Transload Clean Fuels Facility

18th Street and Cleveland Ave

TRAFFIC IMPACT ANALYSIS
NATIONAL CITY, CALIFORNIA

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EXECUTIVE SUMMARY

The following summarizes Project characteristics:

- The Proposed Project is a rail-to-truck transload facility that will involve a transferred volume of approximately 13,800 barrels of fuel per day (bpd)/402 gallons per minute (gpm). Fuels expected at this facility would include biodiesel, renewable diesel, and either ethanol or sustainable aviation fuel. The Project is located south of Cleveland Avenue and 18th Street.
- Project access will follow a circulation route involving trucks entering the Project site on 18th Street from Cleveland Avenue and exiting the Project site on 19th Street.
- The purpose of this report is to provide an abbreviated analysis that describes the Project and provides Project trip generation and trip distribution documenting that the trips generated are under the thresholds that require a full study.
- The Project will generate 169 daily trips, when using a 2.5 factor for trucks, equating to 385 passenger car equivalent daily trips. As 70 percent of the truck activity will occur between 6 PM and 6 AM, this results in 13 weekday AM peak hour trips (7 inbound trips and 6 outbound trips) and 23 weekday PM peak hour trips (11 inbound trips and 12 outbound trips).
- The AM and PM peak hour trips for each of the eight study intersections do not reach the 50-trip threshold during any hour of operation including the AM and PM peak period. Based on the Guidelines for Traffic Impact Studies in the San Diego Region (ITE, 2019), the traffic impact to intersection operation can be deemed minimal.
- The Guidelines for Traffic Impact Studies in the San Diego Region (ITE, 2019) state: A roadway analysis should be prepared for projects that generate greater than 1,000 total average daily trips or 100 peak hour trips. This Project is estimated to generate less than 500 ADT and 50 peak hour passenger car equivalent trips. In following the guidelines, a full Traffic Impact Study beyond this submittal may not be required.
- A Vehicle Miles Traveled (VMT) review was conducted for the Project. The Project is presumed to have a less than significant impact on VMT as it meets the small Project exemption.
- It is requested that the City confirm the findings from this initial report or provide guidance on any additional steps to be taken.

1.0 INTRODUCTION

This Traffic Impact Assessment has been prepared to identify the potential traffic impacts associated with developing a rail-to-truck transload facility at 18th Street and Cleveland Avenue in National City, California. The guidelines for Traffic Impact Studies in the San Diego Region (ITE, 2019) were followed to complete this study.

This report describes the existing roadway network near the Project site. It includes a review of the existing and proposed traffic activities, describes truck access, and describes pedestrian, bicycle and transit facilities in the Project vicinity.

Project Description

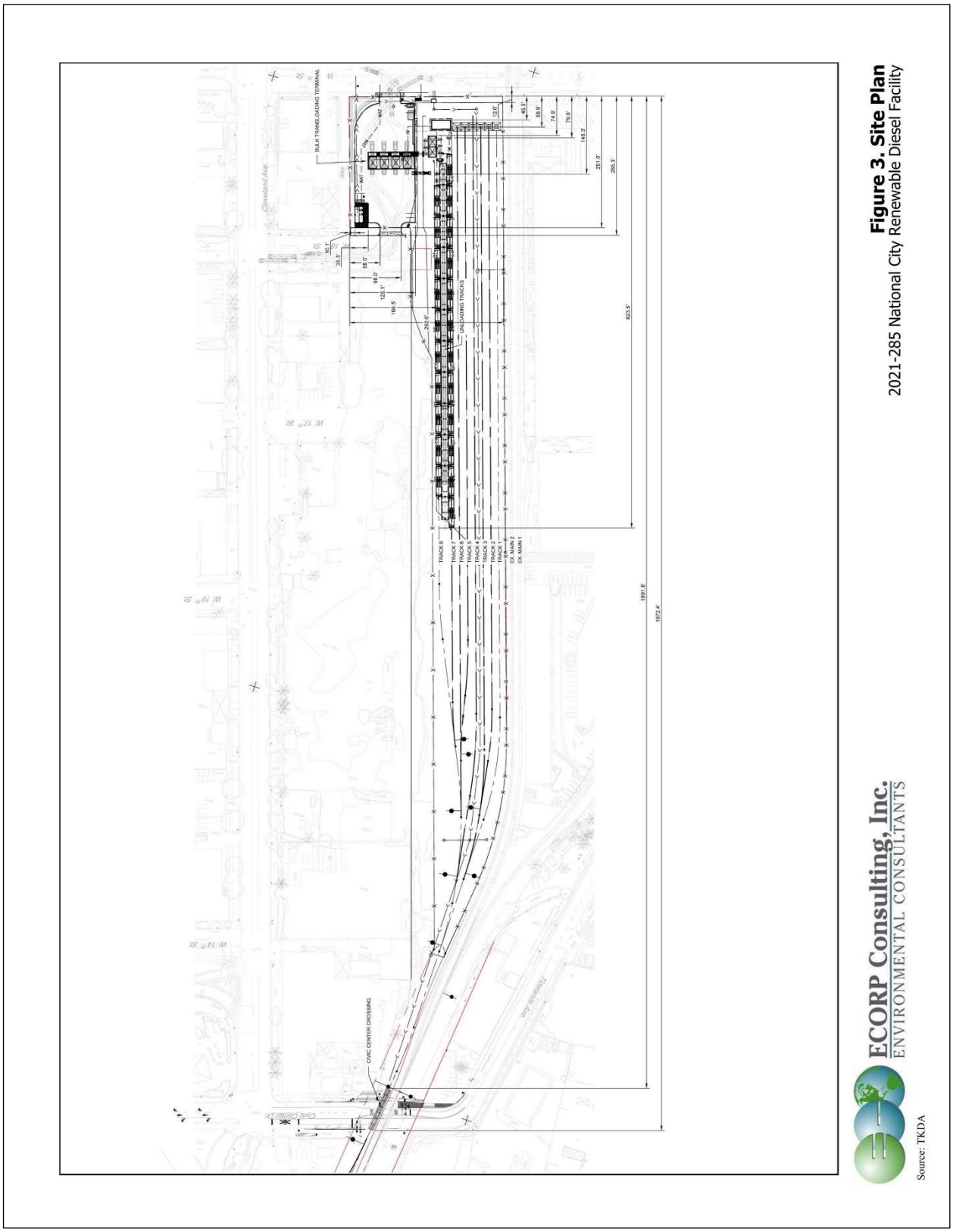
The Proposed Project is a rail-to-truck transload facility that will involve a transferred volume of approximately 13,800 barrels of fuel per day (bpd)/402 gallons per minute (gpm). Fuels expected at this facility would include biodiesel, renewable diesel, and either ethanol or sustainable aviation fuel. The Project is located at the western rail junction and 18th Street. The rail lane is just west of the project. **Figure 1.1** shows the location of the Project site. **Figure 1.2** shows the preliminary site plan for the Proposed Project.

Project Access

Primary in-bound project access will be provided at Cleveland and 18th Street with 18th Street used to access the site. The unloading containment facility will include four truck loading spots. Outbound access will be provided from the truck transfer area at 19th Street.

Figure 1.1 Study Area

Figure 1.2 Site Plan



2.0 ANALYSIS METHODOLOGIES

The following section describes the methodology used to determine study intersections, perform capacity analysis, perform VMT analysis and determine significant impacts.

Study Area

The study area was determined based on the Project's trip assignment and conversations with City of National City staff. The study area for this Project includes those locations to document that there are no traffic impacts from Project trips. No study area intersections or segments are considered to be affected due to the Project being under trip generation thresholds. Eight intersections are identified to describe Project traffic and include:

1. Civic Center Drive and Cleveland Avenue
2. Civic Center Drive and Harbor Drive
3. Civic Center Drive and Wilson Avenue/I-5 Ramps
4. I-5 Southbound Exit Ramp and Cleveland Avenue
5. Cleveland Avenue and 18th Street
6. Project exit at 19th Street
7. 19th Street and Tidelands Avenue
8. 19th Street and Cleveland Avenue

VMT Analysis

As of July 1, 2020, public agencies are required to adhere to Senate Bill 743 (SB 743) which replaces the analysis of level of service (LOS) with VMT for projects qualifying to meet documentational requirements under the California Environmental Quality Act (CEQA). SB 743 was approved by the California legislature in September 2013. SB 743 and requires changes to CEQA, specifically directing the Governor's Office of Planning and Research (OPR) to develop alternative metrics to the use of vehicular LOS for evaluating transportation projects. OPR has prepared a technical advisory ("OPR Technical Advisory") for evaluating transportation impacts in CEQA and has recommended that Vehicle Miles Traveled (VMT) replace LOS as the primary measure of transportation impacts.

VMT refers to the distance a vehicle travels from each origin to destinations. A VMT analysis for CEQA purposes will not be required as the Project has 1,000 average daily trips (ADT) or less and is consistent with the adopted General Plan. If a project is inconsistent with the adopted General Plan, a VMT analysis will not be required if the Project has 500 ADT or less.

3.0 EXISTING CONDITIONS

Roadways

In the vicinity of the Project, the following roadways were analyzed as part of this study, which are described below. The roadway classification was obtained from the City of National City General Plan *Circulation Element*, 2011.

18th Street (Cleveland west into site)
18th Street is a two-lane local street that provides direct access to the Project site. Curb, gutter and sidewalk improvements are in place on the south side. Parking is permitted. It connects under I-5 and under the railroad tracks, but has height restrictions. 18th Street is one-way westbound north of Cleveland Avenue. South of Cleveland Avenue, 18th Street is two-way and extends one additional block. Bike lanes are not provided and there is no posted speed limit.

19th Street (from Cleveland Avenue to Tidelands Avenue)
19th Street is a four-lane collector street. Parking is not permitted. Curb, gutter and sidewalk improvements are in place and the posted speed limit is 35 mph. North of Cleveland Avenue, 19th Street is one-way eastbound. There are height restrictions on this route under I-5 and the railroad track bridge. Bike lanes are not provided.

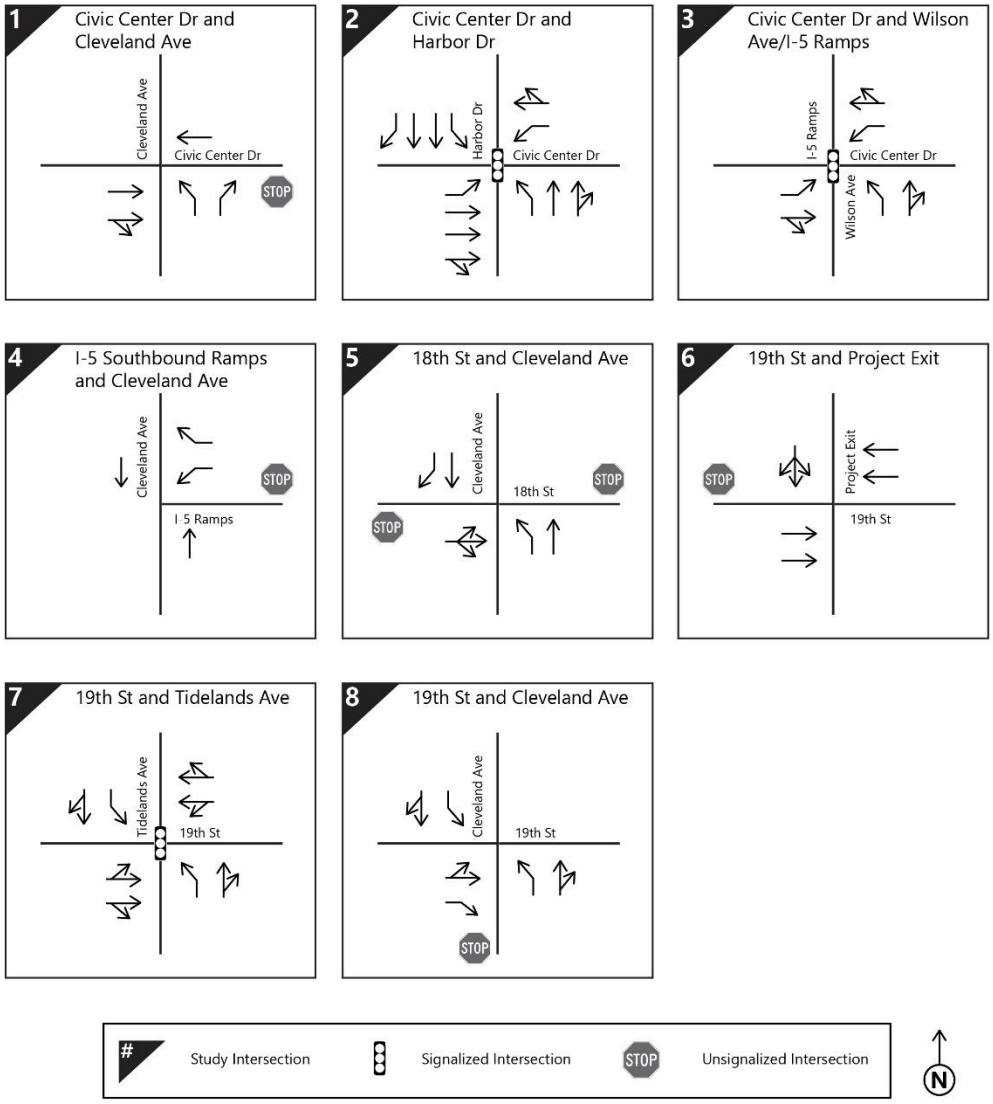
Cleveland Avenue (from Civic Center Drive to Bay Marina Drive)
Cleveland Avenue is a two-lane collector street with a two-way center left turn lane. Parking is permitted on both sides of the street. Curb, gutter and sidewalk improvements are in place and the posted speed limit is 35 mph. Bike lanes are not provided.

Tidelands Avenue (from 19th Street to Civic Center Drive)
Tidelands Avenue has two lanes and is a collector street. The roadway provides access to a number of Port of San Diego uses. The Bayshore Bikeway, a regional bike facility that circles the San Diego Bay extends as a Class IV facility for much of its length before transitioning to a buffered bike lane located on both sides of the street. On-street parking is provided on both sides of the street along the buffered bike lane portion of this road segment. The posted speed limit is 35 mph.

Civic Center Drive (from Tidelands Avenue to I-5)
Civic Center Drive is a four-lane collector street. Ramp access to I-5 northbound and southbound is provided. Parking is permitted on both sides of the street east of the railroad tracks. Curb, gutter, and partial sidewalk improvements are in place and the posted speed limit is 30 mph. Bike lanes are not provided.

Figure 3.1 displays the existing intersection geometrics for study area intersections.

Figure 3.1 Intersection Geometrics



Sidewalks

Walkability within the Project area is provided by sidewalks located along 18th Street, Cleveland Avenue and Civic Center Drive east of Cleveland Avenue. Sidewalks are also provided on Tidewater Avenue. The Project will not impact the use of sidewalks by pedestrians.

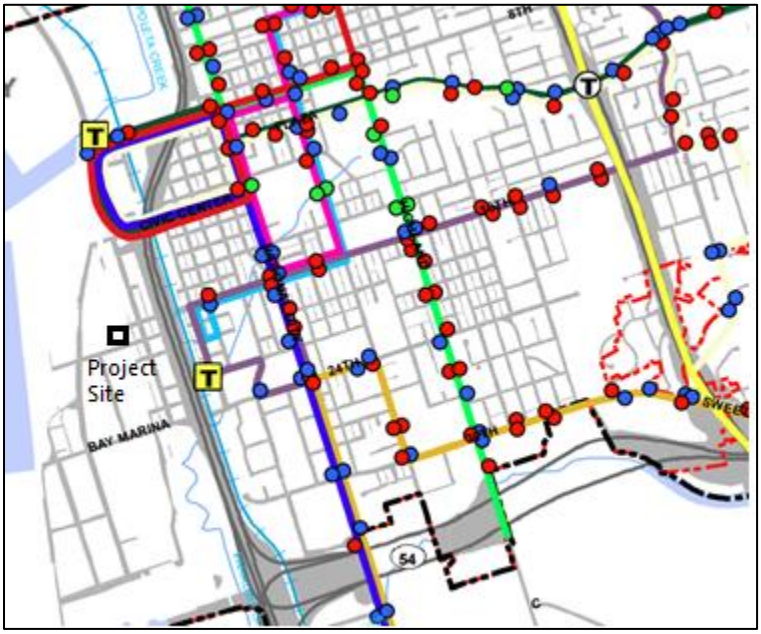
Bicycle Facilities

The Bayshore Bikeway is a 26-mile regional bicycle route that encircles San Diego Bay and passes through the City's planning area along Harbor Drive and Tidelands Avenue. It provides a link to the nearby cities of San Diego, Coronado, Imperial Beach, and Chula Vista. In the Project vicinity, the Bikeway is a separated bicycle facility that is located to the outside of the southbound lanes. For the Project, outbound truck traffic will use the northbound lanes on Tidelands Avenue. As a result, there will be no conflicting traffic movements between Project generated truck traffic and bicycles on the Bayshore Bikeway.

Transit

National City is served by a regional transit system operated by the San Diego Metropolitan Transit System (MTS). There are nine bus routes running in the City of National City with over 200 bus stops. Additionally, two MTS Trolley stations are located within the City, which are located on the Blue Line Trolley running from Old Town and Downtown San Diego to the US-Mexico border. The 8th Street Trolley Station is located near the intersection of 8th Street and Harbor Drive and the 24th Street Trolley Station is located near the intersection of 22nd Street and Wilson Avenue. Transit facilities and routes are not located in close proximity to the Project site. The trolley line does have an at-grade gate crossing of Civic Center Drive under I-5 between Wilson Avenue and McKinley Avenue. Transit routes and stops are shown in **Figure 3-2**.

Figure 3-2 Transit Routes and Stops



4.0 PROJECT TRAFFIC

The following section describes the Project trip generation, distribution, and assignment.

Trip Generation

The Project is expected to generate 385 passenger car equivalent daily trips, including 13 weekday AM peak hour trips (7 inbound trips and 6 outbound trips) and 23 weekday PM peak hour trips (11 inbound trips and 12 outbound trips).

Trip generation has been estimated from both information provided by the Applicant related to truck operation and from the ITE Trip Generation 11th Edition for non-truck travel. The truck generation information is deemed more accurate than using ITE Trip Generation rates that are less specific to this use. The Applicant has stated that the site will accommodate approximately 13,800 barrels or 579,600 gallons per day. The Applicant has estimated that each truck has the capacity for 8,500 gallons. This equates to 72 inbound and 72 outbound truck trips per day. There are a maximum of five employees that would be on site at one time, therefore 10 employees were used to reflect a shift change. The trip generation for these employees was estimated using an industrial employment trip rate. The facility will be operated in three shifts for 24 hours per day, but 70% of the trips will occur between 6 PM and 6 AM. The number of truck trips have been converted to passenger car equivalent trips using 2.5 vehicles/truck. The trip generation is shown below in **Table 4-1**.

Table 4-1 Trip Generation

ITE Code	Variable	Intensity	Unit	Daily Rate (1)	Daily Trips		AM Peak Hour			PM Peak Hour		
							Total	In	Out	Total	In	Out
140	Employees	10	Employee	2.51	25	Rate	0.32	73%	27%	0.31	37%	63%
						Trips	3	2	1	3	1	2
N/A	Truck Trips	13.8	1000 barrel	10.4	144	Rate	0.03	50%	50%	0.05	50%	50%
						Trips	4	2	2	8	4	4
Total					169	Trips	7	4	3	11	5	6
Passenger Car Equivalent					385		13	7	6	23	11	12

Source (Trip Rate): ITE Trip Generation Manual 11th Edition, Client

As noted previously, the Project will generate 385 passenger car equivalent trips per day and less than 50 passenger car equivalent trips during the AM and PM peak hours.

Trip Distribution

The trip distribution is based upon review of the City's truck route map and discussion with the Applicant regarding shipping destinations. Project outbound trips will be distributed to retailers within a 35-mile radius of the Project site. The trip distribution based on a review of potential truck trip origins and destinations provides the following:

North on I-5: 87%
South on I-5: 10%
East on 18th Street: 3%

Trip Assignment

Based on the expected Project trip distributions, daily, AM, and PM peak-hour Project trips were assigned to the roadway network and through the study intersections. The daily Project traffic is presented in **Figure 4.1**. The AM and PM peak hour trips are for each of the eight study intersections are also shown in **Figure 4.2**. As noted previously, no intersections reach the 50-trip threshold during any hour of operation, including the AM and PM peak period.

Figure 4.1 - Project Traffic Volumes (Daily)

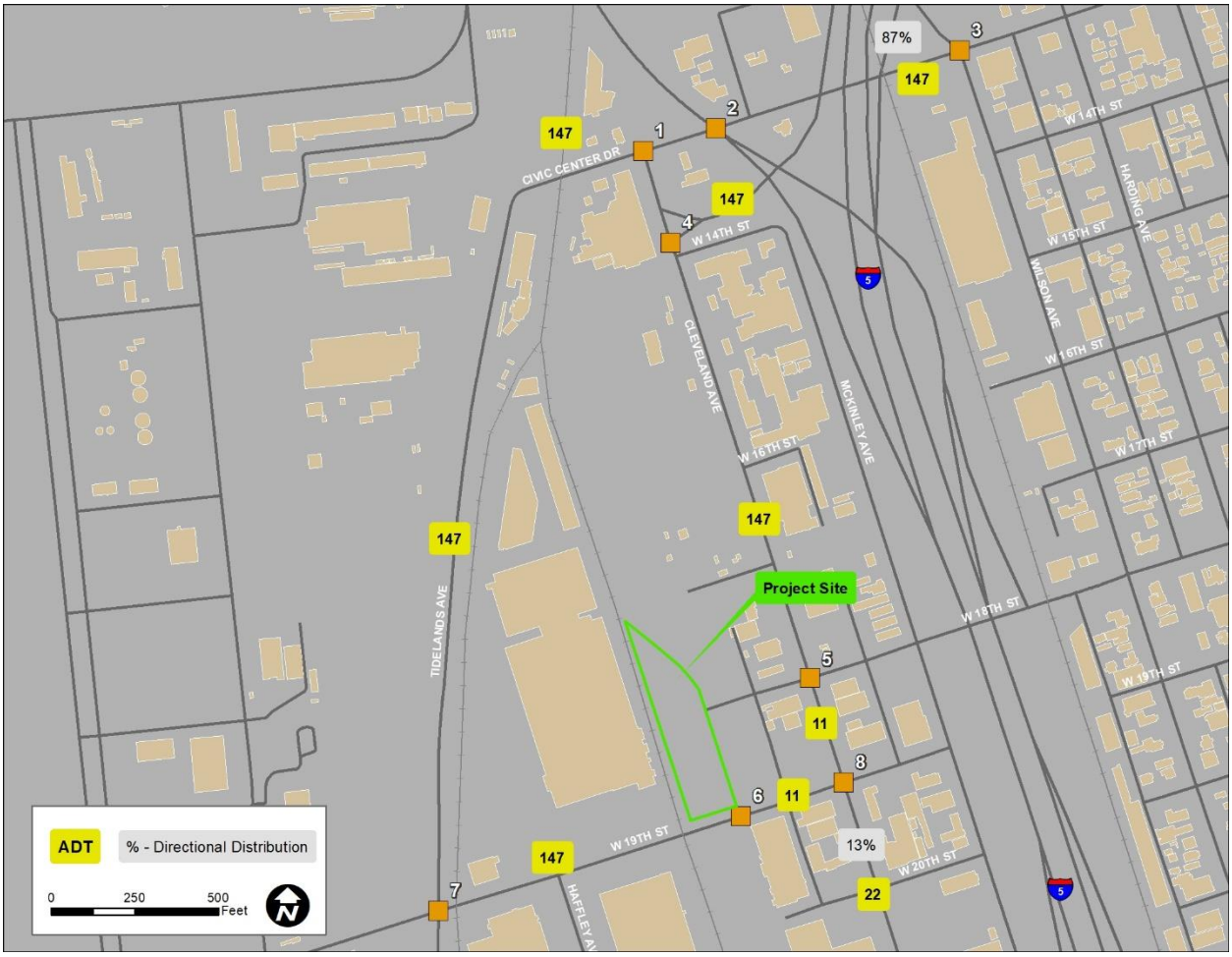
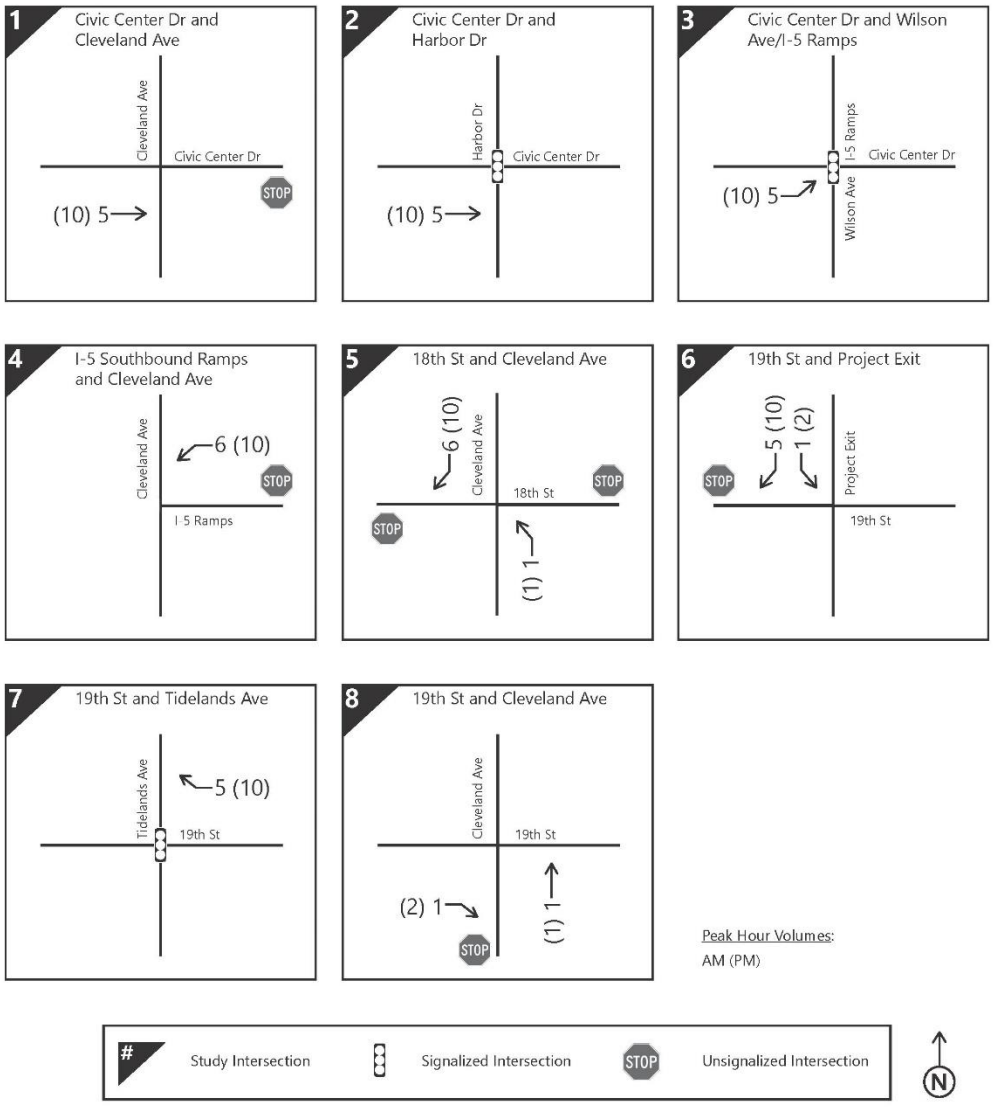


Figure 4-2 Project Traffic Volumes (Peak Hour)



5.0 CIRCULATION

The following section discusses the Proposed Project's access and circulation characteristics.

Project Access and Circulation

Truck access will follow a circulation route involving trucks entering the Project site on 18th Street from Cleveland Avenue and exiting the Project site at 19th Street.

Parking

Parking for employees and other activities will be provided on site.

6.0 VMT ANALYSIS

The California Governor's OPR Technical Advisory provides guidance for setting screening thresholds and thresholds of significance that can be used to identify when a proposed land use project is anticipated to result in a less than significant impact without conducting a more detailed level analysis. The OPR Technical Advisory supporting SB 743 recommends referring to the leading regional agency and/or generally accepted guidelines for location-specific information, VMT thresholds, and other land use types besides residential, office, and retail projects which tend to have the greatest influence on VMT.

This project will refer to the Guidelines for Traffic Impact Studies in the San Diego Region (ITE/SANTEC, 2000). The minimum project size methodology has been successfully used for over 23 years in the San Diego region and has received wide acceptance from transportation profession, decision makers, and the public. This project utilizes the minimum project size method based on previous traffic studies to show that a VMT analysis for CEQA purposes is not required as the Project will only generate **385** passenger car equivalent trips per day which does not exceed the lower **500** average daily trips (ADT) for projects inconsistent with the general plan and subsequently the **1000** ADT threshold for projects consistent with the general plan. This project is consistent with the adopted National City General Plan. The Project is screened out and further analysis is not required. The OPR alternative minimum project size methodology is not used as the project land use is substantially different from OPR's reference land use types of residential, office, and retail projects.

The guidelines are as follows:

MINIMUM PROJECT SIZE BASED ON PREVIOUS TIS GUIDELINES

It is recommended that projects be subjected to different levels of VMT analysis, depending on the size of the project and whether the project is consistent with the local jurisdiction's General Plan or Community Plan. Projects that are consistent with the General Plan or Community Plan are also considered to be consistent with the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

The determination of minimum project size for VMT analysis described below differs from the statewide guidance provided by OPR. It is based on regional standards for transportation analyses that were documented in the Guidelines for Traffic Impact Studies in the San Diego Region (ITE/SANTEC, 2000) and have been in use for over 18 years. The following level of VMT analysis is recommended based on project size (expressed in terms of Average Daily Trips generated by the project, also known as ADT) and zoning:

For Projects Inconsistent with General Plan or Community Plan:

ADT Level of Analysis **0 – 500** - VMT Analysis Not Needed/VMT Impacts Presumed Insignificant [1]

For projects consistent with General Plan or Community Plan:

ADT Level of Analysis **0 – 1,000** - VMT Analysis Not Needed/VMT Impacts Presumed Insignificant [1]

[1] *Guidelines For Transportation Impact Studies in the San Diego Region (P 4-3)*