Appendix C TRANSPORTATION ANALYSIS

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Memorandum

TO: Edward Schreiner **FROM:** Jason Yan
Public Works

SUBJECT: SEE BELOW **DATE:** 03/22/21

Approved Samuel Yhy Date 3/22/21

SUBJECT: Leo Ave Materials Recycling
PW NO. 3-12298 (SP15-016)

We have completed the review of the Local Transportation Analysis for the subject project. The proposed development is located on the north side of Leo Avenue, approximately 540 feet west of South 7th Street at 215 Leo Avenue. The project proposes to expand the operations of an existing 50,000 s.f. solid waste processing facility from a daily capacity of 470 tons per day to a maximum 500 tons per day. The proposed development is projected to add 11 AM net peak hour trips and 10 PM net peak hour trips.

MULTI-MODAL ACCESS

Transit services in the study area are provided by the Santa Clara Valley Transportation Authority (VTA). The project site is primarily served by three (3) local bus routes (Routes 26, 66, 68). Class II bike lanes are provided along Monterey Road, S. 7th Street, and Curtner Avenue/Tully Road. Pedestrian facilities are provided through sidewalks along most of the surrounding streets, however sections of Phelan Avenue and S. 7th Street lack sidewalks. Most of the intersections in the project vicinity provide curb ramps, however not all are ADA compliant.

Regional access to the site is provided via I-280 and SR 87. Vehicular access to the project will be provided via one (1) inbound only driveway and one (1) outbound only driveway along Leo Avenue. An existing third driveway along Leo Avenue will be utilized by long-haul trailers (both inbound and outbound) for access the building entrances.

ANALYSIS

In alignment with the State of California Senate Bill 743 (SB 743), the City of San Jose has adopted the Transportation Analysis Policy, Council Policy 5-1. The policy establishes the threshold for transportation impacts under the California Environmental Quality Act (CEQA) based on Vehicles Miles Traveled (VMT) instead of Levels of Service (LOS). This project analyzed transportation impacts using the VMT metric and conformed to Council Policy 5-1.

CEQA Transportation Analysis

CEQA Transportation Analysis requires an evaluation of a project's potential impacts related to VMT. However, if a project passes the screening criteria, listed in the City of San Jose

Transportation Analysis Handbook (2018), it is expected to result in a less-than significant VMT impact based on project description, characteristics, and/or location.

The project would not meet the screening criteria for VMT analysis exemption as a small industrial infill of 30,000 square feet of gross floor area or less. However, the existing industrial Area VMT of 11.44 per employee is below the baseline VMT industrial threshold of 14.37. Therefore, the project is expected to result in less-than-significant VMT impacts.

The results of the VMT analysis are in the attached Appendix A.

Local Transportation Analysis

Intersection Operation Analysis: Four (4) signalized intersections, including one (1) CMP intersection, were analyzed for the AM and PM peak hours to identify any adverse intersection operation effects using standards and methodologies outlined in the Transportation Analysis Handbook (2018). The results of the analysis indicate that there are no adverse effects at either of the study intersections under background and background plus project conditions.

Intersection Queuing Analysis: Vehicle queuing analysis was performed at three (3) study intersections. The results of the analysis indicate that the existing storage capacities at the southbound left-turn queue at S. 7th Street/Tully Road currently is and would continue to be inadequate under existing and background conditions. However, project trips will not increase the peak hour queues at any of the three (3) intersections.

Site Access and On-site Circulation: Vehicular access to the project will be provided via one (1) inbound only driveway and one (1) outbound only driveway along Leo Avenue. An existing third driveway along Leo Avenue is needed for larger long-haul trailers to access the building entrances. All driveway widths are 32 feet wide to accommodate truck access. The driveways are also equipped with gates to restrict customer access during off-hours and will be open during operational hours. Vehicles will enter via the inbound only driveway and proceed to the scales where their vehicle and load of material are weighed. Vehicles will then turn directly into the facility building where they will discharge their loads and exit via the outbound only driveway.

On-site vehicle stacking was evaluated between the inbound only driveway and the material scales. Arriving trucks are typically lined up in one line on-site but can be stacked into two lines during busy periods. Approximately 6 vehicles can be stored on-site in a line for a maximum of 12 vehicles. Traffic control staff is employed to ensure that Leo Avenue is not impacted.

Sight Distance Analysis: The analysis indicates that the sight distance at the outbound only driveway is adequate. However, with existing street parking present along Leo Avenue, red curb for a minimum of 6 feet should be implemented on the east side of the outbound-only driveway to ensure adequate sight distance.

Truck Access and Circulation: Customer vehicles may include large trucks and trailers that cannot turn into the building facility due to the constricted drive aisle width. Truck turning template analysis was conducted for a WB-62 vehicle. Trucks will need to partially exit the third driveway and position themselves to back up into the building to discharge their load. The third

driveway provides extra room for trucks to align themselves and provides easier and safer backing maneuvers. Facility transfer trailers and trucks used for material disposal will similarly perform the backing maneuvers using the third driveway and outbound-only driveway. Garbage collection will occur on-site, and emergency vehicles would have adequate space to access and circulate the project site.

Bicycle and Pedestrian Access: Class II bike lanes are provided along Monterey Road, S. 7th Street, and Curtner Avenue/Tully Road. Pedestrian facilities are provided through sidewalks along most of the surrounding streets, however sections of Phelan Avenue and S. 7th Street lack sidewalks. The project site will close and replace its existing easternmost driveway along Leo Avenue with sidewalk with access to a pedestrian gate and wheelchair ramp.

Parking: The off-street parking requirement was evaluated based on San Jose Municipal Code (Section 20.90.60). The project is required to provide 31 vehicle parking spaces. The project will meet the parking requirements providing a total of 39 vehicle spaces: 24 spaces on-site as well as 15 parking spaces at a property the applicant owns and is directly across the street from the project site (220 Leo Avenue). The project would meet the bicycle parking requirements providing 3 bicycle parking spaces.

Project conditions:

1. Implement a minimum of 6 feet painted red curb on the east side of the project's outbound-only driveway along Leo Avenue to ensure adequate sight distance.

RECOMMENDATION:

With the inclusion of the above conditions, the subject project will be in conformance with the City of San Jose Transportation Analysis Policy (Council Policy 5-1) and the Santa Clara County Congestion Management Program. Therefore, a determination for less-than-significant impacts can be made with respect to transportation impacts.

If you have any questions, please contact me at Jason.Yan@sanjoseca.gov or (408) 793-5399. You may also reach Manjit Banwait, Traffic Management at Manjit.Banwait@sanjoseca.gov or (408) 793-5301.

Jason Yan

Jason Yan
Project Engineer
Development Services Division

JY:MB:kg:cc
C: Manjit Banwait, PW
Florin Lapustea, DOT
Cathy Lawrence, Stantec

Appendix A SAN JOSE VMT EVALUATION TOOL OUTPUT

CITY OF SAN JOSE VEHICLE MILES TRAVELED EVALUATION TOOL SUMMARY REPORT

PROJECT:

Name: Leo Avenue Recycling Expansion
Location: 215 Leo Avenue
Parcel: 47724049 Parcel Type: Suburb with Multifamily Housing
Proposed Parking Spaces Vehicles: 0 Bicycles: 0

Tool Version: 2/29/2019
Date: 6/25/2020

LAND USE:

Residential:	
Single Family	0 DU
Multi Family	0 DU
Subtotal	0 DU
Office:	0 KSF
Retail:	0 KSF
Industrial:	50 KSF

Percent of All Residential Units

Extremely Low Income (≤ 30% MFI)	0 % Affordable
Very Low Income (> 30% MFI, ≤ 50% MFI)	0 % Affordable
Low Income (> 50% MFI, ≤ 80% MFI)	0 % Affordable

VMT REDUCTION STRATEGIES

Tier 1 - Project Characteristics

Increase Residential Density
- Existing Density (DU/Residential Acres in half-mile buffer) 5
- With Project Density (DU/Residential Acres in half-mile buffer) 5

Increase Development Diversity
- Existing Activity Mix Index 0.99
- With Project Activity Mix Index 0.99

Integrate Affordable and Below Market Rate
- Extremely Low Income BMR units . . . . . 0 %
- Very Low Income BMR units . . . . . 0 %
- Low Income BMR units . . . . . 0 %

Increase Employment Density
- Existing Density (Jobs/Commercial Acres in half-mile buffer) 20
- With Project Density (Jobs/Commercial Acres in half-mile buffer) 20

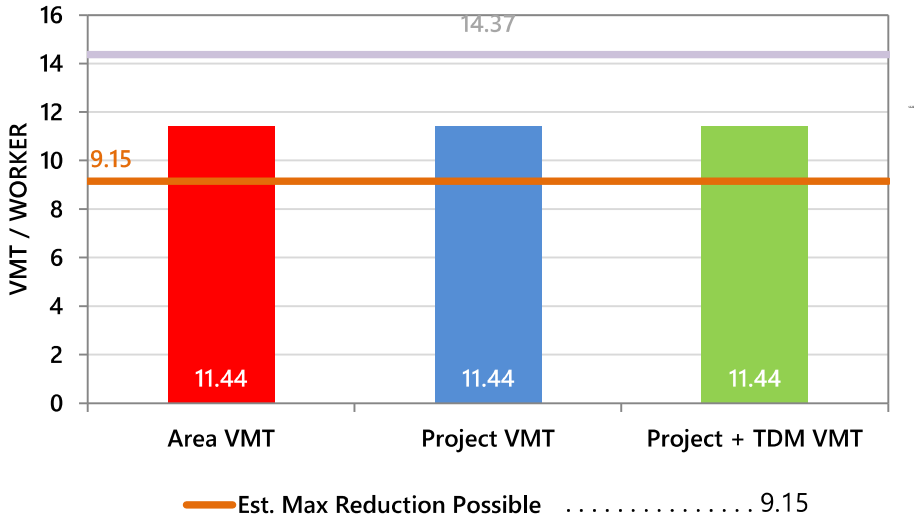
Tier 2 - Multimodal Infrastructure

Tier 3 - Parking

Tier 4 - TDM Programs

EMPLOYMENT ONLY

The tool estimates that the project would generate per non-industrial worker VMT below the City's threshold.



Leo Recycle Project
Transportation Analysis Report

City of San Jose

January 5, 2021

Prepared for:

Leo Recycle

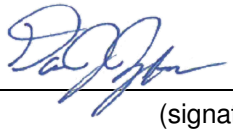
Prepared by:

Stantec Consulting Services Inc.

This document entitled Leo Recycle Project Transportation Analysis Report was prepared by Stantec Consulting Services Inc. (“Stantec”) for the account of Leo Recycle (the “Client”).

Prepared by 
(signature)

Cathy Lawrence, PE
(949) 923-6064

Reviewed by 
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Daryl Zerfass, PE, PTP
(949) 923-6058

Reviewed by _____
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Keith Rutherfurd, PE
(949) 923-6952

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Executive Summary

This transportation analysis has been prepared for the proposed Leo Recycle Project located on Leo Avenue in the City of San Jose. A transportation analysis is required for this Project in compliance with the City of San Jose 's Transportation Analysis Policy (Council Policy 5-1) and the Santa Clara County's Congestion Management Program (CMP). The analysis has been prepared in conformance with the requirements in the City's Transportation Analysis Handbook (2018).

The Project is located on the north side of Leo Avenue at the western terminus of the street west of S. 7th Street. The site is currently developed with a 50,000 square foot industrial building for the existing recycling operation. The Project consists of expanding the existing recycling operations from 470 tons per day to a maximum of 500 tons per day. The Project does not include expansion of the existing industrial building or construction of new buildings.

The City has developed screening criteria to determine when a detailed CEQA transportation analysis would not be required. Industrial projects up to 30,000 square feet meet the City's screening criteria. With an industrial building of 50,000 square feet, the Project does not meet the City's screening criteria and a detailed vehicle miles traveled (VMT) analysis is required. The City's VMT Evaluation Tool calculates that the Project site would generate 11.44 VMT per employee, which is below the City's industrial threshold of significance of 14.37 VMT. Therefore, the Project has less than significant impact on the area VMT. The proposed Project is consistent with the goals of the General Plan and the objectives of Senate Bill 743. The Project is in conformance with Council Policy 5-1.

Project trips were calculated based on estimates of the existing recycling facility in addition to Institute of Transportation Engineers (ITE) trip rates for General Light Industrial workers. A location-based reduction for Suburban with Multi-family Housing was applied to the Project. The proposed Project would generate 11 new trips during the AM peak hour, 10 new trips during the PM peak hour, and 82 new daily trips. The Project trips were distributed to the surrounding street network based on levels and locations of development in relation to the Project site.

The study area for the Local Transportation Analysis (LTA) was defined and approved by City staff, and four signalized intersections and one stop-controlled intersection in proximity to the Project site were identified as the study intersections. Peak hour turning movement volumes were provided by City staff.

Background conditions were developed by adding trips from approved but not yet constructed projects in the City's Approved Trips Inventory (ATI) database to the existing intersection volumes. These background volumes provide the conditions against which the Project effects are evaluated.

The Project trips were added to the background volumes. The delay and level of service (LOS) for background plus Project conditions were compared with the background delay and LOS. The study intersections would operate at acceptable LOS under background and background plus Project conditions, and the Project would have no adverse effect on the study intersections during the AM and

PM peak hours. The intersection of Monterey Road and Curtner Avenue/Tully Road is identified on the Congestion Management Program (CMP) network. The City of San Jose guidelines are consistent with the CMP; therefore, the Project has no adverse effect on the CMP network.

The Project would result in no adverse effect on left-turn queues at the study intersections. Furthermore, the Project would have no adverse effect on the pedestrian facilities, bike facilities, or transit in the vicinity. The intersections in the vicinity of the Project operate at acceptable levels of service, and, with the exception of customers and employees originating from residential neighborhoods, Project traffic would not cut-through residential neighborhoods to access the Project site.

The City supports the closure of the two easternmost driveways (Gates #3 and #4); however, the third driveway (Gate #3) is required for access to the building entrances by large trucks and trucks with trailers. The Project would permanently close the easternmost driveway (Gate #4) only.

1.0 INTRODUCTION

This transportation analysis has been prepared for the proposed expansion of Leo Recycle located on Leo Avenue in the City of San Jose. A transportation analysis is required for this project in compliance with the City of San Jose's Transportation Analysis Policy (Council Policy 5-1) and the Santa Clara County's Congestion Management Program (CMP). The analysis has been prepared in conformance with the requirements contained in the City's Transportation Analysis Handbook (2018). This report summarizes the project's potential transportation impacts, if any, and presents appropriate mitigation measures, if necessary.

1.1 PROJECT DESCRIPTION

Leo Recycle is an existing solid waste processing facility located on the north side of Leo Avenue at the western terminus of the street approximately 540 feet west of S. 7th Street. **Figure 1-1** illustrates the location of the Project site. The facilities include a 50,000 square foot industrial building on an approximately 2.5-acre site. The Project proposes an expansion from 470 tons per day to a maximum daily capacity of 500 tons per day with no change to the size of the building. **Figure 1-2** illustrates the proposed site plan.

The Project is located in a Heavy Industrial zoning district. The Project is also located within the Monterey Business Corridor employment area, which is within a Growth Area – Non-Urban Village. The City's employment areas are planned to accommodate a variety of industry and development types.

The site currently has four driveways. The facility is open to contractors and commercial and residential customers. Customers regularly enter via the westernmost driveway (Gate #1) and exit the site from the second westerly driveway (Gate #2). The third driveway (Gate #3) is for employees and is also used for access to the building entrances by long-haul trailers and customers with trailers. The easternmost driveway (Gate #4) is closed. The City supports the closure of the two easternmost driveways (Gates #3 and #4); however, the facility requires Gate #3 to remain open for access to the building entrances by larger vehicles.

1.2 CEQA TRANSPORTATION ANALYSIS SCOPE

Council Policy 5-1 aligns with California Senate Bill 743 (SB 743) that establishes the thresholds for transportation impacts under the California Environmental Quality Act (CEQA), removing transportation "Level of Service" (LOS) based on delay and congestion and replacing it with "Vehicle Miles Traveled" (VMT). VMT refers to the amount of and distance of automobile travel in a day attributed to a development project. VMT is measured by multiplying the total vehicle-trips generated by a development project by the average distance of those trips. In the City of San Jose, VMT is calculated using the Origin-Destination VMT method, which measures the full distance of vehicle travel with one end within the project.

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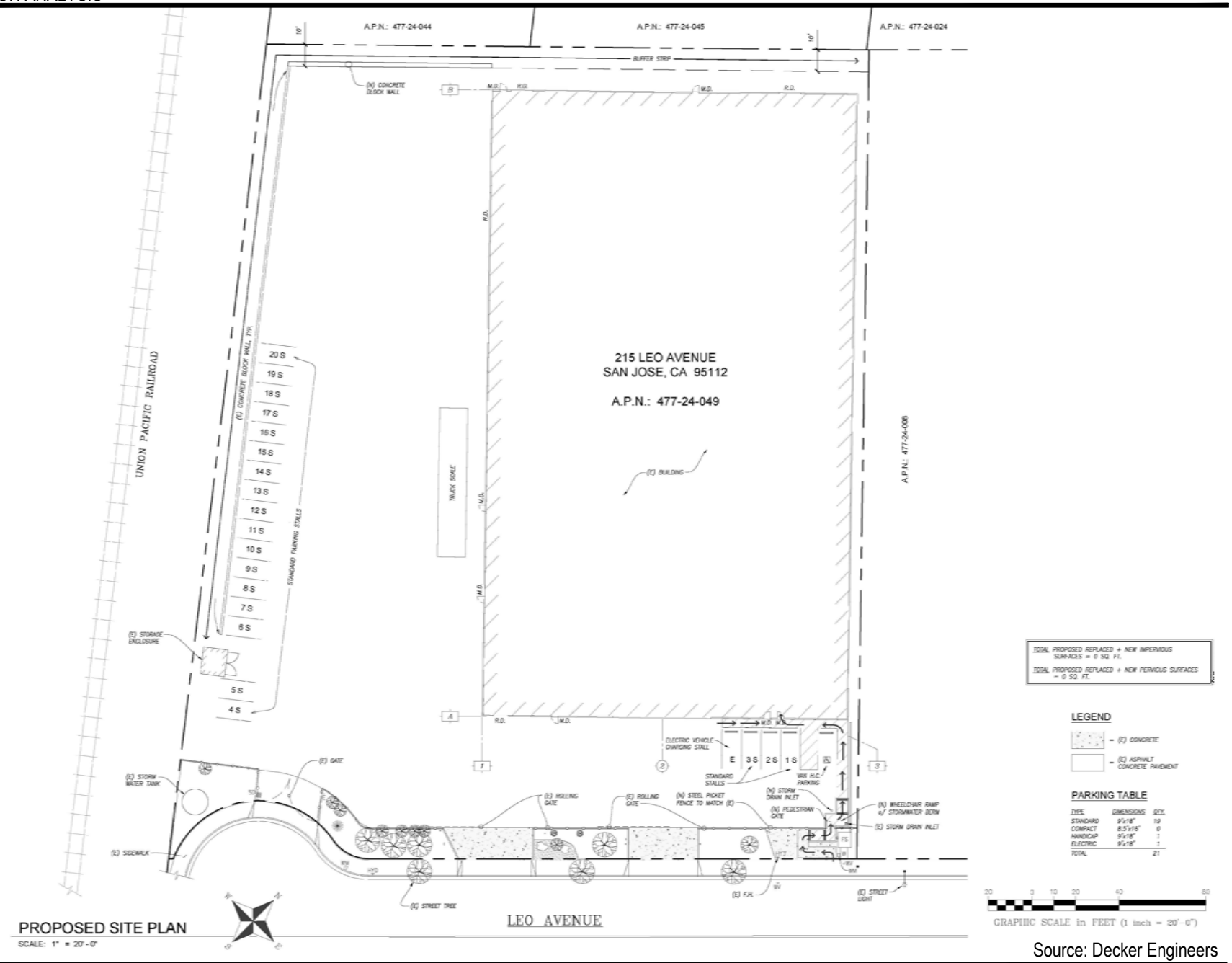
Figure 1-1
Project Site Location



Source: Decker Engineers

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Figure 1-2
Proposed Site Plan

Increased vehicle travel associated with development projects results in several undesirable consequences. Increased vehicle travel leads to increased greenhouse gases and poor air quality, leads to health issues such as chronic diseases (associated with poor air quality and reduced physical activity) and worse mental health, has negative effects on other road users such as pedestrians, cyclists, and transit users, results in more vehicle collisions, requires more infrastructure which increases impermeable surfaces (raising flood risks and polluting waterways) and loss of natural habitat, and increases interactions with nature leading to more collisions with wildlife. SB 743 attempts to diminish these undesirable outcomes by encouraging development that reduces vehicle travel.

The intention of SB 743 is to "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." VMT exceeding an applicable threshold of significance may indicate a significant impact. If a project is found to have a significant impact on VMT, the impact must be reduced by modifying the project VMT to an acceptable level and/or mitigating the impact through multimodal transportation improvements or establishing a Trip Cap.

A project could have a significant transportation impact on the environment if it:

a) Conflicts with a plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian paths,

b) Conflicts or is inconsistent with CEQA Guidelines Section 15064.2, Subdivision (b)(1),

c) Substantially increases hazards due to a geometric design feature or incompatible uses, or

d) Results in inadequate emergency access.

The City has chosen a net increase in the total existing VMT for the region (i.e. the Bay Area's Metropolitan Planning Organization's boundaries) as the determination of significant transportation impact. For development projects that do not meet the City's screening criteria, the VMT analysis consists of a comparison of the project's potential impacts related to VMT and other significance criteria. For office or industrial projects, the VMT per employee for the region without and with the project is calculated. The threshold for significance for retail projects is a net increase in the existing regional VMT per employee.

A detailed CEQA transportation analysis is not required if a project meets the City's screening criteria. The City has specified industrial projects below 30,000 square feet of gross floor area as meeting the screening criteria for VMT analysis exemption. Therefore, it is presumed that industrial projects no larger than 30,000 square feet will have a less than significant VMT impact and do not require a detailed CEQA transportation analysis. The Project site consists of a 50,000 square foot industrial building, which does not meet the screening criteria for VMT analysis exemption; therefore, the Project's impact on the existing regional VMT is evaluated.

1.3 LOCAL TRANSPORTATION ANALYSIS SCOPE

The project is subject to the City's Local Transportation Analysis (LTA) as specified in the Council Policy 5-1 and must comply with methodology included in the City's Transportation Analysis Handbook.

The project's effects on transportation, access, circulation, and related safety elements in the proximate area of the project are evaluated. The traffic study provides near term effect analysis of the proposed project as required by the City. The analysis will address project effects compared with the background no project scenario.

Five study intersections have been identified by Public Works staff, and the Project's effects on the operation of these study intersections were evaluated under background conditions. The following intersections are included in the analysis:

Intersection	Control	Jurisdiction
1. Monterey Rd & Phelan Ave	Signal	San Jose
2. Monterey Rd & Curtner Ave/Tully Rd	Signal	San Jose
3. S. 7th St & Phelan Ave	Signal	San Jose
4. S. 7th St & Tully Rd	Signal	San Jose
5. S. 7th St & Leo Ave	Minor Street Stop	San Jose

The study area includes a Congestion Management Program (CMP) intersection at Monterey Road and Curtner Avenue/Tully Road.

The Project site is zoned as Heavy Industrial in the City's Envision San Jose 2040 General Plan.

The following scenarios are evaluated:

- Existing Intersection Operations
- Background Scenario: Existing + Approved Projects
- Project Scenario: Existing + Approved Projects + Project

Project level of service and potential negative project effects are based on Highway Capacity Manual (HCM) delay methodology. **Table 1-1** summarizes the correspondence between LOS and average vehicle delay. Traffix software is utilized to calculate the vehicle delay at the study intersections. An adverse effect on intersection operations occurs when the analysis demonstrates that the project would cause the operations standard at a study intersection to fall below LOS D with the addition of project vehicle-trips to baseline conditions. For intersections already operating at LOS E or F under background conditions, the criteria for determining adverse intersection operations from the project effect is:

- An increase in average critical delay by 4.0 seconds or more AND an increase in the critical V/C ratio of 0.010 or more; OR
- A decrease in the average critical delay AND an increase in critical V/C ratio of 0.010 or more.

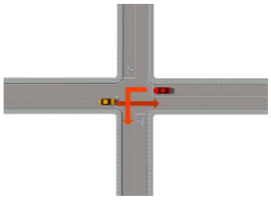
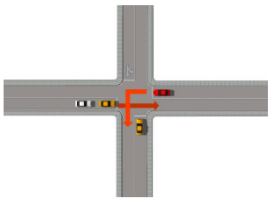
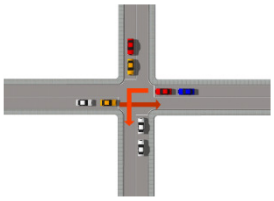
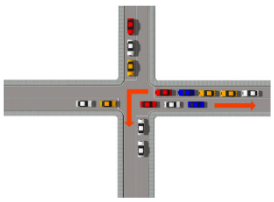
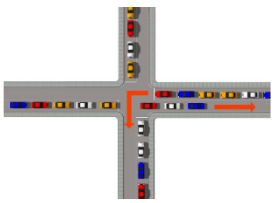
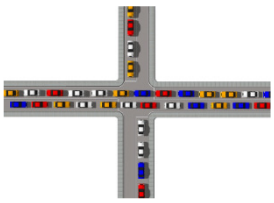
It should be noted that a potential adverse effect is not a CEQA measure of significant impact.

The City of San Jose guidelines are consistent with the CMP requirements.

1.4 REPORT ORGANIZATION

Chapter 2.0 of this report provides the transportation setting for the impact analysis, including existing roadway conditions, peak hour and daily traffic volumes, pedestrian, bicycle, and transit facilities, and traffic conditions field observations. Chapter 3.0 describes the CEQA conditions. Chapter 4.0 focuses on

Table 1-1 Intersection Level of Service Ranges

Level of Service		Delay Description	Average Vehicle Delay	
			Signalized	Stop-Controlled
A		Minimal or no vehicle delay	0 – 10 seconds	0 – 10 seconds
B		Slight delay to vehicles	10.1 – 20 seconds	10.1 – 15 seconds
C		Moderate vehicle delays, traffic flow remains stable	20.1 – 35 seconds	15.1 – 25 seconds
D		More extensive delays at intersections	35.1 – 55 seconds	25.1 – 35 seconds
E		Long queues create lengthy delays	55.1 – 80 seconds	35.1 – 50 seconds
F		Severe delay and congestion	Above 80 seconds	Above 50 seconds

Source: Transportation Research Board, *Highway Capacity Manual 2010*, Exhibit 15-3

the LTA and potential traffic effects of the proposed project under near term conditions, with project trip generation, distribution, and assignment presented in this chapter. Sections presenting additional site analyses and operational effects are included in Chapter 4.0. Chapter 5.0 summarizes the conclusions of the transportation analysis.

2.0 EXISTING TRANSPORTATION CONDITIONS

This chapter describes the transportation setting for the proposed Project. The existing roadway network, intersection conditions, and existing traffic volumes are presented.

2.1 VEHICLE-MILES TRAVELED

From the Transportation Analysis Handbook, VMT is the total miles of travel by personal motorized vehicles a project is expected to generate in a day. In accordance with the established San Jose methodology, VMT is calculated using the Origin-Destination VMT method, which measures the full distance of personal motorized vehicle-trips with one end within the project. VMT that promotes the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses shall be used as a basis for determining significant transportation impacts in California to appropriately balance the needs of congestion management with statewide goals related to infill development, the promotion of public health through active transportation, and the reduction of greenhouse gas emissions.

The City uses an Excel-based VMT Evaluation Tool to evaluate whether proposed development projects would generate VMT impacts. VMT data for the half-mile radius surrounding the project site is based on the City's travel demand model and adjusted to the parcel level.

The City's VMT Evaluation Tool was used to determine the existing VMT data for the Project area. The average VMT for the area is 11.44 VMT per employee. This is below the City's industrial threshold of 14.37 VMT per employee. The area around the project site includes residential developments and industrial and commercial space. The VMT for the area is lower than the City's threshold since the workers in the area may live in the surrounding residential developments and drive less for their commute than does the average worker in the City.

Figure 2-1 illustrates the VMT per job heat map for a one-half mile radius around the project site. This shows that the majority of the area surrounding the project site is classified as Threshold VMT Area.

2.2 ROADWAY NETWORK

The project is located on the north side of Leo Avenue at the western terminus of Leo Avenue west of S. 7th Street. Project traffic would access the local transportation network via three driveways on Leo Avenue—one entry driveway (Gate #1), one exit driveway (Gate #2), and one driveway (Gate #3) used by long-haul trailers (inbound and outbound) to access the building entrance. This driveway (Gate #3) is also used by larger customer vehicles with trailers to maneuver into position to access the building entrances. The existing eastern driveway (Gate #4) would be closed permanently. Regional access to the study area is provided primarily by Interstate 280 (I-280) which is located approximately 1.25 miles north of the Project site and State Route 87 (SR 87) located approximately 0.85 mile west of the site. Monterey Road and Tully Road are identified as Priority Safety Corridors on the Vision Zero Priority Safety Corridors map. The study area is identified as a Suburb with Multifamily Homes place type.

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Figure 2-1
City of San Jose VMT per Job Heat Map

Figure 2-2 illustrates the surrounding street network and shows the existing lane configurations at the study intersections.

Leo Avenue is a two-lane local street which is one block long from S. 7th Street on the east end to the railroad tracks on the west. On-street parking is allowed, and sidewalks are provided on both sides of the street with a width of approximately eight feet. There are no bicycle facilities on Leo Avenue. Curb ramps are provided on the northwest and southwest corners at the intersection with S. 7th Street, although the color of the detectable warning surface is not consistent with Caltrans Americans with Disabilities Act (ADA) guidelines. Development along Leo Avenue consists of industrial uses. The condition of the pavement on Leo Avenue is rated as Fair on the City's Pavement Conditions Map with a pavement condition index (PCI) of 64.

S. 7th Street is classified as a Local Connector Street on the City's General Plan Transportation Network Diagram. S. 7th Street is a two-lane undivided road with on-street parking and striped bike lanes (Class II). The speed limit is posted 35 mph in the study area. Sections of S. 7th Street north of Phelan Avenue and south of Leo Avenue are unimproved. Sidewalk is located on the west side of the street from Phelan Avenue to approximately 1,800 feet south of Leo Avenue and varies from approximately six to eight feet wide. The roadway condition in the study area is identified as Poor with a PCI of 49 but is scheduled for repaving in 2020.

Phelan Avenue is classified as a Local Connector Street on the General Plan Transportation Network. The roadway is striped with two lanes west of S. 10th Street and four lanes east of S. 10th Street. Sidewalks of varying width are provided on both sides of Phelan Avenue between Monterey Road and the railroad tracks west of S. 7th Street. Between the railroad tracks and S. 10th Street to the east, the roadway is mostly unimproved. Class II bike lanes are striped on Phelan Avenue, with the exception of sharrows striped on the unimproved segments at the railroad tracks and between S. 7th Street and S. 10th Street. The bike lanes do not extend east past S. 10th Street. Warning lights are provided at the railroad crossing. The speed limit is 25 mph west of S. 7th Street and 30 mph east of S. 7th Street. The pavement on Phelan Avenue is rated as Good condition with a PCI of 88.

Monterey Road is designated as a Grand Boulevard on the General Plan Transportation Network. Grand Boulevards require special measures within the public right-of-way, such as enhanced landscaping, additional attractive lighting, wider and comfortable sidewalks, and identification banners. Monterey Road is a six-lane divided arterial road with a raised landscaped median. Class II bike lanes are striped on Monterey Road, and on-street parking is prohibited in the study area. The sidewalks on both sides of the street are generally eight to nine feet wide. Curb ramps are located at the intersections; however, all are not consistent with the latest ADA guidelines. The speed limit on Monterey Road is 35 mph. The pavement on Monterey Road is rated in Good condition with a PCI of 87.

Monterey Road is designated as a Priority Safety Corridor on the City's Vision Zero Priority Safety Corridors map. Streets on the Vision Zero Priority Safety Corridors map account for a high proportion of fatalities and severe injuries in the City. They are the focus of major safety projects and outreach campaigns.

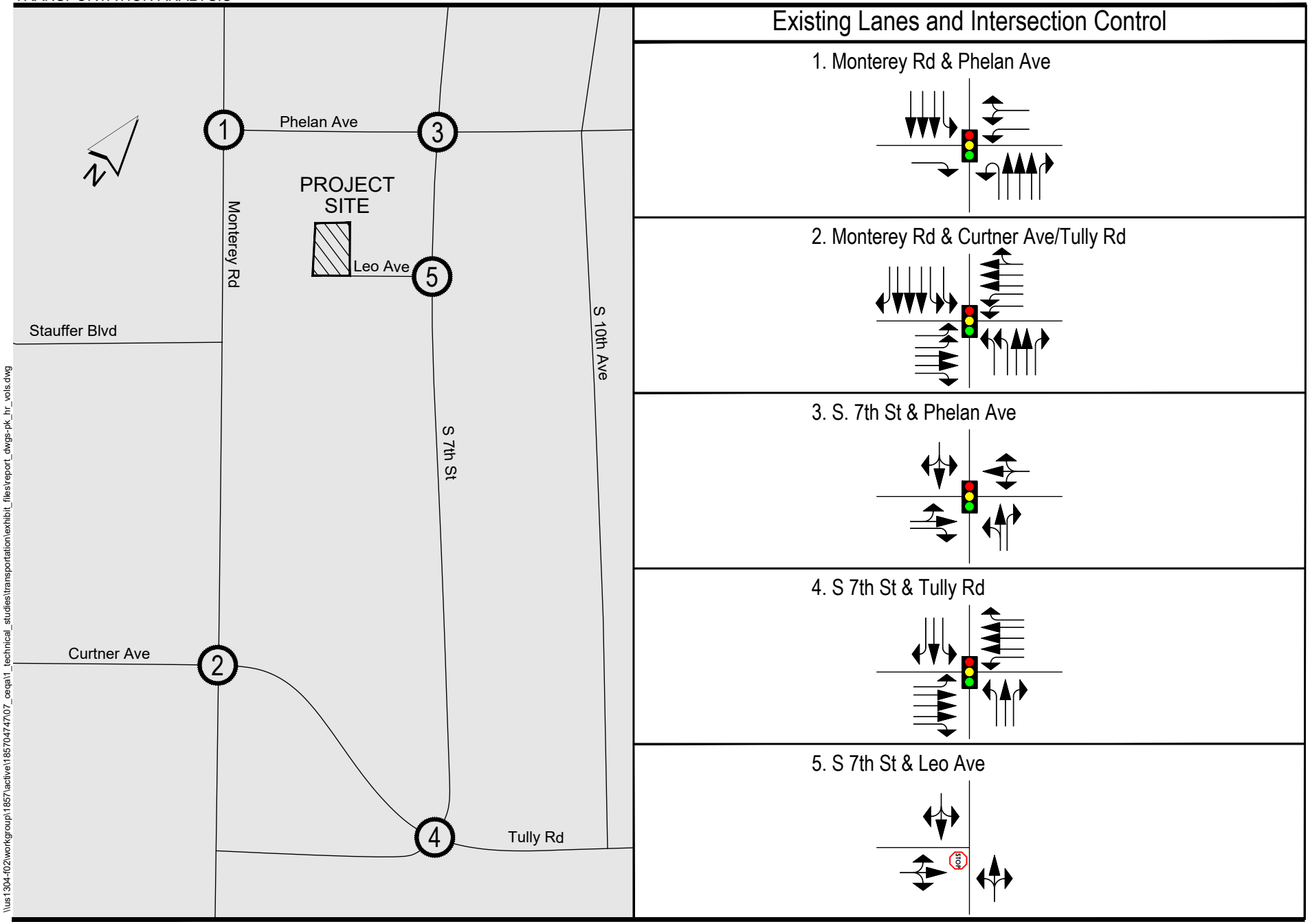

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Figure 2-2
Study Area Street Network

Curtner Avenue/Tully Road is classified as a City Connector Street on the General Plan Transportation Network. The roadway is named Curtner Avenue west of Monterey Road and Tully Road east of Monterey Road. The roadway is a six-lane divided arterial with a raised median in the study area. Class II bike lanes are striped and on-street parking is prohibited. The speed limit is posted 40 mph. The roadway is fully improved with sidewalks on both sides of the street. Curb ramps are provided at intersections, but they are not consistent with the latest ADA guidelines. The pavement condition is rated Fair on Curtner Avenue with a PCI of 62 to 66 and rated Good on Tully Road with a PCI of 90 to 93.

Tully Road east of Monterey Road is identified as a Priority Safety Corridor on the City's Vision Zero Priority Safety Corridors map.

2.3 TRAFFIC VOLUMES

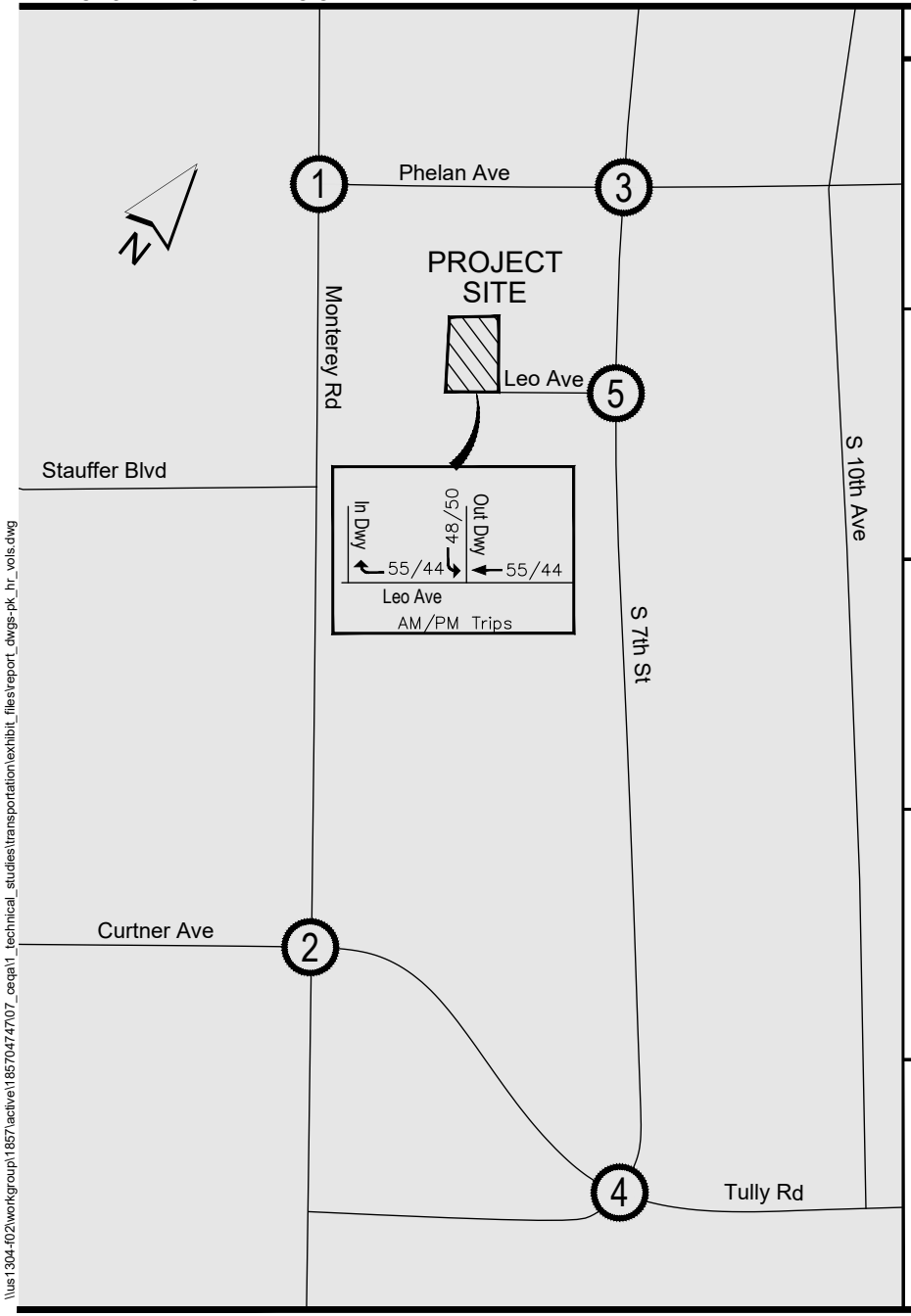
Peak hour intersection turning movement volumes at the four signalized study intersections were provided by City staff. These volumes were collected in 2015 and 2019. The intersection volumes from 2015 were factored to 2019 levels by the application of a 1 percent per year growth factor. Since a traffic count for the intersection of S. 7th Street and Leo Avenue was not available, and because the collection of a new traffic count at this time would not be representative of typical conditions because of travel restrictions due to the COVID-19 pandemic, the peak hour volumes at the intersection of S. 7th Street and Leo Avenue were estimated from the turning movement volumes at the adjacent intersection of S. 7th Street and Phelan Avenue.

The existing peak hour intersection turning movement volumes are illustrated in **Figure 2-3**.

Table 2-1 summarizes the delay and LOS for the study intersections under existing conditions (Traffix delay calculation worksheets are presented in **Appendix C**). This is provided for information only, since the project effects are evaluated under background conditions presented later in the report (Chapter 4.0). At the signalized intersections, the delay is based on the average delay for all movements at the intersection. For the intersection of S. 7th Street and Leo Avenue, the delay is based on the stop-controlled approach. As this table shows, the intersections are currently operating at LOS D or better during the AM and PM peak hours.

Table 2-1 Existing Delay and Level of Service Summary

Intersection	Control	AM Peak Hour		PM Peak Hour	
		Delay (sec)	LOS	Delay (sec)	LOS
1. Monterey Rd & Phelan Ave	Signal	17.7	B	23.0	C
2. Monterey Rd & Curtner Ave/Tully Rd	Signal	39.8	D	48.7	D
3. S. 7th St & Phelan Ave	Signal	26.8	C	29.3	C
4. S. 7th St & Tully Rd	Signal	40.8	D	37.3	D
5. S. 7th St & Leo Ave	Minor Street Stop	12.1	B	13.3	B
Notes: sec = Seconds of delay per vehicle LOS = Level of service					



AM Peak Hour	PM Peak Hour
1. Monterey Rd & Phelan Ave	1. Monterey Rd & Phelan Ave
2. Monterey Rd & Curtner Ave/Tully Rd	2. Monterey Rd & Curtner Ave/Tully Rd
3. S. 7th St & Phelan Ave	3. S. 7th St & Phelan Ave
4. S 7th St & Tully Rd	4. S 7th St & Tully Rd
5. S 7th St & Leo Ave	5. S 7th St & Leo Ave

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Figure 2-3

Existing Peak Hour Intersection Volumes

2.4 PEDESTRIAN AND BICYCLE FACILITIES

Leo Avenue has sidewalks in good condition on both sides of the street. The sidewalks connect with the sidewalk on the west side of S. 7th Street. A section of the sidewalk on the west side of S. 7th Street south of Leo Avenue is damaged. Curb ramps are provided on the northwest and southwest corners of the intersection of S. 7th Street and Leo Avenue; however, the color of the detectable warning surface is not consistent with Caltrans ADA guidelines.

Sidewalks in good condition are located on both sides of Monterey Road and Curtner Avenue/Tully Road in the study area. Curb ramps are provided at intersections, however, not all curb ramps are consistent with the latest ADA guidelines.

Sections of Phelan Avenue and S. 7th Street are unimproved and lack curbs, gutters, and sidewalks; therefore, the pedestrian facilities on these streets are disconnected in the study area.

Bike lanes (Class II) are located along Monterey Road, S. 7th Street, Phelan Avenue, and Curtner Avenue/Tully Road in the study area. Bicyclists share the bike lanes with parked vehicles on S. 7th Street and Phelan Avenue. The Class II bike lanes on Phelan Avenue are replaced with sharrows striped on the unimproved segments at the railroad tracks and between S. 7th Street and S. 10th Street. The bike lanes on Phelan Avenue do not extend east of S. 10th Avenue.

Figure 2-4 illustrates the bike facilities in the project vicinity.

2.5 TRANSIT FACILITIES AND SERVICES

Santa Clara Valley Transportation Authority (VTA) provides local bus service in the study area. VTA Local Bus Routes 66 and 68 are provided along Monterey Road, and Local Bus Route 26 is provided along Curtner Avenue/Tully Road. These routes provide connections to several other VTA Local Bus routes and Light Rail lines and Monterey/Salinas Transit System lines.

Figure 2-5 illustrates the transit routes in the study area.

2.6 OBSERVED TRANSPORTATION CONDITIONS

Stantec staff observed field conditions in the study area on September 16, 2020 during the AM peak period (7:45 to 9:00 AM) and PM peak period (4:00 to 5:15 PM). These observations were conducted during COVID-19 travel restrictions and do not represent “normal conditions”.

At the intersection of S. 7th Street and Leo Avenue, the red curbs at the intersection approaches allow for good visibility for traffic turning from Leo Avenue onto S. 7th Street. Southbound traffic on S. 7th Street was observed making the turn onto Leo Avenue at relatively high speeds. Traffic on Leo Avenue was light during the AM and PM periods with a mixture of passenger vehicles and large trucks. Traffic on S. 7th

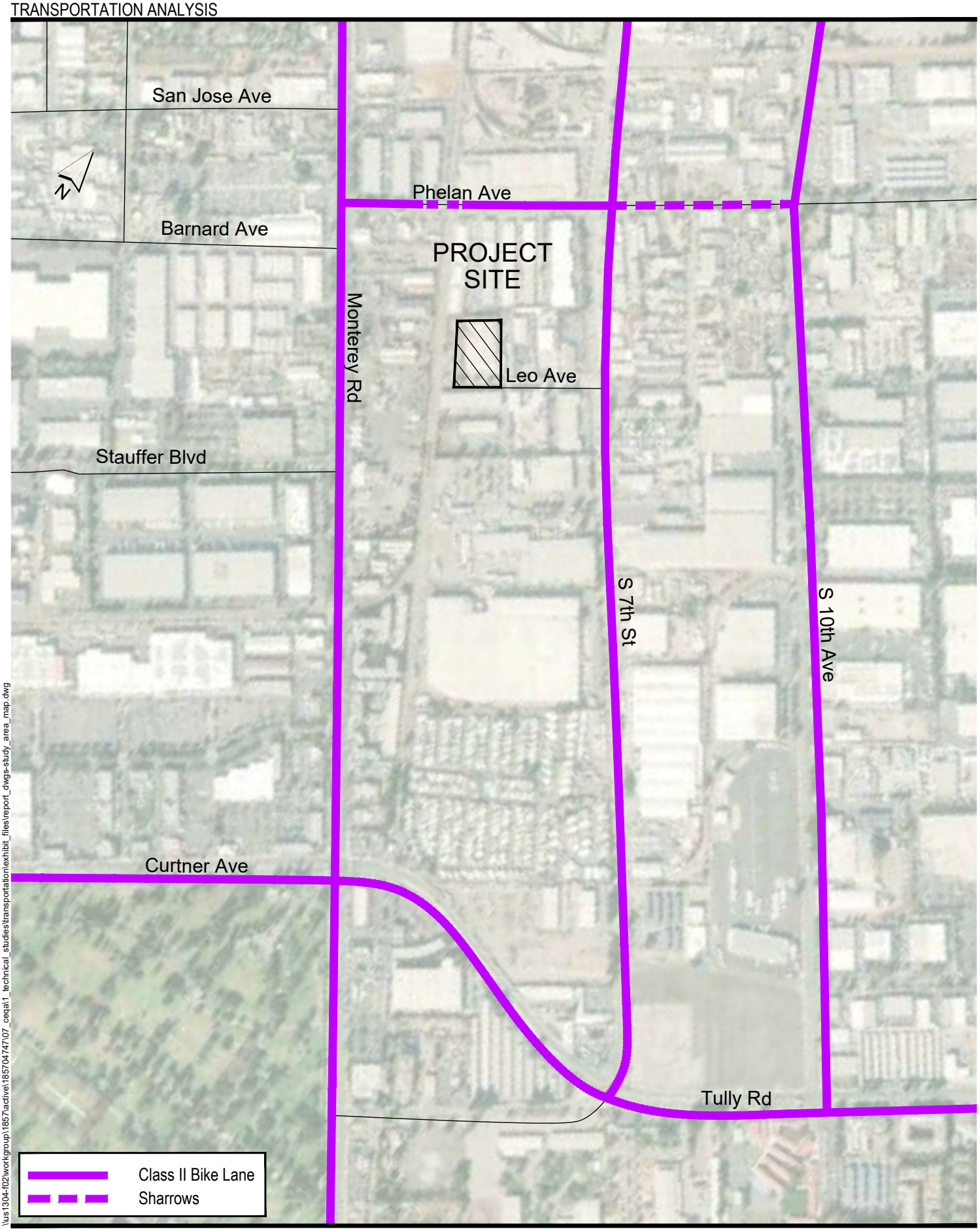

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Figure 2-4
Bicycle Facilities in the Study Area

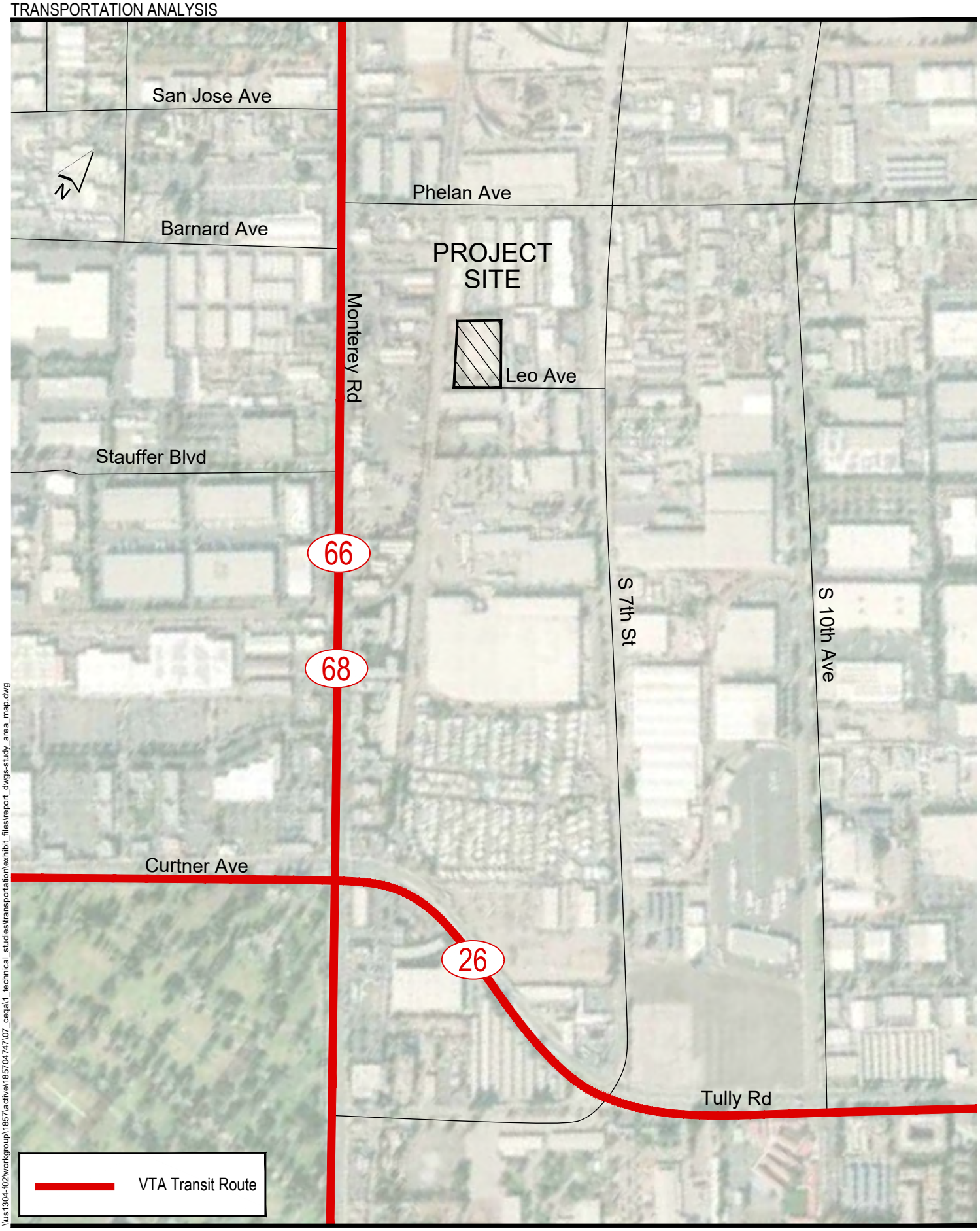

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Figure 2-5
Transit Facilities in the Study Area

Street was moderate with large trucks common. Large vehicles were parked along the west side of S. 7th Street resulting in poor visibility at many driveways. Fewer parked vehicles on the east side of S. 7th Street result in better visibility. Red curbs and No Parking signs on both sides of S. 7th Street at the approach to Tully Road allows for good visibility in both directions.

Traffic on Monterey Road at Phelan Avenue was moderate during the AM and PM peak hours. Traffic cleared the intersection during the signal green phases. The signal was functioning normally and appeared synchronized along Monterey Road.

At the intersection of S. 7th Street and Phelan Avenue, traffic was moderate during the AM and PM periods and appeared relatively balanced in each direction. The signal at the intersection of S. 7th Street and Phelan Avenue was functioning properly. Traffic cleared the intersection during the green phases.

Traffic at the intersection of S. 7th Street and Tully Road was moderate during the AM and PM periods. The signal was operating normally. Traffic cleared the intersection during the green phases. There is a channelized right turn from southbound S. 7th Street to westbound Tully Road, but due to the curve, speeds, and merge from three lanes to two lanes immediately west of the intersection on westbound Tully Road, right turns from S. 7th Street during the red signal phase appeared difficult. The merge on westbound Tully Road appeared poorly signed. Similarly, the eastbound free right turn from Tully Road to southbound S. 7th Street appeared difficult due to the tight turn and speeds on S. 7th Street; however, the volume of traffic making this turn is very light during the peak hours.

Visibility on Tully Road at driveways is good. Speeds on Tully Road were relatively high.

Traffic at the intersection of Monterey Road and Curtner Avenue/Tully Road was moderate during the AM period with the flow heavier in the westbound direction on Tully Road. The traffic was heavy during the PM period with the flow heavier in the eastbound direction. The signal and pedestrian push buttons appeared to be functioning properly. Traffic did not clear the intersection during each green phase during the PM period, causing traffic to back up.

The roadways are not widened at many of the bus stops, which causes bicycle and vehicle traffic to back up behind buses.

Several pedestrians were observed at the intersection of Monterey Road and Tully Road during the peak periods, but very little pedestrian traffic was observed at the other study intersections. Bicycle traffic was very light throughout the area.

Field review notes and photos are included in **Appendix D**.

3.0 CEQA TRANSPORTATION ANALYSIS

City staff has determined that the Project is not exempt from a detailed CEQA VMT analysis since the total site is greater than 30,000 square feet of industrial building.

3.1 VEHICLE-MILES TRAVELED ANALYSIS

The City has developed screening criteria to determine when a detailed CEQA transportation analysis would not be required. A detailed CEQA transportation analysis is not required if a project meets the City's screening criteria. Projects that are expected to result in less-than-significant VMT impacts based on project description, characteristics, or location would not require a detailed CEQA transportation analysis.

The City has defined Small Infill Projects as a type of project that will not result in significant transportation impacts on the transportation system and will conform to the City's General Plan and other City goals and policies. As defined in Council Policy 5-1, small infill projects which generate around 110 daily trips would not require a detailed CEQA transportation analysis. In recognition of this effect, industrial projects up to 30,000 square feet meet the City's screening criteria and do not require a detailed VMT analysis.

The Project site consists of a 50,000 square foot industrial building, which does not meet the screening criteria for VMT analysis exemption. The City's VMT Evaluation Tool calculates that the Project site would generate an average of 11.44 VMT per employee, which is below the City's industrial threshold of significance of 14.37 VMT (the VMT Evaluation Tool Summary Report for the Project is shown in **Appendix A**). The proposed Project is located in an industrial zone within the central area of the City and would attract employees from the residential neighborhoods surrounding the area.

Since the Project would generate an average VMT per employee that is less than the City's threshold of significance, the Project has less than significant impact on the area VMT. The Project is increasing the operations by approximately six percent; however, the Project does not involve the construction of new facilities. The Project would result in approximately 82 new daily trips as discussed in Chapter 4. The small increase in daily trips confirms there is no significant increase in VMT. The proposed Project is consistent with the goals of the General Plan and the objectives of Senate Bill 743. The Project is also in conformance with Council Policy 5-1.

3.2 OTHER JURISDICTIONS

The Project is located near I-280 and SR 87 which are under Caltrans jurisdiction. S. 7th Street provides an interchange with I-280; however, the interchange is approximately 1.25 miles north of the Project site, and the Project adds very little traffic to S. 7th Street north of Phelan Avenue during the peak hours. Access to SR 87 is via Alma Avenue to the north of the site or via Curtner Avenue to the south, and the Project adds a very small amount of traffic to Alma Avenue or Curtner Avenue during the peak hours.

Therefore, the I-280 and SR 87 interchanges are not included as study intersections. Furthermore, the Project adds less than 100 trips to either freeway; therefore, a mainline freeway analysis is not performed.

The study area is located entirely within the City of San Jose boundaries, and no other jurisdictions are involved in the discretionary approval process for the Project.

4.0 LOCAL TRANSPORTATION ANALYSIS

This chapter addresses the potential Project effects based on the City's LTA criteria and identifies adverse Project effects, if any, based on the methodology in the City's Transportation Analysis Handbook.

4.1 BICYCLE AND PEDESTRIAN

Leo Avenue currently has sidewalks on both sides of the street which are in good condition. Pedestrians would access the Project site from a pedestrian gate with wheelchair access at the eastern edge of the property. The Project would replace the sidewalk where the easternmost driveway (Gate #4) would be closed and would not conflict with any pedestrian plans. There are no bicycle facilities on Leo Avenue. Bicycle traffic would access the site from the driveways along Leo Avenue. The Project would not conflict with any bicycle facilities plans.

The Project is not expected to generate a sizeable amount of pedestrian or bicycle traffic. The facility could have a limited number of employees who might walk or bike to the site, but the recycle facility would not attract a measurable number of customers who would walk or bike to the site since its customers bring large deliveries of material to the facility. The Project is estimated to increase the number of employees by nine workers and only a portion of those workers might walk or bike to the job. The Project would not have a noticeable effect on the pedestrian or bicycle network.

4.2 TRANSIT

As discussed previously, transit in the vicinity consists of VTA Bus Routes 66 and 68 on Monterey Road and VTA Bus Route 26 on Curtner Avenue/Tully Road. The recycle facility would not attract customers who would use transit to the visit the site since its customers bring large deliveries of material to the facility. The most common users of transit to the site would be employees of the recycle facility. However, the Project is not expected to have a noticeable effect on transit use in the study area.

4.3 INTERSECTION OPERATIONS ANALYSIS

The LTA is based on the peak hour analysis of five study intersections. The analysis examines the Project's effects based on the HCM delay methodology. Conditions with the proposed Project are compared with background conditions to determine adverse Project effects.

4.3.1 Trip Generation

The Project site is currently developed with a recycling facility. The facility currently handles approximately 470 tons of material per day and employs 21 workers. Contractor, commercial, and residential customers deliver materials consisting of construction, demolition, landscaping, and remodeling materials, which are then sorted and shipped off-site. The facility also recovers waste tires, used paint, mattresses, and E-waste. Customers are charged disposal fees for materials. The operation is not a site for redemption of CRV bottles and cans or recyclable metals.

The operators have provided estimates of the numbers of truck trips currently accessing the Project site per day. Customer inbound loads are estimated at 772 truck trips per day, and off-site transfer loads are estimated at 66 truck trips per day for a total of 838 truck trips per day—a rate of approximately 1.78 trucks per ton. Peak hour estimates were derived from information obtained from a similar existing facility in 2013 (**Appendix F**), and the AM peak hour trip generation is estimated to be 11 percent of the daily total and the PM peak hour trip generation is estimated to be 10 percent of the daily total.[1] During the peak hours, half of the truck trips are estimated to enter the site and half are estimated to exit.

The proposed Project consists of increasing the maximum throughput to 500 tons per day and increasing the number of employees to 30. The total increase due to the Project is 30 tons per day (an increase of approximately six percent) and 9 employees. The estimated rate of daily truck trips is approximately 1.78 daily truck trips per ton. Truck trips for the proposed operation are estimated to increase proportionally with the increase in tons per day.

The trip generation for the employees is based on trip rates per employee obtained from the General Light Industrial category (Category 110) from the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 10th Edition*. The ITE rates provide a more conservative estimate of the employee trips than the 2013 technical memorandum. **Table 4-1** summarizes the daily total and weekday AM and PM peak hour trip generation for the existing operation and proposed Project.

As this table shows, the Project's baseline trip total is 82 daily trips, of which 11 occur during the AM peak hour and 10 occur during the PM peak hour.

Toward the end of the day, if the daily limit of 500 tons is received, no more customers would be allowed to dispose of material and any customers waiting in line would be directed to exit the facility.

4.3.2 Project Trip Distribution

Project trips were distributed and assigned to the surrounding streets manually. The distribution estimates were developed using engineering judgement based on levels and locations of development in relation to the location of the Project site and were reviewed and approved by City staff. Customer truck trips would be oriented toward various construction, remodeling, and residential locations around the surrounding areas similar to the distribution for employees. The number of transfer vehicle trips is small in comparison to the customer deliveries, and a negligible amount are expected during the peak hours. Approximately 30 percent of Project trips would be oriented toward the north, 40 percent would be oriented toward the east, 15 percent would be oriented toward the south, and 15 percent would be oriented toward the west. **Figure 4-1** illustrates the Project distribution.

[1] Technical Memorandum – Trip Generation Estimate for a Proposed Recycling Facility at 215 Leo Avenue in the City of San Jose, November 19, 2013.

Table 4-1 Project Trip Generation Summary

Land Use	Quantity	ADT	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out
Trip Generation								
Proposed Operations								
Trucks	500 Tons	892	98	49	49	90	45	45
Employees	30 Empl	92	16	13	3	14	3	11
Proposed Total		984	114	62	52	104	48	56
Existing Operations								
Trucks	470 Tons	838	92	46	46	84	42	42
Employees	21 Empl	64	11	9	2	10	2	8
Existing Total		902	103	55	48	94	44	50
New Trips								
Trucks	30 Tons	54	6	3	3	6	3	3
Employees	9 Empl	28	5	4	1	4	1	3
Total Baseline Trips		**82**	**11**	**7**	**4**	**10**	**4**	**6**
Trip Rates								
Trucks – Percentage of ADT [1]			11%	5.5%	5.5%	10%	5%	5%
Employees [2]	Empl	3.05	0.52	83%	17%	0.49	22%	78%

[1] Source: Technical Memorandum – Trip Generation Estimate for a Proposed Recycling Facility at 215 Leo Avenue in the City of San Jose, November 19, 2013.
[2] Source: ITE *Trip Generation Manual, 10th Ed.* General Light Industrial (Category 110).

ADT = Average daily trips
Empl = Employees

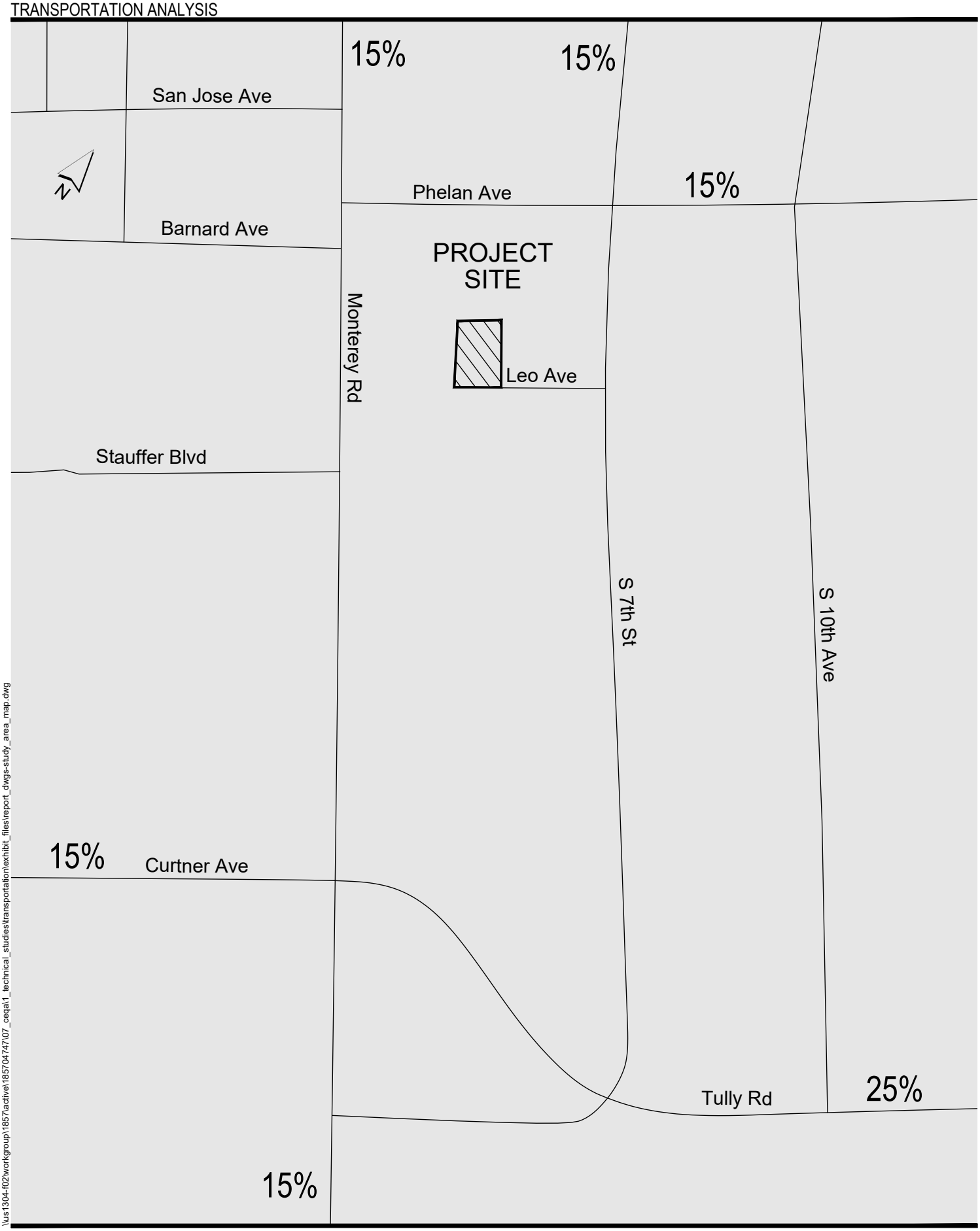

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Figure 4-1
Project Trip Distribution

Typical Project access would be provided by one entrance driveway (Gate #1) and one exit driveway (Gate #2) on Leo Avenue. The long-haul trailers used for transfer deliveries use the third driveway (Gate #3) on Leo Avenue to access the building entrances. These long-haul trailer trips are not expected to occur on a regular basis during the peak hours. In addition, customers with trailers need to use the third driveway (Gate #3) to maneuver into position to back into the building. However, these customer vehicles using the third driveway (Gate #3) to maneuver on-site are not separate trips accessing the site and are accounted for in the trip generation estimate discussed above.

4.3.3 Project Trip Assignment

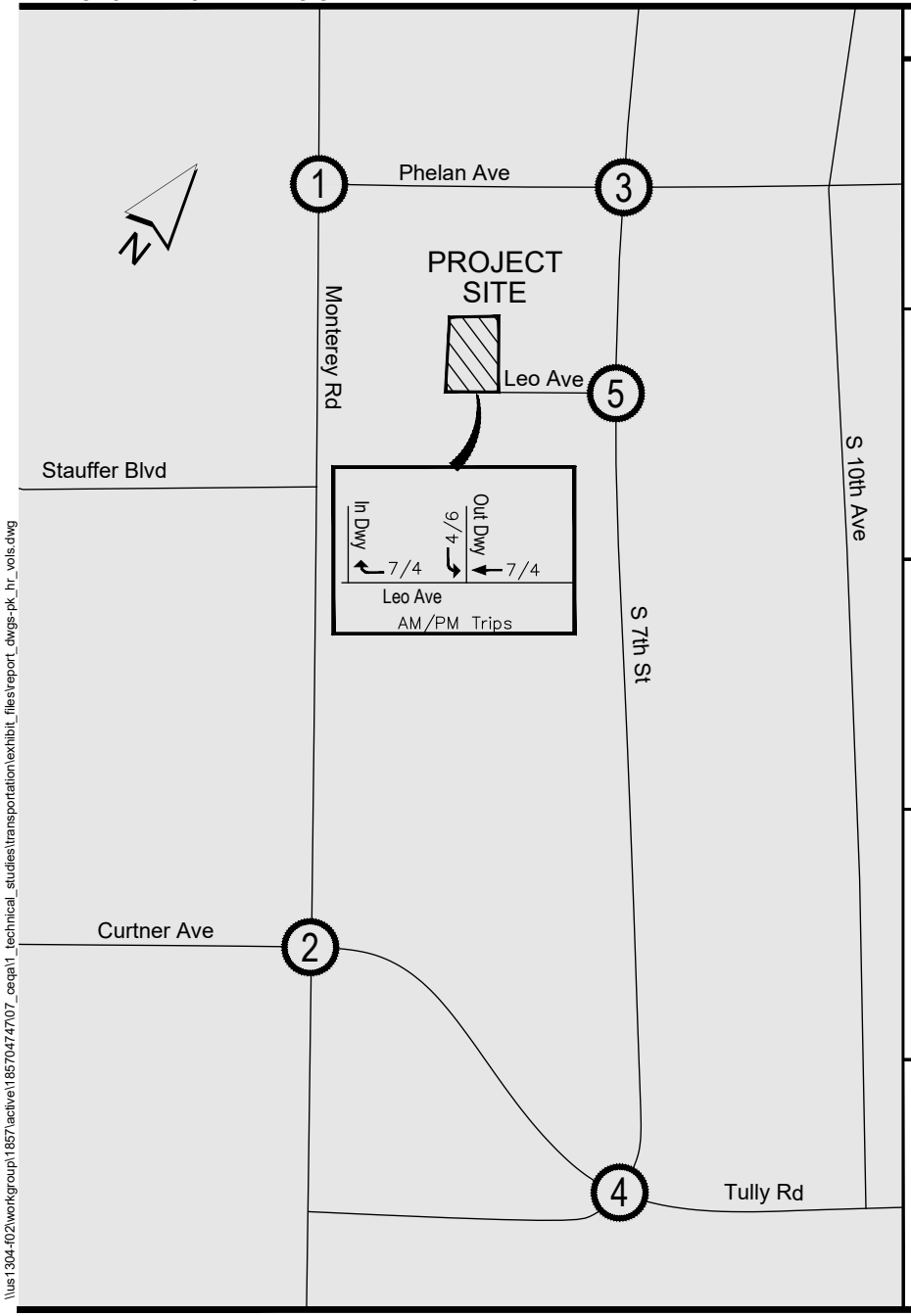
The peak hour Project trips identified in Section 4.4.1 were assigned to the surrounding roadway network according to the distribution presented in the previous Section.

Figure 4-2 illustrates the net new AM and PM peak hour vehicle-trips at the study intersections. **Figure 4-3** illustrates the total trips from the Project site (existing plus new trips).

4.3.4 Background Scenario

The City maintains a database of vehicle-trips of approved but not yet constructed projects, known as the Approved Trip Inventory (ATI), for use in the LTA. City staff provided ATI volumes at the study intersections for this analysis. The ATI volumes were added to the existing count data to represent the background scenario. **Appendix B** summarizes the ATI projects and trips at the study intersections. The ATI peak hour volumes were added to the existing intersection turning movement volumes to produce the AM and PM peak hour background volumes against which the Project effects are evaluated.

Figure 4-4 illustrates the AM and PM peak hour background intersection volumes. **Table 4-2** summarizes the delay and corresponding LOS assuming existing lane configurations under background conditions.



AM Peak Hour	PM Peak Hour
1. Monterey Rd & Phelan Ave	1. Monterey Rd & Phelan Ave
2. Monterey Rd & Curtner Ave/Tully Rd	2. Monterey Rd & Curtner Ave/Tully Rd
3. S. 7th St & Phelan Ave	3. S. 7th St & Phelan Ave
4. S 7th St & Tully Rd	4. S 7th St & Tully Rd
5. S 7th St & Leo Ave	5. S 7th St & Leo Ave

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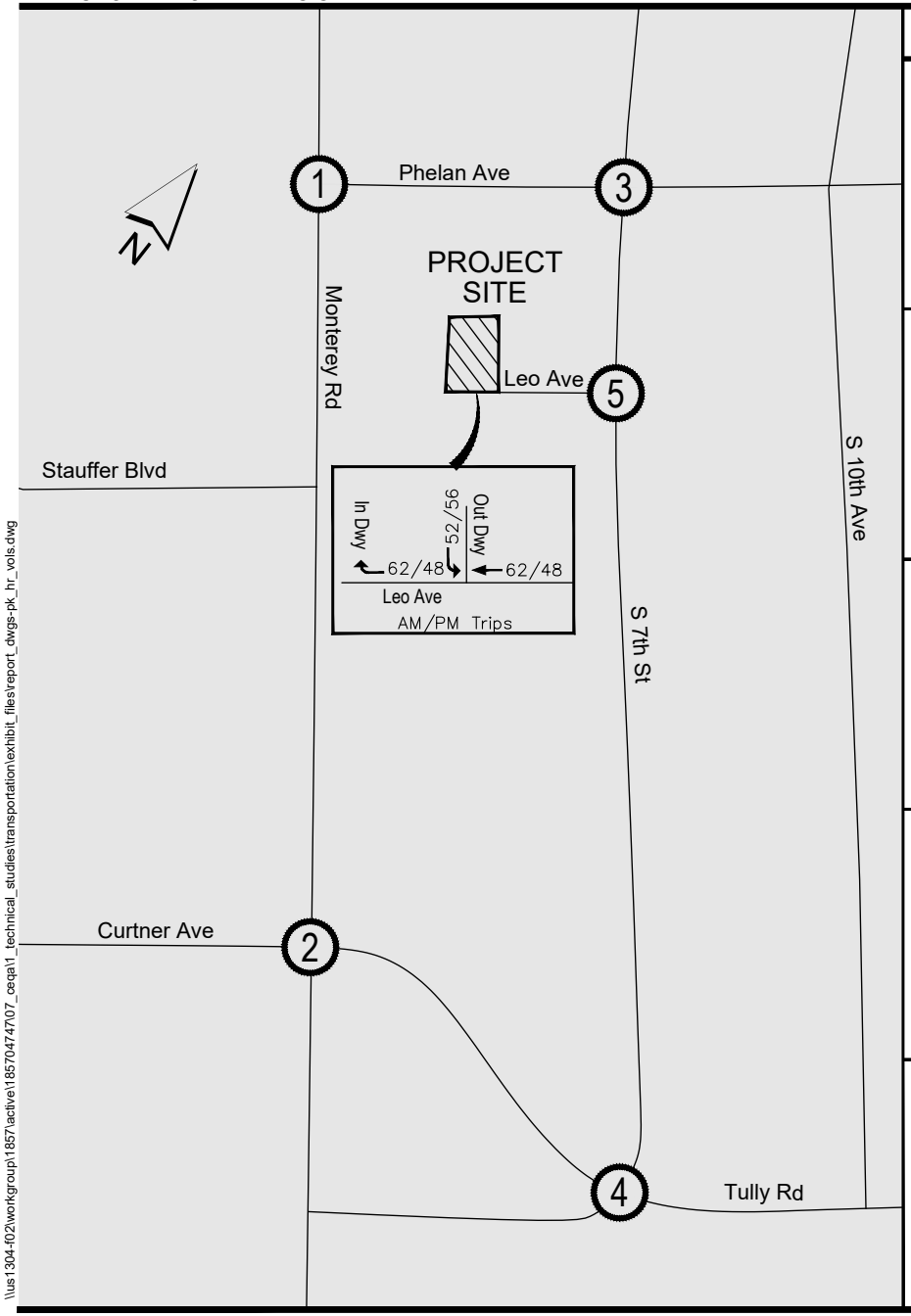
Figure 4-2
Project Peak Hour Trips



AM Peak Hour	PM Peak Hour
1. Monterey Rd & Phelan Ave	1. Monterey Rd & Phelan Ave
2. Monterey Rd & Curtner Ave/Tully Rd	2. Monterey Rd & Curtner Ave/Tully Rd
3. S. 7th St & Phelan Ave	3. S. 7th St & Phelan Ave
4. S 7th St & Tully Rd	4. S 7th St & Tully Rd
5. S 7th St & Leo Ave	5. S 7th St & Leo Ave

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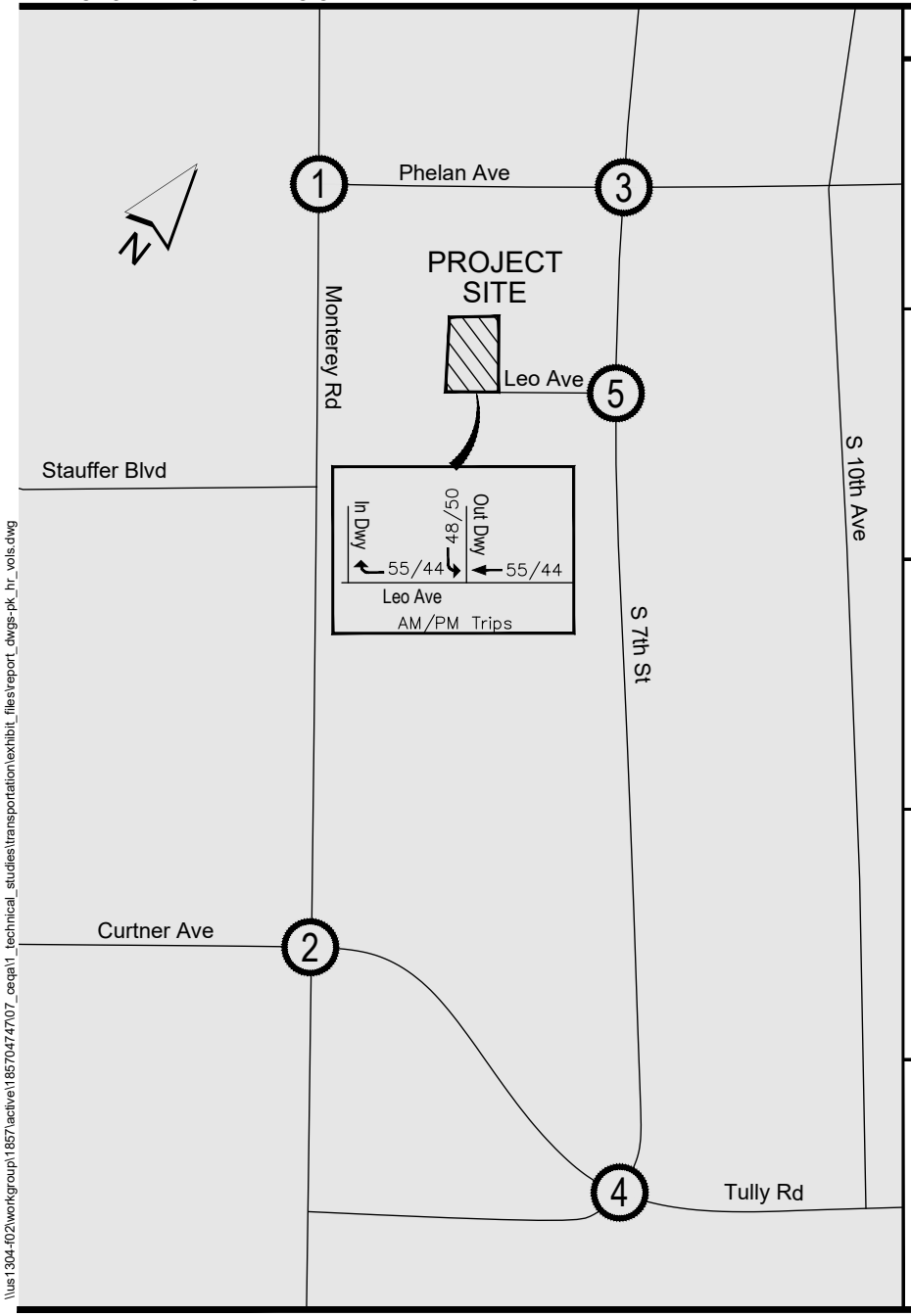
Figure 4-3

Total Site Peak Hour Trips - Existing Plus Project



AM Peak Hour	PM Peak Hour
1. Monterey Rd & Phelan Ave	1. Monterey Rd & Phelan Ave
2. Monterey Rd & Curtner Ave/Tully Rd	2. Monterey Rd & Curtner Ave/Tully Rd
3. S. 7th St & Phelan Ave	3. S. 7th St & Phelan Ave
4. S 7th St & Tully Rd	4. S 7th St & Tully Rd
5. S 7th St & Leo Ave	5. S 7th St & Leo Ave

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Figure 4-4

Background Peak Hour Intersection Volumes

Table 4-2 Background Scenario Delay and Level of Service Summary

Intersection	Control	AM Peak Hour		PM Peak Hour	
		Delay (sec)	LOS	Delay (sec)	LOS
1. Monterey Rd & Phelan Ave	Signal	20.2	C	23.5	C
2. Monterey Rd & Curtner Ave/Tully Rd	Signal	44.6	D	51.6	D
3. S. 7th St & Phelan Ave	Signal	27.3	C	29.7	C
4. S. 7th St & Tully Rd	Signal	41.7	D	38.4	D
5. S. 7th St & Leo Ave	Minor Street Stop	12.1	B	13.4	B
Notes: sec = Seconds of delay per vehicle LOS = Level of service					

As this table shows, the study intersections will continue to operate at LOS D or better during the AM and PM peak hours under the background scenario.

4.3.5 Project Scenario – Background Plus Project Conditions

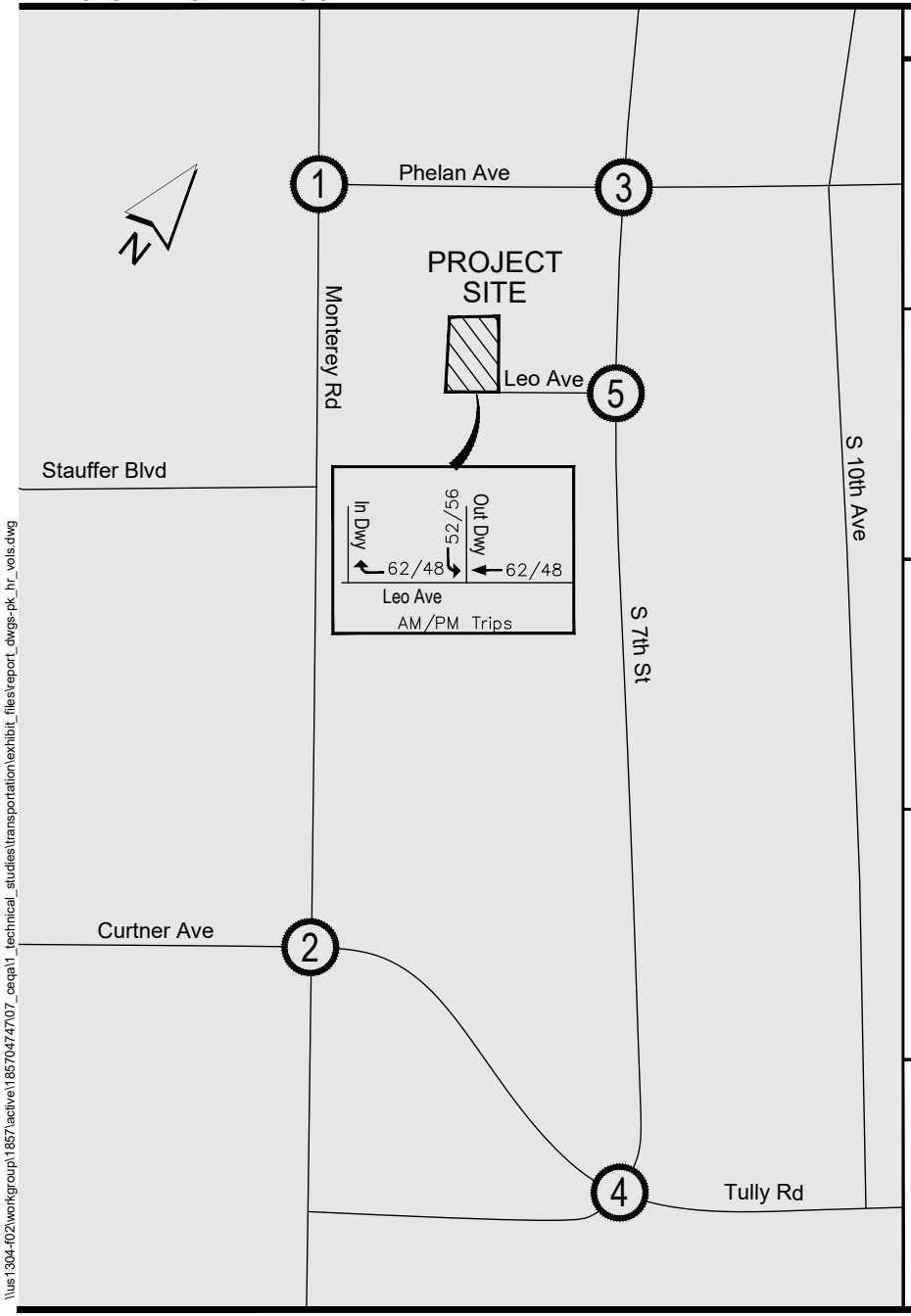
The net peak hour Project trips presented in Section 4.4.3 were added to the background intersection volumes presented in the previous Section to produce the Project scenario. **Figure 4-5** illustrates the AM and PM peak hour Project scenario intersection volumes.

Table 4-3 summarizes the delay and LOS under background plus Project conditions and compares it with background conditions. As this table shows, the study intersections would operate at LOS D or better with the addition of Project trips assuming existing lanes.

As discussed in Chapter 1.0, an adverse effect on intersection operations occurs when the analysis demonstrates that the project causes the operations standard at a study intersection to fall below LOS D with the addition of Project vehicle-trips to background conditions. For signalized intersections already operating at LOS E or F under background conditions, the criteria for determining adverse intersection operations from the Project effect is:

- An increase in average critical delay by 4.0 seconds or more AND an increase in the critical V/C ratio of 0.010 or more; OR
- A decrease in the average critical delay AND an increase in critical V/C ratio of 0.010 or more.

Based on these criteria, none of the study intersections would be adversely affected by the proposed Project. The intersection of Monterey Road and Curtner Avenue/Tully Road is identified on the Santa Clara County Congestion Management Program (CMP) network. The City of San Jose guidelines are consistent with the CMP; therefore, the Project has no adverse effect on the CMP network.



AM Peak Hour	PM Peak Hour
1. Monterey Rd & Phelan Ave	1. Monterey Rd & Phelan Ave
2. Monterey Rd & Curtner Ave/Tully Rd	2. Monterey Rd & Curtner Ave/Tully Rd
3. S. 7th St & Phelan Ave	3. S. 7th St & Phelan Ave
4. S 7th St & Tully Rd	4. S 7th St & Tully Rd
5. S 7th St & Leo Ave	5. S 7th St & Leo Ave

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Figure 4-5

Background Plus Project Peak Hour Intersection Volumes

Table 4-3 Project Scenario Delay and Level of Service Summary

		Background				Background plus Project								
		AM Peak Hour		PM Peak Hour		AM Peak Hour				PM Peak Hour				
Intersection	**Control**	**Delay (sec)**	**LOS**	**Delay (sec)**	**LOS**	**Delay (sec)**	**LOS**	**Incr. in Delay (sec)**	**Incr. in V/C**	**Delay (sec)**	**LOS**	**Incr. in Delay (sec)**	**Incr. in V/C**	**Adverse Effect?**
1. Monterey Rd & Phelan Ave	Signal	20.2	C	23.5	C	20.3	C	0.1	0.001	23.6	C	0.1	0.000	No
2. Monterey Rd & Curtner Ave/Tully Rd	Signal	44.6	D	51.6	D	44.6	D	0.0	0.000	51.6	D	0.0	0.000	No
3. S. 7th St & Phelan Ave	Signal	27.3	C	29.7	C	27.3	C	0.0	0.001	29.7	C	0.0	0.000	No
4. S. 7th St & Tully Rd	Signal	41.7	D	38.4	D	41.8	D	0.1	0.000	38.5	D	0.1	0.001	No
5. S. 7th St & Leo Ave	Minor Street Stop	12.1	B	13.4	B	12.3	B	0.2	0.006	13.6	B	0.2	0.008	No

Notes:
sec = Seconds of delay per vehicle
LOS = Level of service
V/C = Volume/Capacity ratio

4.3.6 Recommendations

The Project would have no adverse effects on the study intersections under background conditions assuming existing lanes, and no improvements are required to eliminate or reduce adverse effects.

4.4 QUEUING ANALYSIS

The Project's potential effect on left-turn storage at the study intersections during the peak hours was evaluated. The Project would add a small amount of peak hour traffic to the left-turn movements at the Monterey Road/Phelan Avenue, S. 7th Street/Phelan Avenue, and S. 7th Street/Tully Road intersections. **Table 4-4** summarizes the left-turn pocket lengths and the 95th percentile queues from the Traffix analysis at the locations where the Project would add trips to the left-turn movement. As this table shows, the southbound left-turn queue at S. 7th Street and Tully Road exceeds the pocket length under existing and background conditions during the AM and PM peak hours; however, the Project would not increase the peak hour queues at the study intersections. The Project has no measurable effect on the left-turn queues.

Table 4-4 Left-Turn Queue Analysis

Intersection	Pocket Length (vehs)	Existing		Background		Background + Project	
		AM (vehs)	PM (vehs)	AM	PM	AM	PM
1. Monterey Rd & Phelan Ave							
Southbound left	7	7	7	7	7	7	7
3. S. 7th St & Phelan Ave							
Northbound	N/A	6	5	6	5	6	5
Westbound	N/A	7	10	9	11	9	11
4. S. 7th St & Tully Rd							
Southbound left	4	5	7	5	7	5	7
Eastbound left	8	4	4	4	4	4	4
vehs = vehicles (25 feet per vehicle) N/A = not applicable – no turn pocket							

4.5 SITE CIRCULATION AND ACCESS

This section discusses on-site circulation and access.

4.5.1 On-Site Circulation

The site has four driveways along Leo Avenue; however, only three are currently used for access (Gates #1, #2, and #3). The City supports the closure of the two easternmost driveways (Gates #3 and #4).

The driveway at the eastern edge of the property (Gate #4) is not used for vehicle access. This easternmost driveway would be closed permanently with the proposed Project, and the driveway curb cut

would be replaced with curb, gutter, and sidewalk. The other three gated driveways (Gates #1, #2, and #3) are necessary for the operation of the facility and would remain open. The westernmost driveway (Gate #1) is used by vehicles to enter the site, the second driveway (Gate #2) is used to exit the site, and the third driveway (Gate #3) is needed for large vehicles to access the building entrances.

Materials delivered to the site by customers are separated by debris type. Some of the materials are unloaded outside of the building and others are unloaded inside the building. The building has three entrances along the southern wall facing Leo Avenue. The western building entrance to Area 1 is 13 feet wide, the middle building entrance to Area 2 is 23 feet wide, and the eastern building entrance to Area 3 is 19.5 feet wide. The building is set back approximately 50 feet from the fence along the property line.

Customer vehicles vary in size. Customer vehicles enter the site via Gate #1 and proceed to the scales where their vehicle and load of materials is weighed. From the scales, drivers are directed to designated areas where they discharge their loads.

The wood and green waste and inert materials are discharged into bunker areas outside the building on the western side of the property. Customers with construction and demolition inert (CD/I) debris enter the building where they are directed to areas where the material is unloaded. Customers with pickups or small trucks can turn directly into the building from the parking lot and turn around inside the building; however, customers with larger trucks or trailers cannot make the turn into the building due to the constricted width of the openings. These customers need Gate #3 for positioning to back into building Areas 2 and 3 by partially exiting Gate #3 and aligning themselves to back up safely, which results in proper alignment inside the building to discharge their load. The extra room the vehicles gain by using Gate #3 for aligning their vehicle for backing provides easier and safer backing maneuvers. Traffic control attendants direct backing vehicles into the building and into place for unloading.

Customers return to the scales outside the building after unloading to determine their fee then exit the site via Gate #2. If the customer has an account set up, the driver may exit the site after unloading material without returning to the scales. **Figure 4-6** illustrates the on-site customer traffic flow for wood, green waste, and inert materials, and **Figure 4-7** illustrates the on-site customer traffic flow for the CD/I debris.

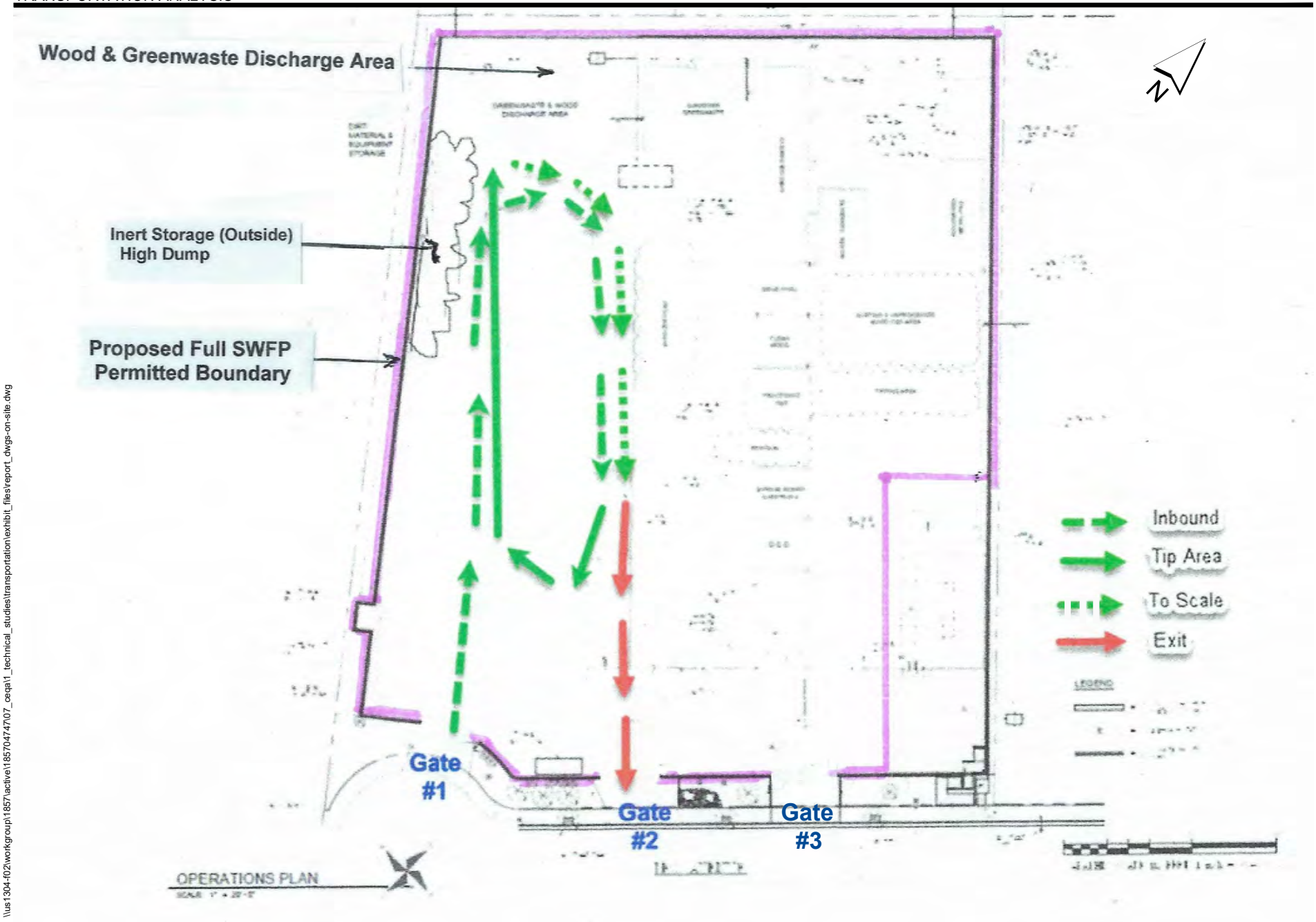

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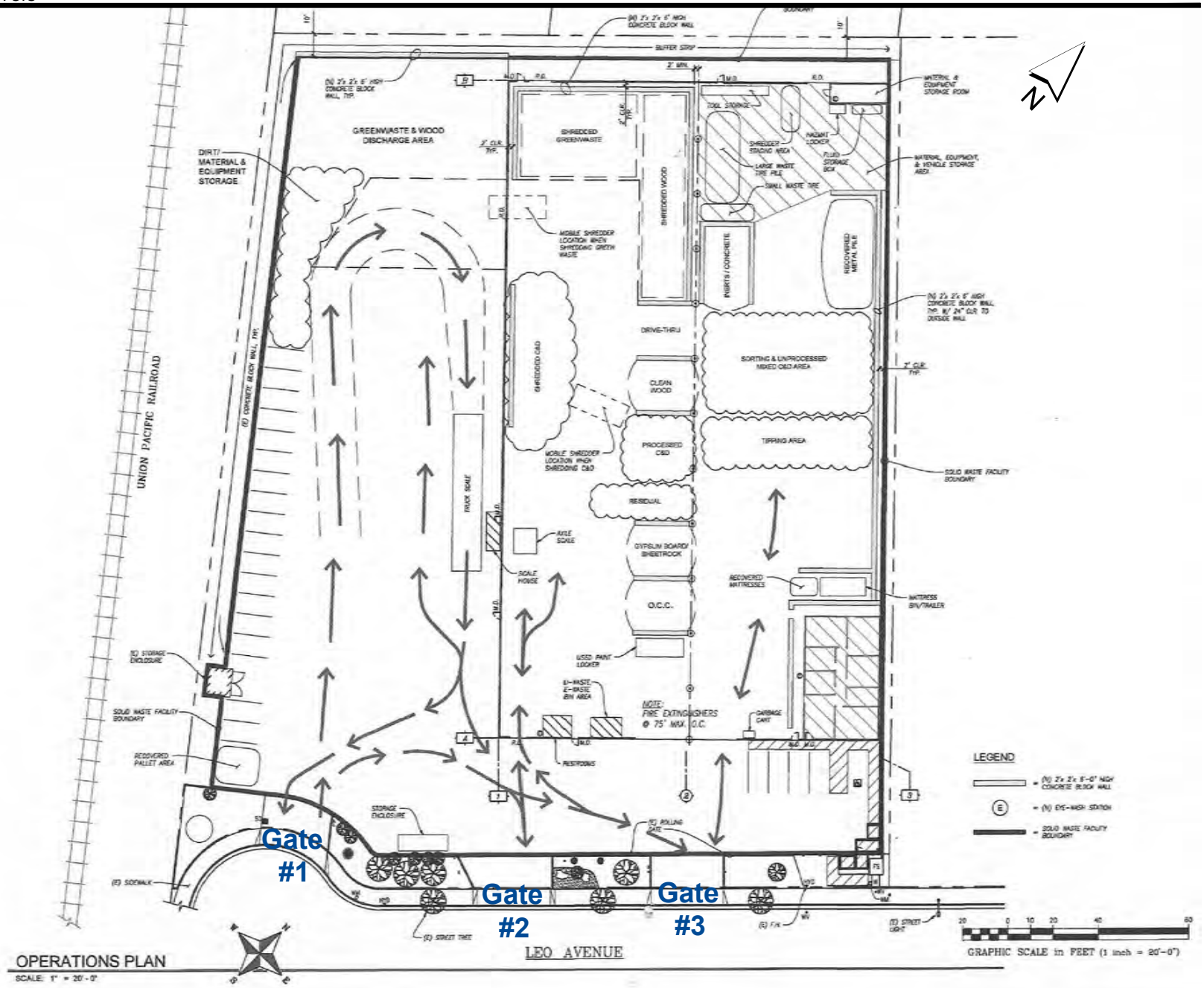
Figure 4-6

On-Site Customer Circulation - Wood, Green Waste, and Inert Materials



\\us1304-f02\workgroup\1857\active\185704747\07_ceqa\1_technical_studies\transportation\exhibit_files\report_dwgs-on-site.dwg

Figure 4-7

On-Site Customer Circulation - CD/I Debris

Materials are processed and loaded daily into transfer vehicles for delivery to off-site landfill, composting, bio-mass energy, or other approved facilities for disposal. The long-haul semi-truck double trailer combinations are used for transfer deliveries. These double trailer combination transfer vehicles must use Gate #2 to access building Area 1 and Gate #3 to access building Areas 2 and 3. The double trailer combination transfer vehicles leave the scale area after initial empty weigh in, partially exit through the driveway at Gate #2 or Gate #3, then back in through the building Area 1, 2, or 3 entrance. Exiting the building, the double trailer combination transfer vehicles drive forward through the driveway, turn right in the street, and return to the scale through Gate #1 to weigh out.

On-site truck turning circulation and example photos are included in **Appendix E**.

The facility operator has employees dedicated to direct traffic both inside and outside the building. Traffic flow through the facility shall be controlled with traffic markings, barricades, traffic control attendants, and/or spotters. Directional signs for ingress and egress would be located on-site and not in the public right-of-way.

The one-way driveway widths are 32 feet wide to accommodate trucks. The driveways are equipped with gates that are open during operational hours and restrict customer access during off-hours. The gate at the westernmost entry driveway (Gate #1) has a gate that swings out towards the street and the second westerly exit driveway (Gate #2) and third driveway (Gate #3) have a rolling gate. There are no parking aisles or buildings within 25 feet of the gates. The driveways meet the 25-foot setback requirement.

The site is designed to accommodate large trucks such as delivery trucks, garbage trucks, and emergency vehicles. The largest vehicle that accesses the site is a semi-truck double trailer with 62-foot wheelbase (WB-62). Truck turning templates for a WB-62 vehicle are shown in **Appendix E**. The truck turning diagram shows that the truck can enter and exit the 32-foot driveways, although to enter Gate #1, the truck swings into the opposite side of the 40-wide street. Since the entrance driveway is at the end of the cul-de-sac street there is nominal traffic, and the truck does not interfere with opposing traffic.

4.5.2 Schedule and Hours of Operation

The proposed Project consists of increasing the operations by 30 tons per day (approximately six percent increase) and increasing the number of employees by 9. The increase would result in an increase of approximately 25 daily transactions and 2 transfer deliveries. As discussed in Section 4.4.1, the increased transactions and employees would result in an increase of 82 daily trips. The facility would run 24 hours per day, 7 days per week. The site would be open to accept materials from 5:30 AM to 7:00 PM Monday through Friday and 5:30 AM to 5:30 PM Saturday and Sunday. Transfer trailers and trucks are brought in daily throughout the day to remove an amount of material roughly equivalent to the amount of material received with the intention to not accumulate materials on-site.

4.5.3 Driveway Operational Analysis

Results from the Traffix analysis (**Appendix C**) show that the driveways would experience very little delay and the 95th percentile on-site queue at the exit driveway (Gate #2 - intersection #7) would be less than one vehicle during the peak hours.

On-site vehicle stacking was evaluated to determine if the expected number of trucks would back onto the street while awaiting processing at the scales. Trucks arrive throughout the day and enter the site via Gate #1. Two scale attendants are used to process vehicles, and traffic control staff are on hand to guide drivers. Arriving trucks are typically lined up in one line on-site but can be stacked into two lines if needed during busy periods. Approximately 6 vehicles can be stored on-site in each line for a total of 12 vehicles. Large trucks are moved directly to the front of the line by the traffic control staff to be processed. The average processing time at the scales is 1 minute and 45 seconds; however, the processing time is faster during the busiest periods. Currently, trucks do not back onto Leo Avenue, and traffic control staff is employed to ensure that Leo Avenue is not impacted.

The proposed Project would add approximately three new truck arrivals during the AM and PM peak hours and would add an average of two new truck arrivals per hour during the non-peak hours. Currently, trucks do not back onto Leo Avenue from the site, and the trucks added by the proposed Project would not noticeably affect the queue of trucks or impact Leo Avenue.

The visibility from the exit driveway (Gate #2) is adequate. Vehicle speeds on the cul-de-sac street are low, and the stopping sight distance for a 25 mph street is 150 feet. There are some small trees with thin trunks and sparse low landscaping to the east of the exit driveway. There is space for one vehicle to park on the street between the exit driveway (Gate #2) and third driveway (Gate #3), but the location of the third driveway (Gate #3) creates a gap in parked vehicles which increases the visibility for vehicles exiting the site. To maintain adequate sight distance for the exit driveway (Gate #2), it is recommended that the curb on the east side of the driveway be repainted red for a minimum of six feet and traffic cones continue to be used to prevent vehicles from parking too close to the driveway.

4.6 NEIGHBORHOOD INTERFACE

Customer vehicles and employees would come from various locations throughout the area and are expected to remain on arterials to access the site. Outbound transfer trucks would follow truck routes to deliver their loads to off-site landfill, composting, or bio-mass energy facilities. The location of the Project site is within an industrial and commercial area of the City. There are no residential neighborhoods in the vicinity, with the exception of an existing mobile home park on S. 7th Street north of Tully Road. Since the level of service of the intersections and roadways in the vicinity of the Project is acceptable there is no reason for Project traffic to cut through the mobile home park streets to avoid congestion. Similarly, the amount of Project traffic and the routes they would take would not noticeably affect school or residential pedestrian circulation or bicycle circulation.

4.7 PARKING

The City's Municipal Code parking rate for Recycling Uses – Transfer Facility is one space per employee of the largest shift plus one space per facility vehicle. The largest shift would consist of 22 employees and there are nine facility vehicles. Standard size parking spaces would be provided for 15 vehicles including 1 electric vehicle space plus 1 accessible space. Additional employee parking for 15 vehicles would be provided at property the applicant owns across the street from the Project site (220 Leo Avenue). Parking for the nine facility vehicles is provided inside the building.

The Municipal Code requires one bicycle parking space per 10 full-time employees. With approximately 30 employees, the Project would require three bicycle parking spaces. The Project would provide three bicycle parking spaces on-site to meet the code requirement.

4.8 CONSTRUCTION OPERATIONS

The proposed Project consists of increasing the existing operations but does not involve construction of new facilities. The closure of the easternmost driveway (Gate #4) would require replacing the section of curb, gutter, and sidewalk at that location. Short-term closure of vehicular lanes and bicycle lanes is not expected.

5.0 CONCLUSIONS

The Project site is currently developed with a 50,000 square foot industrial building for the existing recycling operation. The Project consists of expanding the existing recycling operations from 470 tons per day to a maximum of 500 tons per day, an increase of six percent. The Project does not include expansion of the existing industrial building or construction of new buildings.

With an industrial building of 50,000 square feet on the site, the Project does not meet the City's CEQA screening criteria; therefore, a detailed VMT analysis was performed. The City's VMT Evaluation Tool calculates that the Project site would generate an average of 11.44 VMT per employee, which is below the City's industrial threshold of significance of 14.37 VMT. Therefore, the Project has a less than significant impact on the area VMT. The proposed Project is consistent with the goals of the General Plan and the objectives of Senate Bill 743. The Project is in conformance with Council Policy 5-1.

Project trips were calculated based on estimates of the existing recycling facility in addition to ITE trip rates for General Light Industrial workers. The proposed Project would generate 11 new trips during the AM peak hour, 10 new trips during the PM peak hour, and 82 new daily trips. The Project trips were distributed to the surrounding street network based on levels and locations of development in relation to the Project site.

The Project trips were added to background volumes. The delay and LOS for background plus Project conditions were compared with the background delay and LOS. The study intersections would operate at acceptable LOS D or better under background and background plus Project conditions, and the Project would have no adverse effect on the study intersections during the AM and PM peak hours. The intersection of Monterey Road and Curtner Avenue/Tully Road is identified on the CMP network. The City of San Jose guidelines are consistent with the CMP; therefore, the Project has no adverse effect on the CMP network.

The Project would result in no adverse effect on left-turn queues at the study intersections. Furthermore, the Project would replace the section of sidewalk in front of the driveway (Gate #4) which is being permanently closed and would have no adverse effect on the bike facilities or transit in the vicinity. The intersections in the vicinity of the Project operate at acceptable levels of service, and, with the exception of customers and employees originating from residential neighborhoods, Project traffic would not cut-through the existing residential neighborhoods to access the Project site.

The City supports the closure of the two easternmost driveways (Gates #3 and #4); however, the third driveway (Gate #3) is required for access to the building entrances by large trucks and trucks with trailers. The Project would permanently close the easternmost driveway (Gate #4).

6.0 REFERENCES

1. City of San Jose. April 2018. *Transportation Analysis Handbook*.
2. City of San Jose. March 2018. Council Policy 5-1.
3. Fehr & Peers. February 2018. *San Jose VMT Evaluation Tool: User Guide*.
4. Institute of Transportation Engineers (ITE). September 2017. *Trip Generation Manual, 10th Edition*.

Appendix A SAN JOSE VMT EVALUATION TOOL OUTPUT

CITY OF SAN JOSE VEHICLE MILES TRAVELED EVALUATION TOOL SUMMARY REPORT

PROJECT:

Name: Leo Avenue Recycling Expansion
Location: 215 Leo Avenue
Parcel: 47724049 Parcel Type: Suburb with Multifamily Housing
Tool Version: 2/29/2019
Date: 6/25/2020

Proposed Parking Spaces Vehicles: 0 Bicycles: 0

LAND USE:

Residential:		Percent of All Residential Units	
Single Family	0 DU	Extremely Low Income (≤ 30% MFI)	0 % Affordable
Multi Family	0 DU	Very Low Income (> 30% MFI, ≤ 50% MFI)	0 % Affordable
Subtotal	0 DU	Low Income (> 50% MFI, ≤ 80% MFI)	0 % Affordable
Office:	0 KSF		
Retail:	0 KSF		
Industrial:	50 KSF		

VMT REDUCTION STRATEGIES

Tier 1 - Project Characteristics

Increase Residential Density
- Existing Density (DU/Residential Acres in half-mile buffer) 5
- With Project Density (DU/Residential Acres in half-mile buffer) 5

Increase Development Diversity
- Existing Activity Mix Index 0.99
- With Project Activity Mix Index 0.99

Integrate Affordable and Below Market Rate
- Extremely Low Income BMR units . . . . . 0 %
- Very Low Income BMR units . . . . . 0 %
- Low Income BMR units . . . . . 0 %

Increase Employment Density
- Existing Density (Jobs/Commercial Acres in half-mile buffer) 20
- With Project Density (Jobs/Commercial Acres in half-mile buffer) 20

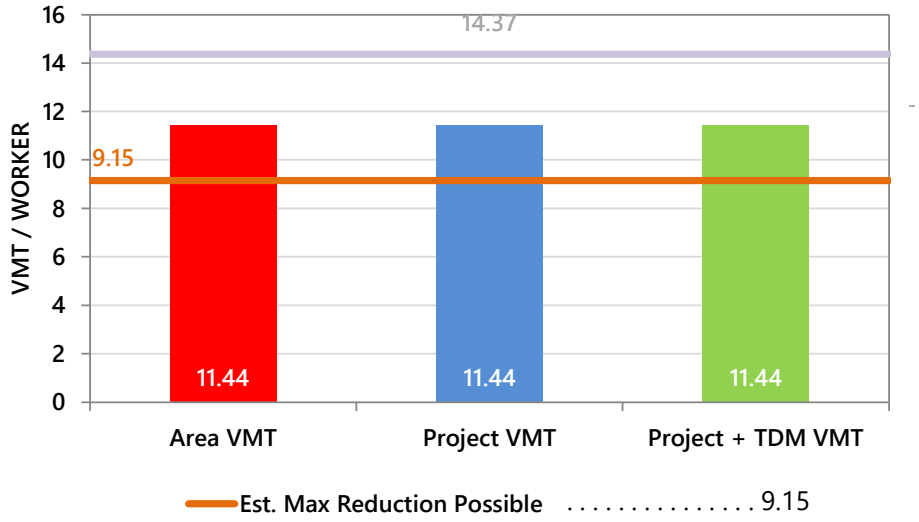
Tier 2 - Multimodal Infrastructure

Tier 3 - Parking

Tier 4 - TDM Programs

EMPLOYMENT ONLY

The tool estimates that the project would generate per non-industrial worker VMT below the City's threshold.



Appendix B APPROVED TRIP INVENTORY

AM PROJECT TRIPS

05/15/2020

Intersection of : Curtner Av & Monterey Rd

Traffix Node Number : 3095

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
CP15-078 (3-02651) Residential 2500 SENTER ROAD CHARATIES HOUSING RESIDENTIAL PROJECT	0	0	0	7	7	0	0	4	2	0	1	0
DOWNTOWN LEGACY DOWNTOWN CORE DOWNTOWN STRATEGY PLAN 2000	7	38	0	1	4	1	2	8	3	0	11	4
PDC02-066 (3-16147) Residential GOBLE LN & MONTEREY RD (SW/C) GOBLE LANE	81	16	0	0	9	0	0	0	44	0	0	0
PDC10-026 (3-18541) Retail/Commercial E/SIDE MONTEREY HIGHWAY, SOUTH OF ALMA SUN GARDEN RETAIL CENTER	0	10	0	3	5	3	4	0	0	0	0	5
PDC13-009 (IND) (3-18407) LEGACY COMMUNICATION HILL	0	0	0	1	19	49	115	21	0	0	37	0
PDC13-009 (RES) (3-18407) LEGACY COMMUNICATIONS HILL	0	0	0	0	8	21	49	9	0	0	15	0
PDC13-009 (RET) (3-18407) LEGACY COMMUNICATIONS HILL	0	0	0	0	0	0	2	1	0	0	1	0

TOTAL:	**88**	**64**	**0**	**12**	**52**	**74**	**172**	**43**	**49**	**0**	**65**	**9**

	LEFT	THRU	RIGHT
NORTH	12	52	74
EAST	0	65	9
SOUTH	88	64	0
WEST	172	43	49

PM PROJECT TRIPS

05/15/2020

Intersection of : Curtner Av & Monterey Rd

Traffix Node Number : 3095

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
CP15-078 (3-02651) Residential 2500 SENTER ROAD CHARATIES HOUSING RESIDENTIAL PROJECT	0	0	0	1	1	0	0	1	0	7	5	0
DOWNTOWN LEGACY DOWNTOWN CORE DOWNTOWN STRATEGY PLAN 2000	8	16	0	6	47	7	4	18	10	3	18	5
PDC02-066 (3-16147) Residential GOBLE LN & MONTEREY RD (SW/C) GOBLE LANE	45	9	0	0	17	0	0	0	83	0	0	0
PDC10-026 (3-18541) Retail/Commercial E/SIDE MONTEREY HIGHWAY, SOUTH OF ALMA SUN GARDEN RETAIL CENTER	0	17	0	8	13	6	6	0	0	0	0	8
PDC13-009 (IND) (3-18407) LEGACY COMMUNICATION HILL	0	13	0	0	0	118	118	17	0	0	9	0
PDC13-009 (RES) (3-18407) LEGACY COMMUNICATIONS HILL	0	6	0	0	0	57	57	8	0	0	3	0
PDC13-009 (RET) (3-18407) LEGACY COMMUNICATIONS HILL	0	1	0	0	0	4	4	0	0	0	1	0

TOTAL:	**53**	**62**	**0**	**15**	**78**	**192**	**189**	**44**	**93**	**10**	**36**	**13**

	LEFT	**THRU**	**RIGHT**
NORTH	15	78	192
EAST	10	36	13
SOUTH	53	62	0
WEST	189	44	93

AM PROJECT TRIPS

05/15/2020

Intersection of : Monterey Rd & Phelan Av

Traffix Node Number : 3704

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
H15-039 Retail/Commercial 1402 MONTEREY ROAD DCP	0	20	0	0	55	0	0	0	0	0	0	45
H16-013 (3-10278) Retail/Commercial 353 W JULIAN ST RIVER CORPORATE CENTER BLDG 3	0	20	0	0	55	0	0	0	0	0	0	45
PDC02-066 (3-16147) Residential GOBLE LN & MONTEREY RD (SW/C) GOBLE LANE	0	16	0	0	9	0	0	0	0	0	0	0
PDC10-026 (3-18541) Retail/Commercial E/SIDE MONTEREY HIGHWAY, SOUTH OF ALMA SUN GARDEN RETAIL CENTER	0	20	0	1	12	0	0	0	0	0	0	2
SP13-068 (3-18833) Office/Industrial 0 SOUTH 7TH STREET SAN JOSE CA 95112 VALLEY RECYCLING	0	0	7	2	0	0	0	0	0	4	0	1
TOTAL:	**0**	**76**	**7**	**3**	**131**	**0**	**0**	**0**	**0**	**4**	**0**	**93**

	LEFT	THRU	RIGHT
NORTH	3	131	0
EAST	4	0	93
SOUTH	0	76	7
WEST	0	0	0

PM PROJECT TRIPS

05/15/2020

Intersection of : Monterey Rd & Phelan Av

Traffix Node Number : 3704

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
H15-039 Retail/Commercial 1402 MONTEREY ROAD DCP	0	10	0	0	-14	0	0	0	0	0	0	17
H16-013 (3-10278) Retail/Commercial 353 W JULIAN ST RIVER CORPORATE CENTER BLDG 3	0	10	0	0	-14	0	0	0	0	0	0	17
PDC02-066 (3-16147) Residential GOBLE LN & MONTEREY RD (SW/C) GOBLE LANE	0	9	0	0	17	0	0	0	0	0	0	0
PDC10-026 (3-18541) Retail/Commercial E/SIDE MONTEREY HIGHWAY, SOUTH OF ALMA SUN GARDEN RETAIL CENTER	0	32	0	4	28	0	0	0	0	0	0	4
SP13-068 (3-18833) Office/Industrial 0 SOUTH 7TH STREET SAN JOSE CA 95112 VALLEY RECYCLING	0	0	5	2	0	0	0	0	0	8	0	3
TOTAL:	**0**	**61**	**5**	**6**	**17**	**0**	**0**	**0**	**0**	**8**	**0**	**41**

	LEFT	THRU	RIGHT
NORTH	6	17	0
EAST	8	0	41
SOUTH	0	61	5
WEST	0	0	0

AM PROJECT TRIPS

05/15/2020

Intersection of : S 7th St / Old Tully Rd & Tully Rd

Traffix Node Number : 3803

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
CP15-078 (3-02651) Residential 2500 SENTER ROAD CHARATIES HOUSING RESIDENTIAL PROJECT	0	0	0	4	5	0	0	8	0	0	1	0
PDC02-066 (3-16147) Residential GOBLE LN & MONTEREY RD (SW/C) GOBLE LANE	0	4	53	0	2	0	0	0	0	29	0	0
PDC13-009 (IND) (3-18407) LEGACY COMMUNICATION HILL	0	5	9	0	0	4	4	18	0	1	0	0
PDC13-009 (RES) (3-18407) LEGACY COMMUNICATIONS HILL	0	1	3	0	0	1	1	7	0	0	0	0
PDC13-009 (RET) (3-18407) LEGACY COMMUNICATIONS HILL	0	1	0	0	0	0	0	1	0	0	0	0
TOTAL:	**0**	**11**	**65**	**4**	**7**	**5**	**5**	**34**	**0**	**30**	**1**	**0**

	LEFT	THRU	RIGHT
NORTH	4	7	5
EAST	30	1	0
SOUTH	0	11	65
WEST	5	34	0

PM PROJECT TRIPS

05/15/2020

Intersection of : S 7th St / Old Tully Rd & Tully Rd

Traffix Node Number : 3803

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
CP15-078 (3-02651) Residential 2500 SENTER ROAD CHARATIES HOUSING RESIDENTIAL PROJECT	0	0	0	0	1	0	0	2	0	0	6	0
PDC02-066 (3-16147) Residential GOBLE LN & MONTEREY RD (SW/C) GOBLE LANE	0	2	30	0	5	0	0	0	0	55	0	0
PDC13-009 (IND) (3-18407) LEGACY COMMUNICATION HILL	0	0	1	2	0	5	3	0	0	7	3	0
PDC13-009 (RES) (3-18407) LEGACY COMMUNICATIONS HILL	0	0	0	0	0	2	0	0	0	3	0	0
PDC13-009 (RET) (3-18407) LEGACY COMMUNICATIONS HILL	0	0	0	0	0	0	1	0	0	0	0	0
TOTAL:	**0**	**2**	**31**	**2**	**6**	**7**	**4**	**2**	**0**	**65**	**9**	**0**

	LEFT	THRU	RIGHT
NORTH	2	6	7
EAST	65	9	0
SOUTH	0	2	31
WEST	4	2	0

AM PROJECT TRIPS

05/15/2020

Intersection of : S 7th St & Phelan Av

Traffix Node Number : 3901

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
H15-039 Retail/Commercial 1402 MONTEREY ROAD DCP	2	0	0	0	2	12	0	0	0	0	30	0
H16-013 (3-10278) Retail/Commercial 353 W JULIAN ST RIVER CORPORATE CENTER BLDG 3	2	0	0	0	2	12	0	0	0	0	30	0
TOTAL:	**4**	**0**	**0**	**0**	**4**	**24**	**0**	**0**	**0**	**0**	**60**	**0**

	LEFT	THRU	RIGHT
NORTH	0	4	24
EAST	0	60	0
SOUTH	4	0	0
WEST	0	0	0

PM PROJECT TRIPS

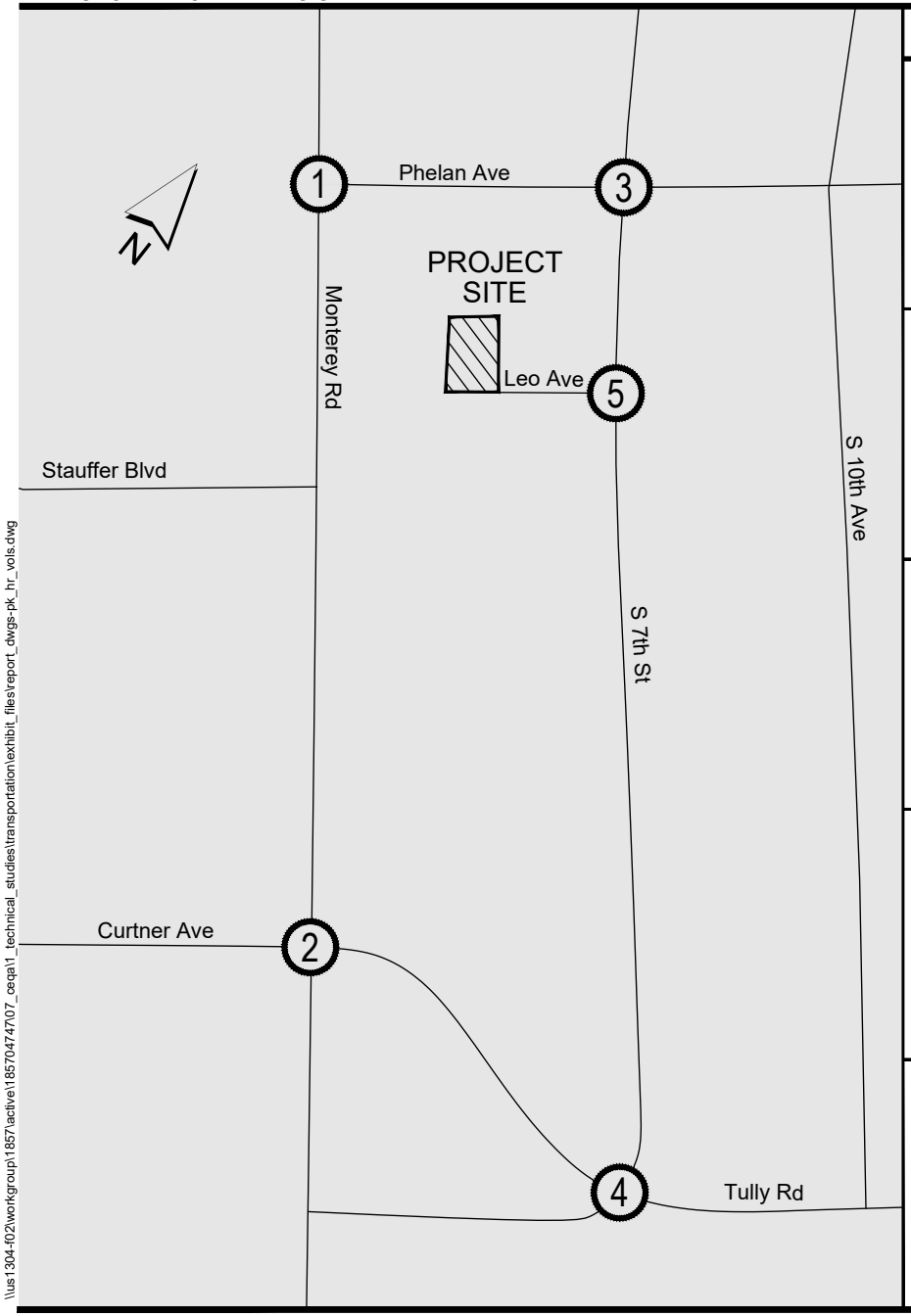
05/15/2020

Intersection of : S 7th St & Phelan Av

Traffix Node Number : 3901

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
H15-039 Retail/Commercial 1402 MONTEREY ROAD DCP	0	0	0	0	4	9	0	0	0	0	7	0
H16-013 (3-10278) Retail/Commercial 353 W JULIAN ST RIVER CORPORATE CENTER BLDG 3	0	0	0	0	4	9	0	0	0	0	7	0
TOTAL:	**0**	**0**	**0**	**0**	**8**	**18**	**0**	**0**	**0**	**0**	**14**	**0**

	LEFT	THRU	RIGHT
NORTH	0	8	18
EAST	0	14	0
SOUTH	0	0	0
WEST	0	0	0



AM Peak Hour	PM Peak Hour
1. Monterey Rd & Phelan Ave	1. Monterey Rd & Phelan Ave
2. Monterey Rd & Curtner Ave/Tully Rd	2. Monterey Rd & Curtner Ave/Tully Rd
3. S. 7th St & Phelan Ave	3. S. 7th St & Phelan Ave
4. S 7th St & Tully Rd	4. S 7th St & Tully Rd
5. S 7th St & Leo Ave	5. S 7th St & Leo Ave

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Figure B-1
ATI Peak Hour Trips

Appendix C INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

Existing

Leo Recycle Project

Scenario Report

Scenario:	AM Peak - Existing
Command:	Base
Volume:	Existing AM Peak Hour
Geometry:	Existing - AM
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Leo Recycle Project

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in D/V
# 1 Monterey Rd & Phelan Ave	B	17.7	0.580	B	17.7	0.580	+ 0.000
# 2 Monterey Rd & Curtner Ave/Tull	D	39.8	0.647	D	39.8	0.647	+ 0.000
# 3 S 7th St & Phelan Ave	C	26.8	0.465	C	26.8	0.465	+ 0.000
# 4 S 7th St & Tully Rd	D	40.8	0.421	D	40.8	0.421	+ 0.000
# 5 S 7th St & Leo Ave	B	12.1	0.099	B	12.1	0.099	+ 0.000
# 6 Project Dwy - West & Leo Ave	A	0.0	0.000	A	0.0	0.000	+ 0.000
# 7 Project Dwy - East & Leo Ave	A	9.1	0.051	A	9.1	0.051	+ 0.000

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Monterey Rd & Phelan Ave

Cycle (sec):	160	Critical Vol./Cap.(X):	0.580
Loss Time (sec):	9	Average Delay (sec/veh):	17.7
Optimal Cycle:	160	Level Of Service:	B

Street Name:	Monterey Rd						Phelan Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Ovl		
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	0 0	0 0	1	1 0	1! 0	1
Volume Module: >> Count Date: 28 Oct 2015 << AM Peak Hour												
Base Vol:	24	2387	135	122	456	1	0	0	0	120	1	83
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	24	2387	135	122	456	1	0	0	0	120	1	83
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	24	2387	135	122	456	1	0	0	0	120	1	83
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	24	2387	135	122	456	1	0	0	0	120	1	83
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	2387	135	122	456	1	0	0	0	120	1	83
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	2387	135	122	456	1	0	0	0	120	1	83
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	1.00	0.92	0.92	0.92	0.92
Lanes:	1.00	3.00	1.00	1.00	2.99	0.01	0.00	0.00	1.00	1.59	0.01	1.40
Final Sat.:	1750	5700	1750	1750	5588	12	0	0	1750	2774	17	2459
Capacity Analysis Module:												
Vol/Sat:	0.01	0.42	0.08	0.07	0.08	0.08	0.00	0.00	0.00	0.04	0.06	0.03
Crit Moves:		****		****							****	
Green Time:	47.1	116	115.6	19.2	87.8	87.8	0.0	0.0	0.0	16.2	16.2	35.4
Volume/Cap:	0.05	0.58	0.11	0.58	0.15	0.15	0.00	0.00	0.00	0.43	0.58	0.15
Delay/Veh:	40.6	11.2	6.8	77.7	17.9	17.9	0.0	0.0	0.0	70.4	75.5	50.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.6	11.2	6.8	77.7	17.9	17.9	0.0	0.0	0.0	70.4	75.5	50.4
LOS by Move:	D	B+	A	E-	B	B	A	A	A	E	E-	D
HCM2kAvgQ:	1	18	2	7	4	4	0	0	0	4	6	2

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Monterey Rd & Curtner Ave/Tully Rd

Cycle (sec):	160	Critical Vol./Cap.(X):	0.647
Loss Time (sec):	12	Average Delay (sec/veh):	39.8
Optimal Cycle:	160	Level Of Service:	D

Street Name:	Monterey Rd						Curtner Ave/Tully Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	2 0	3 0	1	2 0	2 0	1	2 0	2 1	0
Volume Module: >> Count Date: 22 Oct 2019 << AM Peak Hour												
Base Vol:	572	1887	51	128	306	60	135	470	234	25	769	176
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	572	1887	51	128	306	60	135	470	234	25	769	176
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	572	1887	51	128	306	60	135	470	234	25	769	176
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	572	1887	51	128	306	60	135	470	234	25	769	176
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	572	1887	51	128	306	60	135	470	234	25	769	176
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	572	1887	51	128	306	60	135	470	234	25	769	176
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.98	0.95	0.83	1.00	0.92	0.83	1.00	0.92	0.83	0.99	0.95
Lanes:	2.00	2.92	0.08	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.42	0.58
Final Sat.:	3150	5452	147	3150	5700	1750	3150	3800	1750	3150	4556	1043
Capacity Analysis Module:												
Vol/Sat:	0.18	0.35	0.35	0.04	0.05	0.03	0.04	0.12	0.13	0.01	0.17	0.17
Crit Moves:		****		****			****				****	
Green Time:	71.2	85.6	85.6	10.1	24.5	35.1	10.6	38.7	109.8	13.7	41.8	41.8
Volume/Cap:	0.41	0.65	0.65	0.65	0.35	0.16	0.65	0.51	0.19	0.09	0.65	0.65
Delay/Veh:	30.3	27.0	27.0	80.5	60.9	50.7	79.8	53.0	9.2	67.6	53.6	53.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.3	27.0	27.0	80.5	60.9	50.7	79.8	53.0	9.2	67.6	53.6	53.6
LOS by Move:	C	C	C	F	E	D	E-	D-	A	E	D-	D-
HCM2kAvgQ:	11	23	23	5	5	3	5	10	4	1	14	14

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 S 7th St & Phelan Ave

Cycle (sec):	104	Critical Vol./Cap.(X):	0.465
Loss Time (sec):	9	Average Delay (sec/veh):	26.8
Optimal Cycle:	104	Level Of Service:	C

Street Name:	S 7th St						Phelan Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Ovl			Ovl			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	1! 0	0	0 1	0	0	0	1! 0
Volume Module: >> Count Date: 2 Oct 2019 << AM Peak Hour												
Base Vol:	31	204	50	25	156	84	86	145	40	48	181	25
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	31	204	50	25	156	84	86	145	40	48	181	25
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	31	204	50	25	156	84	86	145	40	48	181	25
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	31	204	50	25	156	84	86	145	40	48	181	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	204	50	25	156	84	86	145	40	48	181	25
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	31	204	50	25	156	84	86	145	40	48	181	25
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.92	0.92	0.92
Lanes:	0.13	0.87	1.00	0.09	0.59	0.32	0.37	0.63	1.00	0.19	0.71	0.10
Final Sat.:	237	1563	1750	165	1030	555	670	1130	1750	331	1247	172
Capacity Analysis Module:												
Vol/Sat:	0.13	0.13	0.03	0.15	0.15	0.15	0.13	0.13	0.02	0.15	0.15	0.15
Crit Moves:					****			****				****
Green Time:	33.9	33.9	66.3	33.9	33.9	62.5	28.7	28.7	28.7	32.5	32.5	32.5
Volume/Cap:	0.40	0.40	0.04	0.47	0.47	0.25	0.47	0.47	0.08	0.47	0.47	0.47
Delay/Veh:	27.7	27.7	7.0	28.5	28.5	9.9	32.0	32.0	28.0	29.4	29.4	29.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.7	27.7	7.0	28.5	28.5	9.9	32.0	32.0	28.0	29.4	29.4	29.4
LOS by Move:	C	C	A	C	C	A	C	C	C	C	C	C
HCM2kAvgQ:	6	6	1	7	7	4	7	7	1	7	7	7

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 S 7th St & Tully Rd

Cycle (sec):	160	Critical Vol./Cap.(X):	0.421
Loss Time (sec):	12	Average Delay (sec/veh):	40.8
Optimal Cycle:	160	Level Of Service:	D

Street Name:	S 7th St						Tully Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ovl			Ovl		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module: >> Count Date: 2 Oct 2019 << AM Peak Hour												
Base Vol:	5	130	403	88	48	52	63	587	8	135	857	78
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	130	403	88	48	52	63	587	8	135	857	78
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	130	403	88	48	52	63	587	8	135	857	78
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	130	403	88	48	52	63	587	8	135	857	78
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	130	403	88	48	52	63	587	8	135	857	78
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	5	130	403	88	48	52	63	587	8	135	857	78
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	5700	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.07	0.23	0.05	0.03	0.03	0.04	0.10	0.00	0.08	0.15	0.04
Crit Moves:			****	****			****				****	
Green Time:	31.8	58.1	88.5	19.1	45.4	59.1	13.7	40.5	72.3	30.3	57.1	76.2
Volume/Cap:	0.01	0.19	0.42	0.42	0.09	0.08	0.42	0.41	0.01	0.41	0.42	0.09
Delay/Veh:	51.5	34.9	21.1	66.7	42.1	32.8	71.3	50.0	24.2	57.8	39.1	23.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	51.5	34.9	21.1	66.7	42.1	32.8	71.3	50.0	24.2	57.8	39.1	23.0
LOS by Move:	D-	C-	C+	E	D	C-	E	D	C	E+	D	C
HCM2kAvgQ:	0	4	12	5	2	2	4	8	0	6	10	2

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 S 7th St & Leo Ave

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: B[12.1]

Street Name:	S 7th St								Leo Ave							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	1 0	0	0	0	1 0	0	0	1!	0 0	0	0	1!	0 0
Volume Module: >> Count Date: 1 Jan 2019 << AM Peak Hour																
Base Vol:	50	290	0	0	250	50	50	0	50	0	0	0				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	50	290	0	0	250	50	50	0	50	0	0	0				
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	50	290	0	0	250	50	50	0	50	0	0	0				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	50	290	0	0	250	50	50	0	50	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	50	290	0	0	250	50	50	0	50	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	7.1	6.5	6.2				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3				
Capacity Module:																
Cnflict Vol:	300	xxxx	xxxxx	xxxx	xxxx	xxxxx	520	665	275	690	690	145				
Potent Cap.:	1273	xxxx	xxxxx	xxxx	xxxx	xxxxx	520	383	769	362	371	908				
Move Cap.:	1273	xxxx	xxxxx	xxxx	xxxx	xxxxx	504	368	769	328	356	908				
Volume/Cap:	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	0.10	0.00	0.07	0.00	0.00	0.00				
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*				
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	609	xxxxx		xxxx	0	xxxxx	
SharedQueue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx		0.6	xxxxx	xxxxx	xxxx	xxxxx			
Shrd ConDel:	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx		12.1	xxxxx	xxxxx	xxxx	xxxxx			
Shared LOS:	A	*	*	*	*	*	*		B	*	*	*	*			
ApproachDel:	xxxxxx			xxxxxx				12.1				xxxxxx				
ApproachLOS:	*			*				B				*				

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Project Dwy - West & Leo Ave [Enter Dwy]

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Street Name:	Project Dwy - West						Leo Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 0 0 0			0 0 1 0 0			0 0 0 1 0		
Volume Module: >> Count Date: 1 Jan 2019 << AM Peak Hour												
Base Vol:	0	0	0	0	0	0	0	10	0	0	10	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	10	0	0	10	55
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	0	0	10	0	0	10	55
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	0	10	0	0	10	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	0	0	10	0	0	10	55
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Project Dwy - East & Leo Ave [Exit Dwy]

Average Delay (sec/veh): 3.5 Worst Case Level Of Service: A[9.1]

Street Name:	Project Dwy - East						Leo Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0	1	0 0	0 0	0	0 1	0 0	0	0 1	0 0
Volume Module: >> Count Date: 1 Jan 2019 << AM Peak Hour												
Base Vol:	0	0	0	48	0	0	0	10	0	0	65	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	48	0	0	0	10	0	0	65	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	48	0	0	0	10	0	0	65	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	48	0	0	0	10	0	0	65	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	48	0	0	0	10	0	0	65	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	75	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	933	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	933	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.05	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			9.1			xxxxxx			xxxxxx		
ApproachLOS:	*			A			*			*		

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Future Queue Report (cars)

Node	Intersection	Northbound L	Northbound T	Northbound R	Southbound L	Southbound T	Southbound R	Eastbound L	Eastbound T	Eastbound R	Westbound L	Westbound T	Westbound R
#1	[HCM2kAvgQ]:	1	18	2	7	4	4	0	0	0	4	6	2
#2	[HCM2kAvgQ]:	11	23	23	5	5	3	5	10	4	1	14	14
#3	[HCM2kAvgQ]:	6	6	1	7	7	4	7	7	1	7	7	7
#4	[HCM2kAvgQ]:	0	4	12	5	2	2	4	8	0	6	10	2
#5	[2Way95thQ]:	0.1	0.1	xxxx	xxxx	xxxx	xxxx	0.6	0.6	0.6	xxxx	xxxx	xxxx
#6	[2Way95thQ]:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
#7	[2Way95thQ]:	xxxx	xxxx	xxxx	0.2	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx

Leo Recycle Project

Scenario Report

Scenario:	PM Peak - Existing
Command:	Base
Volume:	Existing PM Peak Hour
Geometry:	Existing - PM
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Leo Recycle Project

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in D/V
# 1 Monterey Rd & Phelan Ave	C+	23.0	0.371	C+	23.0	0.371	+ 0.000
# 2 Monterey Rd & Curtner Ave/Tull	D	48.7	0.722	D	48.7	0.722	+ 0.000
# 3 S 7th St & Phelan Ave	C	29.3	0.656	C	29.3	0.656	+ 0.000
# 4 S 7th St & Tully Rd	D+	37.3	0.547	D+	37.3	0.547	+ 0.000
# 5 S 7th St & Leo Ave	B	13.3	0.113	B	13.3	0.113	+ 0.000
# 6 Project Dwy - West & Leo Ave	A	0.0	0.000	A	0.0	0.000	+ 0.000
# 7 Project Dwy - East & Leo Ave	A	9.0	0.053	A	9.0	0.053	+ 0.000

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Monterey Rd & Phelan Ave

Cycle (sec):	160	Critical Vol./Cap.(X):	0.371
Loss Time (sec):	9	Average Delay (sec/veh):	23.0
Optimal Cycle:	160	Level Of Service:	C+

Street Name:	Monterey Rd						Phelan Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Ovl		
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	0	0 0	0 0	1	1 0	1! 0	1
Volume Module: >> Count Date: 28 Oct 2015 << PM Peak Hour												
Base Vol:	29	817	217	189	1503	0	0	0	34	187	0	163
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	29	817	217	189	1503	0	0	0	34	187	0	163
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	817	217	189	1503	0	0	0	34	187	0	163
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	29	817	217	189	1503	0	0	0	34	187	0	163
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	817	217	189	1503	0	0	0	34	187	0	163
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	29	817	217	189	1503	0	0	0	34	187	0	163
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	0.00	0.00	0.00	1.00	1.53	0.00	1.47
Final Sat.:	1750	5700	1750	1750	5700	0	0	0	1750	2685	0	2565
Capacity Analysis Module:												
Vol/Sat:	0.02	0.14	0.12	0.11	0.26	0.00	0.00	0.00	0.02	0.07	0.00	0.06
Crit Moves:	****				****					****		
Green Time:	7.2	69.0	69.0	52.0	114	0.0	0.0	0.0	30.1	30.1	0.0	82.0
Volume/Cap:	0.37	0.33	0.29	0.33	0.37	0.00	0.00	0.00	0.10	0.37	0.00	0.12
Delay/Veh:	87.2	30.6	30.5	42.5	9.3	0.0	0.0	0.0	54.4	57.8	0.0	20.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	87.2	30.6	30.5	42.5	9.3	0.0	0.0	0.0	54.4	57.8	0.0	20.4
LOS by Move:	F	C	C	D	A	A	A	A	D-	E+	A	C+
HCM2kAvgQ:	2	9	7	7	9	0	0	0	1	6	0	3

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Monterey Rd & Curtner Ave/Tully Rd

Cycle (sec):	160	Critical Vol./Cap.(X):	0.722
Loss Time (sec):	12	Average Delay (sec/veh):	48.7
Optimal Cycle:	160	Level Of Service:	D

Street Name:	Monterey Rd						Curtner Ave/Tully Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	2 0	3 0	1	2 0	2 0	1	2 0	2 1	0
Volume Module: >> Count Date: 4 Dec 2018 << PM Peak Hour												
Base Vol:	446	655	58	387	1392	152	148	760	647	170	761	157
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	446	655	58	387	1392	152	148	760	647	170	761	157
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	446	655	58	387	1392	152	148	760	647	170	761	157
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	446	655	58	387	1392	152	148	760	647	170	761	157
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	446	655	58	387	1392	152	148	760	647	170	761	157
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	446	655	58	387	1392	152	148	760	647	170	761	157
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	1.00	0.92	0.83	1.00	0.92	0.83	0.99	0.95
Lanes:	2.00	2.75	0.25	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.47	0.53
Final Sat.:	3150	5144	455	3150	5700	1750	3150	3800	1750	3150	4641	957
Capacity Analysis Module:												
Vol/Sat:	0.14	0.13	0.13	0.12	0.24	0.09	0.05	0.20	0.37	0.05	0.16	0.16
Crit Moves:	****				****				****	****		
Green Time:	31.4	43.5	43.5	42.0	54.1	68.0	13.9	50.6	81.9	12.0	48.6	48.6
Volume/Cap:	0.72	0.47	0.47	0.47	0.72	0.20	0.54	0.63	0.72	0.72	0.54	0.54
Delay/Veh:	64.4	48.8	48.8	50.0	47.7	29.1	72.1	47.9	33.1	82.9	46.7	46.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	64.4	48.8	48.8	50.0	47.7	29.1	72.1	47.9	33.1	82.9	46.7	46.7
LOS by Move:	E	D	D	D	D	C	E	D	C-	F	D	D
HCM2kAvgQ:	13	10	10	10	20	5	5	16	27	6	13	13

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 S 7th St & Phelan Ave

Cycle (sec):	104	Critical Vol./Cap.(X):	0.656
Loss Time (sec):	9	Average Delay (sec/veh):	29.3
Optimal Cycle:	104	Level Of Service:	C

Street Name:	S 7th St						Phelan Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Ovl			Ovl			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	1! 0	0	1	0 0 1	0	0	1! 0 0
Volume Module: >> Count Date: 2 Oct 2019 << PM Peak Hour												
Base Vol:	41	161	53	46	246	122	99	249	69	49	217	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	161	53	46	246	122	99	249	69	49	217	30
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	161	53	46	246	122	99	249	69	49	217	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	41	161	53	46	246	122	99	249	69	49	217	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	161	53	46	246	122	99	249	69	49	217	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	41	161	53	46	246	122	99	249	69	49	217	30
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.92	0.92	0.92
Lanes:	0.20	0.80	1.00	0.11	0.60	0.29	0.28	0.72	1.00	0.17	0.73	0.10
Final Sat.:	365	1435	1750	194	1040	516	512	1288	1750	290	1283	177
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.03	0.24	0.24	0.24	0.19	0.19	0.04	0.17	0.17	0.17
Crit Moves:					****			****		****		
Green Time:	37.5	37.5	64.3	37.5	37.5	68.2	30.7	30.7	30.7	26.8	26.8	26.8
Volume/Cap:	0.31	0.31	0.05	0.66	0.66	0.36	0.66	0.66	0.13	0.66	0.66	0.66
Delay/Veh:	24.2	24.2	7.8	30.3	30.3	8.3	35.0	35.0	27.0	38.0	38.0	38.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.2	24.2	7.8	30.3	30.3	8.3	35.0	35.0	27.0	38.0	38.0	38.0
LOS by Move:	C	C	A	C	C	A	D+	D+	C	D+	D+	D+
HCM2kAvgQ:	5	5	1	13	13	6	11	11	2	10	10	10

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 S 7th St & Tully Rd

Cycle (sec):	160	Critical Vol./Cap.(X):	0.547
Loss Time (sec):	12	Average Delay (sec/veh):	37.3
Optimal Cycle:	160	Level Of Service:	D+

Street Name:	S 7th St						Tully Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ovl			Ovl		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module: >> Count Date: 2 Oct 2019 << PM Peak Hour												
Base Vol:	4	56	158	130	152	112	80	1094	33	368	903	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	56	158	130	152	112	80	1094	33	368	903	40
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	4	56	158	130	152	112	80	1094	33	368	903	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	56	158	130	152	112	80	1094	33	368	903	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	56	158	130	152	112	80	1094	33	368	903	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	4	56	158	130	152	112	80	1094	33	368	903	40
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	5700	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.03	0.09	0.07	0.08	0.06	0.05	0.19	0.02	0.21	0.16	0.02
Crit Moves:		****		****				****		****		
Green Time:	11.1	10.0	70.9	21.5	20.4	46.5	26.1	55.6	66.7	60.9	90.4	111.9
Volume/Cap:	0.03	0.47	0.20	0.55	0.63	0.22	0.28	0.55	0.05	0.55	0.28	0.03
Delay/Veh:	69.5	75.4	27.4	67.6	71.4	43.3	59.3	42.5	27.7	39.9	18.0	7.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	69.5	75.4	27.4	67.6	71.4	43.3	59.3	42.5	27.7	39.9	18.0	7.4
LOS by Move:	E	E-	C	E	E	D	E+	D	C	D	B-	A
HCM2kAvgQ:	0	3	5	7	8	4	4	14	1	15	7	1

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 S 7th St & Leo Ave

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: B[13.3]

Street Name:	S 7th St								Leo Ave							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	1 0	0	0	0	1 0	0	0	1!	0 0	0	0	1!	0 0
Volume Module: >> Count Date: 1 Jan 2019 << PM Peak Hour																
Base Vol:	50	260	0	0	360	50	50	0	50	0	0	0				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	50	260	0	0	360	50	50	0	50	0	0	0				
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	50	260	0	0	360	50	50	0	50	0	0	0				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	50	260	0	0	360	50	50	0	50	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	50	260	0	0	360	50	50	0	50	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	7.1	6.5	6.2				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3				
Capacity Module:																
Cnflict Vol:	410	xxxx	xxxxx	xxxx	xxxx	xxxxx	615	745	385	770	770	130				
Potent Cap.:	1160	xxxx	xxxxx	xxxx	xxxx	xxxxx	458	345	667	320	333	925				
Move Cap.:	1160	xxxx	xxxxx	xxxx	xxxx	xxxxx	442	329	667	286	319	925				
Volume/Cap:	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	0.11	0.00	0.07	0.00	0.00	0.00				
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	8.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	532	xxxxx	xxxx	0	xxxxx				
SharedQueue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.7	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	8.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	13.3	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	A	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			13.3			xxxxxx						
ApproachLOS:	*			*			B			*						

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Project Dwy - West & Leo Ave [Enter Dwy]

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Street Name:	Project Dwy - West						Leo Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 0 0 0			0 0 1 0 0			0 0 0 1 0		
Volume Module: >> Count Date: 1 Jan 2019 << PM Peak Hour												
Base Vol:	0	0	0	0	0	0	0	10	0	0	10	44
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	10	0	0	10	44
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	0	0	10	0	0	10	44
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	0	10	0	0	10	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	0	0	10	0	0	10	44
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Project Dwy - East & Leo Ave [Exit Dwy]

Average Delay (sec/veh): 4.0 Worst Case Level Of Service: A[9.0]

Street Name:	Project Dwy - East						Leo Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			1 0 0 0 0			0 0 1 0 0			0 0 1 0 0		
Volume Module: >> Count Date: 1 Jan 2019 << PM Peak Hour												
Base Vol:	0	0	0	50	0	0	0	10	0	0	54	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	50	0	0	0	10	0	0	54	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	50	0	0	0	10	0	0	54	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	50	0	0	0	10	0	0	54	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	50	0	0	0	10	0	0	54	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	64	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	947	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	947	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.05	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	9.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			9.0			xxxxxx			xxxxxx		
ApproachLOS:	*			A			*			*		

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Future Queue Report (cars)

Node	Intersection	Northbound L	Northbound T	Northbound R	Southbound L	Southbound T	Southbound R	Eastbound L	Eastbound T	Eastbound R	Westbound L	Westbound T	Westbound R
#1	[HCM2kAvgQ]:	2	9	7	7	9	0	0	0	1	6	0	3
#2	[HCM2kAvgQ]:	13	10	10	10	20	5	5	16	27	6	13	13
#3	[HCM2kAvgQ]:	5	5	1	13	13	6	11	11	2	10	10	10
#4	[HCM2kAvgQ]:	0	3	5	7	8	4	4	14	1	15	7	1
#5	[2Way95thQ]:	0.1	0.1	xxxx	xxxx	xxxx	xxxx	0.7	0.7	0.7	xxxx	xxxx	xxxx
#6	[2Way95thQ]:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
#7	[2Way95thQ]:	xxxx	xxxx	xxxx	0.2	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx

Background Scenario

Leo Recycle Project

Scenario Report

Scenario:	AM Peak - Background
Command:	Base
Volume:	Existing + ATI AM Peak Hour
Geometry:	Existing - AM
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Leo Recycle Project

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in D/V
# 1 Monterey Rd & Phelan Ave	C+	20.2	0.625	C+	20.2	0.625	+ 0.000
# 2 Monterey Rd & Curtner Ave/Tull	D	44.6	0.737	D	44.6	0.737	+ 0.000
# 3 S 7th St & Phelan Ave	C	27.3	0.520	C	27.3	0.520	+ 0.000
# 4 S 7th St & Tully Rd	D	41.7	0.464	D	41.7	0.464	+ 0.000
# 5 S 7th St & Leo Ave	B	12.1	0.100	B	12.1	0.100	+ 0.000
# 6 Project Dwy - West & Leo Ave	A	0.0	0.000	A	0.0	0.000	+ 0.000
# 7 Project Dwy - East & Leo Ave	A	9.1	0.051	A	9.1	0.051	+ 0.000

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Monterey Rd & Phelan Ave

Cycle (sec):	160	Critical Vol./Cap.(X):	0.625
Loss Time (sec):	9	Average Delay (sec/veh):	20.2
Optimal Cycle:	160	Level Of Service:	C+

Street Name:	Monterey Rd						Phelan Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Ovl		
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	0 0	0 0	1	1 0	1! 0	1
Volume Module: >> Count Date: 28 Oct 2015 << AM Peak Hour												
Base Vol:	24	2463	142	125	587	1	0	0	0	124	1	176
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	24	2463	142	125	587	1	0	0	0	124	1	176
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	24	2463	142	125	587	1	0	0	0	124	1	176
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	24	2463	142	125	587	1	0	0	0	124	1	176
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	2463	142	125	587	1	0	0	0	124	1	176
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	2463	142	125	587	1	0	0	0	124	1	176
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	1.00	0.92	0.92	0.92	0.92
Lanes:	1.00	3.00	1.00	1.00	2.99	0.01	0.00	0.00	1.00	1.41	0.01	1.58
Final Sat.:	1750	5700	1750	1750	5590	10	0	0	1750	2469	12	2770
Capacity Analysis Module:												
Vol/Sat:	0.01	0.43	0.08	0.07	0.11	0.11	0.00	0.00	0.00	0.05	0.09	0.06
Crit Moves:		****		****							****	
Green Time:	37.9	111	110.6	18.3	91.0	91.0	0.0	0.0	0.0	22.1	22.1	40.4
Volume/Cap:	0.06	0.62	0.12	0.62	0.18	0.18	0.00	0.00	0.00	0.36	0.62	0.25
Delay/Veh:	47.5	14.2	8.5	81.4	16.8	16.8	0.0	0.0	0.0	63.8	71.1	48.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	47.5	14.2	8.5	81.4	16.8	16.8	0.0	0.0	0.0	63.8	71.1	48.3
LOS by Move:	D	B	A	F	B	B	A	A	A	E	E	D
HCM2kAvgQ:	1	21	2	7	4	4	0	0	0	4	8	5

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Monterey Rd & Curtner Ave/Tully Rd

Cycle (sec):	160	Critical Vol./Cap.(X):	0.737
Loss Time (sec):	12	Average Delay (sec/veh):	44.6
Optimal Cycle:	160	Level Of Service:	D

Street Name:	Monterey Rd						Curtner Ave/Tully Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	2 0	3 0	1	2 0	2 0	1	2 0	2 1	0
Volume Module: >> Count Date: 22 Oct 2019 << AM Peak Hour												
Base Vol:	660	1951	51	140	358	134	307	513	283	25	834	185
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	660	1951	51	140	358	134	307	513	283	25	834	185
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	660	1951	51	140	358	134	307	513	283	25	834	185
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	660	1951	51	140	358	134	307	513	283	25	834	185
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	660	1951	51	140	358	134	307	513	283	25	834	185
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	660	1951	51	140	358	134	307	513	283	25	834	185
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.98	0.95	0.83	1.00	0.92	0.83	1.00	0.92	0.83	0.99	0.95
Lanes:	2.00	2.92	0.08	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.44	0.56
Final Sat.:	3150	5457	143	3150	5700	1750	3150	3800	1750	3150	4582	1016
Capacity Analysis Module:												
Vol/Sat:	0.21	0.36	0.36	0.04	0.06	0.08	0.10	0.14	0.16	0.01	0.18	0.18
Crit Moves:		****		****			****				****	
Green Time:	67.2	77.6	77.6	9.7	20.1	41.3	21.2	45.8	113.0	14.9	39.5	39.5
Volume/Cap:	0.50	0.74	0.74	0.74	0.50	0.30	0.74	0.47	0.23	0.09	0.74	0.74
Delay/Veh:	34.4	34.1	34.1	87.9	65.8	48.0	73.5	47.4	8.3	66.5	57.6	57.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.4	34.1	34.1	87.9	65.8	48.0	73.5	47.4	8.3	66.5	57.6	57.6
LOS by Move:	C-	C-	C-	F	E	D	E	D	A	E	E+	E+
HCM2kAvgQ:	14	27	27	6	6	6	10	10	5	1	17	17

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 S 7th St & Phelan Ave

Cycle (sec):	104	Critical Vol./Cap.(X):	0.520
Loss Time (sec):	9	Average Delay (sec/veh):	27.3
Optimal Cycle:	104	Level Of Service:	C

Street Name:	S 7th St						Phelan Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Ovl			Ovl			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	1! 0	0	1	0 0 1	0	0	1! 0 0
Volume Module: >> Count Date: 2 Oct 2019 << AM Peak Hour												
Base Vol:	35	204	50	25	160	108	86	145	40	48	241	25
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	35	204	50	25	160	108	86	145	40	48	241	25
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	35	204	50	25	160	108	86	145	40	48	241	25
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	35	204	50	25	160	108	86	145	40	48	241	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	204	50	25	160	108	86	145	40	48	241	25
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	35	204	50	25	160	108	86	145	40	48	241	25
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.92	0.92	0.92
Lanes:	0.15	0.85	1.00	0.08	0.55	0.37	0.37	0.63	1.00	0.15	0.77	0.08
Final Sat.:	264	1536	1750	149	956	645	670	1130	1750	268	1343	139
Capacity Analysis Module:												
Vol/Sat:	0.13	0.13	0.03	0.17	0.17	0.17	0.13	0.13	0.02	0.18	0.18	0.18
Crit Moves:					****		****				****	
Green Time:	33.5	33.5	69.3	33.5	33.5	59.1	25.7	25.7	25.7	35.9	35.9	35.9
Volume/Cap:	0.41	0.41	0.04	0.52	0.52	0.29	0.52	0.52	0.09	0.52	0.52	0.52
Delay/Veh:	28.1	28.1	6.0	29.6	29.6	11.8	35.0	35.0	30.3	28.0	28.0	28.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	28.1	28.1	6.0	29.6	29.6	11.8	35.0	35.0	30.3	28.0	28.0	28.0
LOS by Move:	C	C	A	C	C	B+	C-	C-	C	C	C	C
HCM2kAvgQ:	6	6	1	9	9	5	7	7	1	9	9	9

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 S 7th St & Tully Rd

Cycle (sec):	160	Critical Vol./Cap.(X):	0.464
Loss Time (sec):	12	Average Delay (sec/veh):	41.7
Optimal Cycle:	160	Level Of Service:	D

Street Name:	S 7th St						Tully Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ovl			Ovl		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module: >> Count Date: 2 Oct 2019 << AM Peak Hour												
Base Vol:	5	141	468	92	55	57	68	621	8	165	858	78
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	141	468	92	55	57	68	621	8	165	858	78
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	141	468	92	55	57	68	621	8	165	858	78
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	141	468	92	55	57	68	621	8	165	858	78
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	141	468	92	55	57	68	621	8	165	858	78
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	5	141	468	92	55	57	68	621	8	165	858	78
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	5700	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.07	0.27	0.05	0.03	0.03	0.04	0.11	0.00	0.09	0.15	0.04
Crit Moves:			****	****				****		****		
Green Time:	32.1	59.7	92.3	18.1	45.8	61.6	15.8	37.6	69.7	32.5	54.3	72.5
Volume/Cap:	0.01	0.20	0.46	0.46	0.10	0.08	0.39	0.46	0.01	0.46	0.44	0.10
Delay/Veh:	51.3	34.1	19.9	68.1	42.0	31.3	69.1	52.8	25.6	57.0	41.2	25.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	51.3	34.1	19.9	68.1	42.0	31.3	69.1	52.8	25.6	57.0	41.2	25.1
LOS by Move:	D-	C-	B-	E	D	C	E	D-	C	E+	D	C
HCM2kAvgQ:	0	4	14	5	2	2	4	9	0	8	11	2

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 S 7th St & Leo Ave

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: B[12.1]

Street Name:	S 7th St								Leo Ave							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	1 0	0	0	0	1 0	0	0	1!	0 0	0	0	1!	0 0
Volume Module: >> Count Date: 1 Jan 2019 << AM Peak Hour																
Base Vol:	50	294	0	0	254	50	50	0	50	0	0	0				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	50	294	0	0	254	50	50	0	50	0	0	0				
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	50	294	0	0	254	50	50	0	50	0	0	0				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	50	294	0	0	254	50	50	0	50	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	50	294	0	0	254	50	50	0	50	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	7.1	6.5	6.2				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3				
Capacity Module:																
Cnflict Vol:	304	xxxx	xxxxx	xxxx	xxxx	xxxxx	526	673	279	698	698	147				
Potent Cap.:	1268	xxxx	xxxxx	xxxx	xxxx	xxxxx	516	379	765	358	367	905				
Move Cap.:	1268	xxxx	xxxxx	xxxx	xxxx	xxxxx	500	364	765	324	352	905				
Volume/Cap:	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	0.10	0.00	0.07	0.00	0.00	0.00				
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	604	xxxxx	xxxx	0	xxxxx				
SharedQueue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	12.1	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	A	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			12.1			xxxxxx						
ApproachLOS:	*			*			B			*						

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Project Dwy - West & Leo Ave [Enter Dwy]

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Street Name:	Project Dwy - West						Leo Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 0 0 0			0 0 1 0 0			0 0 0 1 0		
Volume Module: >> Count Date: 1 Jan 2019 << AM Peak Hour												
Base Vol:	0	0	0	0	0	0	0	10	0	0	10	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	10	0	0	10	55
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	0	0	10	0	0	10	55
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	0	10	0	0	10	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	0	0	10	0	0	10	55
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Project Dwy - East & Leo Ave [Exit Dwy]

Average Delay (sec/veh): 3.5 Worst Case Level Of Service: A[9.1]

Street Name:	Project Dwy - East						Leo Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0	1	0 0	0	0	0 1	0 0	0	0 1	0 0
Volume Module: >> Count Date: 1 Jan 2019 << AM Peak Hour												
Base Vol:	0	0	0	48	0	0	0	10	0	0	65	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	48	0	0	0	10	0	0	65	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	48	0	0	0	10	0	0	65	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	48	0	0	0	10	0	0	65	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	48	0	0	0	10	0	0	65	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	75	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	933	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	933	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.05	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			9.1			xxxxxx			xxxxxx		
ApproachLOS:	*			A			*			*		

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Future Queue Report (cars)

Node	Intersection	Northbound L	Northbound T	Northbound R	Southbound L	Southbound T	Southbound R	Eastbound L	Eastbound T	Eastbound R	Westbound L	Westbound T	Westbound R
#1	[HCM2kAvgQ]:	1	21	2	7	4	4	0	0	0	4	8	5
#2	[HCM2kAvgQ]:	14	27	27	6	6	6	10	10	5	1	17	17
#3	[HCM2kAvgQ]:	6	6	1	9	9	5	7	7	1	9	9	9
#4	[HCM2kAvgQ]:	0	4	14	5	2	2	4	9	0	8	11	2
#5	[2Way95thQ]:	0.1	0.1	xxxx	xxxx	xxxx	xxxx	0.6	0.6	0.6	xxxx	xxxx	xxxx
#6	[2Way95thQ]:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
#7	[2Way95thQ]:	xxxx	xxxx	xxxx	0.2	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx

Leo Recycle Project

Scenario Report

Scenario:	PM Peak - Background
Command:	Base
Volume:	Existing + ATI PM Peak Hour
Geometry:	Existing - PM
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Leo Recycle Project

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in D/V
# 1 Monterey Rd & Phelan Ave	C	23.5	0.379	C	23.5	0.379	+ 0.000
# 2 Monterey Rd & Curtner Ave/Tull	D-	51.6	0.798	D-	51.6	0.798	+ 0.000
# 3 S 7th St & Phelan Ave	C	29.7	0.681	C	29.7	0.681	+ 0.000
# 4 S 7th St & Tully Rd	D+	38.4	0.590	D+	38.4	0.590	+ 0.000
# 5 S 7th St & Leo Ave	B	13.4	0.114	B	13.4	0.114	+ 0.000
# 6 Project Dwy - West & Leo Ave	A	0.0	0.000	A	0.0	0.000	+ 0.000
# 7 Project Dwy - East & Leo Ave	A	9.0	0.053	A	9.0	0.053	+ 0.000

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Monterey Rd & Phelan Ave

Cycle (sec):	160	Critical Vol./Cap.(X):	0.379
Loss Time (sec):	9	Average Delay (sec/veh):	23.5
Optimal Cycle:	160	Level Of Service:	C

Street Name:	Monterey Rd						Phelan Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Ovl		
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	0	0 0	0 0	1	1 0	1! 0	1
Volume Module: >> Count Date: 28 Oct 2015 << PM Peak Hour												
Base Vol:	29	878	222	195	1520	0	0	0	34	195	0	204
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	29	878	222	195	1520	0	0	0	34	195	0	204
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	878	222	195	1520	0	0	0	34	195	0	204
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	29	878	222	195	1520	0	0	0	34	195	0	204
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	878	222	195	1520	0	0	0	34	195	0	204
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	29	878	222	195	1520	0	0	0	34	195	0	204
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	0.00	0.00	0.00	1.00	1.49	0.00	1.51
Final Sat.:	1750	5700	1750	1750	5700	0	0	0	1750	2605	0	2645
Capacity Analysis Module:												
Vol/Sat:	0.02	0.15	0.13	0.11	0.27	0.00	0.00	0.00	0.02	0.07	0.00	0.08
Crit Moves:	****				****					****		
Green Time:	7.0	69.3	69.3	50.1	112	0.0	0.0	0.0	31.6	31.6	0.0	81.7
Volume/Cap:	0.38	0.36	0.29	0.36	0.38	0.00	0.00	0.00	0.10	0.38	0.00	0.15
Delay/Veh:	88.1	30.8	30.4	44.3	9.9	0.0	0.0	0.0	53.1	56.8	0.0	20.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	88.1	30.8	30.4	44.3	9.9	0.0	0.0	0.0	53.1	56.8	0.0	20.9
LOS by Move:	F	C	C	D	A	A	A	A	D-	E+	A	C+
HCM2kAvgQ:	2	9	7	8	10	0	0	0	1	6	0	4

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Monterey Rd & Curtner Ave/Tully Rd

Cycle (sec):	160	Critical Vol./Cap.(X):	0.798
Loss Time (sec):	12	Average Delay (sec/veh):	51.6
Optimal Cycle:	160	Level Of Service:	D-

Street Name:	Monterey Rd						Curtner Ave/Tully Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	2 0	3 0	1	2 0	2 0	1	2 0	2 1	0
Volume Module: >> Count Date: 4 Dec 2018 << PM Peak Hour												
Base Vol:	499	717	58	402	1470	344	337	804	740	180	797	170
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	499	717	58	402	1470	344	337	804	740	180	797	170
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	499	717	58	402	1470	344	337	804	740	180	797	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	499	717	58	402	1470	344	337	804	740	180	797	170
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	499	717	58	402	1470	344	337	804	740	180	797	170
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	499	717	58	402	1470	344	337	804	740	180	797	170
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	1.00	0.92	0.83	1.00	0.92	0.83	0.99	0.95
Lanes:	2.00	2.77	0.23	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.45	0.55
Final Sat.:	3150	5180	419	3150	5700	1750	3150	3800	1750	3150	4614	984
Capacity Analysis Module:												
Vol/Sat:	0.16	0.14	0.14	0.13	0.26	0.20	0.11	0.21	0.42	0.06	0.17	0.17
Crit Moves:	****				****				****	****		
Green Time:	31.8	43.4	43.4	40.1	51.7	76.4	24.7	53.0	84.8	11.5	39.8	39.8
Volume/Cap:	0.80	0.51	0.51	0.51	0.80	0.41	0.69	0.64	0.80	0.80	0.69	0.69
Delay/Veh:	68.2	49.6	49.6	52.1	51.9	27.5	68.4	46.5	35.5	90.9	56.1	56.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	68.2	49.6	49.6	52.1	51.9	27.5	68.4	46.5	35.5	90.9	56.1	56.1
LOS by Move:	E	D	D	D-	D-	C	E	D	D+	F	E+	E+
HCM2kAvgQ:	16	11	11	10	23	11	10	17	33	7	15	15

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 S 7th St & Phelan Ave

Cycle (sec):	104	Critical Vol./Cap.(X):	0.681
Loss Time (sec):	9	Average Delay (sec/veh):	29.7
Optimal Cycle:	104	Level Of Service:	C

Street Name:	S 7th St						Phelan Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Ovl			Ovl			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	1! 0	0	1	0 0 1	0	0	1! 0 0
Volume Module: >> Count Date: 2 Oct 2019 << PM Peak Hour												
Base Vol:	41	161	53	46	254	140	99	249	69	49	231	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	161	53	46	254	140	99	249	69	49	231	30
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	161	53	46	254	140	99	249	69	49	231	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	41	161	53	46	254	140	99	249	69	49	231	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	161	53	46	254	140	99	249	69	49	231	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	41	161	53	46	254	140	99	249	69	49	231	30
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.92	0.92	0.92
Lanes:	0.20	0.80	1.00	0.10	0.58	0.32	0.28	0.72	1.00	0.16	0.74	0.10
Final Sat.:	365	1435	1750	183	1010	557	512	1288	1750	277	1304	169
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.03	0.25	0.25	0.25	0.19	0.19	0.04	0.18	0.18	0.18
Crit Moves:					****			****		****		
Green Time:	38.4	38.4	65.5	38.4	38.4	67.9	29.5	29.5	29.5	27.1	27.1	27.1
Volume/Cap:	0.30	0.30	0.05	0.68	0.68	0.38	0.68	0.68	0.14	0.68	0.68	0.68
Delay/Veh:	23.6	23.6	7.4	30.6	30.6	8.6	36.8	36.8	27.9	38.8	38.8	38.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	23.6	23.6	7.4	30.6	30.6	8.6	36.8	36.8	27.9	38.8	38.8	38.8
LOS by Move:	C	C	A	C	C	A	D+	D+	C	D+	D+	D+
HCM2kAvgQ:	5	5	1	14	14	7	11	11	2	11	11	11

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 S 7th St & Tully Rd

Cycle (sec):	160	Critical Vol./Cap.(X):	0.590
Loss Time (sec):	12	Average Delay (sec/veh):	38.4
Optimal Cycle:	160	Level Of Service:	D+

Street Name:	S 7th St						Tully Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ovl			Ovl		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module: >> Count Date: 2 Oct 2019 << PM Peak Hour												
Base Vol:	4	58	189	132	158	119	84	1096	33	433	912	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	58	189	132	158	119	84	1096	33	433	912	40
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	4	58	189	132	158	119	84	1096	33	433	912	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	58	189	132	158	119	84	1096	33	433	912	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	58	189	132	158	119	84	1096	33	433	912	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	4	58	189	132	158	119	84	1096	33	433	912	40
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	5700	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.03	0.11	0.08	0.08	0.07	0.05	0.19	0.02	0.25	0.16	0.02
Crit Moves:		****		****				****		****		
Green Time:	10.4	10.0	76.3	20.2	19.8	47.0	27.2	51.5	61.9	66.3	90.6	110.8
Volume/Cap:	0.04	0.49	0.23	0.60	0.67	0.23	0.28	0.60	0.05	0.60	0.28	0.03
Delay/Veh:	70.2	75.7	24.7	70.5	74.4	43.1	58.4	46.1	30.7	37.8	18.0	7.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	70.2	75.7	24.7	70.5	74.4	43.1	58.4	46.1	30.7	37.8	18.0	7.7
LOS by Move:	E	E-	C	E	E	D	E+	D	C	D+	B	A
HCM2kAvgQ:	0	3	6	7	8	5	4	15	1	18	7	1

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 S 7th St & Leo Ave

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: B[13.4]

Street Name:	S 7th St						Leo Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0	1	0	0 0 0	1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module: >> Count Date: 1 Jan 2019 << PM Peak Hour												
Base Vol:	50 260		0	0 368		50	50		0	50		0
Growth Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
Initial Bse:	50 260		0	0 368		50	50		0	50		0
Added Vol:	0 0		0	0 0		0	0		0	0		0
PasserByVol:	0 0		0	0 0		0	0		0	0		0
Initial Fut:	50 260		0	0 368		50	50		0	50		0
User Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Volume:	50 260		0	0 368		50	50		0	50		0
Reduct Vol:	0 0		0	0 0		0	0		0	0		0
FinalVolume:	50 260		0	0 368		50	50		0	50		0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx		xxxxx	xxxx xxxxx			6.4	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2 xxxx xxxxx		xxxxx	xxxx xxxxx			3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	418 xxxx xxxxx		xxxx	xxxx xxxxx			623	753	393	778	778	130
Potent Cap.:	1152 xxxx xxxxx		xxxx	xxxx xxxxx			453	341	660	316	330	925
Move Cap.:	1152 xxxx xxxxx		xxxx	xxxx xxxxx			438	326	660	282	315	925
Volume/Cap:	0.04 xxxx	xxxx	xxxx	xxxx xxxx	xxxx		0.11	0.00	0.08	0.00	0.00	0.00
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx		xxxx	xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.3 xxxx xxxxx		xxxxx	xxxx xxxxx			xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	526	xxxxx	xxxx	0	xxxxx
SharedQueue:	0.1 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.7	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	8.3 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	13.4	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			13.4			xxxxxx		
ApproachLOS:	*			*			B			*		

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Project Dwy - West & Leo Ave [Enter Dwy]

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Street Name:	Project Dwy - West						Leo Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 0 0 0			0 0 1 0 0			0 0 0 1 0		
Volume Module: >> Count Date: 1 Jan 2019 << PM Peak Hour												
Base Vol:	0	0	0	0	0	0	0	10	0	0	10	44
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	10	0	0	10	44
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	0	0	10	0	0	10	44
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	0	10	0	0	10	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	0	0	10	0	0	10	44
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Project Dwy - East & Leo Ave [Exit Dwy]

Average Delay (sec/veh): 4.0 Worst Case Level Of Service: A[9.0]

Street Name:	Project Dwy - East						Leo Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			1 0 0 0 0			0 0 1 0 0			0 0 1 0 0		
Volume Module: >> Count Date: 1 Jan 2019 << PM Peak Hour												
Base Vol:	0	0	0	50	0	0	0	10	0	0	54	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	50	0	0	0	10	0	0	54	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	50	0	0	0	10	0	0	54	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	50	0	0	0	10	0	0	54	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	50	0	0	0	10	0	0	54	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	64	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	947	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	947	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.05	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	9.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			9.0			xxxxxx			xxxxxx		
ApproachLOS:	*			A			*			*		

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Future Queue Report (cars)

Node	Intersection	Northbound L	Northbound T	Northbound R	Southbound L	Southbound T	Southbound R	Eastbound L	Eastbound T	Eastbound R	Westbound L	Westbound T	Westbound R
#1	[HCM2kAvgQ]:	2	9	7	8	10	0	0	0	1	6	0	4
#2	[HCM2kAvgQ]:	16	11	11	10	23	11	10	17	33	7	15	15
#3	[HCM2kAvgQ]:	5	5	1	14	14	7	11	11	2	11	11	11
#4	[HCM2kAvgQ]:	0	3	6	7	8	5	4	15	1	18	7	1
#5	[2Way95thQ]:	0.1	0.1	xxxx	xxxx	xxxx	xxxx	0.7	0.7	0.7	xxxx	xxxx	xxxx
#6	[2Way95thQ]:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
#7	[2Way95thQ]:	xxxx	xxxx	xxxx	0.2	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx

Background Plus Project Scenario

Leo Recycle Project

Scenario Report

Scenario:	AM Peak - Background + Project
Command:	Base
Volume:	Existing + ATI + Project AM Peak Hour
Geometry:	Existing - AM
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Leo Recycle Project

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Monterey Rd & Phelan Ave	C+	20.2	0.625	C+	20.3	0.626	+ 0.080 D/V
# 2 Monterey Rd & Curtner Ave/Tull	D	44.6	0.737	D	44.6	0.737	+ 0.009 D/V
# 3 S 7th St & Phelan Ave	C	27.3	0.520	C	27.3	0.521	+ 0.006 D/V
# 4 S 7th St & Tully Rd	D	41.7	0.464	D	41.8	0.464	+ 0.046 D/V
# 5 S 7th St & Leo Ave	B	12.1	0.100	B	12.3	0.106	+ 0.145 D/V
# 6 Project Dwy - West & Leo Ave	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 7 Project Dwy - East & Leo Ave	A	9.1	0.051	A	9.1	0.056	+ 0.058 D/V

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Monterey Rd & Phelan Ave

Cycle (sec):	160	Critical Vol./Cap.(X):	0.626
Loss Time (sec):	9	Average Delay (sec/veh):	20.3
Optimal Cycle:	160	Level Of Service:	C+

Street Name:	Monterey Rd						Phelan Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Ovl		
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	0 0	0 0	1	1 0	1! 0	1
Volume Module: >> Count Date: 28 Oct 2015 << AM Peak Hour												
Base Vol:	24	2463	142	125	587	1	0	0	0	124	1	176
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	24	2463	142	125	587	1	0	0	0	124	1	176
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Project:	0	0	0	1	0	0	0	0	0	0	0	1
Initial Fut:	24	2463	142	126	587	1	0	0	0	124	1	177
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	24	2463	142	126	587	1	0	0	0	124	1	177
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	2463	142	126	587	1	0	0	0	124	1	177
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	2463	142	126	587	1	0	0	0	124	1	177
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	1.00	0.92	0.92	0.92	0.92
Lanes:	1.00	3.00	1.00	1.00	2.99	0.01	0.00	0.00	1.00	1.41	0.01	1.58
Final Sat.:	1750	5700	1750	1750	5590	10	0	0	1750	2466	12	2772
Capacity Analysis Module:												
Vol/Sat:	0.01	0.43	0.08	0.07	0.11	0.11	0.00	0.00	0.00	0.05	0.09	0.06
Crit Moves:		****		****							****	
Green Time:	37.9	110	110.5	18.4	91.0	91.0	0.0	0.0	0.0	22.1	22.1	40.5
Volume/Cap:	0.06	0.63	0.12	0.63	0.18	0.18	0.00	0.00	0.00	0.36	0.63	0.25
Delay/Veh:	47.5	14.3	8.5	81.3	16.8	16.8	0.0	0.0	0.0	63.8	71.1	48.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	47.5	14.3	8.5	81.3	16.8	16.8	0.0	0.0	0.0	63.8	71.1	48.1
LOS by Move:	D	B	A	F	B	B	A	A	A	E	E	D
HCM2kAvgQ:	1	22	2	7	5	5	0	0	0	4	8	5

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Monterey Rd & Curtner Ave/Tully Rd

Cycle (sec):	160	Critical Vol./Cap.(X):	0.737
Loss Time (sec):	12	Average Delay (sec/veh):	44.6
Optimal Cycle:	160	Level Of Service:	D

Street Name:	Monterey Rd						Curtner Ave/Tully Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	2 0	3 0	1	2 0	2 0	1	2 0	2 1	0
Volume Module: >> Count Date: 22 Oct 2019 << AM Peak Hour												
Base Vol:	660	1951	51	140	358	134	307	513	283	25	834	185
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	660	1951	51	140	358	134	307	513	283	25	834	185
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Project:	0	0	0	0	0	0	0	1	0	0	1	0
Initial Fut:	660	1951	51	140	358	134	307	514	283	25	835	185
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	660	1951	51	140	358	134	307	514	283	25	835	185
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	660	1951	51	140	358	134	307	514	283	25	835	185
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	660	1951	51	140	358	134	307	514	283	25	835	185
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.98	0.95	0.83	1.00	0.92	0.83	1.00	0.92	0.83	0.99	0.95
Lanes:	2.00	2.92	0.08	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.44	0.56
Final Sat.:	3150	5457	143	3150	5700	1750	3150	3800	1750	3150	4583	1015
Capacity Analysis Module:												
Vol/Sat:	0.21	0.36	0.36	0.04	0.06	0.08	0.10	0.14	0.16	0.01	0.18	0.18
Crit Moves:		****		****			****				****	
Green Time:	67.1	77.6	77.6	9.7	20.1	41.3	21.2	45.9	113.0	14.8	39.6	39.6
Volume/Cap:	0.50	0.74	0.74	0.74	0.50	0.30	0.74	0.47	0.23	0.09	0.74	0.74
Delay/Veh:	34.4	34.1	34.1	88.0	65.8	48.1	73.5	47.4	8.3	66.5	57.5	57.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.4	34.1	34.1	88.0	65.8	48.1	73.5	47.4	8.3	66.5	57.5	57.5
LOS by Move:	C-	C-	C-	F	E	D	E	D	A	E	E+	E+
HCM2kAvgQ:	14	27	27	6	6	6	10	10	5	1	17	17

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 S 7th St & Phelan Ave

Cycle (sec):	104	Critical Vol./Cap.(X):	0.521
Loss Time (sec):	9	Average Delay (sec/veh):	27.3
Optimal Cycle:	104	Level Of Service:	C

Street Name:	S 7th St						Phelan Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Ovl			Ovl			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	1! 0	0	0 1	0	0	0	1! 0
Volume Module: >> Count Date: 2 Oct 2019 << AM Peak Hour												
Base Vol:	35	204	50	25	160	108	86	145	40	48	241	25
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	35	204	50	25	160	108	86	145	40	48	241	25
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Project:	1	0	1	0	1	0	0	0	1	1	0	0
Initial Fut:	36	204	51	25	161	108	86	145	41	49	241	25
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	36	204	51	25	161	108	86	145	41	49	241	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	204	51	25	161	108	86	145	41	49	241	25
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	36	204	51	25	161	108	86	145	41	49	241	25
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.92	0.92	0.92
Lanes:	0.15	0.85	1.00	0.08	0.55	0.37	0.37	0.63	1.00	0.16	0.76	0.08
Final Sat.:	270	1530	1750	149	958	643	670	1130	1750	272	1339	139
Capacity Analysis Module:												
Vol/Sat:	0.13	0.13	0.03	0.17	0.17	0.17	0.13	0.13	0.02	0.18	0.18	0.18
Crit Moves:					****		****					****
Green Time:	33.5	33.5	69.4	33.5	33.5	59.1	25.6	25.6	25.6	35.9	35.9	35.9
Volume/Cap:	0.41	0.41	0.04	0.52	0.52	0.30	0.52	0.52	0.10	0.52	0.52	0.52
Delay/Veh:	28.0	28.0	5.9	29.6	29.6	11.8	35.0	35.0	30.4	28.0	28.0	28.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	28.0	28.0	5.9	29.6	29.6	11.8	35.0	35.0	30.4	28.0	28.0	28.0
LOS by Move:	C	C	A	C	C	B+	D+	D+	C	C	C	C
HCM2kAvgQ:	6	6	1	9	9	5	7	7	1	9	9	9

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 S 7th St & Tully Rd

Cycle (sec):	160	Critical Vol./Cap.(X):	0.464
Loss Time (sec):	12	Average Delay (sec/veh):	41.8
Optimal Cycle:	160	Level Of Service:	D

Street Name:	S 7th St						Tully Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ovl			Ovl		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module: >> Count Date: 2 Oct 2019 << AM Peak Hour												
Base Vol:	5	141	468	92	55	57	68	621	8	165	858	78
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	141	468	92	55	57	68	621	8	165	858	78
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Project:	0	1	0	1	0	1	1	0	0	0	0	2
Initial Fut:	5	142	468	93	55	58	69	621	8	165	858	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	142	468	93	55	58	69	621	8	165	858	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	142	468	93	55	58	69	621	8	165	858	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	5	142	468	93	55	58	69	621	8	165	858	80
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	5700	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.07	0.27	0.05	0.03	0.03	0.04	0.11	0.00	0.09	0.15	0.05
Crit Moves:			****	****				****		****		
Green Time:	32.1	59.7	92.1	18.3	45.9	61.6	15.8	37.5	69.6	32.5	54.3	72.6
Volume/Cap:	0.01	0.20	0.46	0.46	0.10	0.09	0.40	0.46	0.01	0.46	0.44	0.10
Delay/Veh:	51.3	34.1	20.0	68.0	42.0	31.3	69.2	52.9	25.6	57.1	41.3	25.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	51.3	34.1	20.0	68.0	42.0	31.3	69.2	52.9	25.6	57.1	41.3	25.1
LOS by Move:	D-	C-	B-	E	D	C	E	D-	C	E+	D	C
HCM2kAvgQ:	0	5	14	5	2	2	4	9	0	8	11	2

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 S 7th St & Leo Ave

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: B[12.3]

Street Name:	S 7th St							Leo Ave					
Approach:	North Bound			South Bound				East Bound			West Bound		
Movement:	L	T	R	L	T	R		L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled				Stop Sign			Stop Sign		
Rights:	Include			Include				Include			Include		
Lanes:	0 1	0 1	0	0	0 0	0 1	0	0	0	1! 0	0	0	1! 0 0
Volume Module: >> Count Date: 1 Jan 2019 << AM Peak Hour													
Base Vol:	50	294	0	0	254	50		50	0	50	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	294	0	0	254	50		50	0	50	0	0	0
Added Vol:	0	0	0	0	0	0		0	0	0	0	0	0
Project:	4	0	0	0	0	3		2	0	2	0	0	0
Initial Fut:	54	294	0	0	254	53		52	0	52	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	54	294	0	0	254	53		52	0	52	0	0	0
Reduct Vol:	0	0	0	0	0	0		0	0	0	0	0	0
FinalVolume:	54	294	0	0	254	53		52	0	52	0	0	0
Critical Gap Module:													
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.4	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:													
Cnflict Vol:	307	xxxx	xxxxx	xxxx	xxxx	xxxxx		536	683	281	709	709	147
Potent Cap.:	1265	xxxx	xxxxx	xxxx	xxxx	xxxxx		509	374	763	352	362	905
Move Cap.:	1265	xxxx	xxxxx	xxxx	xxxx	xxxxx		492	358	763	317	346	905
Volume/Cap:	0.04	xxxx	xxxx	xxxx	xxxx	xxxx		0.11	0.00	0.07	0.00	0.00	0.00
Level Of Service Module:													
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*		*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT				LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	598	xxxxx	xxxx	0	xxxxx
SharedQueue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	12.3	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*		*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx				12.3			xxxxxx		
ApproachLOS:	*			*				B			*		

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Project Dwy - West & Leo Ave [Enter Dwy]

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Street Name:	Project Dwy - West						Leo Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 0 0 0			0 0 1 0 0			0 0 0 1 0		
Volume Module: >> Count Date: 1 Jan 2019 << AM Peak Hour												
Base Vol:	0	0	0	0	0	0	0	10	0	0	10	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	10	0	0	10	55
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Project:	0	0	0	0	0	0	0	0	0	0	0	7
Initial Fut:	0	0	0	0	0	0	0	10	0	0	10	62
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	0	10	0	0	10	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	0	0	10	0	0	10	62
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Project Dwy - East & Leo Ave [Exit Dwy]

Average Delay (sec/veh): 3.5 Worst Case Level Of Service: A[9.1]

Street Name:	Project Dwy - East						Leo Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0	1	0 0	0	0	0 1	0 0	0	0 1	0 0
Volume Module: >> Count Date: 1 Jan 2019 << AM Peak Hour												
Base Vol:	0	0	0	48	0	0	0	10	0	0	65	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	48	0	0	0	10	0	0	65	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Project:	0	0	0	4	0	0	0	0	0	0	7	0
Initial Fut:	0	0	0	52	0	0	0	10	0	0	72	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	52	0	0	0	10	0	0	72	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	52	0	0	0	10	0	0	72	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	82	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	925	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	925	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.06	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			9.1			xxxxxx			xxxxxx		
ApproachLOS:	*			A			*			*		

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Future Queue Report (cars)

Node	Intersection	Northbound L	Northbound T	Northbound R	Southbound L	Southbound T	Southbound R	Eastbound L	Eastbound T	Eastbound R	Westbound L	Westbound T	Westbound R
#1	[HCM2kAvgQ]:	1	22	2	7	5	5	0	0	0	4	8	5
#2	[HCM2kAvgQ]:	14	27	27	6	6	6	10	10	5	1	17	17
#3	[HCM2kAvgQ]:	6	6	1	9	9	5	7	7	1	9	9	9
#4	[HCM2kAvgQ]:	0	5	14	5	2	2	4	9	0	8	11	2
#5	[2Way95thQ]:	0.1	0.1	xxxx	xxxx	xxxx	xxxx	0.6	0.6	0.6	xxxx	xxxx	xxxx
#6	[2Way95thQ]:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
#7	[2Way95thQ]:	xxxx	xxxx	xxxx	0.2	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx

Leo Recycle Project

Scenario Report

Scenario:	PM Peak - Background + Project
Command:	Base
Volume:	Existing + ATI + Project PM Peak Hour
Geometry:	Existing - PM
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Leo Recycle Project

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in V/ C
# 1 Monterey Rd & Phelan Ave	C	23.5	0.379	C	23.6	0.379	+ 0.036 D/V
# 2 Monterey Rd & Curtner Ave/Tull	D-	51.6	0.798	D-	51.6	0.798	+ 0.005 D/V
# 3 S 7th St & Phelan Ave	C	29.7	0.681	C	29.7	0.681	+ 0.010 D/V
# 4 S 7th St & Tully Rd	D+	38.4	0.590	D+	38.5	0.591	+ 0.077 D/V
# 5 S 7th St & Leo Ave	B	13.4	0.114	B	13.6	0.122	+ 0.178 D/V
# 6 Project Dwy - West & Leo Ave	A	0.0	0.000	A	0.0	0.000	+ 0.000 D/V
# 7 Project Dwy - East & Leo Ave	A	9.0	0.053	A	9.1	0.059	+ 0.049 D/V

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Monterey Rd & Phelan Ave

Cycle (sec):	160	Critical Vol./Cap.(X):	0.379
Loss Time (sec):	9	Average Delay (sec/veh):	23.6
Optimal Cycle:	160	Level Of Service:	C

Street Name:	Monterey Rd						Phelan Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Ovl		
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	0	0 0	0 0	1	1 0	1! 0	1
Volume Module: >> Count Date: 28 Oct 2015 << PM Peak Hour												
Base Vol:	29	878	222	195	1520	0	0	0	34	195	0	204
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	29	878	222	195	1520	0	0	0	34	195	0	204
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Project:	0	0	0	1	0	0	0	0	0	0	0	1
Initial Fut:	29	878	222	196	1520	0	0	0	34	195	0	205
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	29	878	222	196	1520	0	0	0	34	195	0	205
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	878	222	196	1520	0	0	0	34	195	0	205
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	29	878	222	196	1520	0	0	0	34	195	0	205
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	0.00	0.00	0.00	1.00	1.49	0.00	1.51
Final Sat.:	1750	5700	1750	1750	5700	0	0	0	1750	2603	0	2647
Capacity Analysis Module:												
Vol/Sat:	0.02	0.15	0.13	0.11	0.27	0.00	0.00	0.00	0.02	0.07	0.00	0.08
Crit Moves:	****				****					****		
Green Time:	7.0	69.1	69.1	50.3	112	0.0	0.0	0.0	31.6	31.6	0.0	81.9
Volume/Cap:	0.38	0.36	0.29	0.36	0.38	0.00	0.00	0.00	0.10	0.38	0.00	0.15
Delay/Veh:	88.1	30.9	30.5	44.2	9.9	0.0	0.0	0.0	53.1	56.8	0.0	20.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	88.1	30.9	30.5	44.2	9.9	0.0	0.0	0.0	53.1	56.8	0.0	20.8
LOS by Move:	F	C	C	D	A	A	A	A	D-	E+	A	C+
HCM2kAvgQ:	2	9	7	8	10	0	0	0	1	6	0	4

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Monterey Rd & Curtner Ave/Tully Rd

Cycle (sec):	160	Critical Vol./Cap.(X):	0.798
Loss Time (sec):	12	Average Delay (sec/veh):	51.6
Optimal Cycle:	160	Level Of Service:	D-

Street Name:	Monterey Rd						Curtner Ave/Tully Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	2 0	3 0	1	2 0	2 0	1	2 0	2 1	0
Volume Module: >> Count Date: 4 Dec 2018 << PM Peak Hour												
Base Vol:	499	717	58	402	1470	344	337	804	740	180	797	170
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	499	717	58	402	1470	344	337	804	740	180	797	170
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Project:	0	0	0	0	0	0	0	1	0	0	1	0
Initial Fut:	499	717	58	402	1470	344	337	805	740	180	798	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	499	717	58	402	1470	344	337	805	740	180	798	170
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	499	717	58	402	1470	344	337	805	740	180	798	170
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	499	717	58	402	1470	344	337	805	740	180	798	170
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	1.00	0.92	0.83	1.00	0.92	0.83	0.99	0.95
Lanes:	2.00	2.77	0.23	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.45	0.55
Final Sat.:	3150	5180	419	3150	5700	1750	3150	3800	1750	3150	4615	983
Capacity Analysis Module:												
Vol/Sat:	0.16	0.14	0.14	0.13	0.26	0.20	0.11	0.21	0.42	0.06	0.17	0.17
Crit Moves:	****				****				****	****		
Green Time:	31.8	43.4	43.4	40.1	51.7	76.4	24.7	53.0	84.8	11.5	39.8	39.8
Volume/Cap:	0.80	0.51	0.51	0.51	0.80	0.41	0.69	0.64	0.80	0.80	0.69	0.69
Delay/Veh:	68.2	49.6	49.6	52.1	51.9	27.5	68.4	46.5	35.5	90.9	56.1	56.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	68.2	49.6	49.6	52.1	51.9	27.5	68.4	46.5	35.5	90.9	56.1	56.1
LOS by Move:	E	D	D	D-	D-	C	E	D	D+	F	E+	E+
HCM2kAvgQ:	16	11	11	10	23	11	10	17	33	7	15	15

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 S 7th St & Phelan Ave

Cycle (sec):	104	Critical Vol./Cap.(X):	0.681
Loss Time (sec):	9	Average Delay (sec/veh):	29.7
Optimal Cycle:	104	Level Of Service:	C

Street Name:	S 7th St						Phelan Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Ovl			Ovl			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	1! 0	0	1	0 0 1	0	0	1! 0 0
Volume Module: >> Count Date: 2 Oct 2019 << PM Peak Hour												
Base Vol:	41	161	53	46	254	140	99	249	69	49	231	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	161	53	46	254	140	99	249	69	49	231	30
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Project:	1	1	1	0	0	0	0	0	1	1	0	0
Initial Fut:	42	162	54	46	254	140	99	249	70	50	231	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	42	162	54	46	254	140	99	249	70	50	231	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	162	54	46	254	140	99	249	70	50	231	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	42	162	54	46	254	140	99	249	70	50	231	30
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.92	0.92	0.92
Lanes:	0.21	0.79	1.00	0.10	0.58	0.32	0.28	0.72	1.00	0.16	0.74	0.10
Final Sat.:	371	1429	1750	183	1010	557	512	1288	1750	281	1300	169
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.03	0.25	0.25	0.25	0.19	0.19	0.04	0.18	0.18	0.18
Crit Moves:					****			****		****		
Green Time:	38.4	38.4	65.5	38.4	38.4	67.9	29.5	29.5	29.5	27.1	27.1	27.1
Volume/Cap:	0.31	0.31	0.05	0.68	0.68	0.39	0.68	0.68	0.14	0.68	0.68	0.68
Delay/Veh:	23.6	23.6	7.4	30.6	30.6	8.6	36.8	36.8	27.9	38.7	38.7	38.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	23.6	23.6	7.4	30.6	30.6	8.6	36.8	36.8	27.9	38.7	38.7	38.7
LOS by Move:	C	C	A	C	C	A	D+	D+	C	D+	D+	D+
HCM2kAvgQ:	5	5	1	14	14	7	11	11	2	11	11	11

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 S 7th St & Tully Rd

Cycle (sec):	160	Critical Vol./Cap.(X):	0.591
Loss Time (sec):	12	Average Delay (sec/veh):	38.5
Optimal Cycle:	160	Level Of Service:	D+

Street Name:	S 7th St						Tully Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ovl			Ovl		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module: >> Count Date: 2 Oct 2019 << PM Peak Hour												
Base Vol:	4	58	189	132	158	119	84	1096	33	433	912	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	58	189	132	158	119	84	1096	33	433	912	40
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Project:	0	0	0	1	1	1	1	0	0	0	0	1
Initial Fut:	4	58	189	133	159	120	85	1096	33	433	912	41
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	58	189	133	159	120	85	1096	33	433	912	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	58	189	133	159	120	85	1096	33	433	912	41
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	4	58	189	133	159	120	85	1096	33	433	912	41
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	5700	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.03	0.11	0.08	0.08	0.07	0.05	0.19	0.02	0.25	0.16	0.02
Crit Moves:		****		****				****		****		
Green Time:	10.4	10.0	76.2	20.3	19.9	47.3	27.4	51.5	61.9	66.2	90.3	110.6
Volume/Cap:	0.04	0.49	0.23	0.60	0.67	0.23	0.28	0.60	0.05	0.60	0.28	0.03
Delay/Veh:	70.2	75.7	24.7	70.4	74.3	42.8	58.3	46.1	30.7	37.9	18.1	7.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	70.2	75.7	24.7	70.4	74.3	42.8	58.3	46.1	30.7	37.9	18.1	7.8
LOS by Move:	E	E-	C	E	E	D	E+	D	C	D+	B-	A
HCM2kAvgQ:	0	3	6	7	8	5	4	15	1	18	7	1

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 S 7th St & Leo Ave

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: B[13.6]

Street Name:	S 7th St								Leo Ave							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	1 0	0	0	0	1 0	0	0	1!	0 0	0	0	1!	0 0
Volume Module: >> Count Date: 1 Jan 2019 << PM Peak Hour																
Base Vol:	50	260	0	0	368	50	50	0	50	0	0	0				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	50	260	0	0	368	50	50	0	50	0	0	0				
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Project:	2	0	0	0	0	2	3	0	3	0	0	0				
Initial Fut:	52	260	0	0	368	52	53	0	53	0	0	0				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	52	260	0	0	368	52	53	0	53	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	52	260	0	0	368	52	53	0	53	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	7.1	6.5	6.2				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3				
Capacity Module:																
Cnflict Vol:	420	xxxx	xxxxx	xxxx	xxxx	xxxxx	628	758	394	785	784	130				
Potent Cap.:	1150	xxxx	xxxxx	xxxx	xxxx	xxxxx	450	339	659	313	327	925				
Move Cap.:	1150	xxxx	xxxxx	xxxx	xxxx	xxxxx	434	323	659	278	312	925				
Volume/Cap:	0.05	xxxx	xxxx	xxxx	xxxx	xxxx	0.12	0.00	0.08	0.00	0.00	0.00				
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	8.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*				
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT						
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	523	xxxxx	xxxx	0	xxxxx				
SharedQueue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.8	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	8.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	13.6	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	A	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			13.6			xxxxxx						
ApproachLOS:	*			*			B			*						

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Project Dwy - West & Leo Ave [Enter Dwy]

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Street Name:	Project Dwy - West						Leo Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 0 0 0			0 0 1 0 0			0 0 0 1 0		
Volume Module: >> Count Date: 1 Jan 2019 << PM Peak Hour												
Base Vol:	0	0	0	0	0	0	0	10	0	0	10	44
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	10	0	0	10	44
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Project:	0	0	0	0	0	0	0	0	0	0	0	4
Initial Fut:	0	0	0	0	0	0	0	10	0	0	10	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	0	10	0	0	10	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	0	0	10	0	0	10	48
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Project Dwy - East & Leo Ave [Exit Dwy]

Average Delay (sec/veh): 4.1 Worst Case Level Of Service: A[9.1]

Street Name:	Project Dwy - East						Leo Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			1 0 0 0 0			0 0 1 0 0			0 0 1 0 0		
Volume Module: >> Count Date: 1 Jan 2019 << PM Peak Hour												
Base Vol:	0	0	0	50	0	0	0	10	0	0	54	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	50	0	0	0	10	0	0	54	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Project:	0	0	0	6	0	0	0	0	0	0	4	0
Initial Fut:	0	0	0	56	0	0	0	10	0	0	58	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	56	0	0	0	10	0	0	58	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	56	0	0	0	10	0	0	58	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	68	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	942	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	942	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.06	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			9.1			xxxxxx			xxxxxx		
ApproachLOS:	*			A			*			*		

Note: Queue reported is the number of cars per lane.

Leo Recycle Project

Future Queue Report (cars)

Node	Intersection	Northbound L	Northbound T	Northbound R	Southbound L	Southbound T	Southbound R	Eastbound L	Eastbound T	Eastbound R	Westbound L	Westbound T	Westbound R
#1	[HCM2kAvgQ]:	2	9	7	8	10	0	0	0	1	6	0	4
#2	[HCM2kAvgQ]:	16	11	11	10	23	11	10	17	33	7	15	15
#3	[HCM2kAvgQ]:	5	5	1	14	14	7	11	11	2	11	11	11
#4	[HCM2kAvgQ]:	0	3	6	7	8	5	4	15	1	18	7	1
#5	[2Way95thQ]:	0.1	0.1	xxxx	xxxx	xxxx	xxxx	0.8	0.8	0.8	xxxx	xxxx	xxxx
#6	[2Way95thQ]:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
#7	[2Way95thQ]:	xxxx	xxxx	xxxx	0.2	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx

Appendix D FIELD REVIEW NOTES AND PHOTOS

Stantec

Memo

To:	Elena Nuno Stantec Consulting Services, Inc. Fresno, CA	From:	Tristan Rhodes Stantec, San Jose, CA
File:	Leo Recycle Traffic Study	Date:	September 17, 2020

Reference: Leo Recycle Traffic Study conducted on September 16th, 2020
This Memo summarizes observations from the recent Traffic Study conducted on Phelan Avenue between Monterey Road and S. 7th Street, on S. 7th Street between Phelan Avenue and Tully Road, and on Tully Road between S. 7th Street and Monterey Road in the city of San Jose, CA.

Observations on 9/16/2020 (AM observations from approximately 7:45AM to 9:00AM, PM observations from approximately 4:00PM to 5:15PM)
Intersection of Monterey Rd at Phelan Ave: Signal appeared timed and synchronized with Monterey Rd flow.
AM: Traffic flow light to moderate, no preferential flow on Phelan Ave and only slight preferential flow on SE-bound Monterey Rd relative to NW-bound. No preferential lane use observed on either street. All traffic cleared the intersection during green lights.
PM: Traffic moderate, no preferential flow direction on either street. For SW-bound vehicles on Phelan Ave, slight preferential flow onto SE-bound Monterey Rd relative to NW-bound. Otherwise, no preferential lane use observed. All traffic cleared the intersection during green lights.

Phelan Ave: Sidewalks and bike lanes originating on Monterey Rd end abruptly at RR crossing. All traffic constricts to two lanes at crossing (including vehicle, bicycle and pedestrian). Bike lanes resume to NE or RR crossing, but no sidewalks on NW side of Phelan Ave and only sidewalk at approach to S. 7th St on SE side of Phelan Ave.

Intersection of Phelan Ave at S. 7th St: 3-way signal at intersection (NE-bound Phelan, SW-bound Phelan, both directions S. 7th St). No left turn lanes (or left turn arrows on signal) for vehicles turning from S. 7th St onto Phelan Ave; vehicles required to turn across oncoming traffic. Signal appeared to be timer controlled and functioning properly.
AM: Traffic flow light to moderate, no preferential flow direction or lane use observed on either street. All traffic cleared the intersection during green lights.
PM: Traffic flow light on S. 7th St to moderate on Phelan Ave. No preferential flow direction on either street. Although moderate backup of traffic for both directions of Phelan Ave during red lights, all traffic cleared the intersection during green lights.

Intersection of S. 7th St and Leo Ave: Curbs painted red at intersection approaches allowing for good visibility when pulling from Leo Ave onto S. 7th St. Stop sign only on Leo Ave at S. 7th St; no turn lanes from S. 7th St onto Leo Ave. Although crosswalk noted across Leo Ave, vehicles travel fast on S. 7th St and turn onto Leo Ave at a high rate of speed (posing potential hazard to crossing pedestrians).
AM: Traffic flow light on Leo Ave, mix of passenger vehicles and large trucks. Traffic moderate on S. 7th St with common large trucks (18-wheelers).
PM: Traffic flow light on Leo Ave, mix of passenger vehicles and large trucks. Traffic moderate on S. 7th St with common large trucks. One bicyclist observed traveling in NW-bound bike lane.

S 7th St: No sidewalks along S. 7th St except on SW side from Phelan Ave to just past Leo Ave. Bike lanes on both sides of S. 7th St. Large vehicles (trucks, RVs) commonly parked along SW side of S. 7th to SE of Leo Ave, causes poor visibility for driveway traffic pulling onto S. 7th St from SW side. Common concrete block barricades along NE side of S. 7th minimized parked vehicles and allowed for good visibility to driveway traffic. Red curbs and No Parking signs on both sides at approach to Tully Road allows for good visibility in both directions.

Reference: **Leo Recycle Traffic Study conducted on September 16th, 2020**

Intersection of S. 7th St and Tully Road: 3-way signal at intersection (SE-bound S. 7th St, NW-bound Old Tully Rd, both directions Tully Rd). Signal appeared timed and synchronized with Tully Rd flow. Due to the broad curve of Tully Rd (as well as the high speed of traffic), the right turn from SE-bound S. 7th St onto W-bound Tully Rd (during red-signal light) appeared dangerous. Problem compounded by the abrupt and poorly-signed loss of the right lane on W-bound Tully Rd immediately west of the intersection. Similarly dangerous merge from E-bound Tully Rd onto SW-bound Old Tully Rd due to sharp hair-pin turn combined with high speed of traffic on SW-bound Old Tully Rd (originating from SE-bound S.7th St and W-bound Tully Rd).
AM: Traffic flow light to moderate, no preferential flow direction or lane use observed on either street. All traffic cleared the intersection during green lights.
PM: Traffic moderate, slight preferential flow on E-bound Tully Rd. All traffic cleared the intersection during green lights.

Tully Rd: No Parking on S side of Tully Rd and limited parking (though not in close proximity to intersections) on the N side of Tully Road results in good visibility for egress from driveways. A low curb-height median separates E- from W-bound traffic; flow of traffic is generally fast. Limited pedestrian and no bicycle use was observed along Tully Rd.

Intersection of Tully Road and Monterey Rd: Signal appeared timed and synchronized with Tully Rd flow. Two left turn lanes per street per direction were observed with dedicated green-left-turn signal arrows. Local businesses and bus stops resulted in common pedestrian use. Cross-walk buttons appeared to be functioning properly.
AM: Traffic flow light to moderate, slight preferential flow direction on W-bound Tully Rd. No preferential lane use observed on either street. All traffic cleared the intersection during green lights.
PM: Traffic moderate to heavy, preferential flow direction on E-bound Tully Rd and SE-bound Monterey Rd. Preferential use of left turn lanes from SE-bound Monterey Rd onto E-bound Tully Rd and right-hand lanes on E-bound Tully Rd (despite a dedicated right turn lane from E-bound Tully Rd onto SE-bound Monterey Rd). Not all traffic cleared the intersection during green lights, causing traffic to backup.

General observations
Numerous bus-stops were observed to have insufficient pull-out areas (see Figure) causing bicycle and/or vehicle traffic to back-up.
Curbs leading to and from intersections were generally painted red, providing good visibility for turning vehicles to assess cross traffic.
With the exception of Monterey Rd and Tully Rd, sidewalks were generally in disrepair or non-existent. Very little pedestrian or bicycle traffic was observed during either AM or PM site visits, except for common pedestrian use at the intersection of Tully Rd and Monterey Rd.

Stantec Consulting Services Inc.

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Geologist

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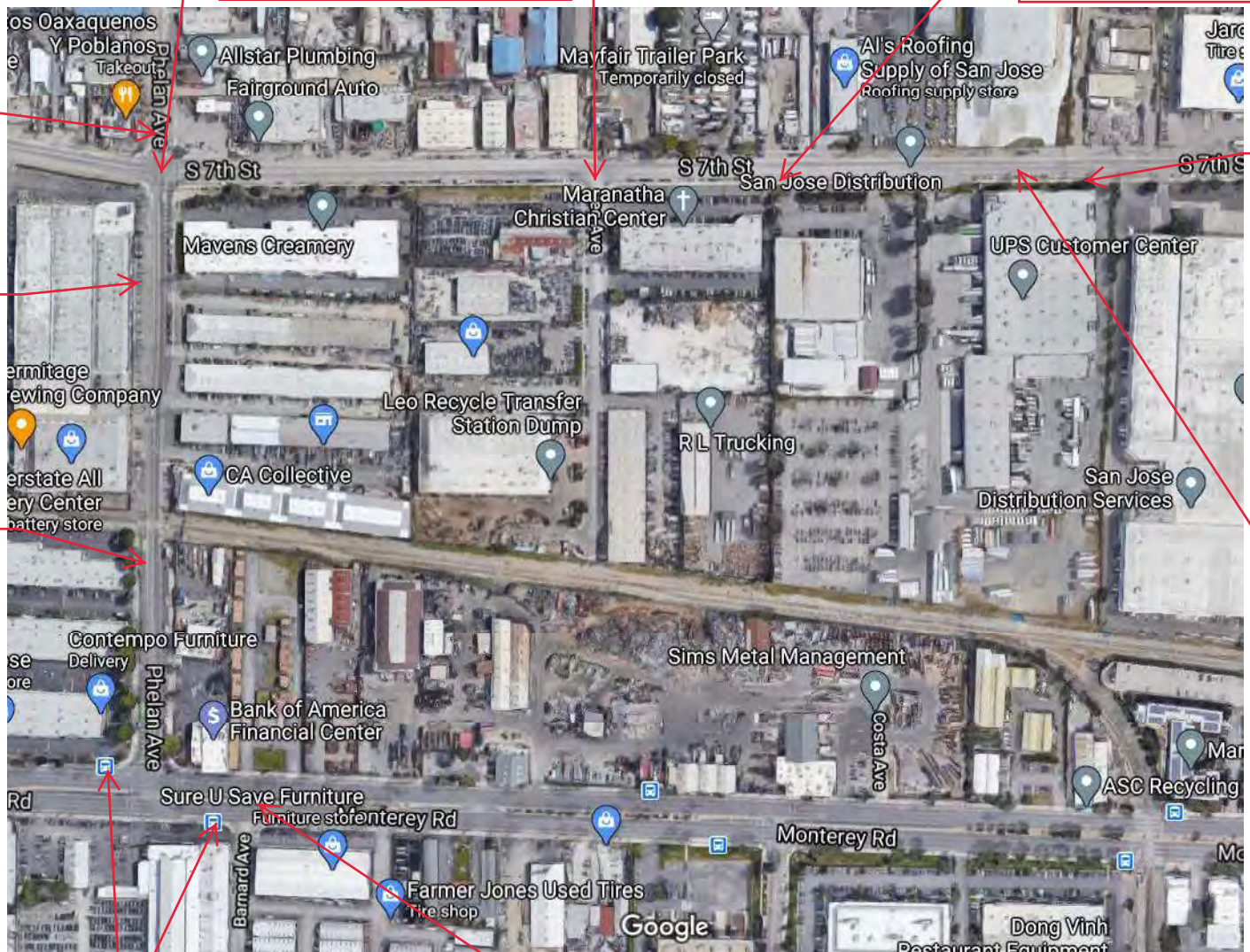
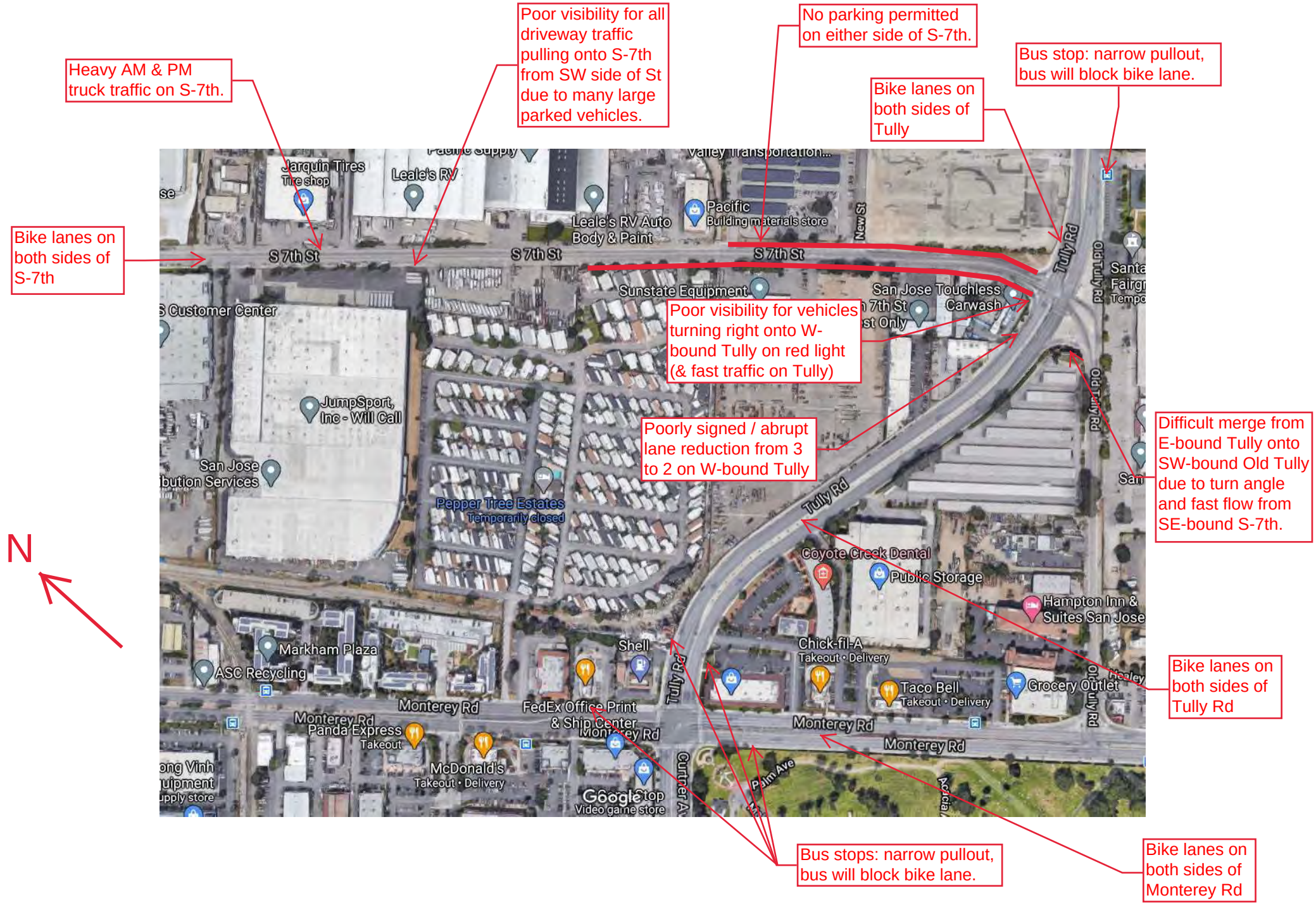

3-way intersection (NE- and SW-bound Phelan have own light). No left turn lanes or arrows for both directions of S-7th.
Red curbs at approaches to Leo Ave intersection allows for good visibility
No sidewalk on NE side S-7th. Intermittent or in disrepair on SW side to SE of this location.
No bike lane on Phelan to NE of S-7th.
Poor visibility for all driveway traffic pulling onto S-7th from SW side of St due to many large parked vehicles.
No sidewalk on NW side Phelan, intermittent on SE side. Bike lanes resume to NE.
Road narrows for RR crossing: only bike lane & sidewalk to SW
Bike lanes on both sides of S. 7th St
N
Bus stop: narrow pull-out, bus will block bike lane.
Bike lanes on both sides of Monterey Rd
Allstar Plumbing
Fairground Auto
Mayfair Trailer Park
Temporarily closed
Al's Roofing Supply of San Jose
Roofing supply store
S 7th St
San Jose Distribution
Maranatha Christian Center
Mavens Creamery
UPS Customer Center
Leo Recycle Transfer Station Dump
R L Trucking
CA Collective
San Jose Distribution Services
Contempo Furniture
Delivery
Sims Metal Management
Bank of America Financial Center
Phelan Ave
Costa Ave
Sure U Save Furniture
Furniture store
Monterey Rd
Barnard Ave
Farmer Jones Used Tires
Tire shop
ASC Recycling
Google
Dong Vinh Restaurant Equipment


Heavy AM & PM truck traffic on S-7th.
Poor visibility for all driveway traffic pulling onto S-7th from SW side of St due to many large parked vehicles.
No parking permitted on either side of S-7th.
Bus stop: narrow pullout, bus will block bike lane.
Bike lanes on both sides of Tully
Bike lanes on both sides of S-7th
Poor visibility for vehicles turning right onto W-bound Tully on red light (& fast traffic on Tully)
Poorly signed / abrupt lane reduction from 3 to 2 on W-bound Tully
Difficult merge from E-bound Tully onto SW-bound Old Tully due to turn angle and fast flow from SE-bound S-7th.
Bike lanes on both sides of Tully Rd
Bus stops: narrow pullout, bus will block bike lane.
Bike lanes on both sides of Monterey Rd
N
Jarquin Tires
Tire shop
Leale's RV
Leale's RV Auto Body & Paint
Pacific
Building materials store
S 7th St
Sunstate Equipment
San Jose Touchless Carwash
Tully Rd
Old Tully Rd
New St
JumpSport, Inc - Will Call
Pepper Tree Estates
Temporarily closed
Coyote Creek Dental
Public Storage
Hampton Inn & Suites San Jose
Chick-fil-A
Takeout • Delivery
Taco Bell
Takeout • Delivery
Grocery Outlet
Markham Plaza
ASC Recycling
Shell
Monterey Rd
FedEx Office Print & Ship Center
Panda Express
Takeout
McDonald's
Takeout • Delivery
Palm Ave
Curtner Ave

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: ATT Recycle, Inc	**Job Number:** 185704747
Site Name: Leo Recycle	**Address:** Phelan Ave, S. 7th St, Tully Rd

PHOTO No. 1

Monterey Rd, facing SE toward intersection with Phelan Ave. Note: no dedicated pullout for bus stop

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: ATT Recycle, Inc	**Job Number:** 185704747
Site Name: Leo Recycle	**Address:** Phelan Ave, S. 7th St, Tully Rd

PHOTO No. 2

Phelan Ave, facing SW toward intersection with Monterey Rd. Note: bike lanes and sidewalks end at RR crossing.

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: ATT Recycle, Inc	**Job Number:** 185704747
Site Name: Leo Recycle	**Address:** Phelan Ave, S. 7th St, Tully Rd

PHOTO No. 3

Phelan Ave, facing NE toward intersection with S. 7th St. Note: No sidewalk on NW side of Phelan, bike lanes on Phelan Ave end to NE of intersection.

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: ATT Recycle, Inc	**Job Number:** 185704747
Site Name: Leo Recycle	**Address:** Phelan Ave, S. 7th St, Tully Rd

PHOTO No. 4

Leo Ave, facing NE toward intersection with S. 7th St.

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: ATT Recycle, Inc	**Job Number:** 185704747
Site Name: Leo Recycle	**Address:** Phelan Ave, S. 7th St, Tully Rd

PHOTO No. 5

S. 7th St facing NW. Note: Poor visibility for vehicles exiting driveway due to large parked RVs and trucks. No parking barricades visible on opposite side of street.

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: ATT Recycle, Inc	**Job Number:** 185704747
Site Name: Leo Recycle	**Address:** Phelan Ave, S. 7th St, Tully Rd
PHOTO No. 6	

Tully Rd, facing E toward intersection with S. 7th St. Note loss of right-hand lane on W-bound Tully Rd (right/foreground).

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: ATT Recycle, Inc	**Job Number:** 185704747
Site Name: Leo Recycle	**Address:** Phelan Ave, S. 7th St, Tully Rd

PHOTO No. 7

Old Tully Rd, facing N toward intersection with Tully Rd. Note: tight right turn from E-bound Tully Rd onto SW-bound Old Tully Rd creates poor visibility for merging. Also note intermittent sidewalks on Old Tully Rd.

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: ATT Recycle, Inc	**Job Number:** 185704747
Site Name: Leo Recycle	**Address:** Phelan Ave, S. 7th St, Tully Rd

PHOTO No. 8

Tully Rd, facing W toward intersection with Monterey Rd. Note: Bus stop (on left side of frame) does not have dedicated pullout.

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: ATT Recycle, Inc	**Job Number:** 185704747
Site Name: Leo Recycle	**Address:** Phelan Ave, S. 7th St, Tully Rd
PHOTO No. 9	

Monterey Rd, facing NW toward intersection with Tully Rd. Note: Bus stop (across Tully Rd) does not have dedicated pullout.

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: ATT Recycle, Inc	**Job Number:** 185704747
Site Name: Leo Recycle	**Address:** Phelan Ave, S. 7th St, Tully Rd

PHOTO No. 1

Monterey Rd, facing NW toward intersection with Phelan Ave. Note: no dedicated pullout for bus stop

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: ATT Recycle, Inc	**Job Number:** 185704747
Site Name: Leo Recycle	**Address:** Phelan Ave, S. 7th St, Tully Rd

PHOTO No. 2

Monterey Rd, facing NE up Phelan Ave.

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: ATT Recycle, Inc	**Job Number:** 185704747
Site Name: Leo Recycle	**Address:** Phelan Ave, S. 7th St, Tully Rd

PHOTO No. 3

S. 7th St, facing NW toward intersection with Phelan Ave. Note: No left turn lane or arrow for vehicles travelling on S. 7th St. Also, sidewalks end on NW side of intersection.

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: ATT Recycle, Inc	**Job Number:** 185704747
Site Name: Leo Recycle	**Address:** Phelan Ave, S. 7th St, Tully Rd

PHOTO No. 4

S. 7th St, facing SE toward intersection with Leo Ave.

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: ATT Recycle, Inc	**Job Number:** 185704747
Site Name: Leo Recycle	**Address:** Phelan Ave, S. 7th St, Tully Rd

PHOTO No. 5

S. 7th St, facing SE (immediately SE of intersection with Leo Ave). Note: sidewalk in disrepair. Also, no sidewalk on NE side of street.

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: ATT Recycle, Inc	**Job Number:** 185704747
Site Name: Leo Recycle	**Address:** Phelan Ave, S. 7th St, Tully Rd
PHOTO No. 6	

Tully Rd, facing E towards intersection with S. 7th St. Note: broad curve of Tully Rd and fast speed of traffic causes visibility issues for driveway egress.

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: ATT Recycle, Inc	**Job Number:** 185704747
Site Name: Leo Recycle	**Address:** Phelan Ave, S. 7th St, Tully Rd

PHOTO No. 7

Curtner Ave, facing NE towards intersection with Monterey Rd.

STANTEC CONSULTING SERVICES INC PHOTOGRAPHIC RECORD	
Client: ATT Recycle, Inc	**Job Number:** 185704747
Site Name: Leo Recycle	**Address:** Phelan Ave, S. 7th St, Tully Rd

PHOTO No. 8

Monterey Rd, facing SE towards intersection with Tully Rd. Note: no dedicated turnout for bus stop.

Appendix E ON-SITE TRUCK TURNING CIRCULATION AND EXAMPLE PHOTOS

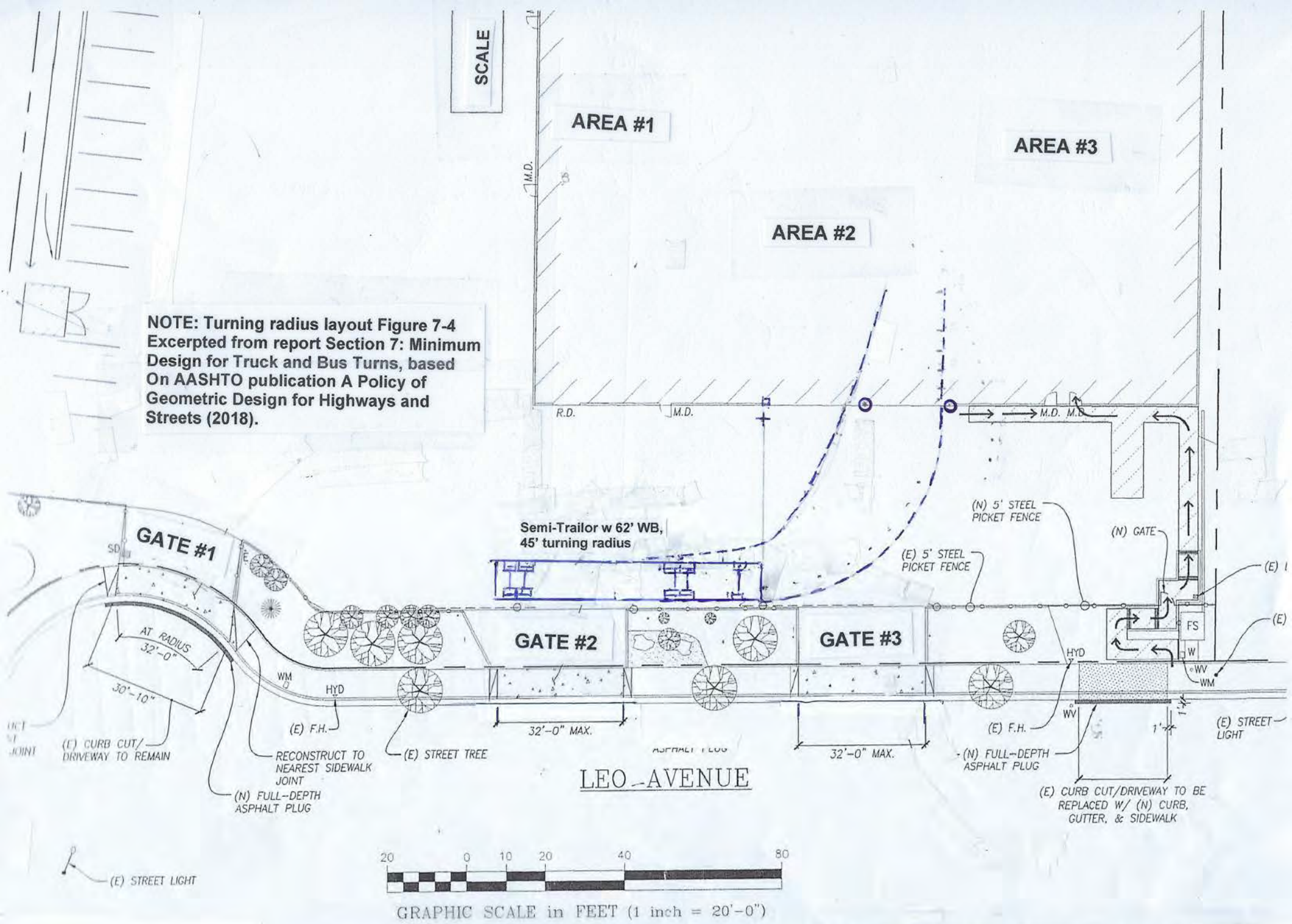


FIGURE A – FRONTAGE PLAN AND TURNING RADIUS LIMITATION *(215 LEO AVE)*

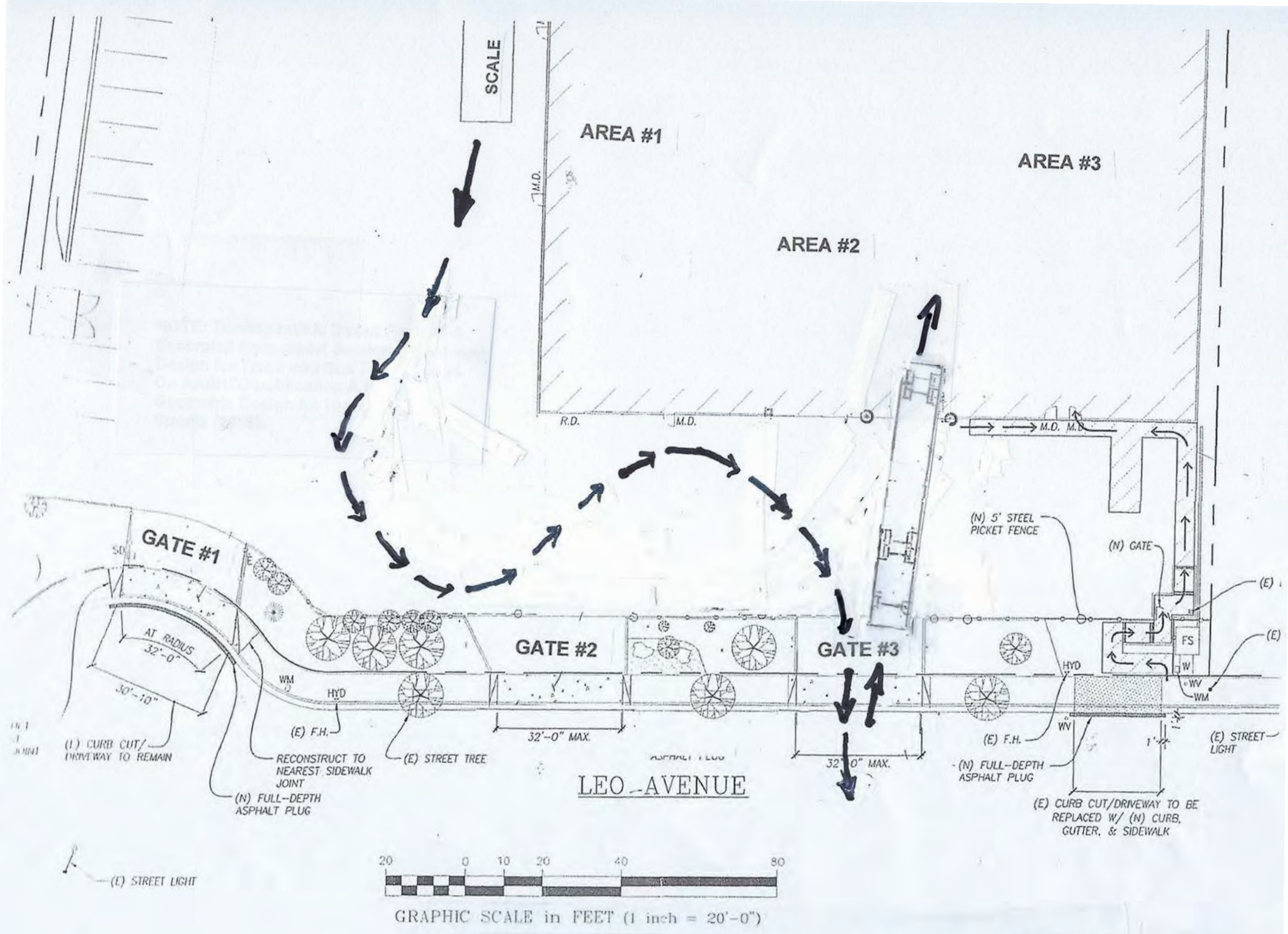


FIGURE B – TURNING PATH LARGE VEHICLE TO ENTER AREA #3

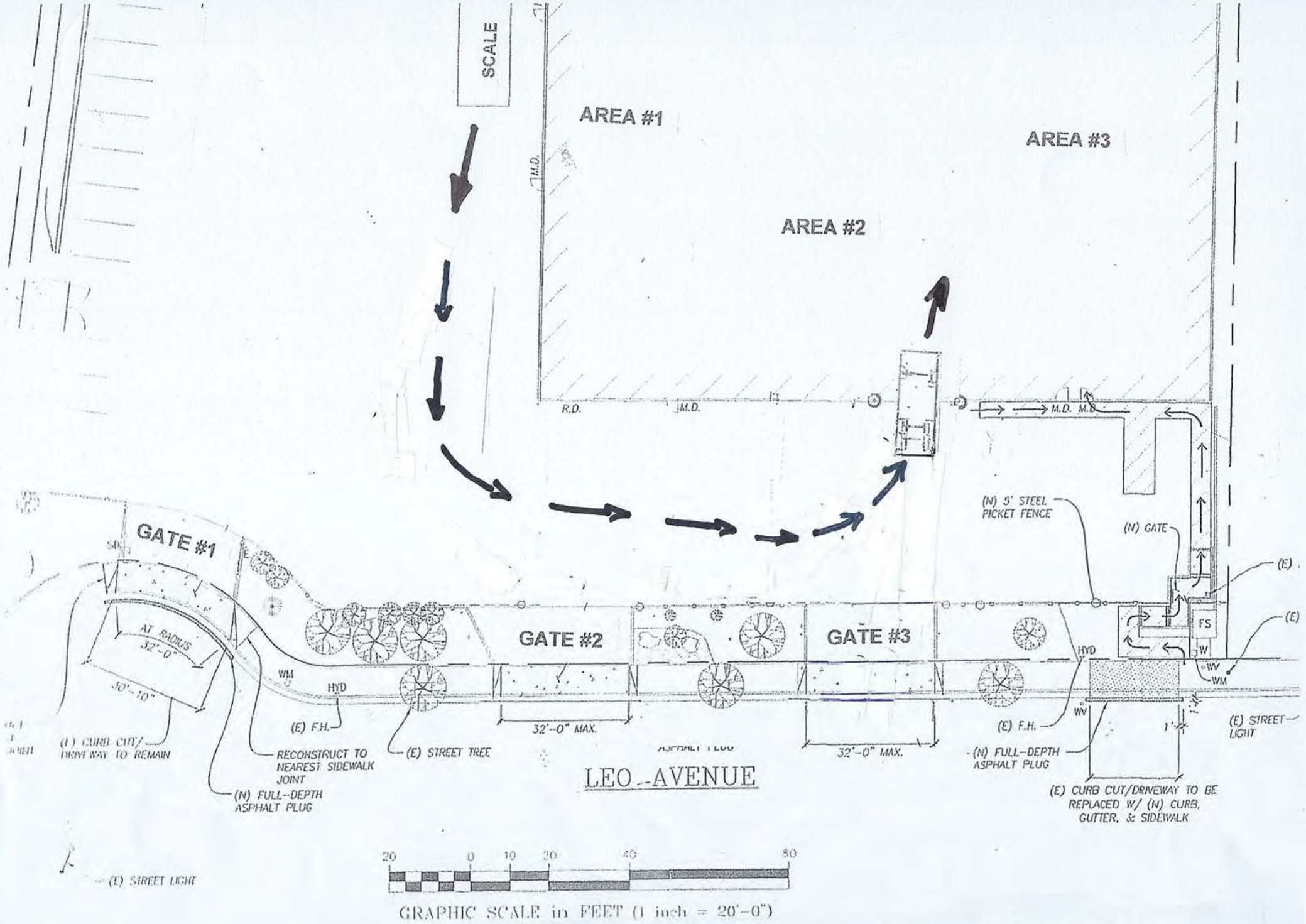


FIGURE C – Turning Path Smaller Size Vehicles to Enter Area #3

GATE #2 Looking At Entrance To AREA #1

Long Haul Transfer Trailer backing into AREA #1 entrance

AREA #2 and AREA #3 entrances

Rolloff Truck backing into AREA #3 entrance

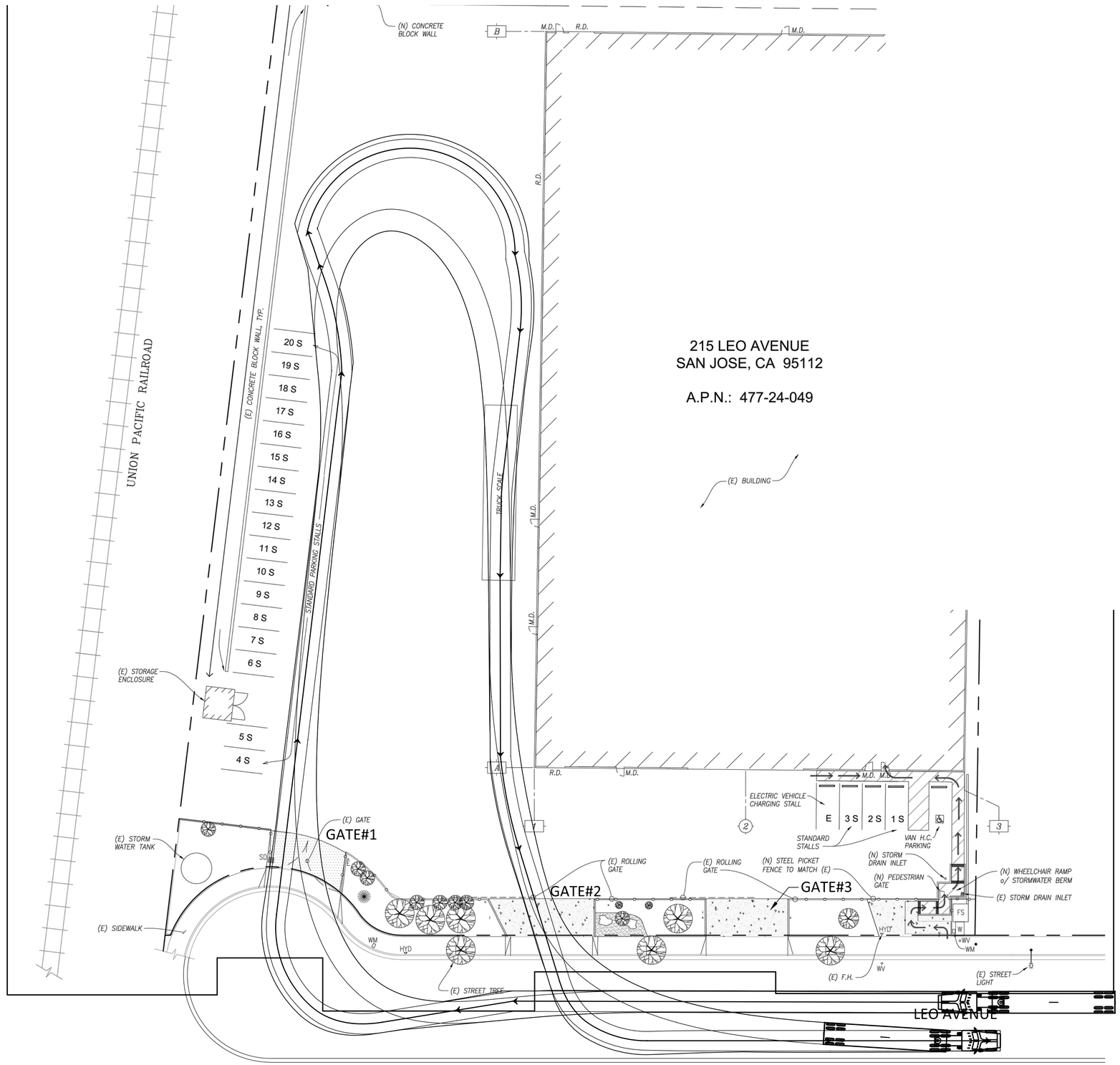
GATE #1

GATE #2

GATE #3 *(looking out)*

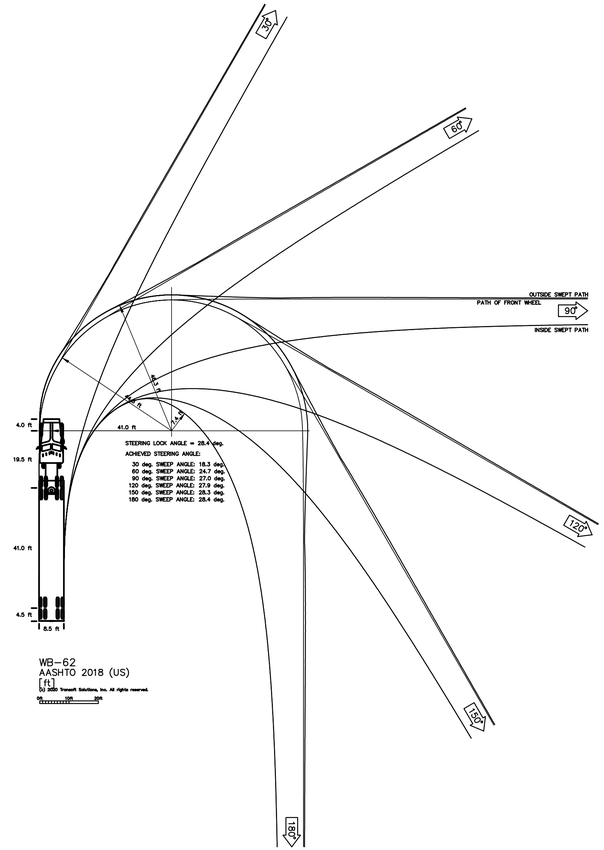
Looking southeast at GATE #2 and GATE #3

Rolloff truck backing into AREA #3 entrance

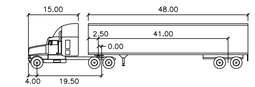


215 LEO AVENUE
SAN JOSE, CA 95112

A.P.N.: 477-24-049



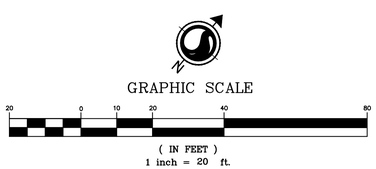
WB-62
AASHTO 2018 (US)



WB-62

feet

Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 28.4
Tractor Track	: 8.00	Articulating Angle	: 70.0
Trailer Track	: 8.50		



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PREPARED FOR:

LEO AVENUE

TRUCK TURNING EXHIBIT USING WB-62

DATE: 11/09/2020

SHEET 1 OF 2

JOB NO. XXXXX.XX.XXX

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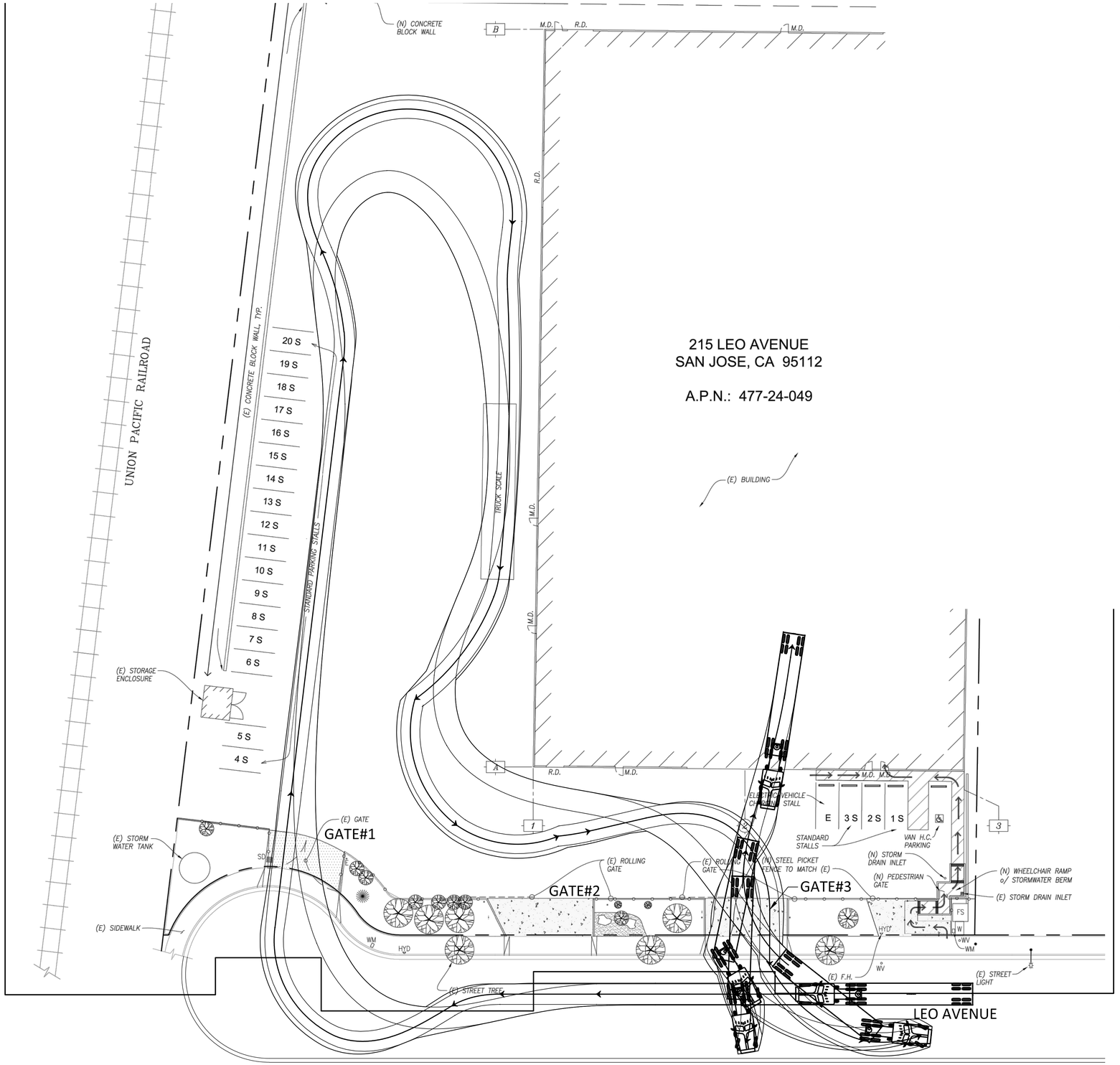
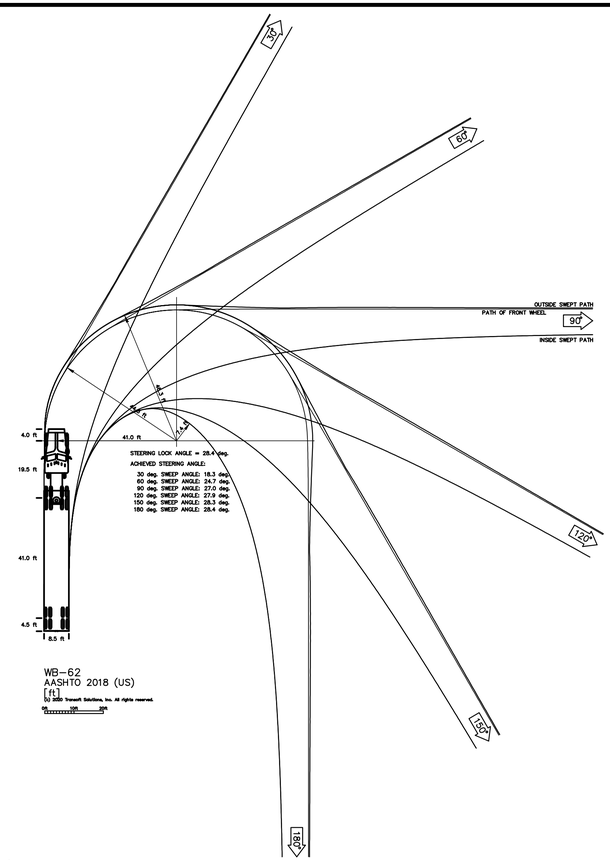


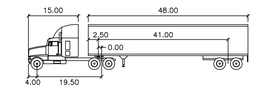
215 LEO AVENUE
SAN JOSE, CA 95112

A.P.N.: 477-24-049

(E) BUILDING



WB–62
AASHTO 2018 (US)
(ft)



WB–62

feet

Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 28.4
Tractor Track	: 8.00	Articulating Angle	: 70.0
Trailer Track	: 8.50		

N

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

PREPARED BY:

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PREPARED FOR:

LEO AVENUE

TRUCK TURNING EXHIBIT USING WB-62

DATE: 11/09/2020

SHEET 2 OF 2

JOB NO. XXXXX.XX.XXX

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Appendix F 2013 TECHNICAL MEMORANDUM

TJKM

Vision That Moves Your Community

Transportation Consultants

Technical Memorandum

Date: November 19, 2013

To: Ms. Liz Koki
Department of Public Works
Development Services Division
City of San Jose

Project No.: 079-092

cc: Vince Rivero, V.E.R. Consultants
Nayan Amin, TJKM Transportation Consultants

From: Wesley Catanzaro, Project Engineer

Jurisdiction: City of San Jose

Subject: Trip Generation estimate for a proposed Recycling Facility at 215 Leo Avenue in the City of San Jose

The purpose of this memorandum is to present an estimate of the total daily, a.m. midday, and p.m. peak hour trips for a proposed materials recycling facility (MRF) at 215 Leo Avenue in the City of San Jose. For the purposes of this study estimate, TJKM defines the peak hour as the one hour period(s) with the highest number of transactions in a typical weekday, with the a.m. peak hour occurring between 7:00 a.m. and 9:00 a.m., the midday peak hour occurring between 11:00 am and 12:00 p.m., and the p.m. peak hour occurring between 4:00 p.m. and 6:00 p.m.

Project Background

The proposed project is located at 215 Leo Avenue in San Jose with a 25,000 square feet MRF. According to information provided by the project applicant, VER Consultants, the project is expected to operate from 6:30 a.m. to 5:00 p.m., Monday through Friday, and from 6:30 a.m. to 3:00 p.m. on Saturday. The facility is expected to provide recycling services to both business and residential customers, with up to a daily handling capacity of 16 tons of recyclable materials and approximately 100 daily transactions. Based on the information provided, it is expected that approximately five (5) employees will work at the proposed facility.

Source of Trip Generation estimate

TJKM initially consulted the Institute of Transportation Engineers' (ITE) *Trip Generation* 9th edition and the San Diego Association of Governments' (SANDAG) *Traffic Generators Manual*. However, it was determined that the land use designations in these manuals were not applicable to the proposed project, as the description of the proposed project did not appear to be consistent with the description and presumed characteristics of the development sites for which there were data points. As a result, TJKM inquired with the

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93704-2515
559.325.7530
559.221.4940 fax

Sacramento
980 Ninth Street
16th Floor
Sacramento, CA
95814-2736
916.449.9095

Santa Rosa
1400 N. Dutton Avenue
Suite 21
Santa Rosa, CA
95401-4643
707.575.5800
707.575.5888 fax

tjkm@tjkm.com

developer regarding the expected level of operation of the proposed project, including the number of daily transactions expected, as well as the number of transactions at a similar facility currently operating under DRG Recycling, Inc. located at 1745 Walsh Avenue in Santa Clara. It should be noted that while the SANDAG *Traffic Generator Manual* does not provide a compatible land use description for standalone recycling facilities, the manual does provide a.m. and p.m. peak hour trip generation proportions for a "Landfill & Recycling Center" land use. TJKM applied these proportions to estimate the percentage of daily trips occurring within the a.m. and p.m. peak hours as a supplement to the data provided by the project applicant regarding midday peak hour trip generation.

Trip Generation at a Representative Facility

According to information received from the project applicant, the existing MRF facility located 1745 Walsh Avenue in Santa Clara operates within the hours of 6:30 a.m. to 5:00 p.m., Monday through Fridays, and from 6:30 a.m. to 3:00 p.m. on Saturdays. The existing facility has 23 employees, and processes approximately 15 tons of recycling material and 100 transactions on a daily basis, with approximately 50 transactions (i.e., 50% of daily transactions) occurring during the midday peak hour between11:00 a.m. and 12:00 p.m. (noon) on weekdays, and between 9:00 a.m. and 12:00 p.m. on Saturdays.

Based on our knowledge of temporal trip generation patterns and data regarding the proportion of daily trips data from SANDAG's *Traffic Generator Manual*, TJKM estimates that of the remaining 50 transactions, 11 (11 percent) occur during the a.m. peak hour, 10 (10 percent) occur during the p.m. peak hour, and the remaining 29 transactions (29%) occur throughout the day outside of the peak periods. Assuming SANDAG's directional distributions of 50% inbound trips and 50% outbound trips during the a.m. and midday peak periods, and 40% inbound trips and 60% outbound trips during the p.m. peak period, TJKM estimates that the existing facility generates approximately 22 trips during the a.m. peak hour (11 inbound and 11 outbound), 100 trips during the midday peak hour (50 inbound and 50 outbound), 25 trips during the p.m. peak hour (10 inbound and 15 outbound), and 99 trips (52 inbound and 47 outbound) during the entire non-peak period. This estimation includes 46 trips generated by employees entering and exiting the site, with 23 inbound trips prior to the a.m. peak hour, five (5) outbound trips during the p.m. peak hour, and 18 outbound trips after the p.m. peak hour.

Proposed Project Trip Generation Estimate

Information received from the project applicant regarding the proposed facility at 215 Leo Avenue indicates that it will operate similar to the existing facility at 1745 Walsh Avenue. Specifically, it is estimated that the proposed facility will have approximately five (5) employees, and process up to 16 tons of material and approximately 100 daily transactions. Because the proposed facility is expected to operate similarly to the existing facility with respect to hours of operation, number of daily transactions, and peak periods, TJKM estimates that the proposed facility at 215 Leo Avenue will generate approximately 210 daily trips, 200 of which will be attributable to the daily transactions. Of those 200 transaction related trips, it is estimated that approximately 22 trips will

occur during the a.m. peak hour (11 inbound and 11 outbound), 100 trips will occur during the midday peak hour (50 inbound and 50 outbound), 20 trips will occur during the p.m. peak hour (10 inbound and 10 outbound), and 58 (29 inbound and 29 outbound) will occur during non-peak periods. The remaining ten trips are expected to be home-based-work trips related to the five employees entering and exiting the proposed facility, with five (5) inbound trips prior to the a.m. peak hour, four (4) outbound trips during the p.m. peak hour, and the remaining one (1) trip occurring after the p.m. peak hour. Thus, accounting for trips generated by employees, it is expected that the proposed project will generate approximately 24 trips during the p.m. peak hour. The following table summarizes the number of trip the project is expected to generate during each peak hour.

Land Use	**Daily Trips**	***A.M. Peak***					***Midday Peak***					***P.M. Peak***				
		In %	***Out %***	***In***	***Out***	***Total***	***In %***	***Out %***	***In***	***Out***	***Total***	***In %***	***Out %***	***In***	***Out***	***Total***
Recycling Center (2.5 k.s.f)	210	50	50	11	11	22	50	50	50	50	100	40	60	10	14	24

Conclusion

Based on the results of the analysis, TJKM estimates that the project will generate approximately 210 daily trips, with 22 trips occurring during the a.m. peak hour, 100 trips occurring during the midday peak hour, and 24 trips occurring during the p.m. peak hour.