APPENDIX 8

TRIP GENERATION ANALYSIS

May 5, 2022

Mr. Grant Tuttle
TITAN INDUSTRIAL METAL CORPORATION
10017 Live Oak Avenue
Fontana, California 92335

RE: Titan Industrial Metal Facility Project Transportation Study Screening Analysis
Project No. 19443

Dear Mr. Tuttle:

Ganddini Group, Inc. is pleased to provide this transportation study screening analysis for the proposed Titan Industrial Metal Facility Project in the County of San Bernardino. We trust the findings of this analysis will aid the County of San Bernardino in assessing whether preparation of a transportation study will be required for the proposed project.

PROJECT DESCRIPTION

The approximately 4.24-acre project site is located north of Valley Boulevard and east of Live Oak Avenue (APNs: 0235-031-04, 0235-041-14, 0235-041-13, and portions of 0235-041-021 and 0235-041-020) in the County of San Bernardino, California. The project site is currently developed with light industrial and residential uses totaling 11,264 square feet of existing structures. All existing structures will be demolished. The proposed project involves a policy plan amendment for 9995 Live Oak Avenue (APN 0235-031-04) from Residential (RS) to Special Development – Commercial (SD-COM), a zone change for 9995 Live Oak Avenue (APN 0235-031-04) from Residential (RS) to Special Development – Commercial (SD-COM), a condition use permit for Equipment Rental and Large Collection/Light Processing Facility, and lot line adjustment to create one parcel for the Equipment Rental use (parcel APN 0235-031-04 will be merged with -013, -014, and with portions of 0235-041-021 and -020, or the lot lines will be adjusted). The Large Collection and Light Processing facility will be located on an adjusted second parcel that will contain the remainder or APN 0235-041-021 and -020.

The project site contains the Titan Industrial Metal Corp. Recycling Center (previously known as Alamo Recycling), which operated the 11,264 square feet of existing structures and closed to the public in January 2019.

The project proposes the development of a 32,400 square foot building to house an Equipment Rental use and a Large Collection/Light Processing facility ("Recycling Facility") to be developed in two phases. The Equipment Rental Use would occupy approximately 24,400 square feet of interior space and provide 52 parking spaces. The Recycling Facility would occupy approximately 8,000 square feet of interior space and provide 21 parking spaces. Additionally, 6 parking spaces will be in compliance with the Americans with Disabilities Act (ADA) including 2 parking spaces with electric charging stations. All aspects of the recycling operation will occur within the building.

The project proposes vehicular access at Valley Boulevard. The proposed site plan is illustrated on Figure 2.

Mr. Grant Tuttle
TITAN INDUSTRIAL METAL CORPORATION
May 5, 2022

PROJECT OPERATIONS

Equipment Rental

Location

An equipment rental yard is proposed on the following: APNs: 0235-031-04, 0235-041-14, 0235-041-13, 0235-041-021, and on a portion of 0235-041-020.

Description of Use

The equipment rental operation would rent heavy duty roll off containers to businesses for use at industrial and commercial project sites. The rental operation includes: delivery of the roll-off or low boy to the site, 8 days to fill it up at no extra charge (on the 9th day, a per day rental fee applies), pick up by truck and removal from the customer's site, appropriate disposal of the stored material at either the light processing facility on the project site (if the material is non-ferrous) or if the material or a portion of the material is ferrous, delivery of the material to an appropriate recycler for processing. If the material is non-ferrous, it would be delivered inside the light processing facility to be source separated, baled, briquetted, crushed and compacted (the "Recycling Operations"). If the material contains ferrous metal, the contents would be delivered to a ferrous-metal recycler and the empty bin returned to the Equipment Rental yard on the project site for storage.

Personnel: The equipment rental would employ about 6 truck drivers who work one shift per weekday (5:00 AM – 4:00 PM) delivering roll offs and low-boys to rental customers, removing them when the customer has finished filling them, and delivering the contents of the roll offs to the appropriate recycling facility for reuse. 3 Equipment Rental employees and 1 Manager would work in the office.

Maintenance Shop: A maintenance shop about 19,600 square feet in size would be located on-site to maintain the roll-offs and low boys (welding, maintenance, and general repair). 9,600 square feet would be built in Phase 1 with 10,000 square feet built in Phase 2. The maintenance shop would be used to maintain the bins, which will require regular welding and painting to provide routine light maintenance for the trucks and trailers.

Yard: Approximately 54 bins would be stored outside of the building to the north. Additional large equipment, including but not limited to cranes, would also be stored in the yard.

Trucks: 3-axle semi-trucks about 17 feet in length plus trailers about 53 feet in length (for a total length of 70') would park on-site. Each truck and trailer require 2 parking spaces - 1 for the truck and 1 for the trailer. The Equipment Rental use includes 16 parking spaces - 8 for trucks and 8 for trailers in Phase 1 and 12 parking spaces (6 for trucks and 6 for trailers in Phase 2). The 4 parking space reduction would occur when the additional 10,000 square feet are developed in Phase 2.

Loading Activities: Fork-lifts or winches would be used to load the bins onto the trailers.

Diesel: 1,000 gallons of diesel would also be stored for on-site use in an above-ground storage tank permitted by the San Bernardino County Fire Department, Hazardous Materials Division.

Equipment Rental Yard: The bins include four sizes: 10-yard (16' x 8' x 2' tall also referred to as a "low boy"), 20-yard (18' x 8' x 4' tall), 30-yard (20' x 8' x 5' tall) and 40-yard (20' x 8' x 6' tall).

Scale: One truck scale would weigh the contents of each bin when it returns to the site for processing.

Office: The Equipment Rental Office would be constructed in Phase 1 and would include 4,800 square feet developed on 2 floors (2,400 square feet on each floor), with 2 bathrooms downstairs and 1 bathroom upstairs.

Trash Enclosure: A 287 square foot trash enclosure would be constructed in Phase 1.

Phasing: The 12,400 square foot Equipment Rental use (including the 4,800 square foot Office) would be constructed in Phase 1 and an additional 10,000 square feet of Equipment Rental space would be constructed in Phase 2.

Parking: The 22,400 square foot Equipment Rental area (Phases 1 and 2) requires 40 parking spaces (20 spaces for the 19,600 square foot Equipment Rental and 20 spaces for the 4,800 square foot Office). In addition, 16 truck parking spaces (8 for trucks and 8 for trailers) are also required to operate the use. The 56 parking spaces required for the Equipment Rental use would be developed in Phase 1. When the additional 10,000 square feet are developed in Phase 2, that portion of the building will eliminate 4 truck parking spaces, reducing the number of parking spaces for the Equipment Rental use to 52. 4 parking spaces are also required by the American Disabilities Act. 6 parking spaces including 2 with electric charging stations would also be developed in Phase 1.

Employees: The Equipment Rental would employ 10 people full time, including the owner.

Parcel Merger or Lot Line Adjustment: In the proposed location, the building would cross one parcel line. A lot-merger or adjustment would be processed post-entitlement to move that line.

Light Processing Recycling Facility

Location

The recycling operations would take place on the east side of APNs 0235-041-021 and 0235-041-020. All recycling operations would occur inside the building.

Description of Use

The Large Collection and Light Processing Facility (the "Recycling Facility") would operate in an 8,000 square foot space inside the building. Members of the public would enter the facility from Valley Boulevard, park south of the building, transfer the recyclable materials from their car onto a wheeled cart, push the cart inside the facility, source separate the recyclables by material type, weigh each material type separately, deliver the separated materials to an employee, and receive payment according to the material type and weight. Under California law, acceptable materials for recycling include: items with Cal Redemption Value (including but not limited to aluminum cans, glass bottles, polyethylene terephthalate (PET), High Density Polyethylene (HDPE) and non-ferrous materials. As stated above, ferrous materials would not be accepted.

Public Intake and Customer Pay-Out: 3 employees would oversee the Recycling Facility which would include a public intake area, a customer payment area, and a recyclable-material processing area.

Processing: Recyclable materials are processed in two steps: first, the materials are source separated - then they are baled. The baleing process includes crushing and compacting.

Baleing: The location of the baler inside the facility would be more than 150 feet from the 3 adjacent off-site residences.

Truck-Transport Post-Processing: After processing, the baled materials would be loaded onto a truck and transported to the appropriate off-site recycler. An average of two loads of processed (baled) recyclables would be weighed and transported from the Recycling Facility per day.

Hours of Operation: The Recycling Facility would operate from 8:00 AM to 4:00 PM (4:30 PM in the summertime) six days per week - closed on Sunday.

Phasing: The Recycling Facility and all of the parking spaces would be constructed in Phase 1. No additional square footage of Recycling use would be added in Phase 2 and no additional parking spaces would be required.

Parking: 8 parking spaces are required for the Recycling Facility and 21 would be provided. In addition, 6 parking spaces (including 2 with electronic charging stations) would be constructed in Phase 1 to comply with the Americans With Disabilities Act (ADA).

Total Parking Spaces at Completion of Phase 2: When Phase 2 has been completed, the proposed project would provide 79 parking spaces (52 for the Equipment Rental (including 40 car and 12 truck parking spaces (6 for trucks and 6 for trailers), 21 for the Recycling Facility, and 6 ADA compliant spaces (including 2 with electric charging stations), as required by section 83.11.060 and Table 83-17 of the Development Code.

TRIP GENERATION

Table 1 shows the project trip generation forecasts based upon data provided by the project applicant. The trip generation is composed of vehicle trips from employees/customers and truck trips to/from the site.

There will be 6 truck drivers that arrive at 5:00 AM and depart at 4:00 PM. They will drive and park their personal vehicles on-site for the day while they drive work trucks to/from the project site. 4 maintenance employees will work from 5:00 AM to 4:00 PM. 6 office employees will work from 6:00 AM to 4:30 to 5:00 PM. 3 recycling facility employees will work from 8:00 AM to 5:00 PM. A total of 19 employees will be on-site during a typical weekday.

The facility will operate 6 trucks averaging 9 truck trips per day from 5:00 AM to 4:00 PM. All trucks will depart the facility around 5:00 AM prior to the AM peak hour returning around 4:00 PM during the PM peak hour. Half (3) of the trucks will be away from the facility for the entirety of the day. Half (3) of the trucks will return mid-day and depart again returning around 4:00 PM. The trucks are 3-axle trucks. To provide a conservative analysis, a passenger car equivalent (PCE) factor of 2.0 has been applied to each 3-axle truck (source: *San Bernardino County Congestion Management Program* (2016), Appendix B).

A typical weekday will experience no more than 150 customers frequenting the recycling facility from 8:00 AM to 4:00 PM. These customers arrive and depart sporadically during the day from 8:00 AM to 4:00 PM. For purposes of this analysis, it is assumed that customer arrival/departure will be dispersed evenly throughout the typical weekday, equating to approximately 19 trips entering and 19 trips exiting every hour between 8:00 AM and 4:00 PM. To provide a conservative analysis, half of the hourly customer trips are assumed to exit the site after 4:00 PM during the PM peak hour.

As shown in Table 1, the project site is estimated to generate approximately 400 daily PCE trips, including 41 PCE trips during the AM peak hour and 41 PCE trips during the PM peak hour.

CRITERIA FOR THE PREPARATION OF TRAFFIC IMPACT ANALYSES

According to the County of San Bernardino *Transportation Impact Study Guidelines* (July 2019) ["the *County VMT Guidelines*"], certain types of projects, because of their size, nature, or location, are exempt from the requirement of preparing a traffic impact analysis.

Level of Service (LOS) Analysis

As specified in the County of San Bernardino *Transportation Impact Study Guidelines*, (July 2019) ["the *County guidelines*"], the requirement to prepare a transportation impact study with Level of Service analysis should be based on one or more of the following criteria:

- If a project generates more than 100 or more trips without consideration of pass-by trip reductions during any peak hour.
- If a project is located within 300 feet of intersection of two streets designated as Collector or higher on the County's General Plan circulation system or an impacted intersection as determined by the County Traffic Division.
- If the project creates safety or operational concerns.
- If a project generates less than 100 trips without consideration of pass-by trip reductions during any peak hour, a study may be required if there are special concerns.

The proposed project is forecast to generate fewer than 100 peak hour trips. While the project proposes to use the existing access to Valley Boulevard (Major Arterial Highway) and Live Oak Avenue (Secondary Highway) is located within 300 feet from the project site, the project is forecast to contribute fewer than the 50 peak hour trip threshold used for identifying intersections to include a transportation impact study. Assuming the project shall construct all on-site and off-site improvements (if any) in accordance with County design standards, the project would not create any new safety or operational concerns. Therefore, the proposed project does not appear to warrant preparation of a transportation impact study based on the County-established screening criteria for Level of Service analysis.

Although the proposed project does not appear to warrant preparation of a transportation impact study based on the County-established screening criteria for Level of Service analysis, the County scoping agreement form has been completed and included in Attachment A.

Vehicle Miles Traveled (VMT) Analysis

The VMT screening assessment has been prepared in accordance with the County guidelines, which were developed based on guidance from the Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA* (State of California, December 2018) ["OPR Technical Advisory"]. The County guidelines identify screening criteria for certain types of projects that typically reduce VMT and may be presumed to result in a less than significant VMT impact. They are as follows:

- Projects consisting of local servicing land use
  - Local-serving retail less than 50,000 square feet

- Local-serving K-12 schools
- Local parks
- Day care centers
- Student housing projects
- Local serving community colleges

- Trip Screening
  - Existing facilities
  - Redevelopment with less than 10,000 square feet increase
  - Projects with less than 110 daily vehicle trips (ADT)
    - 11 single family residential dwelling units
    - 16 multi-family residential dwelling units
    - 10,000 square feet of office
    - 15,000 square feet of light industrial
    - 65,000 square feet of warehousing
    - 79,000 square feet of high-cube transload and short-term storage warehouse
    - 12 hotel rooms

- Projects located within a Transit Priority Area (TPA)
  - Projects within one-half mile of major transit stop or high-quality transit corridor

- Projects located within a low VMT area as determined by the analyst (e.g., development in efficient areas of the County that would reduce VMT per person/employee and is beneficial to the region).

TPA Screening

Exhibit A shows the San Bernardino County Transportation Authority (SBCTA) VMT Screening Tool results for the project site. As shown on Exhibit A, the project is located within a TPA. Therefore, the proposed project satisfies the City-established screening criteria for projects located within a TPA and may be presumed to result in a less than significant VMT impact for this metric.

Low VMT Area Screening

Based on the SBCTA VMT Screening Tool assessment, the proposed project is located within TAZ 53715102. Since the project is an industrial/office use, VMT per worker has been used to access the proposed project. The project 2022 TAZ VMT per worker is equal to 16.5. The County of San Bernardino jurisdictional VMT per worker is equal to 16.9. This represents a difference of -2.58%. The project VMT per worker is lower than the County of San Bernardino jurisdictional average VMT per worker and would therefore reduce VMT per worker for the County. Therefore, the proposed project satisfies the County-established screening criteria for projects located in low VMT areas and may be presumed to result in a less than significant VMT impact.

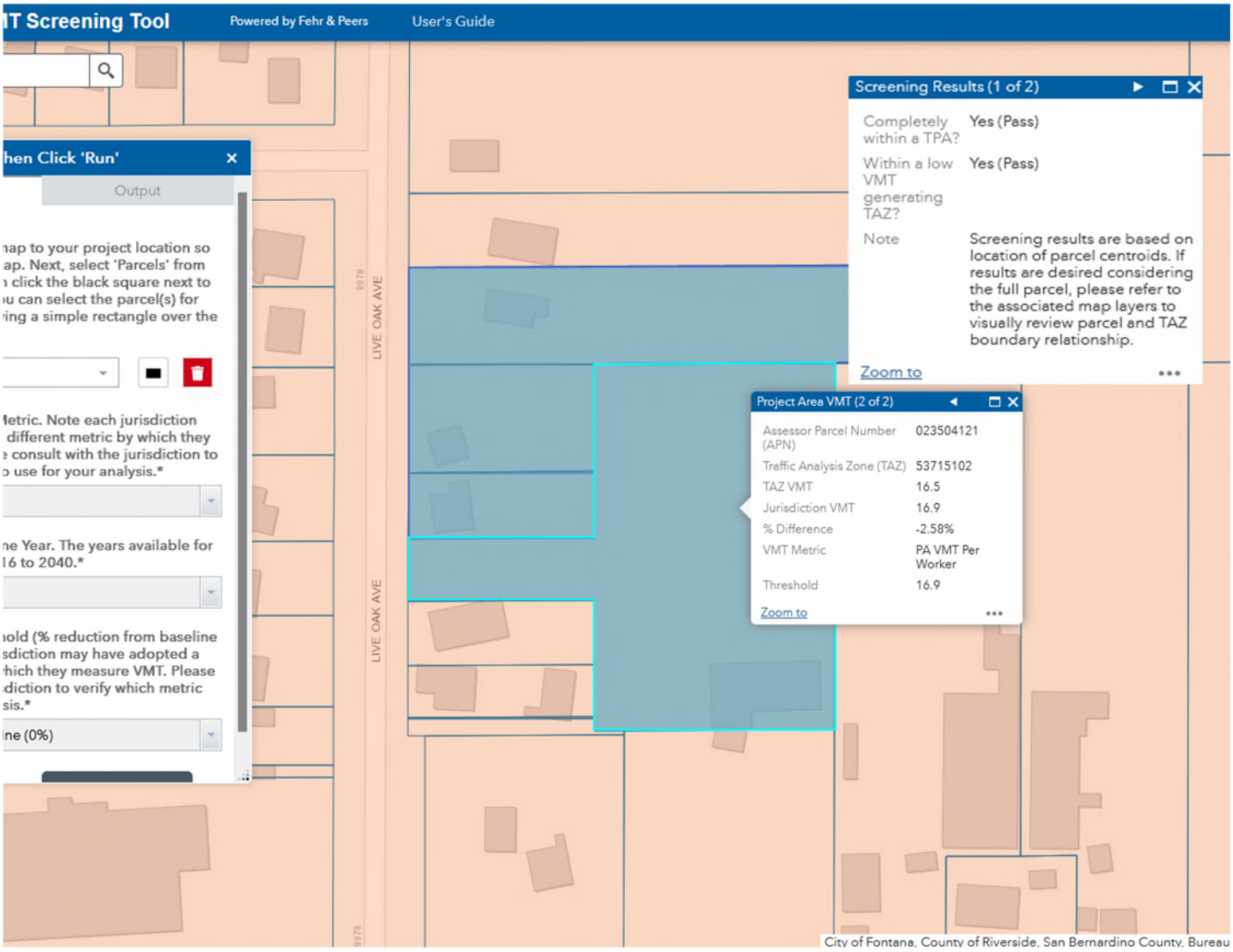

Exhibit A – SBCTA VMT Screening Tool Results for the Project

CONCLUSIONS

The project site is estimated to generate approximately 400 daily PCE trips, including 41 PCE trips during the AM peak hour and 41 PCE trips during the PM peak hour.

The proposed project does not appear to warrant preparation of a transportation impact study based on the County-established screening criteria for Level of Service analysis.

The project is located in a TPA and VMT-efficient area of the County that would reduce VMT per employee. Therefore, the proposed satisfies both the TPA and low VMT screening criteria established by the County and the project may be presumed to result in a less than significant VMT impact.

Mr. Grant Tuttle
TITAN INDUSTRIAL METAL CORPORATION
May 5, 2022

We appreciate the opportunity to assist you on this project. Should you have any questions or if we can be of further assistance, please do not hesitate to call at (714) 795-3100 x 104.

Sincerely,
GANDDINI GROUP, INC.
Bryan Crawford, Senior Transportation Planner
Giancarlo Ganddini, TE, PTP, Principal

Table 1
Project Trip Generation

Trips Generated[1]									
			AM Peak Hour			PM Peak Hour			
Function Type	Quantity	Unit[2]	In	Out	Total	In	Out	Total	Daily
Employees									
Truck Drivers[3]	6	EMP	0	0	0	0	6	6	12
Maintenance[4]	4	EMP	0	0	0	0	4	4	16
Office[5]	6	EMP	0	0	0	0	6	6	24
Recycling Facility[6]	3	EMP	3	0	3	0	3	3	12
Employees Subtotal	19	EMP	3	0	3	0	19	19	64
Trucks (in PCE)[7]	6	TR	0	0	0	12	0	12	36
Customers (Recycling Facility)[8]	150	CUS	19	19	38	0	10	10	300
Total			**22**	**19**	**41**	**12**	**29**	**41**	**400**

Notes:

(1) Trip generation based on data from the project applicant regarding future project site vehicular travel.

(2) EMP = Employees; TR = Trucks; CUS = Customers

(3) Truck drivers will arrive at 5:00 AM in their personal vehicle and depart in a truck. They will return around 5:00 PM and then depart in their personal vehicle.

(4) Maintenance employees will arrive at 5:00 AM and depart at 4:00 PM. It is assumed that all employees go off-site for lunch around mid-day.

(5) Office employees will arrive at 6:00 AM and depart at 4:30 to 5:00 PM. It is assumed that all employees go off-site for lunch around mid-day.

(6) Recycling facility employees will arrive at 8:00 AM and depart at 5:00 PM. It is assumed that all employees go off-site for lunch around mid-day.

(7) The facility will operate 6 trucks averaging 9 roundtrip truck trips per day from 5:00 AM to 4:00 PM. All trucks will depart the facility around 5:00 AM prior to the AM peak hour returning around 5:00 PM during the PM peak hour. Half (3) of the trucks will be away from the facility for the entirety of the day. Half (3) of the trucks will return mid-day and depart again returning around 4:00 PM. A passenger car equivalent (PCE) factor of 2.0 has been applied to each 3-axle truck.

(8) During a typical workday no more than 150 customers frequest the recycling facility from 8:00 AM to 4:00 PM. These customers arrive and depart sporadically during the day from 8:00 AM to 4:00 PM. For purposes of this analysis, it is assumed that customer arrival/departure will be dispersed evenly throughout the typical weekday, equating to approximately 19 trips entering and 19 trips exiting every hour between 8:00 AM and 4:00 PM. To provide a conservative analysis, half of the hourly customer trips are assumed to exit the site after 4:00 PM during the PM peak hour.

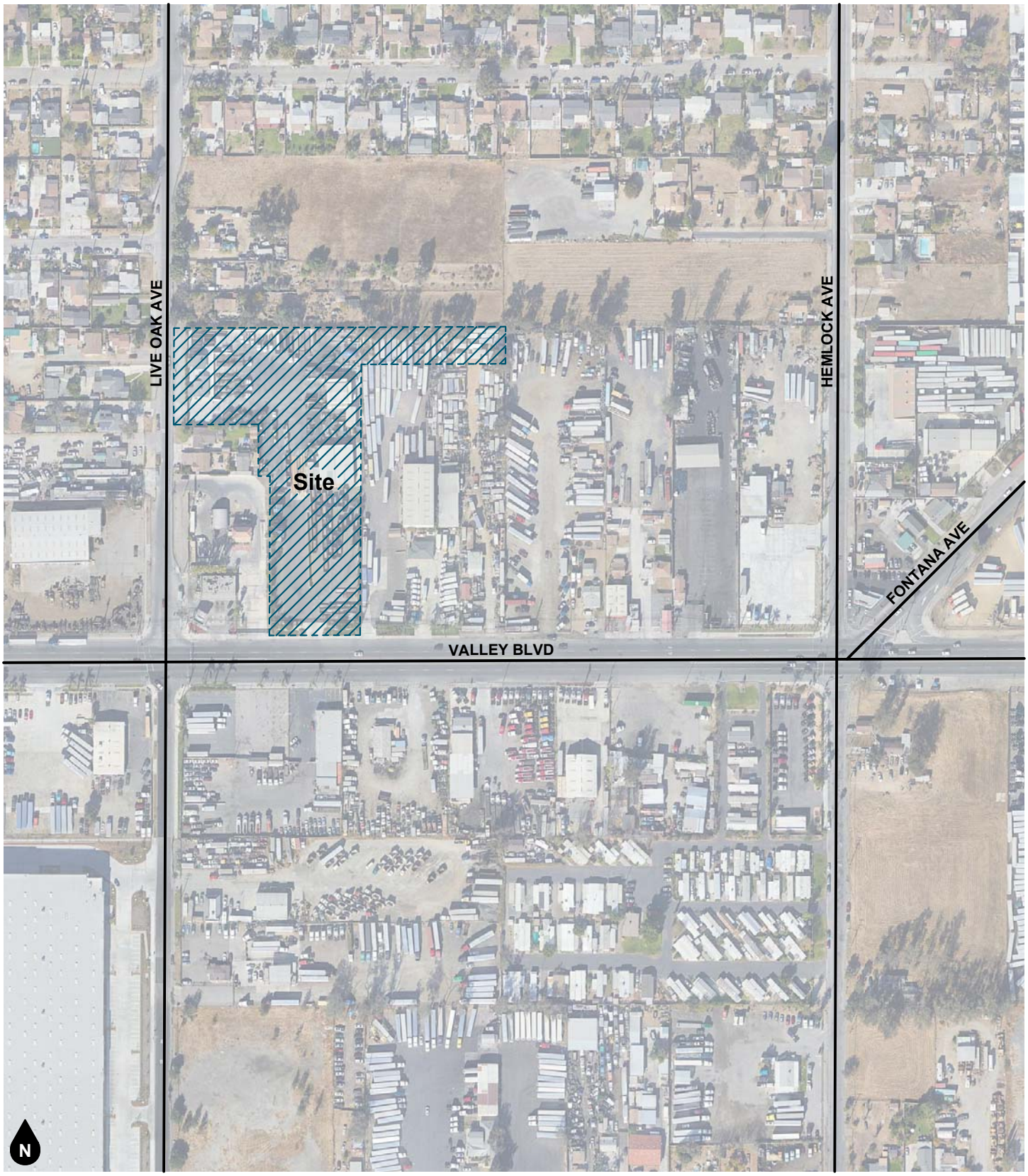

Figure 1
Project Location Map

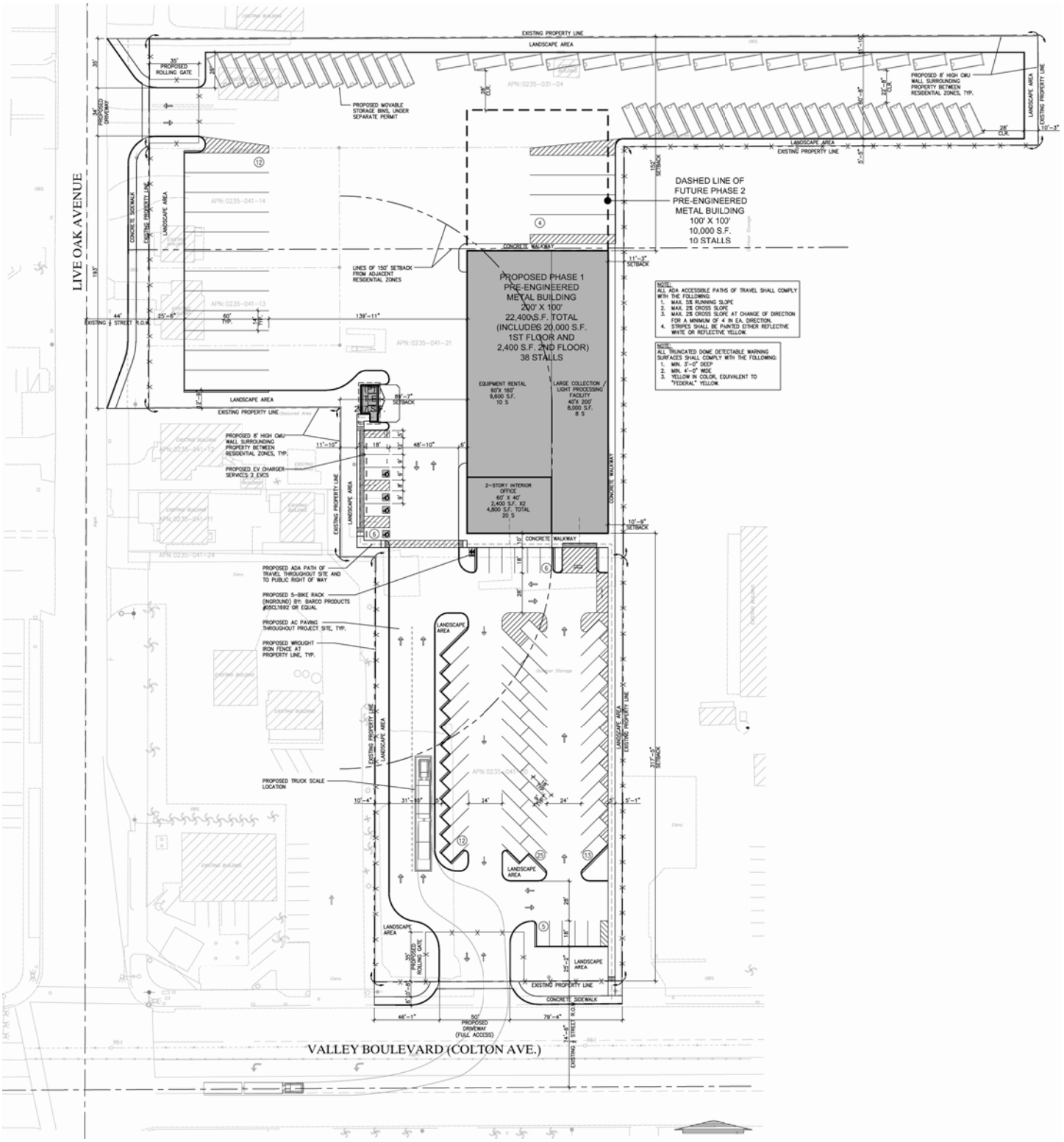

Figure 2
Site Plan

ATTACHMENT A

SCOPING AGREEMENT

SCOPE FOR TRAFFIC STUDY

Project Name:	Titan Industrial Metal Facility Project

Scoping AgreemenThis Scope for Traffic Study acknowledges San Bernardino County Department of Public Works, Traffic Division requirements of traffic impact analysis for the project and is subject to change:

Project Address:	North of Valley Boulevard and east of Live Oak Avenue		
Project Description:	Equipment rental and light processing recycling facility		
City:	Unincorporated		
Project Buildout Year:	2024	**Ambient Growth Rate per Year:**	2%
Closest Intersection (Xtn) to the Project			
Xtn N/S Street Name:	Live Oak Avenue		
Xtn E/W Street Name:	Valley Boulevard		
Thomas Guide Pg+Grid:	--	**County Supervisorial District:**	2

	Engineer	**Developer**
Company:	GANDDINI GROUP, INC.	TITAN INDUSTRIAL METAL CORPORATION
Name:	Bryan Crawford	Grant Tuttle
Address:	555 Parkcenter Drive, Suite 225	10017 Live Oak Avenue
City, State, Zip Code:	Santa Ana, CA 92705	Fontana, CA 92335
Phone #:	714-795-3100	909-355-8811
CELL:		
Email:	bryan@ganddini.com	gtuttle@titanindustrialmetal.com

By:		**Reviewed By:**	
Print Name: Bryan Crawford	05/05/22	**Print Name:**	
Consultant/Developer's Representative	**Date**	**Traffic Division Representative**	**Date**

SCOPE FOR TRAFFIC STUDY

Project Name:	Titan Industrial Metal Facility Project

1. **Traffic Distribution**: Please insert or attach Figure(s) illustrating project trip distribution in percentages and volumes at the study intersections analyzed.

2. Trip Credit: Exact amount of credit subject to approval by Traffic Division.

Transportation Demand Management (TDM)	Yes/**no**	NO
Existing Active Land Use	Yes/**no**	NO
Previous Land Use	Yes/**no**	NO
Internal Trip Reduction	Yes/**no**	NO
Pass-by Trip Reduction	Yes/**no**	NO

3. Related Projects: Consultant should check with Planning in the San Bernardino County Department of Land Use Services and planning departments of adjoining Cities. Documentation of the consultation from these agencies shall be included in the traffic study. Related projects list shall be submitted to Traffic Division for our review and approval before being incorporated in the study.

4. Freeway Analysis: The potential traffic impact on the following Freeway(s) must be considered.

Not Applicable

The applicant shall consult with the State of California Department of Transportation (Caltrans) to determine the California Environmental Quality Act levels of significance with regard to traffic impacts on Caltrans' freeway facilities. This consultation shall also include a determination of Caltrans requirements for the study of traffic impacts to its facilities and the mitigation of any such impacts. This analysis must follow the most current Caltrans' Guide for the Preparation of Traffic Impact Studies (December 2002) and can be obtained from http://www.dot.ca.gov/hq/traffops/developserv/operationalsystems/reports/tiguide.pdf. If Caltrans finds that the project has a significant impact on the freeway, Caltrans shall be requested to include the basis for this finding in their response. If fees are proposed to mitigate the freeway impact, Caltrans shall be requested to identify the specific project to which the fees will apply. These written comments from Caltrans shall be included with the traffic study and submitted to Public Works for review and approval. If a documented good faith effort is made to consult with Caltrans and written comments cannot be obtained from within a reasonable amount of time, an analysis of the freeway impact shall be made using HCM procedures. Appendix A of the SANBAG CMP outlines allowable modifications to these procedures. The SANBAG CMP can be viewed online at: http://www.sanbag.ca.gov/planning/subr_congestion.html

SCOPE FOR TRAFFIC STUDY

Project Name:	Titan Industrial Metal Facility Project

5. Trip Generation

Trip Generation Rate(s) Source: ITE Trip Generation	**I – Institute of Transportation Engineers; S – San Diego Traffic Generators; C – County; O – Other:**	**Edition:**	11th 2021

Land Use Code	Land Use	Rate Based on	Qty[1]	Average Vehicle Trip Ends vs	ADT	Weekday a.m. peak		Weekday p.m. peak		Weekend peak hour	
						In	Out	In	Out	In	Out
Custom	See Table 1	0	See Table 1	See Table 1	400	22	19	12	29	-	-

For ITE Land Uses provide number and name of Land Use. e.g. LU 814 - Variety Store

See attached Table 1.

SCOPE FOR TRAFFIC STUDY

Project Name:	Titan Industrial Metal Facility Project

6. Study Intersections: At minimum, the study shall include the following intersections. The list is subject to change after related projects, trip generation and distribution are determined. Consultant should check with adjoining Cities regarding their requirements in addition to the following County/City intersections. Documentation of the consultation from these agencies shall be included in the traffic study.

Xtn #	% County	Thomas Guide Page+Grid	N/S/E/W Street Name	City	Signalized	CMP
n/a	n/a		n/a – project contribution <50 peak hour trips	n/a	n/a	n/a

Cites to be consulted: n/a

SCOPE FOR TRAFFIC STUDY

Project Name:	

7. Other:

Traffic counts may be conducted immediately per the following:
• Must be taken on Tuesdays, Wednesdays or Thursdays.
• Must exclude holidays, and the first weekdays before and after the holiday.
• Must be taken on days when local schools or colleges are in session.
• Must be taken on days of good weather, and avoid atypical conditions (e.g., road construction, detours, or major traffic incidents).
• Traffic counts used for other traffic studies in the area shall **NOT** be reused again, unless 25% of the counts conducted for that particular traffic study are validated with new counts. The difference in volumes between the old and new counts at each corresponding movement should not be more than 10%.
• New traffic counts shall be checked to ensure the difference in volumes at corresponding approaches, if applicable, between two adjacent intersections is no more than 10% unless the difference can be justified.
• For all proposed mitigation measures, a conceptual plan for the improvements shall be submitted to our Traffic Studies section for review and approval prior to the approval of the Traffic Impact Analysis. All proposed improvements shall be within the right-of-way.
• For all cumulative mitigation measures, a cost estimate for the improvement shall be submitted.

This analysis must follow the most current Traffic Impact Study Guidelines for the County as stated in the County's Road Planning and Design Standards.

8. Fees

The County charges on an actual cost basis for review of traffic studies. An initial deposit of $3400 is required at the time that a land use application is filed with the Department of Land Use Services If the review costs exceed the initial deposit, the applicant will be expected to provide additional funds and the review will be suspended until the additional funds are deposited.

Project Name:	Titan Industrial Metal Facility Project

9. Contact Information:

Please submit a signed copy of this scope for approval by the Traffic Division. Draft scopes may be sent electronically. Final scope with signature should be submitted in person or by US Mail to:

County of San Bernardino
Dept. of Public Works, Traffic Division
825 E. 3rd Street, Rm 115
San Bernardino, CA 92415-0835

909-387-8239

Anthony Pham
Anthony.Pham@lus.sbcounty.gov

Jeremy Johnson
Jeremy.Johnson@dpw.sbcounty.gov

Table 1
Project Trip Generation

Trips Generated[1]									
			AM Peak Hour			PM Peak Hour			
Function Type	Quantity	Unit[2]	In	Out	Total	In	Out	Total	Daily
Employees									
Truck Drivers[3]	6	EMP	0	0	0	0	6	6	12
Maintenance[4]	4	EMP	0	0	0	0	4	4	16
Office[5]	6	EMP	0	0	0	0	6	6	24
Recycling Facility[6]	3	EMP	3	0	3	0	3	3	12
Employees Subtotal	19	EMP	3	0	3	0	19	19	64
Trucks (in PCE)[7]	6	TR	0	0	0	12	0	12	36
Customers (Recycling Facility)[8]	150	CUS	19	19	38	0	10	10	300
Total			**22**	**19**	**41**	**12**	**29**	**41**	**400**

Notes:

(1) Trip generation based on data from the project applicant regarding future project site vehicular travel.

(2) EMP = Employees; TR = Trucks; CUS = Customers

(3) Truck drivers will arrive at 5:00 AM in their personal vehicle and depart in a truck. They will return around 5:00 PM and then depart in their personal vehicle.

(4) Maintenance employees will arrive at 5:00 AM and depart at 4:00 PM. It is assumed that all employees go off-site for lunch around mid-day.

(5) Office employees will arrive at 6:00 AM and depart at 4:30 to 5:00 PM. It is assumed that all employees go off-site for lunch around mid-day.

(6) Recycling facility employees will arrive at 8:00 AM and depart at 5:00 PM. It is assumed that all employees go off-site for lunch around mid-day.

(7) The facility will operate 6 trucks averaging 9 roundtrip truck trips per day from 5:00 AM to 4:00 PM. All trucks will depart the facility around 5:00 AM prior to the AM peak hour returning around 5:00 PM during the PM peak hour. Half (3) of the trucks will be away from the facility for the entirety of the day. Half (3) of the trucks will return mid-day and depart again returning around 4:00 PM. A passenger car equivalent (PCE) factor of 2.0 has been applied to each 3-axle truck.

(8) During a typical workday no more than 150 customers frequest the recycling facility from 8:00 AM to 4:00 PM. These customers arrive and depart sporadically during the day from 8:00 AM to 4:00 PM. For purposes of this analysis, it is assumed that customer arrival/departure will be dispersed evenly throughout the typical weekday, equating to approximately 19 trips entering and 19 trips exiting every hour between 8:00 AM and 4:00 PM. To provide a conservative analysis, half of the hourly customer trips are assumed to exit the site after 4:00 PM during the PM peak hour.