FEHR PEERS

Memorandum

Date: May 16, 2025

To: Joseph L. Stenger, P.G.

From: Jolene Hayes
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Subject: City of Industry Battery Storage Facility Transportation Study

LA24-3574

Fehr & Peers has completed a Transportation Study for the Battery Storage Facility (Project) in the City of Industry, California. The study consists of Level-of-Service (LOS) and Vehicle Miles Traveled (VMT) screening assessments, which conclude the Project does not exceed the City's thresholds and thereby, the Project does not require further transportation impact analysis and would result in a **less-than-significant impact** under the California Environmental Quality Act (CEQA) for transportation. Additionally, the study analyzed how construction traffic associated with the Project would affect the surrounding transportation network and found that the Project would generate less daily trips than the existing uses. The methodologies and procedures used in this study are consistent with the *City of Industry Transportation Study Guidelines for Vehicle Miles Traveled and Level of Service Assessment (2020).*

Project Description

The Project site is bounded by Ward Way to the west, the Southern California Edison (SCE) Walnut Substation to the east, Gale Avenue to the south, and Ardmore Home Design/a rail-line to the north. It is currently developed with 162,000 square feet of industrial land uses, which the Project plans to demolish and replace with a battery storage facility. The Project is anticipated to have up to two employees on-site daily. The Project includes an overhead electric tie-line that will cross the east property boundary directly into the adjacent Walnut Substation where it will interconnect with the grid.

Need for LOS Assessment

As previously stated, the Project is anticipated to have up to two employees on-site daily. Therefore, it is anticipated to generate negligible daily trips.

Per the City's guidelines, the Project is not required to complete a LOS analysis as it does not meet any of the following criteria:

- When either the AM or PM peak hour trip generation is expected to exceed 200 vehicle trips from the proposed development.
- Projects that will add 100 or more trips during either the AM or PM peak hours to any intersection.

VMT Screening

Due to the implementation of California Senate Bill (SB) 743, VMT is utilized as the metric to determine transportation-related impacts. The City's guidelines identify the following three types of screening that may be used to screen projects from project-level VMT assessment:

- Transit Priority Area (TPA) Screening
- Low VMT Area Screening
- Project Type Screening

The Project Type Screening criteria allows projects that generate less than 110 daily vehicle trips to be screened from further VMT assessment. The Project would have up to two employees on site and thus generate less than 110 daily trips, therefore, the Project screens out from further VMT analysis pursuant to the Project Type Screening criteria and is assumed to have a **less-than significant impact** under CEQA.

Construction Traffic Assessment

Although the Project would not generate a noticeable amount of trips to/from the site once in operation, the City requires an assessment of construction trips to ensure traffic operations and safety would not be degraded by construction activities. The Project requires demolition of the existing industrial buildings. The demolition phase of construction is expected to be the worst case with as many workers as any other construction phase, including needed SCE improvements, and the highest daily trip traffic due to off-hauling of demolition debris. To determine if the demolition trips will adversely affect the surrounding transportation network, the daily and peak hour trips generated by the existing industrial land uses were compared to the Project's demolition phase.

Existing Industrial Land Use Traffic Volumes

Figure 1 shows the three driveways that serve the existing industrial land use. Twenty-four-hour vehicle classification traffic counts were collected at the three driveways on Wednesday, September 25th, 2024. The traffic counts are provided in **Attachment A**, and **Table 1** summarizes the daily AM and PM peak hour vehicle classification trips.

Table 1: Existing Industrial Land Use Traffic Volumes

Location	Daily Total	AM In	AM Out	AM Total	PM In	PM Out	PM Total
Driveway One							
Total Trips	28	1	1	2	-	4	4
Autos and Light Truck Trips	24	1	1	2	-	4	4
Heavy and Medium Truck Trips	4	-	-	-	-	-	-
Driveway 2							
Total Trips	38	1	2	3	1	-	1
Autos and Light Truck Trips	35	1	2	3	1	-	1
Heavy and Medium Truck Trips	3	-	-	-	-	-	-
Driveway 3							
Total Trips	315	36	6	42	9	36	45
Autos and Light Truck Trips	304	35	6	41	9	36	45
Heavy and Medium Truck Trips	11	1	-	1	-	-	-
Total Driveway Trips							
Total Trips	381	38	9	47	10	40	50
Autos and Light Truck Trips	363	37	9	46	10	40	50
Heavy and Medium Truck Trips	18	1	-	1	-	-	-

Note: The trips shown represent the site's AM and PM peak hours of operation, 8:00 AM and 4:30 PM, respectively.
Source: Fehr & Peers, 2024.

Demolition Trip Generation

To estimate the traffic associated with the demolition of the existing industrial buildings, Fehr & Peers referenced prior traffic studies to develop an estimate of trips associated with demolishing existing structures. A very similar demolition project, *Draft Initial Study and Mitigated Negative Declaration (November, 2023)* for the Amar Industry Hills Development in the City of Industry, provides the basis for estimating demolition/construction trips associated with the Project. The Amar Industry Hills Development has the following key attributes:

- The Amar Hills Development analyzed the demolition of 164,259 square feet of industrial warehouse uses
- The Amar Hills Development study is located in the City of Industry
- The Amar Hills Development study was completed in 2023 and provides recent data

The Amar Industry Hills Development Initial Study and Mitigated Negative Declaration is provided as **Attachment B** and includes information about construction trips associated with the demolition of 164,259 square feet of industrial buildings.

Table 2 documents the daily trips and trip rates associated with the demolition of the Amar Industry Hills Development industrial land use. The daily trip rates documented in **Table 2** were applied to the existing industrial land use on the Project site to estimate the daily trips for the Project demolition phase, which are documented in **Table 3**.

The Amar Industry Hills Development study did not provide any information regarding the peak hour demolition trips. Construction activities typically begin and end earlier than the typical workday, in part, to avoid peak hour traffic. For the purposes of this analysis, a conservative estimate of 10 percent of the daily trips was used to estimate trips generated by the Project demolition phase. This assumption is based on our knowledge of the area and professional judgment. The Project demolition phase peak hour trip estimates are shown in **Table 4**.

Table 2: Amar Industry Hills Development Demolition Phase Daily Trips and Rates

Land Use Size (KSF)	Trip Type	One-Way Trips per Day	Round Trips per Day[1]	Vehicle Mix	Daily Trip Rate per KSF
164.259	Worker	15	30	Autos and Light Trucks	0.183
	Vendor	4	8	Heavy and Medium Trucks	0.049
	Hauling	63	126	Heavy Trucks	0.767

Note(s): Round trips per day were estimated by doubling the one-way trips per day.
Source: The Amar Industry Hills Development *Draft Initial Study and Mitigated Negative Declaration (2023)*.

Table 3: Project Demolition Phase Daily Trip Estimates

Land Use Size (KSF)	Trip Type	Daily Trip Rate per KSF	Vehicle Mix	Daily Trips
166.000	Worker	0.183	Autos and Light Trucks	30
	Vendor	0.049	Heavy and Medium Trucks	8
	Hauling	0.767	Heavy Trucks	125
			Total Trips	163
			Autos and Light Truck Trips	30
			Heavy and Medium Truck Trips	133

Source: Fehr & Peers, 2024.

Table 4: Project Demolition Phase Peak Hour Trips

Trip Type	Daily Trips	Peak Hour Factor	Peak Hour Trips
Total Trips	163	0.1	17
Autos and Light Truck Trips	30	0.1	3
Heavy and Medium Truck Trips	133	0.1	14

Note: Peak hour trips were rounded up to the nearest whole number.
Source: Fehr & Peers, 2024.

Comparison

Tables 5 and **6** show a comparison of the existing industrial land use and the Project demolition phase PM peak hour trips. The PM peak hour was chosen for the comparison as the existing industrial land use generates the most trips during this period. As shown in **Tables 5** and **6**, during the Project demolition Phase there will be 224 fewer daily trips and 34 fewer PM peak hour trips.

Since the Project demolition phase will generate fewer daily and peak hour trips than the trips generated by the existing industrial land use, it is anticipated that the demolition will not have an adverse effect on the surrounding transportation network.

Table 5: Existing Industrial Land Use and Demolition Phase Daily Trip Comparison

Trip Type	Existing Trips	Demolition Trips	Difference
Total Trips	381	163	(218)
Autos and Light Truck Trips	363	30	(333)
Heavy and Medium Truck Trips	18	133	115

Source: Fehr & Peers, 2024.

Table 6: Existing Industrial Land Use and Demolition Phase Peak Hour Trip Comparison

Trip Type	Existing Trips	Demolition Trips	Difference
Total Trips	50	17	(33)
Autos and Light Truck Trips	46	3	(43)
Heavy and Medium Truck Trips	4	14	10

Source: Fehr & Peers, 2024.

Conclusion

The Project plans to demolish 162,000 square feet of existing industrial land use and replace it with a Battery Storage Facility. The facility will have up to two employees and is expected to generate negligible daily trips. Therefore, the Project screens out from VMT assessment and is not required to complete a LOS assessment as it does not meet the daily and peak hour trip thresholds documented in the City's guidelines. Additionally, traffic associated with the Project construction phase is not expected to have an adverse effect on the surrounding transportation network, as the existing industrial land use generates 218 more daily trips and 33 more peak hour trips than the daily and peak hour estimated trips associated with the Project's construction phase.