
Appendix G

Mobility Analysis

MEMORANDUM

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Subject: Mobility Analysis Study for the Tidelands Avenue Electric Truck Hub Project, San Diego
Unified Port District
Date: July 31, 2025, Revised December 11, 2025, Revised January 19, 2026
cc: Matthew Valerio, Dudek
Attachments: Figures 1 – 6
A – Raw Traffic Counts
B – Railway Crossing Data
C – Gate 13 Counts
D – Vissim LOS and Queuing Reports

1 Purpose and Scope

The following memorandum provides a Mobility Analysis for the Tidelands Avenue Electric Truck Hub Project (project or proposed project) located at 1400 Tidelands Avenue in the City of National City (City), California. Figure 1 illustrates the project's location while Figure 2 illustrates the site plan. The proposed project is located near Gate 13 of the United States Department of the Navy's (U.S. Navy) Naval Base San Diego (base). The San Diego Unified Port District (District) is the lead agency and has requested that this study be used to inform the proposed project's Environmental Impact Report (EIR) of the potential effects to traffic operations, including an analysis of vehicular operations at Naval Base Gate 13 (Gate 13) located at the west end of 19th Street which can become congested at the beginning of the morning shift as personnel report to the base.

This memorandum has been prepared consistent with the Guidelines for Transportation Impact Studies in the San Diego Region (May 2019) which provides guidance on the evaluation of transportation impacts in the San Diego Region, the Port Master Plan, and the National City Transportation Element (Adopted March 19, 2024). This memorandum includes an analysis of the following:

- Document existing roadway, pedestrian, bicycle, transit, and traffic conditions, including intersection levels of service (LOS) and vehicular queuing at the Tidelands Avenue/19th Street intersection and at Gate 13.
- Estimate the trip generation, distribution, and assignment characteristics for the proposed project.

- Analyze the traffic operations and queuing at Gate 13, the Tidelands Avenue/19th Street intersection, and the project access driveways along Tidelands Avenue under Existing plus Project conditions.
- Conduct a comparative pavement analysis of a Tesla EV Semi truck and a typical (Internal Combustion Engine) truck to determine potential impacts to street pavement on Tidelands Avenue.
- Provide findings and recommendations based on the site access analysis, queuing evaluation, and pavement analysis of the proposed project.

The study area for the analysis was established in consultation with the District and the US Navy and is comprised of the following:

1. Tidelands Avenue/19th Street
2. Project Ingress/Tidelands Avenue
3. Project Egress/Tidelands Avenue
4. Gate 13, west end of 19th Street

Figure 3 illustrates the study area and the traffic count locations for the proposed project. Also, based on consultation with the District and Navy, the analysis includes the following scenarios:

- Existing conditions
- Existing plus Project conditions

As noted in the project's Initial Study (June 2025), the proposed project would not result in a substantial increase in vehicles miles traveled (VMT) therefore, this issue will not be further analyzed in this memorandum or in the EIR prepared for the proposed project.

2 Project Description

Skychargers LLC (Applicant) proposes to lease approximately 4.8 acres of an approximately 8.2-acre parcel from the District to develop the Tidelands Avenue Electric Truck Hub Project. The proposed project would consist of the following: (1) Zero Emissions (ZE) or Electric Vehicle (EV) Truck Charging, (2) Photovoltaic (PV) Canopy, (3) Battery Energy Storage System (BESS), (4) Convenience Store, and (5) infrastructure improvements. The proposed project is intended to serve electric trucks working at nearby marine terminal and related storage facilities in the vicinity.

The proposed project would have a total of 70 charging stalls with up to 30 trucks anticipated to use the site during the initial operating year as part of the Truck as a Service program. An additional 16 trucks may be added to the program over the next 3 years to 5 years. Additionally, EV truck charging infrastructure would be available on site to support municipal fleets, local businesses with truck fleets, as well as passenger vehicles dependent on available capacity. Truck as a Service participating operators may have assigned, dedicated parking stalls/charge stalls, and other trucks serving one of the two marine cargo terminals would have priority over all other vehicles for the opportunity charging stalls. The site would be equipped with gates that may be used for access control as needed to enforce the priority of use.

As shown on the site plan (Figure 2), the project site is located on Tidelands Avenue and would be accessed via two driveways: one ingress only on the northern end of the site, and one egress only on the southern end. The site shares its southern boundary with an imported vehicle parking lot operated by Pasha Automotive Services. South of this lot is 19th Street which provides access to Gate 13. The project site is within the National City Bayfront: Planning District 5 of the Port Master Plan (PMP). The PMP provides a mix of goals, policies, and standards to guide existing uses and activities, as well as future development, activation, and management of tidelands.

3 Existing Conditions

This section describes existing conditions within the identified study area. Characteristics are provided for the existing circulation system including roadway, transit, bike and pedestrian conditions. Traffic count data including average daily traffic (ADT) and peak hour volumes were collected on a typical day of traffic as well as Gate 13 operation on Thursday April 17, April 2025 in the study area. The project site is currently developed with parking as an overflow roll-on/roll-off yard (RoRo) and a chassis storage facility (parking) for Pasha Automotive Services. The southern part of the project site would continue to operate in a similar manner as existing conditions, however, with a reduced storage capacity. As described by representative of Pasha Automotive Services, the site generates trips to and from the National City Marine Terminal approximately two-three times a week. The site operation generally occurs between 6:00 am and 2:30 pm and does not occur daily.

3.1 Roadway Network

Direct access to the project is provided by Tidelands Avenue north of its intersection with 19th Street.

Tidelands Avenue. The functional classification of Tidelands Avenue is a Collector (per Figure T-6 of the National City Transportation Element) between Civic Center Drive and 32nd Street. Near the project, the roadway has one lane in each direction and is divided with a painted yellow striping along the segment. As part of the Bayshore Bikeway, there is a buffered Class II bicycle lane along either side of Tidelands Avenue. The posted speed limit is 35 miles per hour (MPH). Parking is allowed on both sides of Tidelands Avenue. The ADT along Tidelands Avenue, between the 19th Street and project access driveway, was observed to be approximately 1,406 vehicles.

19th Street. The functional classification of 19th Street is Collector Street (per Figure T-6 of the National City Transportation Element). 19th Street has two travel lanes in each direction between Kidd Street near Gate 13 and Cleveland Avenue. East of Cleveland Avenue and under Interstate 5 (I-5), 19th Street transitions into a two-lane roadway which terminates at 18th Street. The posted speed limit is 30 MPH. Parking is not allowed along 19th Street and there are no bike facilities. The ADT along 19th Street, west of Tidelands Avenue, was observed to be 2,488 vehicles. West of Tidelands Avenue, 19th Street provides access to Gate 13.

Attachment A includes the 24-hour ADT volumes, collected for the roadway segments of Tidelands Avenue and 19th Street as well as other traffic count data collected in the study area.

3.2 Truck Route

The demand for truck movements is primarily driven by the Port of San Diego, Naval Base San Diego, and the shipyards. These facilities serve as key origins and destinations for truck freight (Port of San Diego 2020). There are two designated truck routes; one truck route runs along Harbor Drive, then connects to adjacent freeways I-5

and I- 15 via 28th or 32nd Streets in the City of San Diego or 8th Street in the City of National City, and the other truck route runs along Tidelands Avenue between 24th Street and Civic Center. The truck route along Harbor Drive is a right-of-way (ROW) controlled by the City of San Diego and the truck route along Tidelands Avenue is a ROW controlled by the City of National City. Because the proposed project will prioritize trucks that frequent the Ports two marine cargo terminals, it is anticipated the trucks using the charging facility will use the designated truck routes to access the proposed project site and marine terminals. The most direct route to the marine cargo terminals and freeway network to and from the proposed project site is via the designated truck routes. Electric trucks associated with or using the proposed project charging, whether for overnight or opportunity charging that are not using the designated truck routes would presumably be delivering cargo to a destination with National City or the City of San Diego and not simply driving through residential streets that do not have the geometric design to accommodate heavy duty truck and trailers.

3.3 Bike and Pedestrian Facilities

The bicycle network is anchored by one major north-south route connected to an array of existing and planned east-west facilities. Harbor Drive is the primary north-south corridor and part of the Bayshore Bikeway, a 24-mile path around San Diego Bay being implemented in phases by SANDAG (Port of San Diego 2020). The Bayshore Bikeway is a regional bicycle route that encircles San Diego Bay and passes through the National City Bayfront: Planning District 5 of the PMP along Harbor Drive and Tidelands Avenue and provides a link to the nearby cities of San Diego, Coronado, Imperial Beach, and Chula Vista. This route also provides an alternative transportation option to many industrial and military job sites. The National City Segment for this bikeway from Civic Center Drive to 32nd Street is complete. However, south of Civic Center Drive and near the proposed project, there are three alternatives proposed for the segment and pending selection and construction of a final protected alignment along Marina Way and McKinley or Cleveland Avenues. Currently, Bayshore Bikeway is a buffered Class II bike lane along Tidelands Avenue and traverses the Tidelands Avenue/19th Street intersection near the proposed project and terminates at 32nd Street.

The pedestrian network consists mainly of sidewalks along Tidelands Avenue and 19th Street. There is a continuous paved sidewalk along the project's frontage along Tidelands Avenue, however, the sidewalk becomes narrow at certain places due to unmaintained landscaping. The Tidelands Avenue/19th Street intersection is constructed with curb ramps and has pedestrian phasing at the traffic signal for the north, south, and west legs. There is no designated pedestrian crossing phase for the intersection's east leg although, pedestrian and bicycle crossings were observed for this movement as well. While pedestrian phasing is provided for three of the four intersection legs, no crosswalk markings are present. Additionally, there is a pedestrian crossing at Tidelands Avenue near the proposed project ingress driveway, although it was not observed to be heavily utilized during AM or PM peak periods, with one (1) pedestrian and six (6) bicycles crossing throughout both the AM and PM peak periods. Pedestrian and bicycle counts at the Tidelands Avenue/19th Street intersection are provided in Attachment A and summarized in Table 1 below.

Table 1. Pedestrian and Bicycle Count Summary

Location	Peak Period	Pedestrian Crossings					Bicycle and Scooter Crossings				
		N Side	S Side	E Side	W Side	Total	N Side	S Side	E Side	W Side	Total
Tidelands Avenue/ 19th Street	AM (5-8 AM)	36	13	5	22	76	8	0	18	2	28
	PM (2-4:30 PM)	9	8	3	10	30	0	1	6	24	31

Source: Attachment A

3.4 Transit Services

The San Diego Metropolitan Transit System (MTS) provides public transportation throughout National City and northern San Diego County. MTS Routes 929, 955 and 962/963 operate in National City. Near the proposed project and east of I-5, MTS Routes 13 and 967 serve the bus stop at the Harding Avenue/18th Street intersection. There are no bus stops or routes near the proposed project along Tidelands Avenue or 19th Street.

The UC San Diego Blue Line is a light rail route/trolley operated by MTS which connects San Ysidro at the U.S.–Mexico border to University Towne Center. Near the proposed project, the alignment is east of I-5 with connecting services at the 8th street station to Naval Base San Diego, and at the 24th street station to the Naval Base San Diego and the National City Marine Terminal.

Figure 4 illustrates the bike, pedestrian and transit facilities in the vicinity of the proposed project. As shown in the figure, there are no transit facilities within 0.5 miles of the proposed project.

3.5 Railroad Crossings

The Port and marine-related facilities on San Diego Bay are served by the Class I Burlington Northern Santa Fe (BNSF) Railway on the San Diego Subdivision rail network. The majority of the trains operate at night, with operations typically occurring in two windows: 9:00 a.m. to 11:00 a.m. and 7:00 p.m. to 12:00 a.m. (Port of San Diego 2020).

There are two at-grade crossings in the study area. Railroad Crossing 1 at the Tidelands Avenue/19th Street intersection traverses 19th Street in the north-south direction and traverses both Tidelands Avenue and 19th Street. Railroad Crossing 1 was observed to have gate-arms-down (for train crossings) for a total of nine times, that includes two times in the north-south direction at 19th Street and seven times in the east-west direction. It was observed to have gate-arms-down two times between 9:00 a.m. and 10:00 a.m. and once around 5:30 p.m. Other gate-arms-down times were after 7:00 p.m. and after midnight.

Railroad Crossing 2 is located east of Tidelands Avenue/19th Street intersection. Railroad Crossing 2 was observed to have gate-arms-down for a total of four times between 8: 21 a.m. and 9:12 a.m. for a duration ranging from 24 seconds to 53 seconds. The data on the number of times the railroad crossings, duration of gate-arms-down, and direction and number of train cars collected on a typical day for 24-hour period, is included as Attachment B.

Because railroad crossings did not occur during the peak hours of analysis as discussed below, the operational analysis of the gate and intersection are not affected by rail operation in the study area.

3.6 Naval Base Gate 13 Operation

The Naval Base San Diego has several gates that allow personnel to enter/exit facilities each day using a typical inspection protocol, i.e., a sentry checks security credentials for each vehicle in succession. Gate 13 is one of the Naval Base San Diego security gates that provide access to the base and is located at the west end of 19th Street. Gate 13 affects the operation of the Tidelands Avenue/19th Street intersection. During peak hours, the gate employs multiple lanes and dual-stacked sentries that allow two to three vehicles to be processed simultaneously in each lane. As noted in the count data, Gate 13 is converted into three lanes in the westbound direction to facilitate inbound access during the peak hours in the morning. The hours of operation of Gate 13 are:

- 5:00 a.m. to 8:00 a.m., and
- 2:00 p.m. and 4:30 p.m.
- For all other times of the day, Gate 13 is closed.

Attachment C contains the count data collected at Gate 13 on a typical day of operation. As shown, approximately 1,725 vehicles entered through the gate between 5:00 a.m. and 8:00 a.m. and in the PM peak hour approximately 539 vehicles exited through the gate between 2:00 p.m. and 4:30 p.m. on a typical day when manual traffic counts were collected at the gate.

3.7 Peak Hour Intersection Traffic Volumes

For the San Diego region, peak-hour traffic typically occurs between the hours of 7:00 a.m. and 9:00 a.m. for the morning (AM Peak Hour), and between 4:00 p.m. and 6:00 p.m. for the evening (PM Peak Hour). However, because shipyard and Navy workers typically start and end their workdays earlier, the peak hour at Gate 13 noted above, and at the Tidelands Avenue and 19th Street intersection occur before the typical AM peak hour, and before the typical PM peak hour. Therefore, to analyze the operation of the intersection and Gate 13 for the same peak period of traffic, existing weekday peak hour turn movement counts at the Tidelands Avenue/19th Street intersection were collected on the same day and same time periods of 5:00 a.m. to 8:00 a.m. and 2:00 p.m. and 4:30 p.m. at Gate 13. Raw traffic count worksheets are provided in Attachment A. Signal timing sheets for the intersection are also included.

Figure 5 illustrates the existing intersection geometrics and Figure 6 provides the existing peak hour intersection volumes at the Tidelands Avenue/19th Street intersection.

3.8 Cumulative Projects

A review of approved and pending projects was conducted to determine if any projects would have the potential to add traffic to the study area under cumulative conditions. Only one active transportation project was identified in the study area. The proposed National City Bayfront amendments and potential route realignment of the southern segment of Bayshore bikeway path would not add significant traffic to the project's study area. Additionally, the project's trip generation described in the next section has been estimated conservatively compared to the opening year estimate of 30 trucks using the facility per day. Therefore, Existing plus Project conditions provides a conservative analysis for the purpose of this analysis.

4 Project Trip Generation and Distribution

4.1 Trip Generation

The project proposes a total of 70 charging stalls which would include 24 opportunity charging stalls and 46 overnight charging stalls. To assess the maximum daily and hourly trip generation potential of the site, the industry standards and specifications available for electric vehicle (EV) charging stalls were reviewed. The number of vehicles that can be serviced per charging port per day depends on the type of vehicle (i.e. car or truck), capacity of the charging port in kilowatt-hour (kWh), average useable battery capacity of the vehicle (in kWh), buffer time between consecutive charging, theoretical maximum vehicles that can be charged per port per day, and an average unitization percentage.

Based on these factors, the number of vehicles and daily trips were estimated for the proposed 24 opportunity charging stalls (400 kW). The daily trips were assumed to occur over a 12-hour period to estimate peak hour trips and distributed equally every hour. To estimate trips for the 24 opportunity charging stalls, two daily truck trips per charging port, assuming an average charging duration of 75 minutes or 1.25 hours and operating over 12 daytime hours, was used. Therefore, one vehicle every 1.25 hours per port results in 0.8 vehicles per hour per port, or approximately 9 vehicles per port over a 12-hour day. Since there are 24 stalls on-site, this equates to 9 vehicles per port times 24 stalls resulting in 216 one-way trips per day, or 432 total daily trips. As shown in Table 2, the opportunity chargers would generate approximately 432 daily truck trips, 36 AM peak hour truck trips (18 inbound and 18 outbound), and 36 PM peak hour truck trips (18 inbound and 18 outbound).

For overnight charging stalls (160 and 240 kW), it was assumed that one truck per port would charge overnight. Truck operators are expected to arrive during the morning peak hour, operate the truck during the day, and return the truck during the afternoon peak hour for overnight charging. It was assumed that the truck operator would drive in a personal car, park it in the charging port for the day and once their work shift was over, return the truck for charging in the port and leave in their personal vehicle. Therefore, two daily auto trips and two daily truck trips per overnight charging port (for a total of 46 overnight charging stalls) are included in the project's trip generation. The autos (i.e., truck drivers' personal cars) were assumed to enter the project site in the morning and leave in the afternoon, whereas the trucks were assumed to leave the project site in the morning and return in the afternoon for overnight charging. As shown in Table 2, the overnight chargers would generate approximately 184 daily trips (92 truck trips and 92 automobile trips), 92 AM peak hour trips (46 inbound automobiles and 46 outbound trucks), and 92 PM peak hour trips (46 inbound trucks and 46 outbound automobiles).

The operation of opportunity and overnight charging stalls (including autos and trucks) is estimated to generate approximately 616 daily trips, 128 AM peak hour trips (64 inbound and 64 outbound), and 128 PM peak hour trips (64 inbound and 64 outbound).

The convenience store would be an ancillary use and primarily cater to the customers or users of the charging facility. Therefore, based on the available parking spaces, four spaces were assumed as employee parking and four spaces were assumed as customer parking (other customers would also be parked in EV charging spaces). For employees, two daily trips were assumed per parking space, for a total of 8 daily trips, 4 AM peak hour trips and 4 PM peak hour trips. For customers, 2 trips per hour were assumed for a total of 48 daily trips, 20 AM peak hour trips and 20 PM peak hour trips. The BESS component would be unmanned and not generate trips on a daily basis. There would be occasional maintenance and operation trips, however those would be nominal.

As shown in Table 2, Trip Generation, once fully operational with all 46 overnight chargers used daily and the 24 opportunity charge stalls servicing up to nine (9) trucks per charging stall, over the 12-hour opportunity charging period each day, the proposed project would generate:

- Approximately 524 daily truck trips, 82 AM peak hour truck trips (18 inbound and 64 outbound), and 82 PM peak hour truck trips (64 inbound and 18 outbound).
- Approximately 148 daily auto trips, 66 AM peak hour auto trips (58 inbound and 8 outbound), and 66 PM peak hour auto trips (8 inbound and 58 outbound).
- Therefore, the proposed project would generate a total of 672 daily trips, 148 AM peak hour trips (76 inbound and 72 outbound), and 148 PM peak hour trips (72 inbound and 76 outbound).

The proposed project is intended to replace diesel powered trucks with battery electric trucks. While the project cannot guarantee one diesel powered truck is removed from operation with the use of a ZEV Truck, the project generated truck trips may not all represent 'new truck trips' as they are intended to replace existing diesel powered truck trips which is anticipated to be the case over time.

4.2 Trip Distribution

Figure 6, Project Trip Distribution and Assignment, illustrates the distribution of trips from the proposed project at the surrounding roadway network. Most of the trucks that would be served by the charging facility would consist of trucks already traveling along Harbor Boulevard and Tidelands Avenue. The trucks travel along Harbor Boulevard and Tidelands Avenue from District's Tenth Avenue Marine Terminal (TAMT) located approximately 3.5 miles north of the site and National City Marine Terminal (NCMT) located approximately 0.5 mile south of the site along Bay Marina Drive serving the Port and shipyards. Those trucks would stop at the charging facility when the schedule allows.

Project trip distribution percentages were based on the above mentioned travel path along Tidelands Avenue to and from the project site. Project traffic would use the two project driveways along Tidelands Avenue to access project site – one ingress driveway and one egress driveway. The driveway for Pasha Automotive Services would be relocated to one of the existing driveways along Tidelands Avenue, south of the project egress driveway, approximately 350 feet north of the Tidelands Avenue and W 19th Street intersection.

Approximately 50% of the traffic is anticipated to access from north and 50% from south along Tidelands Avenue. Project trips were assigned to the study area intersection and project driveways by applying the project trip generation estimates (see Table 2) to the trip distribution percentages. The project trip distribution and assignment are shown on Figure 6. The trip assignment illustrated on Figure 6 is based on the trip generation estimated in Table 2.

Table 2. Project Trip Generation

Land Use – Trip Generation	Size/Units		Vehicle Type	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
<i>EV Charging - Trucks [Opportunity Chargers (400 kW)]¹</i>	24	stalls	Truck	432	18	18	36	18	18	36
<i>EV Charging - Trucks [Overnight Chargers (160 kW)]²</i>	18	stalls	Truck	36	0	18	18	18	0	18
			Auto	36	18	0	18	0	18	18
<i>EV Charging - Trucks [Overnight Chargers (240 kW)]²</i>	28	stalls	Truck	56	0	28	28	28	0	28
			Auto	56	28	0	28	0	28	28
<i>EV Charging – Autos & Trucks [Overnight Chargers]</i>	46	stalls	Truck & Auto	184	46	46	92	46	46	92
Subtotal EV Charging	70	stalls	All	616	64	64	128	64	64	128
On-Site Parking w/in Charging Area (Employees) ³	4	spaces	Auto	8	4	0	4	0	4	4
On-Site Parking for Convenience Store (Customers) ⁴	4	spaces	Auto	48	8	8	16	8	8	16
<i>Subtotal Ancillary On-Site Parking</i>	<i>8</i>	<i>spaces</i>	<i>All</i>	<i>56</i>	<i>12</i>	<i>8</i>	<i>20</i>	<i>8</i>	<i>12</i>	<i>16</i>
<i>Total Trips for Trucks (using Opportunity and Overnight chargers)</i>			<i>Trucks</i>	<i>524</i>	<i>18</i>	<i>64</i>	<i>82</i>	<i>64</i>	<i>18</i>	<i>82</i>
<i>Total Trips for Autos (Users of overnight chargers and employees and customers of the convenience store)</i>			<i>Auto</i>	<i>148</i>	<i>58</i>	<i>8</i>	<i>66</i>	<i>8</i>	<i>58</i>	<i>66</i>
Total Trips (Trucks plus Autos)			All	672	76	72	148	72	76	148

Notes: Some totals may not match due to rounding.

¹ Opportunity chargers estimated to charge trucks to 80% in 60 to 90 minutes (average 75 minutes or 1.25 hours) per Volvo VNR Electric Trucks estimates: <https://www.volvotrucks.us/trucks/vnr-electric/>. The opportunity chargers are expected to primarily operate over 12 daytime hours [1 vehicle every 1.25 hours per port = 0.8 vehicles per hour per port, or approximately 9 vehicles per port over a 12-hour day. Since there are 24 stalls on-site, this equates to 9 vehicles per port * 24 stalls = 216 one-way trips per day, or 432 total daily trips].

² Overnight chargers are expected to provide charging for one truck. Truck operators are expected to arrive during the morning peak hour, utilize the truck during the day, and return the truck during the afternoon peak hour for the purposes of this analysis. One auto trip and one truck trip is assumed for each charging stall.

³ Four on-site parking spaces are assumed as employee parking for the convenience store or other on-site operations

⁴ Four on-site parking spaces are assumed as customer parking for the convenience store. The convenience store is primarily intended as an ancillary use for EV Charging users.

5 Thresholds and Methodology

5.1 Thresholds of Significance

The District requires transportation evaluations to address the transportation impact significance thresholds included in the Appendix G Checklist of the CEQA Guidelines. A project's effect on the roadway system-based on LOS metric is not considered a CEQA impact, however, is conducted by cities as part of General Plan consistency or non-CEQA requirements. Relevant information and analysis from this memorandum is included in the proposed project's EIR and transportation section. National City uses the criteria from the Guidelines for Transportation Impact Studies in the San Diego Region (May 2019). Per the San Diego region guidelines, a detailed transportation analysis (including vehicle miles traveled and/or level of services) would be required if a project exceeds 500 ADT and is inconsistent with the adopted General Plan or exceeds 1,000 ADT and is consistent with the adopted General Plan.

As discussed in Section 3, the project is forecast to generate 672 daily trips. at full buildout (fully operational with all 46 overnight charging stalls leased and the 24 opportunity charging stalls being used throughout the day). As discussed in the Project Description, the Truck Hub is anticipated to begin operations with 30 trucks in the Truck as a Service program with overnight charging and an unknown demand for opportunity charging, but likely minimal given the lack of ZEV Trucks currently operating in the San Diego Region. By year 3 the remaining 16 overnight charging stalls are anticipated to be enrolled into the Truck as a Service program, and again an unknown level of opportunity charger use.

At full buildout conditions, 672 daily trips are anticipated, 616 of which are ZEV trucks and autos with an assumed 432 trips from opportunity chargers based on the assumption that the 24 opportunity chargers generate two daily truck trips per charging stall, assuming an average charging duration of 75 minutes or 1.25 hour per charging stall operating over 12 daytime hours. The project generates fewer than 1,000 ADT. Therefore, a detailed transportation analysis comprising of a vehicle miles traveled (VMT) analysis or level of service (LOS) analysis is not warranted per the San Diego regional guidelines . This memorandum provides a focused operational analysis and queuing at Gate 13, the Tidelands Avenue/19th Street intersection, and project access driveways along Tidelands Avenue that would occur because of the proposed project under Existing plus Project conditions. LOS analysis is provided for informational purposes as well as to determine if any roadway improvements would be warranted.

5.2 Analysis Methodology

The PTV Vissim software was used to determine intersection level of service (LOS) and queuing. The LOS analysis in Vissim is based on the result attribute "vehicle delay (average)" and is consistent with the Highway Capacity Manual (HCM) methodology. The HCM analysis methodology describes the operation of an intersection using a range of LOS from LOS A (free-flow conditions) to LOS F (severely congested conditions), based on the corresponding control delay experienced per vehicle. Table 3 shows the LOS values by delay ranges for unsignalized and signalized intersections under the HCM methodology.

Table 3. Levels of Service for Intersections using HCM Methodology

Level of Service	Unsignalized Intersections Control Delay (in seconds per vehicle)	Signalized Intersections Control Delay (in seconds per vehicle)
A	< 10.0	< 10.0
B	> 10.0 to < 15.0	> 10.0 to < 20.0
C	> 15.0 to < 25.0	> 20.0 to < 35.0
D	> 25.0 to < 35.0	> 35.0 to < 55.0
E	> 35.0 to < 50.0	> 55.0 to < 80.0
F	> 50.0	> 80.0

Source: HCM 2010 (TRB 2010).

Table 4 indicates when a project's effect on the roadway system is considered to justify the need for roadway improvements. That is, if a project's traffic effect causes the values in this table to be exceeded, roadway improvements should be considered. However, a project's effect on the roadway system-based on LOS metric is not considered a CEQA impact. LOS results for the Tidelands Avenue/19th Street intersection are provided for informational purposes.

Table 4. Determination of the Need for Roadway Improvements

Level of Service with Project	Allowable change Due to Project Effect				
	Freeways		Roadway Segments		Intersections
	V/C	Speed (mph)	V/C	Speed (mph)	Delay (Seconds)
LOS E and F	0.01	1	0.02	1	2

Source: Table 7-1 Determination of the Need for Roadway Improvements, Guidelines for San Diego Region. Guidelines for Transportation Impact Studies in the San Diego Region (May 2019).

Notes: V/C = Volume-to-Capacity, mph = miles per hour

The San Diego region guidelines state that not all improvement measures can feasibly consist of roadway widening (new lanes or new capacity). Therefore, financing toward a defined Intelligent Transportation System project, enhanced traffic signal communications project, or active transportation projects should be considered when a project is required to mitigate its effect on the roadway system.

Vissim software provides average and maximum queuing results measured in feet. A vehicle is identified to be in a queue if its speed drops below 3 mph at an identified location, and remains in queue as long as its speed does not exceed 6 mph. The maximum and average queues at the intersection with respect to the operation of Gate 13 were evaluated. The maximum, average and average queue lengths were then reviewed to determine whether the existing queues would block any existing or future driveways along Tidelands Avenue.

6 Level of Service and Queuing Analysis

A level of service (LOS) and queuing analysis was performed for the Tidelands Avenue/19th Street intersection and Gate 13 using peak period traffic volumes, signal timing, and gate operation observations under existing conditions. The analysis was conducted using Vissim software to determine the LOS at the Tidelands Avenue/19th Street

intersection. The Vissim reports are provided in Attachment D. Additionally, the maximum and average queues at the intersection with respect to the operation of Gate 13 were evaluated. The maximum and average queue lengths were then reviewed to determine whether the existing queues would block any existing or future driveways along Tidelands Avenue. Specifically, the analysis was conducted to evaluate existing queuing and blockage/spill back due to inbound queues at Gate 13 in the AM peak hour, and determine whether the proposed project would further exacerbate existing operations.

As shown in the Section 6.1 below, the addition of trips from the proposed project would not result in an increase in delay (in seconds) or change the LOS at the Tidelands Avenue/19th Street intersection in the AM and PM peak hours under the Existing plus Project conditions. The project would not degrade the operational condition of the Tidelands Avenue/19th Street intersection per significance criteria used to determine LOS or traffic impact. Therefore, no improvements to the intersection are proposed. A project's effect on the roadway system-based on LOS metric is not considered a CEQA impact.

As shown in Section 6.2 below, in the queuing analysis of AM peak hour under Existing plus Project conditions, the queues on the westbound, southbound, and northbound approaches of the Tidelands Avenue/19th Street intersection increase with the addition of the project trips. However, the increase would not be considered significant and would not result in queues that obstruct the project driveways on Tidelands Avenue under majority of the peak hour duration or worsen the operation of Gate 13 compared to the existing conditions in the AM peak hour. The maximum southbound queue on Tidelands Avenue, is greater than 350 feet under existing conditions in the AM peak hour due to vehicles accessing Gate 13. The Pasha Automotive Services site does not operate daily and there are no known access issues. The queuing analysis of PM peak hour under Existing plus Project conditions demonstrates that the increase in queues is only observed at the northbound approach of the Tidelands Avenue/19th Street intersection. However, the increase would not result in queues that obstruct the project driveways on Tidelands Avenue or worsen the operation of Gate 13 compared to the existing conditions in the PM peak hour. The project would not result in hazards due to geometric design features because it would not include the addition of new driveways. The project trips would nominally increase vehicular queuing in the study area.

6.1 Levels of Service

Table 5 summarizes the LOS under Existing and Existing plus Project conditions during the AM and PM peak hours. The AM peak hour was observed to be between 5:30 a.m. and 6:30 a.m. and the PM peak hour was observed to be between 2:15 p.m. and 3:15 p.m. in the study area near Gate 13.

Table 5. Level of Service Summary

Vissim LOS Summary									
No.	Intersection	AM Peak Hour (5:30 AM - 6:30 AM)				PM Peak Hour (2:15 PM - 3:15 PM)			
		Existing		Existing plus Project		Existing		Existing plus Project	
		LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
1	Tidelands Avenue/19th Street	F	84.85	F	80.57	C	28.22	C	24.79

Table 5. Level of Service Summary

Vissim LOS Summary									
No.	Intersection	AM Peak Hour (5:30 AM - 6:30 AM)				PM Peak Hour (2:15 PM - 3:15 PM)			
		Existing		Existing plus Project		Existing		Existing plus Project	
		LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
2	Project Ingress/Tidelands Avenue	A	0.06	A	2.46	A	0.03	A	2.73
3	Project Egress/Tidelands Avenue	A	0.04	A	0.37	A	0.02	A	0.40

Source: Attachment D

Notes: LOS = level of service

As shown in Table 5, the Tidelands Avenue/19th Street intersection in the PM peak hour and the Project Ingress and Egress driveway during both peak hours, would operate at LOS C or better under the Existing and Existing Project conditions. The Tidelands Avenue/19th Street intersection operates at LOS F in the AM peak hour under the Existing Conditions and would continue to operate at LOS F under Existing plus Project conditions. The operation of the Tidelands Avenue/19th Street intersection at LOS F in the AM peak hour is primarily due to the inbound traffic at Gate 13 which uses this intersection to access the Naval Base. It should be noted that the delay at the intersection would be reduced from 84.85 seconds to 80.57 seconds in the AM peak hour and from 28.22 seconds to 24.79 seconds in the PM peak hour with the addition of project traffic. A reduction in delay generally occurs when trips are added to non-critical movements of an intersection (i.e., the through movements instead of critical left turns) which could reduce the overall average delay of the intersection. Therefore, since the project would not degrade the operational condition of the Tidelands Avenue/19th Street intersection, no improvements are required or proposed. The project driveways would operate at acceptable LOS under all conditions.

6.2 Queuing

The following queuing analysis is provided by approach for the Tidelands Avenue/19th Street intersection. As noted in Section 3.6, Gate 13 is converted into three lanes in the westbound direction to facilitate inbound access during the peak hours in the morning. For Gate 13, the westbound lanes 1 and 2 queuing results are combined, and westbound lane 3 results are shown separately. Under existing conditions, spillover from the gate approach into the Tidelands Avenue/19th Street intersection occurs when queues exceed 400 feet (distance between the gate and intersection) at the Gate 13 westbound lanes. The egress approach of the Project Driveway has been evaluated as well.

Vissim software provides average and maximum queuing results measured in feet. A vehicle is identified to be in a queue if its speed drops below 3 mph at an identified location, and remains in queue as long as its speed does not exceed 6 mph. The following locations are summarized in Exhibits 1 through 4 and described below.

- Tidelands Avenue/19th Street - Southbound Approach
- Tidelands Avenue/19th Street - Westbound Approach

- Tidelands Avenue/19th Street - Northbound Approach
- Tidelands Avenue/19th Street - Eastbound Approach
- Base Gate - Westbound Lanes 1 and 2
- Base Gate - Westbound Lane 3
- Project Driveway Egress

Exhibits 1-4 show total queue length for an approach, considering all adjacent lanes within an approach. For example, if queues within a left-turn lane extend further than the available storage distance of the left-turn pocket, the reported queue considers the adjacent thru lanes that are blocked, and the left-turn queue represents the total approach queue at that intersection. A graphic illustrating the approach queues, along with a breakdown of recorded average and maximum queues across each 15-minute time interval over the 3-hour AM peak period and the 2.5-hour PM peak period, is provided in Attachment D.

As shown on Exhibit 1. Average Queueing Summary (AM Peak Hour), the maximum queue at the Tidelands Avenue/19th Street intersection is observed at the westbound approach under Existing Conditions. With the addition of project trips, the westbound queues increase nominally from approximately 456 feet to 457 feet in lanes 1 and 2 of Gate 13. The westbound lane 3 queue at gate 13 increases from 361 feet to 368 feet with the addition of project trips. The queues on the westbound, southbound and northbound approaches of the Tidelands Avenue/19th Street intersection increase slightly with the addition of the project trips. The spill-over occurs when queues exceed 400 feet (distance between the gate and intersection) at the Gate 13 westbound lanes. With the addition of the project, in the westbound queues, in the AM peak hour, the increase is nominal i.e. one foot. The Project Egress Driveway on 19th Street would be blocked if the southbound queues at the Tidelands Avenue/19th Street intersection exceed 600 feet. The relocated driveway to the Pasha Automotive Services would be blocked if the southbound queues exceed 350 feet. The maximum queue under average conditions at the southbound approach Tidelands Avenue/19th Street would increase from approximately 259 feet under Existing Conditions to 267 feet under Existing plus Project Conditions compared to Existing Condition. The Project Egress Driveway is located approximately 600 feet north of 19th Street and therefore, the southbound queues would not obstruct the project driveways or access to Pasha Automotive Services. No significant difference is observed in the northbound approach queue by comparing with and without project conditions.

As shown on Exhibit 2. Maximum Queuing Summary (AM Peak Hour), the maximum queue at Tidelands Avenue/19th Street, is also observed at the westbound approach under Existing Conditions. With the addition of project trips, the westbound queues increase from approximately 481 feet to 518 feet in lanes 1 and 2 of Gate 13. The westbound lane 3 queue at Gate 13 does not change with the addition of project trips. The queues on the westbound, southbound and northbound approaches of the Tidelands Avenue/19th Street intersection increase with the addition of the project trips. The spill-over occurs when queues exceed 400 feet (distance between the gate and intersection) at the Gate 13 westbound lanes. With the addition of the project, the increase in the westbound queue is slightly more than average conditions within the AM peak hour. The maximum queue at the southbound approach of Tidelands Avenue/19th Street would increase from approximately 452 feet under Existing conditions to 491 feet under Existing plus Project Conditions compared to Existing Condition. The Project Egress Driveway is located approximately 600 feet north of 19th Street and therefore, the southbound queues on Tidelands Avenue would not obstruct the project driveways. However, the maximum southbound queue on Tidelands Avenue is greater than 350 feet under Existing conditions and would occasionally extend up to the relocated driveway to the Pasha Automotive Services in the AM peak hour due to vehicles accessing Navy Gate 13. An increase is also observed in the northbound approach queue by comparing with and without project conditions.

As shown on Exhibit 3. Average Queuing Summary (PM Peak Hour), nominal queues are observed at the Tidelands Avenue/19th Street intersection under Existing Conditions and Existing plus Project conditions on southbound, westbound and northbound approaches. The eastbound approach queues at the intersection reflect the outbound movement at Gate 13 during the PM peak hour. However, no change in eastbound queues is observed by comparing with and without project conditions.

As shown on Exhibit 4. Maximum Queuing Summary (PM Peak Hour), queues are observed at the Tidelands Avenue/19th Street intersection under Existing Conditions and Existing plus Project conditions on southbound, westbound and northbound approaches. The increase in queues is only observed at the northbound approach by comparing with and without project conditions.

Exhibit 1. Average Queueing Summary (AM Peak Hour)

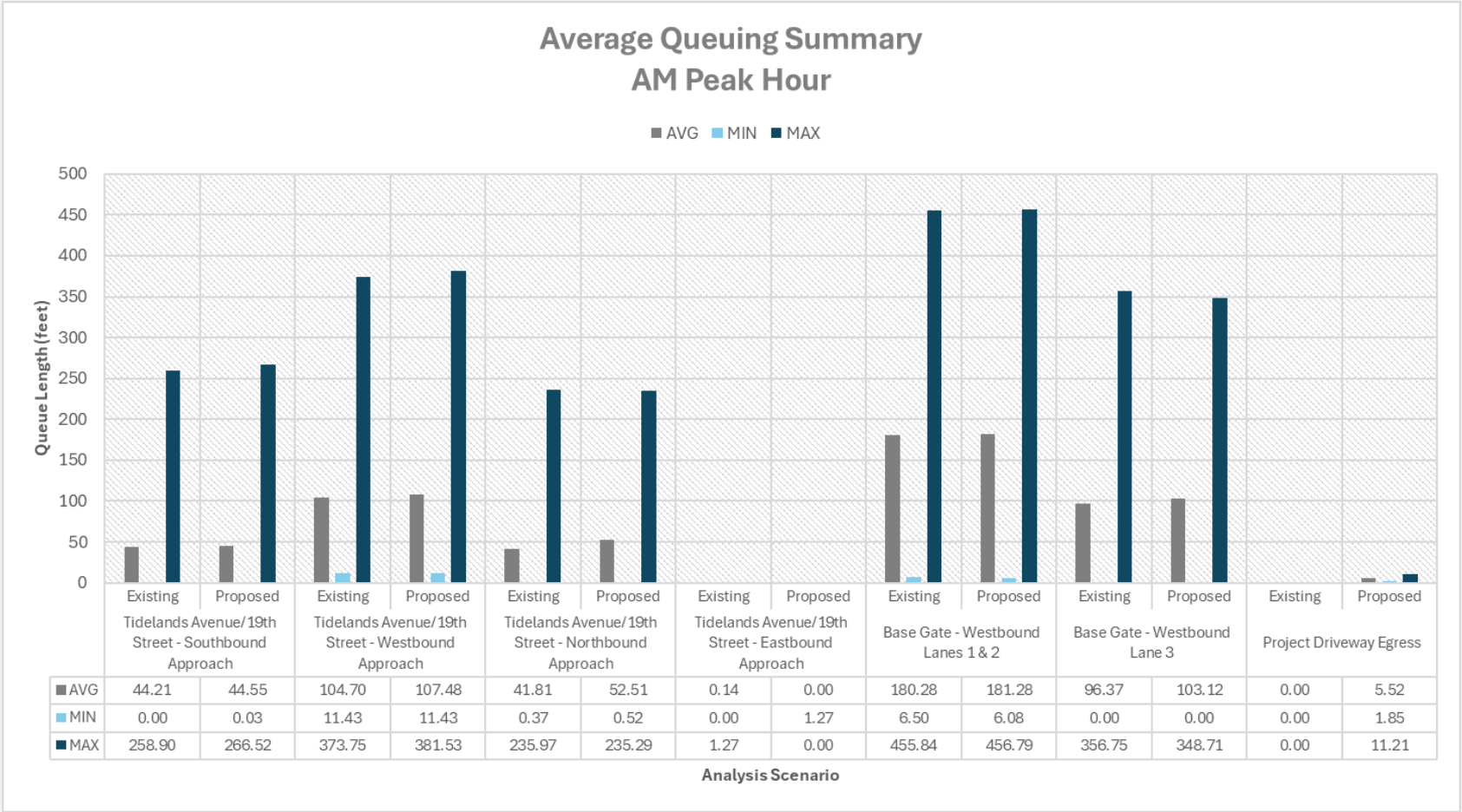


Exhibit 2. Maximum Queueing Summary (AM Peak Hour)

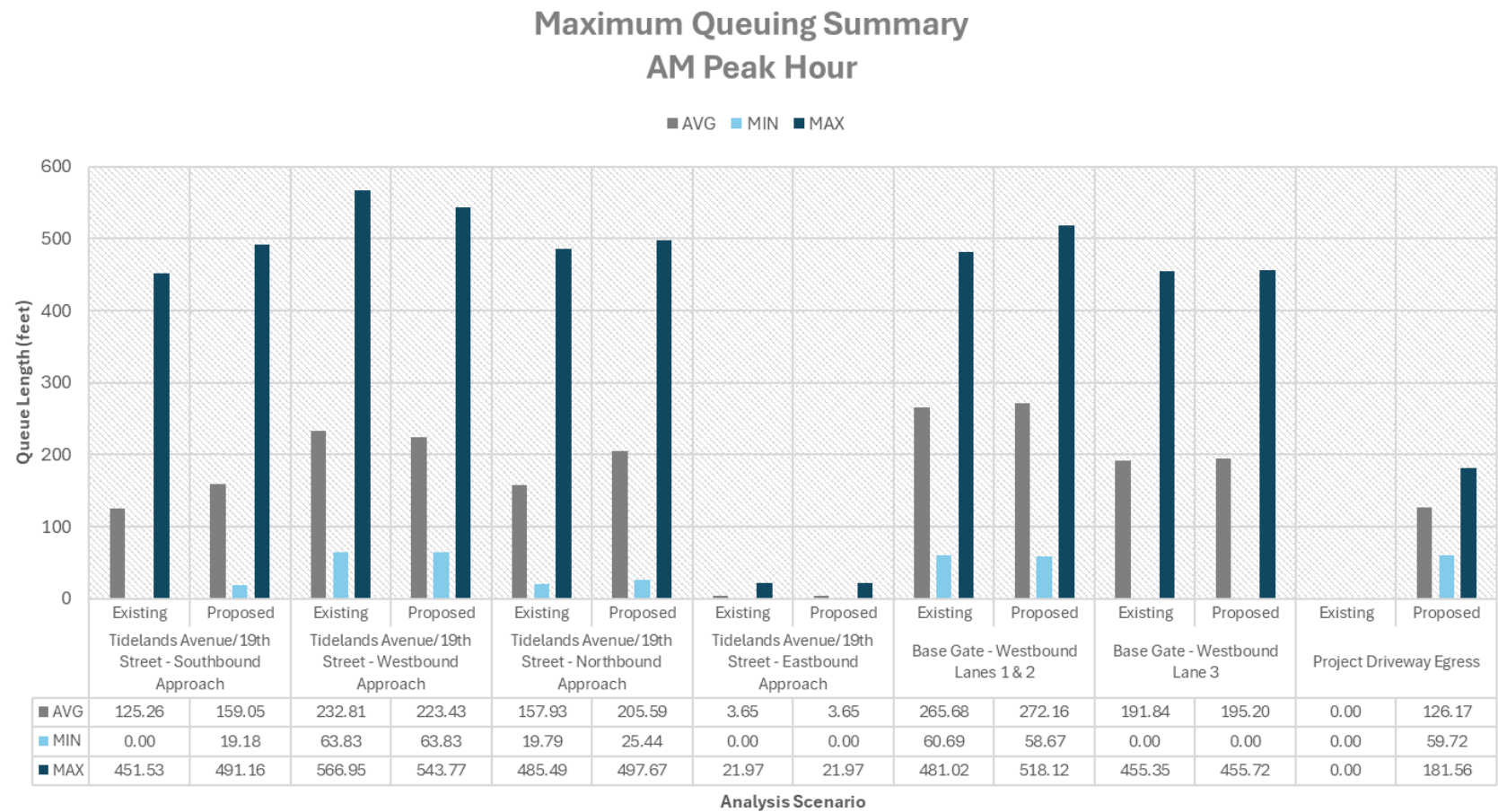


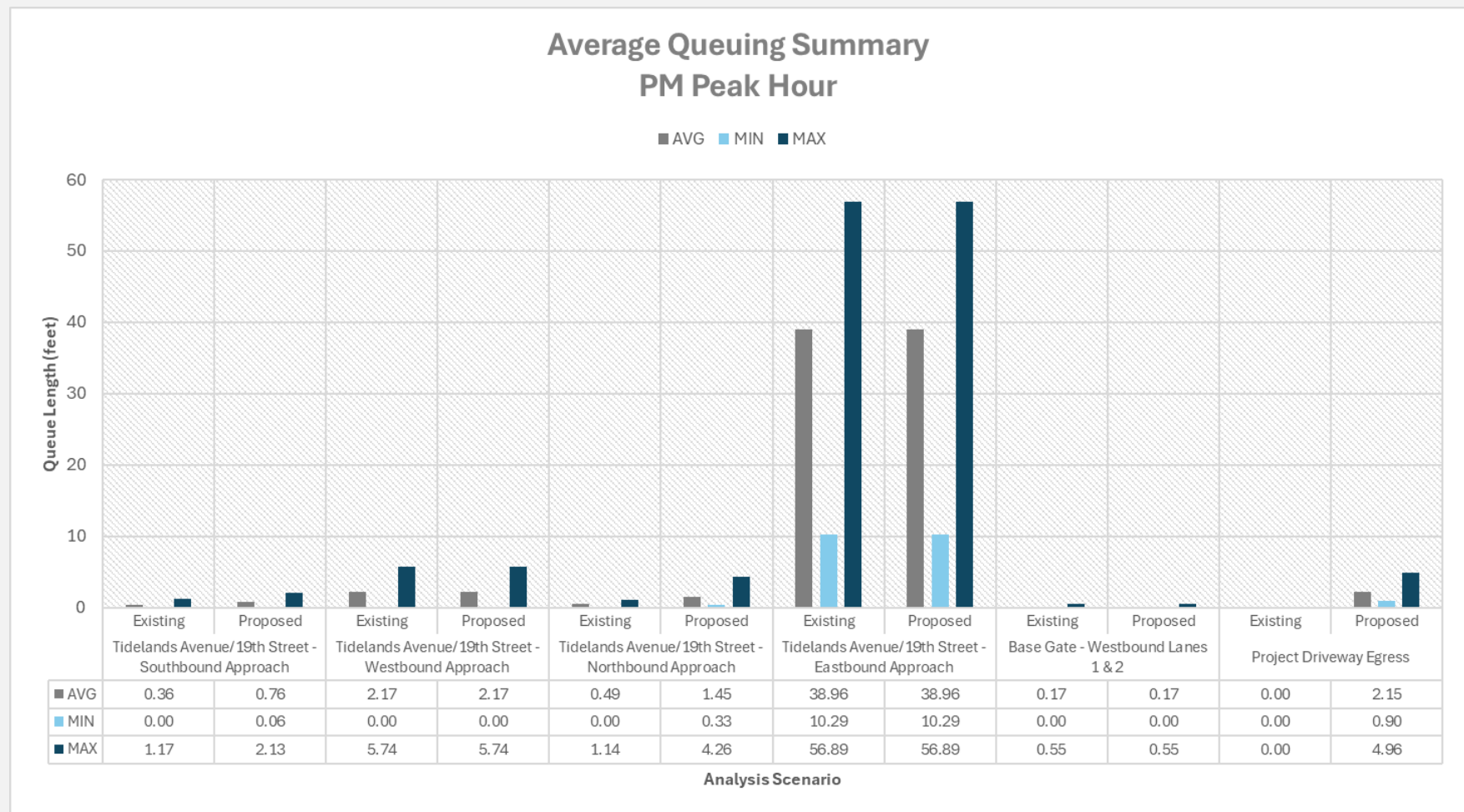
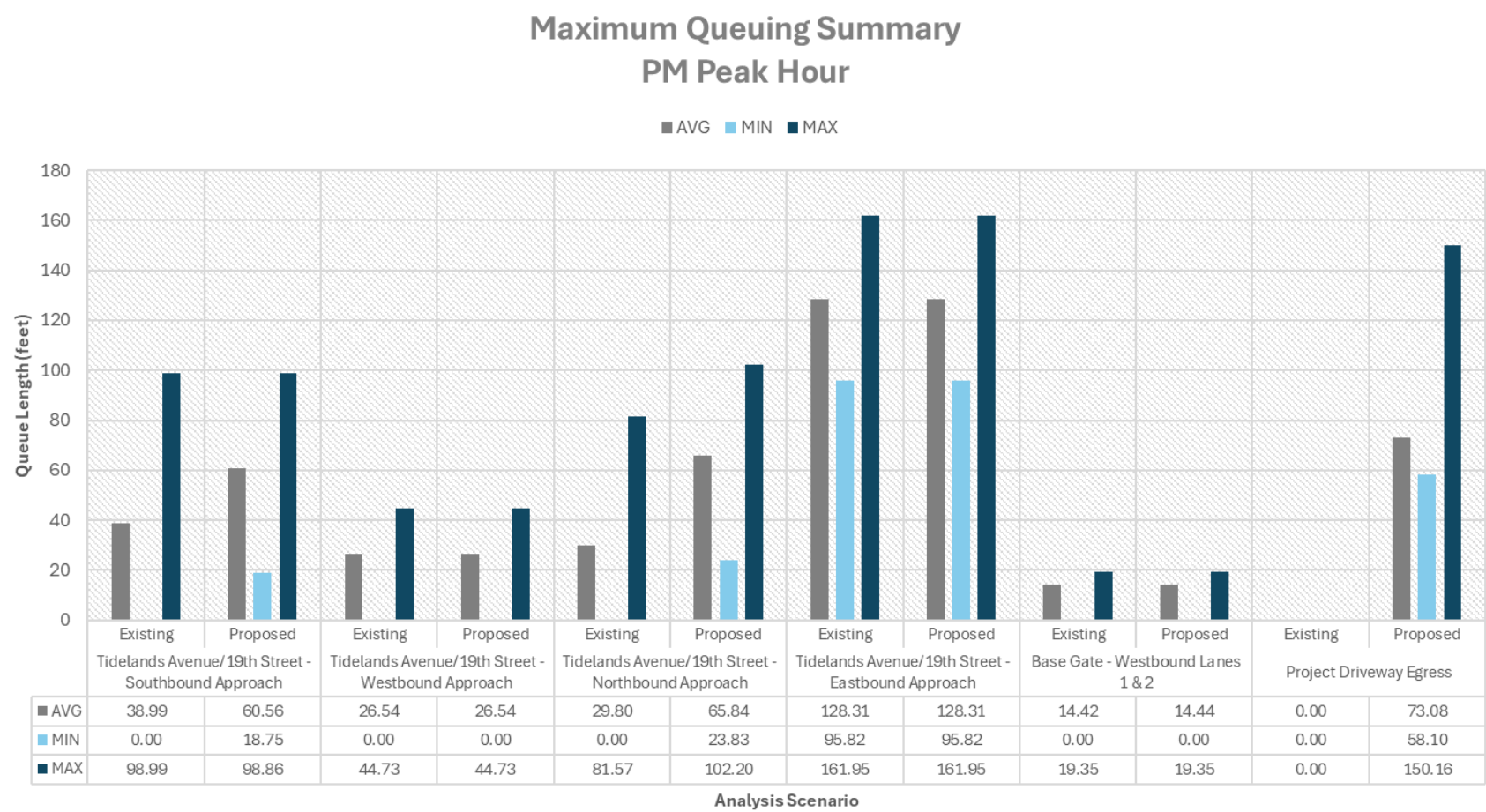
Exhibit 3. Average Queuing Summary (PM Peak Hour)

Exhibit 4. Maximum Queuing Summary (PM Peak Hour)



7 Pavement Analysis

As detailed in the Caltrans Highway Design Manual (HDM), pavements are engineered to carry the truck traffic loads expected during the pavement design life. Truck traffic is the primary factor affecting pavement design life and its serviceability. A few studies have evaluated long-term impacts of heavy-duty electric vehicles (HDEVs) on road infrastructure and noted that HDEVs apply a relatively larger axle load and more significant torque because of the battery weight and electric motor compared to Internal Combustion Engine (ICE) trucks that are powered by diesel or gasoline. A pavement analysis for the roadway segment of Tidelands Avenue near the project is provided in this section. It should be noted that the estimation of Traffic Index for the roadway segment of Tidelands Avenue near the project in this section uses a conservative estimate of new truck trips (versus replaced truck trips) for opportunity chargers and overnight chargers (i.e. 524 truck trips shown in Table 2). In the initial operating year of the project, 30 trucks are anticipated to use the project site, therefore, the analysis provided in this section is conservative and not likely to occur in the initial operating years of the project.

7.1 Pavement Condition Index

The Pavement Condition Index (PCI) method is the industry standard and most widely used method for assessing and reporting street pavement conditions. It is an objective and repeatable assessment of the structural integrity and operational condition of street pavements. The PCI scoring scale ranges from 0 (worst) to 100 (best) and provides a common language for pavement practitioners to describe and communicate pavement conditions. The scale includes seven condition categories:

- **Good (PCI 85-100):** Street displays minimal to low distress and only requires preventative maintenance.
- **Satisfactory (PCI 70-84):** Street displays scattered cracking and only requires routine maintenance.
- **Fair (PCI 55-69):** Street displays signs of low to medium distress and requires minor maintenance up to major rehabilitation.
- **Poor (PCI 40-54):** Street displays medium distress. Near-term maintenance and rehabilitation or reconstruction may be required.
- **Very Poor (PCI 25-39):** Street displays high distress and requires considerable levels of maintenance and/or major rehabilitation and reconstruction.
- **Serious (PCI 10-24):** Street is very highly distressed, contains various potholes, and requires considerable levels of maintenance and/or major rehabilitation and reconstruction.
- **Failed (PCI <10):** Street is extremely distressed and requires full reconstruction, which requires the highest investment.

Based on Dudek's preliminary assessment during a field reconnaissance and review of Google Earth images, the existing pavement condition of Tidelands Avenue in the vicinity of the project, would be considered in the range of fair to poor. This implies that the pavement currently shows signs of low to medium distress and requires minor maintenance up to major rehabilitation.

7.2 Traffic Index

A review of traffic impacts to pavement conditions is conducted using Equivalent Single Axle Load (ESAL) and Traffic Index (TI) calculations. The calculation of Traffic Index (TI) is a measure of the deteriorating effects that truck traffic has on asphalt concrete pavement (also referred to as flexible pavement) and provides the information necessary to design a structural section for a roadway. The TI calculation can be used to determine the PCI for the roadway segment of Tidelands Avenue adjacent to the project to assess the potential change in pavement conditions with the project-added truck trips.

The TI calculation provided in the Caltrans HDM procedures as described in Chapter 610, Pavement Engineering Considerations, Topic 613 – Traffic Considerations (Caltrans 2020) are for ICE trucks. Because the project's trucks would be HDEV, the ESAL and TI calculation was conducted using the specification available for axle load for Tesla Semi trucks. This calculation has been conducted only for the base year to provide a comparison between an ICE and HDEV truck. Additionally, ESAL constants are not available for multiple design years for HDEVs and the methodology to calculate TI for HDEVs has not been standardized yet.

The TI represents the total cumulative traffic loading of vehicle types by axle classification of the 18-kip ESAL expected on a given lane over a given period. Table 5 provides the ESAL calculation for a 5-axle ICE truck and 5-axle Tesla EV truck. As shown in the table below, 5-axle EV truck weighs 82,000 pounds compared to a 5-axle ICE truck that weighs 80,000 pounds. Hence, an EV truck weighs 2,000 pounds more than a 5-axle ICE truck or approximately 500 pounds more per rear or back axle.

Table 5. ESAL Comparison (Typical 80,000-lb ICE Truck to 82,000-lb Tesla EV Truck)

Axle Type	Axle Load (lbs)	ESAL or LEF ¹
Single Axle - 1 ESAL	18,000	1.000
Typical 5-axle Internal Combustion Engine (ICE) Truck		
Single Axle - F Normal	12,000	0.198
Single Axle - B ICE 1	17,000	0.796
Single Axle - B ICE 1	17,000	0.796
Single Axle - B ICE 2	17,000	0.796
Single Axle - B ICE 2	17,000	0.796
Total ICE Truck	80,000	3.380
Typical 5-axle Tesla EV Truck		
Single Axle - F EV	12,000	0.198
Single Axle - B EV 1	17,500	0.893
Single Axle - B EV 1	17,500	0.893
Single Axle - B EV 2	17,500	0.893
Single Axle - B EV 2	17,500	0.893
Total Tesla EV Truck	82,000	3.771
Comparison Factor EV - ICE Truck		1.116

Notes: lbs = pounds; ESAL = Equivalent Single Axle Load; LEF = Load Equivalency Factor; F = Front; B = Back

¹ Based on the Generalized Fourth Power Law - $(X \text{ axle load lbs} / 18,000 \text{ lbs})^4$

Table 6 provides the annual existing ESAL calculation and is used in Table 6 for ESAL and TI calculation for Tidelands Avenue under Existing plus Project conditions.

Table 6. Existing Truck ESAL Estimation

Vehicle Type	Existing Truck ADT ¹	Caltrans ESAL Constant ²	ADT * ESAL Constant = EQUIVALENT SINGLE-AXLE LOAD (ESAL)
3-Axle Single Unit	15	184	2,760
4+-Axle Combo Unit	152	294	44,688
5+-axle	2	689	1,378
Total 3, 4,5+-axle Trucks	169	-	48,826

Notes: ESAL = Equivalent Single Axle Load; ADT = Average daily trips

¹ Existing truck ADT for Tidelands Avenue was collected in April 2024

² Caltrans ESAL constant for existing or base year calculated by interpolating the 10-year and 20-year constant values from Table 613.3-A ESAL Constants

Table 7 provides the number of vehicles and the resulting total ESALs for the EV trucks estimated for the project. The total ESALs are calculated using the factors from Table 5 ESAL Comparison shown above. Table 613.3C, Conversion of ESAL to Traffic Index, of the Caltrans HDM (Caltrans 2020) was used to determine the TI of the segment for base year. The Existing TI is based on existing truck traffic volumes and truck classifications based on the existing segment ADT counts conducted in April 2025. For the purposes of comparison, ESAL and TI has been calculated for both EV and ICE trucks using the number of project-added truck trips (524) even though ICE truck trip generation is hypothetical and not part of the project. TI has been calculated for EV and ICE trucks for comparison purposes.

Table 7. TI Calculation for Tidelands Avenue near the Project

Tesla EV Truck	Value	ICE Truck	Value
Project Truck ADT (Tesla EV Semi-Truck)	524	Project Truck ADT (ICE Truck)	524
Total Daily Project Truck ESAL	$524 \times 3.771 = 1,976$	Total Daily Project Truck ESAL	$524 \times 3.380 = 1,771$
Annual Project ESAL (assuming 250 working days)	$1,976 \times 250 = 494,036$	Annual Project ESAL (assuming 250 working days)	$1,771 \times 250 = 442,781$
Annual Existing Truck ADT (w/o EV Trucks)	169	Annual Existing Truck ADT (w/o EV Trucks)	169
Annual Existing Truck ESAL (w/o EV Trucks)	48,826	Annual Existing Truck ESAL (w/o EV Trucks)	48,826
Base Year TI (w/o Project Trucks)	6.5	Base Year TI (w/o Project Trucks)	6.5
Annual Existing plus Project Truck ESAL	542,862	Annual Existing plus Project Truck ESAL	491,607
Base Year TI (Existing with Project Trucks)	8.5	Base Year TI (Existing with Project Trucks)	8.0

Notes: ESAL = Equivalent Single Axle Load; TI = Traffic Index

As shown in Table 7, the roadway segment of Tidelands Avenue is predicted to have a TI increase of 1.5 from 6.5 to 8.0 as compared to conditions without the project, for ICE trucks. The EV trucks would potentially result in a increase of 2.0 TI from 6.5 to 8.5 TI which is 0.5 greater than ICE trucks owing to the increased weight of EV trucks.

This is 0.5 more as compared to 8.0 TI conditions without the Project. The analysis reveals that new use of the roadway segment will cause wear and tear of the pavement surface, however, the difference between the wear and tear of a heavy-duty battery-electric truck versus an ICE truck is negligible.

7.3 Summary of Pavement Analysis

Some jurisdictions require that projects with large concentrations of truck traffic, include an analysis of the effect of truck traffic on the pavement condition of affected roadways in the traffic analysis of projects such as industrial developments, sand and gravel mining, landfills, and batch processing plants. Such projects can have a substantial effect on the roadway pavement and are required to restore the pavement to the pre-project condition or better. The City of San Diego, National City, or San Diego Regional Transportation Guidelines do not include pavement analysis requirements for projects. The project is a charging facility which would serve existing or future EV trucks and would not generate truck traffic by itself. The ESAL and TI calculation for project frontage along Tidelands Avenue demonstrate that at a planning level the TI resulting from EV trucks would be slightly higher (8.5) compared to an equivalent number of ICE trucks (8.0). The pavement analysis and Traffic Index calculation uses a conservative estimate of trucks for opportunity chargers and overnight chargers (i.e. 524 truck trips shown in Table 2), whereas in the opening year of the project, a conservative estimate of trucks for opportunity chargers and overnight chargers. In the initial operating year of the project, only 30 trucks are anticipated to use the project site.

The improvement or rehabilitation of pavement is conducted using the industry standard PCI method for assessing and reporting street pavement conditions. This is generally part of a Pavement Management Plan that a jurisdiction's Transportation Department prepares to outline pavement funding needs, street selection process, and the planned resurfacing work typically over a period of five to ten years. The City of National City adopted a Pavement Management Plan in November 2020 which conducted a pavement condition survey of all City streets. The Plan has prioritized five roadway segments for pavement rehabilitation. The roadway segment of Tidelands Avenue is not included in the current list of streets that need resurfacing. As such no recommendation is included at this time.

8 Findings and Recommendations

Based on the results of this analysis, the following summarizes the findings and recommendations for the project.

- The proposed project would generate approximately 524 daily truck trips, 82 AM peak hour truck trips (18 inbound and 64 outbound), and 82 PM peak hour truck trips (64 inbound and 18 outbound). It is estimated to generate approximately 148 daily auto trips, 66 AM peak hour auto trips (58 inbound and 6 outbound), and 66 PM peak hour auto trips (8 inbound and 58 outbound). Therefore, the proposed project would generate a total of 672 daily trips, 148 AM peak hour trips (76 inbound and 72 outbound), and 148 PM peak hour trips (72 inbound and 76 outbound).
- The Tidelands Avenue/19th Street intersection in the PM peak hour and the Project Ingress and Egress driveway during both peak hours, would operate at LOS C or better under the Existing and Existing plus Project conditions. The Tidelands Avenue/19th Street intersection operates at LOS F in the AM peak hour under the Existing Conditions and would continue to operate at LOS F under Existing plus Project conditions. The Project would not result in increase in delay at the Tidelands Avenue/19th Street intersection. Because

the project would not degrade the operational condition of the Tidelands Avenue/19th Street intersection, no improvements are required or proposed.

- As shown in the queuing analysis conducted for the Tidelands Avenue/19th Street intersection and Gate 13, under existing conditions, spillover from the gate approach into the Tidelands Avenue/19th Street intersection occurs when queues exceed 400 feet (distance between the gate and intersection) at the Gate 13 westbound lanes in the AM peak hour. As shown in the queuing analysis of AM peak hour under Existing plus Project conditions, the queues on the westbound, southbound, and northbound approaches of the Tidelands Avenue/19th Street intersection increase with the addition of the project trips. However, the increase would not be considered significant. The Project Egress Driveway is located approximately 600 feet north of 19th Street and therefore, the southbound queues on Tidelands Avenue would not obstruct the project driveways. However, the maximum southbound queue on Tidelands Avenue is greater than 350 feet under Existing conditions and would occasionally extend up to the relocated driveway to the Pasha Automotive Services in the AM peak hour due to vehicles accessing Navy Gate 13. The Pasha Automotive Services site does not operate daily and there are no known access issues.
- Nominal queues are observed at the Tidelands Avenue/19th Street intersection in the PM peak hour under the Existing Conditions and Existing plus Project conditions on southbound, westbound, and northbound approaches. The eastbound approach queues at the intersection reflect the outbound movement at Gate 13 during the PM peak hour. However, no change in eastbound queues is observed by comparing with and without project conditions.
- Based on Dudek's field reconnaissance and Google Earth images, the pavement condition of Tidelands Avenue in the vicinity of the project, would be considered in the range of fair to poor. The pavement and TI analysis in this report is provided for informational purposes. The analysis reveals that new use of the roadway segment will cause wear and tear of the pavement surface, however, the difference between the wear and tear of a heavy-duty battery-electric truck versus an ICE truck is negligible.
- The mobility analysis of the project does not require the project to implement any roadway improvements or mitigation measures. As such no recommendation is included in this memorandum.

9 References

California Department of Transportation (Caltrans). 2020. Highway Design Manual. 7th Edition. July 1, 2020.

City of National City. 2024. Transportation Element. March 19, 2024.

City of San Diego. 2024. Pavement Management Plan, January 2024

Institute of Transportation Engineers (ITE). San Diego Section. Guidelines for Transportation Impact Studies (TIS) in the San Diego Region May 2019

Port of San Diego. 2020. Harbor Drive Multimodal Corridor Study. January 2020.

TRB (Transportation Research Board). 2010. Highway Capacity Manual 2010

Figures 1-6



SOURCE: USGS National Map 2025

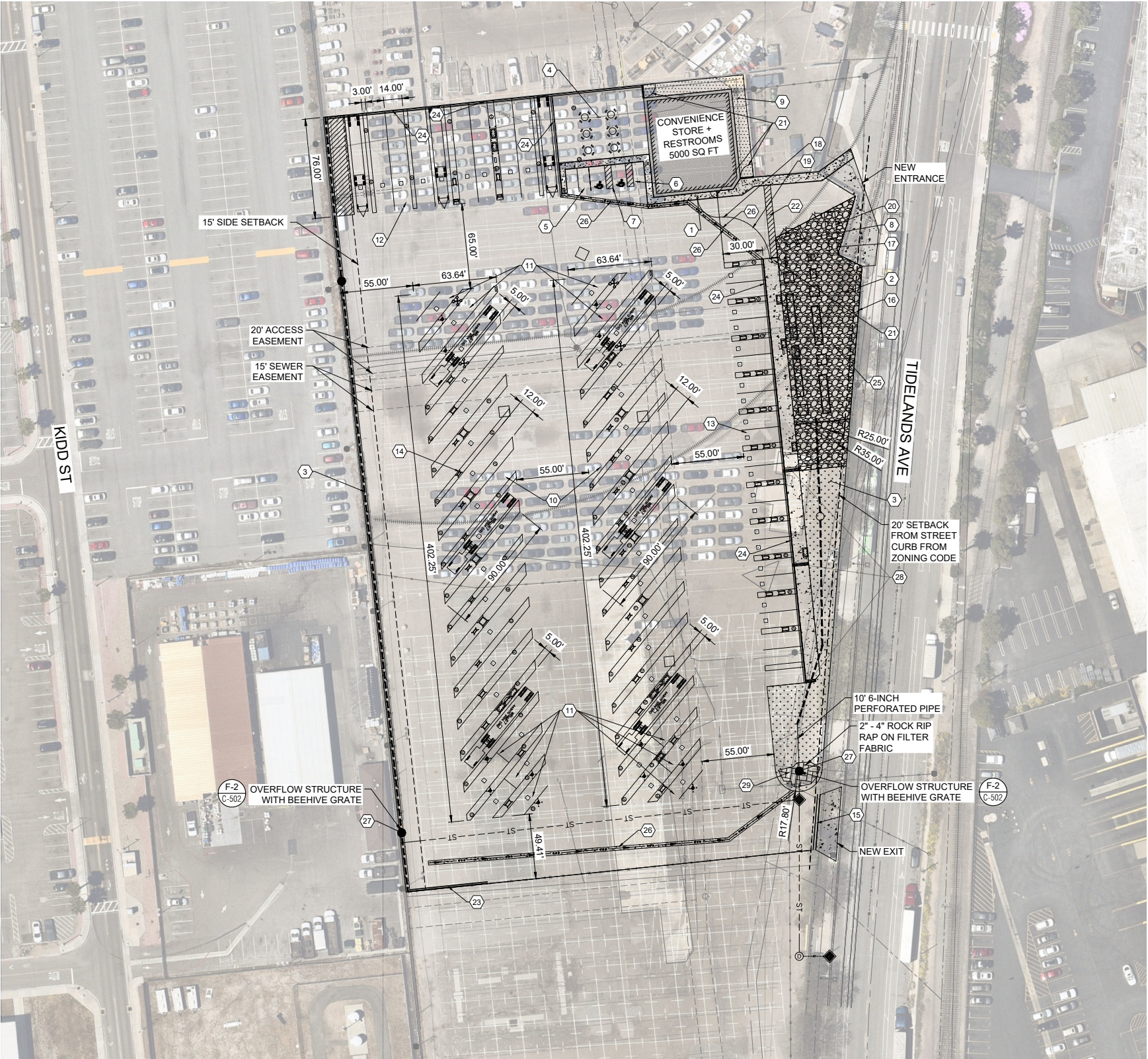
DUDEK



0 1,000 2,000 Feet

FIGURE 1
Project Location

Tidelands Avenue Electric Truck Hub



NOTES

1. THE EXISTING INFORMATION SHOWN ARE PER RECORD DRAWINGS AND DRAWN TO THE CLOSEST ACCURACY AND WITHOUT ANY HORIZONTAL CONTROL.

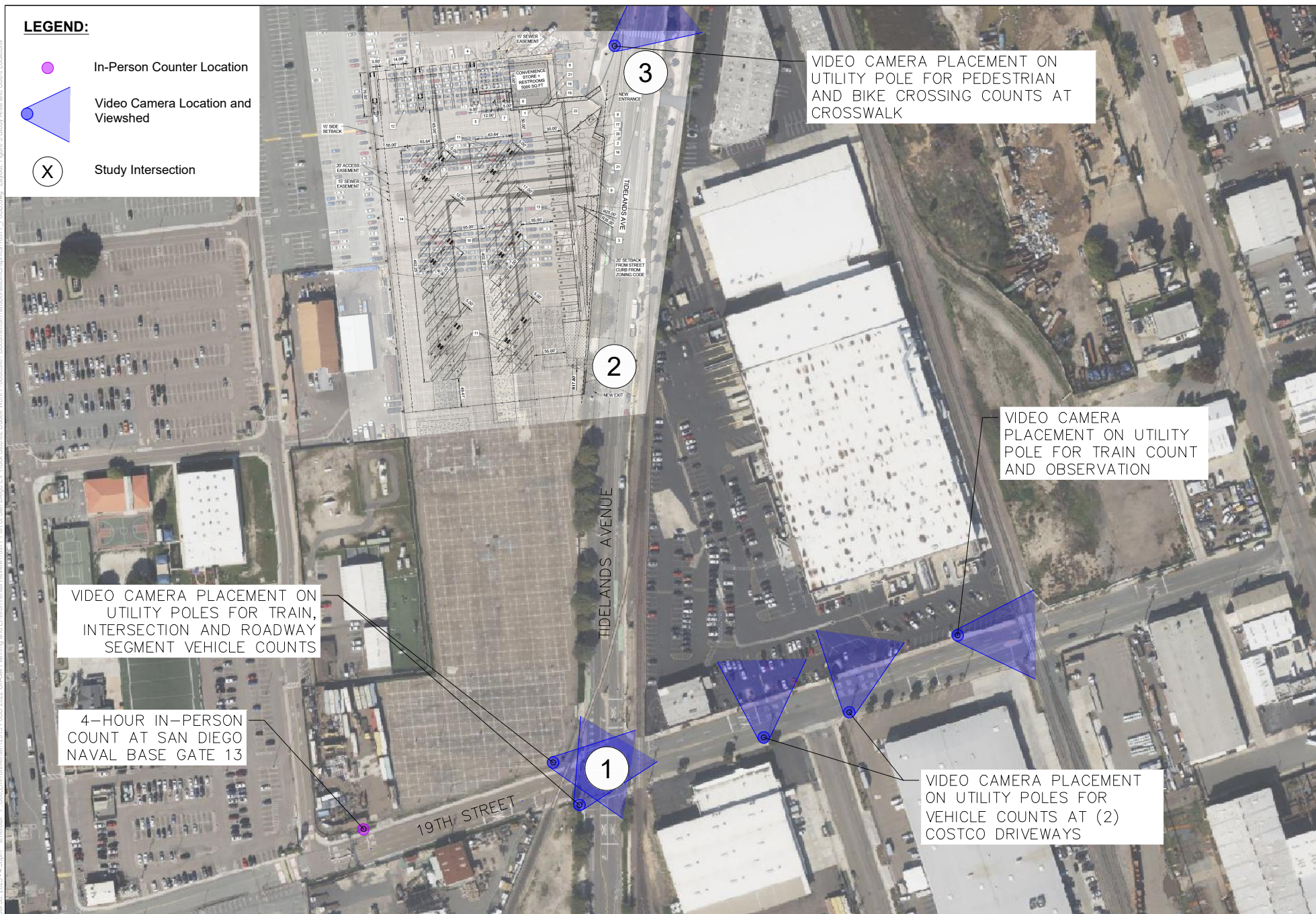
LEGEND AND ABBREVIATIONS

---	EXISTING WATER LINE
---	EXISTING OVERHEAD ELECTRICAL LINE
---	EXISTING UNDERGROUND ELECTRICAL LINE
---	EXISTING SANITARY SEWER LINE
---	EXISTING RAIL SPUR
---	EASEMENT
•	EXISTING UTILITY POLE
○	EXISTING SANITARY MANHOLE
EX	EXISTING WATER LINE
---	LEASE LIMIT LINE
---	CHAINLINK FENCE
---	FLOW LINE
[Pattern]	ASPHALT PAVEMENT
[Pattern]	CONCRETE PAVEMENT/SIDEWALK
[Pattern]	VEGETATED AREA
[Pattern]	BUILDING
[Pattern]	GRAVEL
[Pattern]	RIP RAP
ⓓ	STORM MANHOLE
◆	STORM INLET
---	STORM PIPE

CONSTRUCTION NOTES

① CONCRETE SIDEWALK	⑮ 24' WIDE SLIDING GATE
② ELECTRICAL EQUIPMENT YARD	⑯ CHAINLINK FENCE WITH GATE
③ LANDSCAPING/BIO FILTRATION BASIN WITH MEDIA AND UNDER DRAIN FOR STORMWATER TREATMENT	⑰ 12'x6' PARKING SPOT WITH A CHARGER
④ PICNIC AREA	⑱ 15' SWING GATE
⑤ 90° PARKING SPACE	⑲ 35' SWING GATE
⑥ ACCESSIBLE PARKING SPACE	⑳ 20'x8' STORAGE CONTAINER
⑦ VAN ACCESSIBLE PARKING SPACE	㉑ MAIN GATE
⑧ TRASH ENCLOSURE	㉒ PEDESTRIAN PATH
⑨ ASPHALT PAVEMENT	㉓ CURB
⑩ PULL THROUGH TRUCK+TRAILER PARKING SPACES (12 TYP.)	㉔ CURB AND GUTTER
⑪ PULL THROUGH TRUCK ONLY PARKING SPACES (12 TYP.)	㉕ GRAVEL
⑫ OVERNIGHT TRUCK+TRAILER PARKING SPACES (14 TYP.)	㉖ SWALE
⑬ OVERNIGHT TRUCK ONLY PARKING SPACES (22 TYP.)	㉗ OVERFLOW STRUCTURE WITH BEEHIVE GRATE
⑭ BOLLARD (TYP)	㉘ TRENCH DRAIN
	㉙ RIP RAP

1/13/2025 4:55pm P:\300\Environmental\12916 PSD 2022 On-call Planning and Environmental Review\1977 Part of San Diego EV Truck Stop\22 Dudek Work Products\01 Document Transportation\Graphics\1977 PSD Map Layer\ Figure 3 Study Area and Count Locations



SOURCE: Burns McDonnell 2025; AimTD LLC 2025; Bing Maps



SOURCE: SanGIS 2025; Maxar 2025

DUDEK



0 1,250 2,500
Feet

FIGURE 4
Bike and Transit Facilities
Tidelands Avenue Electric Truck Hub

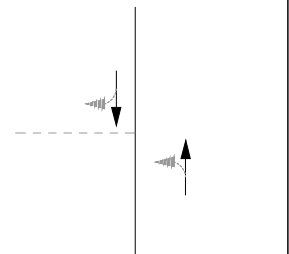
1/13/2025 4:45pm P:\300-Environmental\12916 PSD 2022 On-call Planning and Environmental Review\18977 Port of San Diego EV Truck Stop\22 Dudek Work Products\01 Document\Transportation\Graphics\18977 PSD.dwg Layout Figure 5 Intersection Geometrics

LEGEND:

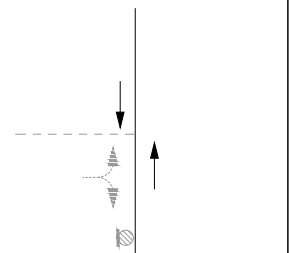
-  Study Intersection
-  Signal
-  Stop Sign
-  Lane Geometrics
-  Proposed Stop Sign
-  Proposed Lane Geometrics
- PERM Permitted Left-Turn Phasing
- DEF Defacto Right-Turn



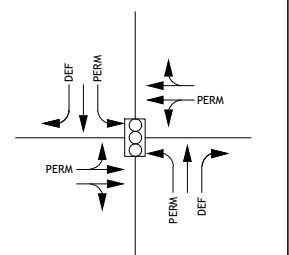
3 Tidelands Avenue Project Driveway Entrance



2 Tidelands Avenue Project Driveway Exit

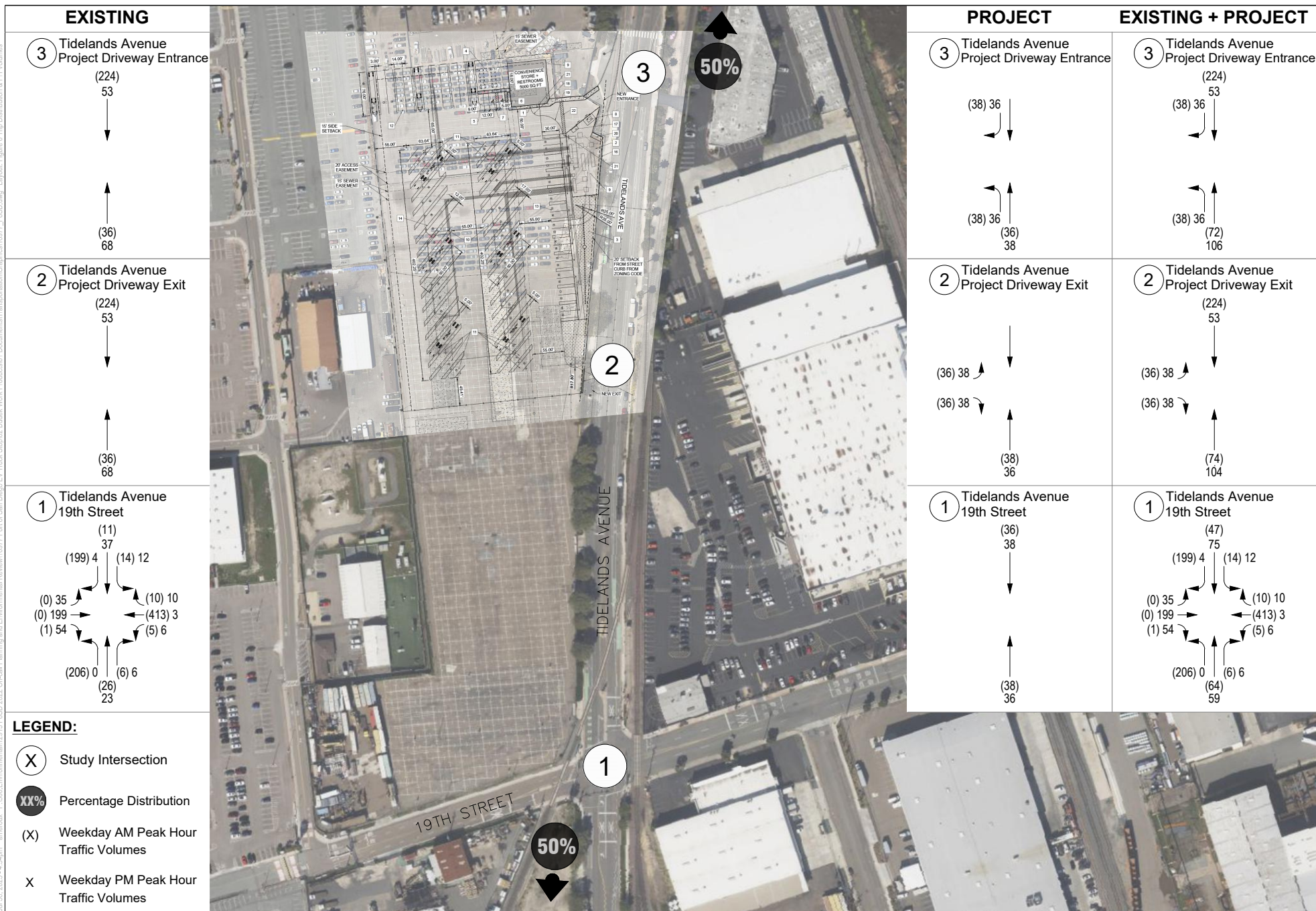


1 Tidelands Avenue 19th Street



SOURCE: Burns McDonnell 2025; AimTD LLC 2025; Bing Maps

July 30, 2025 - 4:54pm - P:\300-Environmental\12915 P&SD - 2022 On-call Planning and Environmental Review\18977 Port of San Diego EV Truck Stop\22 Dudek Work Products\01 Documents\Transportation\Graphics\18977_P&SD.dwg - Layer: Figure 6 Trip Distribution & PH Volumes



LEGEND:

- (X) Study Intersection
- (XX%) Percentage Distribution
- (X) Weekday AM Peak Hour Traffic Volumes
- X Weekday PM Peak Hour Traffic Volumes

SOURCE: Burns McDonnell 2025; AimTD LLC 2025; Bing Maps

DUDEK



NOT TO SCALE

FIGURE 6
Project Trip Distribution & Peak Hour Traffic Volumes

Tidelands Avenue Electric Truck Hub

Attachment A

Raw Traffic Counts

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

T01252

DATE:
Thu, Apr 17, 25

LOCATION:
NORTH & SOUTH: San Diego Port
EAST & WEST: Tidelands Ave
W 19th St

PROJECT #: SC5211
LOCATION #: 1
CONTROL: SIGNAL

NOTES:	AM		▲	
	PM		N	
	MD	◀ W		E ▶
	OTHER		S	
	OTHER		▼	

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Tidelands Ave			Tidelands Ave			W 19th St			W 19th St			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	1	0	1	1	0	0	2	0	0	2	0	

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	

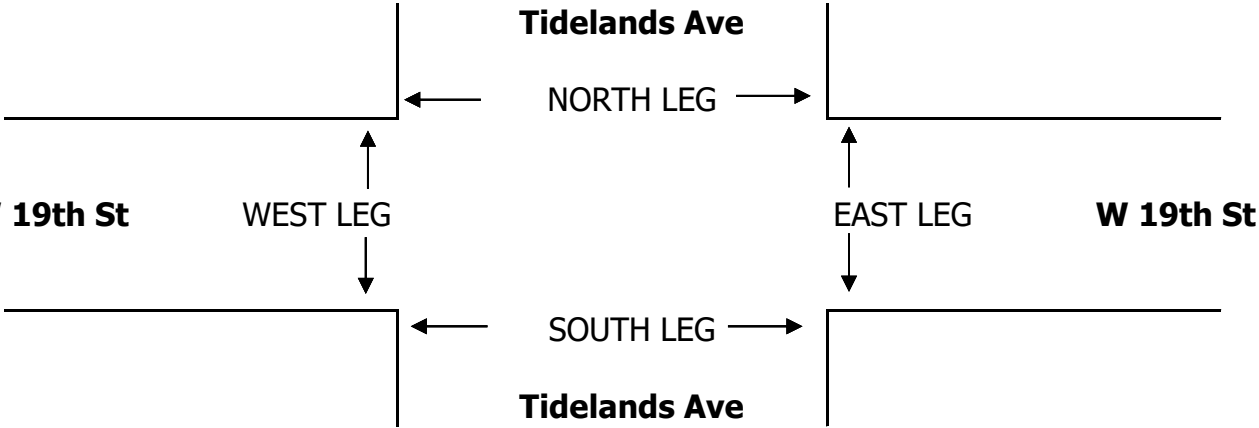
AM	5:00 AM	19	0	0	0	0	10	1	0	0	0	45	0	75
	5:15 AM	26	4	2	2	0	16	1	0	0	0	84	3	138
	5:30 AM	41	5	2	3	4	41	0	0	0	2	110	1	209
	5:45 AM	60	3	0	3	1	54	0	0	0	1	115	4	241
	6:00 AM	58	11	2	4	3	57	0	0	0	0	97	1	233
	6:15 AM	47	7	2	4	3	47	0	0	1	2	91	4	208
	6:30 AM	56	8	2	3	8	46	0	1	0	0	70	2	196
	6:45 AM	36	9	3	3	5	25	1	0	1	2	65	5	155
	7:00 AM	29	4	1	3	3	16	0	1	0	0	45	5	107
	7:15 AM	20	7	3	2	9	9	0	0	0	2	40	4	96
	7:30 AM	9	7	2	1	3	9	3	0	0	0	32	2	68
	7:45 AM	14	9	3	4	6	1	0	0	0	3	26	1	67
VOLUMES		415	74	22	32	45	331	6	2	2	12	820	32	1,794
APPROACH %		81%	14%	4%	8%	11%	81%	60%	20%	20%	1%	95%	4%	
APP/DEPART		511	/	113	409	/	59	10	/	56	864	/	1,566	0
BEGIN PEAK HR		5:30 AM												
VOLUMES		206	26	6	14	11	199	0	0	1	5	413	10	891
APPROACH %		87%	11%	3%	6%	5%	89%	0%	0%	100%	1%	96%	2%	
PEAK HR FACTOR		0.838			0.875			0.250			0.892			0.924
APP/DEPART		238	/	36	224	/	17	1	/	20	428	/	818	0
PM	2:00 PM	0	5	7	3	7	0	7	28	7	2	4	1	71
	2:15 PM	0	9	1	3	10	1	10	45	14	0	0	3	96
	2:30 PM	0	5	1	3	8	2	7	56	18	1	2	2	105
	2:45 PM	0	5	2	2	14	1	10	49	8	2	0	1	94
	3:00 PM	0	4	2	4	5	0	8	49	14	3	1	4	94
	3:15 PM	1	5	1	1	6	2	10	35	9	2	3	2	77
	3:30 PM	0	4	3	4	8	0	9	43	13	1	0	2	87
	3:45 PM	0	2	0	3	3	2	3	34	3	0	0	1	51
	4:00 PM	0	6	1	2	1	0	5	43	3	0	4	1	66
	4:15 PM	0	1	3	1	6	1	3	32	8	1	0	1	57
VOLUMES		1	46	21	26	68	9	72	414	97	12	14	18	799
APPROACH %		1%	68%	31%	25%	65%	9%	12%	71%	17%	27%	32%	41%	
APP/DEPART		68	/	137	104	/	177	583	/	461	44	/	24	0
BEGIN PEAK HR		2:15 PM												
VOLUMES		0	23	6	12	37	4	35	199	54	6	3	10	390
APPROACH %		0%	79%	21%	22%	69%	7%	12%	69%	19%	32%	16%	53%	
PEAK HR FACTOR		0.725			0.794			0.889			0.594			0.929
APP/DEPART		29	/	69	54	/	97	288	/	217	19	/	7	0

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1

0	0	0	0
---	---	---	---

0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1

0	1	0	0
---	---	---	---



AM	5:00 AM
	5:15 AM
	5:30 AM
	5:45 AM
	6:00 AM
	6:15 AM
	6:30 AM
	6:45 AM
	7:00 AM
	7:15 AM
	7:30 AM
	7:45 AM
	TOTAL
	BEGIN PEAK HR
PM	2:00 PM
	2:15 PM
	2:30 PM
	2:45 PM
	3:00 PM
	3:15 PM
	3:30 PM
	3:45 PM
	4:00 PM
	4:15 PM
	TOTAL
	BEGIN PEAK HR

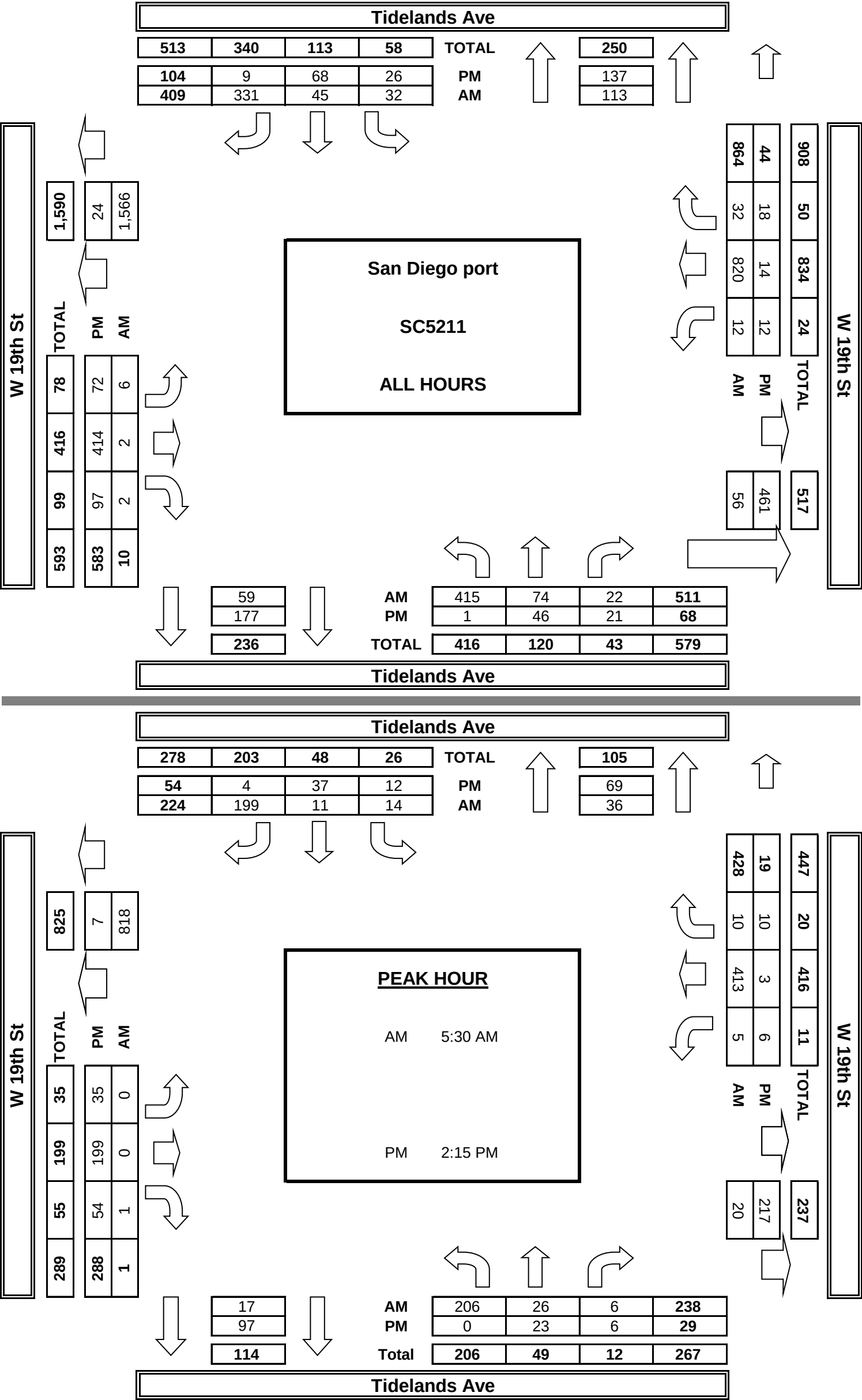
ALL PED + BIKE & SCOOTER				
N LEG	S LEG	E LEG	W LEG	TOTAL
3	0	0	0	3
2	1	3	2	8
6	4	0	4	14
1	2	3	3	9
2	1	3	0	6
8	2	2	2	14
5	1	2	7	15
3	0	1	2	6
6	0	2	0	8
2	1	2	3	8
4	0	4	0	8
2	1	1	1	5
44	13	23	24	104
5:30 AM				
0	2	2	2	6
0	2	1	4	7
1	0	2	1	4
1	0	0	8	9
1	1	2	2	6
2	0	0	7	9
2	1	0	5	8
0	1	1	4	6
2	1	1	0	4
0	1	0	1	2
9	9	9	34	61
2:15 PM				

PEDESTRIAN CROSSINGS				
N LEG	S LEG	E LEG	W LEG	TOTAL
1	0	0	0	1
1	1	0	2	4
6	4	0	4	14
1	2	0	3	6
2	1	0	0	3
7	2	1	2	12
5	1	1	6	13
3	0	0	2	5
6	0	0	0	6
1	1	1	2	5
2	0	2	0	4
1	1	0	1	3
36	13	5	22	76
16	9	1	9	35
0	2	0	1	3
0	2	0	1	3
1	0	0	0	1
1	0	0	1	2
1	1	2	2	6
2	0	0	1	3
2	1	0	1	4
0	0	0	2	2
2	1	1	0	4
0	1	0	1	2
9	8	3	10	30
3	3	2	4	12

BICYCLE & SCOOTER CROSSINGS				
NL	SL	EL	WL	TOTAL
2	0	0	0	2
1	0	3	0	4
0	0	0	0	0
0	0	3	0	3
0	0	3	0	3
1	0	1	0	2
0	0	1	1	2
0	0	1	0	1
0	0	2	0	2
1	0	1	1	3
2	0	2	0	4
1	0	1	0	2
8	0	18	2	28

0	0	2	1	3
0	0	1	3	4
0	0	2	1	3
0	0	0	7	7
0	0	0	0	0
0	0	0	6	6
0	0	0	4	4
0	1	1	2	4
0	0	0	0	0
0	0	0	0	0
0	1	6	24	31

AimTD LLC
TURNING MOVEMENT COUNTS



24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Thursday, April 17, 2025

CITY: San Diego Port

JOB #: SC5211

LOCATION: CLASS1 W 19th St west of Tidelands Ave

AM TIME	EASTBOUND							PM Time	EASTBOUND						
	1	2	3	4	5	6	TOTAL		1	2	3	4	5	6	TOTAL
0:00	0	0	0	0	0	0	0	12:00	6	1	0	0	0	0	7
0:15	0	0	0	0	0	0	0	12:15	6	0	0	0	0	0	6
0:30	0	0	0	0	0	0	0	12:30	1	0	0	0	0	0	1
0:45	0	0	0	0	0	0	0	12:45	2	0	0	0	0	0	2
1:00	0	0	0	0	0	0	0	13:00	3	0	0	0	0	0	3
1:15	0	0	0	0	0	0	0	13:15	2	2	0	0	0	0	4
1:30	0	0	0	0	0	0	0	13:30	4	0	0	0	0	0	4
1:45	0	0	0	0	0	0	0	13:45	20	0	0	0	0	0	20
2:00	0	0	0	0	0	0	0	14:00	40	1	0	0	0	1	42
2:15	2	1	0	0	0	0	3	14:15	68	1	0	0	0	0	69
2:30	0	0	0	0	0	0	0	14:30	79	2	0	0	0	0	81
2:45	0	0	0	0	0	0	0	14:45	65	2	0	0	0	0	67
3:00	0	0	0	0	0	0	0	15:00	70	1	0	0	0	0	71
3:15	0	0	0	0	0	0	0	15:15	53	1	0	0	0	0	54
3:30	1	1	0	0	0	0	2	15:30	63	2	0	0	0	0	65
3:45	0	0	0	0	0	0	0	15:45	37	3	0	0	0	0	40
4:00	0	0	0	0	0	0	0	16:00	51	0	0	0	0	0	51
4:15	0	0	0	0	0	0	0	16:15	43	0	0	0	0	0	43
4:30	0	0	0	0	0	0	0	16:30	3	0	0	0	0	0	3
4:45	1	1	0	0	0	0	2	16:45	1	0	0	0	0	0	1
5:00	1	0	0	0	0	0	1	17:00	3	0	0	0	0	0	3
5:15	1	0	0	0	0	0	1	17:15	3	0	0	0	0	0	3
5:30	0	0	0	0	0	0	0	17:30	2	0	0	0	0	0	2
5:45	0	0	0	0	0	0	0	17:45	0	0	0	0	0	0	0
6:00	0	0	0	0	0	0	0	18:00	1	0	0	0	0	0	1
6:15	1	0	0	0	0	0	1	18:15	0	0	0	0	0	0	0
6:30	1	0	0	0	0	0	1	18:30	3	0	0	0	0	0	3
6:45	2	0	0	0	0	0	2	18:45	1	0	0	0	0	0	1
7:00	1	0	0	0	0	0	1	19:00	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	19:15	2	0	0	0	0	0	2
7:30	0	3	0	0	0	0	3	19:30	1	0	0	0	0	0	1
7:45	0	0	0	0	0	0	0	19:45	0	0	0	0	0	0	0
8:00	1	0	0	0	0	0	1	20:00	4	0	0	0	0	0	4
8:15	1	1	0	0	0	0	2	20:15	1	0	0	0	0	0	1
8:30	1	0	0	0	0	0	1	20:30	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	20:45	0	0	0	0	0	0	0
9:00	0	0	0	0	0	0	0	21:00	0	0	0	0	0	0	0
9:15	0	0	0	0	0	0	0	21:15	2	0	0	0	0	0	2
9:30	0	1	0	0	0	0	1	21:30	1	0	0	0	0	0	1
9:45	2	1	0	0	0	0	3	21:45	3	0	0	0	0	0	3
10:00	1	0	0	0	0	0	1	22:00	1	0	0	0	0	0	1
10:15	1	0	0	0	0	0	1	22:15	0	1	0	0	0	0	1
10:30	0	0	0	0	0	0	0	22:30	0	1	0	0	0	0	1
10:45	1	0	0	0	0	0	1	22:45	0	0	0	0	0	0	0
11:00	4	1	0	0	0	0	5	23:00	0	0	0	0	0	0	0
11:15	7	0	0	0	0	0	7	23:15	0	0	0	0	0	0	0
11:30	17	0	0	0	0	0	17	23:30	1	0	0	0	0	0	1
11:45	18	1	0	0	0	0	19	23:45	0	0	0	0	0	0	0
TOTAL	65	11	0	0	0	0	76	TOTAL	646	18	0	0	0	1	665

AM PEAK HOUR							11:00 AM	PM PEAK HOUR							2:15 PM
AM PEAK VOLUME							48	PM PEAK VOLUME							288

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	711	29	0	0	0	1	741
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	96.0%	3.9%	0.0%	0.0%	0.0%	0.1%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV	TOTAL: ALL	2,440	47	0	0	0	1	2,488
CLASS 6	Buses	% OF TOTAL	98.1%	1.9%	0.0%	0.0%	0.0%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Thursday, April 17, 2025
JOB #: SC5211

CITY: San Diego Port
LOCATION: CLASS1 W 19th St west of Tidelands Ave

AM TIME	WESTBOUND							PM Time	WESTBOUND						
	1	2	3	4	5	6	TOTAL		1	2	3	4	5	6	TOTAL
0:00	0	0	0	0	0	0	0	12:00	5	0	0	0	0	0	5
0:15	0	0	0	0	0	0	0	12:15	4	0	0	0	0	0	4
0:30	0	0	0	0	0	0	0	12:30	2	1	0	0	0	0	3
0:45	0	0	0	0	0	0	0	12:45	1	0	0	0	0	0	1
1:00	0	0	0	0	0	0	0	13:00	4	0	0	0	0	0	4
1:15	0	0	0	0	0	0	0	13:15	3	0	0	0	0	0	3
1:30	0	0	0	0	0	0	0	13:30	5	0	0	0	0	0	5
1:45	0	0	0	0	0	0	0	13:45	6	0	0	0	0	0	6
2:00	0	0	0	0	0	0	0	14:00	3	1	0	0	0	0	4
2:15	2	1	0	0	0	0	3	14:15	1	0	0	0	0	0	1
2:30	0	0	0	0	0	0	0	14:30	4	0	0	0	0	0	4
2:45	0	0	0	0	0	0	0	14:45	1	0	0	0	0	0	1
3:00	0	0	0	0	0	0	0	15:00	1	0	0	0	0	0	1
3:15	0	0	0	0	0	0	0	15:15	6	0	0	0	0	0	6
3:30	1	1	0	0	0	0	2	15:30	0	0	0	0	0	0	0
3:45	0	0	0	0	0	0	0	15:45	2	0	0	0	0	0	2
4:00	0	0	0	0	0	0	0	16:00	4	0	0	0	0	0	4
4:15	0	0	0	0	0	0	0	16:15	1	0	0	0	0	0	1
4:30	2	0	0	0	0	0	2	16:30	3	0	0	0	0	0	3
4:45	30	0	0	0	0	0	30	16:45	1	0	0	0	0	0	1
5:00	74	0	0	0	0	0	74	17:00	3	0	0	0	0	0	3
5:15	126	0	0	0	0	0	126	17:15	3	0	0	0	0	0	3
5:30	191	1	0	0	0	0	192	17:30	2	0	0	0	0	0	2
5:45	229	0	0	0	0	0	229	17:45	0	0	0	0	0	0	0
6:00	212	0	0	0	0	0	212	18:00	1	0	0	0	0	0	1
6:15	185	0	0	0	0	0	185	18:15	0	0	0	0	0	0	0
6:30	172	0	0	0	0	0	172	18:30	3	0	0	0	0	0	3
6:45	126	0	0	0	0	0	126	18:45	1	0	0	0	0	0	1
7:00	89	1	0	0	0	0	90	19:00	0	0	0	0	0	0	0
7:15	66	3	0	0	0	0	69	19:15	3	0	0	0	0	0	3
7:30	48	2	0	0	0	0	50	19:30	1	0	0	0	0	0	1
7:45	41	0	0	0	0	0	41	19:45	0	0	0	0	0	0	0
8:00	5	0	0	0	0	0	5	20:00	3	0	0	0	0	0	3
8:15	7	1	0	0	0	0	8	20:15	1	0	0	0	0	0	1
8:30	6	1	0	0	0	0	7	20:30	0	0	0	0	0	0	0
8:45	4	1	0	0	0	0	5	20:45	0	0	0	0	0	0	0
9:00	1	0	0	0	0	0	1	21:00	0	0	0	0	0	0	0
9:15	5	0	0	0	0	0	5	21:15	2	0	0	0	0	0	2
9:30	3	0	0	0	0	0	3	21:30	2	0	0	0	0	0	2
9:45	2	1	0	0	0	0	3	21:45	1	0	0	0	0	0	1
10:00	2	0	0	0	0	0	2	22:00	1	0	0	0	0	0	1
10:15	1	0	0	0	0	0	1	22:15	0	1	0	0	0	0	1
10:30	2	1	0	0	0	0	3	22:30	0	1	0	0	0	0	1
10:45	0	0	0	0	0	0	0	22:45	0	0	0	0	0	0	0
11:00	3	0	0	0	0	0	3	23:00	0	0	0	0	0	0	0
11:15	2	0	0	0	0	0	2	23:15	0	0	0	0	0	0	0
11:30	4	0	0	0	0	0	4	23:30	1	0	0	0	0	0	1
11:45	3	0	0	0	0	0	3	23:45	0	0	0	0	0	0	0
TOTAL	1,644	14	0	0	0	0	1,658	TOTAL	85	4	0	0	0	0	89
AM PEAK HOUR							5:30 AM	PM PEAK HOUR							1:15 PM
AM PEAK VOLUME							818	PM PEAK VOLUME							18

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	1,729	18	0	0	0	0	1,747
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	99.0%	1.0%	0.0%	0.0%	0.0%	0.0%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV								
CLASS 6	BUS								

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Thursday, April 17, 2025

CITY: San Diego Port

JOB #: SC5211

LOCATION: CLASS1 W 19th St west of Tidelands Ave

AM TIME	COMBINED							PM Time	COMBINED						
	1	2	3	4	5	6	TOTAL		1	2	3	4	5	6	TOTAL
0:00	0	0	0	0	0	0	0	12:00	11	1	0	0	0	0	12
0:15	0	0	0	0	0	0	0	12:15	10	0	0	0	0	0	10
0:30	0	0	0	0	0	0	0	12:30	3	1	0	0	0	0	4
0:45	0	0	0	0	0	0	0	12:45	3	0	0	0	0	0	3
1:00	0	0	0	0	0	0	0	13:00	7	0	0	0	0	0	7
1:15	0	0	0	0	0	0	0	13:15	5	2	0	0	0	0	7
1:30	0	0	0	0	0	0	0	13:30	9	0	0	0	0	0	9
1:45	0	0	0	0	0	0	0	13:45	26	0	0	0	0	0	26
2:00	0	0	0	0	0	0	0	14:00	43	2	0	0	0	1	46
2:15	4	2	0	0	0	0	6	14:15	69	1	0	0	0	0	70
2:30	0	0	0	0	0	0	0	14:30	83	2	0	0	0	0	85
2:45	0	0	0	0	0	0	0	14:45	66	2	0	0	0	0	68
3:00	0	0	0	0	0	0	0	15:00	71	1	0	0	0	0	72
3:15	0	0	0	0	0	0	0	15:15	59	1	0	0	0	0	60
3:30	2	2	0	0	0	0	4	15:30	63	2	0	0	0	0	65
3:45	0	0	0	0	0	0	0	15:45	39	3	0	0	0	0	42
4:00	0	0	0	0	0	0	0	16:00	55	0	0	0	0	0	55
4:15	0	0	0	0	0	0	0	16:15	44	0	0	0	0	0	44
4:30	2	0	0	0	0	0	2	16:30	6	0	0	0	0	0	6
4:45	31	1	0	0	0	0	32	16:45	2	0	0	0	0	0	2
5:00	75	0	0	0	0	0	75	17:00	6	0	0	0	0	0	6
5:15	127	0	0	0	0	0	127	17:15	6	0	0	0	0	0	6
5:30	191	1	0	0	0	0	192	17:30	4	0	0	0	0	0	4
5:45	229	0	0	0	0	0	229	17:45	0	0	0	0	0	0	0
6:00	212	0	0	0	0	0	212	18:00	2	0	0	0	0	0	2
6:15	186	0	0	0	0	0	186	18:15	0	0	0	0	0	0	0
6:30	173	0	0	0	0	0	173	18:30	6	0	0	0	0	0	6
6:45	128	0	0	0	0	0	128	18:45	2	0	0	0	0	0	2
7:00	90	1	0	0	0	0	91	19:00	0	0	0	0	0	0	0
7:15	66	3	0	0	0	0	69	19:15	5	0	0	0	0	0	5
7:30	48	5	0	0	0	0	53	19:30	2	0	0	0	0	0	2
7:45	41	0	0	0	0	0	41	19:45	0	0	0	0	0	0	0
8:00	6	0	0	0	0	0	6	20:00	7	0	0	0	0	0	7
8:15	8	2	0	0	0	0	10	20:15	2	0	0	0	0	0	2
8:30	7	1	0	0	0	0	8	20:30	0	0	0	0	0	0	0
8:45	4	1	0	0	0	0	5	20:45	0	0	0	0	0	0	0
9:00	1	0	0	0	0	0	1	21:00	0	0	0	0	0	0	0
9:15	5	0	0	0	0	0	5	21:15	4	0	0	0	0	0	4
9:30	3	1	0	0	0	0	4	21:30	3	0	0	0	0	0	3
9:45	4	2	0	0	0	0	6	21:45	4	0	0	0	0	0	4
10:00	3	0	0	0	0	0	3	22:00	2	0	0	0	0	0	2
10:15	2	0	0	0	0	0	2	22:15	0	2	0	0	0	0	2
10:30	2	1	0	0	0	0	3	22:30	0	2	0	0	0	0	2
10:45	1	0	0	0	0	0	1	22:45	0	0	0	0	0	0	0
11:00	7	1	0	0	0	0	8	23:00	0	0	0	0	0	0	0
11:15	9	0	0	0	0	0	9	23:15	0	0	0	0	0	0	0
11:30	21	0	0	0	0	0	21	23:30	2	0	0	0	0	0	2
11:45	21	1	0	0	0	0	22	23:45	0	0	0	0	0	0	0
TOTAL	1,709	25	0	0	0	0	1,734	TOTAL	731	22	0	0	0	1	754
AM PEAK HOUR							5:30 AM	PM PEAK HOUR							2:15 PM
AM PEAK VOLUME							819	PM PEAK VOLUME							295

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	2,440	47	0	0	0	1	2,488
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	98.1%	1.9%	0.0%	0.0%	0.0%	0.0%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV								
CLASS 6	Buses								

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Thursday, April 17, 2025
JOB #: SC5211

CITY: San Diego Port
LOCATION: CLASS2 Tidelands Ave north of W 19th St

AM TIME	NORTHBOUND							PM Time	NORTHBOUND						
	1	2	3	4	5	6	TOTAL		1	2	3	4	5	6	TOTAL
0:00	0	1	0	0	0	0	1	12:00	10	1	0	0	0	0	11
0:15	1	0	0	0	0	0	1	12:15	7	1	0	0	0	0	8
0:30	0	0	0	0	0	0	0	12:30	7	1	1	2	0	0	11
0:45	0	0	0	0	0	0	0	12:45	6	2	1	2	0	0	11
1:00	0	0	0	0	0	0	0	13:00	8	1	1	1	0	0	11
1:15	1	1	0	0	0	0	2	13:15	3	0	0	1	0	0	4
1:30	0	0	0	0	0	0	0	13:30	6	1	1	2	0	0	10
1:45	0	0	0	0	0	0	0	13:45	12	2	0	1	0	0	15
2:00	0	0	0	0	0	0	0	14:00	8	2	0	2	0	1	13
2:15	1	1	0	0	0	0	2	14:15	16	3	0	4	0	0	23
2:30	0	0	0	0	0	0	0	14:30	10	2	0	2	0	0	14
2:45	0	0	0	0	0	0	0	14:45	13	2	0	1	0	0	16
3:00	0	0	0	0	0	0	0	15:00	16	0	0	0	0	0	16
3:15	0	0	0	0	0	0	0	15:15	13	2	0	2	0	0	17
3:30	0	1	0	1	0	0	2	15:30	11	4	0	0	0	0	15
3:45	0	0	0	0	0	0	0	15:45	3	3	0	0	0	0	6
4:00	1	0	0	0	0	0	1	16:00	11	0	0	1	0	0	12
4:15	1	0	0	0	0	0	1	16:15	5	0	0	0	0	0	5
4:30	2	0	0	0	0	0	2	16:30	1	0	0	0	0	0	1
4:45	1	1	0	0	0	0	2	16:45	2	0	0	0	0	0	2
5:00	1	0	0	0	0	0	1	17:00	2	1	0	0	0	0	3
5:15	7	0	0	1	0	0	8	17:15	5	0	0	1	0	0	6
5:30	4	0	0	2	0	0	6	17:30	5	0	0	0	0	0	5
5:45	5	1	0	1	0	0	7	17:45	4	0	0	0	0	0	4
6:00	9	0	0	3	0	0	12	18:00	5	0	0	1	0	0	6
6:15	8	2	0	1	0	0	11	18:15	1	0	0	0	0	0	1
6:30	8	0	1	1	0	0	10	18:30	1	0	0	0	0	0	1
6:45	12	1	0	2	0	0	15	18:45	1	0	0	0	0	0	1
7:00	6	2	0	1	0	0	9	19:00	2	0	0	0	0	0	2
7:15	7	4	0	1	0	0	12	19:15	1	0	0	0	0	0	1
7:30	4	4	1	3	0	0	12	19:30	0	0	0	0	0	0	0
7:45	8	1	0	1	0	0	10	19:45	0	0	0	0	0	0	0
8:00	4	4	0	6	0	0	14	20:00	1	0	0	0	0	0	1
8:15	3	1	1	4	0	0	9	20:15	2	0	0	0	0	0	2
8:30	4	0	0	3	0	0	7	20:30	0	0	0	0	0	0	0
8:45	2	1	0	1	0	0	4	20:45	2	0	0	0	0	0	2
9:00	4	0	0	2	0	0	6	21:00	1	0	0	0	0	0	1
9:15	2	3	0	2	0	0	7	21:15	0	0	0	0	0	0	0
9:30	7	1	0	4	0	0	12	21:30	3	0	0	0	0	0	3
9:45	2	1	0	3	0	0	6	21:45	1	1	0	0	0	0	2
10:00	4	0	0	1	0	0	5	22:00	1	0	0	0	0	0	1
10:15	5	0	0	2	0	0	7	22:15	0	0	0	0	0	0	0
10:30	9	0	0	3	0	0	12	22:30	0	1	0	0	0	0	1
10:45	10	0	1	3	0	0	14	22:45	1	0	0	0	0	0	1
11:00	5	3	0	0	0	0	8	23:00	0	0	0	0	0	0	0
11:15	10	0	0	1	0	0	11	23:15	0	1	0	0	0	0	1
11:30	8	0	0	4	0	0	12	23:30	2	0	0	0	0	0	2
11:45	9	1	0	4	0	0	14	23:45	0	0	0	0	0	0	0
TOTAL	175	35	4	61	0	0	275	TOTAL	209	31	4	23	0	1	268
AM PEAK HOUR							7:15 AM	PM PEAK HOUR							2:15 PM
AM PEAK VOLUME							48	PM PEAK VOLUME							69

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	384	66	8	84	0	1	543
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	70.7%	12.2%	1.5%	15.5%	0.0%	0.2%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV	TOTAL: ALL	1,098	139	15	152	0	2	1,406
CLASS 6	Buses	% OF TOTAL	78.1%	9.9%	1.1%	10.8%	0.0%	0.1%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Thursday, April 17, 2025
JOB #: SC5211

CITY: San Diego Port
LOCATION: CLASS2 Tidelands Ave north of W 19th St

AM TIME	SOUTHBOUND							PM Time	SOUTHBOUND						
	1	2	3	4	5	6	TOTAL		1	2	3	4	5	6	TOTAL
0:00	1	1	0	0	0	0	2	12:00	11	0	0	2	0	0	13
0:15	2	0	0	0	0	0	2	12:15	6	0	1	1	0	0	8
0:30	0	0	0	0	0	0	0	12:30	7	4	0	0	0	0	11
0:45	0	0	0	0	0	0	0	12:45	13	0	1	3	0	0	17
1:00	0	0	0	0	0	0	0	13:00	12	2	0	0	0	0	14
1:15	1	1	0	0	0	0	2	13:15	8	0	0	1	0	0	9
1:30	0	0	0	0	0	0	0	13:30	6	1	0	3	0	0	10
1:45	0	0	0	0	0	0	0	13:45	11	3	0	4	0	0	18
2:00	0	0	0	0	0	0	0	14:00	6	4	0	0	0	0	10
2:15	2	1	0	0	0	0	3	14:15	9	2	0	4	0	0	15
2:30	0	0	0	0	0	0	0	14:30	7	2	0	4	0	0	13
2:45	0	0	0	0	0	0	0	14:45	12	2	0	3	0	0	17
3:00	0	0	0	0	0	0	0	15:00	7	1	0	1	0	0	9
3:15	0	0	0	0	0	0	0	15:15	8	0	0	1	0	0	9
3:30	0	0	0	0	0	0	0	15:30	8	1	0	3	0	0	12
3:45	0	0	0	0	0	0	0	15:45	7	0	0	1	0	0	8
4:00	0	1	0	0	0	0	1	16:00	3	0	0	0	0	0	3
4:15	1	0	0	0	0	0	1	16:15	5	0	0	3	0	0	8
4:30	2	0	0	0	0	0	2	16:30	8	3	0	0	0	0	11
4:45	2	0	0	0	0	0	2	16:45	4	0	1	2	0	0	7
5:00	10	0	0	0	0	0	10	17:00	3	1	0	1	0	0	5
5:15	18	0	0	0	0	0	18	17:15	7	1	0	0	0	0	8
5:30	46	2	0	0	0	0	48	17:30	7	0	0	0	0	0	7
5:45	58	0	0	0	0	0	58	17:45	2	0	0	1	0	0	3
6:00	63	1	0	0	0	0	64	18:00	5	0	0	0	0	0	5
6:15	54	0	0	0	0	0	54	18:15	3	0	0	0	0	0	3
6:30	55	1	0	1	0	0	57	18:30	2	0	0	0	0	0	2
6:45	29	4	0	0	0	0	33	18:45	2	0	0	0	0	0	2
7:00	21	0	0	1	0	0	22	19:00	5	1	0	0	0	0	6
7:15	15	5	0	1	0	0	21	19:15	1	0	0	0	0	0	1
7:30	10	2	0	0	0	1	13	19:30	2	0	0	0	0	0	2
7:45	8	1	0	2	0	0	11	19:45	0	0	0	0	0	0	0
8:00	8	2	0	0	0	0	10	20:00	3	0	0	0	0	0	3
8:15	4	1	0	0	0	0	5	20:15	2	0	0	0	0	0	2
8:30	6	2	0	1	0	0	9	20:30	0	0	0	0	0	0	0
8:45	5	2	0	0	0	0	7	20:45	4	0	0	0	0	0	4
9:00	5	2	0	4	0	0	11	21:00	1	0	0	0	0	0	1
9:15	8	2	0	1	0	0	11	21:15	2	0	0	0	0	0	2
9:30	8	0	0	2	0	0	10	21:30	3	0	0	0	0	0	3
9:45	4	1	0	3	0	0	8	21:45	2	0	0	1	0	0	3
10:00	5	2	0	0	0	0	7	22:00	0	0	0	0	0	0	0
10:15	2	1	0	3	0	0	6	22:15	1	1	0	0	0	0	2
10:30	6	2	1	1	0	0	10	22:30	0	1	0	0	0	0	1
10:45	6	1	1	1	0	0	9	22:45	0	0	0	0	0	0	0
11:00	5	0	1	3	0	0	9	23:00	0	1	0	1	0	0	2
11:15	4	2	1	1	0	0	8	23:15	0	0	0	0	0	0	0
11:30	13	1	0	1	0	0	15	23:30	1	0	0	0	0	0	1
11:45	11	0	0	2	0	0	13	23:45	0	1	0	0	0	0	1
TOTAL	498	41	4	28	0	1	572	TOTAL	216	32	3	40	0	0	291
AM PEAK HOUR							5:45 AM	PM PEAK HOUR							1:45 PM
AM PEAK VOLUME							233	PM PEAK VOLUME							56

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	714	73	7	68	0	1	863
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	82.7%	8.5%	0.8%	7.9%	0.0%	0.1%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV								
CLASS 6	BUS								

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Thursday, April 17, 2025

CITY: San Diego Port

JOB #: SC5211

LOCATION: CLASS2 Tidelands Ave north of W 19th St

AM TIME	COMBINED							PM Time	COMBINED						
	1	2	3	4	5	6	TOTAL		1	2	3	4	5	6	TOTAL
0:00	1	2	0	0	0	0	3	12:00	21	1	0	2	0	0	24
0:15	3	0	0	0	0	0	3	12:15	13	1	1	1	0	0	16
0:30	0	0	0	0	0	0	0	12:30	14	5	1	2	0	0	22
0:45	0	0	0	0	0	0	0	12:45	19	2	2	5	0	0	28
1:00	0	0	0	0	0	0	0	13:00	20	3	1	1	0	0	25
1:15	2	2	0	0	0	0	4	13:15	11	0	0	2	0	0	13
1:30	0	0	0	0	0	0	0	13:30	12	2	1	5	0	0	20
1:45	0	0	0	0	0	0	0	13:45	23	5	0	5	0	0	33
2:00	0	0	0	0	0	0	0	14:00	14	6	0	2	0	1	23
2:15	3	2	0	0	0	0	5	14:15	25	5	0	8	0	0	38
2:30	0	0	0	0	0	0	0	14:30	17	4	0	6	0	0	27
2:45	0	0	0	0	0	0	0	14:45	25	4	0	4	0	0	33
3:00	0	0	0	0	0	0	0	15:00	23	1	0	1	0	0	25
3:15	0	0	0	0	0	0	0	15:15	21	2	0	3	0	0	26
3:30	0	1	0	1	0	0	2	15:30	19	5	0	3	0	0	27
3:45	0	0	0	0	0	0	0	15:45	10	3	0	1	0	0	14
4:00	1	1	0	0	0	0	2	16:00	14	0	0	1	0	0	15
4:15	2	0	0	0	0	0	2	16:15	10	0	0	3	0	0	13
4:30	4	0	0	0	0	0	4	16:30	9	3	0	0	0	0	12
4:45	3	1	0	0	0	0	4	16:45	6	0	1	2	0	0	9
5:00	11	0	0	0	0	0	11	17:00	5	2	0	1	0	0	8
5:15	25	0	0	1	0	0	26	17:15	12	1	0	1	0	0	14
5:30	50	2	0	2	0	0	54	17:30	12	0	0	0	0	0	12
5:45	63	1	0	1	0	0	65	17:45	6	0	0	1	0	0	7
6:00	72	1	0	3	0	0	76	18:00	10	0	0	1	0	0	11
6:15	62	2	0	1	0	0	65	18:15	4	0	0	0	0	0	4
6:30	63	1	1	2	0	0	67	18:30	3	0	0	0	0	0	3
6:45	41	5	0	2	0	0	48	18:45	3	0	0	0	0	0	3
7:00	27	2	0	2	0	0	31	19:00	7	1	0	0	0	0	8
7:15	22	9	0	2	0	0	33	19:15	2	0	0	0	0	0	2
7:30	14	6	1	3	0	1	25	19:30	2	0	0	0	0	0	2
7:45	16	2	0	3	0	0	21	19:45	0	0	0	0	0	0	0
8:00	12	6	0	6	0	0	24	20:00	4	0	0	0	0	0	4
8:15	7	2	1	4	0	0	14	20:15	4	0	0	0	0	0	4
8:30	10	2	0	4	0	0	16	20:30	0	0	0	0	0	0	0
8:45	7	3	0	1	0	0	11	20:45	6	0	0	0	0	0	6
9:00	9	2	0	6	0	0	17	21:00	2	0	0	0	0	0	2
9:15	10	5	0	3	0	0	18	21:15	2	0	0	0	0	0	2
9:30	15	1	0	6	0	0	22	21:30	6	0	0	0	0	0	6
9:45	6	2	0	6	0	0	14	21:45	3	1	0	1	0	0	5
10:00	9	2	0	1	0	0	12	22:00	1	0	0	0	0	0	1
10:15	7	1	0	5	0	0	13	22:15	1	1	0	0	0	0	2
10:30	15	2	1	4	0	0	22	22:30	0	2	0	0	0	0	2
10:45	16	1	2	4	0	0	23	22:45	1	0	0	0	0	0	1
11:00	10	3	1	3	0	0	17	23:00	0	1	0	1	0	0	2
11:15	14	2	1	2	0	0	19	23:15	0	1	0	0	0	0	1
11:30	21	1	0	5	0	0	27	23:30	3	0	0	0	0	0	3
11:45	20	1	0	6	0	0	27	23:45	0	1	0	0	0	0	1
TOTAL	673	76	8	89	0	1	847	TOTAL	425	63	7	63	0	1	559
AM PEAK HOUR							5:45 AM	PM PEAK HOUR							2:15 PM
AM PEAK VOLUME							273	PM PEAK VOLUME							123

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	1,098	139	15	152	0	2	1,406
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	78.1%	9.9%	1.1%	10.8%	0.0%	0.1%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV								
CLASS 6	Buses								

PREPARED BY: **AimTD LLC.** tel: 714 253 7888 cs@air

PEDS AND BIKES DIRECTIONAL STUDY

Date 4/17/2025

City San Diego

N-S- Direction: Tidelands Ave

E-W Direction:

Location:

4/17/2025					
PEDS			BIKES		
TIDELANDS AVE NORTH-SOUTH			TIDELANDS AVE NORTH-SOUTH		
Start Time	EB	WB	EB	WB	
AM	5:00 AM	0	0	0	0
	5:15 AM	0	0	0	0
	5:30 AM	0	0	0	0
	5:45 AM	0	0	0	0
	6:00 AM	0	0	0	0
	6:15 AM	0	0	0	0
	6:30 AM	0	0	0	0
	6:45 AM	0	0	0	0
	7:00 AM	0	0	0	0
	7:15 AM	0	1	0	1
	7:30 AM	0	0	0	1
	7:45 AM	0	0	0	0
PM	2:00 PM	0	0	0	0
	2:15 PM	0	0	0	1
	2:30 PM	0	0	0	2
	2:45 PM	0	0	0	0
	3:00 PM	0	0	0	0
	3:15 PM	0	0	0	0
	3:30 PM	0	0	0	0
	3:45 PM	0	0	0	0
	4:00 PM	0	0	0	1
	4:15 PM	0	0	0	0
	TTL	0	1	0	6

Attachment B

Railway Crossing Data

San Diego Port

1 Railroad Crossing Tidelands Ave and 19th Street

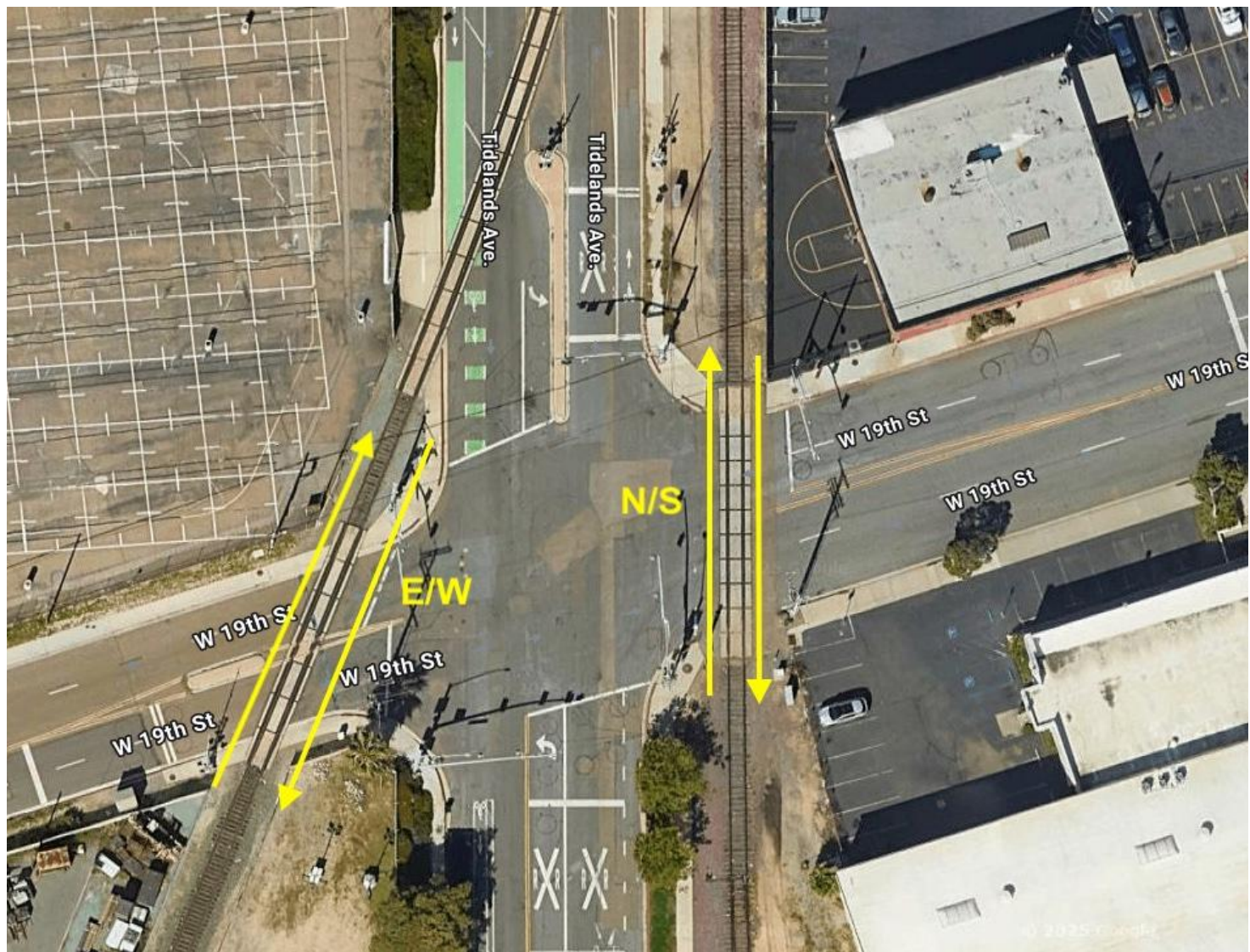
4/17/2025 Thursday

Prepared by AimTD LLC

cs@aimtd.com

714.253.7888

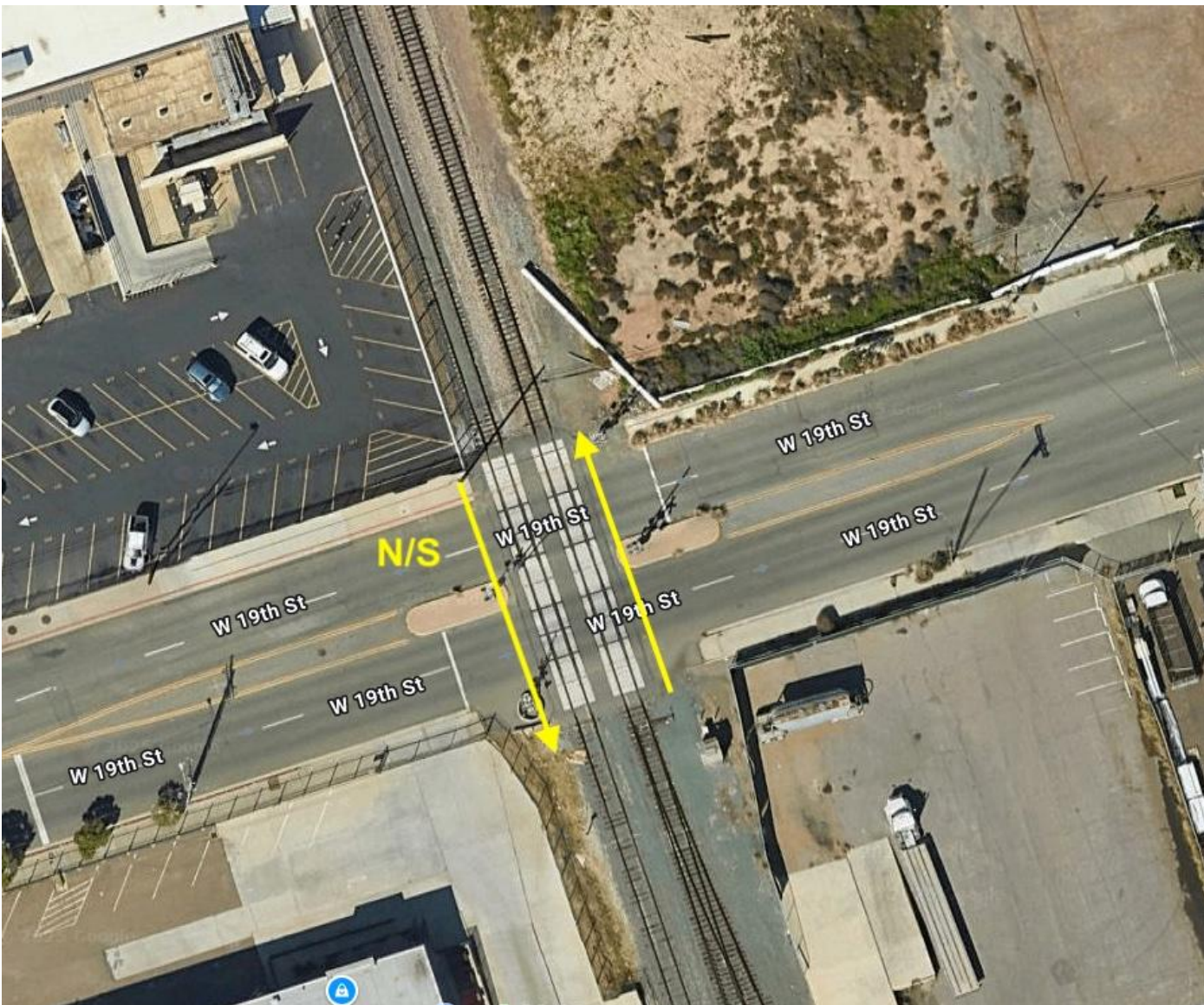
No	Crossing closed	Arriving of the train	Duration from closure till arriving	Crossing opened	Duration crossing closure	Direction of the train	Train Cars
1	12:12:55 AM	12:13:21 AM	0:00:26	12:22:27 AM	0:09:32	NB-SB	67
2	12:26:02 AM	12:26:27 AM	0:00:25	12:58:50 AM	0:32:48	WB-EB-WB	46
3	1:21:12 AM	1:21:32 AM	0:00:20	1:22:11 AM	0:00:59	WB-EB	2
4	9:17:47 AM	9:18:13 AM	0:00:26	9:18:50 AM	0:01:03	EB-WB	6
5	9:33:13 AM	9:33:32 AM	0:00:19	9:34:29 AM	0:01:16	WB-EB	9
6	5:32:17 PM	5:32:42 PM	0:00:25	5:33:10 PM	0:00:53	NB-SB	3
7	7:02:51 PM	7:03:14 PM	0:00:23	7:03:55 PM	0:01:04	EB-WB	3
8	7:30:10 PM	7:30:30 PM	0:00:20	7:32:23 PM	0:02:13	WB-EB-WB	3
9	7:32:39 PM	7:34:43 PM	0:02:04	8:10:43 PM	0:38:04	WB-EB-WB	75



San Diego Port
 2 Railroad Crossing 19th Street
 4/17/2025 Thursday

Prepared by AimTD LLC
cs@aimtd.com
 714.253.7888

Nº	Crossing closed	Arriving of the train	Duration from closure till arriving	Crossing opened	Duration crossing closure	Direction of the train	Train Cars
1	8:21:53 AM	8:22:10 AM	0:00:17	8:22:36 AM	0:00:43	NB-SB	5
2	8:29:04 AM	8:29:30 AM	0:00:26	8:29:47 AM	0:00:43	SB-NB	1
3	8:34:40 AM	8:34:09 AM	0:00:31	8:35:04 AM	0:00:24	NB-SB	2
4	9:12:20 AM	9:12:40 AM	0:00:20	9:13:13 AM	0:00:53	SB-NB	6



Attachment C

Gate 13 Counts

Time	Lane IN			Out all u-tun	Peds			
	1	2	3		in	out	Bikes	Scooters
5:05:00 AM	23	22	19		2			
5:10:00 AM	12	8	2		3			
5:15:00 AM	16	13	8		2			1
5:20:00 AM	13	15	6		2			
5:25:00 AM	18	14	6		3			1
5:30:00 AM	27	28	x		1			1
5:35:00 AM	23	23	x		3			
5:40:00 AM	26	27	18		2			
5:45:00 AM	29	27	25		2			
5:50:00 AM	30	29	26		3			
5:55:00 AM	29	25	25		4			
6:00:00 AM	28	26	27		7			
6:05:00 AM	31	29	25		3			
6:10:00 AM	29	28	30		8			
6:15:00 AM	26	23	16		12			
6:20:00 AM	25	20	23		6		1	
6:25:00 AM	10	20	20		8			
6:30:00 AM	29	28	25		16			
6:35:00 AM	27	28	29		5			
6:40:00 AM	26	22	23		11			
6:45:00 AM	4	19	15		10			
6:50:00 AM	30	24	20		5			
6:55:00 AM	20	14	12		4			1
7:00:00 AM	17	13	3	1	8			
7:05:00 AM	11	9	x	1	12			
7:10:00 AM	24	16	x		1			
7:15:00 AM	16	15	x	1	4			
7:20:00 AM	14	10	x			2		
7:25:00 AM	15	9	x		2		1	
7:30:00 AM	12	7	x					
7:35:00 AM	9	5	x		1			
7:40:00 AM	10	5	x					
7:45:00 AM	13	6	x		2	1		1
7:50:00 AM	8	1	x		2			
7:55:00 AM	6	7	x		1			1
8:00:00 AM	14	7	x		3	2		
x Lane closed	700	622	403		158	5	2	6
	Total Inbound Vehicles			1725				

Time	OUT	Peds		Bikes		Scooters	
		in	out	in	out	in	out
13.58 open	18		3				1
2:05:00 PM	11		5				
2:10:00 PM	14		4				
2:15:00 PM	11		4				
2:20:00 PM	15		5				
2:25:00 PM	23		4				
2:30:00 PM	15		3				
2:35:00 PM	14		2				
2:40:00 PM	19		1				
2:45:00 PM	19		2				
2:50:00 PM	16		1				
2:55:00 PM	21		2				
3:00:00 PM	18		2			1	
3:05:00 PM	22		1				
3:10:00 PM	17		2				
3:15:00 PM	19		2				
3:20:00 PM	18		2				
3:25:00 PM	26		4				
3:30:00 PM	23	1	3				
3:35:00 PM	21		1				
3:40:00 PM	10	1	5				
3:45:00 PM	20		0				
3:50:00 PM	25		2				
3:55:00 PM	24		4				
4:00:00 PM	11		0				
4:05:00 PM	17		0				
4:10:00 PM	10	2	2				
4:15:00 PM	15		3				
4:20:00 PM	16	1	8				
4:25:00 PM	13		3				
4:30:00 PM	18		0				
Total Outbound vehicles	539	5	80	0	0	1	1

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Attachment D

Vissim LOS and Queuing Reports

DIVISION

\$MOVEM	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	PERS(ALL)	LOS(ALL)	LOSVAL(ALL)	VEHDELAY(ALL)	PERSDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	
1	1800-5400	1-2: 19th Street@155.9-1: 19th Street@25.6	185.43	565.22	275	275	LOS_F	6	134.93	134.93	100.12	4.55	
1	1800-5400	1-2: 19th Street@155.9-24: Tidelands Avenue@9.1	185.43	565.22	3	3	LOS_F	6	206.92	206.92	166.11	5.33	
1	1800-5400	1-2: 19th Street@155.9-25: Tidelands Avenue@28.4	185.43	565.22	5	5	LOS_F	6	87.02	87.02	68.48	2.4	
1	1800-5400	1-2: 19th Street@155.9-56: 19th Street@18.3	185.43	565.22	110	110	LOS_F	6	96.25	96.25	68.66	3.09	
1	1800-5400	1-9: 19th Street@335.3-10: 19th Street@46.5	0	0	0	0	LOS_A						
1	1800-5400	1-9: 19th Street@335.3-24: Tidelands Avenue@9.1	0	0	0	0	LOS_A						
1	1800-5400	1-9: 19th Street@335.3-25: Tidelands Avenue@28.4	0	0	1	1	LOS_A	1	0.05	0.05	0	0	
1	1800-5400	1-21: Tidelands Avenue@15.5-1: 19th Street@25.6	48.14	285.75	188	188	LOS_D	4	40.85	40.85	26.47	2.92	
1	1800-5400	1-21: Tidelands Avenue@15.5-10: 19th Street@46.5	10.5	181.3	16	16	LOS_A	1	7.48	7.48	5.4	0.38	
1	1800-5400	1-21: Tidelands Avenue@15.5-25: Tidelands Avenue@28.4	41.07	262.26	10	10	LOS_B	2	11.11	11.11	7.58	0.4	
1	1800-5400	1-21: Tidelands Avenue@15.5-43: Tidelands Avenue@21.5	44.16	269.4	0	0	LOS_A						
1	1800-5400	1-23: Tidelands Avenue@59.9-1: 19th Street@25.6	91.33	487.22	58	58	LOS_E	5	74.75	74.75	48.49	4.6	
1	1800-5400	1-23: Tidelands Avenue@59.9-10: 19th Street@46.5	91.33	487.22	21	21	LOS_B	2	17.9	17.9	13.06	0.81	
1	1800-5400	1-23: Tidelands Avenue@59.9-24: Tidelands Avenue@9.1	91.33	487.22	13	13	LOS_C	3	28.22	28.22	17.87	1.15	
1	1800-5400	1-23: Tidelands Avenue@59.9-31: Tidelands Avenue-Bike Lane@13.5	91.33	487.22	0	0	LOS_A						
1	1800-5400	1-23: Tidelands Avenue@59.9-56: 19th Street@18.3	91.33	487.22	144	144	LOS_E	5	68.57	68.57	45.22	3.85	
1	1800-5400	1-46@1273.9-46@1461.0	0	0	0	0	LOS_A						
1	1800-5400		1	52.08	565.22	844	844	LOS_F	6	84.85	84.85	60.3	3.59
1	1800-5400	2-15: Tidelands Avenue@378.0-15: Tidelands Avenue@512.6	0	0	226	226	LOS_A	1	0.06	0.06	0	0	
1	1800-5400	2-16: Tidelands Avenue@321.1-16: Tidelands Avenue@454.8	0	0	16	16	LOS_A	1	0.17	0.17	0	0	
1	1800-5400	2-33: Tidelands Avenue-Bike Lane@136.9-33: Tidelands Avenue-Bike Lane@269.9	0	0	0	0	LOS_A						
1	1800-5400	2-36: Tidelands Avenue-Bike Lane@110.8-36: Tidelands Avenue-Bike Lane@246.0	0	0	0	0	LOS_A						
1	1800-5400	2-49: Project Site Exit@280.7-15: Tidelands Avenue@512.6	0	0	0	0	LOS_A						
1	1800-5400	2-49: Project Site Exit@280.7-16: Tidelands Avenue@454.8	0	0	0	0	LOS_A						
1	1800-5400		2	0	0	242	242	LOS_A	1	0.06	0.06	0	0
1	1800-5400	3-14: Tidelands Avenue@50.6-15: Tidelands Avenue@24.0	0	0	227	227	LOS_A	1	0.04	0.04	0	0	
1	1800-5400	3-16: Tidelands Avenue@808.9-17: Tidelands Avenue@112.3	0	0	16	16	LOS_A	1	0.01	0.01	0	0	
1	1800-5400	3-16: Tidelands Avenue@808.9-48: Project Site Entrance@21.9	0	0	0	0	LOS_A						
1	1800-5400	3-34: Tidelands Avenue-Bike Lane@204.5-34: Tidelands Avenue-Bike Lane@355.5	0	0	0	0	LOS_A						
1	1800-5400	3-35: Tidelands Avenue-Bike Lane@50.6-35: Tidelands Avenue-Bike Lane@203.6	0	0	0	0	LOS_A						
1	1800-5400	3-10047@9.6-48: Project Site Entrance@21.9	0	0	0	0	LOS_A						
1	1800-5400		3	0	0	243	243	LOS_A	1	0.04	0.04	0	0

SVISION

\$QUEUEC	TIMEINT	QUEUECOUNTER	QLEN	QLENMAX	QSTOPS
1	0-900		1	0	0
1	0-900		2	23.71	65.83
1	0-900		3	1.1	20.81
1	0-900		4	0	0
1	0-900		5	8.97	63.51
1	0-900		6	6.73	61.64
1	900-1800		1	0.5	39.04
1	900-1800		2	42.71	152.7
1	900-1800		3	1.15	19.79
1	900-1800		4	0	0
1	900-1800		5	20.32	95.52
1	900-1800		6	23.76	127.21
1	1800-2700		1	0.6	37.22
1	1800-2700		2	51.01	192.81
1	1800-2700		3	5.04	55.37
1	1800-2700		4	0	0
1	1800-2700		5	115.19	289.96
1	1800-2700		6	70.54	194.23
1	2700-3600		1	9.22	113.64
1	2700-3600		2	61.15	155.22
1	2700-3600		3	18.92	149.09
1	2700-3600		4	0	0
1	2700-3600		5	293.65	481.02
1	2700-3600		6	220.03	450.02
1	3600-4500		1	43.27	133.58
1	3600-4500		2	262.04	546.09
1	3600-4500		3	235.97	485.49
1	3600-4500		4	0	0
1	3600-4500		5	437.18	480.96
1	3600-4500		6	356.75	454.64
1	4500-5400		1	106.26	259.22
1	4500-5400		2	373.75	566.95
1	4500-5400		3	101.12	363.36
1	4500-5400		4	0	0
1	4500-5400		5	446.1	481.01
1	4500-5400		6	287.93	455.35
1	5400-6300		1	258.9	451.53
1	5400-6300		2	315.24	539.9
1	5400-6300		3	105.45	294.21
1	5400-6300		4	1.27	21.97
1	5400-6300		5	455.84	480.33
1	5400-6300		6	109.54	309.38
1	6300-7200		1	111.37	409.18
1	6300-7200		2	54.76	217.93
1	6300-7200		3	25.46	304.6
1	6300-7200		4	0.41	21.77
1	6300-7200		5	323.89	476.13
1	6300-7200		6	81.07	231.69
1	7200-8100		1	0.4	23.4
1	7200-8100		2	19.65	101.24
1	7200-8100		3	2.27	58.8
1	7200-8100		4	0	0
1	7200-8100		5	24.37	111.64
1	7200-8100		6	0.06	17.89
1	8100-9000		1	0.02	17.18
1	8100-9000		2	23.32	107.42
1	8100-9000		3	3.39	79.97
1	8100-9000		4	0	0
1	8100-9000		5	24.6	105.49
1	8100-9000		6	0	0
1	9000-9900		1	0.03	19.18
1	9000-9900		2	11.43	83.78
1	9000-9900		3	0.37	25.74
1	9000-9900		4	0	0
1	9000-9900		5	6.5	61.86
1	9000-9900		6	0	0
1	9900-10800		1	0	0
1	9900-10800		2	17.58	63.83
1	9900-10800		3	1.46	37.9
1	9900-10800		4	0	0
1	9900-10800		5	6.71	60.69
1	9900-10800		6	0	0

This aerial photograph shows the intersection of Highway 101 and Highway 102 in San Francisco. A proposed transit alignment is overlaid on the image, indicated by red lines. The alignment runs north-south along Highway 101, with a red dot marking the proposed station location at the intersection. The surrounding area includes various commercial buildings, parking lots, and a large white-roofed structure on the right side of the image.

SVISION

\$MOVEMENT	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	PERS(ALL)	LOS(ALL)	LOSVAL(ALL)	VEHDELAY(ALL)	PERSDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	
1 1800-5400	1-2: 19th Street@155.9-1: 19th Street@25.6		192.86	542.04	275	275	LOS_F	6	137.03	137.03	101.73	4.57	
1 1800-5400	1-2: 19th Street@155.9-24: Tidelands Avenue@9.1		192.86	542.04	3	3	LOS_F	6	180.14	180.14	151.37	4.33	
1 1800-5400	1-2: 19th Street@155.9-25: Tidelands Avenue@28.4		192.86	542.04	5	5	LOS_E	5	69.3	69.3	52.37	2	
1 1800-5400	1-2: 19th Street@155.9-56: 19th Street@18.3		192.86	542.04	109	109	LOS_F	6	97.74	97.74	69.36	3.29	
1 1800-5400	1-9: 19th Street@335.3-10: 19th Street@46.5		0	0	0	0	LOS_A						
1 1800-5400	1-9: 19th Street@335.3-24: Tidelands Avenue@9.1		0	0	0	0	LOS_A						
1 1800-5400	1-9: 19th Street@335.3-25: Tidelands Avenue@28.4		0	0	1	1	LOS_A	1	0.05	0.05	0	0	
1 1800-5400	1-21: Tidelands Avenue@15.5-1: 19th Street@25.6		47.2	306.74	187	187	LOS_D	4	39.5	39.5	27.11	2.55	
1 1800-5400	1-21: Tidelands Avenue@15.5-10: 19th Street@46.5		14.66	282.48	16	16	LOS_A	1	7.28	7.28	5.15	0.38	
1 1800-5400	1-21: Tidelands Avenue@15.5-25: Tidelands Avenue@28.4		40.78	283.25	39	39	LOS_B	2	10.71	10.71	5.97	0.38	
1 1800-5400	1-21: Tidelands Avenue@15.5-43: Tidelands Avenue@21.5		43.04	290.39	0	0	LOS_A						
1 1800-5400	1-23: Tidelands Avenue@59.9-1: 19th Street@25.6		96.9	494.97	59	59	LOS_F	6	82.51	82.51	54.43	4.76	
1 1800-5400	1-23: Tidelands Avenue@59.9-10: 19th Street@46.5		96.9	494.97	20	20	LOS_B	2	17.2	17.2	12.5	0.75	
1 1800-5400	1-23: Tidelands Avenue@59.9-24: Tidelands Avenue@9.1		96.9	494.97	50	50	LOS_C	3	25.23	25.23	14.99	0.9	
1 1800-5400	1-23: Tidelands Avenue@59.9-31: Tidelands Avenue-Bike Lane@13.5		96.9	494.97	0	0	LOS_A						
1 1800-5400	1-23: Tidelands Avenue@59.9-56: 19th Street@18.3		96.9	494.97	148	148	LOS_E	5	66.64	66.64	43.06	3.76	
1 1800-5400	1-46@1273.9-46@1461.0		0	0	0	0	LOS_A						
1 1800-5400			1	53.63	542.04	912	912	LOS_F	6	80.57	80.57	57.26	3.33
1 1800-5400	2-15: Tidelands Avenue@378.0-15: Tidelands Avenue@512.6		0	0	226	226	LOS_A	1	0.26	0.26	0	0	
1 1800-5400	2-16: Tidelands Avenue@321.1-16: Tidelands Avenue@454.8		0	0	53	53	LOS_A	1	0.07	0.07	0	0	
1 1800-5400	2-33: Tidelands Avenue-Bike Lane@136.9-33: Tidelands Avenue-Bike Lane@269.9		0	0	0	0	LOS_A						
1 1800-5400	2-36: Tidelands Avenue-Bike Lane@110.8-36: Tidelands Avenue-Bike Lane@246.0		0	0	0	0	LOS_A						
1 1800-5400	2-49: Project Site Exit@280.7-15: Tidelands Avenue@512.6		8.91	207.54	29	29	LOS_B	2	11.55	11.55	0.83	1.45	
1 1800-5400	2-49: Project Site Exit@280.7-16: Tidelands Avenue@454.8		8.75	207.97	33	33	LOS_B	2	13.35	13.35	0.65	1.48	
1 1800-5400			2	2.94	207.97	341	341	LOS_A	1	2.46	2.46	0.13	0.27
1 1800-5400	3-14: Tidelands Avenue@50.6-15: Tidelands Avenue@24.0		0	0	227	227	LOS_A	1	0.09	0.09	0	0	
1 1800-5400	3-16: Tidelands Avenue@808.9-17: Tidelands Avenue@112.3		0	0	49	49	LOS_A	1	0.36	0.36	0	0	
1 1800-5400	3-16: Tidelands Avenue@808.9-48: Project Site Entrance@21.9		0.36	59.78	37	37	LOS_A	1	2.48	2.48	0.44	0.27	
1 1800-5400	3-34: Tidelands Avenue-Bike Lane@204.5-34: Tidelands Avenue-Bike Lane@355.5		0	0	0	0	LOS_A						
1 1800-5400	3-35: Tidelands Avenue-Bike Lane@50.6-35: Tidelands Avenue-Bike Lane@203.6		0	0	0	0	LOS_A						
1 1800-5400	3-10047@9.6-48: Project Site Entrance@21.9		0	0	42	42	LOS_A	1	0.06	0.06	0	0	
1 1800-5400			3	0.06	59.78	355	355	LOS_A	1	0.37	0.37	0.05	0.03

SVISION

\$QUEUECC	TIMEINT	QUEUECOUNTER	QLEN	QLENMAX	QSTOPS	
1	0-900		1	0.12	58.27	2
1	0-900		2	23.71	65.83	40
1	0-900		3	1.99	41.21	11
1	0-900		4	0	0	0
1	0-900		5	9.2	63.51	46
1	0-900		6	6.69	61.57	24
1	0-900		7	6.83	99.57	29
1	900-1800		1	0.54	39.04	3
1	900-1800		2	42.71	152.7	87
1	900-1800		3	2.28	60.01	13
1	900-1800		4	0	0	0
1	900-1800		5	20.32	95.52	75
1	900-1800		6	23.73	127.21	45
1	900-1800		7	3.63	99.58	16
1	1800-2700		1	1.28	81.14	8
1	1800-2700		2	51.02	192.81	118
1	1800-2700		3	6.84	55.3	16
1	1800-2700		4	0	0	0
1	1800-2700		5	114.51	276.76	137
1	1800-2700		6	69.94	194.26	62
1	1800-2700		7	6.1	119.85	23
1	2700-3600		1	13.27	157.04	23
1	2700-3600		2	59.18	155.22	125
1	2700-3600		3	23.03	179.32	33
1	2700-3600		4	0	0	0
1	2700-3600		5	291.63	477.16	171
1	2700-3600		6	220.97	450.89	90
1	2700-3600		7	1.85	59.72	12
1	3600-4500		1	27.39	134.58	53
1	3600-4500		2	285.97	528.64	267
1	3600-4500		3	235.29	493.25	172
1	3600-4500		4	0	0	0
1	3600-4500		5	437.72	518.12	286
1	3600-4500		6	348.71	455.05	133
1	3600-4500		7	2.43	100.28	15
1	4500-5400		1	113.57	280.21	93
1	4500-5400		2	381.53	543.77	382
1	4500-5400		3	118.06	443.7	104
1	4500-5400		4	0	0	0
1	4500-5400		5	444.74	480.95	296
1	4500-5400		6	299.69	455.72	98
1	4500-5400		7	11.21	180.45	18
1	5400-6300		1	266.52	491.16	172
1	5400-6300		2	319.18	524.72	302
1	5400-6300		3	177.79	497.67	124
1	5400-6300		4	1.27	21.97	1
1	5400-6300		5	456.79	498.24	290
1	5400-6300		6	124.2	321.66	46
1	5400-6300		7	6.6	160.48	27
1	6300-7200		1	110.82	470.53	88
1	6300-7200		2	52.62	196.1	89
1	6300-7200		3	56.69	492.58	55
1	6300-7200		4	0.91	21.77	1
1	6300-7200		5	332.1	476.45	197
1	6300-7200		6	143.52	257.73	62
1	6300-7200		7	8.88	132.8	22
1	7200-8100		1	0.2	58.17	5
1	7200-8100		2	18.51	66.33	41
1	7200-8100		3	2.97	80.29	13
1	7200-8100		4	0	0	0
1	7200-8100		5	30.97	145.83	90
1	7200-8100		6	0.04	18.36	2
1	7200-8100		7	5.39	181.56	20
1	8100-9000		1	0.7	60.36	2
1	8100-9000		2	26.33	107.4	57
1	8100-9000		3	3.02	59.8	13
1	8100-9000		4	0	0	0
1	8100-9000		5	23.61	103.24	83
1	8100-9000		6	0	0	0
1	8100-9000		7	3.58	117.88	19
1	9000-9900		1	0.03	19.18	2
1	9000-9900		2	11.43	83.78	30
1	9000-9900		3	0.52	25.44	4
1	9000-9900		4	0	0	0
1	9000-9900		5	6.08	58.67	42
1	9000-9900		6	0	0	0
1	9000-9900		7	3.96	101.92	16
1	9900-10800		1	0.19	58.9	3
1	9900-10800		2	17.58	63.83	30
1	9900-10800		3	1.66	38.56	9
1	9900-10800		4	0	0	0
1	9900-10800		5	7.69	71.48	45
1	9900-10800		6	0	0	0
1	9900-10800		7	5.8	160	24

SVISION

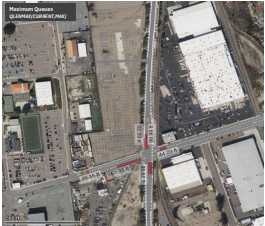
\$MOVEMENT	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	PERS(ALL)	LOS(ALL)	LOSVAL(ALL)	VEHDELAY(ALL)	PERSDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	
1 900-4500	1-2: 19th Street@155.9-1: 19th Street@25.6		1.77	42.99	3	3	LOS_C		3	25.24	25.24	17.79	1
1 900-4500	1-2: 19th Street@155.9-24: Tidelands Avenue@9.1		1.77	42.99	6	6	LOS_C		3	24.71	24.71	22.05	0.5
1 900-4500	1-2: 19th Street@155.9-25: Tidelands Avenue@28.4		1.77	42.99	3	3	LOS_D		4	49.91	49.91	43.26	1
1 900-4500	1-9: 19th Street@339.3-10: 19th Street@46.5		55.69	162.66	209	209	LOS_D		4	35.26	35.26	27.96	0.83
1 900-4500	1-9: 19th Street@339.3-24: Tidelands Avenue@9.1		57.36	164.79	39	39	LOS_C		3	32.23	32.23	25.74	0.85
1 900-4500	1-9: 19th Street@339.3-25: Tidelands Avenue@28.4		56.08	163.54	51	51	LOS_D		4	36.33	36.33	29.89	0.86
1 900-4500	1-21: Tidelands Avenue@15.5-1: 19th Street@25.6		0.83	84.78	14	14	LOS_A		1	3.98	3.98	2.3	0.29
1 900-4500	1-21: Tidelands Avenue@15.5-10: 19th Street@46.5		0.64	62.47	10	10	LOS_A		1	4.39	4.39	2.77	0.3
1 900-4500	1-21: Tidelands Avenue@15.5-25: Tidelands Avenue@28.4		0.94	63.24	46	46	LOS_A		1	4.26	4.26	1.69	0.24
1 900-4500	1-21: Tidelands Avenue@15.5-43: Tidelands Avenue@21.5		0.66	68.43	0	0	LOS_A						
1 900-4500	1-23: Tidelands Avenue@59.9-1: 19th Street@25.6		0.74	83.29	0	0	LOS_A						
1 900-4500	1-23: Tidelands Avenue@59.9-10: 19th Street@46.5		0.74	83.29	8	8	LOS_A		1	5.46	5.46	2.65	0.5
1 900-4500	1-23: Tidelands Avenue@59.9-24: Tidelands Avenue@9.1		0.74	83.29	11	11	LOS_A		1	8.86	8.86	5.23	0.45
1 900-4500	1-23: Tidelands Avenue@59.9-31: Tidelands Avenue-Bike Lane@13.5		0.74	83.29	0	0	LOS_A						
1 900-4500	1-46@1273.9-46@1461.0		0	0	0	0	LOS_A						
1 900-4500			1	15.96	164.79	400	400	LOS_C	3	28.22	28.22	22.26	0.72
1 900-4500	2-15: Tidelands Avenue@378.0-15: Tidelands Avenue@512.6		0	0	60	60	LOS_A		1	0	0	0	0
1 900-4500	2-16: Tidelands Avenue@321.1-16: Tidelands Avenue@454.8		0	0	56	56	LOS_A		1	0.06	0.06	0	0
1 900-4500	2-33: Tidelands Avenue-Bike Lane@136.9-33: Tidelands Avenue-Bike Lane@269.9		0	0	0	0	LOS_A						
1 900-4500	2-36: Tidelands Avenue-Bike Lane@110.8-36: Tidelands Avenue-Bike Lane@246.0		0	0	10	10	LOS_A		1	0	0	0	0
1 900-4500	2-49: Project Site Exit@280.7-15: Tidelands Avenue@512.6		0	0	0	0	LOS_A						
1 900-4500	2-49: Project Site Exit@280.7-16: Tidelands Avenue@454.8		0	0	0	0	LOS_A						
1 900-4500			2	0	0	126	126	LOS_A	1	0.03	0.03	0	0
1 900-4500	3-14: Tidelands Avenue@50.6-15: Tidelands Avenue@24.0		0	0	60	60	LOS_A		1	0	0	0	0
1 900-4500	3-16: Tidelands Avenue@808.9-17: Tidelands Avenue@112.3		0	0	56	56	LOS_A		1	0.05	0.05	0	0
1 900-4500	3-16: Tidelands Avenue@808.9-48: Project Site Entrance@21.9		0	0	0	0	LOS_A						
1 900-4500	3-34: Tidelands Avenue-Bike Lane@204.5-34: Tidelands Avenue-Bike Lane@355.5		0	0	0	0	LOS_A						
1 900-4500	3-35: Tidelands Avenue-Bike Lane@50.6-35: Tidelands Avenue-Bike Lane@203.6		0	0	10	10	LOS_A		1	0	0	0	0
1 900-4500	3-10047@9.6-48: Project Site Entrance@21.9		0	0	0	0	LOS_A						
1 900-4500			3	0	0	126	126	LOS_A	1	0.02	0.02	0	0

\$VISION

\$QUEUECCTIMEINT	QUEUECOL	QLEN	QLENMAX	QSTOPS
1 0-900	1	0.75	39.48	4
1 0-900	2	5.74	24.36	6
1 0-900	3	0.82	41.77	3
1 0-900	4	10.29	95.82	17
1 0-900	5	0.19	19.35	4
1 900-1800	1	0.92	60.19	4
1 900-1800	2	0.93	23.76	1
1 900-1800	3	1.14	81.57	3
1 900-1800	4	56.21	159.78	66
1 900-1800	5	0	0	0
1 1800-2700	1	0.22	98.99	3
1 1800-2700	2	3.41	44.73	4
1 1800-2700	3	0.1	20	1
1 1800-2700	4	55.7	158.06	64
1 1800-2700	5	0.55	18.87	5
1 2700-3600	1	1.17	58.25	8
1 2700-3600	2	0.82	21.91	1
1 2700-3600	3	0.53	45.25	2
1 2700-3600	4	51.13	139.03	67
1 2700-3600	5	0.21	18.81	1
1 3600-4500	1	0.03	18.11	2
1 3600-4500	2	2.41	39.46	3
1 3600-4500	3	0.99	45.74	3
1 3600-4500	4	56.89	161.95	65
1 3600-4500	5	0.02	16.83	1
1 4500-5400	1	0	0	0
1 4500-5400	2	5.05	43.92	6
1 4500-5400	3	0	0	0
1 4500-5400	4	35.32	114.42	42
1 4500-5400	5	0.5	18.65	6
1 5400-6300	1	0.26	37.83	4
1 5400-6300	2	0.32	22.8	2
1 5400-6300	3	0.81	23.83	3
1 5400-6300	4	42.16	119.01	48
1 5400-6300	5	0	0	0
1 6300-7200	1	0	0	0
1 6300-7200	2	0	0	0
1 6300-7200	3	0	0	0
1 6300-7200	4	23.81	97.82	34
1 6300-7200	5	0.04	17.16	2
1 7200-8100	1	0.22	18.12	2
1 7200-8100	2	2.88	22.52	4
1 7200-8100	3	0.55	39.82	2
1 7200-8100	4	28.44	116.63	36
1 7200-8100	5	0.18	17.42	3
1 8100-9000	1	0.08	58.91	1
1 8100-9000	2	0.1	21.91	1
1 8100-9000	3	0	0	0
1 8100-9000	4	29.62	120.61	37
1 8100-9000	5	0.04	17.14	2

VISION

SCENARIO NAME	LINE POS	QLENCURRENT TOTAL	QLENCURRENT AVG	QLENCURRENT MIN	QLENCURRENT MAX	QLENCURRENT L1	QLENCURRENT L2	QLENCURRENT L3	QLENCURRENT L4	QLENCURRENT L5	QLENCURRENT L6	QLENCURRENT L7	QLENCURRENT L8	QLENCURRENT L9	QLENCURRENT L10	QLENCURRENT AVG	QLENCURRENT MIN	QLENCURRENT MAX	QLENCURRENT L1	QLENCURRENT L2	QLENCURRENT L3	QLENCURRENT L4	QLENCURRENT L5	QLENCURRENT L6	QLENCURRENT L7	QLENCURRENT L8	QLENCURRENT L9	QLENCURRENT L10
1 Traffic - Southbound	11 45.867	1.64	0.36	0	1.17	0.75	0.02	0.22	0.17	0.02	0	0.34	0	0.22	0.04	38.99	0	68.99	39.46	60.19	36.39	36.25	61.11	0	17.61	0	18.12	38.61
2 Dpr - Westbound	7 101.882	1.68	1.17	0	1.76	1.74	0.02	1.41	0.02	1.43	0.02	0.32	0	1.88	0.1	39.14	0	61.73	14.36	12.16	46.73	11.81	39.44	43.81	10.1	0	17.12	11.91
3 Traffic - Northbound	22 92.883	4.94	0.49	0	1.14	0.02	1.14	0.1	0.02	0.39	0	0.01	0	0.02	0	61.57	41.77	81.17	29	42.25	41.74	0	23.62	0	39.82	0	0	0
4 Dpr - Eastbound	9 102.883	389.59	38.86	12.19	48.82	19.79	10.21	61.7	0.12	28.89	10.22	42.14	12.81	28.64	0.02	101.95	101.82	129.78	129.85	129.72	161.91	114.42	129.71	87.12	124.62	129.61	0	0
5 Base Case - Westbound Lanes 1&2	1 395.591	1.72	0.17	0	0.02	0.19	0	0.15	0.21	0.02	0.1	0.04	0.18	0.04	14.42	0	15.35	15.35	0	16.17	16.11	16.62	16.65	0	17.16	17.42	17.14	0



SVISION

\$MOVEMENT	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	PERS(ALL)	LOS(ALL)	LOSVAL(ALL)	VEHDELAY(ALL)	PERSDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	
1 900-4500	1-2: 19th Street@155.9-1: 19th Street@25.6		1.77	42.99	3	3	LOS_C		3	25.24	25.24	17.79	1
1 900-4500	1-2: 19th Street@155.9-24: Tidelands Avenue@9.1		1.77	42.99	6	6	LOS_C		3	24.71	24.71	22.05	0.5
1 900-4500	1-2: 19th Street@155.9-25: Tidelands Avenue@28.4		1.77	42.99	3	3	LOS_D		4	49.91	49.91	43.26	1
1 900-4500	1-9: 19th Street@339.3-10: 19th Street@46.5		55.69	162.66	209	209	LOS_D		4	35.26	35.26	27.96	0.83
1 900-4500	1-9: 19th Street@339.3-24: Tidelands Avenue@9.1		57.36	164.79	39	39	LOS_C		3	32.23	32.23	25.74	0.85
1 900-4500	1-9: 19th Street@339.3-25: Tidelands Avenue@28.4		56.08	163.54	51	51	LOS_D		4	36.33	36.33	29.89	0.86
1 900-4500	1-21: Tidelands Avenue@15.5-1: 19th Street@25.6		0.87	84.78	14	14	LOS_A		1	4.18	4.18	2.3	0.36
1 900-4500	1-21: Tidelands Avenue@15.5-10: 19th Street@46.5		0.67	62.47	10	10	LOS_A		1	4.58	4.58	2.77	0.3
1 900-4500	1-21: Tidelands Avenue@15.5-25: Tidelands Avenue@28.4		1.33	63.24	75	75	LOS_A		1	4.18	4.18	1.82	0.2
1 900-4500	1-21: Tidelands Avenue@15.5-43: Tidelands Avenue@21.5		0.7	68.43	0	0	LOS_A						
1 900-4500	1-23: Tidelands Avenue@59.9-1: 19th Street@25.6		1.43	83.29	0	0	LOS_A						
1 900-4500	1-23: Tidelands Avenue@59.9-10: 19th Street@46.5		1.43	83.29	8	8	LOS_A		1	5.46	5.46	2.65	0.5
1 900-4500	1-23: Tidelands Avenue@59.9-24: Tidelands Avenue@9.1		1.43	83.29	47	47	LOS_A		1	4.58	4.58	1.98	0.19
1 900-4500	1-23: Tidelands Avenue@59.9-31: Tidelands Avenue-Bike Lane@13.5		1.43	83.29	0	0	LOS_A						
1 900-4500	1-46@1273.9-46@1461.0		0	0	0	0	LOS_A						
1 900-4500			1	16.07	164.79	465	465	LOS_C	3	24.79	24.79	19.35	0.64
1 900-4500	2-15: Tidelands Avenue@378.0-15: Tidelands Avenue@512.6		0	0	60	60	LOS_A		1	0.06	0.06	0	0
1 900-4500	2-16: Tidelands Avenue@321.1-16: Tidelands Avenue@454.8		0	0	92	92	LOS_A		1	0.1	0.1	0	0
1 900-4500	2-33: Tidelands Avenue-Bike Lane@136.9-33: Tidelands Avenue-Bike Lane@269.9		0	0	0	0	LOS_A						
1 900-4500	2-36: Tidelands Avenue-Bike Lane@110.8-36: Tidelands Avenue-Bike Lane@246.0		0	0	10	10	LOS_A		1	0	0	0	0
1 900-4500	2-49: Project Site Exit@280.7-15: Tidelands Avenue@512.6		3.99	109.67	29	29	LOS_A		1	8.34	8.34	0.17	1.03
1 900-4500	2-49: Project Site Exit@280.7-16: Tidelands Avenue@454.8		4.35	110.1	37	37	LOS_A		1	9.93	9.93	0.45	1.14
1 900-4500			2	1.39	110.1	228	228	LOS_A	1	2.73	2.73	0.09	0.32
1 900-4500	3-14: Tidelands Avenue@50.6-15: Tidelands Avenue@24.0		0	0	60	60	LOS_A		1	0.39	0.39	0	0
1 900-4500	3-16: Tidelands Avenue@808.9-17: Tidelands Avenue@112.3		0	0	93	93	LOS_A		1	0.34	0.34	0	0
1 900-4500	3-16: Tidelands Avenue@808.9-48: Project Site Entrance@21.9		0.31	60.13	36	36	LOS_A		1	0.93	0.93	0.22	0.11
1 900-4500	3-34: Tidelands Avenue-Bike Lane@204.5-34: Tidelands Avenue-Bike Lane@355.5		0	0	0	0	LOS_A						
1 900-4500	3-35: Tidelands Avenue-Bike Lane@50.6-35: Tidelands Avenue-Bike Lane@203.6		0	0	10	10	LOS_A		1	0.11	0.11	0	0
1 900-4500	3-10047@9.6-48: Project Site Entrance@21.9		0	0	43	43	LOS_A		1	0.15	0.15	0	0
1 900-4500			3	0.05	60.13	242	242	LOS_A	1	0.4	0.4	0.03	0.02

\$VISION

\$QUEUECC	TIMEINT	QUEUECOI	QLEN	QLENMAX	QSTOPS
1	0-900	1	2.13	77.03	7
1	0-900	2	5.74	24.36	6
1	0-900	3	4.26	102.2	7
1	0-900	4	10.29	95.82	17
1	0-900	5	0.19	19.35	4
1	0-900	7	2.89	82.87	25
1	900-1800	1	0.95	60.19	7
1	900-1800	2	0.93	23.76	1
1	900-1800	3	2.92	81.57	5
1	900-1800	4	56.21	159.78	66
1	900-1800	5	0	0	0
1	900-1800	7	1.5	59.14	16
1	1800-2700	1	0.25	98.86	5
1	1800-2700	2	3.41	44.73	4
1	1800-2700	3	0.7	59.74	2
1	1800-2700	4	55.7	158.06	64
1	1800-2700	5	0.55	18.87	5
1	1800-2700	7	2.09	60.25	23
1	2700-3600	1	1.17	58.25	8
1	2700-3600	2	0.82	21.91	1
1	2700-3600	3	0.58	45.25	3
1	2700-3600	4	51.13	139.03	67
1	2700-3600	5	0.21	18.85	1
1	2700-3600	7	0.9	59.19	10
1	3600-4500	1	0.06	18.75	4
1	3600-4500	2	2.41	39.46	3
1	3600-4500	3	1.16	45.74	4
1	3600-4500	4	56.89	161.95	65
1	3600-4500	5	0.02	16.83	1
1	3600-4500	7	2.9	82.58	17
1	4500-5400	1	0.97	76.8	4
1	4500-5400	2	5.05	43.92	6
1	4500-5400	3	0.83	60.52	4
1	4500-5400	4	35.32	114.42	42
1	4500-5400	5	0.5	18.65	6
1	4500-5400	7	4.96	150.16	24
1	5400-6300	1	1.02	58.19	9
1	5400-6300	2	0.32	22.8	2
1	5400-6300	3	0.81	23.83	3
1	5400-6300	4	42.16	119.01	48
1	5400-6300	5	0	0	0
1	5400-6300	7	1.98	59.89	28
1	6300-7200	1	0.08	57.72	4
1	6300-7200	2	0	0	0
1	6300-7200	3	1.51	100.13	2
1	6300-7200	4	23.81	97.82	34
1	6300-7200	5	0.04	17.16	2
1	6300-7200	7	1	59.03	13
1	7200-8100	1	0.7	40.86	6
1	7200-8100	2	2.88	22.52	4
1	7200-8100	3	1.42	80.85	5
1	7200-8100	4	28.44	116.63	36
1	7200-8100	5	0.18	17.42	3
1	7200-8100	7	1.73	59.63	18
1	8100-9000	1	0.3	58.88	4
1	8100-9000	2	0.1	21.91	1
1	8100-9000	3	0.33	58.53	1
1	8100-9000	4	29.62	120.61	37
1	8100-9000	5	0.04	17.23	2
1	8100-9000	7	1.56	58.1	18

VISION																													
SCENARIO NAME	TIME POS	QLENCURRENT TOTAL	QLENCURRENT AVG	QLENCURRENT MIN	QLENCURRENT MAX	QLENCURRENT 1	QLENCURRENT 2	QLENCURRENT 3	QLENCURRENT 4	QLENCURRENT 5	QLENCURRENT 6	QLENCURRENT 7	QLENCURRENT 8	QLENCURRENT 9	QLENCURRENT 10	QLENCURRENT 11	QLENCURRENT 12	QLENCURRENT 13	QLENCURRENT 14	QLENCURRENT 15	QLENCURRENT 16	QLENCURRENT 17	QLENCURRENT 18	QLENCURRENT 19	QLENCURRENT 20	QLENCURRENT 21	QLENCURRENT 22	QLENCURRENT 23	QLENCURRENT 24
1 Towards Southbound	21 45.887	7.62	0.76	0.00	2.53	2.13	0.95	0.25	1.17	0.36	0.97	1.02	0.00	0.7	0.3	60.50	18.75	88.86	77.03	60.19	86.86	36.25	16.75	76.8	38.19	57.75	80.88	58.88	58.88
2 Up Northbound	2 101.882	11.68	1.17	0	5.78	5.78	0.00	3.43	4.82	2.42	5.05	0.32	0	3.86	0.1	20.54	64.73	24.36	23.78	46.73	39.46	43.82	37.8	0	27.52	71.81	52.52	51.81	51.81
3 Towards Northbound	22 50.883	14.51	1.45	0.20	6.26	6.26	2.00	0.7	0.58	1.36	0.83	0.81	1.51	1.42	0.32	60.88	23.83	103.2	103.2	61.57	59.74	45.25	45.74	62.52	23.83	103.13	88.88	58.53	
4 Up Southbound	3 102.915	188.58	18.86	10.29	46.09	50.29	30.23	65.7	61.13	36.09	30.23	42.16	23.81	24.66	20.42	128.51	101.65	95.87	128.78	128.56	128.25	161.25	116.42	110.51	67.82	158.63	159.63	159.63	
5 Down Gate Westbound Lanes 1&2	4 305.281	1.72	0.17	0	0.50	0.19	0	0.35	0.21	0.02	0.5	0	0.04	0.18	0.04	14.48	0	19.35	19.35	0	18.07	18.05	16.63	18.05	0	17.16	17.62	17.23	
7 Project Driveway Right	40 100.76	11.5	1.15	0.53	6.06	2.89	1.5	2.09	0.9	2.9	6.06	1.08	1	1.73	1.58	73.09	50.1	209.55	102.87	59.14	60.25	39.19	62.58	120.18	59.69	158.63	158.63	158.1	

