	1.00		0.07	1.00		0.07	1.00		1.07	1.00	
29	Permitted Sat Flow	95.0	1600.0		92.2	1600.0		95.0	1523.2		1520.0	1452.8	
30	Reference Time A	200.8	5.6		32.5	2.1		208.4	12.6		0.6	5.5	
31	Adjusted Saturation B		1600.0			800.0			3046.4			2179.2	
32	Reference Time B		5.6			2.1			12.6			NA	
33	Reference Time Lefts	21.4			10.2			21.9			NA		
34	Reference Time		21.4			10.2			21.9			5.5	
35	Adjusted Reference Time		25.4			14.2			25.9			9.5	
	Split Timing												
36	Ref Time Combined		5.6			2.1			12.6			5.5	
37	Ref Time By Movement	13.4	5.6		2.2	2.1		13.9	12.6		0.6	5.5	
38	Reference Time		13.4			2.2			13.9			5.5	
39	Adjusted Reference Time	17.4	17.4		8.0	8.0		17.9	17.9		9.5	9.5	
40	Lane Group V/C Ratio	0.106	0.046	0.071	0.017	0.015	-	0.110	0.100	0.116	0.005	0.060	-

	Summary	East West	North South
41	Protected Option	25.4	27.4
42	Permitted Option	25.4	25.9
43	Split Option	25.4	27.4
44	Minimum	25.4	25.9
45	Combined	51.3	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	14.1	8.0	22.5	20.9
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	16.6	9.5	8.0	9.6
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	8.0	17.4	8.0	17.9
51	Combined	38.7	34.9	38.5	48.4

52	**Intersection Capacity Utilization**	**42.7%**
53	**Level Of Service**	**A**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Campus Park Dr & Collins Dr
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: No-Build Condition - PM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	1	1	1	2	0.5	0.5	1	2	2	1	1.5	0.5
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	94	79	96	215	65	2	204	163	117	4	205	101
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☑ Yes			☑ Yes			☐ Yes			☑ Yes	
7	Pedestrian Timing Required		30			30			0			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	94.0	79.0	96.0	215.0	65.0	2.0	204.0	163.0	117.0	4.0	205.0	101.0
14	Volume Separate Left	94.0	79.0		215.0	65.0		204.0	163.0		4.0	205.0	
15	Lane Utilization Factor	1.000	1.000	1.000	0.971	1.000	1.000	1.000	0.952	0.885	1.000	0.908	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	1425.0	1600.0	1275.0	2767.4	800.0	637.5	1425.0	3046.4	2256.8	1425.0	2179.2	637.5
18	Saturated Flow Separate	1425.0	1600.0		2767.4	800.0		1425.0	3046.4		1425.0	2179.2	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	7.9	5.9	9.0	9.3	9.8	0.4	17.2	6.4	6.2	0.3	11.3	19.0
23	Adjusted Reference Time	11.9	9.9	13.0	13.3	13.8	8.0	21.2	10.4	10.2	8.0	15.3	23.0
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	94	79		107.5	130		204	82		4	137	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	15.0	15.0		15.0	15.0		15.0	15.0		0.9	15.0	
28	Left turn Factor	0.07	1.00		0.07	1.00		0.07	1.00		1.07	1.00	
29	Permitted Sat Flow	95.0	1600.0		92.2	1600.0		95.0	1523.2		1520.0	1452.8	
30	Reference Time A	118.7	5.9		139.8	9.8		257.7	6.4		0.3	11.3	
31	Adjusted Saturation B		1600.0			800.0			3046.4			2179.2	
32	Reference Time B		5.9			9.8			NA			NA	
33	Reference Time Lefts	15.9			17.3			NA			NA		
34	Reference Time		15.9			17.3			257.7			11.3	
35	Adjusted Reference Time		19.9			21.3			261.7			15.3	
	Split Timing												
36	Ref Time Combined		5.9			9.8			6.4			11.3	
37	Ref Time By Movement	7.9	5.9		9.3	9.8		17.2	6.4		0.3	11.3	
38	Reference Time		7.9			9.8			17.2			11.3	
39	Adjusted Reference Time	11.9	11.9		13.8	13.8		21.2	21.2		15.3	15.3	
40	Lane Group V/C Ratio	0.063	0.049	0.064	0.072	0.043	-	0.136	0.051	0.039	0.003	0.097	-

	Summary	East West	North South
41	Protected Option	25.7	36.5
42	Permitted Option	21.3	261.7
43	Split Option	25.7	36.5
44	Minimum	21.3	36.5
45	Combined	57.8	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	13.0	8.0	10.2	23.0
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	10.4	15.3	13.8	9.9
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	13.3	11.9	8.0	21.2
51	Combined	36.8	35.2	32.0	54.1

52	**Intersection Capacity Utilization**	**48.2%**
53	**Level Of Service**	**A**

Revision 2003.0

E. No-Build Conditions Analysis Reports

b. No-Build Unsignalized Intersections Synchro Reports



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	11	25	890	71	61	581
Future Volume (vph)	11	25	890	71	61	581
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	16	12	11	16
Storage Length (ft)	0	0		0	120	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.907		0.990			
Flt Protected	0.985				0.950	
Satd. Flow (prot)	1832	0	2030	0	1662	2051
Flt Permitted	0.985				0.950	
Satd. Flow (perm)	1832	0	2030	0	1662	2051
Link Speed (mph)	25		30			30
Link Distance (ft)	95		275			227
Travel Time (s)	2.6		6.3			5.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	12	27	967	77	66	632
Shared Lane Traffic (%)						
Lane Group Flow (vph)	39	0	1044	0	66	632
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	16		11			11
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.85	0.85	0.85	1.00	1.04	0.85
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 61.1%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	11	25	890	71	61	581
Future Volume (Veh/h)	11	25	890	71	61	581
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	27	967	77	66	632
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1770	1006			1044	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1770	1006			1044	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	85	91			90	
cM capacity (veh/h)	81	289			655	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	39	1044	66	632
Volume Left	12	0	66	0
Volume Right	27	77	0	0
cSH	161	1700	655	1700
Volume to Capacity	0.24	0.61	0.10	0.37
Queue Length 95th (ft)	23	0	8	0
Control Delay (s)	34.3	0.0	11.1	0.0
Lane LOS	D		B	
Approach Delay (s)	34.3	0.0	1.1	
Approach LOS	D			

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	61.1%	ICU Level of Service	B
Analysis Period (min)	15		



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	73	106	310	17	15	299
Future Volume (vph)	73	106	310	17	15	299
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		110	140		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1863	1583	1770	3539	1770	1583
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1863	1583	1770	3539	1770	1583
Link Speed (mph)	30			30	30	
Link Distance (ft)	242			254	271	
Travel Time (s)	5.5			5.8	6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	79	115	337	18	16	325
Shared Lane Traffic (%)						
Lane Group Flow (vph)	79	115	337	18	16	325
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.8%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	73	106	310	17	15	299
Future Volume (Veh/h)	73	106	310	17	15	299
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	79	115	337	18	16	325
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			194		762	79
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			194		762	79
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			76		94	66
cM capacity (veh/h)			1377		258	965

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	NB 2
Volume Total	79	115	337	9	9	16	325
Volume Left	0	0	337	0	0	16	0
Volume Right	0	115	0	0	0	0	325
cSH	1700	1700	1377	1700	1700	258	965
Volume to Capacity	0.05	0.07	0.24	0.01	0.01	0.06	0.34
Queue Length 95th (ft)	0	0	24	0	0	5	37
Control Delay (s)	0.0	0.0	8.5	0.0	0.0	19.9	10.6
Lane LOS			A			C	B
Approach Delay (s)	0.0		8.0			11.0	
Approach LOS						B	

Intersection Summary			
Average Delay	7.4		
Intersection Capacity Utilization	33.8%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	48	57	818	20	26	966
Future Volume (vph)	48	57	818	20	26	966
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	16	12	11	16
Storage Length (ft)	0	0		0	120	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.927		0.997			
Flt Protected	0.978				0.950	
Satd. Flow (prot)	1859	0	2045	0	1662	2051
Flt Permitted	0.978				0.950	
Satd. Flow (perm)	1859	0	2045	0	1662	2051
Link Speed (mph)	25		30			30
Link Distance (ft)	95		275			227
Travel Time (s)	2.6		6.3			5.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	52	62	889	22	28	1050
Shared Lane Traffic (%)						
Lane Group Flow (vph)	114	0	911	0	28	1050
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	16		11			11
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.85	0.85	0.85	1.00	1.04	0.85
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 63.7%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	48	57	818	20	26	966
Future Volume (Veh/h)	48	57	818	20	26	966
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	52	62	889	22	28	1050
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2006	900			911	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2006	900			911	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	16	81			96	
cM capacity (veh/h)	62	333			735	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	114	911	28	1050
Volume Left	52	0	28	0
Volume Right	62	22	0	0
cSH	111	1700	735	1700
Volume to Capacity	1.03	0.54	0.04	0.62
Queue Length 95th (ft)	169	0	3	0
Control Delay (s)	167.5	0.0	10.1	0.0
Lane LOS	F		B	
Approach Delay (s)	167.5	0.0	0.3	
Approach LOS	F			

Intersection Summary			
Average Delay	9.2		
Intersection Capacity Utilization	63.7%	ICU Level of Service	B
Analysis Period (min)	15		



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	68	83	310	17	17	299
Future Volume (vph)	68	83	310	17	17	299
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		110	140		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1863	1583	1770	3539	1770	1583
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1863	1583	1770	3539	1770	1583
Link Speed (mph)	30			30	30	
Link Distance (ft)	242			254	271	
Travel Time (s)	5.5			5.8	6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	74	90	337	18	18	325
Shared Lane Traffic (%)						
Lane Group Flow (vph)	74	90	337	18	18	325
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.8%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	68	83	310	17	17	299
Future Volume (Veh/h)	68	83	310	17	17	299
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	74	90	337	18	18	325
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			164		757	74
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			164		757	74
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			76		93	67
cM capacity (veh/h)			1412		262	973

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	NB 2
Volume Total	74	90	337	9	9	18	325
Volume Left	0	0	337	0	0	18	0
Volume Right	0	90	0	0	0	0	325
cSH	1700	1700	1412	1700	1700	262	973
Volume to Capacity	0.04	0.05	0.24	0.01	0.01	0.07	0.33
Queue Length 95th (ft)	0	0	23	0	0	6	37
Control Delay (s)	0.0	0.0	8.3	0.0	0.0	19.8	10.5
Lane LOS			A			C	B
Approach Delay (s)	0.0		7.9			11.0	
Approach LOS						B	

Intersection Summary			
Average Delay	7.7		
Intersection Capacity Utilization	33.8%	ICU Level of Service	A
Analysis Period (min)	15		

F. Build Conditions Analysis Reports

F. Build Conditions Analysis Reports

a. Build Signalized Intersections ICU Reports

Intersection Capacity Utilization Worksheet

Intersection Location: Spring Rd & Princeton Ave/E High S
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: Build Condition - AM
Date and Time of Data:
Project: Moorpark Distribution Center

1	**Movement**	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	1	1	1	1	1	1	1	2	1	1	1.5	0.5
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	15	270	191	85	270	175	147	222	245	439	616	24
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☑ Yes			☑ Yes			☑ Yes			☑ Yes	
7	Pedestrian Timing Required		30			30			30			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	15.0	270.0	191.0	85.0	270.0	175.0	147.0	222.0	245.0	439.0	616.0	24.0
14	Volume Separate Left	15.0	270.0		85.0	270.0		147.0	222.0		439.0	616.0	
15	Lane Utilization Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.952	1.000	1.000	0.908	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	1425.0	1600.0	1275.0	1425.0	1600.0	1275.0	1425.0	3046.4	1275.0	1425.0	2179.2	637.5
18	Saturated Flow Separate	1425.0	1600.0		1425.0	1600.0		1425.0	3046.4		1425.0	2179.2	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	1.3	20.3	18.0	7.2	20.3	16.5	12.4	8.7	23.1	37.0	33.9	4.5
23	Adjusted Reference Time	8.0	24.3	22.0	11.2	24.3	20.5	16.4	12.7	27.1	41.0	37.9	8.5
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	15	270		85	270		147	111		439	411	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	15.0	15.0		15.0	15.0		15.0	15.0		0.9	15.0	
28	Left turn Factor	0.07	1.00		0.07	1.00		0.07	1.00		1.07	1.00	
29	Permitted Sat Flow	95.0	1600.0		95.0	1600.0		95.0	1523.2		1520.0	1452.8	
30	Reference Time A	18.9	20.3		107.4	20.3		185.7	8.7		37.0	33.9	
31	Adjusted Saturation B		1600.0			1600.0			3046.4			2179.2	
32	Reference Time B		NA			NA			NA			NA	
33	Reference Time Lefts	NA			NA			NA			NA		
34	Reference Time		20.3			107.4			185.7			37.0	
35	Adjusted Reference Time		24.3			111.4			189.7			41.0	
	Split Timing												
36	Ref Time Combined		20.3			20.3			8.7			33.9	
37	Ref Time By Movement	1.3	20.3		7.2	20.3		12.4	8.7		37.0	33.9	
38	Reference Time		20.3			20.3			12.4			37.0	
39	Adjusted Reference Time	24.3	24.3		24.3	24.3		16.4	16.4		41.0	41.0	
40	Lane Group V/C Ratio	0.010	0.169	0.127	0.057	0.169	0.117	0.098	0.069	0.163	0.293	0.203	-

	Summary	**East West**	**North South**
41	Protected Option	35.4	54.3
42	Permitted Option	111.4	189.7
43	Split Option	48.5	57.3
44	Minimum	35.4	54.3
45	Combined	89.7	

	Right Turns	**EBR**	**WBR**	**NBR**	**SBR**
46	Adjusted Reference Time	22.0	20.5	27.1	8.5
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	12.7	37.9	24.3	24.3
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	11.2	8.0	41.0	16.4
51	Combined	45.9	66.4	92.3	49.1

52	**Intersection Capacity Utilization**	**76.9%**
53	**Level Of Service**	**C**

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Intersection Capacity Utilization Worksheet

Intersection Location: Spring Rd & Princeton Ave/E High S
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: Build Condition - PM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	1	1	1	1	1	1	1	2	1	1	1.5	0.5
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	39	356	163	110	310	516	203	678	292	239	320	35
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☑ Yes			☑ Yes			☑ Yes			☑ Yes	
7	Pedestrian Timing Required		30			30			30			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	39.0	356.0	163.0	110.0	310.0	516.0	203.0	678.0	292.0	239.0	320.0	35.0
14	Volume Separate Left	39.0	356.0		110.0	310.0		203.0	678.0		239.0	320.0	
15	Lane Utilization Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.952	1.000	1.000	0.908	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	1425.0	1600.0	1275.0	1425.0	1600.0	1275.0	1425.0	3046.4	1275.0	1425.0	2179.2	637.5
18	Saturated Flow Separate	1425.0	1600.0		1425.0	1600.0		1425.0	3046.4		1425.0	2179.2	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	3.3	26.7	15.3	9.3	23.3	48.6	17.1	26.7	27.5	20.1	17.6	6.6
23	Adjusted Reference Time	8.0	30.7	19.3	13.3	27.3	52.6	21.1	30.7	31.5	24.1	21.6	10.6
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	39	356		110	310		203	339		239	213	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	15.0	15.0		15.0	15.0		15.0	15.0		0.9	15.0	
28	Left turn Factor	0.07	1.00		0.07	1.00		0.07	1.00		1.07	1.00	
29	Permitted Sat Flow	95.0	1600.0		95.0	1600.0		95.0	1523.2		1520.0	1452.8	
30	Reference Time A	49.3	26.7		138.9	23.3		256.4	26.7		20.1	17.6	
31	Adjusted Saturation B		1600.0			1600.0			3046.4			2179.2	
32	Reference Time B		NA			NA			NA			NA	
33	Reference Time Lefts	NA			NA			NA			NA		
34	Reference Time		49.3			138.9			256.4			20.1	
35	Adjusted Reference Time		53.3			142.9			260.4			24.1	
	Split Timing												
36	Ref Time Combined		26.7			23.3			26.7			17.6	
37	Ref Time By Movement	3.3	26.7		9.3	23.3		17.1	26.7		20.1	17.6	
38	Reference Time		26.7			23.3			26.7			20.1	
39	Adjusted Reference Time	30.7	30.7		27.3	27.3		30.7	30.7		24.1	24.1	
40	Lane Group V/C Ratio	0.026	0.223	0.109	0.073	0.194	0.344	0.135	0.212	0.195	0.159	0.113	-

	Summary	East West	North South
41	Protected Option	44.0	54.8
42	Permitted Option	142.9	260.4
43	Split Option	58.0	54.8
44	Minimum	44.0	54.8
45	Combined	98.8	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	19.3	52.6	31.5	10.6
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	30.7	21.6	27.3	30.7
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	13.3	8.0	24.1	21.1
51	Combined	63.3	82.2	82.9	62.4

52	**Intersection Capacity Utilization**	**82.3%**
53	**Level Of Service**	**D**

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Intersection Capacity Utilization Worksheet

Intersection Location: Princeton Ave & Condor Dr N
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: Build Condition - AM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	0.5	0.5	1	1	0.5	0.5	1	1.5	0.5	1	1.5	0.5
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	32	0	32	-1	0	-2	32	864	48	255	358	32
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☑ Yes			☑ Yes			☑ Yes			☑ Yes	
7	Pedestrian Timing Required		30			30			30			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	32.0	0.0	32.0	-1.0	0.0	-2.0	32.0	864.0	48.0	255.0	358.0	32.0
14	Volume Separate Left	32.0	0.0		-1.0	0.0		32.0	864.0		255.0	358.0	
15	Lane Utilization Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.908	1.000	1.000	0.908	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	712.5	800.0	1275.0	1425.0	800.0	637.5	1425.0	2179.2	637.5	1425.0	2179.2	637.5
18	Saturated Flow Separate	712.5	800.0		1425.0	800.0		1425.0	2179.2		1425.0	2179.2	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	5.4	0.0	3.0	0.0	0.0	0.0	2.7	47.6	9.0	21.5	19.7	6.0
23	Adjusted Reference Time	9.4	0.0	8.0	0.0	0.0	0.0	8.0	51.6	13.0	25.5	23.7	10.0
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	64	0		0	0		32	576		255	239	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	15.0	15.0		15.0	15.0		15.0	15.0		0.9	15.0	
28	Left turn Factor	0.07	1.00		0.07	1.00		0.07	1.00		1.07	1.00	
29	Permitted Sat Flow	95.0	1600.0		95.0	1600.0		95.0	1452.8		1520.0	1452.8	
30	Reference Time A	80.8	0.0		0.0	0.0		40.4	47.6		21.5	19.7	
31	Adjusted Saturation B		800.0			800.0			2179.2			2179.2	
32	Reference Time B		0.0			0.0			NA			NA	
33	Reference Time Lefts	13.4			0.0			NA			NA		
34	Reference Time		13.4			0.0			47.6			21.5	
35	Adjusted Reference Time		17.4			8.0			51.6			25.5	
	Split Timing												
36	Ref Time Combined		0.0			0.0			47.6			19.7	
37	Ref Time By Movement	5.4	0.0		0.0	0.0		2.7	47.6		21.5	19.7	
38	Reference Time		5.4			0.0			47.6			21.5	
39	Adjusted Reference Time	9.4	9.4		0.0	0.0		51.6	51.6		25.5	25.5	
40	Lane Group V/C Ratio	-	0.021	0.021	-0.001	-0.001	-	0.021	0.294	-	0.170	0.124	-

	Summary	East West	North South
41	Protected Option	9.4	77.1
42	Permitted Option	17.4	51.6
43	Split Option	9.4	77.1
44	Minimum	9.4	51.6
45	Combined	61.0	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	8.0	0.0	13.0	10.0
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	51.6	23.7	0.0	0.0
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	0.0	9.4	25.5	8.0
51	Combined	59.6	33.1	38.5	18.0

52	**Intersection Capacity Utilization**	**50.8%**
53	**Level Of Service**	**A**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Princeton Ave & Condor Dr N
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: Build Condition - PM
Date and Time of Data:
Project: Moorpark Distribution Center

	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	0.5	0.5	1	1	0.5	0.5	1	1.5	0.5	1	1.5	0.5
3	Shared LT Lane (y/n)	☑ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	32	0	32	50	0	280	32	741	12	27	731	32
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☑ Yes			☑ Yes			☑ Yes			☑ Yes	
7	Pedestrian Timing Required		30			30			30			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	0.0	32.0	32.0	50.0	0.0	280.0	32.0	741.0	12.0	27.0	731.0	32.0
14	Volume Separate Left	32.0	0.0		50.0	0.0		32.0	741.0		27.0	731.0	
15	Lane Utilization Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.908	1.000	1.000	0.908	1.000
16	Turning Factor Adjust	0.950	0.950	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	0.0	1520.0	1275.0	1425.0	800.0	637.5	1425.0	2179.2	637.5	1425.0	2179.2	637.5
18	Saturated Flow Separate	2137.5	800.0		1425.0	800.0		1425.0	2179.2		1425.0	2179.2	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		FALSE			FALSE			TRUE			TRUE	
22	Reference Time	NA	NA	3.0	NA	NA	52.7	2.7	40.8	2.3	2.3	40.3	6.0
23	Adjusted Reference Time	NA	NA	8.0	NA	NA	56.7	8.0	44.8	8.0	8.0	44.3	10.0
	Permitted Option												
24	Proportion Lefts	1	1.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	0	192		50	0		32	494		27	487	
26	Proportion Lefts Left	1	0.17		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	15.0	16.1		15.0	15.0		15.0	15.0		0.9	15.0	
28	Left turn Factor	0.07	0.28		0.07	1.00		0.07	1.00		1.07	1.00	
29	Permitted Sat Flow	0.0	865.6		95.0	1600.0		95.0	1452.8		1520.0	1452.8	
30	Reference Time A	0.0	26.6		63.2	0.0		40.4	40.8		2.3	40.3	
31	Adjusted Saturation B		-800.0			800.0			2179.2			2179.2	
32	Reference Time B		14.7			0.0			NA			NA	
33	Reference Time Lefts	9.8			12.2			NA			NA		
34	Reference Time		14.7			12.2			40.8			40.3	
35	Adjusted Reference Time		18.7			16.2			44.8			44.3	
	Split Timing												
36	Ref Time Combined		2.5			0.0			40.8			40.3	
37	Ref Time By Movement	1.8	0.0		4.2	0.0		2.7	40.8		2.3	40.3	
38	Reference Time		2.5			4.2			40.8			40.3	
39	Adjusted Reference Time	8.0	8.0		8.2	8.2		44.8	44.8		44.3	44.3	
40	Lane Group V/C Ratio	-	0.021	0.021	0.033	0.181	-	0.021	0.243	-	0.018	0.242	-

	Summary	East West	North South
41	Protected Option	NA	52.8
42	Permitted Option	18.7	44.8
43	Split Option	16.2	89.1
44	Minimum	16.2	44.8
45	Combined	61.0	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	8.0	56.7	8.0	10.0
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	44.8	44.3	8.2	8.0
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	8.2	8.0	8.0	8.0
51	Combined	61.0	109.0	24.2	26.0

52	**Intersection Capacity Utilization**	**90.8%**
53	**Level Of Service**	**E**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Princeton Ave & EB Ramps
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: Build Condition - AM
Date and Time of Data:
Project: Moorpark Distribution Center

	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	0.5	1	0.5	0	0	0	0	1.5	0.5	1	2	0
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	57	2	116	0	0	0	0	364	590	56	486	0
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☐ Yes			☐ Yes			☐ Yes			☐ Yes	
7	Pedestrian Timing Required		30			30			30			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	57.0	2.0	116.0	0.0	0.0	0.0	0.0	364.0	590.0	56.0	486.0	0.0
14	Volume Separate Left	57.0	2.0		0.0	0.0		0.0	364.0		56.0	486.0	
15	Lane Utilization Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.908	1.000	1.000	0.952	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	712.5	1600.0	637.5	0.0	0.0	0.0	0.0	2179.2	637.5	1425.0	3046.4	0.0
18	Saturated Flow Separate	712.5	1600.0		0.0	0.0		0.0	2179.2		1425.0	3046.4	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	9.6	0.2	21.8	0.0	0.0	0.0	0.0	20.0	111.1	4.7	19.1	0.0
23	Adjusted Reference Time	13.6	8.0	25.8	0.0	0.0	0.0	0.0	24.0	115.1	8.7	23.1	0.0
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	114	2		0	0		0	243		56	243	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	0.9	15.0		15.0	15.0		15.0	15.0		15.0	15.0	
28	Left turn Factor	1.07	1.00		0.07	1.00		0.07	1.00		0.07	1.00	
29	Permitted Sat Flow	1520.0	1600.0		0.0	0.0		0.0	1452.8		95.0	1523.2	
30	Reference Time A	9.6	0.2		0.0	0.0		0.0	20.0		70.7	19.1	
31	Adjusted Saturation B		1600.0			0.0			2179.2			3046.4	
32	Reference Time B		0.2			0.0			NA			NA	
33	Reference Time Lefts	17.6			0.0			NA			NA		
34	Reference Time		9.6			0.0			20.0			70.7	
35	Adjusted Reference Time		13.6			8.0			24.0			74.7	
	Split Timing												
36	Ref Time Combined		0.2			0.0			20.0			19.1	
37	Ref Time By Movement	9.6	0.2		0.0	0.0		0.0	20.0		4.7	19.1	
38	Reference Time		9.6			0.0			20.0			19.1	
39	Adjusted Reference Time	13.6	13.6		0.0	0.0		24.0	24.0		23.1	23.1	
40	Lane Group V/C Ratio	-	0.056	-	-	-	-	-	0.303	-	0.037	0.152	-

	Summary	East West	North South
41	Protected Option	13.6	32.8
42	Permitted Option	13.6	74.7
43	Split Option	13.6	47.2
44	Minimum	13.6	32.8
45	Combined	46.4	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	25.8	0.0	115.1	0.0
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	24.0	23.1	0.0	8.0
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	0.0	13.6	8.7	0.0
51	Combined	49.9	36.7	123.8	8.0

52	**Intersection Capacity Utilization**	**103.1%**
53	**Level Of Service**	**F**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Princeton Ave & EB Ramps
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: Build Condition - PM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	0.5	1	0.5	0	0	0	0	1.5	0.5	1	2	0
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	296	0	172	0	0	0	0	458	594	57	621	0
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☐ Yes			☐ Yes			☐ Yes			☐ Yes	
7	Pedestrian Timing Required		30			30			30			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	296.0	0.0	172.0	0.0	0.0	0.0	0.0	458.0	594.0	57.0	621.0	0.0
14	Volume Separate Left	296.0	0.0		0.0	0.0		0.0	458.0		57.0	621.0	
15	Lane Utilization Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.908	1.000	1.000	0.952	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	712.5	1600.0	637.5	0.0	0.0	0.0	0.0	2179.2	637.5	1425.0	3046.4	0.0
18	Saturated Flow Separate	712.5	1600.0		0.0	0.0		0.0	2179.2		1425.0	3046.4	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	49.9	0.0	32.4	0.0	0.0	0.0	0.0	25.2	111.8	4.8	24.5	0.0
23	Adjusted Reference Time	53.9	0.0	36.4	0.0	0.0	0.0	0.0	29.2	115.8	8.8	28.5	0.0
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	592	0		0	0		0	305		57	311	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	0.9	15.0		15.0	15.0		15.0	15.0		15.0	15.0	
28	Left turn Factor	1.07	1.00		0.07	1.00		0.07	1.00		0.07	1.00	
29	Permitted Sat Flow	1520.0	1600.0		0.0	0.0		0.0	1452.8		95.0	1523.2	
30	Reference Time A	49.9	0.0		0.0	0.0		0.0	25.2		72.0	24.5	
31	Adjusted Saturation B		1600.0			0.0			2179.2			3046.4	
32	Reference Time B		0.0			0.0			NA			NA	
33	Reference Time Lefts	57.9			0.0			NA			NA		
34	Reference Time		49.9			0.0			25.2			72.0	
35	Adjusted Reference Time		53.9			8.0			29.2			76.0	
	Split Timing												
36	Ref Time Combined		0.0			0.0			25.2			24.5	
37	Ref Time By Movement	49.9	0.0		0.0	0.0		0.0	25.2		4.8	24.5	
38	Reference Time		49.9			0.0			25.2			24.5	
39	Adjusted Reference Time	53.9	53.9		0.0	0.0		29.2	29.2		28.5	28.5	
40	Lane Group V/C Ratio	0.197	-	0.115	-	-	-	-	0.658	-	0.038	0.388	-

	Summary	East West	North South
41	Protected Option	53.9	38.0
42	Permitted Option	53.9	76.0
43	Split Option	53.9	57.7
44	Minimum	53.9	38.0
45	Combined	91.9	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	36.4	0.0	115.8	0.0
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	29.2	28.5	0.0	0.0
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	0.0	53.9	8.8	0.0
51	Combined	65.6	82.3	124.6	0.0

52	**Intersection Capacity Utilization**	**103.8%**
53	**Level Of Service**	**F**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Princeton Ave & WB Ramps
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: Build Condition - AM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	0	0	0	1	0.5	0.5	1	2	0	0	1.5	0.5
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	0	0	0	387	46	26	85	338	0	0	167	467
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☐ Yes			☐ Yes			☐ Yes			☐ Yes	
7	Pedestrian Timing Required		30			30			30			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	0.0	0.0	0.0	387.0	46.0	26.0	85.0	338.0	0.0	0.0	167.0	467.0
14	Volume Separate Left	0.0	0.0		387.0	46.0		85.0	338.0		0.0	167.0	
15	Lane Utilization Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.952	1.000	1.000	0.908	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	0.0	0.0	0.0	1425.0	800.0	637.5	1425.0	3046.4	0.0	0.0	2179.2	637.5
18	Saturated Flow Separate	0.0	0.0		1425.0	800.0		1425.0	3046.4		0.0	2179.2	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	0.0	0.0	0.0	32.6	6.9	4.9	7.2	13.3	0.0	0.0	9.2	87.9
23	Adjusted Reference Time	0.0	0.0	0.0	36.6	10.9	8.9	11.2	17.3	0.0	0.0	13.2	91.9
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	0	0		387	92		85	169		0	111	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	15.0	15.0		15.0	15.0		15.0	15.0		0.9	15.0	
28	Left turn Factor	0.07	1.00		0.07	1.00		0.07	1.00		1.07	1.00	
29	Permitted Sat Flow	0.0	0.0		95.0	1600.0		95.0	1523.2		0.0	1452.8	
30	Reference Time A	0.0	0.0		488.8	6.9		107.4	13.3		0.0	9.2	
31	Adjusted Saturation B		0.0			800.0			3046.4			2179.2	
32	Reference Time B		0.0			6.9			NA			NA	
33	Reference Time Lefts	0.0			40.6			NA			NA		
34	Reference Time		0.0			40.6			107.4			9.2	
35	Adjusted Reference Time		8.0			44.6			111.4			13.2	
	Split Timing												
36	Ref Time Combined		0.0			6.9			13.3			9.2	
37	Ref Time By Movement	0.0	0.0		32.6	6.9		7.2	13.3		0.0	9.2	
38	Reference Time		0.0			32.6			13.3			9.2	
39	Adjusted Reference Time	0.0	0.0		36.6	36.6		17.3	17.3		13.2	13.2	
40	Lane Group V/C Ratio	-	-	-	0.258	0.046	-	0.057	0.106	-	-	0.201	-

	Summary	East West	North South
41	Protected Option	36.6	24.4
42	Permitted Option	44.6	111.4
43	Split Option	36.6	30.5
44	Minimum	36.6	24.4
45	Combined	60.9	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	0.0	8.9	0.0	91.9
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	17.3	13.2	10.9	0.0
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	36.6	0.0	0.0	11.2
51	Combined	53.9	22.1	10.9	103.1

52	**Intersection Capacity Utilization**	**85.9%**
53	**Level Of Service**	**D**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Princeton Ave & WB Ramps
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: Build Condition - PM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	0	0	0	1	0.5	0.5	1	2	0	0	1.5	0.5
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	0	0	0	527	72	122	167	628	0	0	186	270
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☐ Yes			☐ Yes			☐ Yes			☐ Yes	
7	Pedestrian Timing Required		30			30			30			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	0.0	0.0	0.0	527.0	72.0	122.0	167.0	628.0	0.0	0.0	186.0	270.0
14	Volume Separate Left	0.0	0.0		527.0	72.0		167.0	628.0		0.0	186.0	
15	Lane Utilization Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.952	1.000	1.000	0.908	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	0.0	0.0	0.0	1425.0	800.0	637.5	1425.0	3046.4	0.0	0.0	2179.2	637.5
18	Saturated Flow Separate	0.0	0.0		1425.0	800.0		1425.0	3046.4		0.0	2179.2	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	0.0	0.0	0.0	44.4	10.8	23.0	14.1	24.7	0.0	0.0	10.2	50.8
23	Adjusted Reference Time	0.0	0.0	0.0	48.4	14.8	27.0	18.1	28.7	0.0	0.0	14.2	54.8
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	0	0		527	144		167	314		0	124	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	15.0	15.0		15.0	15.0		15.0	15.0		0.9	15.0	
28	Left turn Factor	0.07	1.00		0.07	1.00		0.07	1.00		1.07	1.00	
29	Permitted Sat Flow	0.0	0.0		95.0	1600.0		95.0	1523.2		0.0	1452.8	
30	Reference Time A	0.0	0.0		665.7	10.8		210.9	24.7		0.0	10.2	
31	Adjusted Saturation B		0.0			800.0			3046.4			2179.2	
32	Reference Time B		0.0			10.8			NA			NA	
33	Reference Time Lefts	0.0			52.4			NA			NA		
34	Reference Time		0.0			52.4			210.9			10.2	
35	Adjusted Reference Time		8.0			56.4			214.9			14.2	
	Split Timing												
36	Ref Time Combined		0.0			10.8			24.7			10.2	
37	Ref Time By Movement	0.0	0.0		44.4	10.8		14.1	24.7		0.0	10.2	
38	Reference Time		0.0			44.4			24.7			10.2	
39	Adjusted Reference Time	0.0	0.0		48.4	48.4		28.7	28.7		14.2	14.2	
40	Lane Group V/C Ratio	-	-	-	0.351	0.125	-	0.111	0.196	-	-	0.145	-

	Summary	East West	North South
41	Protected Option	48.4	32.3
42	Permitted Option	56.4	214.9
43	Split Option	48.4	43.0
44	Minimum	48.4	32.3
45	Combined	80.7	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	0.0	27.0	0.0	54.8
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	28.7	14.2	14.8	0.0
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	48.4	0.0	0.0	18.1
51	Combined	77.1	41.2	14.8	72.9

52	**Intersection Capacity Utilization**	**67.2%**
53	**Level Of Service**	**B**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Campus Park Dr & Collins Dr
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: Build Condition - AM
Date and Time of Data:
Project: Moorpark Distribution Center

1	**Movement**	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	1	1	1	2	0.5	0.5	1	2	2	1	1.5	0.5
3	Shared LT Lane (y/n)	☑ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	159	74	107	50	14	10	165	321	348	7	100	90
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☑ Yes			☑ Yes			☐ Yes			☑ Yes	
7	Pedestrian Timing Required		30			30			0			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	0.0	233.0	107.0	50.0	14.0	10.0	165.0	321.0	348.0	7.0	100.0	90.0
14	Volume Separate Left	159.0	74.0		50.0	14.0		165.0	321.0		7.0	100.0	
15	Lane Utilization Factor	1.000	1.000	1.000	0.971	1.000	1.000	1.000	0.952	0.885	1.000	0.908	1.000
16	Turning Factor Adjust	0.950	0.966	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	0.0	3090.8	1275.0	2767.4	800.0	637.5	1425.0	3046.4	2256.8	1425.0	2179.2	637.5
18	Saturated Flow Separate	2850.0	1600.0		2767.4	800.0		1425.0	3046.4		1425.0	2179.2	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		FALSE			FALSE			TRUE			TRUE	
22	Reference Time	NA	NA	10.1	NA	NA	1.9	13.9	12.6	18.5	0.6	5.5	16.9
23	Adjusted Reference Time	NA	NA	14.1	NA	NA	8.0	17.9	16.6	22.5	8.0	9.5	20.9
	Permitted Option												
24	Proportion Lefts	1	0.68		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	0	233		25	28		165	161		7	67	
26	Proportion Lefts Left	1	0.68		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	15.0	16.2		15.0	15.0		15.0	15.0		0.9	15.0	
28	Left turn Factor	0.07	0.09		0.07	1.00		0.07	1.00		1.07	1.00	
29	Permitted Sat Flow	0.0	272.4		92.2	1600.0		95.0	1523.2		1520.0	1452.8	
30	Reference Time A	0.0	102.6		32.5	2.1		208.4	12.6		0.6	5.5	
31	Adjusted Saturation B		0.0			800.0			3046.4			2179.2	
32	Reference Time B		17.0			2.1			12.6			NA	
33	Reference Time Lefts	14.7			10.2			21.9			NA		
34	Reference Time		17.0			10.2			21.9			5.5	
35	Adjusted Reference Time		21.0			14.2			25.9			9.5	
	Split Timing												
36	Ref Time Combined		9.0			2.1			12.6			5.5	
37	Ref Time By Movement	6.7	5.6		2.2	2.1		13.9	12.6		0.6	5.5	
38	Reference Time		9.0			2.2			13.9			5.5	
39	Adjusted Reference Time	13.0	13.0		8.0	8.0		17.9	17.9		9.5	9.5	
40	Lane Group V/C Ratio	0.106	0.046	0.071	0.017	0.015	-	0.110	0.100	0.116	0.005	0.060	-

	Summary	**East West**	**North South**
41	Protected Option	NA	27.4
42	Permitted Option	21.0	25.9
43	Split Option	21.0	27.4
44	Minimum	21.0	25.9
45	Combined	46.9	

	Right Turns	**EBR**	**WBR**	**NBR**	**SBR**
46	Adjusted Reference Time	14.1	8.0	22.5	20.9
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	16.6	9.5	8.0	13.0
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	8.0	13.0	8.0	17.9
51	Combined	38.7	30.6	38.5	51.9

52	**Intersection Capacity Utilization**	**43.2%**
53	**Level Of Service**	**A**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Campus Park Dr & Collins Dr
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: Build Condition - PM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	1	1	1	2	0.5	0.5	1	2	2	1	1.5	0.5
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	94	79	96	215	65	2	204	163	117	4	205	101
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☑ Yes			☑ Yes			☐ Yes			☑ Yes	
7	Pedestrian Timing Required		30			30			0			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	94.0	79.0	96.0	215.0	65.0	2.0	204.0	163.0	117.0	4.0	205.0	101.0
14	Volume Separate Left	94.0	79.0		215.0	65.0		204.0	163.0		4.0	205.0	
15	Lane Utilization Factor	1.000	1.000	1.000	0.971	1.000	1.000	1.000	0.952	0.885	1.000	0.908	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	1425.0	1600.0	1275.0	2767.4	800.0	637.5	1425.0	3046.4	2256.8	1425.0	2179.2	637.5
18	Saturated Flow Separate	1425.0	1600.0		2767.4	800.0		1425.0	3046.4		1425.0	2179.2	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	7.9	5.9	9.0	9.3	9.8	0.4	17.2	6.4	6.2	0.3	11.3	19.0
23	Adjusted Reference Time	11.9	9.9	13.0	13.3	13.8	8.0	21.2	10.4	10.2	8.0	15.3	23.0
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	94	79		107.5	130		204	82		4	137	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	15.0	15.0		15.0	15.0		15.0	15.0		0.9	15.0	
28	Left turn Factor	0.07	1.00		0.07	1.00		0.07	1.00		1.07	1.00	
29	Permitted Sat Flow	95.0	1600.0		92.2	1600.0		95.0	1523.2		1520.0	1452.8	
30	Reference Time A	118.7	5.9		139.8	9.8		257.7	6.4		0.3	11.3	
31	Adjusted Saturation B		1600.0			800.0			3046.4			2179.2	
32	Reference Time B		5.9			9.8			NA			NA	
33	Reference Time Lefts	15.9			17.3			NA			NA		
34	Reference Time		15.9			17.3			257.7			11.3	
35	Adjusted Reference Time		19.9			21.3			261.7			15.3	
	Split Timing												
36	Ref Time Combined		5.9			9.8			6.4			11.3	
37	Ref Time By Movement	7.9	5.9		9.3	9.8		17.2	6.4		0.3	11.3	
38	Reference Time		7.9			9.8			17.2			11.3	
39	Adjusted Reference Time	11.9	11.9		13.8	13.8		21.2	21.2		15.3	15.3	
40	Lane Group V/C Ratio	0.063	0.049	0.064	0.072	0.043	-	0.136	0.051	0.039	0.003	0.097	-

	Summary	East West	North South
41	Protected Option	25.7	36.5
42	Permitted Option	21.3	261.7
43	Split Option	25.7	36.5
44	Minimum	21.3	36.5
45	Combined	57.8	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	13.0	8.0	10.2	23.0
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	10.4	15.3	13.8	9.9
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	13.3	11.9	8.0	21.2
51	Combined	36.8	35.2	32.0	54.1

52	**Intersection Capacity Utilization**	**48.2%**
53	**Level Of Service**	**A**

Revision 2003.0

F. Build Conditions Analysis Reports

b. Build Unsignalized Intersections Synchro Reports



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	11	25	890	71	61	577
Future Volume (vph)	11	25	890	71	61	577
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	16	12	11	16
Storage Length (ft)	0	0		0	120	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.907		0.990			
Flt Protected	0.985				0.950	
Satd. Flow (prot)	1832	0	2030	0	1662	2051
Flt Permitted	0.985				0.950	
Satd. Flow (perm)	1832	0	2030	0	1662	2051
Link Speed (mph)	25		30			30
Link Distance (ft)	95		275			227
Travel Time (s)	2.6		6.3			5.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	12	27	967	77	66	627
Shared Lane Traffic (%)						
Lane Group Flow (vph)	39	0	1044	0	66	627
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	16		11			11
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.85	0.85	0.85	1.00	1.04	0.85
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 61.1%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	11	25	890	71	61	577
Future Volume (Veh/h)	11	25	890	71	61	577
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	27	967	77	66	627
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1764	1006			1044	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1764	1006			1044	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	85	91			90	
cM capacity (veh/h)	82	289			655	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	39	1044	66	627
Volume Left	12	0	66	0
Volume Right	27	77	0	0
cSH	162	1700	655	1700
Volume to Capacity	0.24	0.61	0.10	0.37
Queue Length 95th (ft)	22	0	8	0
Control Delay (s)	34.1	0.0	11.1	0.0
Lane LOS	D		B	
Approach Delay (s)	34.1	0.0	1.1	
Approach LOS	D			

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	61.1%	ICU Level of Service	B
Analysis Period (min)	15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	73	106	310	17	15	299
Future Volume (vph)	73	106	310	17	15	299
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		110	140		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1863	1583	1770	3539	1770	1583
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1863	1583	1770	3539	1770	1583
Link Speed (mph)	30			30	30	
Link Distance (ft)	242			254	271	
Travel Time (s)	5.5			5.8	6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	79	115	337	18	16	325
Shared Lane Traffic (%)						
Lane Group Flow (vph)	79	115	337	18	16	325
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.8%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	73	106	310	17	15	299
Future Volume (Veh/h)	73	106	310	17	15	299
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	79	115	337	18	16	325
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			194		762	79
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			194		762	79
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			76		94	66
cM capacity (veh/h)			1377		258	965

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	NB 2
Volume Total	79	115	337	9	9	16	325
Volume Left	0	0	337	0	0	16	0
Volume Right	0	115	0	0	0	0	325
cSH	1700	1700	1377	1700	1700	258	965
Volume to Capacity	0.05	0.07	0.24	0.01	0.01	0.06	0.34
Queue Length 95th (ft)	0	0	24	0	0	5	37
Control Delay (s)	0.0	0.0	8.5	0.0	0.0	19.9	10.6
Lane LOS			A			C	B
Approach Delay (s)	0.0		8.0			11.0	
Approach LOS						B	

Intersection Summary			
Average Delay	7.4		
Intersection Capacity Utilization	33.8%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	48	57	823	25	26	960
Future Volume (vph)	48	57	823	25	26	960
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	16	12	11	16
Storage Length (ft)	0	0		0	120	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.927		0.996			
Flt Protected	0.978				0.950	
Satd. Flow (prot)	1859	0	2043	0	1662	2051
Flt Permitted	0.978				0.950	
Satd. Flow (perm)	1859	0	2043	0	1662	2051
Link Speed (mph)	25		30			30
Link Distance (ft)	95		275			227
Travel Time (s)	2.6		6.3			5.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	52	62	895	27	28	1043
Shared Lane Traffic (%)						
Lane Group Flow (vph)	114	0	922	0	28	1043
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	16		11			11
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.85	0.85	0.85	1.00	1.04	0.85
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 63.3%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	48	57	823	25	26	960
Future Volume (Veh/h)	48	57	823	25	26	960
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	52	62	895	27	28	1043
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2008	908			922	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2008	908			922	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	15	81			96	
cM capacity (veh/h)	61	329			728	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	114	922	28	1043
Volume Left	52	0	28	0
Volume Right	62	27	0	0
cSH	110	1700	728	1700
Volume to Capacity	1.03	0.54	0.04	0.61
Queue Length 95th (ft)	170	0	3	0
Control Delay (s)	169.2	0.0	10.1	0.0
Lane LOS	F		B	
Approach Delay (s)	169.2	0.0	0.3	
Approach LOS	F			

Intersection Summary			
Average Delay	9.3		
Intersection Capacity Utilization	63.3%	ICU Level of Service	B
Analysis Period (min)	15		



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	68	83	310	17	17	299
Future Volume (vph)	68	83	310	17	17	299
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		110	140		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1863	1583	1770	3539	1770	1583
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1863	1583	1770	3539	1770	1583
Link Speed (mph)	30			30	30	
Link Distance (ft)	242			254	271	
Travel Time (s)	5.5			5.8	6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	74	90	337	18	18	325
Shared Lane Traffic (%)						
Lane Group Flow (vph)	74	90	337	18	18	325
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.8%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	68	83	310	17	17	299
Future Volume (Veh/h)	68	83	310	17	17	299
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	74	90	337	18	18	325
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			164		757	74
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			164		757	74
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			76		93	67
cM capacity (veh/h)			1412		262	973

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	NB 2
Volume Total	74	90	337	9	9	18	325
Volume Left	0	0	337	0	0	18	0
Volume Right	0	90	0	0	0	0	325
cSH	1700	1700	1412	1700	1700	262	973
Volume to Capacity	0.04	0.05	0.24	0.01	0.01	0.07	0.33
Queue Length 95th (ft)	0	0	23	0	0	6	37
Control Delay (s)	0.0	0.0	8.3	0.0	0.0	19.8	10.5
Lane LOS			A			C	B
Approach Delay (s)	0.0		7.9			11.0	
Approach LOS						B	

Intersection Summary			
Average Delay	7.7		
Intersection Capacity Utilization	33.8%	ICU Level of Service	A
Analysis Period (min)	15		

G. Existing with Proposed Project Conditions Analysis Reports

G. Existing with Proposed Project Conditions Analysis Reports

a. Existing with Proposed Project Signalized Intersections ICU Reports

Intersection Capacity Utilization Worksheet

Intersection Location: Spring Rd & Princeton Ave/E High S
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: Existing+Project Condition - AM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	1	1	1	1	1	1	1	2	1	1	1.5	0.5
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	12	250	169	82	253	167	133	213	235	422	591	22
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☑ Yes			☑ Yes			☑ Yes			☑ Yes	
7	Pedestrian Timing Required		30			30			30			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	12.0	250.0	169.0	82.0	253.0	167.0	133.0	213.0	235.0	422.0	591.0	22.0
14	Volume Separate Left	12.0	250.0		82.0	253.0		133.0	213.0		422.0	591.0	
15	Lane Utilization Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.952	1.000	1.000	0.908	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	1425.0	1600.0	1275.0	1425.0	1600.0	1275.0	1425.0	3046.4	1275.0	1425.0	2179.2	637.5
18	Saturated Flow Separate	1425.0	1600.0		1425.0	1600.0		1425.0	3046.4		1425.0	2179.2	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	1.0	18.8	15.9	6.9	19.0	15.7	11.2	8.4	22.1	35.5	32.5	4.1
23	Adjusted Reference Time	8.0	22.8	19.9	10.9	23.0	19.7	15.2	12.4	26.1	39.5	36.5	8.1
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	12	250		82	253		133	107		422	394	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	15.0	15.0		15.0	15.0		15.0	15.0		0.9	15.0	
28	Left turn Factor	0.07	1.00		0.07	1.00		0.07	1.00		1.07	1.00	
29	Permitted Sat Flow	95.0	1600.0		95.0	1600.0		95.0	1523.2		1520.0	1452.8	
30	Reference Time A	15.2	18.8		103.6	19.0		168.0	8.4		35.5	32.5	
31	Adjusted Saturation B		1600.0			1600.0			3046.4			2179.2	
32	Reference Time B		NA			NA			NA			NA	
33	Reference Time Lefts	NA			NA			NA			NA		
34	Reference Time		18.8			103.6			168.0			35.5	
35	Adjusted Reference Time		22.8			107.6			172.0			39.5	
	Split Timing												
36	Ref Time Combined		18.8			19.0			8.4			32.5	
37	Ref Time By Movement	1.0	18.8		6.9	19.0		11.2	8.4		35.5	32.5	
38	Reference Time		18.8			19.0			11.2			35.5	
39	Adjusted Reference Time	22.8	22.8		23.0	23.0		15.2	15.2		39.5	39.5	
40	Lane Group V/C Ratio	0.008	0.156	0.113	0.055	0.158	0.111	0.089	0.067	0.157	0.281	0.195	-

	Summary	East West	North South
41	Protected Option	33.7	51.9
42	Permitted Option	107.6	172.0
43	Split Option	45.7	54.7
44	Minimum	33.7	51.9
45	Combined	85.6	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	19.9	19.7	26.1	8.1
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	12.4	36.5	23.0	22.8
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	10.9	8.0	39.5	15.2
51	Combined	43.2	64.3	88.6	46.1

52	**Intersection Capacity Utilization**	**73.9%**
53	**Level Of Service**	**C**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Spring Rd & Princeton Ave/E High S
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: Existing+Project Condition - PM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	1	1	1	1	1	1	1	2	1	1	1.5	0.5
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	36	336	145	102	284	492	176	650	281	230	307	31
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☑ Yes			☑ Yes			☑ Yes			☑ Yes	
7	Pedestrian Timing Required		30			30			30			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	36.0	336.0	145.0	102.0	284.0	492.0	176.0	650.0	281.0	230.0	307.0	31.0
14	Volume Separate Left	36.0	336.0		102.0	284.0		176.0	650.0		230.0	307.0	
15	Lane Utilization Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.952	1.000	1.000	0.908	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	1425.0	1600.0	1275.0	1425.0	1600.0	1275.0	1425.0	3046.4	1275.0	1425.0	2179.2	637.5
18	Saturated Flow Separate	1425.0	1600.0		1425.0	1600.0		1425.0	3046.4		1425.0	2179.2	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	3.0	25.2	13.6	8.6	21.3	46.3	14.8	25.6	26.4	19.4	16.9	5.8
23	Adjusted Reference Time	8.0	29.2	17.6	12.6	25.3	50.3	18.8	29.6	30.4	23.4	20.9	9.8
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	36	336		102	284		176	325		230	205	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	15.0	15.0		15.0	15.0		15.0	15.0		0.9	15.0	
28	Left turn Factor	0.07	1.00		0.07	1.00		0.07	1.00		1.07	1.00	
29	Permitted Sat Flow	95.0	1600.0		95.0	1600.0		95.0	1523.2		1520.0	1452.8	
30	Reference Time A	45.5	25.2		128.8	21.3		222.3	25.6		19.4	16.9	
31	Adjusted Saturation B		1600.0			1600.0			3046.4			2179.2	
32	Reference Time B		NA			NA			NA			NA	
33	Reference Time Lefts	NA			NA			NA			NA		
34	Reference Time		45.5			128.8			222.3			19.4	
35	Adjusted Reference Time		49.5			132.8			226.3			23.4	
	Split Timing												
36	Ref Time Combined		25.2			21.3			25.6			16.9	
37	Ref Time By Movement	3.0	25.2		8.6	21.3		14.8	25.6		19.4	16.9	
38	Reference Time		25.2			21.3			25.6			19.4	
39	Adjusted Reference Time	29.2	29.2		25.3	25.3		29.6	29.6		23.4	23.4	
40	Lane Group V/C Ratio	0.024	0.210	0.097	0.068	0.178	0.328	0.117	0.203	0.187	0.153	0.107	-

	Summary	East West	North South
41	Protected Option	41.8	53.0
42	Permitted Option	132.8	226.3
43	Split Option	54.5	53.0
44	Minimum	41.8	53.0
45	Combined	94.8	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	17.6	50.3	30.4	9.8
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	29.6	20.9	25.3	29.2
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	12.6	8.0	23.4	18.8
51	Combined	59.8	79.2	79.1	57.9

52	**Intersection Capacity Utilization**	**79.0%**
53	**Level Of Service**	**C**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Princeton Ave & Condor Dr N
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: Existing+Project Condition - AM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	0.5	0.5	1	1	0.5	0.5	1	1.5	0.5	1	1.5	0.5
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	31	0	31	-1	0	-2	31	823	42	245	313	31
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☑ Yes			☑ Yes			☑ Yes			☑ Yes	
7	Pedestrian Timing Required		30			30			30			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	31.0	0.0	31.0	-1.0	0.0	-2.0	31.0	823.0	42.0	245.0	313.0	31.0
14	Volume Separate Left	31.0	0.0		-1.0	0.0		31.0	823.0		245.0	313.0	
15	Lane Utilization Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.908	1.000	1.000	0.908	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	712.5	800.0	1275.0	1425.0	800.0	637.5	1425.0	2179.2	637.5	1425.0	2179.2	637.5
18	Saturated Flow Separate	712.5	800.0		1425.0	800.0		1425.0	2179.2		1425.0	2179.2	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	5.2	0.0	2.9	0.0	0.0	0.0	2.6	45.3	7.9	20.6	17.2	5.8
23	Adjusted Reference Time	9.2	0.0	8.0	0.0	0.0	0.0	8.0	49.3	11.9	24.6	21.2	9.8
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	62	0		0	0		31	549		245	209	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	15.0	15.0		15.0	15.0		15.0	15.0		0.9	15.0	
28	Left turn Factor	0.07	1.00		0.07	1.00		0.07	1.00		1.07	1.00	
29	Permitted Sat Flow	95.0	1600.0		95.0	1600.0		95.0	1452.8		1520.0	1452.8	
30	Reference Time A	78.3	0.0		0.0	0.0		39.2	45.3		20.6	17.2	
31	Adjusted Saturation B		800.0			800.0			2179.2			2179.2	
32	Reference Time B		0.0			0.0			NA			NA	
33	Reference Time Lefts	13.2			0.0			NA			NA		
34	Reference Time		13.2			0.0			45.3			20.6	
35	Adjusted Reference Time		17.2			8.0			49.3			24.6	
	Split Timing												
36	Ref Time Combined		0.0			0.0			45.3			17.2	
37	Ref Time By Movement	5.2	0.0		0.0	0.0		2.6	45.3		20.6	17.2	
38	Reference Time		5.2			0.0			45.3			20.6	
39	Adjusted Reference Time	9.2	9.2		0.0	0.0		49.3	49.3		24.6	24.6	
40	Lane Group V/C Ratio	-	0.020	0.021	-0.001	-0.001	-	0.021	0.279	-	0.163	0.109	-

	Summary	East West	North South
41	Protected Option	9.2	74.0
42	Permitted Option	17.2	49.3
43	Split Option	9.2	74.0
44	Minimum	9.2	49.3
45	Combined	58.5	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	8.0	0.0	11.9	9.8
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	49.3	21.2	0.0	0.0
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	0.0	9.2	24.6	8.0
51	Combined	57.3	30.5	36.5	17.8

52	**Intersection Capacity Utilization**	**48.8%**
53	**Level Of Service**	**A**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Princeton Ave & Condor Dr N
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: Existing+Project Condition - PM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	0.5	0.5	1	1	0.5	0.5	1	1.5	0.5	1	1.5	0.5
3	Shared LT Lane (y/n)	☑ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	31	0	31	48	0	269	31	689	12	26	686	31
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☑ Yes			☑ Yes			☑ Yes			☑ Yes	
7	Pedestrian Timing Required		30			30			30			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	0.0	31.0	31.0	48.0	0.0	269.0	31.0	689.0	12.0	26.0	686.0	31.0
14	Volume Separate Left	31.0	0.0		48.0	0.0		31.0	689.0		26.0	686.0	
15	Lane Utilization Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.908	1.000	1.000	0.908	1.000
16	Turning Factor Adjust	0.950	0.950	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	0.0	1520.0	1275.0	1425.0	800.0	637.5	1425.0	2179.2	637.5	1425.0	2179.2	637.5
18	Saturated Flow Separate	2137.5	800.0		1425.0	800.0		1425.0	2179.2		1425.0	2179.2	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		FALSE			FALSE			TRUE			TRUE	
22	Reference Time	NA	NA	2.9	NA	NA	50.6	2.6	37.9	2.3	2.2	37.8	5.8
23	Adjusted Reference Time	NA	NA	8.0	NA	NA	54.6	8.0	41.9	8.0	8.0	41.8	9.8
	Permitted Option												
24	Proportion Lefts	1	1.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	0	186		48	0		31	459		26	457	
26	Proportion Lefts Left	1	0.17		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	15.0	16.1		15.0	15.0		15.0	15.0		0.9	15.0	
28	Left turn Factor	0.07	0.28		0.07	1.00		0.07	1.00		1.07	1.00	
29	Permitted Sat Flow	0.0	865.6		95.0	1600.0		95.0	1452.8		1520.0	1452.8	
30	Reference Time A	0.0	25.8		60.6	0.0		39.2	37.9		2.2	37.8	
31	Adjusted Saturation B		-800.0			800.0			2179.2			2179.2	
32	Reference Time B		14.7			0.0			NA			NA	
33	Reference Time Lefts	9.7			12.0			NA			NA		
34	Reference Time		14.7			12.0			39.2			37.8	
35	Adjusted Reference Time		18.7			16.0			43.2			41.8	
	Split Timing												
36	Ref Time Combined		2.4			0.0			37.9			37.8	
37	Ref Time By Movement	1.7	0.0		4.0	0.0		2.6	37.9		2.2	37.8	
38	Reference Time		2.4			4.0			37.9			37.8	
39	Adjusted Reference Time	8.0	8.0		8.0	8.0		41.9	41.9		41.8	41.8	
40	Lane Group V/C Ratio	-	0.020	0.021	0.032	0.174	-	0.021	0.226	-	0.017	0.228	-

	Summary	East West	North South
41	Protected Option	NA	49.9
42	Permitted Option	18.7	43.2
43	Split Option	16.0	83.7
44	Minimum	16.0	43.2
45	Combined	59.2	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	8.0	54.6	8.0	9.8
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	41.9	41.8	8.0	8.0
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	8.0	8.0	8.0	8.0
51	Combined	58.0	104.4	24.0	25.8

52	**Intersection Capacity Utilization**	**87.0%**
53	**Level Of Service**	**D**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Princeton Ave & EB Ramps
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: Existing+Project Condition - AM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	0.5	1	0.5	0	0	0	0	1.5	0.5	1	2	0
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	55	2	102	0	0	0	0	347	562	54	446	0
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☐ Yes			☐ Yes			☐ Yes			☐ Yes	
7	Pedestrian Timing Required		30			30			30			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	55.0	2.0	102.0	0.0	0.0	0.0	0.0	347.0	562.0	54.0	446.0	0.0
14	Volume Separate Left	55.0	2.0		0.0	0.0		0.0	347.0		54.0	446.0	
15	Lane Utilization Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.908	1.000	1.000	0.952	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	712.5	1600.0	637.5	0.0	0.0	0.0	0.0	2179.2	637.5	1425.0	3046.4	0.0
18	Saturated Flow Separate	712.5	1600.0		0.0	0.0		0.0	2179.2		1425.0	3046.4	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	9.3	0.2	19.2	0.0	0.0	0.0	0.0	19.1	105.8	4.5	17.6	0.0
23	Adjusted Reference Time	13.3	8.0	23.2	0.0	0.0	0.0	0.0	23.1	109.8	8.5	21.6	0.0
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	110	2		0	0		0	231		54	223	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	0.9	15.0		15.0	15.0		15.0	15.0		15.0	15.0	
28	Left turn Factor	1.07	1.00		0.07	1.00		0.07	1.00		0.07	1.00	
29	Permitted Sat Flow	1520.0	1600.0		0.0	0.0		0.0	1452.8		95.0	1523.2	
30	Reference Time A	9.3	0.2		0.0	0.0		0.0	19.1		68.2	17.6	
31	Adjusted Saturation B		1600.0			0.0			2179.2			3046.4	
32	Reference Time B		0.2			0.0			NA			NA	
33	Reference Time Lefts	17.3			0.0			NA			NA		
34	Reference Time		9.3			0.0			19.1			68.2	
35	Adjusted Reference Time		13.3			8.0			23.1			72.2	
	Split Timing												
36	Ref Time Combined		0.2			0.0			19.1			17.6	
37	Ref Time By Movement	9.3	0.2		0.0	0.0		0.0	19.1		4.5	17.6	
38	Reference Time		9.3			0.0			19.1			17.6	
39	Adjusted Reference Time	13.3	13.3		0.0	0.0		23.1	23.1		21.6	21.6	
40	Lane Group V/C Ratio	-	0.051	-	-	-	-	-	0.289	-	0.036	0.139	-

	Summary	East West	North South
41	Protected Option	13.3	31.7
42	Permitted Option	13.3	72.2
43	Split Option	13.3	44.7
44	Minimum	13.3	31.7
45	Combined	44.9	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	23.2	0.0	109.8	0.0
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	23.1	21.6	0.0	8.0
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	0.0	13.3	8.5	0.0
51	Combined	46.3	34.8	118.3	8.0

52	**Intersection Capacity Utilization**	**98.6%**
53	**Level Of Service**	**E**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Princeton Ave & EB Ramps
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: Existing+Project Condition - PM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	0.5	1	0.5	0	0	0	0	1.5	0.5	1	2	0
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	284	0	163	0	0	0	0	425	563	55	583	0
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☐ Yes			☐ Yes			☐ Yes			☐ Yes	
7	Pedestrian Timing Required		30			30			30			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	284.0	0.0	163.0	0.0	0.0	0.0	0.0	425.0	563.0	55.0	583.0	0.0
14	Volume Separate Left	284.0	0.0		0.0	0.0		0.0	425.0		55.0	583.0	
15	Lane Utilization Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.908	1.000	1.000	0.952	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	712.5	1600.0	637.5	0.0	0.0	0.0	0.0	2179.2	637.5	1425.0	3046.4	0.0
18	Saturated Flow Separate	712.5	1600.0		0.0	0.0		0.0	2179.2		1425.0	3046.4	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	47.8	0.0	30.7	0.0	0.0	0.0	0.0	23.4	106.0	4.6	23.0	0.0
23	Adjusted Reference Time	51.8	0.0	34.7	0.0	0.0	0.0	0.0	27.4	110.0	8.6	27.0	0.0
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	568	0		0	0		0	283		55	292	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	0.9	15.0		15.0	15.0		15.0	15.0		15.0	15.0	
28	Left turn Factor	1.07	1.00		0.07	1.00		0.07	1.00		0.07	1.00	
29	Permitted Sat Flow	1520.0	1600.0		0.0	0.0		0.0	1452.8		95.0	1523.2	
30	Reference Time A	47.8	0.0		0.0	0.0		0.0	23.4		69.5	23.0	
31	Adjusted Saturation B		1600.0			0.0			2179.2			3046.4	
32	Reference Time B		0.0			0.0			NA			NA	
33	Reference Time Lefts	55.8			0.0			NA			NA		
34	Reference Time		47.8			0.0			23.4			69.5	
35	Adjusted Reference Time		51.8			8.0			27.4			73.5	
	Split Timing												
36	Ref Time Combined		0.0			0.0			23.4			23.0	
37	Ref Time By Movement	47.8	0.0		0.0	0.0		0.0	23.4		4.6	23.0	
38	Reference Time		47.8			0.0			23.4			23.0	
39	Adjusted Reference Time	51.8	51.8		0.0	0.0		27.4	27.4		27.0	27.0	
40	Lane Group V/C Ratio	-	0.144		-	-		-	0.314		0.037	0.182	-

	Summary	East West	North South
41	Protected Option	51.8	36.0
42	Permitted Option	51.8	73.5
43	Split Option	51.8	54.4
44	Minimum	51.8	36.0
45	Combined	87.9	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	34.7	0.0	110.0	0.0
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	27.4	27.0	0.0	0.0
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	0.0	51.8	8.6	0.0
51	Combined	62.1	78.8	118.6	0.0

52	**Intersection Capacity Utilization**	**98.8%**
53	**Level Of Service**	**E**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Princeton Ave & WB Ramps
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: Existing+Project Condition - AM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	0	0	0	1	0.5	0.5	1	2	0	0	1.5	0.5
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	0	0	0	357	44	25	80	325	0	0	154	448
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☐ Yes			☐ Yes			☐ Yes			☐ Yes	
7	Pedestrian Timing Required		30			30			30			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	0.0	0.0	0.0	357.0	44.0	25.0	80.0	325.0	0.0	0.0	154.0	448.0
14	Volume Separate Left	0.0	0.0		357.0	44.0		80.0	325.0		0.0	154.0	
15	Lane Utilization Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.952	1.000	1.000	0.908	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	0.0	0.0	0.0	1425.0	800.0	637.5	1425.0	3046.4	0.0	0.0	2179.2	637.5
18	Saturated Flow Separate	0.0	0.0		1425.0	800.0		1425.0	3046.4		0.0	2179.2	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	0.0	0.0	0.0	30.1	6.6	4.7	6.7	12.8	0.0	0.0	8.5	84.3
23	Adjusted Reference Time	0.0	0.0	0.0	34.1	10.6	8.7	10.7	16.8	0.0	0.0	12.5	88.3
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	0	0		357	88		80	163		0	103	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	15.0	15.0		15.0	15.0		15.0	15.0		0.9	15.0	
28	Left turn Factor	0.07	1.00		0.07	1.00		0.07	1.00		1.07	1.00	
29	Permitted Sat Flow	0.0	0.0		95.0	1600.0		95.0	1523.2		0.0	1452.8	
30	Reference Time A	0.0	0.0		450.9	6.6		101.1	12.8		0.0	8.5	
31	Adjusted Saturation B		0.0			800.0			3046.4			2179.2	
32	Reference Time B		0.0			6.6			NA			NA	
33	Reference Time Lefts	0.0			38.1			NA			NA		
34	Reference Time		0.0			38.1			101.1			8.5	
35	Adjusted Reference Time		8.0			42.1			105.1			12.5	
	Split Timing												
36	Ref Time Combined		0.0			6.6			12.8			8.5	
37	Ref Time By Movement	0.0	0.0		30.1	6.6		6.7	12.8		0.0	8.5	
38	Reference Time		0.0			30.1			12.8			8.5	
39	Adjusted Reference Time	0.0	0.0		34.1	34.1		16.8	16.8		12.5	12.5	
40	Lane Group V/C Ratio	-	-	-	0.238	0.045	-	0.053	0.102	-	-	0.191	-

	Summary	East West	North South
41	Protected Option	34.1	23.2
42	Permitted Option	42.1	105.1
43	Split Option	34.1	29.3
44	Minimum	34.1	23.2
45	Combined	57.3	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	0.0	8.7	0.0	88.3
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	16.8	12.5	10.6	0.0
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	34.1	0.0	0.0	10.7
51	Combined	50.9	21.2	10.6	99.1

52	**Intersection Capacity Utilization**	**82.6%**
53	**Level Of Service**	**D**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Princeton Ave & WB Ramps
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: Existing+Project Condition - PM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	0	0	0	1	0.5	0.5	1	2	0	0	1.5	0.5
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	0	0	0	496	69	117	153	595	0	0	175	259
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☐ Yes			☐ Yes			☐ Yes			☐ Yes	
7	Pedestrian Timing Required		30			30			30			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	0.0	0.0	0.0	496.0	69.0	117.0	153.0	595.0	0.0	0.0	175.0	259.0
14	Volume Separate Left	0.0	0.0		496.0	69.0		153.0	595.0		0.0	175.0	
15	Lane Utilization Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.952	1.000	1.000	0.908	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	0.0	0.0	0.0	1425.0	800.0	637.5	1425.0	3046.4	0.0	0.0	2179.2	637.5
18	Saturated Flow Separate	0.0	0.0		1425.0	800.0		1425.0	3046.4		0.0	2179.2	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	0.0	0.0	0.0	41.8	10.4	22.0	12.9	23.4	0.0	0.0	9.6	48.8
23	Adjusted Reference Time	0.0	0.0	0.0	45.8	14.4	26.0	16.9	27.4	0.0	0.0	13.6	52.8
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	0	0		496	138		153	298		0	117	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	15.0	15.0		15.0	15.0		15.0	15.0		0.9	15.0	
28	Left turn Factor	0.07	1.00		0.07	1.00		0.07	1.00		1.07	1.00	
29	Permitted Sat Flow	0.0	0.0		95.0	1600.0		95.0	1523.2		0.0	1452.8	
30	Reference Time A	0.0	0.0		626.5	10.4		193.3	23.4		0.0	9.6	
31	Adjusted Saturation B		0.0			800.0			3046.4			2179.2	
32	Reference Time B		0.0			10.4			NA			NA	
33	Reference Time Lefts	0.0			49.8			NA			NA		
34	Reference Time		0.0			49.8			193.3			9.6	
35	Adjusted Reference Time		8.0			53.8			197.3			13.6	
	Split Timing												
36	Ref Time Combined		0.0			10.4			23.4			9.6	
37	Ref Time By Movement	0.0	0.0		41.8	10.4		12.9	23.4		0.0	9.6	
38	Reference Time		0.0			41.8			23.4			9.6	
39	Adjusted Reference Time	0.0	0.0		45.8	45.8		27.4	27.4		13.6	13.6	
40	Lane Group V/C Ratio	-	-	-	0.331	0.120	-	0.102	0.186	-	-	0.138	-

	Summary	East West	North South
41	Protected Option	45.8	30.5
42	Permitted Option	53.8	197.3
43	Split Option	45.8	41.1
44	Minimum	45.8	30.5
45	Combined	76.3	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	0.0	26.0	0.0	52.8
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	27.4	13.6	14.4	0.0
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	45.8	0.0	0.0	16.9
51	Combined	73.2	39.7	14.4	69.6

52	**Intersection Capacity Utilization**	**63.6%**
53	**Level Of Service**	**B**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Campus Park Dr & Collins Dr
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: Existing+Project Condition - AM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	1	1	1	2	0.5	0.5	1	2	2	1	1.5	0.5
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	152	71	103	48	13	9	156	308	334	7	96	85
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☑ Yes			☑ Yes			☐ Yes			☑ Yes	
7	Pedestrian Timing Required		30			30			0			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	152.0	71.0	103.0	48.0	13.0	9.0	156.0	308.0	334.0	7.0	96.0	85.0
14	Volume Separate Left	152.0	71.0		48.0	13.0		156.0	308.0		7.0	96.0	
15	Lane Utilization Factor	1.000	1.000	1.000	0.971	1.000	1.000	1.000	0.952	0.885	1.000	0.908	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	1425.0	1600.0	1275.0	2767.4	800.0	637.5	1425.0	3046.4	2256.8	1425.0	2179.2	637.5
18	Saturated Flow Separate	1425.0	1600.0		2767.4	800.0		1425.0	3046.4		1425.0	2179.2	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	12.8	5.3	9.7	2.1	2.0	1.7	13.1	12.1	17.8	0.6	5.3	16.0
23	Adjusted Reference Time	16.8	9.3	13.7	8.0	8.0	8.0	17.1	16.1	21.8	8.0	9.3	20.0
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	152	71		24	26		156	154		7	64	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	15.0	15.0		15.0	15.0		15.0	15.0		0.9	15.0	
28	Left turn Factor	0.07	1.00		0.07	1.00		0.07	1.00		1.07	1.00	
29	Permitted Sat Flow	95.0	1600.0		92.2	1600.0		95.0	1523.2		1520.0	1452.8	
30	Reference Time A	192.0	5.3		31.2	2.0		197.1	12.1		0.6	5.3	
31	Adjusted Saturation B		1600.0			800.0			3046.4			2179.2	
32	Reference Time B		5.3			2.0			12.1			NA	
33	Reference Time Lefts	20.8			10.1			21.1			NA		
34	Reference Time		20.8			10.1			21.1			5.3	
35	Adjusted Reference Time		24.8			14.1			25.1			9.3	
	Split Timing												
36	Ref Time Combined		5.3			2.0			12.1			5.3	
37	Ref Time By Movement	12.8	5.3		2.1	2.0		13.1	12.1		0.6	5.3	
38	Reference Time		12.8			2.1			13.1			5.3	
39	Adjusted Reference Time	16.8	16.8		8.0	8.0		17.1	17.1		9.3	9.3	
40	Lane Group V/C Ratio	0.101	0.044	0.069	0.016	0.014	-	0.104	0.096	0.111	0.005	0.057	-

	Summary	East West	North South
41	Protected Option	24.8	26.4
42	Permitted Option	24.8	25.1
43	Split Option	24.8	26.4
44	Minimum	24.8	25.1
45	Combined	49.9	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	13.7	8.0	21.8	20.0
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	16.1	9.3	8.0	9.3
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	8.0	16.8	8.0	17.1
51	Combined	37.8	34.1	37.8	46.5

52	**Intersection Capacity Utilization**	**41.6%**
53	**Level Of Service**	**A**

Revision 2003.0

Intersection Capacity Utilization Worksheet

Intersection Location: Campus Park Dr & Collins Dr
City: Moorpark, CA
Analyzed by: WR/JI
Alternative: Existing+Project Condition - PM
Date and Time of Data:
Project: Moorpark Distribution Center

1	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2	Lanes	1	1	1	2	0.5	0.5	1	2	2	1	1.5	0.5
3	Shared LT Lane (y/n)	☐ Yes			☐ Yes			☐ Yes			☐ Yes		
4	Volume	88	76	89	206	62	2	192	156	112	4	197	97
5	Pedestrians			0			0			0			0
6	Ped Button (y/n)		☑ Yes			☑ Yes			☐ Yes			☑ Yes	
7	Pedestrian Timing Required		30			30			0			30	
8	Free Right (y/n)			☐ Yes			☐ Yes			☐ Yes			☐ Yes
9	Ideal Flow	1500	1600	1500	1500	1600	1500	1500	1600	1500	1500	1600	1500
10	Lost Time	4	4	4	4	4	4	4	4	4	4	4	4
11	Minimum Green	4	4	4	4	4	4	4	4	4	4	4	4
12	Reference Cycle Length	120											
13	Volume Combined	88.0	76.0	89.0	206.0	62.0	2.0	192.0	156.0	112.0	4.0	197.0	97.0
14	Volume Separate Left	88.0	76.0		206.0	62.0		192.0	156.0		4.0	197.0	
15	Lane Utilization Factor	1.000	1.000	1.000	0.971	1.000	1.000	1.000	0.952	0.885	1.000	0.908	1.000
16	Turning Factor Adjust	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850	0.950	1.000	0.850
17	Saturated Flow Combined	1425.0	1600.0	1275.0	2767.4	800.0	637.5	1425.0	3046.4	2256.8	1425.0	2179.2	637.5
18	Saturated Flow Separate	1425.0	1600.0		2767.4	800.0		1425.0	3046.4		1425.0	2179.2	
19	Pedestrian Interference Time		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
20	Pedestrian Frequency		0.0%			0.0%			0.0%			0.0%	
21	**Protected Option Allowed**		TRUE			TRUE			TRUE			TRUE	
22	Reference Time	7.4	5.7	8.4	8.9	9.3	0.4	16.2	6.1	6.0	0.3	10.8	18.3
23	Adjusted Reference Time	11.4	9.7	12.4	12.9	13.3	8.0	20.2	10.1	10.0	8.0	14.8	22.3
	Permitted Option												
24	Proportion Lefts	1	0.00		1	0.00		1	0.00		1	0.00	
25	Volume Left Lane	88	76		103	124		192	78		4	131	
26	Proportion Lefts Left	1	0.00		1	0.00		1	0.00		1	0.00	
27	Left turn Equivalents	15.0	15.0		15.0	15.0		15.0	15.0		0.9	15.0	
28	Left turn Factor	0.07	1.00		0.07	1.00		0.07	1.00		1.07	1.00	
29	Permitted Sat Flow	95.0	1600.0		92.2	1600.0		95.0	1523.2		1520.0	1452.8	
30	Reference Time A	111.2	5.7		134.0	9.3		242.5	6.1		0.3	10.8	
31	Adjusted Saturation B		1600.0			800.0			3046.4			2179.2	
32	Reference Time B		5.7			9.3			NA			NA	
33	Reference Time Lefts	15.4			16.9			NA			NA		
34	Reference Time		15.4			16.9			242.5			10.8	
35	Adjusted Reference Time		19.4			20.9			246.5			14.8	
	Split Timing												
36	Ref Time Combined		5.7			9.3			6.1			10.8	
37	Ref Time By Movement	7.4	5.7		8.9	9.3		16.2	6.1		0.3	10.8	
38	Reference Time		7.4			9.3			16.2			10.8	
39	Adjusted Reference Time	11.4	11.4		13.3	13.3		20.2	20.2		14.8	14.8	
40	Lane Group V/C Ratio	0.059	0.048	0.059	0.069	0.041	-	0.128	0.049	0.037	0.003	0.093	-

	Summary	East West	North South
41	Protected Option	24.7	35.0
42	Permitted Option	20.9	246.5
43	Split Option	24.7	35.0
44	Minimum	20.9	35.0
45	Combined	55.9	

	Right Turns	EBR	WBR	NBR	SBR
46	Adjusted Reference Time	12.4	8.0	10.0	22.3
47	Cross Through Direction	NBT	SBT	WBT	EBT
48	Cross Through Adj Ref Time	10.1	14.8	13.3	9.7
49	Oncoming Left Direction	WBL	EBL	SBL	NBL
50	Oncoming Left Adj Ref Time	12.9	11.4	8.0	20.2
51	Combined	35.5	34.3	31.3	52.1

52	**Intersection Capacity Utilization**	**46.6%**
53	**Level Of Service**	**A**

Revision 2003.0

G. Existing with Proposed Project Conditions Analysis Reports

b. Existing with Proposed Project Unsignalized Intersections

Synchro Reports



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	9	20	847	56	34	548
Future Volume (vph)	9	20	847	56	34	548
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	16	12	11	16
Storage Length (ft)	0	0		0	120	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.907		0.992			
Flt Protected	0.985				0.950	
Satd. Flow (prot)	1832	0	2034	0	1662	2051
Flt Permitted	0.985				0.950	
Satd. Flow (perm)	1832	0	2034	0	1662	2051
Link Speed (mph)	25		30			30
Link Distance (ft)	95		275			227
Travel Time (s)	2.6		6.3			5.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	10	22	921	61	37	596
Shared Lane Traffic (%)						
Lane Group Flow (vph)	32	0	982	0	37	596
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	16		11			11
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.85	0.85	0.85	1.00	1.04	0.85
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 58.0%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	9	20	847	56	34	548
Future Volume (Veh/h)	9	20	847	56	34	548
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	22	921	61	37	596
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1622	952			982	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1622	952			982	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	91	93			95	
cM capacity (veh/h)	105	311			691	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	32	982	37	596
Volume Left	10	0	37	0
Volume Right	22	61	0	0
cSH	193	1700	691	1700
Volume to Capacity	0.17	0.58	0.05	0.35
Queue Length 95th (ft)	14	0	4	0
Control Delay (s)	27.3	0.0	10.5	0.0
Lane LOS	D		B	
Approach Delay (s)	27.3	0.0	0.6	
Approach LOS	D			

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	58.0%	ICU Level of Service	B
Analysis Period (min)	15		



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	70	100	294	16	14	287
Future Volume (vph)	70	100	294	16	14	287
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		110	140		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1863	1583	1770	3539	1770	1583
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1863	1583	1770	3539	1770	1583
Link Speed (mph)	30			30	30	
Link Distance (ft)	242			254	271	
Travel Time (s)	5.5			5.8	6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	109	320	17	15	312
Shared Lane Traffic (%)						
Lane Group Flow (vph)	76	109	320	17	15	312
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.0%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	70	100	294	16	14	287
Future Volume (Veh/h)	70	100	294	16	14	287
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	76	109	320	17	15	312
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			185		724	76
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			185		724	76
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			77		95	68
cM capacity (veh/h)			1387		277	970

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	NB 2
Volume Total	76	109	320	8	8	15	312
Volume Left	0	0	320	0	0	15	0
Volume Right	0	109	0	0	0	0	312
cSH	1700	1700	1387	1700	1700	277	970
Volume to Capacity	0.04	0.06	0.23	0.01	0.01	0.05	0.32
Queue Length 95th (ft)	0	0	22	0	0	4	35
Control Delay (s)	0.0	0.0	8.4	0.0	0.0	18.7	10.5
Lane LOS			A			C	B
Approach Delay (s)	0.0		7.9			10.8	
Approach LOS						B	

Intersection Summary			
Average Delay	7.3		
Intersection Capacity Utilization	33.0%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	39	33	790	23	21	910
Future Volume (vph)	39	33	790	23	21	910
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	16	12	11	16
Storage Length (ft)	0	0		0	120	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.938		0.996			
Flt Protected	0.974				0.950	
Satd. Flow (prot)	1874	0	2043	0	1662	2051
Flt Permitted	0.974				0.950	
Satd. Flow (perm)	1874	0	2043	0	1662	2051
Link Speed (mph)	25		30			30
Link Distance (ft)	95		275			227
Travel Time (s)	2.6		6.3			5.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	42	36	859	25	23	989
Shared Lane Traffic (%)						
Lane Group Flow (vph)	78	0	884	0	23	989
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	16		11			11
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.85	0.85	0.85	1.00	1.04	0.85
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 58.7%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	39	33	790	23	21	910
Future Volume (Veh/h)	39	33	790	23	21	910
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	42	36	859	25	23	989
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1906	872			884	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1906	872			884	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	41	90			97	
cM capacity (veh/h)	72	346			753	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	78	884	23	989
Volume Left	42	0	23	0
Volume Right	36	25	0	0
cSH	113	1700	753	1700
Volume to Capacity	0.69	0.52	0.03	0.58
Queue Length 95th (ft)	91	0	2	0
Control Delay (s)	88.6	0.0	9.9	0.0
Lane LOS	F		A	
Approach Delay (s)	88.6	0.0	0.2	
Approach LOS	F			

Intersection Summary			
Average Delay	3.6		
Intersection Capacity Utilization	58.7%	ICU Level of Service	B
Analysis Period (min)	15		



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	65	80	294	16	14	281
Future Volume (vph)	65	80	294	16	14	281
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		110	140		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1863	1583	1770	3539	1770	1583
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1863	1583	1770	3539	1770	1583
Link Speed (mph)	30			30	30	
Link Distance (ft)	242			254	271	
Travel Time (s)	5.5			5.8	6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	71	87	320	17	15	305
Shared Lane Traffic (%)						
Lane Group Flow (vph)	71	87	320	17	15	305
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.0%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	65	80	294	16	14	281
Future Volume (Veh/h)	65	80	294	16	14	281
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	71	87	320	17	15	305
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			158		720	71
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			158		720	71
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			77		95	69
cM capacity (veh/h)			1419		281	977

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	NB 2
Volume Total	71	87	320	8	8	15	305
Volume Left	0	0	320	0	0	15	0
Volume Right	0	87	0	0	0	0	305
cSH	1700	1700	1419	1700	1700	281	977
Volume to Capacity	0.04	0.05	0.23	0.01	0.01	0.05	0.31
Queue Length 95th (ft)	0	0	22	0	0	4	34
Control Delay (s)	0.0	0.0	8.3	0.0	0.0	18.5	10.3
Lane LOS			A			C	B
Approach Delay (s)	0.0		7.9			10.7	
Approach LOS						B	

Intersection Summary			
Average Delay	7.5		
Intersection Capacity Utilization	33.0%	ICU Level of Service	A
Analysis Period (min)	15		