APPENDIX I
VEHICLE MILES TRAVELED ASSESSMENT

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Michael Baker INTERNATIONAL

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TECHNICAL MEMORANDUM

To: Oxnard Harbor District—Port of Hueneme
Jennifer Boberg, Director of Infrastructure and Capital Projects

From: Michael Baker International
Jacob Swim, TE

CC: Melissa Whittemore, Michael Baker International
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Date: July 2, 2026

Subject: P1 Hueneme Parking Structure Project – Vehicle Miles Traveled Assessment

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Introduction

The Oxnard Harbor District - Port of Hueneme (District) is proposing the construction and operation of the P1 Hueneme Parking Structure Project (project) at the Port of Hueneme (Port) in the City of Port Hueneme (City), at 333 Ponoma Street, in Ventura County (County), California **(Figure 1, Regional Location Map).**

The approximately 18.8-acre project site is located east of the Port entrance channel and north of the commercial harbor. The project site currently consists of a warehouse structure and an asphalt concrete parking lot used to stage vehicles once they are offloaded from roll on/roll off transport ships. The project site is bounded to the north by Naval Base Ventura County (NBVC) Port Hueneme and single-family residences, to the east by single- and multi-family residences, to the south by active Port facilities and the commercial harbor, and to the west by additional NBVC Port Hueneme property and the Port entrance channel, with the Pacific Ocean located further west and south **(Figure 2, Project Vicinity Map).**

The proposed project would include an approximately 455,900-square-foot (building footprint), up-to-six-level parking structure to support the Port's ongoing vehicle processing operations (**Figure 3, Project Site Plan**). The proposed parking garage with a maximum height of 75 feet and would provide approximately 8,500 net new vehicle parking spaces. The parking structure would likely consist of reinforced concrete and would be designed to accommodate large quantities of vehicles and continuous operational use.

Additionally, high-and-heavy vehicles (HH), which may include oversized vehicles or specialized equipment, would be accommodated on a new 345,800-square-foot concrete pad designed to support their operational requirements, including appropriate turning radii and structural support. As shown on **Figure 3**, **Project Site Plan**, high-and-heavy staging areas would be located to maximize

efficient unloading and minimize travel distances from vessel berths. These areas would be configured to avoid conflicts with primary vehicle staging and circulation routes to the extent feasible.

The parking structure would function as an intermediate staging and transfer point between ocean-going vessels at berth and ground transportation modes, including rail and truck, used to transport automobiles from the Port to dealerships or other destinations. Project operations would result in an average total of approximately 701,672 vehicles imported each year by horizon year 2046, equating to an average of approximately 58,473 vehicles per month, or 2,249 vehicles per day (this assumes 26 working days per month).[1] As existing operations on-site currently generate an average of approximately 1,124 vehicle trips per day, the net new number of trips added (total trips generated by the proposed project), would average approximately 1,125 daily vehicle trips (2,249 vehicles in 2046 minus 1,124 vehicles under existing baseline, or year 2026, conditions). The project would therefore support the Port's role as a regional hub for automobile import and export activities.

The purpose of this memorandum is to document the Vehicle Miles Traveled (VMT) assessment for the proposed project in support of the Transportation component of the California Environmental Quality Act (CEQA) process.

Trip Generation

Table 1 summarizes auto import activity from 2021 to 2025 to inform growth trends and trip generation assumptions. Auto import volumes exhibited an upward trend between 2021 and 2024, increasing from approximately 287,000 vehicles annually in 2021 to a peak of over 418,000 vehicles in 2024. This growth reflects sustained increases in import activity, with average monthly volumes rising from roughly 24,000 vehicles per month in 2021 to nearly 35,000 vehicles per month by 2024. Over the five-year period, an average increase of 4.2 percent growth was calculated.

In 2025, total auto imports declined by approximately 18.5 percent compared to the prior year. This decrease is attributed primarily to new and expanded tariff policies, which temporarily dampened import demand and disrupted supply chains. Despite this decline, 2025 import levels remained higher than early-period volumes and within the overall historical range observed during the five-year period. When averaged across 2021 through 2025, auto imports total approximately 351,000 vehicles per year, or about 29,200 vehicles per month, indicating a generally stable long-term trend notwithstanding short-term market fluctuations.

Planned enhancements at the Port were considered when developing growth assumptions for modeling purposes. Such enhancements may include the ability to accommodate an increased number of vehicles being offloaded and staged at the Port due to the arrival of larger cargo ships (enabled by anticipated channel deepening efforts, not part of the proposed project), the addition of the proposed parking structure, and expected improvements in vehicle processing efficiency (i.e., project objectives include construction of a new vertical parking structure to increase cargo operating

[1] Oxnard Harbor District–Port of Hueneme. 2026. Port of Hueneme Cargo Volume Forecast – Prepared for Environmental Impact Analysis. Confidential report.

space; and improved on-site circulation in unloading activities, processor retrieval movements, and HH cargo/vehicle operations to allow such activities to occur simultaneously on-site).

Additionally, a number of other improvement projects (unrelated to the proposed project) are anticipated to occur over upcoming years to enhance Port operations; refer to **Table 5**, below. Collectively, these factors may increase overall throughput capacity and enable the Port to process greater vehicle import volumes over time. The 5 percent growth assumption is intended to reflect these efficiencies while remaining conservative relative to higher growth rates observed in recent peak years.

TABLE 1: AUTO IMPORT SUMMARY

Calendar Year	Commodity	Total Autos Imported Per Year	Average Per Month	Increase or Decrease Per Year
2021	Auto Import	286,682	23,890	N/A
2022	Auto Import	317,315	26,443	+9.7%
2023	Auto Import	378,663	31,555	+16.2%
2024	Auto Import	418,460	34,872	+9.5%
2025	Auto Import	353,061	29,422	-18.5%
Average Auto Imports (2021 – 2025)		**350,836**	**29,236**	**+4.2%**

Table 2 summarizes historical and forecasted auto import growth used to evaluate potential transportation impacts under CEQA. Historical data from 2021 to 2025 indicates an average annual growth rate of approximately 4.2 percent, resulting in an average of about 350,836 auto imports per year and an incremental increase of approximately 1,124 vehicles per day.

For the future analysis period (2026–2046), a conservative annual growth rate of five percent was assumed to reasonably account for anticipated operational enhancements, including increased processing capacity and infrastructure improvements. This forecast equates to an average of approximately 701,672 average auto imports annually by horizon year 2046, which equates to an average of approximately 2,249 vehicles imported per day, or an average increase of approximately 1,125 (2,249 - 1,124 = 1,125) net new vehicles imported per day over existing (baseline year of 2026) conditions. For context, existing conditions reflect an average of approximately 29,236 auto imports per month, or approximately 1,124 vehicles per day. Auto imports vary considerably on a daily basis, typically ranging from approximately 200 to 2,000 vehicles per cargo vessel. Following unloading, vehicles are staged on-site for periods ranging from several hours to multiple days, depending on processing schedules. Accordingly, for trip generation and analysis purposes, an average daily auto import volume of 1,125 vehicles was assumed to account for the variation in daily imports.

Vehicles are retrieved from the Port and driven to designated off-site processing centers located in nearby lots. Shuttle vans then return drivers to the Port to continue retrieval operations, creating a continuous cycle of vehicle and shuttle movements between the Port and processing centers. For purposes of this analysis, shuttle trips are assumed to be proportional to vehicle retrieval trips and are accounted for within the overall trip generation estimates. Given the high variability in the number of vehicles processed on a daily basis, shuttle trips are encompassed within the estimated 1,125 daily trips.

Table 2 summarizes the projected increase in auto imports on an annual, monthly, and daily basis.

TABLE 2: AUTO IMPORTS SUMMARY FOR BASELINE AND YEAR 2046 CONDITIONS

CONDITIONS	BASELINE (YEAR 2026)	PLANNING HORIZON YEAR 2046
Imports Per Year	350,836	701,672
Imports Per Month	29,236	58,473
Imports Per Day[1]	1,124	2,249

NOTES
[1] *Assumes 26 working days per month; no work on Sundays.*

VMT Screening Criteria

Based on the *Ventura County CEQA Vehicle Miles Traveled Adaptive Mitigation Program (County Guidelines)*, approved May 12, 2023, development projects that meet certain screening threshold criteria based on project size, location, proximity to transit or trip-making potential may be presumed to have a less-than-significant transportation impact under CEQA and do not require a full detailed VMT analysis.

In **Table 3**, the project was evaluated against the VMT screening criteria and does not meet any of the screening criteria under the applicable categories. The project is forecast to generate approximately 1,125 average daily vehicle trips, exceeding the 110-trip threshold for small project screening. It is not located within a designated Low VMT Area based on the Ventura County VMT Adaptive Mitigation Program Parcel Map. While a portion of the site is located within a High-Quality Transit Area (HQTA), the project does not satisfy Transit Priority Area assumptions due to a floor area ratio (FAR) below 0.75 and the provision of approximately 8,500 net new parking stalls to support future growth in auto imports. The project does not include affordable housing or community-serving uses; therefore, those screening criteria do not apply.

TABLE 3: VMT SCREENING CRITERIA

Screening Criteria[1]		Project Evaluation	Result
Small Projects	Projects that generate or attract fewer than 110 trips per day based on the CEQA categorical exemption for existing facilities, including additions to existing structures of up to 10,000 gross square feet.	The project is forecast to increase average daily vehicle trips by approx. 1,125 trips based on forecasted growth at the Port which exceeds the 110-trip threshold.	**DOES NOT MEET CRITERIA**

Screening Criteria[1]		Project Evaluation	Result
Low VMT Area	Projects that locate in areas with low VMT, and that incorporate similar features (i.e., density, mix of uses, transit accessibility), will tend to exhibit similarly low VMT. Maps created with VMT data can illustrate areas as of 2023 below threshold VMT. "Areas" are usually Traffic Analysis Zones (TAZ) for which VMT information is available. A TAZ is usually a Census Tract sized area of land with different amounts of housing, commercial and/or industrial uses, or a major land use such as a regional hospital or college campus.	The project is not located in a Low VMT Area as shown in the orange area in accordance with the Ventura County VMT Adaptive Mitigation Program Parcel Map found in the link below. https://www.goventura.org/work-with-vctc/vmt-amp/	**DOES NOT MEET CRITERIA**
Transit Priority Area	Projects located within a TPA may be presumed to have a less than significant impact absent substantial evidence to the contrary. This presumption may NOT be appropriate if the project: • Has a Floor Area Ratio (FAR) if less than 0.75; • Includes more parking for use by residents, customers, or employers of the project than required by the City (if the City requires the project to supply parking); • Is inconsistent with the applicable Sustainable Communities Strategy; and/or • Replaces affordable housing residential units with a small number of moderate-or-high income residential units.	A portion of the project site is located within a High-Quality Transit Area (HQTA), as shown in the dark green area on (**Figure 4, HQTA Map)**. However, the project does not meet the minimum floor area ratio (FAR) threshold of greater than 0.75 and includes the construction of approximately 9,500 net new parking stalls to accommodate anticipated future growth in auto imports. Additional information regarding the HQTA designation at the Port is provided at the link below. https://www.goventura.org/work-with-vctc/vmt-amp/	**DOES NOT MEET CRITERIA**
Affordable Housing Development	Projects that are full or partial affordable housing development, especially in and near commercially zoned areas.	The project is not building affordable housing units, therefore, this criterion does not apply.	**DOES NOT APPLY**

Screening Criteria[1]		Project Evaluation	Result
Community Serving Projects	Projects focused on services that primarily serve the community such as neighborhood retail, schools, parks, community center, daycare, and libraries.	The project does not provide services that primarily serve the local community such as retail or a park; therefore, this criterion does not apply.	**DOES NOT APPLY**

[1] *Ventura County CEQA Vehicle Miles Traveled Adaptive Mitigation Program, approved May 12, 2023.*

Trip Length Evaluation

In accordance with the County's Guidelines, projects that satisfy specific screening criteria based on factors such as project size, location, proximity to transit, or trip-making potential, may be presumed to result in a less-than-significant transportation impact under CEQA and therefore would not require a detailed VMT analysis. As shown in **Table 3**, the project does not meet any of the applicable screening thresholds. Accordingly, a project-specific VMT analysis was prepared, with trip length identified as the appropriate metric for evaluating VMT impacts for this project.

Following discharge from the ocean-going vessel, imported vehicles are transported to the proposed parking structure and subsequently transferred to regional vehicle processing centers, including GLOVIS USA, the BMW Vehicle Distribution Center, and the Wallenius Wilhelmsen (WWL) processing center. The average "dwell time" a vehicle would be held at the parking structure prior to being transferred to the processing center is approximately four days. **Figure 5, Vehicle Processing Centers,** shows the location of all three vehicle processing centers and the proposed location of the parking structure on the Port.

Table 4 compares the trip lengths associated with these transfers to the City of Oxnard's VMT thresholds. Based on a review of Ventura County's and City of Oxnard's VMT metrics, the most conservative metric was found in the City of Oxnard and was therefore used in this analysis. Consistent with the *City of Oxnard CEQA Significance Threshold Guidelines* (adopted December 3, 2024), VMT analysis for "other land use" project types (i.e., non-residential, non-office, and non-retail uses) can be tailored to reflect the unique trip generation and trip length characteristics of the proposed use. For this analysis, the trip length between the proposed parking structure and the off-site vehicle processing centers was used to evaluate consistency with the City's average trip length of 9.9 miles. The City's Guidelines establish significance thresholds for VMT impacts based on whether a project exceeds a benchmark set at 15 percent below existing Ventura County VMT.

To provide a conservative and consistent evaluation aligned with the City's Guidelines, a comparable approach was applied by defining the significance threshold relative to the City of Oxnard's average trip length of 9.9 miles. Accordingly, a project would result in a significant VMT impact if it exceeds 15 percent below the Citywide average trip length. Based on this methodology, the applicable threshold is 8.4 miles (9.9 miles × 0.85).

As shown in **Table 4**, distances between the proposed parking structure and the three processing centers (GLOVIS USA, BMW, and WWL) range from approximately 1.2 to 2.4 miles, well below the 8.4-mile threshold. Therefore, the project would result in a less-than-significant VMT impact, and no mitigation measures are required.

TABLE 4: TRIP LENGTH COMPARISON

Origin	Destination	Distance (mi)	City of Oxnard Average Trip Length[1] (mi)	VMT Threshold[2] (mi)	Exceeds Threshold?
Proposed Parking Structure	GLOVIS USA Processing Center	1.2	9.9	8.4	NO
Proposed Parking Structure	BMW Vehicle Distribution Center	2.3	9.9	8.4	NO
Proposed Parking Structure	WWL Vehicle Processing Center	2.4	9.9	8.4	NO

Notes:
[1] City of Oxnard Home-Based Work VMT per Employee is 9.9 miles.
[2] Fifteen percent (15%) below the average trip length for the City of Oxnard is 8.4 miles.

Cumulative Projects

As part of the VMT analysis, reasonably foreseeable cumulative projects were identified and evaluated to determine whether the proposed project would result in a cumulatively considerable contribution to VMT impacts. Refer to **Table 5***,* Cumulative Projects, below. **Table 5** provides a list of cumulative projects in coordination with the neighboring cities of Oxnard and Port Hueneme.

TABLE 5: CUMULATIVE PROJECTS

Lead Agency	Project Name	Location	Description
City of Oxnard	Arcturus Cold Storage	5980-5990 Arcturus Avenue, Oxnard	103,705-square-foot, steel-framed cold storage building with 36 truck loading docks and 270 truck/container storage spaces, container storage area with 90 containers stacked 3 levels high, and a 48-space vehicle parking lot.
City of Oxnard	Solar Pacific Professional Development	1750 Solar Drive, Oxnard	Tentative subdivision map proposes to subdivide the 3.69-acre site into nine parcels. Eight buildings, totaling 42,816 square feet; each building would be between 3,008 and 8,519 square feet.
City of Oxnard	101 Logistics Center	Sakioka Farms Business Park, located north of Sakioka Drive, south of Highway 101, east of Gravity Circle and west of Synergy Circle, Oxnard	Four industrial buildings totaling 778,720 square feet and related site improvements on four separate lots.

Lead Agency	Project Name	Location	Description
City of Oxnard	Teal Club Specific Plan	NE Ventura Road & Teal Club, Oxnard	990 residential units of varying density, including single-family houses, townhomes, condominiums, and apartments; 24 acres of community parks; 8 acres of public/semi-public use; 4 acres of mixed-use, retail, and commercial; 10 acres of business/research park; and 1-acre fire station site.
City of Oxnard	Maulhardt/Stiles NECSP Sub-Neighborhood Plan	Northeast corner of North Rose Avenue and Camino Del Sol, Oxnard	Specific Plan Amendment to create a Sub-Neighborhood Plan under the Northeast Community Specific Plan. The Sub-Neighborhood Plan would create a framework for the future subdivision and development of approximately 500 to 950 residential units, a school, and commercial development on the 107-acre project site.
Oxnard Harbor District–Port of Hueneme	C1 Demolition of Warehouse 1A, Grading, and Paving	Port of Hueneme, south of Wharf 1 located on Parcels 5 and 6	Demolition of Warehouse 1A and foundation slab formerly used by breakbulk operations to be replaced with new pavement; lighting would be installed new paved area.
Oxnard Harbor District–Port of Hueneme	C2 NCEL Building Removal	Port of Hueneme, south of Wharf 1 located on Parcels 5 and 6	Demolition of seven buildings and developed pervious areas, formerly used by the Navy Civil Engineering Lab (NCEL) to allow for near-term beneficial reuse by the Port of Hueneme as open backlands for ongoing port operations; includes approximately 169,500 square feet of new pavement.
Oxnard Harbor District–Port of Hueneme	C3 Electric Reefer Plugs	Throughout the Port of Hueneme	Installation of new electrical refrigeration (reefer) plugs on a vertical rack system at the west end of the Port's South Terminal.
Oxnard Harbor District–Port of Hueneme	C4 South Terminal Dredging Preparation	Port of Hueneme, Berth 2	Replacement of fendering system, completion of wharf deck improvements, installation of sheet pile and cathodic protection, and dredging and deepening from 35 feet to 40 feet at Berth 2.

Lead Agency	Project Name	Location	Description
Oxnard Harbor District–Port of Hueneme	C5 North Terminal Wharf 2 Improvements and Deepening	Port of Hueneme, Berths 4 and 5	Replacement of fendering system, completion of wharf deck improvements, installation of sheet pile and cathodic protection, and dredging and deepening from 35 feet to 40 feet at Berths 4 and 5.
Oxnard Harbor District–Port of Hueneme	C7 Stormwater Filtration System	Throughout the Port of Hueneme	Installation of state-of-the-art stormwater filtration/treatment system for Port drain network.
Oxnard Harbor District–Port of Hueneme	C8 South Terminal Electrical Power System	Port of Hueneme, South Terminal	Installation of a new electrical system consisting of a grid connection to provide auxiliary power to ships at berth and reduce air pollutant emissions.
Oxnard Harbor District–Port of Hueneme	C10 Squid Offloading Relocation from the Port to Ventura Harbor	Ventura Harbor and Port of Hueneme	Relocation of squid operations from Port of Hueneme to Ventura Harbor

Although future development of the proposed project and the cumulative projects identified may (depending on the type of land use or improvements) generate additional vehicle trips, increased traffic generation and the potential effects of such traffic on the circulation system, do not require evaluation pursuant to CEQA. Rather, potential impacts from such development are considered relative to VMT and evaluated against adopted thresholds for the region. A project that falls below an efficiency-based threshold that is aligned with long-term environmental goals and relevant plans would have no cumulative impact distinct from the project impact. Accordingly, a finding of a less than significant project impact would imply a less than significant cumulative impact and vice versa [Office of Planning and Climate Innovation (formerly OPR) 2018].

As previously indicated, project VMT would be well below the applicable significance threshold of 8.4 miles, and therefore, a significant impact would not occur. As impacts would be less than significant, the project would not combine with other cumulative projects to contribute to a significant cumulative impact that could, in turn, be cumulatively considerable. Other cumulative projects would similarly be evaluated on a project-specific basis relative to applicable regional significance to determine VMT-related impacts and the potential for a project to contribute to a VMT-related impact on a cumulative level.

Construction Traffic

Construction of the proposed project would result in limited and temporary effects on local roadways serving the Port. During the peak construction period, up to 156 construction workers are anticipated to be on site per day, generating approximately 312 daily vehicle trips (one inbound and one outbound trip per worker). Average daily construction employment is expected to be lower, with approximately 47 workers per day, resulting in approximately 94 daily vehicle trips.

Construction-related truck traffic would be limited and intermittent and is expected to occur over an approximate 24-month period. Material deliveries are anticipated to generate approximately 61 truck trips per day, while haul truck activity is expected to include approximately 139 trips per day.

The majority of construction activities, including the delivery and transport of construction materials on City streets, would occur during standard daytime hours (8:00 a.m. to 6:00 p.m., Monday through Saturday), excluding holidays, unless otherwise approved by the District. All construction haul trucks would utilize a designated haul route approved by the District, providing access to Highway 101.

Overall, construction-related traffic would be temporary and low in intensity and would not substantially disrupt roadway operations in the project vicinity. Consistent with CEQA Guidelines, construction traffic is temporary in nature and does not constitute an operational vehicle miles traveled (VMT) impact pursuant to Section 15064.3(b).

Conclusion

The proposed P1 Hueneme Parking Structure Project was evaluated for potential transportation impacts under CEQA using a Vehicle Miles Traveled (VMT) framework consistent with Ventura County CEQA Guidelines. While the project does not meet any applicable VMT screening criteria and is anticipated to incrementally increase vehicle activity at the Port as a result of forecasted growth in auto imports, a detailed project-specific VMT analysis demonstrates that operational VMT impacts would be less than significant. Trip length analysis shows that vehicle transfers between the proposed parking structure and regional processing centers would result in trip lengths substantially below applicable City of Oxnard average VMT thresholds. Additionally, cumulative projects identified in the District's 2020 Strategic Plan were previously evaluated and determined not to result in measurable VMT increases. Construction-related traffic would be temporary, limited in duration, and would not constitute an operational VMT impact pursuant to CEQA Guidelines Section 15064.3(b). Therefore, the proposed project would not result in a significant VMT impact, either individually or cumulatively, and no mitigation measures are required.

Enclosed:

Figure 1 – Regional Location Map
Figure 2 – Project Vicinity Map
Figure 3 – Project Site Plan
Figure 4 – Ventura County HQTA Map
Figure 5 – Vehicle Processing Centers



Not to Scale

Regional Location Map

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Figure 1



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Legend

- Project Site
- Port of Hueneme Property

Not to Scale

Project Vicinity Map

Figure 2

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June 2026

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Source: WATRY DESIGN, INC. 06/15/2026

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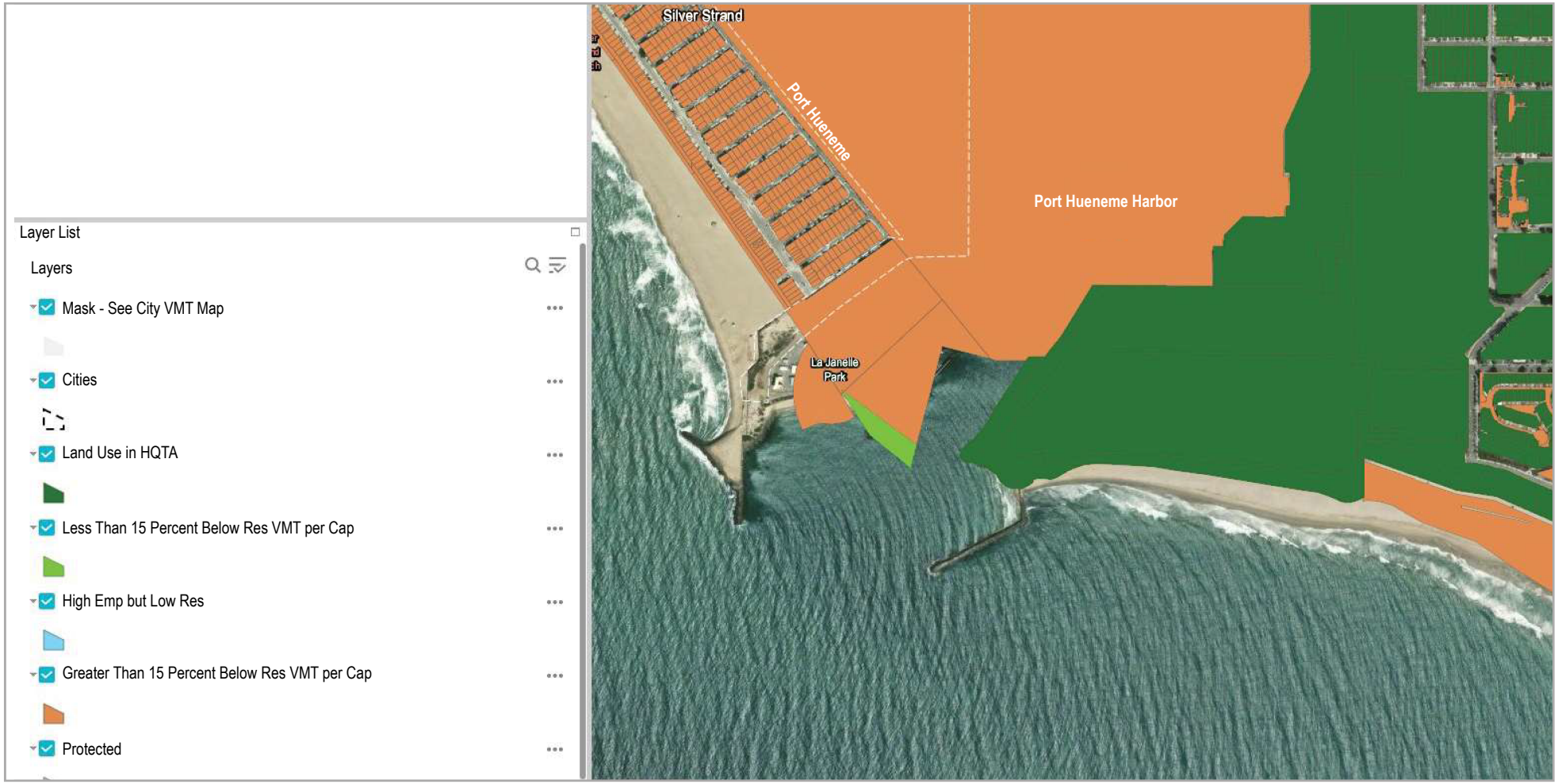
Project Site Plan

Figure 3

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Source: Ventura County VMT Adaptive Mitigation Program Interactive Map

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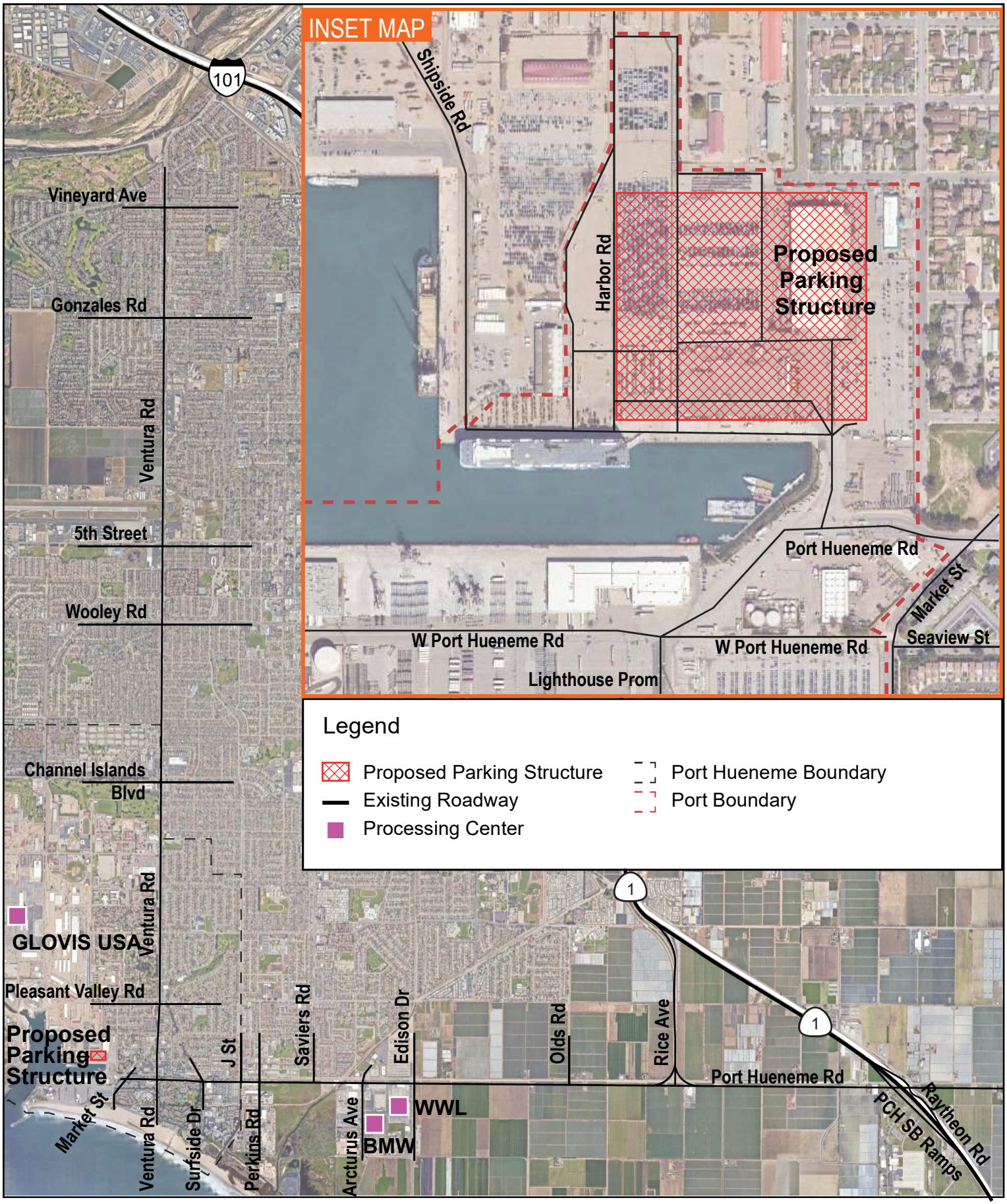
Ventura County High Quality Transit Area Map

Figure 4

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April 2026

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Vehicle Processing Centers

April 2026
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Figure 5