CITY OF VISALIA
315 E. ACEQUIA STREET
VISALIA, CA 93291

ENVIRONMENTAL DOCUMENT NO. 2024-26

NOTICE OF A PROPOSED INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION

Project Title: Conditional Use Permit No. 2024-17

Project Description:

Conditional Use Permit No. 2024-17 is request by Derek Finnegan / Lars Anderson & Associates to amend Conditional Use Permit No. 2019-31, for the establishment of a 172,000 square foot big box retail membership club store, with a service station containing 14 fueling stations, a 9,000 square foot canopy, and 200 square foot fueling station building, and a 7,500 square foot carwash, all within the Commons at Visalia Parkway Shopping Center, located in the C-R (Regional Commercial) Zone.

The development of the project will include on and off-site improvements such as relocation of an access drive, curb/gutter/sidewalk, development of parking lots and lighting, landscaping, additions to noise restricting block walls, underground storage tanks, and installation of utilities.

Project Location: The project site is located on the southwest corner of S. Mooney Blvd. and W. Visalia Parkway (APNs: 121-620-004, 005, 006, 007, 008, 013, 014).

Contact Person: Cristobal Carrillo, Associate Planner. Phone: (559) 713-4443. Email: cristobal.carrillo@visalia.city

Time and Place of Public Hearing: A public hearing will be held before the Planning Commission on September 23, 2024, at 7:00 p.m. in the City Hall Council Chambers located at 707 West Acequia Avenue, Visalia, California.

Pursuant to City Ordinance No. 2388, the Environmental Coordinator of the City of Visalia has reviewed the proposed project described herein and has found that the project will not result in any significant effect upon the environment because of the reasons listed below:

Reasons for Mitigated Negative Declaration: Initial Study No. 2024-26 has identified environmental impact(s) that may occur because of the project; however, with the implementation of mitigation measures identified, impact(s) will be reduced to a level that is less than significant. Copies of the initial study and other documents relating to the subject project may be examined by interested parties at the Planning Division in City Hall East, at 315 East Acequia Avenue, Visalia, CA, and on the City website at https://www.visalia.city/depts/community_development/planning/cega_environmental_review.asp

Comments on this proposed Mitigated Negative Declaration will be accepted from August 22, 2024, to September 20, 2024.

Date: 8/21/2024 Signed: _____

Brandon Smith, AICP
Environmental Coordinator

MITIGATED NEGATIVE DECLARATION

Project Title: Conditional Use Permit No. 2024-17

Project Description: Conditional Use Permit No. 2024-17 is request by Derek Finnegan / Lars Anderson & Associates to amend Conditional Use Permit No. 2019-31, for the establishment of a 172,000 square foot big box retail membership club store, with a service station containing 14 fueling stations, a 9,000 square foot canopy, and 200 square foot fueling station building, and a 7,500 square foot carwash, all within the Commons at Visalia Parkway Shopping Center, located in the C-R (Regional Commercial) Zone.

The development of the project will include on and off-site improvements such as relocation of an access drive, curb/gutter/sidewalk, development of parking lots and lighting, landscaping, additions to noise restricting block walls, underground storage tanks, and installation of utilities.

Project Location: The project site is located on the southwest corner of S. Mooney Blvd. and W. Visalia Parkway (APNs: 121-620-004, 005, 006, 007, 008, 013, 014).

Project Facts: Refer to Initial Study for project facts, plans and policies, and discussion of environmental effects.

Attachments:

Initial Study	(X)
Environmental Checklist	(X)
Location Map	(X)
Mitigation Measures	(X)
Traffic Memo	(X)
Noise Study	(X)
Health Risk Assessment	(X)
Cultural Memo	(X)

DECLARATION OF NO SIGNIFICANT EFFECT:

This project will not have a significant effect on the environment for the following reasons:

(a) The project does not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.

(b) The project does not have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.

(c) The project does not have environmental effects which are individually limited but cumulatively considerable. Cumulatively considerable means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

(d) The environmental effects of the project will not cause substantial adverse effects on human beings, either directly or indirectly.

This Mitigated Negative Declaration has been prepared by the City of Visalia Planning Division in accordance with the California Environmental Quality Act of 1970, as amended. A copy may be obtained from the City of Visalia Planning Division Staff during normal business hours.

APPROVED
Brandon Smith, AICP
Environmental Coordinator

By: 

Date Approved: August 21, 2024

Review Period: 30 days

INITIAL STUDY

I. GENERAL

A. Project Name and Description:

Conditional Use Permit No. 2024-17 is request by Derek Finnegan / Lars Anderson & Associates to amend Conditional Use Permit No. 2019-31, which established a master planned commercial development on 17.43 acres of a 28.7 acre site, consisting of approximately 138,188 sq. ft. of commercial uses., including the establishment of four retail buildings of varying sizes (56,800 sq. ft., 29,800 sq. ft. and two 10,000 sq. ft. buildings), a 4,088 sq. ft. gas station/convenience store with six fueling stations and a 3,060 sq. ft. canopy, a 7,500 sq. ft. sit-down restaurant, two 3,000 sq. ft. drive-thru restaurants, and a 5,000 sq. ft. automotive repair store, on parcels with less than the minimum five acre site area requirement, including a parcel with no public street frontage. This development was collectively known as the Commons at Visalia Parkway Shopping Center.

The amendment to the Conditional Use Permit proposes consolidation of the retail and office uses, removal of the convenience store, and relocation of the service station, to accommodate the ultimate establishment of a 172,000 square foot big box retail membership club store, with an expanded service station containing 14 fueling stations, a 9,000 square foot canopy, and 200 square foot fueling station building, and addition of a 7,500 square foot carwash to the commercial development. The development will be located in the C-R (Regional Commercial) Zone.

The development of the project will include on and off-site improvements such as relocation of an access drive, curb/gutter/sidewalk, development of parking lots and lighting, landscaping, additions to noise restricting block walls, underground storage tanks, and installation of utilities.

The project site is located on the southwest corner of S. Mooney Blvd. and W. Visalia Parkway (APNs: 121-620-004, 005, 006, 007, 008, 013, 014).

B. Identification of the Environmental Setting:

The project area is composed of five parcels totaling 22.2 acres located within the Commons at Visalia Parkway shopping center. The parcels are primarily vacant, with portions developed with a parking field and drive-aisles, and curb/gutter/sidewalk. The remainder of the shopping center has been developed with a sit-down restaurant, two drive-thru restaurants, and a tire shop, with accompanying parking, lighting, landscaping, and on/off-site infrastructure. The project site is directly bounded to the north by West Visalia Parkway, a four-lane minor arterial street, and by South Mooney Boulevard to the east, a six-lane highway designated as State Route 63. Development surrounding the project site consists of a shopping center to the north, a senior mobile home park to the west, a continuation of the senior mobile home park and mixed commercial uses to the south, and a second shopping center to the east, currently under development.

The surrounding uses, Zoning, and General Plan are as follows:

	General Plan (2014 Land Use)	**Zoning (2017)**	**Existing uses**
North:	Commercial Regional	C-R (Regional Commercial)	Packwood Creek Shopping Center.
South:	Commercial Regional, Residential Low Density	C-R (Regional Commercial), R-1-5 (Single Family Residential, 5,000 sq. ft. minimum site area)	Westlake Village senior mobile home park, mixed office and commercial buildings.
East:	Commercial Regional	C-R (Regional Commercial)	Oaks Marketplace Shopping Center, vacant commercial land.
West:	Residential Low Density	R-1-5 (Single Family Residential, 5,000 sq. ft. minimum site area)	Westlake Village senior mobile home park.

Fire and police protection services, street maintenance of public streets, refuse collection, and wastewater treatment will be provided by the City of Visalia upon the development of the area.

C. Plans and Policies:

The General Plan Land Use Diagram, adopted October 14, 2014, designates the site as Commercial Regional and the Zoning Map, adopted in 2017, designates the site as C-R (Regional Commercial). The proposed development is consistent with the Land Use Element of the General Plan, and consistent with the standards for commercial zones development pursuant to the Visalia Municipal Code Title 17 (Zoning Ordinance) Chapter 17.18.

The project is proposed on the site of the Commons at Visalia Parkway Shopping Center, which was approved on April 13, 2020, via Conditional Use Permit No. 2019-31 and Tentative Parcel Map No. 2019-13. The Conditional Use Permit and Tentative Parcel Map together permitted the establishment of a master planned commercial development on a 28.7-acre parcel split into 11 lots, consisting of approximately 138,188 sq. ft. of commercial uses, including the establishment of three retail buildings of varying sizes (56,800 sq. ft., 29,800 sq. ft., and 10,000 sq. ft.), a 10,000 sq. ft. credit union building, a 4,088 sq. ft. gas station/convenience store with a 3,060 sq. ft. canopy, a 7,500 sq. ft. sit-down restaurant, two 3,000 sq. ft. drive-thru restaurants, and a 5,000 sq. ft. automotive repair store, on parcels with less than the minimum five acre site area requirement, including a parcel with no public street frontage, in the C-R (Regional Commercial) Zone. Mitigation measures related to traffic and noise were adopted with the approval of the Conditional Use Permit and Tentative Parcel Map and were implemented during development of the shopping center.

II. ENVIRONMENTAL IMPACTS

No significant adverse environmental impacts have been identified for this project that cannot be mitigated to a *less than significant impact*. The City of Visalia Land Use Element and Zoning Ordinance contain policies and regulations that are designed to mitigate impacts to a level of non-significance.

III. MITIGATION MEASURES

The following mitigation measures, which are listed below under IV. Mitigation Monitoring Program, will reduce potential environmental impacts related to noise impacts to a less than significant level as described below:

Noise – An Acoustical Analysis was prepared for the proposed project [ref.: as follows: Environmental Noise & Vibration Assessment: SWC W. Visalia Parkway & S. Mooney Boulevard Development. Bollard Acoustical Consultants, Inc., July 15, 2024].

The Acoustical Analysis concluded that an exterior noise level in excess of the 65 dB DNL standard for noise-sensitive land uses, specified in the City's Noise Element, exists on the project site. To ensure that community noise standards are met for the development, the project developers have proposed an increase in height of an existing block wall located on the west side of the main project site to an overall height of eight feet, limited hours of operation to loading dock and truck delivery activities, and construction related compliance with Visalia Municipal Code Noise Ordinance measures and best practices to reduce impacts. The recommendations will allow for development of the proposal in accordance with the standards contained in the City's Noise Element and Ordinance.

Therefore, to ensure that community noise standards are met for the proposed project, the project site shall be developed in substantial compliance with the mitigation contained in pages 25, 28, 29, 43, 44, and 53 of the Acoustical Analysis. As described in the analyses, the project shall contain the following features:

1) All project loading dock activities shall be limited to daytime hours only (7:00 a.m. to 10:00 p.m.).

2) The height of the existing 7-foot-tall masonry wall along the western project property boundary shall be increased to a minimum height of 8-feet. The location of the required 8-foot-tall masonry wall is illustrated in Figure 4 of the Acoustical Analysis. It should be noted that Section 17.36.050 of the Visalia Municipal Code limits the height of commercial walls to 7-feet in height when located in a rear yard, such as the existing 7-foot-tall wall adjacent to the project site. As a result, the project applicant would be required to file for an Administrative Adjustment to permit the additional 1-foot of wall height required for compliance. As an alternative, an 8-foot-tall masonry wall may be constructed adjacent to the existing 7-foot-tall wall (i.e., off the property line).
3) All on-site delivery truck circulation shall be limited to daytime hours only (7:00 a.m. to 10:00 p.m.).
4) To the maximum extent practical, the following measures should be incorporated into the project construction operations:
    - All on-site noise-generating construction activities should occur pursuant to Visalia Municipal Code Section 8.36.050.
    - All noise-producing project equipment and vehicles using internal-combustion engines shall be equipped with manufacturers-recommended mufflers and be maintained in good working condition.
    - All mobile or fixed noise-producing equipment used on the project site that are regulated for noise output by a federal, state, or local agency shall comply with such regulations while in the course of project activity.
    - Electrically powered equipment shall be used instead of pneumatic or internal combustion-powered equipment, where feasible.
    - Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive uses.
    - Project area and site access road speed limits shall be established and enforced during the construction period.
    - Nearby residences shall be notified of construction schedules so that arrangements can be made, if desired, to limit their exposure to short-term increases in ambient noise levels.

Staff has incorporated the above recommendations as required mitigation measures. Therefore, to ensure that noise requirements are met for the proposed project, the project shall be developed and shall operate in substantial compliance with the Mitigation Measures 1.1 through 1.4. These mitigation measures are included in Section IV below as part of this Initial Study.

The City of Visalia Zoning Ordinance also contains guidelines, criteria, and requirements for the mitigation of potential impacts related to light/glare, visibility screening, noise, and traffic/parking to eliminate and/or reduce potential impacts to a level of non-significance.

IV. MITIGATION MONITORING PROGRAM

Mitigation Measure	Responsible Party	Timeline
Noise Impact Mitigation Measure 1.1: All project loading dock activities shall be limited to daytime hours only (7:00 a.m. to 10:00 p.m.).	Project Applicant	Mitigation shall be enforced by the City of Visalia and carried out by the project applicant during operation.

Noise Impact Mitigation Measure 1.2: The height of the existing 7-foot-tall masonry wall along the western project property boundary shall be increased to a minimum height of 8-feet. The location of the required 8-foot-tall masonry wall is illustrated in Figure 4. It should be noted that Section 17.36.050 of the Visalia Municipal Code limits the height of commercial walls to 7-feet-in-height when located in a rear yard, such as the existing 7-foot-tall wall adjacent to the project site. As a result, the project applicant would be required to file for an Administrative Adjustment to permit the additional 1-foot of wall required for compliance. As an alternative, an 8-foot-tall masonry wall may be constructed adjacent to the existing 7-foot-tall wall (i.e., off the property line).	Project Applicant	The sound walls shall be constructed with development of the project and shall be completed prior to the occupation of any buildings on the project site.
Noise Impact Mitigation Measure 1.3: All on-site delivery truck circulation shall be limited to daytime hours only (7:00 a.m. to 10:00 p.m.).	Project Applicant	Mitigation shall be enforced by the City of Visalia and carried out by the project applicant during operation.
Noise Impact Mitigation Measure 1.4: To the maximum extent practical, the following measures should be incorporated into the project construction operations: • All on-site noise-generating construction activities should occur pursuant to Visalia Municipal Code Section 8.36.050. • All noise-producing project equipment and vehicles using internal-combustion engines shall be equipped with manufacturers-recommended mufflers and be maintained in good working condition. • All mobile or fixed noise-producing equipment used on the project site that are regulated for noise output by a federal, state, or local agency shall comply with such regulations while in the course of project activity. • Electrically powered equipment shall be used instead of pneumatic or internal combustion-powered equipment, where feasible. • Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive uses. • Project area and site access road speed limits shall be established and enforced during the construction period. • Nearby residences shall be notified of construction schedules so that arrangements can be made, if desired, to limit their exposure to short-term increases in ambient noise levels.	Project Applicant	Mitigation shall be enforced by the City of Visalia and carried out by the project applicant during construction.

IV. PROJECT COMPATIBILITY WITH EXISTING ZONES AND PLANS

The project is compatible with the General Plan and Zoning Ordinance as the project relates to surrounding properties.

V. SUPPORTING DOCUMENTATION

The following documents are hereby incorporated into this Mitigated Negative Declaration and Initial Study by reference:

- Visalia General Plan Update. Dyett & Bhatia, October 2014.
- Visalia City Council Resolution No. 2014-38 (Certifying the Visalia General Plan Update) passed and adopted October 14, 2014.
- Visalia General Plan Update Final Environmental Impact Report (SCH No. 2010041078). Dyett & Bhatia, June 2014.
- Visalia General Plan Update Draft Environmental Impact Report (SCH No. 2010041078). Dyett & Bhatia, March 2014.
- Visalia City Council Resolution No. 2014-37 (Certifying the EIR for the Visalia General Plan Update) passed and adopted October 14, 2014.
- Visalia Municipal Code, including Title 17 (Zoning Ordinance).
- California Environmental Quality Act Guidelines.
- City of Visalia, California, Climate Action Plan, Draft Final. Strategic Energy Innovations, December 2013.
- Visalia City Council Resolution No. 2014-36 (Certifying the Visalia Climate Action Plan) passed and adopted October 14, 2014.
- City of Visalia Storm Water Master Plan. Boyle Engineering Corporation, September 1994.
- City of Visalia Sewer System Master Plan. City of Visalia, 1994.
- City of Visalia Zoning Ordinance Update. City of Visalia, March 2017.
- Conditional Use Permit No. 2019-31. April 13, 2020.
- Tentative Parcel Map No. 2019-13. April 13, 2020.
- Mitigated Negative Declaration No. 2019-62. April 13, 2020.
- CarMax Development: Noise Study Report, September 2019. VRPA Technologies, Inc., November 19, 2019.
- Environmental Noise & Vibration Assessment: Visalia Parkway & S. Mooney Boulevard Retail Development. Bollard Acoustical Consultants, Inc., January 15, 2020.
- Traffic Impact Analysis: Proposed Commons at Visalia Parkway Shopping Center. Peters Engineering Group, January 10, 2020.
- Environmental Noise & Vibration Assessment: SWC W. Visalia Parkway & S. Mooney Boulevard Development. Bollard Acoustical Consultants, Inc., July 15, 2024.
- Sam's Club Gas Station Health Risk Assessment / City of Visalia. JK Consulting Group, LLC, March 14, 2024.
- Archaeological Letter Report In Consideration of the SWC Visalia Parkway and Mooney Blvd. Development Project. Culturescape, August 2024.
- Technical Memorandum: Trip Generation Comparison, Visalia Commons Shopping Center, Visalia California. Peters Engineering Group, August 19, 2024.

VI. NAME OF PERSON WHO PREPARED INITIAL STUDY

Cristobal Carrillo
Associate Planner

Brandon Smith, AICP
Environmental Coordinator

INITIAL STUDY
ENVIRONMENTAL CHECKLIST

Name of Proposal	Conditional Use Permit No. 2024-17		
NAME OF PROPONENT**:**	Derek Finnegan, Lars Anderson & Associates, Inc.	NAME OF AGENT**:**	Derek Finnegan, Lars Anderson & Associates, Inc.
Address of Proponent:	4694 W. Jacquelyn Avenue Fresno, CA 93722	Address of Agent:	4694 W. Jacquelyn Avenue Fresno, CA 93722
Telephone Number:	(559) 276-2790	Telephone Number:	(559) 276-2790
Date of Review	August 22, 2024	Lead Agency:	City of Visalia

The following checklist is used to determine if the proposed project could potentially have a significant effect on the environment. Explanations and information regarding each question follow the checklist.

1 = No Impact 2 = Less Than Significant Impact
3 = Less Than Significant Impact with Mitigation Incorporated 4 = Potentially Significant Impact

I. AESTHETICS

Except as provided in Public Resources Code Section 21099, would the project:

2 a) Have a substantial adverse effect on a scenic vista?

1 b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

2 c) Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

2 d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

II. AGRICULTURAL RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

1 a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency to non-agricultural use?

1 b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

1 c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

1 d) Result in the loss of forest land or conversion of forest land to non-forest use?

1 e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to nonagricultural use?

III. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

2 a) Conflict with or obstruct implementation of the applicable air quality plan?

2 b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under applicable federal or state ambient air quality standard?

2 c) Expose sensitive receptors to substantial pollutant concentrations?

1 d) Result in other emissions, such as those leading to odors adversely affecting a substantial number of people?

IV. BIOLOGICAL RESOURCES

Would the project:

2 a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

1 b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

1 c) Have a substantial adverse effect on federally protected wetlands (including but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

2 d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

1 e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

1 f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

V. CULTURAL RESOURCES

Would the project:

1 a) Cause a substantial adverse change in the significance of a historical resource pursuant to Public Resources Code Section 15064.5?

1 b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Public Resources Code Section 15064.5?

1 c) Disturb any human remains, including those interred outside of formal cemeteries?

VI. ENERGY

Would the project:

2 a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

2 b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

VII. GEOLOGY AND SOILS

Would the project:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

1 i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

1 ii) Strong seismic ground shaking?

1 iii) Seismic-related ground failure, including liquefaction?

1 iv) Landslides?

1 b) Result in substantial soil erosion or loss of topsoil?

1 c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

1 d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

1 e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

1 f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

VIII. GREENHOUSE GAS EMISSIONS

Would the project:

2 a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

2 b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

IX. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

1 a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

1 b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

1 c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

1 d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

1 e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

1 f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

1 g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

X. HYDROLOGY AND WATER QUALITY

Would the project:

2 a) Violate any water quality standards of waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

2 b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

2 c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

2 i) result in substantial erosion or siltation on- or off-site;

2 ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; or

2 iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

2 d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

2 e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

XI. LAND USE AND PLANNING

Would the project:

1 a) Physically divide an established community?

1 b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

XII. MINERAL RESOURCES

Would the project:

1 a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

1 b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

XIII. NOISE

Would the project result in:

3 a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

1 b) Generation of excessive groundborne vibration or groundborne noise levels?

1 c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

XIV. POPULATION AND HOUSING

Would the project:

1 a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

1 b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

XV. PUBLIC SERVICES

Would the project:

1 a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

1 i) Fire protection?

1 ii) Police protection?

1 iii) Schools?

1 iv) Parks?

1 v) Other public facilities?

XVI. RECREATION

Would the project:

1 a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

1 b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

XVII. TRANSPORTATION / TRAFFIC

Would the project:

1 a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

2 b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

1 c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

1 d) Result in inadequate emergency access?

XVIII. TRIBAL CULTURAL RESOURCES

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

1 a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

1 b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

XIX. UTILITIES AND SERVICE SYSTEMS

Would the project:

2 a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

2 b) Have sufficient water supplies available to service the project and reasonable foreseeable future development during normal, dry, and multiple dry years?

1 c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

1 d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

1 e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

XX. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

1 a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

1 b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

1 c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

1 d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:

2 a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

2 b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

2 c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Note: Authority cited: Sections 21083 and 21083.05, Public Resources Code. Reference: Section 65088.4, Gov. Code; Sections 21080(c), 21080.1, 21080.3, 21083, 21083.05, 21083.3, 21093, 21094, 21095, and 21151, Public Resources Code; *Sundstrom v. County of Mendocino,*(1988) 202 Cal.App.3d 296; *Leonoff v. Monterey Board of Supervisors,* (1990) 222 Cal.App.3d 1337; *Eureka Citizens for Responsible Govt. v. City of Eureka* (2007) 147 Cal.App.4th 357; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th at 1109; *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656.

Revised 2019

Authority: Public Resources Code sections 21083 and 21083.09

Reference: Public Resources Code sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3/ 21084.2 and 21084.3

DISCUSSION OF ENVIRONMENTAL EVALUATION

I. AESTHETICS

a. The proposed project is new commercial construction which will meet City standards for setbacks, landscaping and height restrictions. This project will not adversely affect the view of any scenic vistas. The Sierra Nevada mountain range may be considered a scenic vista, but views of the range will not be adversely impacted or significantly altered by the project.

Retail uses that include gas stations and carwash uses are considered compatible in commercial areas where potential impacts can be addressed through the Conditional Use Permit process. The project site is located along Mooney Boulevard and Visalia Parkway, which are designated arterial roadways. The City's General Plan Land Use Map designates the site as Commercial Regional. Staff believes that the proposed use is consistent in nature and character with existing and future uses surrounding the project site, subject to the inclusion of mitigation measures and the conditions of project approval for this project.

The Visalia General Plan contains multiple policies that together work to reduce the potential for impacts to the development of land as designated by the General Plan. With implementation of these policies and the existing City standards, impacts to land use development consistent with the General Plan will be less than significant.

b. There are no scenic resources on the site.

c. The proposed project is for a commercial development that will be aesthetically consistent with surrounding development and with General Plan policies. Furthermore, the city has development standards related to landscaping and other amenities that will ensure that the visual character of the area is enhanced and not degraded. Thus, the project would not substantially degrade the existing visual character of the site and its surroundings.

d. The project will create new sources of light that are typical of commercial development. The City has development standards that require that light be directed and/or shielded so it does not fall upon adjacent properties.

Conceptual photometric plans and lighting specs for the use have been prepared and provided by the project proponent, demonstrating the lighting fixtures installed throughout and directed toward the interior of the site. The on-site lighting for the use is directed and focused to avoid direct illumination spilling beyond the site boundaries into the adjacent residential uses, as required under Section 17.30.015.H of the Zoning Ordinance. Compliance with the City's Zoning Ordinance standards will be verified upon installation and prior to operation of the use. Therefore, impacts to lighting will be less than significant.

II. AGRICULTURAL RESOURCES

a. The project is not located on property that is identified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.

b. The project is not located on property that is party to a Williamson Act contract. Existing City zoning for the area is C-R (Regional Commercial). As such zoning for agricultural use will not be affected.

c. There is no forest land or timberland currently located on the site, nor does the site conflict with a zoning for forest land, timberland, or timberland zoned timberland production.

d. There is no forest or timberland currently located on the site.

e. The project will not involve any changes that would promote or result in the conversion of farmland to non-agriculture use. The subject property is currently designated for an urban rather than agricultural land use. Properties that are vacant may develop in a way that is consistent with their zoning and land use designated at any time. The adopted Visalia General Plan's implementation of a three-tier growth boundary system further assists in protecting open space around the City fringe to ensure that premature conversion of farmland to non-agricultural uses does not occur.

III. AIR QUALITY

a. The project site is located in an area that is under the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). The project does not disrupt implementation of the San Joaquin Regional Air Quality Management Plan and will therefore be a less than significant impact.

b. Development under the Visalia General Plan will result in emissions that will exceed thresholds established by the SJVAPCD for PM10 and PM2.5. The project will contribute to a net increase of criteria pollutants and will therefore contribute to exceeding the thresholds. Also, the project could result in short-term air quality impacts related to dust generation and exhaust due to construction and grading activities. This site was evaluated in the Visalia General Plan Update EIR for conversion into urban development. Development under the General Plan will result in increases of construction and operation-related criteria pollutant impacts, which are considered significant and unavoidable. General Plan policies identified under Impacts 3.3-1 and 3.3-2 serve as the mitigation which assists in reducing the severity of the impact to the extent possible while still achieving the General Plan's goals of accommodating a certain amount of growth to occur within the Planning Area.

The project is required to adhere to requirements administered by the SJVAPCD to reduce emissions to a level of compliance consistent with the District's grading regulations. Compliance with the SJVAPCD's rules and regulations will reduce potential impacts associated with air quality standard violations to a less than significant level.

In addition, development of the project will be subject to the SJVAPCD Indirect Source Review (Rule 9510) procedures that became effective on March 1, 2006. The Applicant will

be required to obtain permits demonstrating compliance with Rule 9510, or payment of mitigation fees to the SJVAPCD.

c. Tulare County is designated non-attainment for certain federal ozone and state ozone levels. The project will result in a net increase of criteria pollutants. This site was evaluated in the Visalia General Plan Update EIR for conversion into urban development. Development under the General Plan will result in increases of construction and operation-related criteria pollutant impacts, which are considered significant and unavoidable. General Plan policies identified under Impacts 3.3-1, 3.3-2, and 3.3-3 serve as the mitigation which assists in reducing the severity of the impact to the extent possible while still achieving the General Plan's goals of accommodating a certain amount of growth to occur within the Planning Area.

The project is required to adhere to requirements administered by the SJVAPCD to reduce emissions to a level of compliance consistent with the District's grading regulations. Compliance with the SJVAPCD's rules and regulations will reduce potential impacts associated with air quality standard violations to a less than significant level.

In addition, development of the project will be subject to the SJVAPCD Indirect Source Review (Rule 9510) procedures that became effective on March 1, 2006. The Applicant will be required to obtain permits demonstrating compliance with Rule 9510, or payment of mitigation fees to the SJVAPCD.

Residences located to the west and south of the proposed project are considered sensitive receptors susceptible to air quality impacts from the proposed use. As a result, a Health Risk Assessment (HRA) was submitted. Specifically, the HRA analyzed potential impacts from carcinogenic, chronic, and acute toxic air contaminants (TAC) produced by the proposed 'Gasoline Dispensing Facility' on nearby sensitive receptors. The HRA identifies residences located within 92 feet of the underground gasoline storage tanks as the nearest sensitive receptors. The HRA notes that a 50-foot separation is recommended for typical gas dispensing facilities and that siting 'new' sensitive land uses within 300 feet of a large gas station (facility with a throughput of 3.6 million gallons per year or greater) should be avoided. The HRA notes that while the Project is anticipated to sell 7.5 million gallons of gasoline and 1.2 million gallons of diesel fuel annually, the recommendation related to 300 feet is related to siting new sensitive receptors adjacent to exiting gasoline dispensing facilities. The fuel dispensing area is located approximately 200 feet from the nearest sensitive receptor (residence).

The HRA analyzed VOC emissions, diesel emissions from truck traffic and idling, and emission rates provided in the California Air Resources Board and California Air Pollution Control Officers Association's Gasoline Service Station Industrywide Risk Assessment Technical Guide (February 18, 2022), to estimate Project emissions associated with the operation of the gasoline service station.

Lastly, the HRA employed the SJVAPCD Prioritization Calculator to determine the "Total Max Score" of Project specific toxic emissions as discussed above. Projects with a Prioritization score of 10 or higher require a Health Risk Assessment with dispersion modeling. Toxic emissions associated with the Project were used as inputs to the Prioritization Calculator which generated the prioritization score for the Project. Results indicate that toxic emissions associated with the Project will generate a max score of 8.62 for sensitive receptors within 328 feet of the Project. Project emissions associated with the Project will not trigger dispersion modeling since the Total Max Score is less than 10. As a result, dispersion modeling was not required for the Project considering the SJVAPCD's methodology/threshold. TAC emissions generated during Project operations would not expose sensitive receptors to substantial pollutant concentrations. Therefore, mitigation is not warranted since there is a less than significant impact from Project operational emissions.

d. The proposed project will not involve the generation of objectionable odors that would affect a substantial number of people.

IV. BIOLOGICAL RESOURCES

a. The site has no known species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. The project site is part of the Commons at Visalia Parkway Shopping Center and has been largely developed with urban uses. The project would therefore not have a substantial adverse effect on a sensitive, candidate, or special species.

Citywide biological resources were evaluated in the Visalia General Plan Update Environmental Impact Report (EIR). The EIR concluded that certain special-status species or their habitats may be directly or indirectly affected by future development within the General Plan Planning Area. This may be through the removal of or disturbance to habitat. Such effects would be considered significant. However, the General Plan contains multiple policies, identified under Impact 3.8-1 of the EIR, that together work to reduce the potential for impacts on special-status species likely to occur in the Planning Area. With implementation of these polies, impacts on special-status species will be less than significant.

b. The project is not located within an identified sensitive riparian habitat or other natural community. Packwood Creek is located approximately 1,300 feet west of the project site and will not be affected by the proposed development.

City-wide biological resources were evaluated in the Visalia General Plan Update Environmental Impact Report (EIR). The EIR concluded that certain sensitive natural communities may be directly or indirectly affected by future development within the General Plan Planning Area, particularly valley oak woodlands and valley oak riparian woodlands. Such effects would be considered significant. However, the General Plan contains multiple policies, identified under Impact 3.8-2 of the EIR, that together work to reduce the potential for impacts on woodlands located within in the Planning Area. With implementation of these policies and being that the project is not located within or adjacent to an identified sensitive riparian habitat or other natural community, including woodlands, impacts on woodlands will be less than significant.

c. The project is not located within or adjacent to federally protected wetlands as defined by Section 404 of the Clean Water Act.

City-wide biological resources were evaluated in the Visalia General Plan Update Environmental Impact Report (EIR). The EIR concluded that certain protected wetlands and other waters may be directly or indirectly affected by future development within the General Plan Planning Area. Such effects would be considered significant. However, the General Plan contains multiple policies, identified under Impact 3.8-3 of the EIR, that together work to reduce the potential for impacts on wetlands and other waters located within in the Planning Area. With implementation of these policies, impacts on wetlands will be less than significant.

d. Citywide biological resources were evaluated in the Visalia General Plan Update Environmental Impact Report (EIR). The EIR concluded that the movement of wildlife species may be directly or indirectly affected by future development within the General Plan Planning Area. Such effects would be considered significant. However, the General Plan contains multiple policies, identified under Impact 3.8-4 of the EIR, that together work to reduce the potential for impacts on wildlife movement corridors located within in the Planning Area. With implementation of these policies, impacts on wildlife movement corridors will be less than significant.

e. The project will not conflict with any local policies or ordinances protecting biological resources. The City of Visalia has a municipal ordinance in place to protect valley oak trees; however, no oak trees exist on the site.

f. There are no local or regional habitat conservation plans for the area.

V. CULTURAL RESOURCES

a. Per the "Archaeological Letter Report In Consideration of the SWC Visalia Parkway and Mooney Blvd. Development Project" submitted by Culturescape in August 2024, there are no known historical resources located within the project area. If some potentially historical or cultural resource is unearthed during development all work should cease until a qualified professional archaeologist can evaluate the finding and make necessary mitigation recommendations.

b. There are no known archaeological resources located within the project area. If some archaeological resource is unearthed during development all work will cease until a qualified professional archaeologist can evaluate the finding and make necessary mitigation recommendations.

c. There are no known human remains buried in the project vicinity. If human remains are unearthed during development all work should cease until the proper authorities are notified and a qualified professional archaeologist can evaluate the finding and make any necessary mitigation recommendations. In the event that potentially significant cultural resources are discovered during ground disturbing activities associated with project preparation, construction, or completion, work shall halt in that area until a qualified Native American Tribal observer, archeologist, or paleontologist can assess the significance of the find, and, if necessary, develop appropriate treatment measures in consultation with Tulare County Museum, Coroner, and other appropriate agencies and interested parties.

VI. ENERGY

a. Development of the site will require the use of energy supply and infrastructure. However, the use of energy will be typical of that associated with commercial development associated with the underlying zoning. Furthermore, the use is not considered the type of use or intensity that would result in wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation. The project will be required to comply with California Building Code Title 24 standards for energy efficiency.

Policies identified under Impacts 3.4-1 and 3.4-2 of the EIR will reduce any potential impacts to a less than significant level. With implementation of these policies and the existing City standards, impacts to energy will be less than significant.

b. The project will not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, based on the discussion in section VI.a above.

VII. GEOLOGY AND SOILS

a. The State Geologist has not issued an Alquist-Priolo Earthquake Fault Map for Tulare County. The project area is not located on or near any known earthquake fault lines. Therefore, the project will not expose people or structures to potential substantial adverse impacts involving earthquakes.

b. The development of this site will require movement of topsoil. Existing City Engineering Division standards require that a grading and drainage plan be submitted for review to the City to ensure that off- and on-site improvements will be designed to meet City standards.

c. The project area is relatively flat and the underlying soil is not known to be unstable. Soils in the Visalia area have few limitations with regard to development. Due to low clay content and limited topographic relief, soils in the Visalia area have low expansion characteristics.

d. Due to low clay content, soils in the Visalia area have an expansion index of 0-20, which is defined as very low potential expansion.

e. The project does not involve the use of septic tanks or alternative wastewater disposal systems since sanitary sewer lines are available for connection for the disposal of wastewater at this location.

f. There are no known unique paleontological resources or geologic features located within the project area. In the event that potentially significant cultural resources are discovered during ground disturbing activities associated with project preparation, construction, or completion, work shall halt in that area until a qualified Native American Tribal observer, archeologist, or paleontologist can assess the significance of the find, and, if necessary, develop appropriate treatment measures in consultation with Tulare County Museum, Coroner, and other appropriate agencies and interested parties.

VIII. GREENHOUSE GAS EMISSIONS

a. The project is expected to generate Greenhouse Gas (GHG) emissions in the short-term as a result of the construction of the project, and long-term as a result of day-to-day operation of the development.

The City has prepared and adopted a Climate Action Plan (CAP) which includes a baseline GHG emissions inventories, reduction measures, and reduction targets consistent with local and State goals. The CAP was

prepared concurrently with the proposed General Plan and its impacts are also evaluated in the Visalia General Plan Update EIR.

The Visalia General Plan and the CAP both include policies that aim to reduce the level of GHG emissions emitted in association with buildout conditions under the General Plan. Although emissions will be generated as a result of the projects, implementation of the General Plan and CAP policies will result in fewer emissions than would be associated with a continuation of baseline conditions. Thus, the impact to GHG emissions will be less than significant.

b. The State of California has enacted the Global Warming Solutions Act of 2006 (AB 32), which included provisions for reducing the GHG emission levels to 1990 "baseline" levels by 2020 and to a level 80% below 1990 baseline levels by 2050. In addition, the State has enacted SB 32 which included provisions for reducing the GHG emission levels to a level 40% below 1990 baseline levels by 2030.

The proposed project will not impede the State's ability to meet the GHG emission reduction targets under AB 32 and SB 32. Current and probable future state and local GHG reduction measures will continue to reduce the project's contribution to climate change. As a result, the project will not contribute significantly, either individually or cumulatively, to GHG emissions.

IX. HAZARDS AND HAZARDOUS MATERIALS

a. No hazardous materials are anticipated with the project.

b. Construction activities associated with development of the project may include maintenance of on-site construction equipment that could lead to minor fuel and oil spills. The use and handling of any hazardous materials during construction activities would occur in accordance with applicable federal, state, regional, and local laws. Therefore, impacts are considered to be less than significant.

c. There are no schools located within one-quarter mile from the project. There is no reasonably foreseeable condition or incident involving the project that could affect existing or proposed school sites within one-quarter mile of school sites.

d. The project area does not include any sites listed as hazardous materials sites pursuant to Government Code Section 65692.5.

e. The City's adopted Airport Master Plan shows the project area is located outside of all Airport Zones. There are no restrictions for the proposed project related to Airport Zone requirements.

The project area is not located within 2 miles of a public airport.

f. The project will not interfere with the implementation of any adopted emergency response plan or evacuation plan.

g. There are no wild lands within or near the project area.

X. HYDROLOGY AND WATER QUALITY

a. Development projects associated with buildout under the Visalia General Plan are subject to regulations that serve to ensure that such projects do not violate water quality standards of waste discharge requirements. These regulations include the Federal Clean Water Act (CWA), the National Pollutant Discharge Elimination System (NPDES) permit program. State regulations include the State Water Resources Control Board (SWRCB) and more specifically the Central Valley Regional Water Quality Control Board (RWQCB), of which the project site area falls within the jurisdiction of.

Adherence to these regulations results in projects incorporating measures that reduce pollutants. The project will be required to adhere to municipal wastewater requirements set by the Central Valley RWQCB and any permits issued by the agency.

Furthermore, there are no reasonably foreseeable reasons why the project would result in the degradation of water quality.

The Visalia General Plan contains multiple policies, identified under Impact 3.6-2 and 3.9-3 of the EIR, that together work to reduce the potential for impacts to water quality. With implementation of these policies and the existing City standards, impacts to water quality will be less than significant.

b. The project area overlies the southern portion of the San Joaquin unit of the Central Valley groundwater aquifer. The project will result in an increase of impervious surfaces on the project site, which might affect the amount of precipitation that is recharged to the aquifer. However, as the City of Visalia is already largely developed and covered by impervious surfaces, the increase of impervious surfaces through this project will be small by comparison. The project therefore might affect the amount of precipitation that is recharged to the aquifer. The City of Visalia's water conversation measures and explorations for surface water use over groundwater extraction will assist in offsetting the loss in groundwater recharge.

c.

i. The development of this site will require movement of topsoil. Existing City Engineering Division standards require that a grading and drainage plan be submitted for review to the City to ensure that off- and on-site improvements will be designed to meet City standards.

ii. Development of the site will create additional impervious surfaces. However, existing and planned improvements to storm water drainage facilities as required through the Visalia General Plan policies will reduce any potential impacts to a less than significant level.

Policies identified under Impact 3.6-2 of the EIR will reduce any potential impacts to a less than significant level. With implementation of these policies and the existing City standards, impacts to groundwater supplies will be less than significant.

iii. Development of the site will create additional impervious surfaces. However, existing and planned improvements to storm water drainage facilities as required through the Visalia General Plan policies will reduce any potential impacts to a less than significant level.

Policies identified under Impact 3.6-2 of the EIR will reduce any potential impacts to a less than significant level. With implementation of these policies and the

existing City standards, impacts to groundwater supplies will be less than significant.

Existing storm water mains are on site and the applicant will be connecting to service. Furthermore, the project will be required to meet the City's improvement standards for directing storm water runoff to the City's storm water drainage system consistent with the City's adopted City Storm Drain Master Plan. These improvements will not cause significant environmental impacts.

d. The project area is located sufficiently inland and distant from bodies of water, and outside potentially hazardous areas for seiches and tsunamis. The site is also relatively flat, which will contribute to the lack of impacts by mudflow occurrence.Therefore there will be no impact related to these hazards.

e. Development of the site has the potential to affect drainage patterns in the short term due to erosion and sedimentation during construction activities and in the long term through the expansion of impervious surfaces. Impaired storm water runoff may then be intercepted and directed to a storm drain or water body, unless allowed to stand in a detention area. The City's existing standards may require the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) in accordance with the SWRCB's General Construction Permit process, which would address erosion control measures.

The Visalia General Plan contains multiple policies, identified under Impact 3.6-1 of the EIR, that together work to reduce the potential for erosion. With implementation of these policies and the existing City standards, impacts to erosion will be less than significant.

XI. LAND USE AND PLANNING

a. The project will not physically divide an established community. The site is partially developed with a commercial shopping center and would not result in development that would split existing urban areas. The General Plan Land Use Diagram designates the project area as Regional Commercial. The Zoning Map designates the site as C-R (Regional Commercial), which is consistent with the General Plan Land Use Designation of Regional Commercial as identified in Table 9-1 "Consistency Between the Plan and Zoning" of the General Plan. Commercial centers that include retail shops, gas stations and carwashes are considered compatible uses in commercial areas where potential impacts can be addressed through the conditional use permit process. The site is located along Mooney Boulevard and Visalia Parkway, both designated arterial roadways.

The Visalia General Plan contains multiple policies, identified under Impact 3.1-2 of the EIR, that together work to reduce the potential for impacts to the development of land as designated by the General Plan. With implementation of these policies and the existing City standards, impacts to land use development consistent with the General Plan will be less than significant.

b. The project site is within the Urban Development Tier 1 Boundary. Development of commercial lands in Tier 1 may occur at any time. The proposed project is consistent with Land Use Policies LU-P-19 of the General Plan. Policy LU-P-19 states; "Ensure that growth occurs in a compact and concentric fashion by implementing the General Plan's phased growth strategy."

The project as a whole does not conflict with any land use plan, policy or regulation of the City of Visalia. The site's General Plan Land Use Designation of Regional Commercial and the Zoning Designation of C-R (Regional Commercial) are consistent with each other based on the underlying allowed land uses and density ranges as identified in Table 9-1 "*Consistency between the Plan and Zoning"* of the General Plan. The City of Visalia's Zoning Ordinance allows for commercial development as a permitted use, though the service station and carwash identified in the commercial development require a Conditional Use Permit.

Lastly, the proposed project will be consistent with the Land Use Element of the General Plan, including Policies LU-P-62, LU-P-65, and LU-P-69 for Regional Commercial Development, and consistent with the standards for commercial development pursuant to the Visalia Municipal Code Title 17 (Zoning Ordinance) Chapters 17.18 and 17.30.

XII. MINERAL RESOURCES

a. No mineral areas of regional or statewide importance exist within the Visalia area.

b. There are no mineral resource recovery sites delineated in the Visalia area.

XIII. NOISE

a. The project will result in noise generation typical of urban development. The Visalia Noise Element and City Ordinance contain criterion for acceptable noise levels inside and outside residential living spaces. This standard is 65 dB DNL for outdoor activity areas associated with residences and 45 dB DNL for indoor areas.

An acoustical analysis was prepared for the proposed project, addressing the proposed commercial, automated car wash use [Environmental Noise & Vibration Assessment: SWC W. Visalia Parkway & S. Mooney Boulevard Development. Bollard Acoustical Consultants, Inc., July 15, 2024]. The purpose of the study is to determine if noise levels associated with the project will comply with the City's applicable noise level standards, particularly upon the existing single-family residential mobile home park uses to the west and south. The acoustical analysis is intended to determine project-related noise levels for all aspects of the proposed project.

The Acoustical Analysis concluded that an exterior noise level in excess of the 65 dB DNL standard for noise-sensitive land uses, specified in the City's Noise Element, exists on the project site. To ensure that community noise standards are met for the development, the project developers have proposed an increase in height of an existing block wall located on the west side of the main project site to an overall height of eight feet, limited hours of operation to loading dock and truck delivery activities, and construction related compliance with Visalia Municipal Code Noise Ordinance measures and best practices to reduce impacts. The recommendations will allow for development of the proposal in accordance with the standards contained in the City's Noise Element and Ordinance.

Therefore, to ensure that community noise standards are met for the proposed project, the project site shall be developed in substantial compliance with the mitigation contained in pages 25, 28, 29, 43, 44, and 53 of the Acoustical Analysis. As described in the analyses, the project shall contain the following features:

1) All project loading dock activities shall be limited to daytime hours only (7:00 a.m. to 10:00 p.m.).

2) The height of the existing 7-foot-tall masonry wall along the western project property boundary shall be increased to a minimum height of 8-feet. The location of the required 8-foot-tall masonry wall is illustrated in Figure 4 of the Acoustical Analysis. It should be noted that Section 17.36.050 of the Visalia Municipal Code limits the height of commercial walls to 7-feet-in-height when located in a rear yard, such as the existing 7-foot-tall wall adjacent to the project site. As a result, the project applicant would be required to file for an Administrative Adjustment to permit the additional 1-foot of wall height required for compliance. As an alternative, an 8-foot-tall masonry wall may be constructed adjacent to the existing 7-foot-tall wall (i.e., off the property line).

3) All on-site delivery truck circulation shall be limited to daytime hours only (7:00 a.m. to 10:00 p.m.).

4) To the maximum extent practical, the following measures should be incorporated into the project construction operations:

- All on-site noise-generating construction activities should occur pursuant to Visalia Municipal Code Section 8.36.050.
- All noise-producing project equipment and vehicles using internal-combustion engines shall be equipped with manufacturers-recommended mufflers and be maintained in good working condition.
- All mobile or fixed noise-producing equipment used on the project site that are regulated for noise output by a federal, state, or local agency shall comply with such regulations while in the course of project activity.
- Electrically powered equipment shall be used instead of pneumatic or internal combustion-powered equipment, where feasible.
- Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive uses.
- Project area and site access road speed limits shall be established and enforced during the construction period.
- Nearby residences shall be notified of construction schedules so that arrangements can be made, if desired, to limit their exposure to short-term increases in ambient noise levels.

Staff has incorporated the above recommendations as required mitigation measures. Therefore, to ensure that noise requirements are met for the proposed project, the project shall be developed and shall operate in substantial compliance with the Mitigation Measures 1.1 through 1.4. These mitigation measures are included as part of this Initial Study.

Noise levels will increase temporarily during the construction of the project but shall remain within the limits defined by the City of Visalia Noise Ordinance. Temporary increase in ambient noise levels is less than significant.

b. Ground-borne vibration or ground-borne noise levels may occur as part of construction activities associated with the project. Construction activities will be temporary and will not expose persons to such vibration or noise levels for an extended period of time; thus, the impacts will be less than significant. There are no existing uses near the project area that create ground-borne vibration or ground-borne noise levels.

c. The project area is not within two miles of a public airport, and there is no private airstrip near the project area. The project will not expose people residing or working in the project area to excessive noise levels resulting from aircraft operations.

XIV. POPULATION AND HOUSING

a. The project will not directly induce substantial unplanned population growth that is in excess of that planned in the General Plan.

b. Development of the site will not displace any housing or people on the site. The area being developed is currently vacant land within a developed commercial shopping center.

XV. PUBLIC SERVICES

a.

i. Current fire protection facilities are located at the Visalia Station 52, located approximately one mile north of the property, and can adequately serve the site without a need for alteration. Impact fees will be paid to mitigate the project's proportionate impact on these facilities.

ii. Current police protection facilities can adequately serve the site without a need for alteration. Impact fees will be paid to mitigate the project's proportionate impact on these facilities.

iii. The project will not generate new students for which existing schools in the area may accommodate.

iv. Current park facilities can adequately serve the site without a need for alteration. Impact fees will be paid to mitigate the project's proportionate impact on these facilities.

v. Other public facilities can adequately serve the site without a need for alteration.

XVI. RECREATION

a. The proposed project does not include recreational facilities or require the construction or expansion of recreational facilities within the area that might have an adverse physical effect on the environment. Nor will the project increase the use of existing neighborhood and regional

parks as no residential uses are proposed.

b. The proposed project does not include recreational facilities or require the construction or expansion of recreational facilities within the area that might have an adverse physical effect on the environment.

XVII. TRANSPORTATION AND TRAFFIC

a. Development and operation of the project is not anticipated to conflict with applicable plans, ordinances, or policies establishing measures of effectiveness of the City's circulation system. The project will result in an increase in traffic levels on arterial and collector roadways, although the City of Visalia's Circulation Element has been prepared to address this increase in traffic.

b. Development of the site will result in increased traffic in the immediate area; but will not cause a substantial increase in traffic Citywide. This site was evaluated in the Visalia General Plan Update Environmental Impact Report (EIR) for Regional Commercial urban use.

A Traffic Memo [Technical Memorandum: Trip Generation Comparison, Visalia Commons Shopping Center, Visalia California. Peters Engineering Group, August 19, 2024] has been provided by the applicant, comparing potential trip generation from the project to that which was originally identified in the Traffic Impact Analysis Report (TIA) conducted for the overall shopping center development in which the project will be located (ref.: Traffic Impact Analysis: Proposed Commons at Visalia Parkway Shopping Center. Peters Engineering Group, January 10, 2020). Based on the analysis provided in the Traffic Memo, trips generated by the project will be less than identified in the original TIA. Improvements identified in the original TIA have been largely implemented, to including widening of W. Visalia Parkway and S. Mooney Boulevard to their ultimate widths, and improvement of the Visalia Parkway/Mooney Boulevard intersection. As such an update to the TIA is not required nor new mitigation measures recommended. The original traffic study performed remains applicable and covers the projected trip projection for the new project. Furthermore, since the project will operate in conformance with the original TIA, and being that the original project and its respective environmental document and supporting TIA were approved on April 13, 2020, being prior to July 1, 2020 when the current provisions of CEQA Guidelines Section 15064.3 became effective, no supplemental or subsequent VMT analysis is required, as the criteria for utilizing VMT as a basis for analyzing transportation impacts were not applicable at the time of original discretionary approval.

c. There are no planned geometric designs associated with the project that are considered hazardous.

d. The project will not result in inadequate emergency access.

XVIII. TRIBAL CULTURAL RESOURCES

The proposed project would not cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe.

a. The site is not listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k).

b. The site has been determined to not be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Further, the EIR (SCH 2010041078) for the 2014 General Plan update included a thorough review of sacred lands files through the California Native American Heritage Commission. The sacred lands file did not contain any known cultural resources information for the Visalia Planning Area.

XIX. UTILITIES AND SERVICE SYSTEMS

a. The project will be connecting to existing City sanitary sewer lines, consistent with the City Sewer Master Plan. The Visalia wastewater treatment plant has a current rated capacity of 22 million gallons per day, but currently treats an average daily maximum month flow of 12.5 million gallons per day. With the completed project, the plant has more than sufficient capacity to accommodate impacts associated with the proposed project. The proposed project will therefore not cause significant environmental impacts.

Existing sanitary sewer and storm water mains are on site and the applicant will be connecting to services. Usage of these lines is consistent with the City Sewer System Master Plan and Storm Water Master Plan. These improvements will not cause significant environmental impacts.

b. The project will not result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

c. The City has determined that there is adequate capacity existing to serve the site's projected wastewater treatment demands at the City wastewater treatment plant.

d. Current solid waste disposal facilities can adequately serve the site without a need for alteration.

e. The project will be able to meet the applicable regulations for solid waste. Removal of debris from construction will be subject to the City's waste disposal requirements.

XX. WILDFIRE

a. The project is located on a site that is adjacent on multiple sides by existing development. The site will be further served by multiple points of access. In the event of an emergency response, coordination would be made with the City's Engineering, Police, and Fire Divisions to ensure that adequate access to and from the site is maintained.

b. The project area is relatively flat and the underlying soil is not known to be unstable. Therefore, the site is not in a location that is likely to exacerbate wildfire risks.

c. The project is located on a site that is adjacent on multiple sides by existing development. New project development will require the installation and maintenance of associated infrastructure extending from adjacent off-site locations to the project site; however the infrastructure would be typical

of commercial development and would be developed to the standards of the underlying responsible agencies.

d. The project area is relatively flat and the underlying soil is not known to be unstable. Therefore, the site is not in a location that would expose persons or structures to significant risks of flooding or landslides.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

a. The project will not affect the habitat of a fish or wildlife species or a plant or animal community. This site was evaluated in the Program EIR (SCH No. 2010041078) for the City of Visalia's Genera Plan Update for conversion to urban use. The City adopted mitigation measures for conversion to urban development. Where effects were still determined to be significant a statement of overriding considerations was made.

b. This site was evaluated in the Program EIR (SCH No. 2010041078) for the City of Visalia General Plan Update for the area's conversion to urban use. The City adopted mitigation measures for conversion to urban development. Where effects were still determined to be significant a statement of overriding considerations was made.

c. This site was evaluated in the Program EIR (SCH No. 2010041078) for the City of Visalia General Plan Update for conversion to urban use. The City adopted mitigation measures for conversion to urban development. Where effects were still determined to be significant a statement of overriding considerations was made.

DETERMINATION OF REQUIRED ENVIRONMENTAL DOCUMENT

On the basis of this initial evaluation:

____ I find that the proposed project **COULD NOT** have a significant effect on the environment. **A NEGATIVE DECLARATION WILL BE PREPARED.**

__X__ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on the attached sheet have been added to the project. **A MITIGATED NEGATIVE DECLARATION WILL BE PREPARED.**

___ I find the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

___ I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.

___ I find that as a result of the proposed project no new effects could occur, or new mitigation measures would be required that have not been addressed within the scope of the Program Environmental Impact Report (SCH No. 2010041078). The Environmental Impact Report prepared for the City of Visalia General Plan was certified by Resolution No. 2014-37 adopted on October 14, 2014. **THE PROGRAM ENVIRONMENTAL IMPACT REPORT WILL BE UTILIZED.**

August 21, 2024

Brandon Smith, AICP
Environmental Coordinator

Date

PETERS ENGINEERING GROUP
A CALIFORNIA CORPORATION

TECHNICAL MEMORANDUM

To: Mr. Jim Shehadey
Visalia Parkway Partners, LLC

From: John Rowland, PE, TE

Subject: Trip Generation Comparison
Visalia Commons Shopping Center
Visalia, California

Date: August 19, 2024

This purpose of this memorandum is to summarize trip generation calculations that were prepared to compare the number of trips expected to be generated by the current version of the Visalia Commons Shopping Center project to the number of trips analyzed in the traffic impact analysis report for the shopping center dated January 10, 2020 (hereinafter referred to as the TIA). The trip generation comparisons were submitted to City of Visalia staff for review and comment. The data provided herein are the final calculations that were agreed to by City staff.

The current site plan includes the following uses:

- 171,161-square-foot discount club
- 5,588-square-foot Chick-fil-A
- Automated car wash with one wash tunnel
- 2,450-square-foot Panda Express
- 7,646-square-foot Texas Roadhouse
- 810-square-foot Dutch Bros.
- 12,000-square-foot Les Schwab

The trip generation calculations for the current site plan were performed utilizing the Institute of Transportation Engineers *Trip Generation Manual, 11th Edition*, with the exception that trip generation data developed specifically for Dutch Bros. were utilized for the proposed coffee shop. The Dutch Bros. trip generation data are presented in a report by KD Anderson & Associates dated August 31, 2021 and is attached.

City of Visalia staff requested that a comparison of weekend trip generation values be provided. Weekends were not studied in the TIA; therefore, new weekend trip generation estimates were prepared for both the site plan studied in the TIA and the current site plan.

In general, the trip generation estimates are based on average rates. However, to account for the possibility that the discount club and Chick-fil-A may generate more trips than an average facility, an additional set of trip generation estimates was prepared considering a rate one standard deviation above the average for these two uses.

Internal capture was maintained at no more than five percent for the entire project.

The trip generation estimates and internal capture calculations are attached for both the current site plan and the original site plan studied in the TIA. Following the calculations, tables presenting the comparisons are attached.

The trip generation comparisons suggest that the proposed site plan will generate fewer trips than the site plan analyzed in the TIA. The new site plan potentially generates more trips during the Saturday peak hour; however, using the increased rates (average plus one standard deviation) the difference amounts to less than one external vehicle trip per minute (entering and exiting combined). This difference is considered to be well within the tolerances anticipated in the trip generation data. Therefore, it is our conclusion that the TIA remains applicable and covers the trips expected to be generated by the current site plan. As such, no additional mitigation measures would be triggered. In addition, the values in Tables 1C through 4C (attached) indicate that the daily external traffic volumes are expected to be fewer than originally estimated. Therefore, no analysis of vehicle miles traveled (VMT) is expected to be triggered.

If you have any questions, please contact me at (559) 299-1544, Extension 112, or by email at jrowland@peters-engineering.com.

Attachments: KD Anderson & Associates report dated August 31, 2021
Trip Generation Calculations - Current Site Plan
Internal Capture Calculations - Current Site Plan
Trip Generation Calculations - Original Site Plan
Internal Capture Calculations - Original Site Plan
Trip Generation Comparisons

KD Anderson Report

August 31, 2021

Mr. Paul Deppe, Partner
Armet Davis Newlove & Associates
1330 Olympic Blvd
Santa Monica, CA 90404

RE: CEQA VMT IMPACT AND TRAFFIC OPERATIONAL ASSESSMENT FOR MULTI-TENANTS BUILDING WITH END CAP DRIVE-THRU, KERMAN, CALIFORNIA.

Dear Mr. Deppe:

Thank you for contacting our firm regarding the ***Multi Tenants Building with End Cap Drive-thru*** in Kerman, California. As we are aware the project is a 6,640 sf retail building within a center being built on the south side of West Whitesbridge Road (SR 180), as shown in Figure 1. While the tenants in the project are somewhat speculative, a 1,000 sf coffee restaurant with drive-thru is planned as an end cap. This report identifies the project's Trip Generation and discusses its CEQA VMT impacts. The report also assesses the Drive-Thru Queuing characteristics of the coffee restaurant in order to confirm that the project will not affect local circulation and that further analysis is not needed.

Project Trip Generation

Institute of Transportation Engineers Rates. The amount of vehicular traffic associated with the project has been estimated on a peak hour basis from two perspectives. First, trip generation rates for coffee related uses that are presented in the Institute of Transportation Engineers (ITE) publication, *Trip Generation Manual, 10th Edition* were identified and reviewed to determine whether this data is applicable to the proposed. As indicated in Table 2 rates available for the general retail space and for the fast casual restaurant space.

ITE rates are not generally available for the coffee use as indicated in an assessment we have made previously for Dutch Brothers Coffee. As indicated in Table A which is attached, ITE rates are available for two coffee related uses with drive-thru lanes. Code 938 is ***Coffee / Donut Shop with Drive-Thru and No Indoor Seating***. While that description does match the proposed coffee use, all the data provided by ITE was collected at very small kiosks (100 sf) that generated 10 to 60 peak hour trips. Because these kiosks were so small their "per ksf" trip generation rates would greatly exaggerate a forecast for the larger proposed building. Alternatively, Code 937 is a ***Coffee / Donut Shop with Drive-Thru*** at sites where indoor seating is available. In this case the ITE data was collected at sites that ranged from 500 to 5,500 sf, and as the proposed use does not offer indoor seating forecasts these "per ksf" trip rates may not be helpful in understanding the trip generation characteristic of the proposed project.

Dutch Brothers Data. As an alternative method, we have assembled available trip generation information specific to the current prototype Dutch Brothers operation (i.e., 900 sf with dual drive-thru aisles) and determined a.m. and p.m. peak hour trip generation forecasts from that perspective. As noted in attached Table A, a 2019 report prepared by another firm included a survey of a large Dutch Brothers kiosk in Stockton, California, and our firm surveyed three Dutch Brothers sites in Northern California in 2020 - 2021. Average "per ksf" a.m. and p.m. peak hour trip generation rates were created from that data, and

these results generally fall between the rates identified by Code 938 and 937 in the morning peak hour but are higher than either rate in the evening peak hour.

It is our opinion that the trip generation associated with the proposed coffee use would be similar to that observed at Dutch Brothers standard kiosks. The effect of providing an outdoor patio is already included in the rates as that is a common feature of Dutch Brothers kiosks.

TABLE 1
TRIP GENERATION ESTIMATE

ITE Code	Description	Quantity	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
820	General Retail	1 ksf	37.75	62%	38%	0.94	48%	52%	3.81
	Project	4.34	164	3	1	4	8	8	16
	Pass-by	34%	<56>	-	-	-	<3>	<3>	<6>
	Primary trips		108	3	1	4	5	5	10
930	Fast Casual Restaurant	1 ksf	315.17	67%	33%	2.07	55%	45%	14.13
	Project	1.10	847	1	1	2	9	7	16
	Pass-by	43%	<364>	-	-	-	<3>	<3>	<6>
	Primary			1	1	2	6	4	10
	Coffee without indoor seating	1 ksf	1,685.13			148.07			121.55
	Project	1.01	1,705	76	73	149	59	64	123
	Pass-by	75%	<1,279>	<56>	<56>	<112>	<46>	<46>	<92>
	Primary Trips		426	20	17	37	13	18	31
	Total Gross Trips		**2,716**	**80**	**75**	**155**	**76**	**79**	**155**
	Total Pass-by		**<1,699>**	**<56>**	**<56>**	**<112>**	**<52>**	**<52>**	**<104>**
	Total Primary		**1,017**	**24**	**19**	**43**	**24**	**27**	**51**

Peak Hour Trip Generation Forecasts. As indicated in Table 1, we have assembled trip generation estimates for the three components of the project. As shown, the project could generate 155 trips in the a.m. peak hour and evening peak hour.

Daily Trip Generation. Data specific to the Dutch Brothers restaurant is not available on a daily basis, and we have typically estimated the business's daily trip generation based on the characteristics of other coffee related uses. The sum of a.m. and p.m. peak hour trip generation rates has been compared to the available daily trip generation rates to suggest a factor that can be applied to the available Dutch Brothers peak hour data. For Code 938 (small kiosks) the sum of peak hour rates represents 21.3% of the daily rate. For Code 937 (Coffee Shop with seating), the sum equals 16.2% of the daily traffic, while for **Code 934 (Fast-Food with Drive-Thru)**, the sum is equal to 15.5 % of the daily trip generation. Based on these relationships we expect that the sum of Dutch Brothers a.m. and p.m. peak hour trip generation forecasts would be 16% of its daily traffic. We estimate that coffee use in the project could generate 1,705 daily trips (i.e., ½ inbound and ½ outbound) (i.e., 145+123) / 0.16 = 1,705). Combined with the other uses the total project could generate 2,716 daily trips.

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Pass-by Trips. A share of the trips generated by retail and service-related uses is often drawn from the stream of traffic already passing the business. These "pass-by" trips would be made by customers who simply turn into and out of the site as a part of another trip. The ITE Trip Generation Handbook, 3rd Edition presents pass-by trip rates based on interviews with patrons at various businesses, and this data was reviewed. In this case pass-by rates for three land use categories may be applicable. Pass-by rates are presented for Code 938, and pass-by trips comprised 89% of the p.m. peak hour trips made at the small coffee kiosks included in that study. Similarly, pass-by trip rates for Code 934 *Fast-Food Restaurant with Drive-Thru* are 49% of the a.m. and 50% of the p.m. trips for that use. While no rates are available for Fast Casual Restaurants, ITE data is available for High Turnover Sit Down restaurants (i.e., 43%), and this rate was assumed.

Recognizing that the pass-by trip characteristics of a coffee use such as Dutch Brothers likely fall somewhere between these two published rates, we anticipate that 75% of the trips generated by the coffee use will be pass-by trips drawn from the 15,300 AADT reported by Caltrans in 2019 on SR 180 east of SR 145, as well as persons already visiting the neighboring Walmart. Thus, 112 a.m. peak hour and 104 p.m. peak hour trips would be pass-by. The remaining 43 a.m. and 51 p.m. peak hour trips would be made by customers for the primary purpose of visiting the project.

CEQA / Vehicle Miles Traveled (VMT)

Starting in July 2020 SB 743 required agencies to move from a Level of Service based impact analysis under CEQA to analysis based on regional Vehicle Miles Traveled (VMT). Current direction regarding methods to identify VMT and comply with state requirements is provided by the California Governor's Office of Planning and Research (OPR) December 2018 publication, *Technical Advisory on Evaluating Transportation Impacts in CEQA* and the *Del Norte Region SB 743 Implementation Plan (2020)*.

OPR provides this direction for retail projects:

> ***Retail Projects.*** *Generally, lead agencies should analyze the effects of a retail project by assessing the change in total VMT because retail projects typically re-route travel from other retail destinations. A retail project might lead to increases or decreases in VMT, depending on previously existing retail travel patterns.*

However, OPR also identifies Screening thresholds for various types of development projects:

> *Many agencies use "screening thresholds" to quickly identify when a project should be expected to cause a less-than-significant impact without conducting a detailed study. (See e.g., CEQA Guidelines, §§ 15063(c)(3)(C), 15128, and Appendix G.) As explained below, this technical advisory suggests that lead agencies may screen out VMT impacts using project size, maps, transit availability, and provision of affordable housing.*

Local-Serving Retail Uses. Local-serving retail developments would reduce trip lengths (and therefore VMT) by offering additional retail choices allowing customers to make shorter trips than they would make to more distant retail developments. This would apply to retail developments intended to serve customers in the immediate area.

Evidence – The OPR Technical Advisory provides that "because new retail development typically redistributes shopping trips rather than creating new trips, estimating the total change in VMT (i.e., the difference in total VMT in the area affected with and without the project) is the best way to analyze a retail project's transportation impacts." Local serving retail generally shortens trips as longer trips from regional

retail are redistributed to new local retail. OPR Guidance suggests that retail uses of 50,000 sf or less can typically be considered locally serving.

The project provides retail and food services along SR 180 within the Kerman area, which in addition to motorists already on SR 180 is expected to provide a majority of its customer base. Based on the location of competing business, the most likely effect on regional travel associated with the development of the project is to offer another option for trips made by residents shopping along the SR 180 corridor. As the proposed project is relatively close to other restaurants and rerail centers, the regional effect on VMT is likely to be small, but VMT generally will be reduced by offering a closer option for some traffic.

Site Plan Review

Layout. The project is part of a larger commercial center being constructed west of Kerman Plaza (Walmart). Access to the overall center has been constructed on SR 180 under an encroachment permit from Caltrans District 6. A north-south aisle extends south for about 240 feet to an east west aisle that will provide direct access to the project. Those access points are about 35 feet and 200 feet from the SR 180 connection, respectively.

Drive-thru Queueing Statistics. To assess the coffee use's drive-thru aisle we have assembled available information regarding the queuing characteristics of Dutch Brothers restaurants in order to confirm the adequacy of the proposed site plan. As shown in the attached site plan, the drive-thru is entered at a location adjoining the western site access. From that point the lane proceeds counterclockwise around the building. The lane has roughly 350 feet of queuing area from the pick-up window around the site to the entrance. At 20 feet per vehicle the plan accommodates 18 vehicles that can be stored inside the designated queueing area. The lanes last 70 feet includes an exit pass-thru lane that allows customers who have been serviced while in line the opportunity to proceed around a time-consuming-order at the pick-up window.

As indicated in Table 2, peak drive-thru queues were measured at four Dutch Brothers kiosk restaurants. Each is equipped with dual entry aisles, provides peak period in-line service to reduce headways and includes an exit pass-thru lane that allows customers who have been serviced in line to proceed. During peak period Dutch Brothers regularly positions staff with ordering tablets in line to expedite service, and this activity was observed.

Table 2 identifies the maximum queue observed behind the ordering board in each lane and the maximum number of vehicles queueing at one time. As shown, the largest number of concurrent vehicles was in a range of 13 to 15 vehicles, and the 18 vehicles accommodated in Multi-Tenants Building with end cap drive-thru has the capacity for those totals.

TABLE 2
DUTCH BROTHERS DRIVE-THRU QUEUE REPORTS WITH DUAL DRIVE-THRU

Location	Peak Hour Time Period	Pick Up Window	Entry Aisle		Total Vehicles
			#1	#2	
Sacramento, CA	AM	3	5	5	13
	PM	3	7	5	15
Roseville, CA	AM	2	6	5	13
	PM	2	3	2	7
Stockton, CA	AM	-	6	9	15
	PM	-	7	6	13
Turlock, CA	AM	7	3	2	12
	PM	7	4	5	16

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Drive Thru Assessment. While the project layout does not match the Dutch Brothers standalone prototype, the drive-thru layout will be adequate assuming that operational strategies typically used by Dutch Brothers are incorporated into the plan. As noted earlier, in line service is likely to be needed during peak periods, and the site plan should be designed to provide a safe area for service employees to walk around the queue of waiting cars.

Dutch Brothers typically monitors the effects of peak period queuing near its drive thru entrances, and if excessive queues occur temporary traffic controls are implemented to direct incoming customers to alternative routes that stretch out the queue at an acceptable location. Temporary controls are preferable to permanent changes that limit access to all businesses at other times. The site layout can facilitate a temporary control plan by limiting access at the eastern access and directing arriving traffic to the west access about 200 feet away. From that point traffic to the drive-thru would turn into the southern aisle and any extra queue can be accommodated in this area (10 more cars). The area around the drive-thru entrance could be marked "KEEP CLEAR" to inform customers of the need to avoid queuing and to set the stage for the time periods when temporary control goes into effect. Because peak coffee sales typically occur in the morning when most retail businesses and casual dining restaurants are not open, a temporary control plan can be implemented without appreciably affecting the coffee business's neighbors. However, traffic that was destined for other businesses can still access storefront parking via the northern aisle.

Overall Conclusions

The project's impacts under CEQA based on VMT are not significant. The site plan will function acceptably with implementation of temporary peak period traffic control measures at the drive-thru entrance when needed.

Thank you for contacting our firm. Please feel free to contact me if you have any questions.

Sincerely,

KD Anderson & Associates, Inc.

Kenneth D. Anderson, P.E.
President

Attachments: Tables A, Site Plan

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TABLE A
DUTCH BROTHERS TRIP GENERATION RATES

Location	Size (sf)	Daily	AM Peak Hour					PM Peak Hour				
			Inbound	Outbound	Trips	Rate per ksf	Pass-by Rate	Inbound	Outbound	Trips	Rate per ksf	Pass-by Rate
Dutch Brothers Data Specific to 800+ sf model with dual drive thru												
Stockton, CA[1]	810		53%	47%	120	148.10		44%	56%	70	86.42	
Sacramento, CA[2]	865		48%	52%	120	138.72		47%	53%	112	129.48	
Roseville, CA[3]	865		52%	48%	114	131.79		50%	50%	66	76.30	
Turlock, CA[4]	835		52%	48%	145	173.65		50%	50%	162	194.01	
Average		1682.13	51%	49%	125	148.07		48%	52%	103	121.55	
Kerman Site based on other ITE rates												
ITE 937	1.01	828	46	44	*90*	88.90		22	22	44	43.48	
ITE 938	1.01	2,020	170	170	*340*	337.04		42	42	84	83.33	
ITE Data												
ITE Code 938[5]		2,000.00	50%	50%	10 to 60	337.04			50%	50%	83.33	89%
ITE Code 937[6]		820.38	51%	49%		88.90			50%	50%	43.48	
ITE Code 934[7]		470.95				40.19	49%				32.67	50%

[1] Crane Transportation Group, survey of Stockton CA site 10/3/2019
[2] 4250 El Camino Avenue, Sacramento, CA 11/3/2020
[3] 2348 Sunrise Blvd, Roseville, CA 11/3/2020
[4] 1201 W. Monte Vista Ave, Turlock, CA
[5] Coffee / Donut Shop with Drive-Thru and No Indoor Dining. All samples are Kiosks of 100 sf
[6] Coffee / Donut Shop with Drive-Thru. Samples ranged from 500 to 5,500 sf
[7] Fast-Food Restaurant with Drive-Thru
[8] assumed average of rates for Code 938 and Code 934 values

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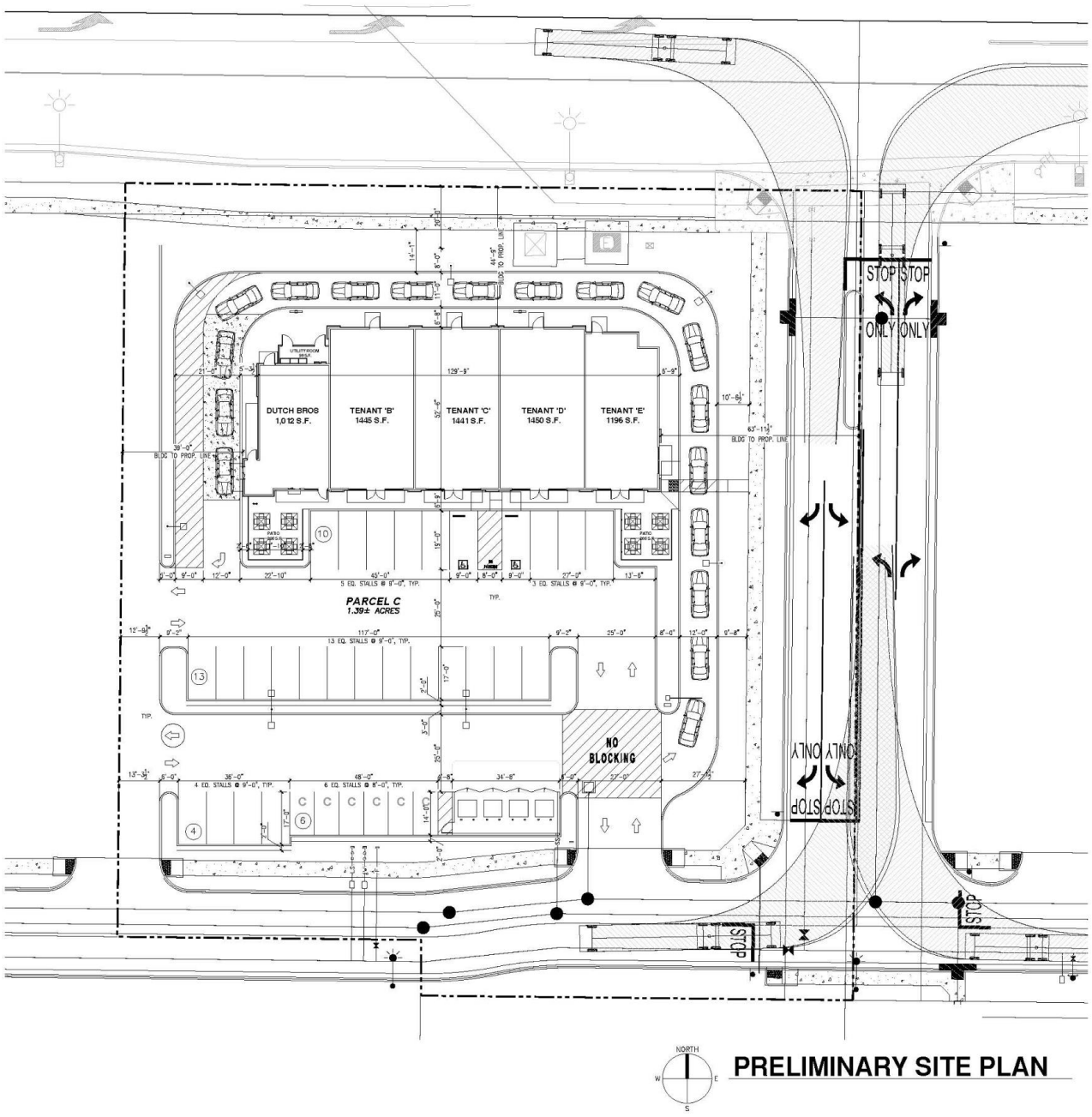

DUTCH BROS
1,012 S.F.
TENANT 'B'
1445 S.F.
TENANT 'C'
1441 S.F.
TENANT 'D'
1450 S.F.
TENANT 'E'
1196 S.F.
PARCEL C
1.39± ACRES
NO
BLOCKING
STOP
ONLY
NORTH
PRELIMINARY SITE PLAN

SITE PLAN

Trip Generation Calculations

CURRENT SITE PLAN

Table 1A
New Project Trip Generation (Average Rates)

ITE Land Use	Units	A.M. Peak Hour Traffic Volumes			Midday Peak Hour Traffic Volumes			P.M. Peak Hour Traffic Volumes			Weekday Traffic Volume	
		Rate Split	Enter	Exit	Rate Split	Enter	Exit	Rate Split	Enter	Exit	Rate	Total
Discount Club (857)	171,161 sq. ft.	0.80 61/39	84	54	4.62 50/50	396	396	4.19 50/50	359	359	42.46	7,268
Fast Food Restaurant with Drive Through (934) (NEC of site)	5,588 sq. ft.	44.61 51/49	128	122	50.94 51/49	145	140	33.03 52/48	96	89	467.48	2,612
Automated Car Wash (948) (Shops B)	1 lane	77.50+ 50/50	39	39	77.50+ 50/50	39	39	77.50 50/50	39	39	776++	776
Fast Food Restaurant with Drive Through (934) (Panda)	2,540 sq. ft.	44.61 51/49	0**	0**	50.94 51/49	66	64	33.03 52/48	44	40	467.48	1,188
High-Turnover Sit-Down Restaurant (932) (Texas Roadhouse)	7,646 sq. ft.	9.57 55/45	0***	0***	17.41 52/48	0***	0***	9.05 61/39	26	17	107.20	820
Coffee Shop without indoor seating (Dutch Bros.)	810 sq. ft.	148.07 51/49	61	59	148.07 51/49	61	59	121.55 48/52	48	51	1,685. 13	1,366
Automobile Parts and Service Center (943) (Les Schwab)	12,000 sq. ft.	1.91 72/28	17	6	2.76 54/46	18	15	2.06 39/61	10	15	16.60	200
Subtotals:	-	-	329	280	-	725	713	-	622	610	-	14,230
Internal Capture:	-	-	-15	-15	-	-36	-36	-	-31	-31		-718
TOTAL EXTERNAL:	**-**	**-**	**314**	**265**	**-**	**689**	**677**	**-**	**591**	**579**	**-**	**13,512**

Reference: *Trip Generation Manual, 11th Edition, Institute of Transportation Engineers, September 2021.* Rates are reported in trips per 1,000 square feet of building area and trips per lane, as applicable. Splits are reported as Entering/Exiting as a percentage of the total.

\+ ITE does not provide data for the A.M. peak hour and midday peak hour, so P.M. peak hour data were applied.

++ ITE does not provide data for the daily volumes, so it was assumed that 10 percent of the daily volume occurs during the P.M. peak hour and the daily rate was estimated by multiplying the P.M. peak hour rate by 10.

* ITE indicates that. "*Some sites may include on-site fueling pumps.*" ** Panda Express opens at 10:00 a.m. *** Texas Roadhouse opens at 3:00 p.m.

Table 2A
Alternate New Project Trip Generation (Using Increased Rates)

ITE Land Use	Units	A.M. Peak Hour Traffic Volumes			Midday Peak Hour Traffic Volumes			P.M. Peak Hour Traffic Volumes			Weekday Traffic Volume	
		Rate Split	Enter	Exit	Rate Split	Enter	Exit	Rate Split	Enter	Exit	Rate	Total
Discount Club (857)	171,161 sq. ft.	1.53 61/39	160	102	6.38 50/50	546	546	5.89 50/50	504	504	55.50	9,500
Fast Food Restaurant with Drive Through (934) (NEC of site)	5,588 sq. ft.	71.75 51/49	204	197	75.85 51/49	216	208	50.62 52/48	147	136	706.10	3,946
Automated Car Wash (948) (Shops B)	1 lane	77.50+ 50/50	39	39	77.50+ 50/50	39	39	77.50 50/50	39	39	776++	776
Fast Food Restaurant with Drive Through (934) (Panda)	2,540 sq. ft.	44.61 51/49	0**	0**	50.94 51/49	66	64	33.03 52/48	44	40	467.48	1,188
High-Turnover Sit-Down Restaurant (932) (Texas Roadhouse)	7,646 sq. ft.	9.57 55/45	0***	0***	17.41 52/48	0***	0***	9.05 61/39	26	17	107.20	820
Coffee Shop without indoor seating (Dutch Bros.)	810 sq. ft.	148.07 51/49	61	59	148.07 51/49	61	59	121.55 48/52	48	51	1,685.13	1,366
Automobile Parts and Service Center (943) (Les Schwab)	12,000 sq. ft.	1.91 72/28	17	6	2.76 54/46	18	15	2.06 39/61	10	15	16.60	200
Subtotals:	-	-	481	403	-	946	931	-	818	802	-	17,796
Internal Capture:	-	-	-22	-22	-	-47	-47	-	-41	-41		-888
TOTAL EXTERNAL:	**-**	**-**	**459**	**381**	**-**	**899**	**884**	**-**	**777**	**761**	**-**	**16,908**

Reference: *Trip Generation Manual, 11th Edition, Institute of Transportation Engineers, September 2021*. Rates are reported in trips per 1,000 square feet of building area and trips per lane, as applicable. Splits are reported as Entering/Exiting as a percentage of the total.

\+ ITE does not provide data for the A.M. peak hour and midday peak hour, so P.M. peak hour data were applied.

++ ITE does not provide data for the daily volumes, so it was assumed that 10 percent of the daily volume occurs during the P.M. peak hour and the daily rate was estimated by multiplying the P.M. peak hour rate by 10.

* ITE indicates that. "*Some sites may include on-site fueling pumps.*" ** Panda Express opens at 10:00 a.m. *** Texas Roadhouse opens at 3:00 p.m.

Note: Rates for Discount Club and Fast-Food at NEC are average rate plus one standard deviation. Rates for Dutch Bros. are taken from KD Anderson report dated 8-31-21.

Table 3A
New Project Trip Generation (Average Rates – Saturday)

ITE Land Use	Units	Saturday Peak Hour Traffic Volumes			Saturday Traffic Volume	
		Rate Split	Enter	Exit	Rate	Total
Discount Club (857)	171,161 sq. ft.	6.37 49/51	534	556	53.75	9,200
Fast Food Restaurant with Drive Through (934) (NEC of site)	5,588 sq. ft.	55.25 51/49	158	151	616.12	3,444
Automated Car Wash (948) (Shops B)	1 lane	41.00 46/54	19	22	410++	410
Fast Food Restaurant with Drive Through (934) (Panda)	2,540 sq. ft.	55.25 51/49	72	69	616.12	1,566
High-Turnover Sit-Down Restaurant (932) (Texas Roadhouse)	7,646 sq. ft.	11.19 51/49	44	42	122.40	936
Coffee Shop without indoor seating (Dutch Bros.)	810 sq. ft.	148.07 51/49	61	59	1,685.13	1,366
Automobile Parts and Service Center (943) (Les Schwab)	12,000 sq. ft.	2.76 54/46	18	15	16.60	200
Subtotals:	-	-	906	914	-	17,122
Internal Capture:	-	-	-45	-45		-858
TOTAL EXTERNAL:	**-**	**-**	**861**	**869**	**-**	**16,264**

Reference: *Trip Generation Manual, 11th Edition, Institute of Transportation Engineers, September 2021.* Rates are reported in trips per 1,000 square feet of building area and trips per lane, as applicable. Splits are reported as Entering/Exiting as a percentage of the total.

++ ITE does not provide data for the daily volumes, so it was assumed that 10 percent of the daily volume occurs during the peak hour and the daily rate was estimated by multiplying the peak hour rate by 10.

Rates for Dutch Bros. are taken from KD Anderson report dated 8-31-21. Saturday values were not available.

Table 4A
New Project Trip Generation (Increased Rates – Saturday)

ITE Land Use	Units	Saturday Peak Hour Traffic Volumes			Saturday Traffic Volume	
		Rate Split	Enter	Exit	Rate	Total
Discount Club (857)	171,161 sq. ft.	8.80 49/51	738	769	69.00	11,810
Fast Food Restaurant with Drive Through (934) (NEC of site)	5,588 sq. ft.	79.87 51/49	228	219	937.02	5,236
Automated Car Wash (948) (Shops B)	1 lane	41.00 46/54	19	22	410++	410
Fast Food Restaurant with Drive Through (934) (Panda)	2,540 sq. ft.	55.25 51/49	72	69	616.12	1,566
High-Turnover Sit-Down Restaurant (932) (Texas Roadhouse)	7,646 sq. ft.	11.19 51/49	44	42	122.40	936
Coffee Shop without indoor seating (Dutch Bros.)	810 sq. ft.	148.07 51/49	61	59	1,685.13	1,366
Automobile Parts and Service Center (943) (Les Schwab)	12,000 sq. ft.	2.76 54/46	18	15	16.60	200
Subtotals:	-	-	1,180	1,198	-	21,524
Internal Capture:	-	-	-59	-59	-	-1,070
TOTAL EXTERNAL:	**-**	**-**	**1,121**	**1,139**	**-**	**20,455**

Reference: *Trip Generation Manual, 11th Edition, Institute of Transportation Engineers, September 2021*. Rates are reported in trips per 1,000 square feet of building area and trips per lane, as applicable. Splits are reported as Entering/Exiting as a percentage of the total.

++ ITE does not provide data for the daily volumes, so it was assumed that 10 percent of the daily volume occurs during the peak hour and the daily rate was estimated by multiplying the peak hour rate by 10.

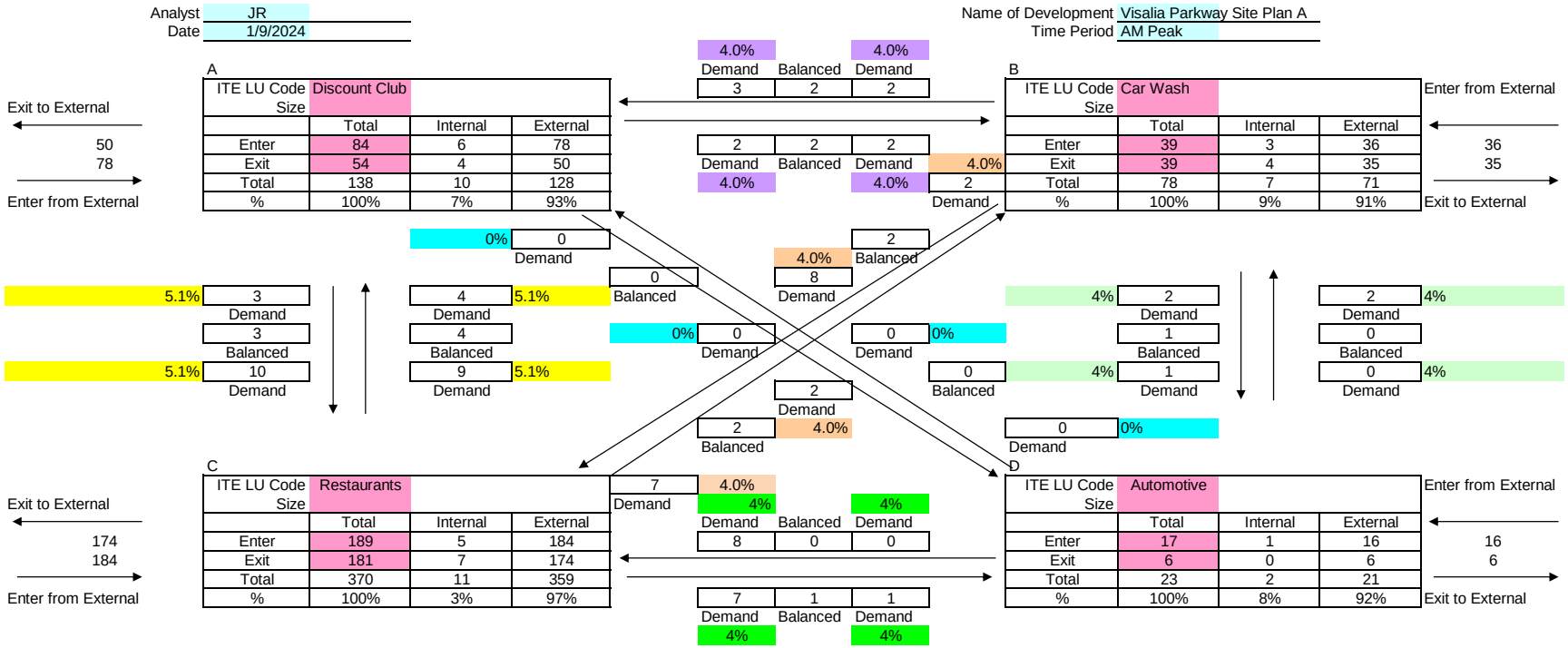
Rates for Dutch Bros. taken from KD Anderson, 8-31-21. Saturday values were not available.

Note: Rates for Discount Club and Fast-Food at NEC are average rate plus one standard deviation. Rates for Dutch Bros. are taken from KD Anderson report dated 8-31-21.

Internal Capture Calculations

CURRENT SITE PLAN

MULTI-USE TRIP GENERATION AND INTERNAL CAPTURE SUMMARY



Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Land Use D	Total
Enter	78	36	184	16	314
Exit	50	35	174	6	265
Total	128	71	359	21	579
Single-Use Trip Gen. Est.	138	78	370	23	609

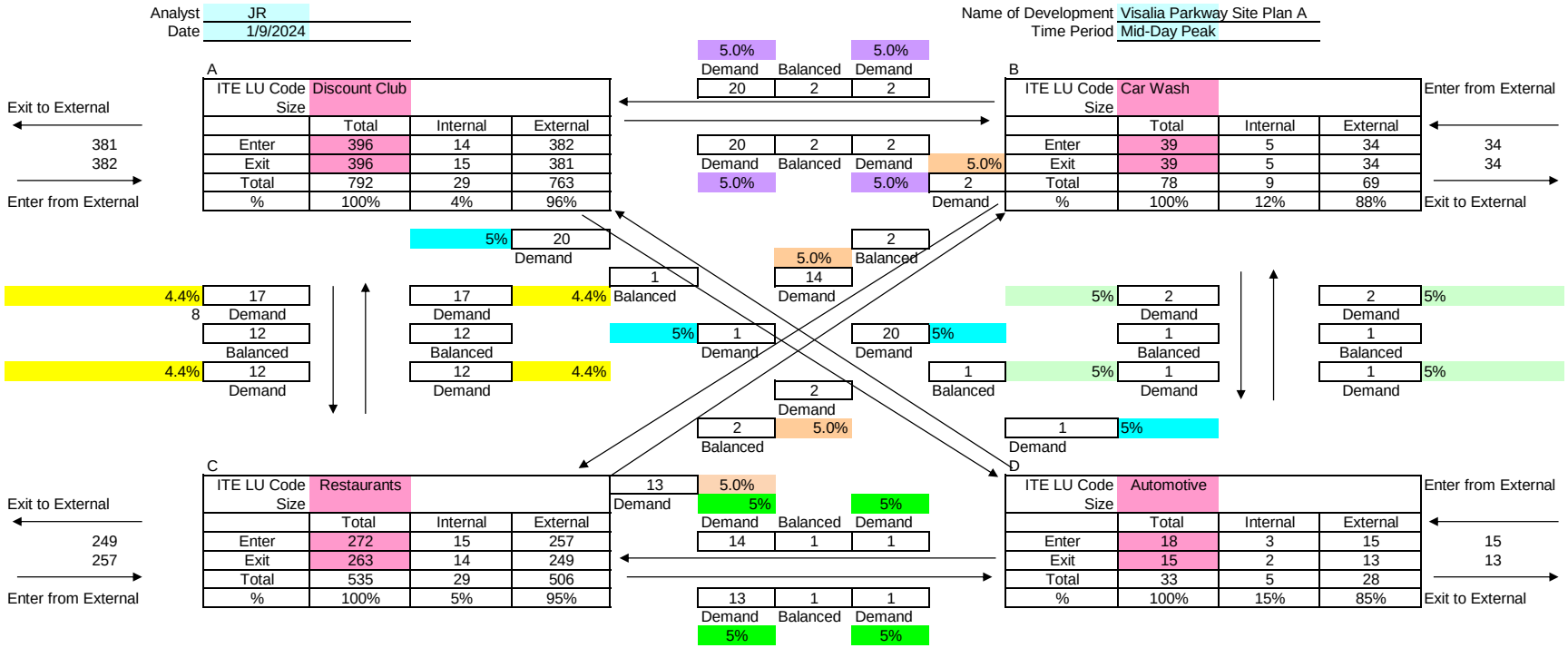
INTERNAL CAPTURE 5.0%

ITE Totals	Captured
329	15
280	15

Pass-By Trips

Land Use A	Land Use B	Land Use C	Total
11	8	73	92
7	8	69	84

MULTI-USE TRIP GENERATION AND INTERNAL CAPTURE SUMMARY



Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Land Use D	Total
Enter	382	34	257	15	689
Exit	381	34	249	13	677
Total	763	69	506	28	1365
Single-Use Trip Gen. Est.	792	78	535	33	1438

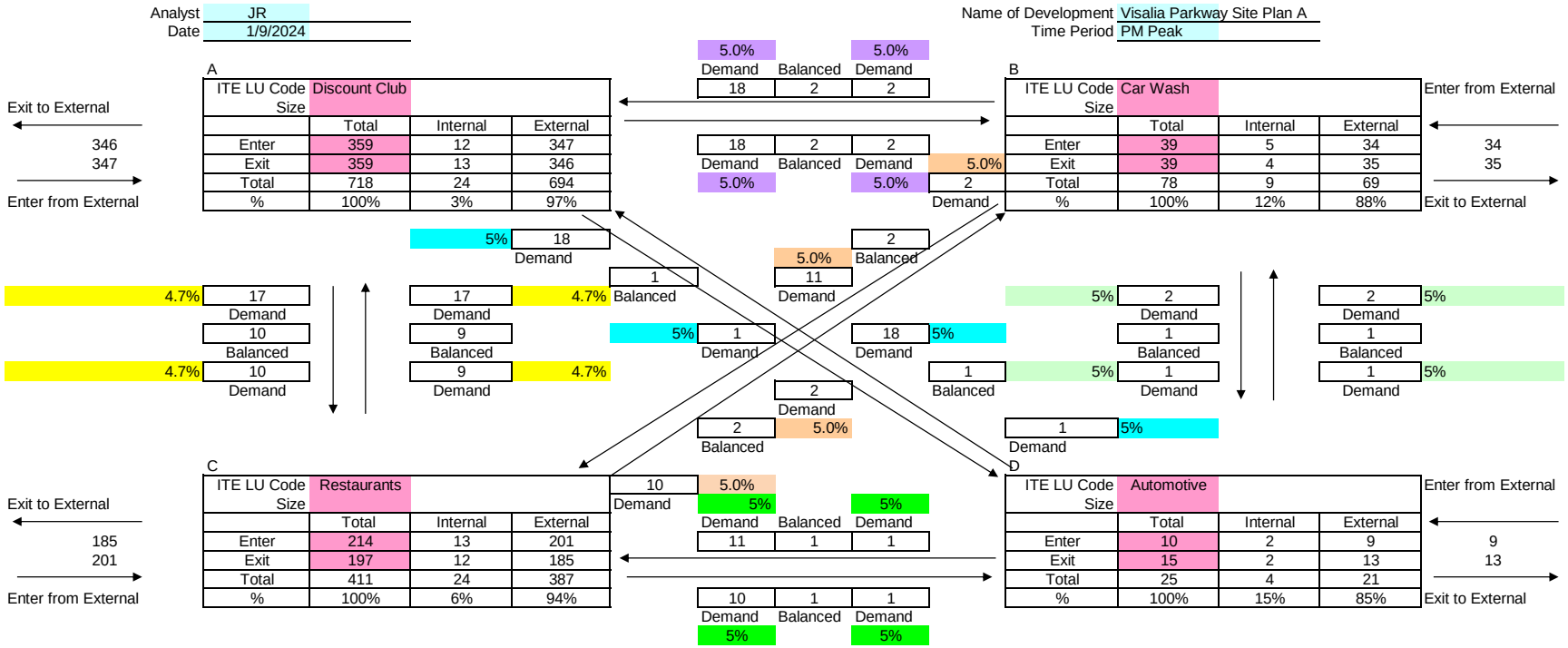
INTERNAL CAPTURE 5.0%

ITE Totals	Captured
725	36
713	36

Pass-By Trips

Land Use A	Land Use B	Land Use C	Total
95	17	102	214
95	17	99	211

MULTI-USE TRIP GENERATION AND INTERNAL CAPTURE SUMMARY



Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Land Use D	Total
Enter	347	34	201	9	591
Exit	346	35	185	13	579
Total	694	69	387	21	1170
Single-Use Trip Gen. Est.	718	78	411	25	1232

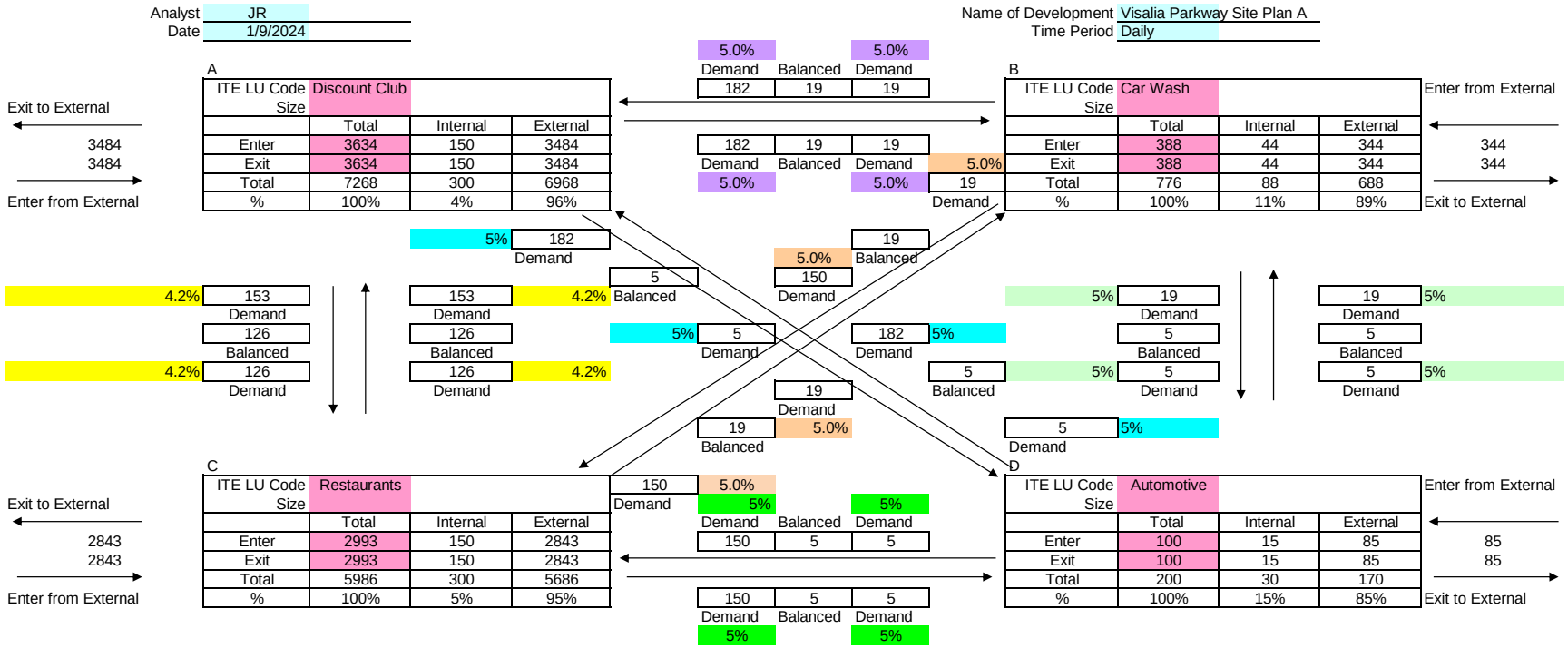
INTERNAL CAPTURE 5.0%

ITE Totals	Captured
622	31
610	31

Pass-By Trips

Land Use A	Land Use B	Land Use C	Total
86	17	80	183
86	17	74	177

MULTI-USE TRIP GENERATION AND INTERNAL CAPTURE SUMMARY



Net External Trips for Multi-Use Development

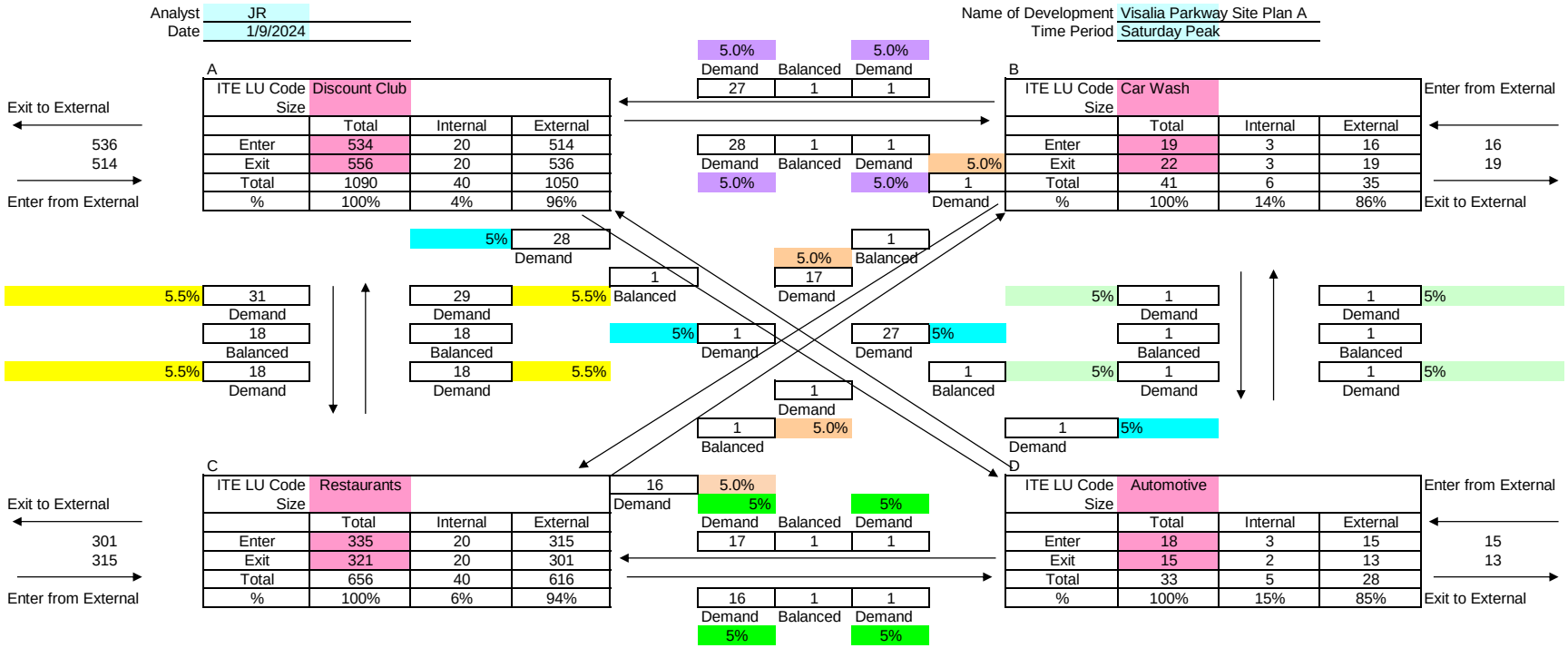
	Land Use A	Land Use B	Land Use C	Land Use D	Total
Enter	3484	344	2843	85	6756
Exit	3484	344	2843	85	6756
Total	6968	688	5686	170	13512
Single-Use Trip Gen. Est.	7268	776	5986	200	14230

	ITE Totals	Captured	
INTERNAL CAPTURE	14230	718.024	13511.976
5.0%			

Pass-By Trips

	Land Use A	Land Use B	Land Use C	Total
Enter	870	172	1137	2179
Exit	870	172	1137	2179

MULTI-USE TRIP GENERATION AND INTERNAL CAPTURE SUMMARY



Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Land Use D	Total
Enter	514	16	315	15	861
Exit	536	19	301	13	869
Total	1050	35	616	28	1730
Single-Use Trip Gen. Est.	1090	41	656	33	1820

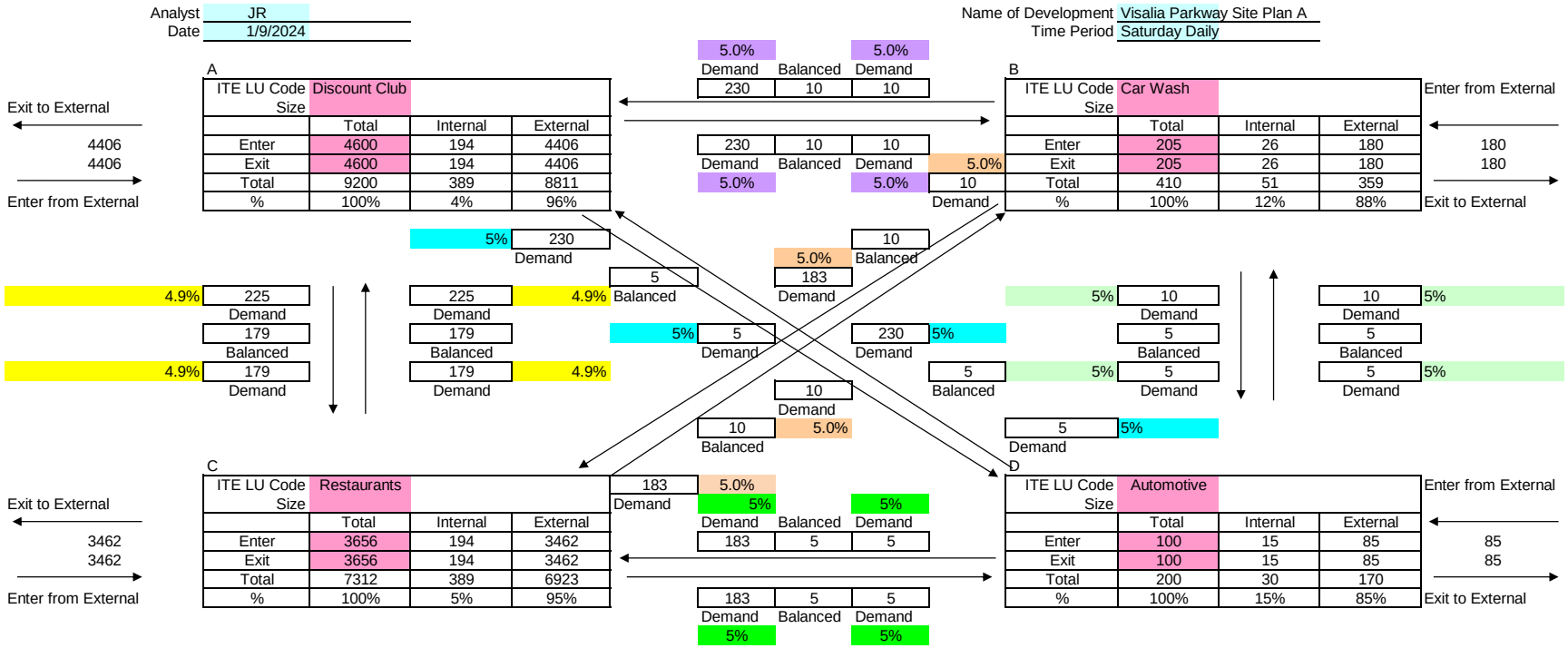
INTERNAL CAPTURE 5.0%

ITE Totals	Captured
906	45
914	45

Pass-By Trips

Land Use A	Land Use B	Land Use C	Total
128	8	125	261
133	9	120	262

MULTI-USE TRIP GENERATION AND INTERNAL CAPTURE SUMMARY



Net External Trips for Multi-Use Development

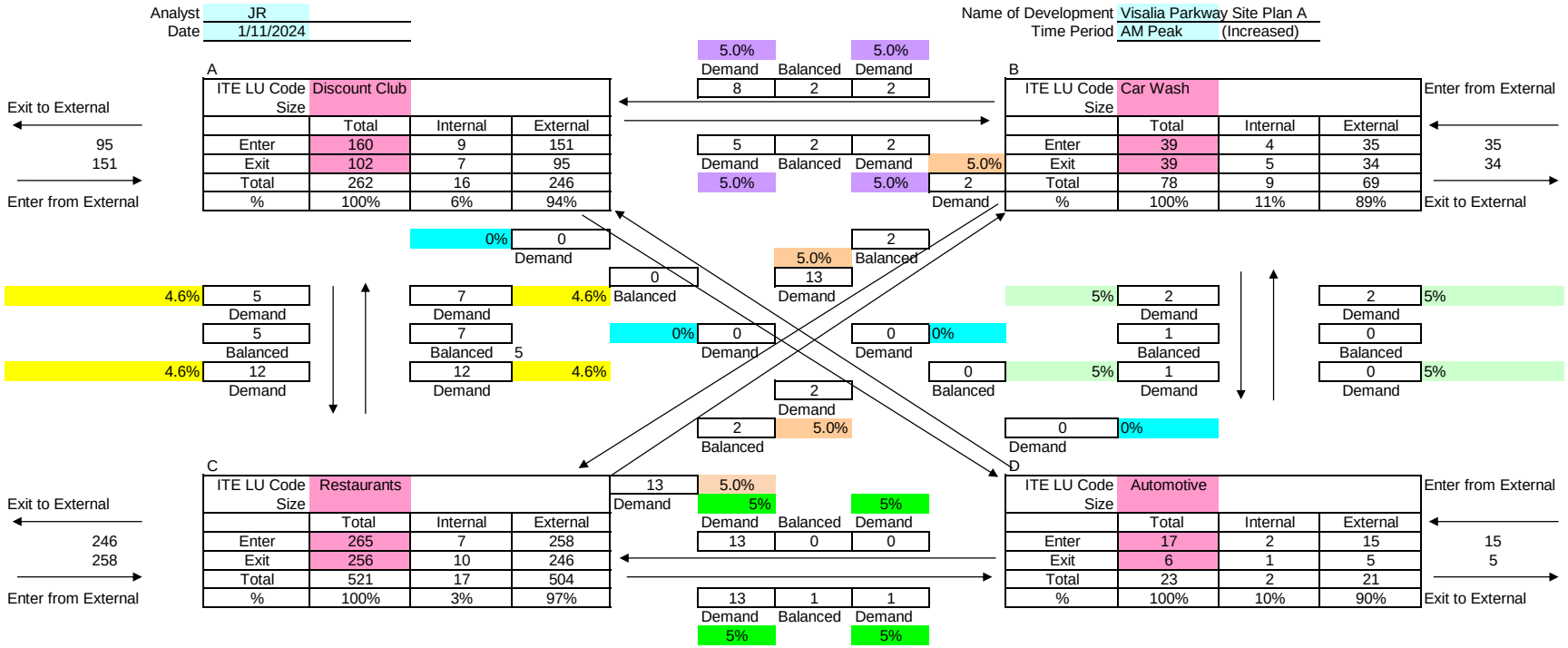
	Land Use A	Land Use B	Land Use C	Land Use D	Total
Enter	4406	180	3462	85	8132
Exit	4406	180	3462	85	8132
Total	8811	359	6923	170	16263
Single-Use Trip Gen. Est.	9200	410	7312	200	17122

	ITE Totals	Captured		
INTERNAL CAPTURE	17122	858.576	16263.424	
5.0%				

Pass-By Trips

	Land Use A	Land Use B	Land Use C	Total
Enter	1101	89	1384	2574
Exit	1101	89	1384	2574

MULTI-USE TRIP GENERATION AND INTERNAL CAPTURE SUMMARY



Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Land Use D	Total
Enter	151	35	258	15	459
Exit	95	34	246	5	381
Total	246	69	504	21	840
Single-Use Trip Gen. Est.	262	78	521	23	884

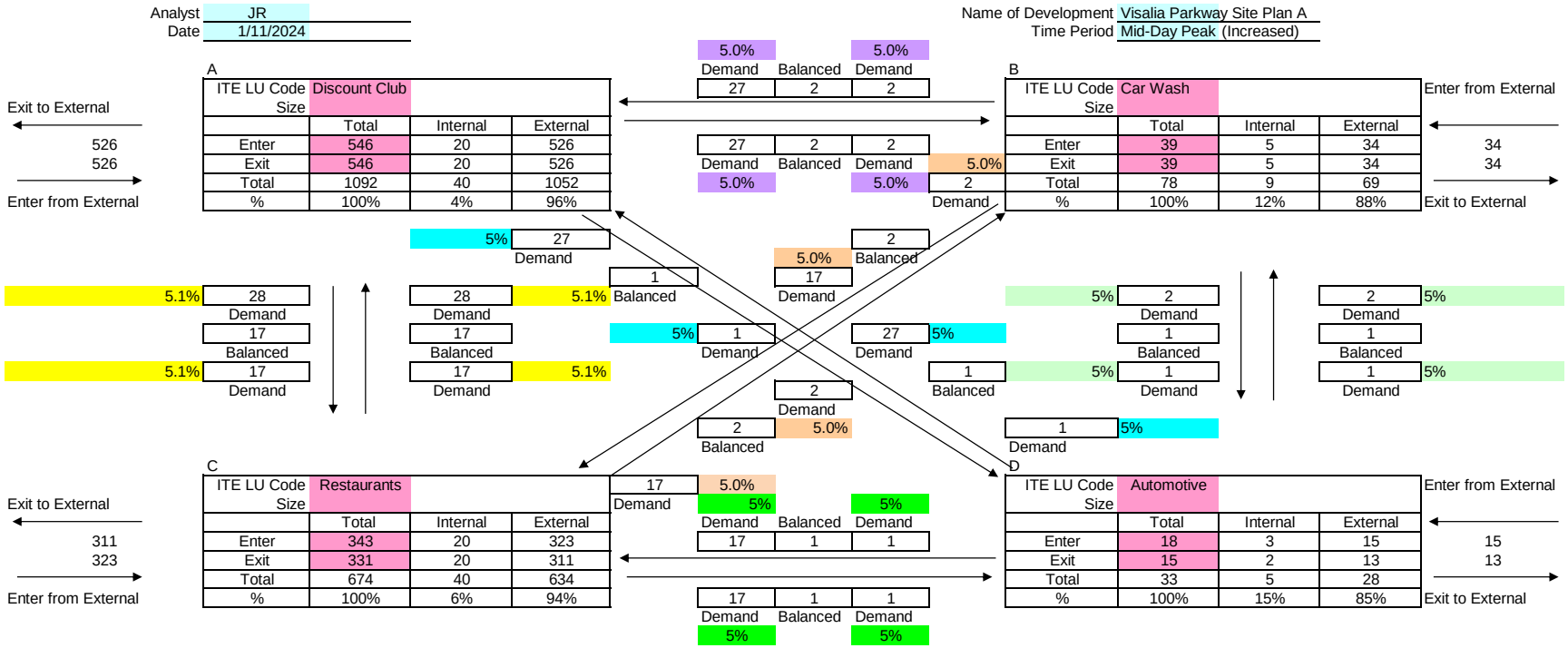
ITE Totals	Captured
481	22
403	22

INTERNAL CAPTURE 5.0%

Pass-By Trips

	Land Use A	Land Use B	Land Use C	Total
	22	8	103	133
	14	8	98	120

MULTI-USE TRIP GENERATION AND INTERNAL CAPTURE SUMMARY



Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Land Use D	Total
Enter	526	34	323	15	899
Exit	526	34	311	13	884
Total	1052	69	634	28	1783
Single-Use Trip Gen. Est.	1092	78	674	33	1877

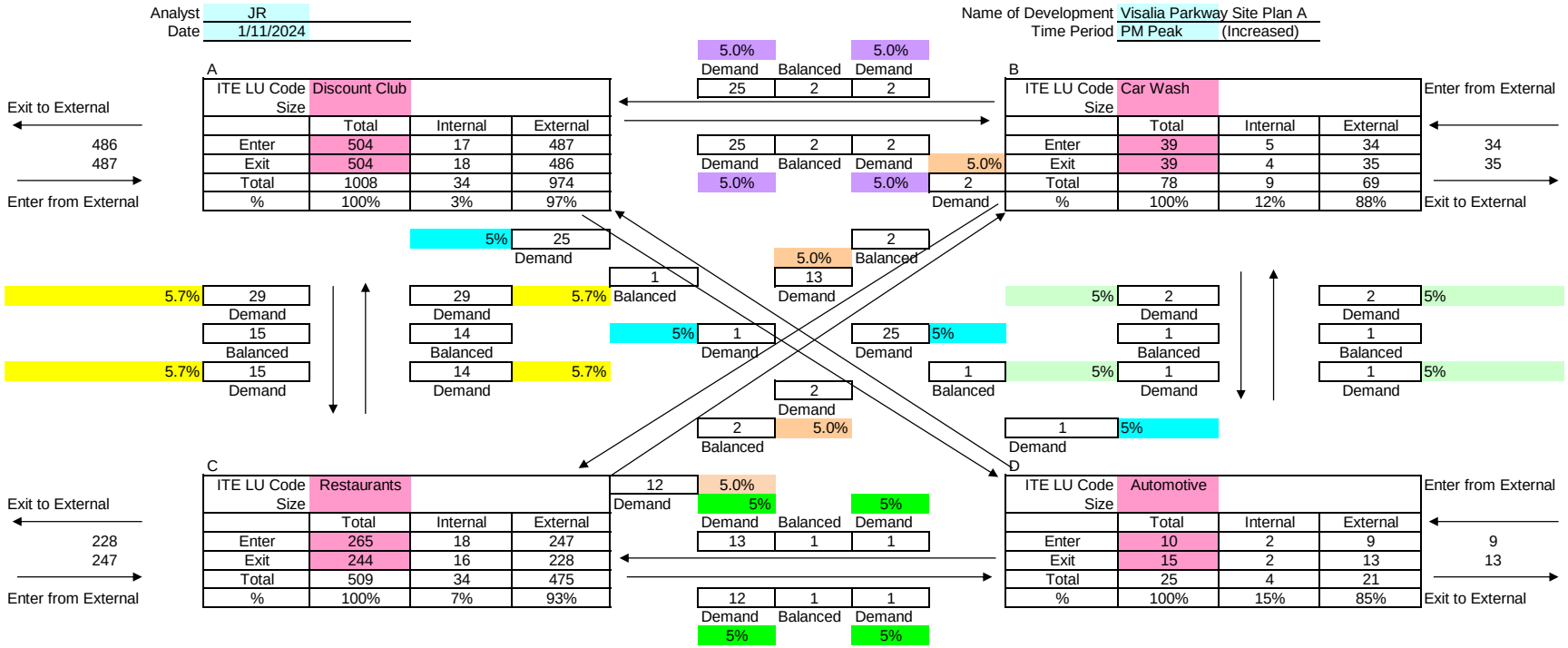
INTERNAL CAPTURE 5.0%

ITE Totals	Captured
946	47
931	47

Pass-By Trips

Land Use A	Land Use B	Land Use C	Total
131	17	129	277
131	17	124	272

MULTI-USE TRIP GENERATION AND INTERNAL CAPTURE SUMMARY



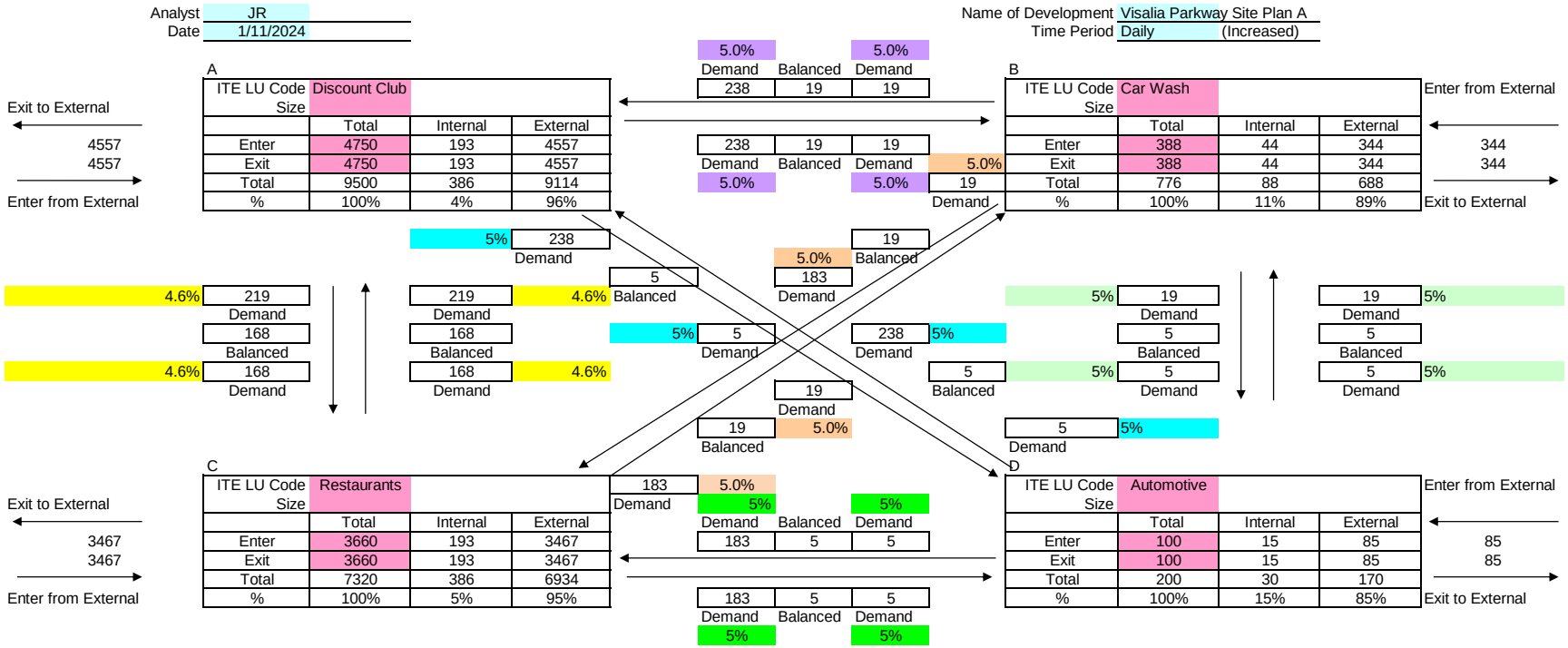
Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Land Use D	Total		ITE Totals	Captured
Enter	487	34	247	9	777		818	41
Exit	486	35	228	13	761		802	41
Total	974	69	475	21	1539	INTERNAL CAPTURE		
Single-Use Trip Gen. Est.	1008	78	509	25	1620	5.0%		

Pass-By Trips

	Land Use A	Land Use B	Land Use C	Total
Enter	121	17	98	236
Exit	121	17	91	229

MULTI-USE TRIP GENERATION AND INTERNAL CAPTURE SUMMARY



Net External Trips for Multi-Use Development

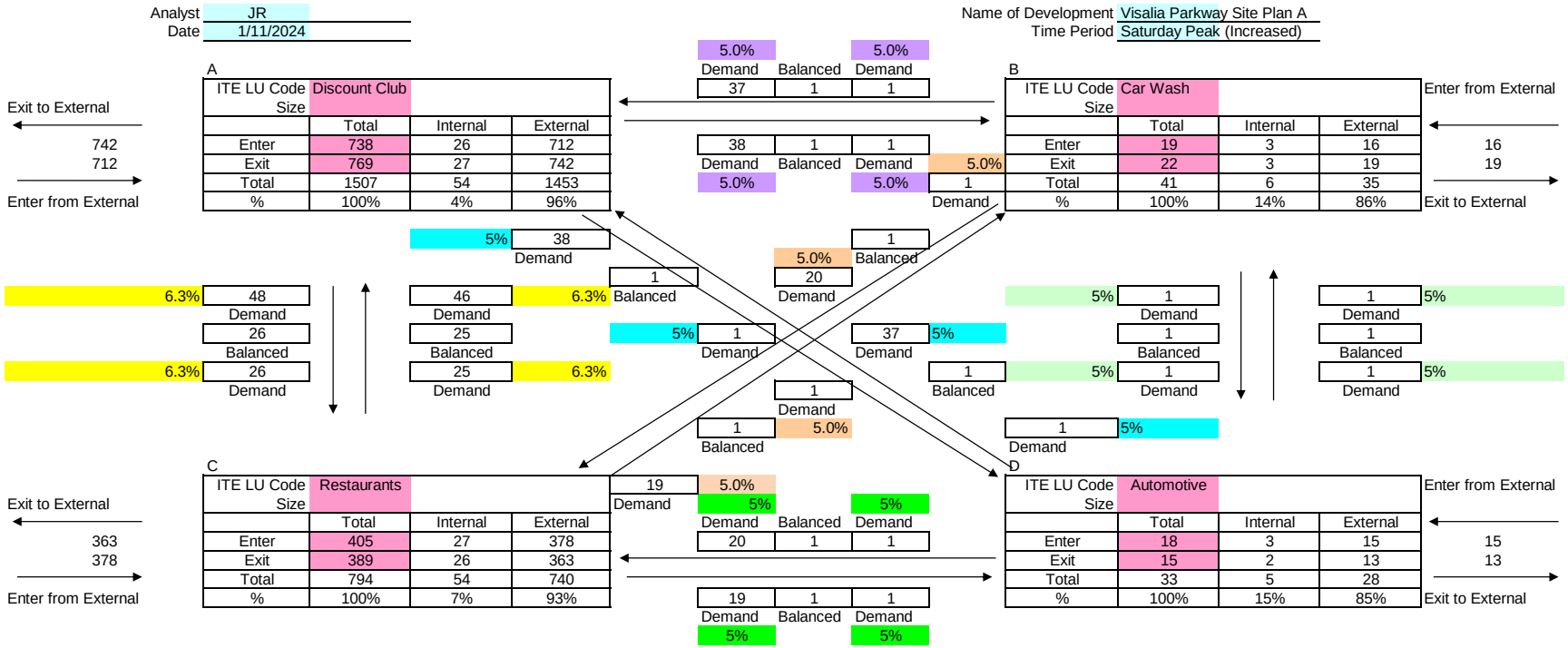
	Land Use A	Land Use B	Land Use C	Land Use D	Total
Enter	4557	344	3467	85	8454
Exit	4557	344	3467	85	8454
Total	9114	688	6934	170	16907
Single-Use Trip Gen. Est.	9500	776	7320	200	17796

	ITE Totals	Captured	
INTERNAL CAPTURE	17796	888.64	16907.36
	5.0%		

Pass-By Trips

	Land Use A	Land Use B	Land Use C	Total
Enter	1139	172	1386	2697
Exit	1139	172	1386	2697

MULTI-USE TRIP GENERATION AND INTERNAL CAPTURE SUMMARY



Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Land Use D	Total
Enter	712	16	378	15	1121
Exit	742	19	363	13	1136
Total	1453	35	740	28	2257
Single-Use Trip Gen. Est.	1507	41	794	33	2375

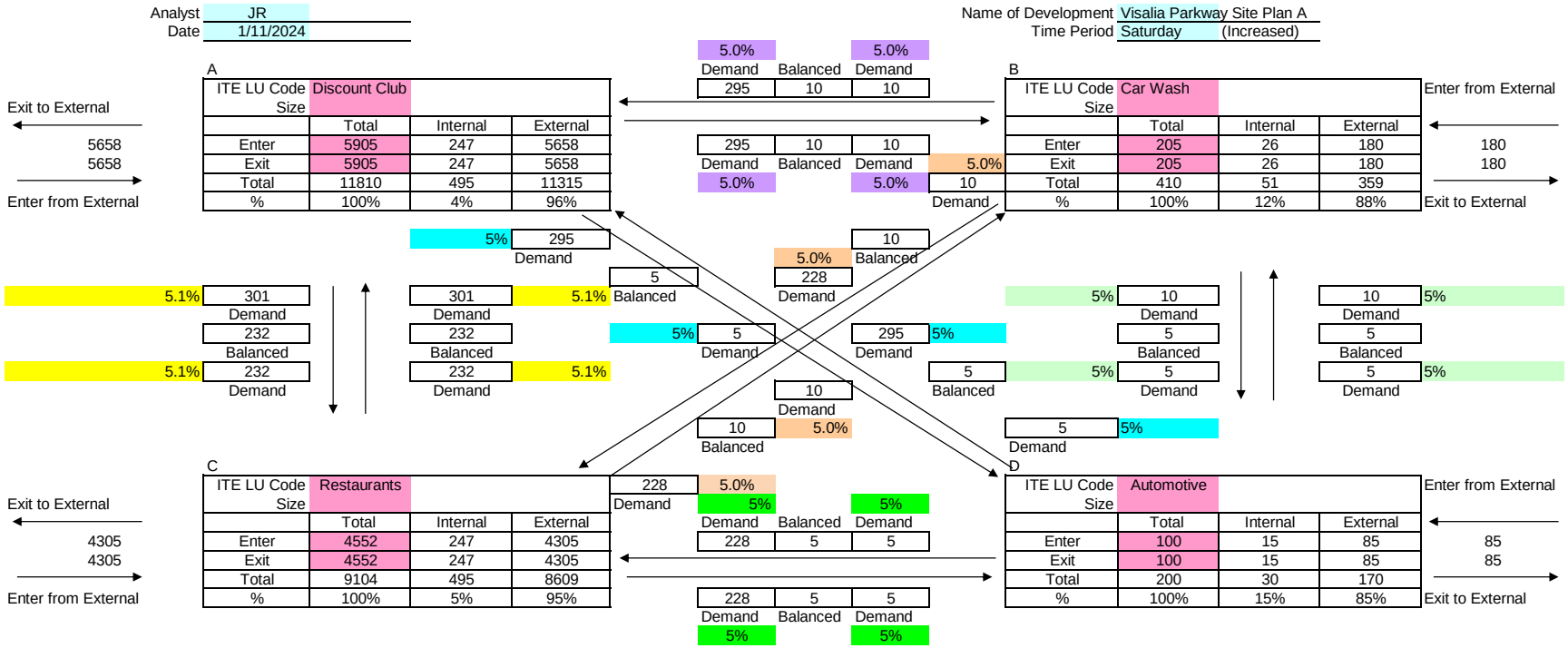
INTERNAL CAPTURE 5.0%

	ITE Totals	Captured
	1180	59
	1195	59

Pass-By Trips

	Land Use A	Land Use B	Land Use C	Total
	177	8	151	336
	185	9	145	339

MULTI-USE TRIP GENERATION AND INTERNAL CAPTURE SUMMARY



Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Land Use D	Total
Enter	5658	180	4305	85	10227
Exit	5658	180	4305	85	10227
Total	11315	359	8609	170	20453
Single-Use Trip Gen. Est.	11810	410	9104	200	21524

	ITE Totals	Captured	
INTERNAL CAPTURE	21524	1070.608	20453.392
5.0%			

Pass-By Trips

	Land Use A	Land Use B	Land Use C	Total
Enter	1414	89	1721	3224
Exit	1414	89	1721	3224

Trip Generation Calculations

ORIGINAL SITE PLAN

Table A.2
Phases 1 and 2 Project Trip Generation

ITE Land Use	Building Area	A.M. Peak Hour Traffic Volumes			Midday Peak Hour Traffic Volumes			P.M. Peak Hour Traffic Volumes			Weekday Traffic Volume	
		Rate Split	Enter	Exit	Rate Split	Enter	Exit	Rate Split	Enter	Exit	Rate	Total
Shopping Center (820)	166,600 sq. ft.	FC1 62/38	146	90	FC2 50/50	408	408	FC3 48/52	381	413	FC4	8,508
Fast Food Restaurant with Drive Through (934)	18,000 sq. ft.	40.19 51/49	369	355	51.36 51/49	472	453	32.67 52/48	306	283	470.95	8,478
High-Turnover Sit-Down Restaurant (932)	7,200 sq. ft.	9.94 55/45	40	32	17.41 52/48	66	60	9.77 62/38	44	27	112.18	808
Super Convenience Market/Gas Station (960)	3,100 sq. ft.	FC5 50/50	81	81	FC6 50/50	90	90	69.28 50/50	108	108	837.58	2,598
Automobile Parts and Service Center (943)	12,000 sq. ft.	1.96 73/27	17	7	2.75 54/46	18	15	2.26 40/60	11	17	16.28	196
Subtotals:	-	-	653	565	-	1,054	1,026	-	850	848	-	20,588
Internal Capture	-	-	-30	-30	-	-52	-52	-	-42	-42		-1,024
TOTALS:	**-**	**-**	**623**	**535**	**-**	**1,002**	**974**	**-**	**808**	**806**	**-**	**19,564**

Reference: *Trip Generation Manual, 10th Edition, Institute of Transportation Engineers, September 2017*
Rates are reported in trips per 1,000 square feet of building area
Splits are reported as Entering/Exiting as a percentage of the total.
FC1: Fitted curve: T = 0.50(X) + 151.78 FC2: Fitted curve: Ln(T) = 0.72Ln(X) + 3.02
FC3: Fitted curve: Ln(T) = 0.74Ln(X) + 2.89 FC4: Fitted curve: Ln(T) = 0.68Ln(X) + 5.57
FC5: Fitted curve: T = 137.38(X) – 264.53 FC6: Fitted curve: T = 99.90(X) – 130.36

Table A.4
Outlot 2 Trip Generation

ITE Land Use	Units	A.M. Peak Hour Traffic Volumes			Midday Peak Hour Traffic Volumes			P.M. Peak Hour Traffic Volumes			Weekday Traffic Volume	
		Rate Split	Enter	Exit	Rate Split	Enter	Exit	Rate Split	Enter	Exit	Rate	Total
Senior Housing - Attached (252)	100	0.20 35/65	7	13	0.33 47/53	16	17	0.26 55/45	14	12	3.70	370

Reference: *Trip Generation Manual, 10th Edition, Institute of Transportation Engineers, September 2017*
Rates are reported in trips per unit
Splits are reported as Entering/Exiting as a percentage of the total.

Table 4.4
Pass-By Trips and Primary Project Trips (Phases 1 and 2)

Time Period	Trips Entering Site	Trips Exiting Site	Total Trips
A.M. Peak Hour Pass-By Trips	229	206	435
A.M. Peak Hour Primary Trips	394	329	723
Midday Peak Hour Pass-By Trips	344	334	678
Midday Peak Hour Primary Trips	658	640	1,298
P.M. Peak Hour Pass-By Trips	272	266	538
P.M. Peak Hour Primary Trips	536	540	1,076

Table 4.4 Plus Table A.4
Pass-By Trips and Primary Project Trips (Phases 1 and 2 and Outlot 2)

Time Period	Trips Entering Site	Trips Exiting Site	Total Trips
A.M. Peak Hour Pass-By Trips	229	206	435
A.M. Peak Hour Primary Trips	401	342	743
Midday Peak Hour Pass-By Trips	344	334	678
Midday Peak Hour Primary Trips	674	657	1,331
P.M. Peak Hour Pass-By Trips	272	266	538
P.M. Peak Hour Primary Trips	550	552	1,102

Table X.2 (Not Previously Presented)
Original Site Plan Phases 1 and 2 Saturday Project Trip Generation

ITE Land Use	Building Area	Saturday Peak Hour Traffic Volumes			Saturday Traffic Volume	
		Rate Split	Enter	Exit	Rate	Total
Shopping Center (>150k) (820)	166,600 sq. ft.	FC1 52/48	510	471	FC2	12,844
Fast Food Restaurant with Drive Through (934)	18,000 sq. ft.	55.25 51/49	507	488	616.12	11,090
High-Turnover Sit-Down Restaurant (932)	7,200 sq. ft.	11.19 51/49	41	40	122.40	882
Convenience Store/Gas Station – VFP (9-15) (945)	3,100 sq. ft.	64.13 50/50	100	100	700.00	2,170
Automobile Parts and Service Center (943)	12,000 sq. ft.	2.76* 54/46	18	16	16.60*	200
Subtotals:	-	-	1,176	1,115	-	27,186
Internal Capture	-	-	-57	-57	-	-1,024
TOTALS:	**-**	**-**	**1,119**	**1,058**	**-**	**26,162**

Reference: *Trip Generation Manual, 11th Edition, Institute of Transportation Engineers, September 2021*
Rates are reported in trips per 1,000 square feet of building area
Splits are reported as Entering/Exiting as a percentage of the total.
* Weekend data not available. Used weekday data.
FC1: Fitted curve: $Ln(T) = 0.76Ln(X) + 3.00$ FC2: Fitted curve: $T = 36.03(X) + 6840.22$

Table X.4 (Not Previously Presented)
Original Site Plan Outlot 2 Saturday Trip Generation

ITE Land Use	Units	Saturday Peak Hour Traffic Volumes			Saturday Traffic Volume	
		Rate Split	Enter	Exit	Rate	Total
Senior Adult Housing - Multifamily (252)	100	0.32 54/46	17	15	2.74	274

Reference: *Trip Generation Manual, 11th Edition, Institute of Transportation Engineers, September 2021*
Rates are reported in trips per unit
Splits are reported as Entering/Exiting as a percentage of the total.

Table Y.4 (Not Previously Presented)
Pass-By Trips and Primary Project Trips (Phases 1 and 2 and Outlot 2)
Original Site Plan Saturday Project Trip Generation

Time Period	Trips Entering Site	Trips Exiting Site	Total Trips
Midday Peak Hour Pass-By Trips	375	358	733
Midday Peak Hour Primary Trips	761	715	1,476

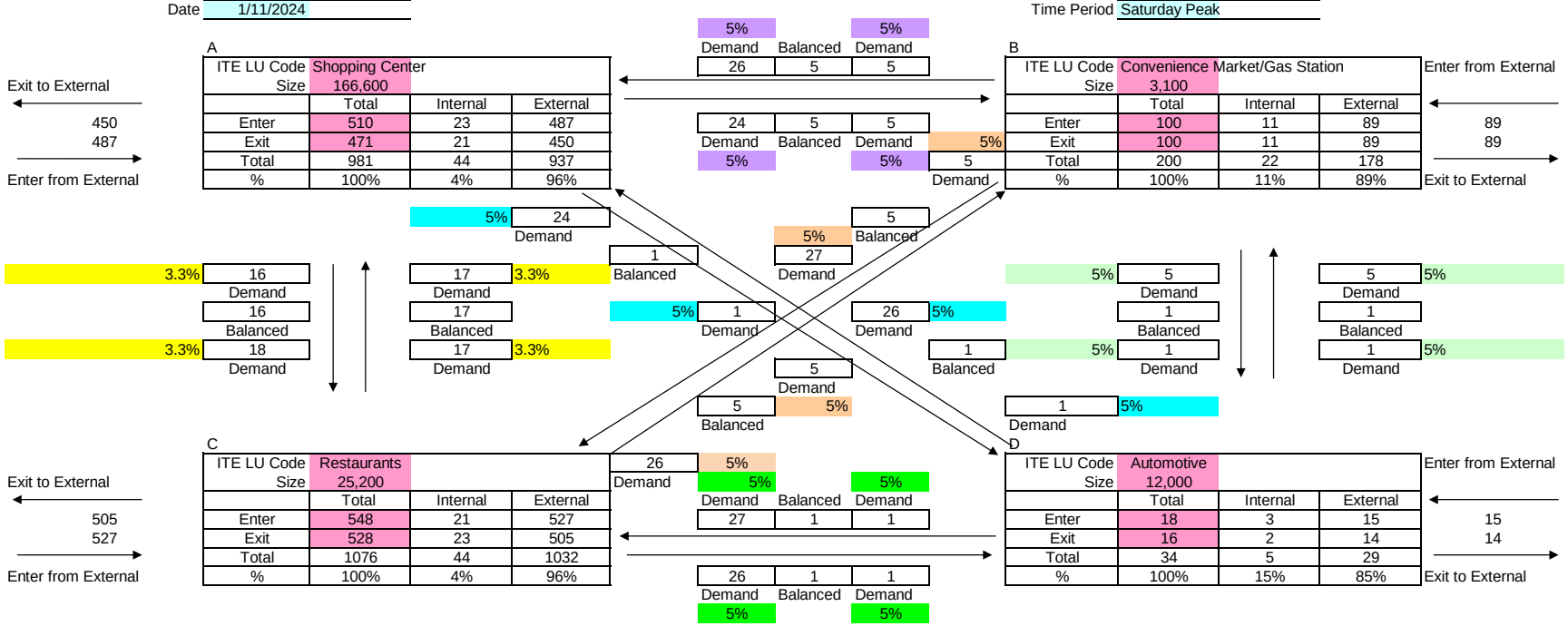
Internal Capture Calculations

ORIGINAL SITE PLAN

MULTI-USE TRIP GENERATION AND INTERNAL CAPTURE SUMMARY

Analyst JR
Date 1/11/2024

Name of Development Commons at Visalia Parkway Phases 1 and 2
Time Period Saturday Peak



Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Land Use D	Total
Enter	487	89	527	15	1119
Exit	450	89	505	14	1058
Total	937	178	1032	29	2176
Single-Use Trip Gen. Est.	981	200	1076	34	2291

INTERNAL CAPTURE 5.0%

	ITE Totals	Captured
Enter	1176	57
Exit	1115	57

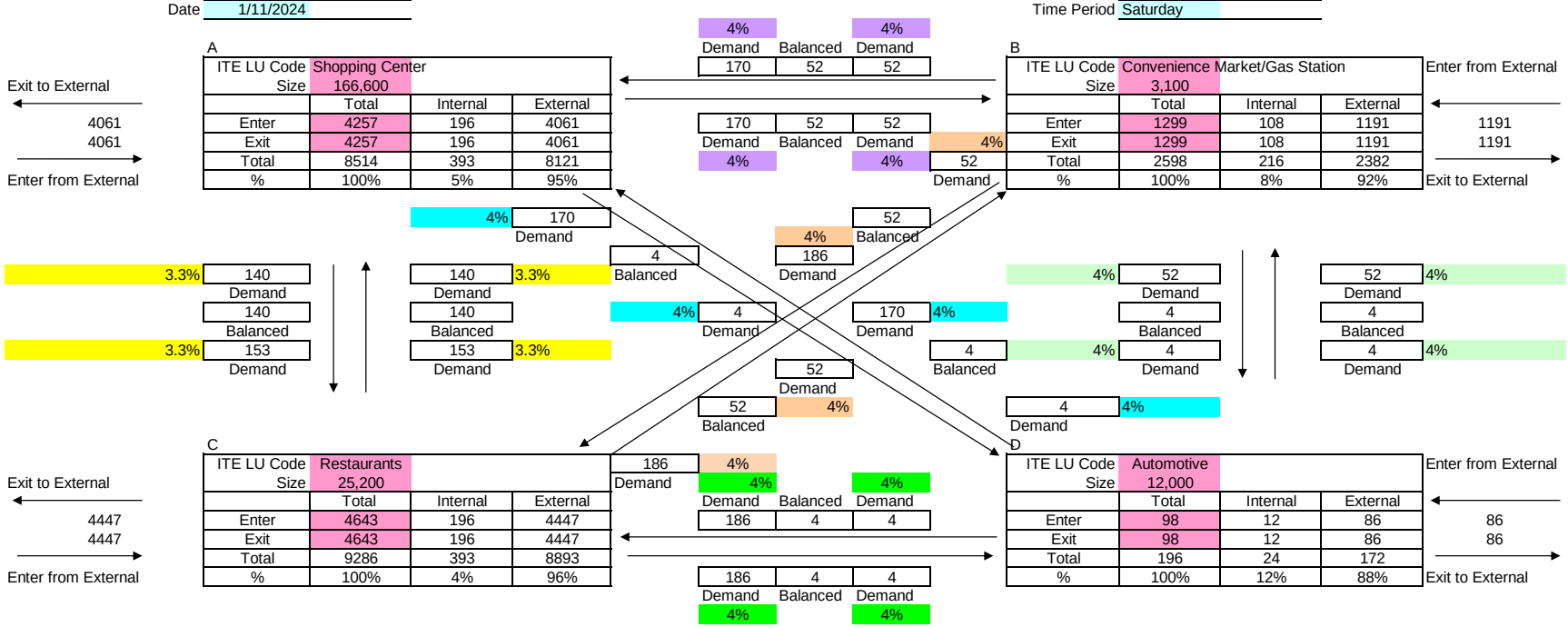
Pass-By Trips

	Land Use A	Land Use B	Land Use C	Total
Enter	121	44	210	375
Exit	112	44	202	358

MULTI-USE TRIP GENERATION AND INTERNAL CAPTURE SUMMARY

Analyst JR
Date 1/11/2024

Name of Development Commons at Visalia Parkway Phases 1 and 2
Time Period Saturday



Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Land Use D	Total		ITE Totals	Captured
Enter	4061	1191	4447	86	9785		10297	512
Exit	4061	1191	4447	86	9785		10297	512
Total	8121	2382	8893	172	19569	INTERNAL CAPTURE		
Single-Use Trip Gen. Est.	8514	2598	9286	196	20594	5.0%		

Pass-By Trips

Land Use A	Land Use B	Land Use C	Total
1015	595	1778	3388
1015	595	1778	3388

Trip Generation Comparisons

Table 1B
New Project Trip Generation (Average Rates)
Pass-By Trips and Primary Project Trips

Time Period	Trips Entering Site	Trips Exiting Site	Total Trips
A.M. Peak Hour Pass-By Trips	92	84	176
A.M. Peak Hour Primary Trips	222	181	403
Midday Peak Hour Pass-By Trips	214	211	425
Midday Peak Hour Primary Trips	475	466	941
P.M. Peak Hour Pass-By Trips	183	177	360
P.M. Peak Hour Primary Trips	408	402	810

Table 2B
Alternate New Project Trip Generation (Using Increased Rates)
Pass-By Trips and Primary Project Trips

Time Period	Trips Entering Site	Trips Exiting Site	Total Trips
A.M. Peak Hour Pass-By Trips	133	120	253
A.M. Peak Hour Primary Trips	326	261	587
Midday Peak Hour Pass-By Trips	277	222	499
Midday Peak Hour Primary Trips	622	662	1,284
P.M. Peak Hour Pass-By Trips	236	229	465
P.M. Peak Hour Primary Trips	541	532	1,073

Table 3B
New Project Trip Generation (Average Rates – Saturday)
Pass-By Trips and Primary Project Trips

Time Period	Trips Entering Site	Trips Exiting Site	Total Trips
Midday Peak Hour Pass-By Trips	261	262	523
Midday Peak Hour Primary Trips	600	607	1,207

Table 4B
New Project Trip Generation (Increased Rates – Saturday)
Pass-By Trips and Primary Project Trips

Time Period	Trips Entering Site	Trips Exiting Site	Total Trips
Midday Peak Hour Pass-By Trips	336	339	675
Midday Peak Hour Primary Trips	785	800	1,585

Table 1C
External Trip Generation Comparison 1 (Average Values)

Scenario	A.M. Peak Hour Traffic Volumes		Midday Peak Hour Traffic Volumes		P.M. Peak Hour Traffic Volumes		Weekday Traffic Volume
	Enter	Exit	Enter	Exit	Enter	Exit	
New Site Plan	314	265	689	677	591	579	13,512
Original Study	630	548	1,018	991	872	855	19,934
Difference:	**-316**	**-283**	**-329**	**-314**	**-281**	**-276**	**-6,422**

Table 2C
External Trip Generation Comparison 2 (Increased Rates)

Scenario	A.M. Peak Hour Traffic Volumes		Midday Peak Hour Traffic Volumes		P.M. Peak Hour Traffic Volumes		Weekday Traffic Volume
	Enter	Exit	Enter	Exit	Enter	Exit	
New Site Plan Increased Rates	459	381	899	884	777	761	16,908
Original Study	630	548	1,018	991	872	855	19,934
Difference:	**-171**	**-167**	**-119**	**-107**	**-95**	**-94**	**-3,026**

Table 3C
External Trip Generation Comparison 3 (Average Saturday)

Scenario	Peak Hour Traffic Volumes		24-Hour Traffic Volume
	Enter	Exit	
New Site Plan Saturday	861	869	16,264
Original Site Plan (Saturday)	1,136	1,076	26,436
Difference:	**-275**	**-207**	**-10,172**

Note: Original traffic study did not include weekend analyses.

Table 4C
External Trip Generation Comparison 4 (Increased Saturday)

Scenario	Peak Hour Traffic Volumes		24-Hour Traffic Volume
	Enter	Exit	
New Site Plan Saturday Increased Rates	1,121	1,139	20,455
Original Site Plan (Saturday)	1,136	1,076	26,436
Difference:	**-15**	**63**	**-5,981**

Note: Original traffic study did not include weekend analyses.

Table 1D
Primary Trip Generation Comparison 1 (Average Values)

Scenario	A.M. Peak Hour Traffic Volumes		Midday Peak Hour Traffic Volumes		P.M. Peak Hour Traffic Volumes	
	Enter	Exit	Enter	Exit	Enter	Exit
New Site Plan	222	181	475	466	408	402
Original Study	401	342	674	657	550	552
Difference:	**-179**	**-161**	**-199**	**-191**	**-142**	**-150**

Table 2D
Primary Trip Generation Comparison 2 (Increased Rates)

Scenario	A.M. Peak Hour Traffic Volumes		Midday Peak Hour Traffic Volumes		P.M. Peak Hour Traffic Volumes	
	Enter	Exit	Enter	Exit	Enter	Exit
New Site Plan Increased Rates	326	261	622	662	541	532
Original Study	401	342	674	657	550	552
Difference:	**-75**	**-81**	**-52**	**-5**	**-9**	**-20**

Table 3D
Primary Trip Generation Comparison 3 (Average Saturday)

Scenario	Peak Hour Traffic Volumes	
	Enter	Exit
New Site Plan Saturday	600	607
Original Site Plan (Saturday)	761	715
Difference:	**-161**	**-108**

Note: Original traffic study did not include weekend analyses.

Table 4D
Primary Trip Generation Comparison 4 (Increased Saturday)

Scenario	Peak Hour Traffic Volumes	
	Enter	Exit
New Site Plan Saturday Increased Rates	814	834
Original Site Plan (Saturday)	785	800
Difference:	**29**	**34**

Note: Original traffic study did not include weekend analyses.

Environmental Noise & Vibration Assessment

SWC W. Visalia Parkway & S. Mooney Boulevard Development

Visalia, California

BAC Job # 2023-170

Prepared For:

Lars Anderson & Associates, Inc.

Attn: Ashley Nulick
4694 W Jacquelyn Avenue
Fresno, CA 93722

Prepared By:

Bollard Acoustical Consultants, Inc.

Dario Gotchet, Principal Consultant

July 15, 2024

BOLLARD
Acoustical Consultants

CEQA Checklist

NOISE AND VIBRATION **– Would the Project Result in:**	**NA – Not Applicable**	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Generation of substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			**X**		
b) Generation of excessive groundborne vibration or groundborne noise levels?				**X**	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?					**X**

Introduction

The SWC W. Visalia Parkway & S. Mooney Boulevard Development is located south of W. Visalia Parkway and west of S. Mooney Boulevard in Visalia, California. The components of the development included in this assessment are the proposed anchor tenant with fueling station and car wash land uses (project). Existing land uses in the immediate project vicinity consist of single-family residential to the south and west, commercial to the north and east. The project area and surrounding land uses are shown in Figure 1. The project preliminary site plan is presented in Figure 2.

The purposes of this assessment are to quantify the existing noise and vibration environments, identify potential noise and vibration impacts resulting from the project, identify appropriate mitigation measures, and provide a quantitative and qualitative analysis of impacts associated with the project. Specifically, impacts are identified if project-related activities would cause a substantial increase in ambient noise levels at existing sensitive land uses in the project vicinity (residential), generate excessive vibration levels at the nearby sensitive uses, or result in noise levels that would exceed applicable federal, state, or local standards at nearby sensitive uses.

Noise and Vibration Fundamentals

Noise

Noise is often described as unwanted sound. Sound is defined as any pressure variation in air that the human ear can detect. If the pressure variations occur frequently enough (at least 20 times per second), they can be heard and are designated as sound. The number of pressure variations per second is called the frequency of sound and is expressed as cycles per second, or Hertz (Hz). Definitions of acoustical terminology are provided in Appendix A.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals of pressure) as a point of reference, defined as 0 dB. Other sound pressures are then compared to the reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB. Another useful aspect of the decibel scale is that changes in decibel levels correspond closely to human perception of relative loudness. Noise levels associated with common noise sources are provided in Figure 3.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable and can be approximated by filtering the frequency response of a sound level meter by means of the standardized A-weighting network. There is a strong correlation between A-weighted sound levels (expressed as dBA) and community response to noise. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}). The L_{eq} is the foundation of the day-night average noise descriptor, DNL (or L_{dn}), and shows very good correlation with community response to noise. DNL is based on the average noise level over a 24-hour day, with a +10-decibel weighting applied to noise occurring during nighttime hours (10:00 p.m. to 7:00 a.m.). The nighttime penalty is based on the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because DNL represents a 24-hour average, it tends to disguise short-term variations in the noise environment.

Vibration

Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that noise is generally considered to be pressure waves transmitted through air, while vibration is usually associated with transmission through the ground or structures. As with noise, vibration consists of amplitude and frequency. A person's response to vibration will depend on their individual sensitivity as well as the amplitude and frequency of the source.

Vibration can be described in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration in terms of velocity in inches per second peak particle velocity (IPS, PPV) or root-mean-square (VdB, RMS). Standards pertaining to perception as well as damage to structures have been developed for vibration in terms of peak particle velocity as well as RMS velocities.

As vibrations travel outward from the source, they excite the particles of rock and soil through which they pass and cause them to oscillate. Differences in subsurface geologic conditions and distance from the source of vibration will result in different vibration levels characterized by different frequencies and intensities. In all cases, vibration amplitudes will decrease with increasing distance.

Human response to vibration is difficult to quantify. Vibration can be felt or heard well below the levels that produce any damage to structures. The duration of the event has an effect on human response, as does frequency. Generally, as the duration and vibration frequency increase, the potential for adverse human response increases.

According to the Transportation and Construction-Induced Vibration Guidance Manual (Caltrans, June 2004), operation of construction equipment and construction techniques generate ground vibration. Traffic traveling on roadways can also be a source of such vibration. At high enough amplitudes, ground vibration has the potential to damage structures and/or cause cosmetic damage. Ground vibration can also be a source of annoyance to individuals who live or work close to vibration-generating activities. However, traffic rarely generates vibration amplitudes high enough to cause structural or cosmetic damage.

Legend

- Project Boundary (Approximate)
- Ambient Noise & Vibration Survey Sites

N

Scale (Feet)

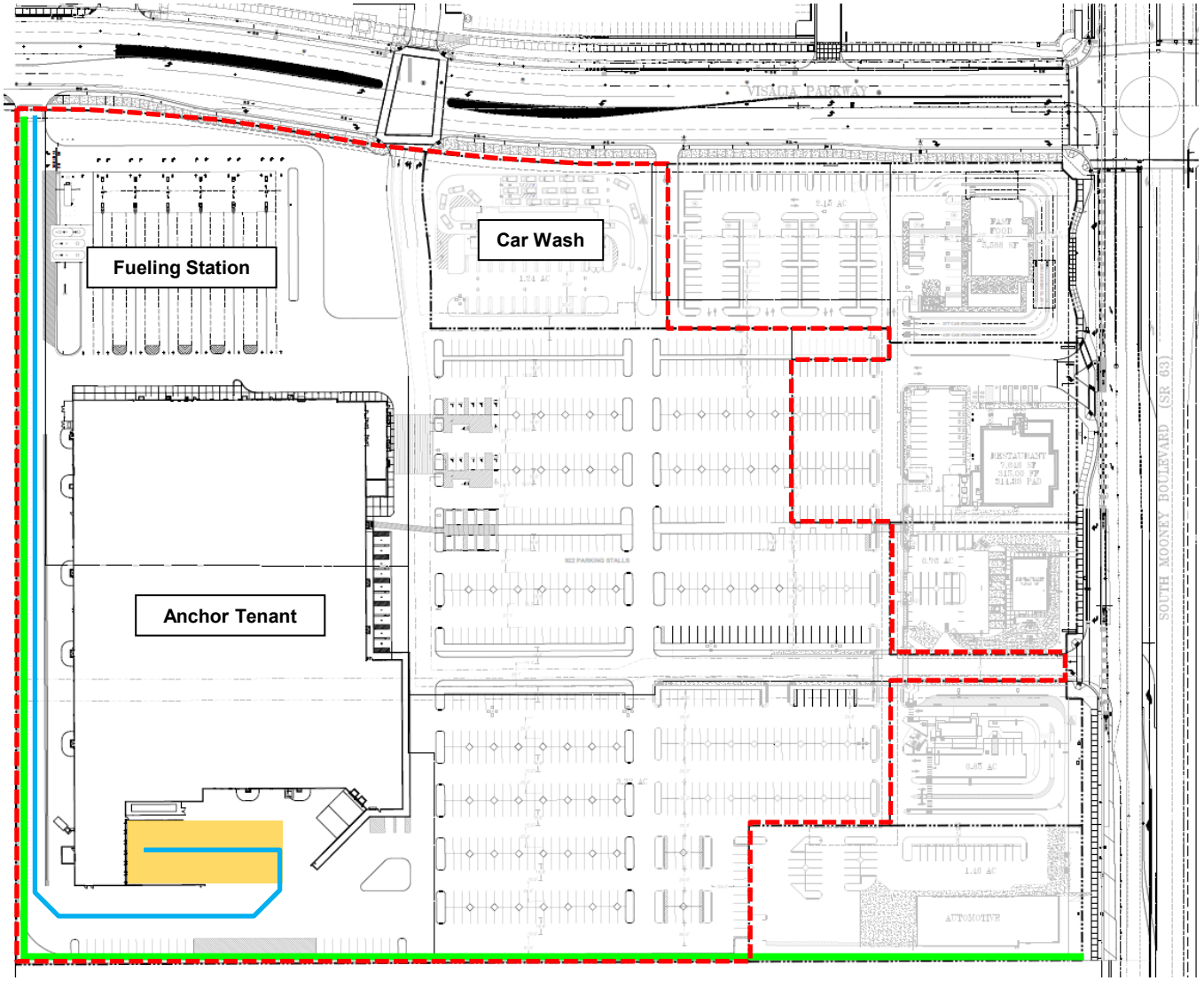
0 150 300

SWC W. Visalia Pkwy & S. Mooney Blvd
Visalia, California

Project Area

Figure 1

BOLLARD Acoustical Consultants



Legend

- Project Boundary
- Existing 7' Solid Wall (Noise Barrier)
- On-Site Delivery Truck Circulation Route (Assumed)
- Loading Dock Area

N

Scale (Feet)

0 100 200

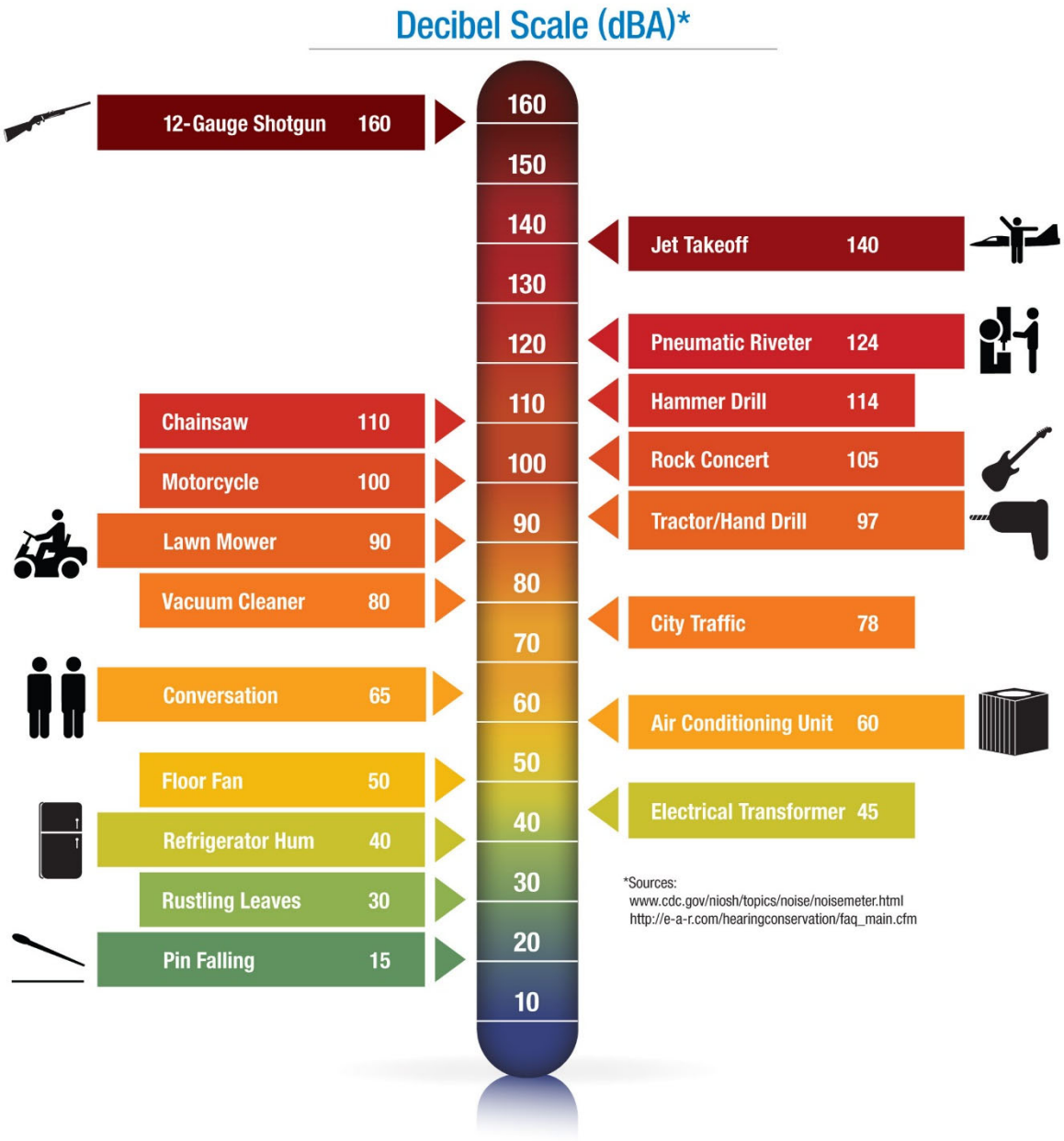
SWC W. Visalia Pkwy & S. Mooney Blvd
Visalia, California

Project Preliminary Site Plan

Figure 2

BOLLARD Acoustical Consultants

Figure 3
Noise Levels Associated with Common Noise Sources



Environmental Setting – Existing Ambient Noise and Vibration Environment

Noise-Sensitive Land Uses in the Project Vicinity

Noise-sensitive land uses are generally defined as locations where people reside or where the presence of unwanted sound could adversely affect the primary intended use of the land. Places where people live, sleep, recreate, worship, and study are generally considered to be sensitive to noise because intrusive noise can be disruptive to these activities.

The existing noise-sensitive land uses which would potentially be affected by the project consist of residential uses. Specifically, single-family residential land uses are located to the south and west of the project. Commercial uses are located to the north and east of the project property; however, such uses aren't typically considered to be noise-sensitive. The project area and surrounding land uses are shown in Figure 1.

Existing Overall Ambient Noise Environment within the Project Vicinity

The existing ambient noise environment within the immediate project vicinity is defined primarily by traffic on W. Visalia Parkway and S. Mooney Boulevard, and by existing nearby commercial operations. To quantify the existing ambient noise environment within the immediate project vicinity, BAC conducted long-term (72-hour) ambient noise level surveys at three (3) locations February 14-16, 2024. The ambient noise survey locations are identified as sites 1-3 in Figure 1. Photographs of the noise survey sites are provided in Appendix B.

Larson Davis Laboratories (LDL) Model 831 and LxT precision integrating sound level meters were used to complete the long-term noise level survey. The meters were calibrated immediately before use with an LDL Model CA200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all specifications of the American National Standards Institute requirements for Type 1 sound level meters (ANSI S1.4). The results of the long-term ambient noise surveys are shown numerically and graphically in Appendices C and D (respectively) and are summarized in Table 1.

Table 1
Summary of Long-Term Ambient Noise Survey Results – February 14-16, 2024

Site Description[1]	Date	DNL (dB)	Average Measured Hourly Noise Levels (dB)[2]					
			Daytime[3]			Nighttime[3]		
			L_{eq}	L_{max}	L_{50}	L_{eq}	L_{max}	L_{50}
Site 1: Northwest project area in backyard of W. Lake Dr residence	2/14/24	55	53	67	50	48	61	45
	2/15/24	55	52	66	48	47	60	45
	2/16/24	55	53	69	50	47	60	43
Site 2: Western project area in backyard of Quince Ct residence	2/14/24	58	53	68	49	51	65	48
	2/15/24	57	52	72	47	51	63	48
	2/16/24	57	52	67	48	50	63	47
Site 3: Southeast project area in backyard of Ash Ct residence	2/14/24	56	52	68	49	49	65	46
	2/15/24	57	51	69	48	50	62	47
	2/16/24	55	51	69	48	49	63	44

[1] Noise monitoring locations are identified in Figure 1. Survey photos are presented in Appendix B.
[2] Detailed summaries of the noise monitoring results are provided in Appendices C and D.
[3] Daytime: 7:00 AM to 10:00 PM | Nighttime: 10:00 PM to 7:00 AM

Source: BAC 2024

BAC ambient noise survey site 1, located along the northwest portion of the project property boundary, was selected to be representative of the ambient noise level environment at the closest residences to the northwest of the project. Noise level measurements obtained at site 2, located along the west/southwest project property boundary, are believed to be generally representative of the ambient noise level environments at the closest residences to the west/southwest of the project. Finally, noise level measurements obtained at site 3, located near the southeast project property line, are believed to be representative of the existing ambient noise level environments at the nearest residences to the south/southeast of the project.

As shown in Table 1, measured day-night average noise levels (DNL) and average measured hourly noise levels (L_{eq}, L_{50}, L_{max}) were generally consistent at each survey site during the 72-hour monitoring period (i.e., relatively small range of measured values).

Existing Ambient Vibration Environment within the Project Vicinity

During site visits on February 13th and 17th, 2024, vibration levels were below the threshold of perception within the project vicinity. Nonetheless, to quantify existing vibration levels within the project vicinity, BAC conducted three (3) short-term (15-minute) vibration measurement surveys on February 17th, 2024 at the locations shown in Figure 1.

A Larson-Davis Laboratories Model LxT precision integrating sound level meter equipped with a vibration transducer was used to complete the measurements. The results are summarized in Table 2.

Table 2
Summary of Short-Term Ambient Vibration Survey Results – February 17th, 2024

Site Description[1]	Time	Average Measured Vibration Level, PPV (in/sec)[1]
Site 1: Northwest project area in backyard of W. Lake Dr residence	5:46 p.m.	<0.001
Site 2: Western project area in backyard of Quince Ct residence	5:16 p.m.	<0.001
Site 3: Southeast project area in backyard of Ash Ct residence	4:55 p.m.	<0.001
[1] PPV = Peak Particle Velocity (inches/second)		

Source: BAC 2024

The Table 2 data indicate that measured average vibration levels within the project vicinity were less than 0.001 in/sec PPV (i.e., below the threshold of human perception).

Regulatory Setting: Criteria for Acceptable Noise and Vibration Exposure

Federal

There are no federal noise or vibration criteria which would be directly applicable to this project. However, the City of Visalia does not currently have a policy for assessing noise impacts associated with increases in ambient noise levels from project-generated noise sources. As a result, the following federal noise criteria was applied to the project.

Federal Interagency Commission on Noise (FICON)

The Federal Interagency Commission on Noise (FICON) has developed a graduated scale for use in the assessment of project-related noise level increases. The criteria shown in Table 3 was developed by FICON as a means of developing thresholds for impact identification for project-related noise level increases. The FICON standards have been used extensively in recent years in the preparation of the noise sections of Environmental Impact Reports that have been certified in many California cities and counties.

The use of the FICON standards is considered conservative relative to thresholds used by other agencies in the State of California. For example, the California Department of Transportation (Caltrans) requires a project-related traffic noise level increase of 12 dB for a finding of significance, and the California Energy Commission (CEC) considers project-related noise level increases between 5 to 10 dB significant, depending on local factors. Therefore, the use of the FICON standards, which set the threshold for finding of significant noise impacts as low as 1.5 dB, provides a very conservative approach to impact assessment for this project.

Table 3
Significance of Changes in Cumulative Noise Exposure

Ambient Noise Level Without Project (DNL)	Change in Ambient Noise Level Due to Project
<60 dB	+5.0 dB or more
60 to 65 dB	+3.0 dB or more
>65 dB	+1.5 dB or more

Source: Federal Interagency Committee on Noise (FICON)

Based on the FICON research, as shown in Table 3, a 5 dB increase in noise levels due to a project is required for a finding of significant noise impact where ambient noise levels without the project are less than 60 dB DNL. Where pre-project ambient conditions are between 60 and 65 dB DNL, a 3 dB increase is applied as the standard of significance. Finally, in areas already exposed to higher noise levels, specifically pre-project noise levels in excess of 65 dB DNL, a 1.5 dB increase is considered by FICON as the threshold of significance.

State of California

California Environmental Quality Act (CEQA)

Appendix G of the CEQA Guidelines asks whether the project would result in any of the following to determine whether a significant noise or vibration impact would occur:

A. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or other applicable standards of other agencies; or

B. Generation of excessive groundborne vibration or groundborne noise levels; or

C. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, the project expose people residing or working in the project area to excessive noise levels.

It should be noted that audibility is not a test of significance according to CEQA. If this were the case, any project which added any audible amount of noise to the environment would be considered significant according to CEQA. Because every physical process creates noise, the use of audibility alone as significance criteria would be unworkable. CEQA requires a substantial increase in noise levels before noise impacts are identified, not simply an audible change.

California Department of Transportation (Caltrans)

The City of Visalia does not currently have adopted standards for groundborne vibration that would be applicable to this specific project. As a result, the vibration impact criteria developed by the California Department of Transportation (Caltrans) was applied to the project. The Caltrans

guidance criteria for building structures and vibration annoyance are presented in Tables 4 and 5, respectively.

Table 4
Caltrans Guidance for Building Structure Vibration Criteria

Structure and Condition	Limiting PPV (in/sec)
Historic and some old buildings	0.5
Residential structures	0.5
New residential structures	1.0
Industrial buildings	2.0
Bridges	2.0
PPV = Peak Particle Velocity	

Source: 2020 Caltrans Transportation and Construction Vibration Guidance Manual, Table 14

Table 5
Caltrans Guidance for Vibration Annoyance Potential Criteria

	Maximum PPV (in/sec)	
Human Response	Transient Sources	Continuous/Frequent Intermittent Sources
Severe/very disturbing	2.0	0.4 to 3.6
Strongly perceptible	0.9	0.1
Distinctly perceptible	0.24	0.035
Barely/slightly perceptible	0.035	0.012
Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent sources include pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers and vibratory compaction equipment.		
PPV = Peak Particle Velocity		

Source: 2020 Caltrans Transportation and Construction Vibration Guidance Manual, Tables 4 & 6

Local

Visalia General Plan

The Safety and Noise Element of the Visalia General Plan (Chapter 8) contains objectives and policies to ensure that city residents are not subjected to noise beyond acceptable levels. The General Plan objectives and policies which would be most applicable to this project are reproduced below.

Objectives

N-O-1 Strive to achieve an acceptable noise environment for present and future residents of Visalia.

N-O-2 Protect the City's economic base by preventing the encroachment of incompatible land uses near known noise producing industries, railroads, airports and other sources.

N-O-3 Protect noise-sensitive land uses such as schools, hospitals, and senior care facilities from encroachment of and exposure to excessive levels of noise.

Policies

N-P-1 Update the City's Noise Ordinance as needed to be in conformance with the General Plan.

N-P-2 Promote the use of noise attenuation measures to improve the acoustic environment inside residences where existing single-family residential development is located in a noise-impacted environment such as along an arterial street or adjacent to a noise-producing use.

N-P-4 Where new development of industrial, commercial or other noise-generating land uses (including roadways, railroads, and airports) may result in noise levels that exceed the noise level exposure criteria established by Tables 8-3 and 8-4 (Tables 6 and 7 of this report), require a noise study to determine impacts, and require developers to mitigate these impacts in conformance with Tables 8-3 and 8-4 (Tables 6 and 7 of this report) as a condition of permit approval through appropriate means.

Noise mitigation measures may include but are not limited to:

- Screen and control noise sources, such as parking and loading facilities, outdoor activities, and mechanical equipment;
- Increase setbacks for noise sources from adjacent dwellings;
- Retain fences, walls, and landscaping that serve as noise buffers;
- Use soundproofing materials and double-glazed windows;
- Use open space, building orientation and design, landscaping and running water to mask sounds; and
- Control hours of operation, including deliveries and trash pickup, to minimize noise impacts.

Alternative acoustical designs that achieve the prescribed noise level reduction may be approved, provided a qualified acoustical consultant submits information demonstrating that the alternative designs will achieve and maintain the specific targets for outdoor activity areas and interior spaces. As a last resort, developers may propose to construct noise walls along state highways and arterials when compatible with aesthetic concerns and neighborhood character. This would be a developer responsibility, with no City funding.

N-P-5 Continue to enforce applicable State Noise Insulation Standards (California Administrative Code, Title 24) and Uniform Building Code (UBC) noise requirements.

Table 6
Transportation Noise Sources

Noise-Sensitive Land Use	Outdoor Activity Areas, dBA	Interior Spaces, dBA	
	DNL/CNEL[2]	DNL/CNEL[2]	L_{eq}[3]
Residential	65	45	--
Transient Lodging	65	45	--
Hospitals, Nursing Homes	65	45	--
Theatres, Auditoriums, Music Halls	--	--	35
Churches, Meeting Halls	65	--	45
Office Buildings	--	--	45
Schools, Libraries, Museums	--	--	45

[1] Outdoor activity areas generally include backyards of single-family residences and outdoor patios, decks or common recreation areas for multi-family developments.
[2] The CNEL is used for quantification of aircraft noise exposure as required by CAC Title 21.
[3] As determined for a typical worst-case hour during periods of use.

Source: Visalia General Plan, Safety and Noise Element, Table 8-3

Table 7
Stationary Noise Sources[1]

Noise Level Descriptor	Daytime (7:00 a.m. to 10:00 p.m.)	Nighttime (10:00 p.m. to 7:00 a.m.)
Hourly Equivalent Sound Level, L_{eq} (dBA)	50	45
Maximum Sound Level, L_{max} (dBA)	70	65

[1] As determined as the property line of the receiving noise-sensitive use.

Source: Visalia General Plan, Safety and Noise Element, Table 8-4

Visalia Municipal Code

The provisions of the Visalia Municipal Code which would be most applicable to this project are reproduced below.

Chapter 8.36 Noise

8.36.040 Exterior noise standards – fixed noise sources.

A. It is unlawful for any person at any location within the city to create any noise, or to allow the creation of any noise, on property owned, leased, occupied or otherwise controlled by such person which causes the exterior noise level, when measured at the property line of any affected noise-sensitive land use, to exceed any of the categorical noise level standards as set forth in the following table:

Exterior Noise Level Standards, dBA

Category	Cumulative Number of Minutes in Any 1-Hour Time Period	Evening and Daytime (6:00 a.m. to 7:00 p.m.)	Nighttime (7:00 p.m. to 6:00 a.m.)
1	30 (L_{50})	50	45
2	15 (L_{25})	55	50
3	5 (L_8)	60	55
4	1 (L_2)	65	60
5	0 (L_{max})	70	65

Source: Visalia Municipal Code, Section 8.36.040(A)

B. In the event the measured ambient noise level without the alleged offensive source in operation exceeds an applicable noise level standard in any category above, the applicable standard shall be adjusted so as to equal the ambient noise level.

C. Each of the noise level standards specified above shall be reduced by 5 dB for pure tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises.

8.36.050 Exterior noise standards – mobile noise sources prohibition against use.

It is unlawful to operate any of the below-listed devices, appliances, equipment or vehicles on public or private property abutting noise-sensitive land uses between the weekday hours of 7:00 p.m. and 6:00 a.m., and between the weekend hours of 7:00 p.m. and 9:00 a.m.

C. Construction equipment including jackhammers, portable generators, pneumatic equipment, trenchers, or other such equipment, except for emergency repair purposes as provided in Section 8.36.070.

8.36.060 Residential interior noise standards.

A. It is unlawful for any person, at any location within the city, to operate or cause to be operated, any source of sound or to allow the creation of any noise which causes the noise level when measured inside a dwelling unit to exceed any of the categorized noise level standards as set forth in the following table:

Interior Noise Level Standards, dBA

Category	Cumulative Number of Minutes in Any 1-Hour Time Period	Evening and Daytime (6:00 a.m. to 7:00 p.m.)	Nighttime (7:00 p.m. to 6:00 a.m.)
1	5 (L_8)	45	35
2	1 (L_2)	50	40
3	0 (L_{max})	55	45

Source: Visalia Municipal Code, Section 8.36.040(A)

B. In the event the measured ambient noise level without the alleged offensive source in operation exceeds an applicable noise level standard in any category above, the applicable standard shall be adjusted so as to equal the ambient noise level.

C. Each of the noise level standards specified above shall be reduced by 5 dB for pure tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises.

8.36.070 Noise source exemptions.

The following activities shall be exempted from the provisions of this chapter:

A. Noise sources associated with the collection of waste or garbage from commercially zoned or industrially zoned property by the city or its authorized franchisee.

17.36.50 Commercial and mixed-use zones.

The following standards shall apply to sites within a C-N, C-R, C-S, C-MU or D-MU zone:

A. Where a site in the C-N, C-R, C-S, C-MU, or D-MU zone adjoins an R-1 or R-M zone, either a concrete block masonry wall not less than seven (7) feet in height shall be located on the property line except in a required front yard and suitably maintained or a landscaped buffer be provided as approved by the planning commission.

B. A use not conducted entirely within a completely enclosed structure, on a site across a street or alley from an R-1 or R-M zone shall be screened by a concrete block or masonry wall not less than six (6) feet in height, if the city planning commission finds said use to be unsightly. A landscaped buffer can be approved by the planning commission in place of a required wall as an exception.

C. Open storage of materials and equipment, except commercial vehicles and used car sales lots, shall be permitted only within an area surrounded and screened by a concrete block or masonry wall not less than six (6) feet in height; provided, that no materials or equipment shall be stored to a height greater than that of the wall or fence.

D. No fence or wall shall exceed seven (7) feet in height if located in a required side or rear yard or three (3) feet in height if located in a required front yard. A fence or wall may be allowed in a required front yard to a height of four (4) feet provided that the additional one-foot height is not of a solid material, upon approval of the city planner.

Adjustments to Municipal Code Noise Standards Based on Ambient Conditions

Section 8.36.040 of the Visalia Municipal Code states that if measured ambient noise levels exceed the established noise level limits, the applicable standard shall be adjusted so as to equal the measured ambient noise level.

Table 1 of this report contains the results from the BAC long-term ambient noise survey at sites 1-3, which are believed to be representative of the existing ambient noise environments at nearby

existing residential uses adjacent to the project. Based on the results from the BAC long-term noise level surveys, the Municipal Code noise level limits applicable to the project are summarized in Table 8.

Table 8
Adjusted Municipal Code Noise Level Standards Applied to the Project

Nearest Residences[1]	Average Measured Noise Levels[1]				Unadjusted Standards				Adjustment for Measured Ambient?				Applied Standards[2]			
	Daytime		Nighttime		Day/Eve		Nighttime		Day/Eve		Nighttime		Day/Eve		Nighttime	
	L_{50}	L_{max}	L_{50}	L_{max}	L_{50}	L_{max}	L_{50}	L_{max}	L_{50}	L_{max}	L_{50}	L_{max}	L_{50}	L_{max}	L_{50}	L_{max}
Northwest	48	66	43	60	**50**	**70**	**45**	**65**	N	N	N	N	50	70	45	65
West	47	67	47	63	**50**	**70**	**45**	**65**	N	N	Y	N	50	70	*47*	65
Southwest	47	67	47	63	**50**	**70**	**45**	**65**	N	N	Y	N	50	70	*47*	65
Southeast	48	68	44	62	**50**	**70**	**45**	**65**	N	N	N	N	50	70	45	65

[1] Lowest average measured hourly noise levels from Table 1.
[2] Applied standards based on results from BAC ambient noise level surveys and pursuant to Section 8.36.040.

Impacts and Mitigation Measures

Thresholds of Significance

For the purposes of this assessment, noise or vibration impacts are considered significant if the project would result in:

- Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or other applicable standards of other agencies; or
- Generation of excessive groundborne vibration or groundborne noise levels; or
- For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, the project expose people residing or working in the project area to excessive noise levels.

The project site is not within the vicinity of a private airstrip, an airport land use plan, or within two miles of a public airport. Therefore, the last threshold listed above is not discussed further.

The following criteria based on standards established by the Federal Interagency Commission on Noise (FICON), California Department of Transportation (Caltrans), Visalia General Plan, and Visalia Municipal Code were used to evaluate the significance of environmental noise and vibration resulting from the project:

- A significant noise impact would be identified if the project would expose persons to or generate noise levels that would exceed applicable noise standards presented in the Visalia General Plan or Visalia Municipal Code.

- A significant impact would be identified if project-generated off-site traffic were to substantially increase noise levels at existing sensitive receptors in the vicinity. A substantial increase in off-site traffic noise levels would be identified relative to the FICON noise level increase significance criteria presented in Table 3.

  In terms of determining the temporary noise increase due to project on-site operations at existing sensitive receptors in the vicinity, an impact would occur if those activities were to noticeably increase ambient noise levels above background levels at those locations. The threshold of perception of the human ear is approximately 3 to 5 dB – a 5 dB change is considered to be clearly noticeable. For the analysis of increases in ambient noise levels associated with project on-site operations, a noticeable increase in ambient noise levels is assumed to occur where those activities would result in an increase by 5 dB or more over existing ambient noise levels at existing residences.

- A significant impact would be identified if project construction activities or proposed on-site operations were to expose existing sensitive receptors to excessive groundborne vibration levels. Specifically, an impact would be identified if groundborne vibration levels due to these sources would exceed the Caltrans vibration impact criteria presented in this report.

Noise Impacts Associated with Project-Generated Increases in Off-Site Traffic

Impact 1: Increases in Existing Off-Site Traffic Noise Levels due to the Project

Construction of this project would result in increased traffic on the local roadway network. BAC utilized the FHWA Model (FHWA-RD-77-108) with provided project traffic data to determine whether traffic noise impacts (relative to the FICON increase significance criteria provided in Table 3) would occur as a result of this project.

The FHWA Traffic Noise Model (FHWA-RD-77-108) was used to quantify increases in existing traffic noise levels at the existing sensitive land uses nearest to the project area roadway network. The FHWA Model predicts hourly L_{eq} values for free-flowing traffic conditions. Estimates of the hourly distribution of traffic for a typical 24-hour period were used to develop DNL values from L_{eq} values.

According to the provided site plan, the project site will be accessed from S. Mooney Boulevard and W. Visalia Parkway. As a result, the greatest impact from project-generated off-site traffic will be along these roadways. The nearest existing noise sensitive use along S. Mooney Boulevard has been identified as a single-family residence located ¼ mile south of the project site (27274 S. Mooney Boulevard), which outdoor activity area (i.e., backyard) maintains a separation of approximately 150 feet from the roadway centerline. The closest existing noise-sensitive use along W. Visalia Parkway has been identified as a single-family residence located just west of the

project area (on W. Lake Drive), which outdoor activity area (i.e., backyard) maintains a separation of approximately 100 feet from the roadway centerline.

Existing traffic data in the form of peak hour intersection turning movements were obtained from the Proposed Commons at W. Visalia Parkway Shopping Center Traffic Impact Analysis prepared by Peters Engineering Group. Those data were converted to Average Daily Traffic (ADT) segment volumes by applying a factor of 5 to the sum of AM and PM peak hour conditions. Other inputs were obtained from BAC observations and noise measurement data. Based on the results from the analysis, the segment of S. Mooney Boulevard adjacent to the closest existing residential use is calculated to have an existing ADT volume of approximately 17,000. The results further indicate that the segment of W. Visalia Parkway adjacent to the closest existing residential use is calculated to have an existing ADT volume of approximately 6,500.

Assuming vehicle speeds of 55 MPH, medium- and heavy-truck mix of 4%/2% (derived from Caltrans data), and an existing ADT of 17,000, the FHWA Model predicts S. Mooney Boulevard traffic noise levels of 66 dB DNL at distance of 150 feet from the centerline of the roadway (i.e., location of 27274 S. Mooney Boulevard residence backyard). Assuming vehicle speeds of 45 MPH, medium- and heavy-truck mix of 2%/2% (derived from BAC file data for similar roadways), and an existing ADT of 6,500, the FHWA Model predicts W. Visalia Parkway traffic noise levels of 62 dB DNL at distance of 100 feet from the centerline of the roadway (i.e., location of W. Lake Drive residence backyard).

According to the provided project trip generation data, the proposed anchor tenant with fueling station land use (discount club – ITE code 857) is estimated to generate a weekday traffic volume of 9,500, and a Saturday traffic volume of 11,810. The project trip generation also indicate that the proposed car wash land use (automated car wash – ITE code 934) is calculated to generate a weekday traffic volume of 776, and a Saturday traffic volume of 410. Given a combined ADT of 12,220 (11,810+410), project-generated traffic noise level exposure is predicted to be 60 dB DNL at the outdoor activity area (backyard) of the residence located at 27274 S. Mooney Boulevard. Given the combined ADT of 12,220, project-generated traffic noise level exposure is also predicted to be 60 dB DNL at the outdoor activity area of the nearest existing residence located along W. Visalia Parkway (W. Lake Drive).

According to FICON criteria (presented in Table 3), where pre-project ambient conditions are between 60 and 65 dB DNL, a 3 dB increase is applied as the standard of significance. The FICON increase significance criterion of 3 dB would be applicable at the residence located along W. Visalia Parkway (W. Lake Drive), at which an existing W. Visalia Parkway traffic noise level environment 62 dB DNL was calculated. FICON criteria also indicate that in areas already exposed to higher noise levels, specifically pre-project noise levels in excess of 65 dB DNL, a 1.5 dB increase is considered by FICON as the threshold of significance. The FICON increase significance criterion of 1.5 dB would be applicable at the residence located at 27274 S. Mooney Boulevard, at which an existing traffic noise level environment of 66 dB DNL was calculated.

Based a predicted existing S. Mooney Boulevard traffic noise level environment of 66 dB DNL, and given a predicted project-generated traffic noise level of 60 dB DNL, the combined traffic noise level exposure is calculated to be 67 dB DNL, which would result in a 1 dB increase at the closest existing residential use along the roadway. The calculated project-generated increase of

1 dB along S. Mooney Boulevard would be below the applied FICON increase significance criterion of 1.5 dB. Given a predicted existing W. Visalia Parkway traffic noise level environment of 62 dB DNL, and a predicted project-generated traffic noise level of 60 dB DNL, the combined traffic noise level exposure is calculated to be 64 dB DNL, which would result in a 2 dB increase at the closest existing residential use along the roadway. The calculated project-generated increase of 2 dB along W. Visalia Parkway would be below the applied FICON increase significance criterion of 3 dB.

Because project-related traffic is not predicted to result in increases in ambient noise levels that would exceed the applicable FICON increase significance criteria at existing sensitive uses within the project vicinity, this impact is identified as being ***less than significant***.

Noise Impacts Associated with Project On-Site Operations

The project proposes the development of anchor tenant with fueling station and car wash land uses. The primary on-site operations noise sources associated with the anchor tenant / fueling station component of the project have been identified as on-site truck circulation (i.e., medium and heavy truck passbys), truck delivery activities (i.e., loading dock operations), parking lot activities, and rooftop mechanical equipment (HVAC). The primary on-site operations noise sources associated with the car wash component of the project have been identified as car wash tunnel operations and vacuum system equipment. Noise generated by operations of these land uses were quantified through a combination of reference noise level data and application of accepted noise modeling techniques.

The following section includes impact discussions for each of the above-identified on-site project noise sources at nearby residential uses. The locations of the nearby residential uses are shown in Figure 1. The Visalia General Plan exterior noise level standards provided in Table 7 of this report were applied to project on-site operations noise sources. Additionally, the applied Visalia Municipal Code exterior noise level limits presented in Table 8 of this report were also used in the assessment of on-site operations noise compliance. Finally, the residential interior noise level criteria established in Section 8.36.060 of the Visalia Municipal Code were also applied to project on-site operations noise generation.

In terms of determining the ambient noise increases due to project on-site operations, an impact would occur if those activities were to noticeably increase ambient noise levels above background levels at existing sensitive receptors. For the analysis of increases in ambient noise levels associated with project on-site operations, a noticeable increase is assumed to occur where those activities would result in an increase by 5 dB or more over ambient noise levels at existing nearby residences.

Impact 2: Parking Operations Noise Generation – Anchor Tenant Component

As a means of determining potential noise exposure due to anchor tenant / fueling station parking lot activities, Bollard Acoustical Consultants, Inc. (BAC) utilized specific parking lot noise level measurements conducted by BAC. Specifically, a series of individual noise measurements were conducted of multiple vehicle types arriving and departing a parking area, including engines starting and stopping, car doors opening and closing, and persons conversing as they entered

and exited the vehicles. The results of those measurements revealed that individual parking lot movements generated mean noise levels of approximately 70 dB SEL at a reference distance of 50 feet. The maximum noise level associated with parking lot activity typically did not exceed 65 dB L_{max} at the same reference distance.

To compute hourly average (L_{eq}) noise levels generated by parking activities, the approximate number of hourly operations in any given area and distance to the effective noise center of those activities is required. According to the provided site plan, the fueling station component of the project proposes 12 drive lanes for 12 fueling islands (total of 24 fuel dispensers). Further, it is estimated that a maximum of 8 vehicles could be in each drive lane at maximum capacity (total of 96 drive lane queue positions). Assuming each vehicle spends 5 minutes at either a fuel dispenser or queue position, a total of approximately 1,440 vehicle trips could occur on-site per hour at maximum capacity (considered to be worst-case). For the purpose of this analysis, it was conservatively assumed that 1,440 vehicle trips could occur at the fueling component of the project site during a worst-case busy daytime hour. It was further assumed that the nearest 350 stalls of the anchor tenant parking area could either empty or fill during a worst-case busy daytime hour nearest to a residential use. Finally, because parking area activity would be significantly reduced during nighttime hours, it was reasonably assumed that 50% of the above-identified daytime peak hour trips could occur during a nighttime peak hour. Parking lot noise exposure was determined using the following equation:

$$Peak\ Hour\ L_{eq} = 70+10*log\ (N) - 35.6$$

Where 70 is the SEL for a single automobile parking operation, N is the number of parking lot operations in a peak hour, and 35.6 is 10 times the logarithm of the number of seconds in an hour. Using the information provided above, and assuming standard spherical spreading loss (-6 dB per doubling of distance).

The Visalia General Plan noise standards are provided in terms of both hourly average (L_{eq}) and individual maximum (L_{max}) noise levels. Because parking activities would occur throughout the course of an hour (i.e., in excess of 30 minutes), the Visalia Municipal Code median (L_{50}) noise level descriptor would be applicable. Based on the BAC file data, project trip generation estimates, and operations assumptions above, and assuming standard spherical spreading loss (-6 dB per doubling of distance), project parking area noise exposure at the property lines of existing nearby residential uses was calculated and the results of those calculations are presented in Tables 9 and 10.

Table 9
Predicted Parking Area Noise Levels at Nearby Residential Uses – Daytime Hours

Receiver[1]	Offsets (dB)[2]	Predicted Combined Parking Noise Level (dB)[3,4]		
		L_{eq}	L_{max}	L_{50}
Residential – Northwest	-8	46	53	41
Residential – West	-8	36	45	31
Residential – Southwest	-8	34	49	29
Residential – Southeast	-8	40	57	35

[1] Receiver locations shown in Figure 1.
[2] An offset of -8 dB was applied to account for shielding that would be provided by an existing 7' solid wall (noise barrier) constructed along the perimeter of the project property boundary. Existing 7' wall illustrated in Figure 2. Offset based on the result from a source specific barrier evaluation.
[3] Predicted combined noise levels from anchor tenant parking area and fueling station stalls/lanes.
[4] Predicted combined noise level also include screening from proposed intervening buildings where applicable.

Source: BAC 2024

Table 10
Predicted Parking Area Noise Levels at Nearby Residential Uses – Nighttime Hours

Receiver[1]	Offsets (dB)[2]	Predicted Combined Parking Noise Level (dB)[3,4,5]		
		L_{eq}	L_{max}	L_{50}
Residential – Northwest	-8	43	53	38
Residential – West	-8	33	45	28
Residential – Southwest	-8	31	49	26
Residential – Southeast	-8	37	57	32

[1] Receiver locations shown in Figure 1.
[2] An offset of -8 dB was applied to account for shielding that would be provided by an existing 7' solid wall (noise barrier) constructed along the perimeter of the project property boundary. Existing 7' wall illustrated in Figure 2. Offset based on the results from a source specific barrier evaluation.
[3] Predicted combined noise levels also include screening from proposed intervening buildings where applicable.
[4] Predicted nighttime parking activity reasonably assumes 50% of daytime activity.

Source: BAC 2024

As indicated in Tables 9 and 10, project parking activity noise levels are predicted to satisfy the Visalia General Plan hourly average (L_{eq}) and maximum (L_{max}) daytime and nighttime noise level standards at the nearest existing residential uses. Tables 9 and 10 data also indicate that project parking activity noise levels are predicted to satisfy the applied Visalia Municipal Code daytime/evening and nighttime median (L_{50}) exterior noise level limits at those nearest existing residential uses.

Standard residential construction (e.g., stucco siding, STC-27 windows, door weather-stripping, exterior wall insulation, composition plywood roof) typically results in an exterior to interior noise reduction of at least 20 to 25 dB with windows closed and approximately 15 dB with windows open (including manufactured homes). Based on this information, and after consideration of the predicted exterior property line noise levels presented in Tables 9 and 10, project parking area

noise levels are expected to satisfy the strictest Visalia Municipal Code interior noise level criteria within the nearest existing residences.

Table 1 of this report contains a summary of the results from the BAC long-term ambient noise survey at sites 1-3, which are believed to be representative of the existing ambient noise environments at nearby existing residential receivers adjacent to the project. Using the average measured hourly daytime and nighttime noise levels at each monitoring location during the BAC ambient noise survey shown in Table 1, and the predicted noise levels presented in Tables 9 and 10, ambient plus project parking area noise level increases were calculated at the nearby residential uses. The results of those calculations are provided in Tables 11 and 12 below. As indicated in Tables 11 and 12, the calculated increases in ambient noise levels at the nearby residential uses would be well below the applied increase significance criterion of 5 dB.

Table 11
Calculated Project Parking Increases in Ambient Noise Levels – Daytime Hours

Receiver[1]	Measured Ambient Noise Level[1]			Predicted Combined Parking Noise Level[2]			Ambient Plus Project Noise Level[3]			Associated Noise Level Increase (dB)[4]		
	L_{eq}	L_{max}	L_{50}	L_{eq}	L_{max}	L_{50}	L_{eq}	L_{max}	L_{50}	L_{eq}	L_{max}	L_{50}
Residential – NW	53	67	49	46	53	41	53.6	67.5	50.0	0.9	0.2	0.6
Residential – W	52	69	48	36	45	31	52.4	69.0	48.1	0.1	<0.1	0.1
Residential – SW	52	69	48	34	49	29	52.4	69.0	48.1	0.1	<0.1	0.1
Residential – SE	51	69	48	40	57	35	51.7	69.0	48.5	0.3	0.3	0.2

[1] Average measured daytime ambient noise levels assigned to receiver presented in Table 1 of this report.
[2] Predicted combined parking noise levels during daytime hours presented in Table 9 of this report.
[3] Calculated logarithmic sum of daytime ambient noise level plus project-generated daytime noise level.
[4] Calculated increase in ambient daytime noise level at each receiver location. Calculated increase is the result of the logarithmic addition of measured ambient noise level and project-generated noise level.

Source: BAC 2024

Table 12
Calculated Project Parking Increases in Ambient Noise Levels – Nighttime Hours

Receiver[1]	Measured Ambient Noise Level[1]			Predicted Combined Parking Noise Level[2]			Ambient Plus Project Noise Level[3]			Associated Noise Level Increase (dB)[4]		
	L_{eq}	L_{max}	L_{50}	L_{eq}	L_{max}	L_{50}	L_{eq}	L_{max}	L_{50}	L_{eq}	L_{max}	L_{50}
Residential – NW	47	60	44	43	53	38	48.8	61.1	45.3	1.4	0.7	1.0
Residential – W	51	64	48	33	45	28	50.7	63.7	47.7	0.1	0.1	0.1
Residential – SW	51	64	48	31	49	26	50.7	63.8	47.7	<0.1	0.1	<0.1
Residential – SE	49	63	46	37	57	32	49.6	64.2	45.9	0.3	0.9	0.2

[1] Average measured nighttime ambient noise levels assigned to receiver presented in Table 1 of this report.
[2] Predicted combined parking noise levels during nighttime hours presented in Table 10 of this report.
[3] Calculated logarithmic sum of nighttime ambient noise level plus project-generated nighttime noise level.
[4] Calculated increase in ambient nighttime noise level at each receiver location. Calculated increase is the result of the logarithmic addition of measured ambient noise level and project-generated noise level.

Source: BAC 2024

Because noise exposure from project parking area movements is predicted to satisfy applicable Visalia General Plan and Visalia Municipal Code noise level criteria at the nearest existing residential uses, and because noise exposure from those activities is not calculated to significantly increase ambient noise levels at those uses, this impact is identified as being ***less than significant***.

Impact 3: Loading Dock Activity Noise Generation – Anchor Tenant Component

Based on a review of the provided site plan, the anchor tenant use will receive truck deliveries of product at a loading dock area located on the south end of the building. The location of the anchor tenant building loading dock area is shown in Figure 2. The nearest existing residential use maintains a separation of approximately 135 feet from the anchor tenant loading dock area.

The primary noise sources associated with loading dock activities are trucks stopping (air brakes), trucks backing into position (back-up alarms), and pulling away from the dock area (revving engines). Once docked, it is expected that activities associated with unloading of the product would occur within the building. To quantify the noise generated by loading dock activities, BAC utilized noise level data obtained from BAC field measurements of a commercial warehouse facility. According to BAC measurement data, truck loading dock average and maximum noise levels are approximately 63 dB L_{eq} and 75 dB L_{max} at a reference distance of 50 feet (including back-up beepers). Median (L_{50}) on-site truck delivery activity noise levels would be approximately 5 dB less than hourly average noise levels (L_{eq}).

The Visalia General Plan noise standards are provided in terms of both hourly average (L_{eq}) and individual maximum (L_{max}) noise levels. Because loading dock activities could occur throughout the course of an hour (i.e., in excess of 30 minutes), the Visalia Municipal Code median (L_{50}) noise level descriptor would be applicable. Based on the reference noise level data and operations assumptions cited above, and assuming standard sound wave spreading loss (-6 dB per doubling of distance), project loading dock noise level exposure at the property lines of existing nearby residential uses was calculated and the results of those calculations are presented in Table 13.

Table 13
Predicted Loading Dock Noise Levels at Nearby Residential Uses

Receiver[1]	Offsets (dB)[2]	Predicted Loading Dock Noise Level (dB)[3]		
		L_{eq}	L_{max}	L_{50}
Residential – Northwest	-8	23	35	18
Residential – West	-8	30	42	25
Residential – Southwest	-8	46	58	41
Residential – Southeast	-8	38	50	33

[1] Receiver locations shown in Figure 1.
[2] An offset of -8 dB was applied to account for shielding that would be provided by an existing 7' solid wall (noise barrier) constructed along the perimeter of the project property boundary. Existing 7' wall illustrated in Figure 2. Offset based on the results of a source specific barrier evaluation.
[3] Predicted noise level also include screening from proposed intervening buildings where applicable.

Source: BAC 2024

Table 13 data indicate that project loading dock activity noise levels are predicted to satisfy the Visalia General Plan hourly average (L_{eq}) and maximum (L_{max}) daytime noise level standards at the nearest existing residential uses, but would exceed the nighttime hourly average noise level limit of 45 dB L_{eq} at the closest residential use to the southwest. Table 13 data also indicate that project loading dock activity noise levels are predicted to satisfy the applied Visalia Municipal Code daytime/evening and nighttime median (L_{50}) exterior noise level limits at the nearest existing residential uses.

Based on the noise level reduction achieved with standard residential construction (minimum of 20 to 25 dB with windows closed, approximately 15 dB with windows open), and after consideration of the predicted exterior property line noise levels presented in Table 13, project loading dock noise levels are expected to satisfy the strictest Visalia Municipal Code interior noise level criteria within the nearest existing residences.

Using the average measured hourly daytime and nighttime noise levels at each monitoring location during the BAC ambient noise survey shown in Table 1, and the predicted noise levels presented in Table 13, ambient plus project loading dock noise level increases were calculated at the nearby residential uses. The results of those calculations are provided in Tables 14 and 15 below.

Table 14
Calculated Project Loading Dock Increases in Ambient Daytime Noise Levels

Receiver[1]	Measured Ambient Noise Level[1]			Predicted Loading Dock Noise Level[2]			Ambient Plus Project Noise Level[3]			Associated Noise Level Increase (dB)[4]		
	L_{eq}	L_{max}	L_{50}	L_{eq}	L_{max}	L_{50}	L_{eq}	L_{max}	L_{50}	L_{eq}	L_{max}	L_{50}
Residential – NW	53	67	49	23	35	18	52.7	67.3	49.3	<0.1	<0.1	<0.1
Residential – W	52	69	48	30	42	25	52.4	69.0	48.0	<0.1	<0.1	<0.1
Residential – SW	52	69	48	46	58	41	53.3	69.4	48.9	1.0	0.4	0.9
Residential – SE	51	69	48	38	50	33	51.5	68.7	48.5	0.2	0.1	0.1

[1] Average measured daytime ambient noise levels assigned to receiver presented in Table 1 of this report.
[2] Predicted project loading dock noise levels presented in Table 13 of this report.
[3] Calculated logarithmic sum of daytime ambient noise level plus project-generated noise level.
[4] Calculated increase in ambient daytime noise level at each receiver location. Calculated increase is the result of the logarithmic addition of measured ambient noise level and project-generated noise level.

Source: BAC 2024

Table 15
Calculated Project Loading Dock Increases in Ambient Nighttime Noise Levels

Receiver[1]	Measured Ambient Noise Level[1]			Predicted Loading Dock Noise Level[2]			Ambient Plus Project Noise Level[3]			Associated Noise Level Increase (dB)[4]		
	L_{eq}	L_{max}	L_{50}	L_{eq}	L_{max}	L_{50}	L_{eq}	L_{max}	L_{50}	L_{eq}	L_{max}	L_{50}
Residential – NW	47	60	44	23	35	18	47.4	60.3	44.3	<0.1	<0.1	<0.1
Residential – W	51	64	48	30	42	25	50.7	63.7	47.7	<0.1	<0.1	<0.1
Residential – SW	51	64	48	46	58	41	52.0	64.8	48.6	1.4	1.1	0.9
Residential – SE	49	63	46	38	50	33	49.6	63.5	45.9	0.3	0.2	0.2

[1] Average measured nighttime ambient noise levels assigned to receiver presented in Table 1 of this report.
[2] Predicted project loading dock noise levels presented in Table 13 of this report.
[3] Calculated logarithmic sum of nighttime ambient noise level plus project-generated noise level.
[4] Calculated increase in ambient nighttime noise level at each receiver location. Calculated increase is the result of the logarithmic addition of measured ambient noise level and project-generated noise level.

Source: BAC 2024

As shown in Tables 14 and 15, the calculated increases in ambient noise levels at the nearby residential uses would be well below the applied increase significance criterion of 5 dB. However, because project loading dock activity noise exposure is predicted to exceed the Visalia General Plan nighttime hourly average (L_{eq}) noise level standard at the nearby existing residential use to the southwest (Table 13), this impact is identified as **potentially significant**.

Mitigation Measure 1:

To ensure for satisfaction of the Visalia General Plan nighttime hourly average (L_{eq}) noise level standard at nearby existing residential uses, the following specific noise mitigation measure would be required of the project:

MM 1: All project loading dock activities shall be limited to daytime hours only (7:00 a.m. to 10:00 p.m.).

Significance of Impact with MM 1: *Less than Significant with Mitigation Measures*

Impact 4: On-Site Delivery Truck Circulation Noise – Anchor Tenant Component

Based on review of the provided site plan, it is assumed that delivery trucks will utilize an access road located off W. Visalia Parkway at the northwest end of the project property. Once on-site, it is further assumed that trucks will travel along the west/southwest project property line behind the anchor tenant building to the loading dock area on the south side of the building. The assumed on-site truck circulation route is shown in Figure 2. The nearest existing residential uses maintain a separation of approximately 25 feet from the assumed anchor tenant on-site truck circulation route.

It is the experience of BAC that deliveries of product to the anchor tenant type uses occur primarily by heavy trucks. However, the fueling station will also receive deliveries from heavy fueling trucks

for the purpose of refilling the underground storage tanks. According to the project applicant, the project is expected to receive a total of 20 heavy truck deliveries per day (15 – anchor tenant; 5 – fueling station). Based on a review of the site design (loading dock area), and for the purpose of this analysis, it is expected that no more than 3 heavy trucks could deliver products to the anchor tenant building during the same worst-case hour of deliveries. It is reasonably assumed that the fueling station would only have 1 heavy fueling truck delivery during a given worst-case hour of deliveries.

Heavy truck arrivals and departures, and on-site circulation will occur at low speeds. To predict noise levels generated by those activities, BAC utilized file data obtained from measurements conducted by BAC of heavy truck passbys. According to BAC file data, single-event heavy truck passby noise levels are approximately 74 dB L_{max} and 83 dB SEL at a reference distance of 50 feet. Because the Visalia General Plan noise standards are provided in terms of both individual maximum noise levels and hourly average noise levels, it is necessary to identify the number of truck movements occurring during a typical busy hour of operations to assess compliance with the L_{eq}-based standards. In addition, because on-site truck circulation could occur throughout the course of an hour (i.e., in excess of 30 minutes), the applicable Visalia Municipal Code noise level descriptor for on-site truck circulation would be the median noise level metric (L_{50}).

Based on a 3 heavy truck trips per hour, and an SEL of 83 dB SEL per passby, the average hourly noise level generated by anchor tenant delivery truck circulation computes to 50 dB L_{eq} at a reference distance of 52 feet from the passby route (maximum noise level of 74 dB L_{max}). Given 1 heavy truck trip per hour, and an SEL of 83 dB SEL per passby, the average hourly noise level generated by fueling station delivery truck circulation computes to 48 dB L_{eq} at a reference distance of 50 feet from the passby route (maximum noise level of 74 dB L_{max}). Median (L_{50}) on-site truck circulation noise levels would be approximately 5 dB less than calculated hourly average noise levels (L_{eq}).

Based on the reference noise level data and operations assumptions above, project on-site truck circulation noise exposure at the property lines of existing nearby residential uses was calculated and the results of those calculations are presented in Table 16.

Table 16
Predicted On-Site Delivery Truck Circulation Noise Levels at Nearby Residential Uses

Receiver[1]	Offsets (dB)[2]	Predicted Truck Circulation Noise Level (dB)[3]		
		L_{eq}	L_{max}	L_{50}
Residential – Northwest	-7	52	73	47
Residential – West	-7	51	73	46
Residential – Southwest	-7	43	64	38
Residential – Southeast	-7	37	58	32

[1] Receiver locations shown in Figure 1.
[2] An offset of -7 dB was applied to account for shielding that would be provided by an existing 7' solid wall (noise barrier) constructed along the perimeter of the project property boundary. Existing 7' wall illustrated in Figure 2. Offset based on the results of a source specific barrier evaluation.
[3] Predicted noise level also include screening from proposed intervening buildings where applicable.

Source: BAC 2024

As indicated in Table 16, project on-site truck circulation noise levels are predicted to exceed the Visalia General Plan daytime and nighttime hourly average (L_{eq}) and maximum (L_{max}) noise level standards at a portion of the nearest residential uses. The Table 16 data also indicates that project on-site truck circulation noise levels are predicted to exceed the applied Visalia Municipal Code daytime/evening and nighttime median (L_{50}) exterior noise level limits at a portion of those nearest residential uses.

Based on the noise level reduction achieved with standard residential construction (minimum of 20 to 25 dB with windows closed, approximately 15 dB with windows open), and after consideration of the predicted exterior property line noise levels presented in Table 16, project on-site truck circulation noise levels are expected to satisfy the strictest Visalia Municipal Code interior noise level criteria within the nearest existing residences.

Using the average measured hourly daytime and nighttime noise levels at each monitoring location during the BAC ambient noise survey shown in Table 1, and the predicted noise levels presented in Table 16, ambient plus project on-site truck circulation noise level increases were calculated at the nearby residential uses. The results of those calculations are provided in Tables 17 and 18. As shown in Tables 17 and 18, the calculated increases in ambient noise levels would exceed the applied increase significance criterion of 5 dB at a portion of the closest residential uses.

Table 17
Calculated Project On-Site Truck Circulation Increases in Ambient Daytime Noise Levels

Receiver[1]	Measured Ambient Noise Level[1]			Predicted Truck Noise Level[2]			Ambient Plus Project Noise Level[3]			Associated Noise Level Increase (dB)[4]		
	L_{eq}	L_{max}	L_{50}	L_{eq}	L_{max}	L_{50}	L_{eq}	L_{max}	L_{50}	L_{eq}	L_{max}	L_{50}
Residential – NW	53	67	49	52	73	47	55.6	74.1	51.5	2.9	6.7	2.2
Residential – W	52	69	48	51	73	46	54.8	74.1	50.2	2.5	5.1	2.2
Residential – SW	52	69	48	43	64	38	52.8	70.2	48.4	0.5	1.2	0.4
Residential – SE	51	69	48	37	58	32	51.5	69.0	48.4	0.2	0.4	0.1

[1] Average measured daytime ambient noise levels assigned to receiver presented in Table 1 of this report.
[2] Predicted project on-site truck circulation noise levels presented in Table 16 of this report.
[3] Calculated logarithmic sum of daytime ambient noise level plus project-generated noise level.
[4] Calculated increase in ambient daytime noise level at each receiver location. Calculated increase is the result of the logarithmic addition of measured ambient noise level and project-generated noise level.

Source: BAC 2024

Table 18
Calculated Project On-Site Truck Circulation Increases in Ambient Nighttime Noise Levels

Receiver[1]	Measured Ambient Noise Level[1]			Predicted Truck Noise Level[2]			Ambient Plus Project Noise Level[3]			Associated Noise Level Increase (dB)[4]		
	L_{eq}	L_{max}	L_{50}	L_{eq}	L_{max}	L_{50}	L_{eq}	L_{max}	L_{50}	L_{eq}	L_{max}	L_{50}
Residential – NW	47	60	44	52	73	47	53.7	73.2	49.2	6.3	12.9	4.9
Residential – W	51	64	48	51	73	46	54.0	73.1	50.0	3.3	9.4	2.4
Residential – SW	51	64	48	43	64	38	51.3	67.0	48.1	0.7	3.3	0.4
Residential – SE	49	63	46	37	58	32	49.6	64.5	45.8	0.2	1.2	0.2

[1] Average measured nighttime ambient noise levels assigned to receiver presented in Table 1 of this report.
[2] Predicted project on-site truck circulation noise levels presented in Table 16 of this report.
[3] Calculated logarithmic sum of nighttime ambient noise level plus project-generated noise level.
[4] Calculated increase in ambient nighttime noise level at each receiver location. Calculated increase is the result of the logarithmic addition of measured ambient noise level and project-generated noise level.

Source: BAC 2024

Because project on-site truck circulation noise exposure is predicted to exceed Visalia General Plan and applied Visalia Municipal Code daytime and nighttime noise level criteria at nearby existing residential uses (Table 16), and because daytime and nighttime increases in ambient noise levels associated with those operations are also calculated to exceed the applied increase significance criterion (Tables 17 and 18), this impact is identified as **potentially significant**.

Mitigation Measure 2:

To comply with Visalia General Plan and applied Visalia Municipal Code daytime noise level criteria, reduce increases in ambient daytime and nighttime noise levels to below the applied increase significance criterion, and to avoid the potential for exceedances of Visalia General Plan and Municipal Code nighttime noise level criteria at nearby existing residential uses, the following two (2) specific noise mitigation measures would be required of the project:

MM 2A: A portion of the existing 7-foot-tall masonry wall along the project property line shall be increased to 8-feet in height. The location of the required 8-foot-tall wall portion is illustrated in Figure 4.

It should be noted that Section 17.36.050 of the Visalia Municipal Code limits the height of commercial walls to 7-feet-in-height when located in a rear yard, such as the existing 7-foot-tall wall adjacent to the project site. As a result, the project applicant would be required to file for an Administrative Adjustment to permit the additional 1-foot of wall required for compliance. As an alternative, an 8-foot-tall masonry wall may be constructed adjacent to the existing 7-foot-tall wall (i.e., off the property line).

MM 2B: All project on-site delivery truck circulation shall be limited to daytime hours only (7:00 a.m. to 10:00 p.m.).

Table 19 below shows predicted on-site truck circulation noise levels after implementation of Mitigation Measure 2A as outlined above. Table 19 data shows compliance with Visalia General

Plan and applied Visalia Municipal Code daytime noise level criteria at nearby residential uses. In addition, Table 20 data shows calculated increases in ambient noise levels at the nearby residential uses after implementation of Mitigation Measure 2A. As shown in Table 20, the calculated mitigated increases in ambient noise levels at the nearby residential uses would satisfy the applied increase significance criterion of 5 dB.

Table 19
Mitigated Predicted On-Site Truck Circulation Noise Levels – Daytime Hours

	Unmitigated Noise Levels (dB)			Mitigated Noise Levels (dB)[1]		
Receiver	L_{eq}	L_{max}	L_{50}	L_{eq}	L_{max}	L_{50}
Residential – Northwest	52	73	47	49	70	44
Residential – West	51	73	46	48	70	43
Residential – Southwest	43	64	38	43	64	38
Residential – Southeast	37	58	32	37	58	32

[1] Predicted noise levels with implementation of Mitigation Measure 2A.

Source: BAC 2024

Table 20
Mitigated On-Site Truck Circulation Increases in Ambient Daytime Noise Levels

	Unmitigated Increases (dB)			Mitigated Increases (dB)[1]		
Receiver	L_{eq}	L_{max}	L_{50}	L_{eq}	L_{max}	L_{50}
Residential – Northwest	2.9	6.7	2.2	1.7	4.6	1.2
Residential – West	2.5	5.1	2.2	1.4	3.3	1.3
Residential – Southwest	0.5	1.2	0.4	0.5	1.2	0.4
Residential – Southeast	0.2	0.4	0.1	0.2	0.4	0.1

[1] Calculated increases in daytime ambient noise levels with implementation of Mitigation Measure 2A.

Source: BAC 2024

Significance of Impact with MM 2A & 2B: *Less than Significant with Mitigation Measures*

Impact 5: Rooftop Mechanical Equipment (HVAC) Noise – Anchor Tenant Component

The provided rooftop mechanical plans for the proposed anchor tenant building indicate that a combination of rooftop units (RTUs), air-handing units (AHUs), exhaust fans (EFs), and exhaust fan handlers (EFHs) will be located on the building rooftop. This rooftop-mounted mechanical equipment would be shielded from view at ground level locations of adjacent residential land uses by the building envelope and/or rooftop parapets. The location of the anchor tenant building is shown in Figure 2. Brief descriptions of the proposed rooftop mechanical equipment are provided below.

Rooftop Units (RTUs)

The project proposes the installation of 25 rooftop units consisting of four (4) models manufactured by Enlight Lennox (Models LHT036H4, LHT060H4, LHT122H4E and

LHT240H4M). According to equipment manufacturer specification documentation, provided in Appendix E of this report, the reference sound power levels for the proposed rooftop unit models range from 75 dB to 94 dB.

Air-Handling Units (AHUs)

The project proposes the installation of four (4) air-handling units on the building rooftop. The specific model proposed by the project is the HCUC8040AAD manufactured by Munters. According to equipment manufacturer specification documentation, provided in Appendix E of this report, the reference sound pressure level for the proposed air-handling unit model is 73 dB at distance of 15 feet.

Exhaust Fans (EFs)

The project proposes the installation of three (3) exhaust fan handling units consisting of potentially four (4) models manufactured by Carnes, Acme, Pennbarry and Greenheck (Models VUDK12P2, PDU135RGG4, FX16R and CUE-101-A). According to equipment manufacturer specification documentation, provided in Appendix E of this report, the reference sound power levels for the exhaust fan models range from 13 sones to 20 sones.

Exhaust Fan Handlers (EFHs)

Based on the provided project mechanical equipment schedule, rooftop mechanical plan, and information obtained from the project applicant, the project proposes the installation of 11 exhaust fans consisting of two (2) models manufactured by CaptiveAire (Models DU50HFA and DU180HFA). According to equipment manufacturer specification documentation, provided in Appendix E of this report, the reference sound power levels for the DU50HFA and DU180HFA exhaust fan handler models are 18 sones and 30 sones, respectively.

For the purpose of this analysis, it was conservatively assumed that all identified rooftop-mounted mechanical equipment would be in operation concurrently (believed to be worst-case noise exposure). Based on this operations assumption, the provided rooftop mechanical plans and rooftop mechanical plan schedule, and using the cited equipment manufacturer reference sound level data above with accepted sound propagation (-6 dB per doubling of distance), combined project rooftop-mounted mechanical equipment noise exposure at the property lines of existing nearby residential uses was calculated and the results of those calculations are presented in Table 21. Because operation of the rooftop mechanical equipment is typically a steady state noise source, the equipment was assessed relative to the General Plan hourly average (L_{eq}) and Municipal Code median (L_{50}) noise level standard descriptors.

Table 21
Predicted Combined Rooftop Mechanical Equipment Noise Levels at Nearby Residential Uses

Receiver[1]	Offsets (dB)[2]	Predicted Combined Rooftop Mechanical Equipment Noise Level, L_{eq}/L_{50} (dB)[3,4]
Residential – Northwest	-7	40
Residential – West	-7	42
Residential – Southwest	-7	40
Residential – Southeast	-7	41

[1] Receiver locations shown in Figure 1.
[2] An offset of -7 dB was applied to account for shielding that would be provided by an existing 7' solid wall (noise barrier) constructed along the perimeter of the project property boundary. Existing 7' wall illustrated in Figure 2. Offset based on the results of a source specific barrier evaluation.
[3] Predicted noise levels include a conservative offset of -10 dB to account for shielding that provided by building envelope and/or rooftop parapets that would break line of sight of equipment at adjacent ground level locations.
[4] Predicted combined noise level exposure at each receiver conservatively assumes all of the identified rooftop mechanical equipment in operation concurrently (25-RTUs; 4-AHUs; 3-EFs; 2-EFHs).

Source: BAC 2024

Table 21 data indicate that worst-case project rooftop mechanical equipment noise levels are predicted to satisfy the Visalia General Plan daytime and nighttime hourly average (L_{eq}) noise level standards at the nearest existing residential uses. Table 21 data also indicate that project rooftop mechanical equipment noise level exposure is predicted to satisfy the applied Visalia Municipal Code daytime/evening and nighttime median (L_{50}) exterior noise level limits at the nearest existing residential uses.

Based on the noise level reduction achieved with standard residential construction (minimum of 20 to 25 dB with windows closed, approximately 15 dB with windows open), and after consideration of the predicted exterior property line noise levels presented in Table 21, project rooftop mechanical equipment noise levels are expected to satisfy the strictest Visalia Municipal Code interior noise level criteria within the nearest existing residences.

Using the average measured hourly daytime and nighttime noise levels at each monitoring location during the BAC ambient noise survey shown in Table 1, and the predicted noise levels presented in Table 21, ambient plus project rooftop mechanical equipment noise level increases were calculated at the nearby residential uses. The results of those calculations are provided in Tables 22 and 23. As indicated in Tables 22 and 23, the calculated mitigated increases in ambient noise levels at the nearby residential uses would satisfy the applied increase significance criterion of 5 dB.

Table 22
Calculated Project Rooftop Equipment Increases in Ambient Daytime Noise Levels

Receiver[1]	Measured Ambient Noise Level[1]		Predicted Equipment Noise Level[2]	Ambient Plus Project Noise Level[3]		Associated Noise Level Increase (dB)[4]	
	L_{eq}	L_{50}	L_{eq}/L_{50}	L_{eq}	L_{50}	L_{eq}	L_{50}
Residential – NW	53	49	40	52.9	49.8	0.2	0.5
Residential – W	52	48	42	52.8	49.1	0.4	1.1
Residential – SW	52	48	40	52.6	48.7	0.3	0.7
Residential – SE	51	48	41	51.8	49.1	0.4	0.8

[1] Average measured daytime ambient noise levels assigned to receiver presented in Table 1 of this report.
[2] Predicted project rooftop mechanical equipment noise levels presented in Table 21 of this report.
[3] Calculated logarithmic sum of daytime ambient noise level plus project-generated noise level.
[4] Calculated increase in ambient daytime noise level at each receiver location. Calculated increase is the result of the logarithmic addition of measured ambient noise level and project-generated noise level.

Source: BAC 2024

Table 23
Calculated Project Rooftop Equipment Increases in Ambient Nighttime Noise Levels

Receiver[1]	Measured Ambient Noise Level[1]		Predicted Equipment Noise Level[2]	Ambient Plus Project Noise Level[3]		Associated Noise Level Increase (dB)[4]	
	L_{eq}	L_{50}	L_{eq}/L_{50}	L_{eq}	L_{50}	L_{eq}	L_{50}
Residential – NW	47	44	40	48.1	45.7	0.7	1.4
Residential – W	51	48	42	51.3	48.8	0.6	1.1
Residential – SW	51	48	40	51.1	48.4	0.4	0.7
Residential – SE	49	46	41	50.0	47.0	0.6	1.4

[1] Average measured nighttime ambient noise levels assigned to receiver presented in Table 1 of this report.
[2] Predicted project rooftop mechanical equipment noise levels presented in Table 21 of this report.
[3] Calculated logarithmic sum of nighttime ambient noise level plus project-generated noise level.
[4] Calculated increase in ambient nighttime noise level at each receiver location. Calculated increase is the result of the logarithmic addition of measured ambient noise level and project-generated noise level.

Source: BAC 2024

Because noise exposure from project rooftop mechanical equipment is predicted to satisfy applicable Visalia General Plan and Visalia Municipal Code noise level criteria at the nearest existing residential uses, and because noise exposure from those operations is not calculated to significantly increase ambient noise levels at those uses, this impact is identified as being ***less than significant***.

Impact 6: Car Wash Drying Assembly Noise Generation – Car Wash Component

It is the experience of BAC in the preparation of numerous car wash noise studies in recent years that noise levels generated by car washes are primarily due to the drying portion of the operation. Based on information obtained from the project applicant, the car wash component of the project proposes the installation of a Sonny's Enterprises 3-blower arch assembly (45 HP), Part # BL1-45HP-1. According to equipment manufacturer noise specifications, provided as Appendix F of

this report, the blower assembly generates a maximum noise level of 75 dB L_{max} at a distance of 100 feet.

Based on BAC's experience with noise level data collection at various existing car washes, the noise level generation of car wash drying assemblies vary depending on the orientation of the measurement position relative to the tunnel opening. Worst-case drying assembly noise levels occur at a position directly facing the car wash exit, considered to be 0 degrees off-axis. At off-axis positions, the building facade provides varying degrees of noise level reduction. At positions 45 degrees off-axis relative to the facade of the car wash exit and entrance, drying assembly noise levels are approximately 5 dB lower. At 90 degrees off-axis, drying assembly noise levels are approximately 10 dB lower.

Because project car wash operations could potentially be occurring off and on for the duration of an hour or more, car wash drying assembly noise level exposure was assessed relative to the General Plan hourly average (L_{eq}) and Municipal Code (L_{50}) noise level standard descriptors. According to BAC conservations with Sonny's representatives in recent years, the car wash cycle is approximately 1.5 minutes in duration, with the drying assembly in operation during the last 30 seconds (0.5 minutes) of the cycle. Based on this information, the car wash is calculated to go through 40 full cycles (60 minutes ÷ 1.5 minutes per cycle) and the dryer would operate for approximately 20 minutes (40 car wash cycles x 0.5 minutes of drying) during a busy hour of operations. Based on 20 minutes of dryer operations per hour, the resulting hourly average (L_{eq}) or median (L_{50}) drying assembly noise level is calculated to be approximately 5 dB lower than the equipment's reference maximum (L_{max}) noise level presented above.

Car wash drying assembly noise level exposure was calculated based on the orientation to tunnel entrance/exit, as discussed above. Noise attenuation due to distance was calculated based on standard spherical spreading loss from a point source (-6 dB per doubling of distance). Based on the operations assumptions above, car wash drying assembly noise exposure was calculated at the property lines of existing nearby residential uses was calculated and the results of those calculations are presented in Table 24.

Table 24
Predicted Car Wash Drying Assembly Noise Levels at Nearby Residential Uses

Receiver[1]	Offsets (dB)[2]	Predicted Car Wash Drying Assembly Noise Level, L_{eq}/L_{50} (dB)[3]
Residential – Northwest	-8	39
Residential – West	-8	22
Residential – Southwest	-8	26
Residential – Southeast	-8	27

[1] Receiver locations shown in Figure 1.
[2] An offset of -8 dB was applied to account for shielding that would be provided by an existing 7' solid wall (noise barrier) constructed along the perimeter of the project property boundary. Existing 7' wall illustrated in Figure 2. Offset based on the results of a source specific barrier evaluation.
[3] Predicted noise levels include an additional offset of -10 dB to where the anchor tenant building would completely screen view of the car wash.

Source: BAC 2024

As indicated in Table 24, project car wash drying assembly noise levels are predicted to satisfy the Visalia General Plan daytime and nighttime hourly average (L_{eq}) noise level standards at the nearest existing residential uses. Table 24 data also show that project car wash drying assembly noise level exposure is predicted to satisfy the applied Visalia Municipal Code daytime/evening and nighttime median (L_{50}) exterior noise level limits at the nearest existing residential uses.

Based on the noise level reduction achieved with standard residential construction (minimum of 20 to 25 dB with windows closed, approximately 15 dB with windows open), and after consideration of the predicted exterior property line noise levels presented in Table 24, project car wash drying assembly noise levels are expected to satisfy the strictest Visalia Municipal Code interior noise level criteria within the nearest existing residences.

Using the average measured hourly daytime and nighttime noise levels at each monitoring location during the BAC ambient noise survey shown in Table 1, and the predicted noise levels presented in Table 24, ambient plus project car wash drying assembly noise level increases were calculated at the nearby residential uses. The results of those calculations are provided in Tables 25 and 26.

Table 25
Calculated Project Car Wash Drying Assembly Increases in Ambient Daytime Noise Levels

Receiver[1]	Measured Ambient Noise Level[1]		Predicted Equipment Noise Level[2]	Ambient Plus Project Noise Level[3]		Daytime Noise Level Increase (dB)[4]	
	L_{eq}	L_{50}	L_{eq}/L_{50}	L_{eq}	L_{50}	L_{eq}	L_{50}
Residential – NW	53	49	39	52.9	49.8	0.2	0.4
Residential – W	52	48	22	52.3	48.0	<0.1	<0.1
Residential – SW	52	48	26	52.3	48.0	<0.1	<0.1
Residential – SE	51	48	27	51.4	48.4	<0.1	<0.1

[1] Average measured daytime ambient noise levels assigned to receiver presented in Table 1 of this report.
[2] Predicted project car wash drying assembly noise levels presented in Table 24 of this report.
[3] Calculated logarithmic sum of daytime ambient noise level plus project-generated noise level.
[4] Calculated increase in ambient daytime noise level at each receiver location. Calculated increase is the result of the logarithmic addition of measured ambient noise level and project-generated noise level.

Source: BAC 2024

Table 26
Calculated Project Car Wash Drying Assembly Increases in Ambient Nighttime Noise Levels

Receiver[1]	Measured Ambient Noise Level[1]		Predicted Equipment Noise Level[2]	Ambient Plus Project Noise Level[3]		Daytime Noise Level Increase (dB)[4]	
	L_{eq}	L_{50}	L_{eq}/L_{50}	L_{eq}	L_{50}	L_{eq}	L_{50}
Residential – NW	47	44	39	48.0	45.6	0.7	1.2
Residential – W	51	48	22	50.7	47.7	<0.1	<0.1
Residential – SW	51	48	26	50.7	47.7	<0.1	<0.1
Residential – SE	49	46	27	49.4	45.7	<0.1	0.1

[1] Average measured nighttime ambient noise levels assigned to receiver presented in Table 1 of this report.
[2] Predicted project car wash drying assembly noise levels presented in Table 24 of this report.
[3] Calculated logarithmic sum of nighttime ambient noise level plus project-generated noise level.
[4] Calculated increase in ambient nighttime noise level at each receiver location. Calculated increase is the result of the logarithmic addition of measured ambient noise level and project-generated noise level.

Source: BAC 2024

Because noise exposure from project car wash drying assembly operations is predicted to satisfy applicable Visalia General Plan and Visalia Municipal Code noise level criteria at the nearest existing residential uses, and because noise exposure from those operations is not calculated to significantly increase ambient noise levels at those uses, this impact is identified as being ***less than significant***.

Impact 7: Vacuum System Noise Generation – Car Wash Component

The car wash component of the project would also include the installation and operation of a central vacuum piping system offered by Vacutech (powered by turbine producers). According to the provided site plan, there will be a total of 20 vacuum bays.

After a review of the provided site plans, it appears as though the noise-generating vacuum turbine producers will be contained within either a fully-enclosed equipment room attached to the car wash tunnel or an outdoor CMU enclosure. Based on BAC's experience and field observations with similarly configured car washes, noise impacts due to the operation of the vacuum turbine producers are not expected due to the transmission loss that would be provided either by the completely enclosed equipment room or the CMU enclosure. As a result, no further analysis would be warranted for the vacuum system turbine producers.

Based on noise level measurements conducted by BAC staff at recently completed car wash project sites, the primary noise-generating aspects of central vacuum piping systems are use of the suction nozzles located at each of the stalls – specifically, noise associated with active suction nozzles hanging off nozzle hangers. Reference sound level data obtained from the proposed vacuum system manufacturer (Vacutech) is provided as Appendix G. The sound level data provided in Appendix C show measured and projected sound levels from 19 vacuum hoses off their respective nozzle hangers at distances ranging from 45 to 85 feet.

For the purposes of this analysis, it was conservatively assumed that all proposed vacuum suction nozzles would be in concurrent operation (believed to be worst-case noise exposure). Based on

the manufacturer sound level data in Appendix G and operations assumptions above, and assuming standard spherical spreading loss (-6 dB per doubling of distance from a stationary source), worst-case project vacuum equipment noise exposure at the property lines of existing nearby residential uses was calculated and the results of those calculations are presented in Table 27. Because the project vacuum system could potentially be in operation continuously for the duration of an hour during a busy hour of operations, vacuum equipment noise level exposure was assessed relative to the General Plan hourly average (L_{eq}) and Municipal Code (L_{50}) noise level standard descriptors.

Table 27
Predicted Vacuum Nozzle Noise Levels at Nearby Residential Uses

Receiver[1]	Offsets (dB)[2]	Predicted Vacuum Nozzle Noise Level, L_{eq}/L_{50} (dB)[3]
Residential – Northwest	-8	24
Residential – West	-8	<20
Residential – Southwest	-8	<20
Residential – Southeast	-8	<20

[1] Receiver locations shown in Figure 1.
[2] An offset of -8 dB was applied to account for shielding that would be provided by an existing 7' solid wall (noise barrier) constructed along the perimeter of the project property boundary. Existing 7' wall illustrated in Figure 2. Offset based on the results of a source specific barrier evaluation.
[3] Predicted noise levels include an additional offset of -10 dB to where the anchor tenant building would completely screen view of the vacuum area.

Source: BAC 2024

Table 27 data indicate that project vacuum system operation noise levels are predicted to satisfy the Visalia General Plan daytime and nighttime hourly average (L_{eq}) noise level standards at the nearest existing residential uses. Table 27 data also indicate that project vacuum equipment noise level exposure is predicted to satisfy the applied Visalia Municipal Code daytime/evening and nighttime median (L_{50}) exterior noise level limits at the nearest existing residential uses.

Based on the noise level reduction achieved with standard residential construction (minimum of 20 to 25 dB with windows closed, approximately 15 dB with windows open), and after consideration of the predicted exterior property line noise levels presented in Table 27, project vacuum system noise levels are expected to satisfy the strictest Visalia Municipal Code interior noise level criteria within the nearest existing residences.

Using the average measured hourly daytime and nighttime noise levels at each monitoring location during the BAC ambient noise survey shown in Table 1, and the predicted noise levels presented in Table 27, ambient plus project vacuum equipment noise level increases were calculated at the nearby residential uses. The results of those calculations are provided in Tables 28 and 29. As indicated in Tables 28 and 29, the calculated mitigated increases in ambient noise levels at the nearby residential uses would satisfy the applied increase significance criterion of 5 dB.

Table 28
Calculated Project Vacuum Equipment Increases in Ambient Daytime Noise Levels

Receiver[1]	Measured Ambient Noise Level[1]		Predicted Equipment Noise Level[2]	Ambient Plus Project Noise Level[3]		Daytime Noise Level Increase (dB)[4]	
	L_{eq}	L_{50}	L_{eq}/L_{50}	L_{eq}	L_{50}	L_{eq}	L_{50}
Residential – NW	53	49	24	52.7	49.3	<0.1	<0.1
Residential – W	52	48	<20	52.3	48.0	<0.1	<0.1
Residential – SW	52	48	<20	52.3	48.0	<0.1	<0.1
Residential – SE	51	48	<20	51.3	48.3	<0.1	<0.1

[1] Average measured daytime ambient noise levels assigned to receiver presented in Table 1 of this report.
[2] Predicted project vacuum nozzle noise levels presented in Table 27 of this report.
[3] Calculated logarithmic sum of daytime ambient noise level plus project-generated noise level.
[4] Calculated increase in ambient daytime noise level at each receiver location. Calculated increase is the result of the logarithmic addition of measured ambient noise level and project-generated noise level.

Source: BAC 2024

Table 29
Calculated Project Vacuum Equipment Increases in Ambient Nighttime Noise Levels

Receiver[1]	Measured Ambient Noise Level[1]		Predicted Equipment Noise Level[2]	Ambient Plus Project Noise Level[3]		Daytime Noise Level Increase (dB)[4]	
	L_{eq}	L_{50}	L_{eq}/L_{50}	L_{eq}	L_{50}	L_{eq}	L_{50}
Residential – NW	47	44	24	47.4	44.4	<0.1	<0.1
Residential – W	51	48	<20	50.7	47.7	<0.1	<0.1
Residential – SW	51	48	<20	50.7	47.7	<0.1	<0.1
Residential – SE	49	46	<20	49.3	45.7	<0.1	<0.1

[1] Average measured nighttime ambient noise levels assigned to receiver presented in Table 1 of this report.
[2] Predicted project vacuum nozzle noise levels presented in Table 27 of this report.
[3] Calculated logarithmic sum of nighttime ambient noise level plus project-generated noise level.
[4] Calculated increase in ambient nighttime noise level at each receiver location. Calculated increase is the result of the logarithmic addition of measured ambient noise level and project-generated noise level.

Source: BAC 2024

Because noise exposure from project vacuum equipment is predicted to satisfy applicable Visalia General Plan and Visalia Municipal Code noise level criteria at the nearest existing residential uses, and because noise exposure from those operations is not calculated to significantly increase ambient noise levels at those uses, this impact is identified as being ***less than significant***.

Impact 8: Cumulative Project On-Site Operations Noise Generation

The calculated cumulative (combined hourly average L_{eq} and median L_{50}) and highest predicted maximum (L_{max}) noise levels from analyzed project operations at nearby residential uses are presented in Tables 30-35.

Table 30
Calculated Cumulative On-Site Operations Noise Levels – Daytime Hourly Average (L_{eq})

Receiver	Predicted Noise Levels, L_{eq} (dB)						Calculated Cumulative, L_{eq} (dB)[1]	GP Daytime Standard, L_{eq}
	Parking	Loading Dock	Truck Circulation	Rooftop Equipment	Car Wash Dryers	Vacuums		
Residential – NW	46	23	52	40	39	24	54	**50**
Residential – W	36	30	51	42	22	13	52	**50**
Residential – SW	34	46	43	40	26	11	49	**50**
Residential – SE	40	38	37	41	27	22	45	**50**

[1] Calculated cumulative noise levels from Impacts 2-7.

Source: BAC 2024

Table 31
Highest Predicted On-Site Operations Noise Levels – Daytime Maximum (L_{max})

Receiver	Predicted Noise Levels, L_{max} (dB)						Highest Predicted, L_{max} (dB)[1]	GP Daytime Standard, L_{max}	Applied MC Daytime Standard, L_{max}
	Parking	Loading Dock	Truck Circulation	Rooftop Equipment	Car Wash Dryers	Vacuums			
Residential – NW	51	35	73	--	--	--	73	**70**	**70**
Residential – W	43	42	73	--	--	--	73	**70**	**70**
Residential – SW	47	58	64	--	--	--	64	**70**	**70**
Residential – SE	55	50	58	--	--	--	58	**70**	**70**

[1] Highest predicted noise levels presented in Impacts 2-7.

Source: BAC 2024

Table 32
Calculated Cumulative On-Site Operations Noise Levels – Daytime Median (L_{50})

Receiver	Predicted Noise Levels, L_{50} (dB)						Calculated Cumulative, L_{50} (dB)[1]	Applied MC Daytime Standard, L_{50}
	Parking	Loading Dock	Truck Circulation	Rooftop Equipment	Car Wash Dryers	Vacuums		
Residential – NW	41	18	47	40	39	24	49	**50**
Residential – W	31	25	46	42	22	13	48	**50**
Residential – SW	29	41	38	40	26	11	45	**50**
Residential – SE	35	33	32	41	27	22	43	**50**

[1] Calculated cumulative noise levels using predicted noise levels from Impacts 2-7.

Source: BAC 2024

Table 33
Calculated Cumulative On-Site Operations Noise Levels – Nighttime Hourly Average (L_{eq})

Receiver	Predicted Noise Levels, L_{eq} (dB)						Calculated Cumulative, L_{eq} (dB)[1]	GP Nighttime Standard, L_{eq}
	Parking	Loading Dock	Truck Circulation	Rooftop Equipment	Car Wash Dryers	Vacuums		
Residential – NW	43	23	52	40	39	24	53	**45**
Residential – W	33	30	51	42	22	13	52	**45**
Residential – SW	31	46	43	40	26	11	49	**45**
Residential – SE	37	38	37	41	27	22	45	**45**

[1] Calculated cumulative noise levels from Impacts 2-7.

Source: BAC 2024

Table 34
Highest Predicted On-Site Operations Noise Levels – Nighttime Maximum (L_{max})

Receiver	Predicted Noise Levels, L_{max} (dB)						Highest Predicted, L_{max} (dB)[1]	GP Nighttime Standard, L_{max}	Applied MC Nighttime Standard, L_{max}
	Parking	Loading Dock	Truck Circulation	Rooftop Equipment	Car Wash Dryers	Vacuums			
Residential – NW	51	35	73	--	--	--	73	**65**	**65**
Residential – W	43	42	73	--	--	--	73	**65**	**65**
Residential – SW	47	58	64	--	--	--	64	**65**	**65**
Residential – SE	55	50	58	--	--	--	58	**65**	**65**

[1] Highest predicted noise levels presented in Impacts 2-7.

Source: BAC 2024

Table 35
Calculated Cumulative On-Site Operations Noise Levels – Nighttime Median (L_{50})

Receiver	Predicted Noise Levels, L_{50} (dB)						Calculated Cumulative, L_{50} (dB)[1]	Applied MC Nighttime Standard, L_{50}
	Parking	Loading Dock	Truck Circulation	Rooftop Equipment	Car Wash Dryers	Vacuums		
Residential – NW	38	18	47	40	39	24	49	**45**
Residential – W	28	25	46	42	22	13	48	**47**
Residential – SW	26	41	38	40	26	11	45	**47**
Residential – SE	32	33	32	41	27	22	43	**45**

[1] Calculated cumulative noise levels using predicted noise levels from Impacts 2-7.

Source: BAC 2024

As indicated in Tables 30-35, cumulative and highest predicted noise levels from on-site operations are calculated to exceed the Visalia General Plan daytime and nighttime hourly average (L_{eq}) and maximum (L_{max}) noise level standards at a portion of the nearest residential uses. Further, cumulative and highest predicted noise levels from on-site operations are also calculated to exceed a portion of the applied Visalia Municipal Code daytime/evening and nighttime median (L_{50}) and maximum (L_{max}) exterior noise level limits at the nearest residential uses.

Based on the noise level reduction achieved with standard residential construction (minimum of 20 to 25 dB with windows closed, approximately 15 dB with windows open), and after consideration of the predicted exterior property line noise levels presented in Tables 30-35, cumulative and highest predicted project on-site operations noise levels are expected to satisfy the strictest Visalia Municipal Code interior noise level criteria within the nearest existing residences.

Using the average measured hourly daytime and nighttime noise levels at each monitoring location during the BAC ambient noise survey (Table 1), and the calculated cumulative/highest predicted noise levels presented in Tables 30-35, ambient plus combined project on-site operations noise level increases were calculated at the nearby residential uses. The results of those calculations are provided in Tables 36-41.

Table 36
Calculated Cumulative On-Site Operations Ambient Increases – Daytime Hourly Average (L_{eq})

Receiver[1]	Measured Ambient Noise Level, L_{eq}[1]	Calculated Cumulative Noise Level, L_{eq}[2]	Ambient Plus Project Noise Level, L_{eq}[3]	Daytime Noise Level Increase, L_{eq} (dB)[4]
Residential – NW	53	54	56.3	3.6
Residential – W	52	52	55.1	2.8
Residential – SW	52	49	53.9	1.6
Residential – SE	51	45	52.3	1.0

[1] Average measured daytime ambient noise levels assigned to receiver presented in Table 1 of this report.
[2] Calculated cumulative on-site operations noise levels presented in Table 30 of this report.
[3] Calculated logarithmic sum of daytime ambient noise level plus cumulative project-generated noise level.
[4] Calculated increase in ambient daytime noise level at each receiver location. Calculated increase is the result of the logarithmic addition of measured ambient noise level and cumulative project-generated noise level.

Source: BAC 2024

Table 37
Highest Predicted On-Site Operations Ambient Increases – Daytime Maximum (L_{max})

Receiver[1]	Measured Ambient Noise Level, L_{max}[1]	Highest Predicted Noise Level, L_{max}[2]	Ambient Plus Project Noise Level, L_{max}[3]	Daytime Noise Level Increase, L_{max} (dB)[4]
Residential – NW	67	73	74.1	6.7
Residential – W	69	73	74.1	5.1
Residential – SW	69	64	70.2	1.2
Residential – SE	69	58	69.0	0.4

[1] Average measured daytime ambient noise levels assigned to receiver presented in Table 1 of this report.
[2] Highest predicted on-site operations noise levels presented in Table 31 of this report.
[3] Calculated logarithmic sum of daytime ambient noise level plus highest predicted project-generated noise level.
[4] Calculated increase in ambient daytime noise level at each receiver location. Calculated increase is the result of the logarithmic addition of measured ambient noise level and highest project-generated noise level.

Source: BAC 2024

Table 38
Calculated Cumulative On-Site Operations Ambient Increases – Daytime Median (L_{50})

Receiver[1]	Measured Ambient Noise Level, L_{50}[1]	Calculated Cumulative Noise Level, L_{50}[2]	Ambient Plus Project Noise Level, L_{50}[3]	Daytime Noise Level Increase, L_{50} (dB)[4]
Residential – NW	49	49	52.4	3.1
Residential – W	48	48	50.9	2.9
Residential – SW	48	45	49.7	1.7
Residential – SE	48	43	49.5	1.1

[1] Average measured daytime ambient noise levels assigned to receiver presented in Table 1 of this report.
[2] Calculated cumulative on-site operations noise levels presented in Table 32 of this report.
[3] Calculated logarithmic sum of daytime ambient noise level plus cumulative project-generated noise level.
[4] Calculated increase in ambient daytime noise level at each receiver location. Calculated increase is the result of the logarithmic addition of measured ambient noise level and cumulative project-generated noise level.

Source: BAC 2024

Table 39
Calculated Cumulative On-Site Operations Ambient Increases – Nighttime Hourly Average (L_{eq})

Receiver[1]	Measured Ambient Noise Level, L_{eq}[1]	Calculated Cumulative Noise Level, L_{eq}[2]	Ambient Plus Project Noise Level, L_{eq}[3]	Nighttime Noise Level Increase, L_{eq} (dB)[4]
Residential – NW	47	53	54.4	7.0
Residential – W	51	52	54.3	3.6
Residential – SW	51	49	52.8	2.2
Residential – SE	49	45	50.6	1.3

[1] Average measured nighttime ambient noise levels assigned to receiver presented in Table 1 of this report.
[2] Calculated cumulative on-site operations noise levels presented in Table 33 of this report.
[3] Calculated logarithmic sum of nighttime ambient noise level plus cumulative project-generated noise level.
[4] Calculated increase in ambient nighttime noise level at each receiver location. Calculated increase is the result of the logarithmic addition of measured ambient noise level and cumulative project-generated noise level.

Source: BAC 2024

Table 40
Highest Predicted On-Site Operations Ambient Increases – Nighttime Maximum (L_{max})

Receiver[1]	Measured Ambient Noise Level, L_{max}[1]	Highest Predicted Noise Level, L_{max}[2]	Ambient Plus Project Noise Level, L_{max}[3]	Nighttime Noise Level Increase, L_{max} (dB)[4]
Residential – NW	60	73	73.2	12.9
Residential – W	64	73	73.1	9.4
Residential – SW	64	64	67.0	3.3
Residential – SE	63	58	64.5	1.2

[1] Average measured nighttime ambient noise levels assigned to receiver presented in Table 1 of this report.
[2] Highest predicted on-site operations noise levels presented in Table 34 of this report.
[3] Calculated logarithmic sum of nighttime ambient noise level plus highest predicted project-generated noise level.
[4] Calculated increase in ambient nighttime noise level at each receiver location. Calculated increase is the result of the logarithmic addition of measured ambient noise level and highest project-generated noise level.

Source: BAC 2024

Table 41
Calculated Cumulative On-Site Operations Ambient Increases – Nighttime Median (L_{50})

Receiver[1]	Measured Ambient Noise Level, L_{50}[1]	Calculated Cumulative Noise Level, L_{50}[2]	Ambient Plus Project Noise Level, L_{50}[3]	Daytime Noise Level Increase, L_{50} (dB)[4]
Residential – NW	44	49	50.4	6.0
Residential – W	48	48	50.7	3.0
Residential – SW	48	45	49.5	1.8
Residential – SE	46	43	47.4	1.8

[1] Average measured nighttime ambient noise levels assigned to receiver presented in Table 1 of this report.
[2] Calculated cumulative on-site operations noise levels presented in Table 35 of this report.
[3] Calculated logarithmic sum of nighttime ambient noise level plus cumulative project-generated noise level.
[4] Calculated increase in ambient nighttime noise level at each receiver location. Calculated increase is the result of the logarithmic addition of measured ambient noise level and cumulative project-generated noise level.

Source: BAC 2024

As shown in Tables 36-41, calculated increases in ambient noise levels would exceed the applied increase significance criterion of 5 dB at a portion of the closest residential uses.

Because cumulative/highest predicted project on-site operations noise exposure is predicted to exceed Visalia General Plan and applied Visalia Municipal Code daytime and nighttime noise level criteria at a portion of the nearby existing residential uses, and because daytime and nighttime increases in ambient noise levels associated with those operations are also calculated to exceed the applied increase significance criterion at a portion of those uses, this impact is identified as **potentially significant**.

Mitigation Measure 3:

To comply with Visalia General Plan and applied Visalia Municipal Code daytime and nighttime noise level criteria at nearby residential uses, and reduce project-generated increases in ambient daytime and nighttime noise levels to below the applied increase significance criterion at those uses, the following three (3) specific noise mitigation measures would be required of the project:

MM 3A: Implementation of **Mitigation Measure 1 (MM 1)**, as outlined in this report. Specifically, all project loading dock activities shall be limited to daytime hours only (7:00 a.m. to 10:00 p.m.).

MM 3B: Implementation of **Mitigation Measure 2A (MM 2A)**, as outlined in this report. Specifically, the height of the existing 7-foot-tall masonry wall along the western project property boundary shall be increased to a minimum height of 8-feet. The location of the required 8-foot-tall masonry wall is illustrated in Figure 4. It should be noted that Section 17.36.050 of the Visalia Municipal Code limits the height of commercial walls to 7-feet-in-height when located in a rear yard, such as the existing 7-foot-tall wall adjacent to the project site. As a result, the project applicant would be required to file for an Administrative Adjustment to permit the additional 1-foot of wall required for compliance. As an alternative, an 8-foot-tall masonry wall may be constructed adjacent to the existing 7-foot-tall wall (i.e., off the property line).

MM 3C: Implementation of **Mitigation Measure 2B (MM 2B)**, as outlined in this report. Specifically, all on-site delivery truck circulation shall be limited to daytime hours only (7:00 a.m. to 10:00 p.m.).

Tables 42-47 below shows calculated cumulative on-site operations noise levels after implementation of Mitigation Measures 3A, 3B and 3C, as outlined above. Tables 48-53 data show the calculated cumulative/highest predicted on-site operations increases in ambient noise levels at the nearby residential uses after implementation of Mitigation Measures 3A, 3B and 3C.

Table 42
Calculated Cumulative On-Site Operations Noise Levels – Daytime Hourly Average (L_{eq}) – Mitigated

Receiver	Predicted Noise Levels, L_{eq} (dB)						Calculated Cumulative, L_{eq} (dB)[1]	GP Daytime Standard, L_{eq}
	Parking	Loading Dock	Truck Circulation	Rooftop Equipment	Car Wash Dryers	Vacuums		
Residential – NW	44	22	49	38	38	23	50	**50**
Residential – W	34	29	48	40	21	12	49	**50**
Residential – SW	34	46	43	40	26	11	49	**50**
Residential – SE	40	38	37	41	27	22	45	**50**

[1] Calculated cumulative noise levels with implementation of Mitigation Measure 3B.

Source: BAC 2024

Table 43
Highest Predicted On-Site Operations Noise Levels – Daytime Maximum (L_{max}) – Mitigated

Receiver	Predicted Noise Levels, L_{max} (dB)						Highest Predicted, L_{max} (dB)[1]	GP Daytime Standard, L_{max}	Applied MC Daytime Standard, L_{max}
	Parking	Loading Dock	Truck Circulation	Rooftop Equipment	Car Wash Dryers	Vacuums			
Residential – NW	49	34	70	--	--	--	70	**70**	**70**
Residential – W	41	41	70	--	--	--	70	**70**	**70**
Residential – SW	47	58	64	--	--	--	64	**70**	**70**
Residential – SE	55	50	58	--	--	--	58	**70**	**70**

[1] Highest predicted noise levels with implementation of Mitigation Measure 3B.

Source: BAC 2024

Table 44
Calculated Cumulative On-Site Operations Noise Levels – Daytime Median (L_{50}) – Mitigated

Receiver	Predicted Noise Levels, L_{50} (dB)						Calculated Cumulative, L_{50} (dB)[1]	Applied MC Daytime Standard, L_{50}
	Parking	Loading Dock	Truck Circulation	Rooftop Equipment	Car Wash Dryers	Vacuums		
Residential – NW	39	17	44	38	38	23	47	**50**
Residential – W	29	24	43	40	21	12	45	**50**
Residential – SW	29	41	38	40	26	11	45	**50**
Residential – SE	35	33	32	41	27	22	43	**50**

[1] Calculated cumulative noise levels with implementation of Mitigation Measure 3B.

Source: BAC 2024

Table 45
Calculated Cumulative On-Site Operations Noise Levels – Nighttime Hourly Average (L_{eq}) – Mitigated

Receiver	Predicted Noise Levels, L_{eq} (dB)						Calculated Cumulative, L_{eq} (dB)[1]	GP Nighttime Standard, L_{eq}
	Parking	Loading Dock	Truck Circulation	Rooftop Equipment	Car Wash Dryers	Vacuums		
Residential – NW	41	--	--	38	38	23	44	**45**
Residential – W	31	--	--	40	21	12	41	**45**
Residential – SW	31	--	--	40	26	11	41	**45**
Residential – SE	37	--	--	41	27	22	43	**45**

[1] Calculated cumulative noise levels with implementation of Mitigation Measures 3A, 3B and 3C.

Source: BAC 2024

Table 46
Highest Predicted On-Site Operations Noise Levels – Nighttime Maximum (L_{max}) – Mitigated

Receiver	Predicted Noise Levels, L_{max} (dB)						Highest Predicted, L_{max} (dB)[1]	GP Nighttime Standard, L_{max}	Applied MC Nighttime Standard, L_{max}
	Parking	Loading Dock	Truck Circulation	Rooftop Equipment	Car Wash Dryers	Vacuums			
Residential – NW	49	--	--	--	--	--	49	**65**	**65**
Residential – W	41	--	--	--	--	--	41	**65**	**65**
Residential – SW	47	--	--	--	--	--	47	**65**	**65**
Residential – SE	55	--	--	--	--	--	55	**65**	**65**

[1] Highest predicted noise levels with implementation of Mitigation Measures 3A, 3B and 3C.

Source: BAC 2024

Table 47
Calculated Cumulative On-Site Operations Noise Levels – Nighttime Median (L_{50}) – Mitigated

Receiver	Predicted Noise Levels, L_{50} (dB)						Calculated Cumulative, L_{50} (dB)[1]	Applied MC Nighttime Standard, L_{50}
	Parking	Loading Dock	Truck Circulation	Rooftop Equipment	Car Wash Dryers	Vacuums		
Residential – NW	36	--	--	38	38	23	42	**45**
Residential – W	26	--	--	40	21	12	40	**47**
Residential – SW	26	--	--	40	26	11	40	**47**
Residential – SE	32	--	--	41	27	22	42	**45**

[1] Calculated cumulative noise levels with implementation of Mitigation Measures 3A, 3B and 3C.

Source: BAC 2024

Table 48
Mitigated Cumulative On-Site Operations Ambient Increases – Daytime Hourly Average (L_{eq})

Receiver[1]	Measured Ambient Noise Level, L_{eq}[1]	Calculated Cumulative Noise Level, L_{eq}[2]	Ambient Plus Project Noise Level, L_{eq}[3]	Daytime Noise Level Increase, L_{eq} (dB)[4]
Residential – NW	53	50	54.7	2.0
Residential – W	52	49	54.0	1.7
Residential – SW	52	49	53.9	1.6
Residential – SE	51	45	52.3	1.0

[1] Average measured daytime ambient noise levels assigned to receiver presented in Table 1 of this report.
[2] Calculated cumulative noise levels with implementation of Mitigation Measure 3B.
[3] Calculated logarithmic sum of daytime ambient noise level plus cumulative mitigated project-generated noise level.
[4] Calculated increase in ambient daytime noise level at each receiver location. Calculated increase is the result of the logarithmic addition of measured ambient noise level and cumulative mitigated project-generated noise level.

Source: BAC 2024

Table 49
Mitigated Highest Predicted On-Site Operations Ambient Increases – Daytime Maximum (L_{max})

Receiver[1]	Measured Ambient Noise Level, L_{max}[1]	Highest Predicted Noise Level, L_{max}[2]	Ambient Plus Project Noise Level, L_{max}[3]	Daytime Noise Level Increase, L_{max} (dB)[4]
Residential – NW	67	70	71.9	4.6
Residential – W	69	70	72.3	3.3
Residential – SW	69	64	70.2	1.2
Residential – SE	69	58	69.0	0.4

[1] Average measured daytime ambient noise levels assigned to receiver presented in Table 1 of this report.
[2] Highest predicted on-site operations with implementation of Mitigation Measure 3B.
[3] Calculated logarithmic sum of daytime ambient noise level plus highest predicted mitigated project-generated noise level.
[4] Calculated increase in ambient daytime noise level at each receiver location. Calculated increase is the result of the logarithmic addition of measured ambient noise level and highest predicted mitigated project-generated noise level.

Source: BAC 2024

Table 50
Mitigated Cumulative On-Site Operations Ambient Increases – Daytime Median (L_{50})

Receiver[1]	Measured Ambient Noise Level, L_{50}[1]	Calculated Cumulative Noise Level, L_{50}[2]	Ambient Plus Project Noise Level, L_{50}[3]	Daytime Noise Level Increase, L_{50} (dB)[4]
Residential – NW	49	47	51.3	2.0
Residential – W	48	45	49.8	1.8
Residential – SW	48	45	49.7	1.7
Residential – SE	48	43	49.5	1.1

[1] Average measured daytime ambient noise levels assigned to receiver presented in Table 1 of this report.
[2] Calculated cumulative on-site operations noise levels with implementation of Mitigation Measure 3B.
[3] Calculated logarithmic sum of daytime ambient noise level plus cumulative mitigated project-generated noise level.
[4] Calculated increase in ambient daytime noise level at each receiver location. Calculated increase is the result of the logarithmic addition of measured ambient noise level and cumulative mitigated project-generated noise level.

Source: BAC 2024

Table 51
Mitigated Cumulative On-Site Operations Ambient Increases – Nighttime Hourly Average (L_{eq})

Receiver[1]	Measured Ambient Noise Level, L_{eq}[1]	Calculated Cumulative Noise Level, L_{eq}[2]	Ambient Plus Project Noise Level, L_{eq}[3]	Nighttime Noise Level Increase, L_{eq} (dB)[4]
Residential – NW	47	44	49.1	1.7
Residential – W	51	41	51.1	0.4
Residential – SW	51	41	51.1	0.4
Residential – SE	49	43	50.2	0.9

[1] Average measured nighttime ambient noise levels assigned to receiver presented in Table 1 of this report.
[2] Calculated cumulative on-site operations with implementation of Mitigation Measures 3A, 3B and 3C.
[3] Calculated logarithmic sum of nighttime ambient noise level plus cumulative mitigated project-generated noise level.
[4] Calculated increase in ambient nighttime noise level at each receiver location. Calculated increase is the result of the logarithmic addition of measured ambient noise level and cumulative mitigated project-generated noise level.

Source: BAC 2024

Table 52
Mitigated Predicted On-Site Operations Ambient Increases – Nighttime Maximum (L_{max})

Receiver[1]	Measured Ambient Noise Level, L_{max}[1]	Highest Predicted Noise Level, L_{max}[2]	Ambient Plus Project Noise Level, L_{max}[3]	Nighttime Noise Level Increase, L_{max} (dB)[4]
Residential – NW	60	49	60.6	0.3
Residential – W	64	41	63.7	<0.1
Residential – SW	64	47	63.8	0.1
Residential – SE	63	55	63.9	0.6

[1] Average measured nighttime ambient noise levels assigned to receiver presented in Table 1 of this report.
[2] Highest predicted on-site operations noise levels with implementation of Mitigation Measures 3A, 3B and 3C.
[3] Calculated logarithmic sum of nighttime ambient noise level plus highest predicted mitigated project-generated noise level.
[4] Calculated increase in ambient nighttime noise level at each receiver location. Calculated increase is the result of the logarithmic addition of measured ambient noise level and highest predicted mitigated project-generated noise level.

Source: BAC 2024

Table 53
Mitigated Cumulative On-Site Operations Ambient Increases – Nighttime Median (L_{50})

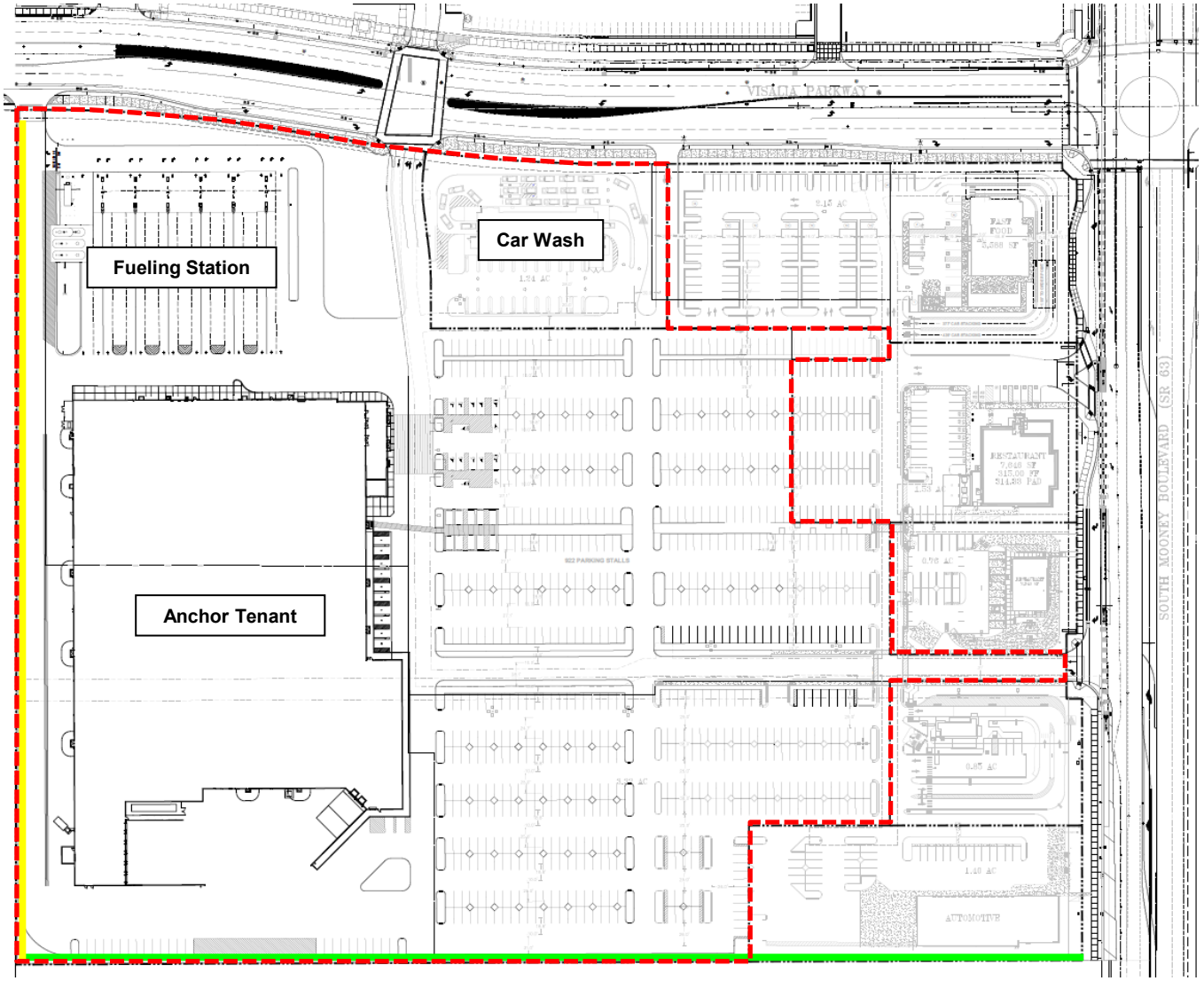
Receiver[1]	Measured Ambient Noise Level, L_{50}[1]	Calculated Cumulative Noise Level, L_{50}[2]	Ambient Plus Project Noise Level, L_{50}[3]	Daytime Noise Level Increase, L_{50} (dB)[4]
Residential – NW	44	42	46.5	2.2
Residential – W	48	40	48.4	0.7
Residential – SW	48	40	48.4	0.7
Residential – SE	46	42	47.1	1.5

[1] Average measured nighttime ambient noise levels assigned to receiver presented in Table 1 of this report.
[2] Calculated cumulative on-site operations noise levels with implementation of Mitigation Measures 3A, 3B and 3C.
[3] Calculated logarithmic sum of nighttime ambient noise level plus cumulative mitigated project-generated noise level.
[4] Calculated increase in ambient nighttime noise level at each receiver location. Calculated increase is the result of the logarithmic addition of measured ambient noise level and cumulative mitigated project-generated noise level.

Source: BAC 2024

Tables 42-47 data shows compliance with Visalia General Plan and applied Visalia Municipal Code daytime and nighttime noise level criteria at nearby residential uses. As shown in Tables 48-53, the calculated mitigated increases in ambient noise levels at the nearby residential uses would satisfy the applied increase significance criterion of 5 dB.

Significance of Impact with MM 3A-3C: *Less than Significant with Mitigation Measures*



Legend

- Project Boundary
- Existing 7’ Solid Wall (Noise Barrier)
- Required 8’ Solid Wall (Noise Barrier)

N

Scale (Feet)

0 100 200

SWC W. Visalia Pkwy & S. Mooney Blvd
Visalia, California

Mitigation Measure 2A – 8’ Solid Wall

Figure 4

BOLLARD Acoustical Consultants

Noise Impacts Associated with Project On-Site Construction Activities

Impact 9: Project On-Site Construction Noise Generation

During project construction, heavy equipment would be used for grading excavation, paving, and building construction, which would increase ambient noise levels when in use. Noise levels would vary depending on the type of equipment used, how it is operated, and how well it is maintained. Noise exposure at any single point outside the project work area would also vary depending upon the proximity of equipment activities to that point.

Table 54 includes the range of maximum noise levels for equipment commonly used in general construction projects at full-power operation at a distance of 50 feet. The outdoor activity areas (i.e., backyards) of the residences located nearest to the project area maintain a separation of approximately 50 feet from where most construction activities could occur potentially within the project area.

Table 54
Typical Construction Equipment Noise

Equipment Description	Maximum Noise Level at 50 Feet (dB)
Air Compressor	80
Backhoe	80
Ballast Equalizer	82
Ballast Tamper	83
Compactor	82
Concrete Mixer	85
Concrete Pump	82
Concrete Vibrator	76
Crane, Mobile	83
Dozer	85
Generator	82
Grader	85
Impact Wrench	85
Loader	80
Paver	85
Pneumatic Tool	85
Pump	77
Saw	76
Scarifier	83
Scraper	85
Shovel	82
Spike Driver	77
Tie Cutter	84
Tie Handler	80
Tie Inserter	85
Truck	84

Source: FTA Transit Noise and Vibration Impact Assessment Manual, Table 7-1

Visalia Municipal Code Section 8.36.050 states that the operation of construction equipment including jackhammers, portable generators, pneumatic equipment, trenchers, or other such equipment shall not be operated on the project site between the weekday hours of 7:00 p.m. and 6:00 a.m., and between the weekend hours of 7:00 p.m. and 9:00 a.m. It is reasonably assumed for the purpose of this analysis that all on-site project construction equipment and activities would occur pursuant to Visalia Municipal Code Section 8.36.050.

Based on the equipment reference noise levels in Table 54, worst-case on-site project construction equipment maximum noise levels at the outdoor activity areas of the nearest residential uses located 50 feet away are expected to range from approximately 76 to 85 dB (calculated average of 82 dB). Thus, it is possible that a portion of the project construction equipment could potentially result in substantial short-term increases over ambient daytime maximum noise levels measured at BAC sites 1-3 (data contained in Appendices C & D). However, it should be noted that the reference construction noise levels at 50 feet shown in Table 54 are generally within the range of measured maximum noise levels at BAC sites 1-3. Nonetheless, noise impacts associated with construction activities are identified as being **potentially significant**. As a result, the following specific noise mitigation measures should be incorporated into project on-site construction operations:

Mitigation Measure 4:

MM 4: To the maximum extent practical, the following measures should be incorporated into the project construction operations:

- All on-site noise-generating construction activities should occur pursuant to Visalia Municipal Code Section 8.36.050.
- All noise-producing project equipment and vehicles using internal-combustion engines shall be equipped with manufacturers-recommended mufflers and be maintained in good working condition.
- All mobile or fixed noise-producing equipment used on the project site that are regulated for noise output by a federal, state, or local agency shall comply with such regulations while in the course of project activity.
- Electrically powered equipment shall be used instead of pneumatic or internal-combustion-powered equipment, where feasible.
- Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive uses.
- Project area and site access road speed limits shall be established and enforced during the construction period.
- Nearby residences shall be notified of construction schedules so that arrangements can be made, if desired, to limit their exposure to short-term increases in ambient noise levels.

Significance of Impact with MM 4: *Less than Significant with Mitigation Measures*

Vibration Impacts Associated with the Project

Impact 10: Vibration Generated by Project Construction and On-Site Operations

During project construction, heavy equipment would be used for grading, excavation, paving, and building construction, which would generate localized vibration in the immediate vicinity of those activities. The nearest existing structures to the project area have been identified as residential buildings (i.e., not highly susceptible to damage by vibration) located to the south and west.

Table 55 includes the range of vibration levels for equipment commonly used in general construction projects at a distance of 25 feet. Table 55 also includes projected equipment vibration levels at the nearest off-site existing structures located approximately 30 feet away.

Table 55
Reference and Projected Vibration Source Amplitudes for Construction Equipment

Equipment	Reference PPV at 25 ft (in/sec)[1]	Projected PPV at Nearest Receptor (in/sec)[1] Residence – 30 ft
Hoe ram	0.089	0.068
Large bulldozer	0.089	0.068
Caisson drilling	0.089	0.068
Loaded trucks	0.076	0.058
Jackhammer	0.035	0.027
Small bulldozer	0.003	0.002

[1] PPV = Peak Particle Velocity

Source: 2018 FTA Transit Noise and Vibration Impact Assessment Manual and BAC calculations

As indicated in Table 55, vibration levels generated from on-site construction activities at the nearest existing residences are projected to be well below the strictest Caltrans thresholds for damage to residential structures of 0.5 in/sec PPV shown in Table 4 of this report. Further, the projected vibration levels in Table 55 would range from imperceptible to just above slightly perceptible at the closest residential buildings located 30 feet away. Based on the analysis above, on-site construction within the project area is not expected to result in excessive groundborne vibration levels at nearby existing sensitive receptors.

Based on the results from the BAC ambient vibration survey (Table 2), measured vibration levels within the project vicinity were below the threshold of perception (less than 0.001 in/sec PPV). Therefore, it is believed that persons within the project area (or proposed uses of the development) would not be exposed to excessive groundborne vibration levels. Finally, the project proposes the development of commercial uses. It is the experience of BAC that commercial uses do not typically have equipment that generates appreciable vibration.

Because vibration levels due to and upon the project are expected to be satisfactory relative to the applicable Caltrans vibration impact criteria for damage to structures and annoyance, this impact is considered to be ***less than significant***.

Conclusion

This concludes BAC's noise and vibration assessment for the SWC W. Visalia Parkway & S. Mooney Boulevard Development in Visalia, California. Please contact BAC at (530) 537-2328 or dariog@bacnoise.com if you have any comments or questions regarding this report.

Appendix A
Acoustical Terminology

Acoustics The science of sound.

Ambient Noise The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.

Attenuation The reduction of an acoustic signal.

A-Weighting A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.

Decibel or dB Fundamental unit of sound. A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.

CNEL Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.

Frequency The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz.

IIC Impact Insulation Class (IIC): A single-number representation of a floor/ceiling partition's impact generated noise insulation performance. The field-measured version of this number is the FIIC.

L_{dn} Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.

L_{eq} Equivalent or energy-averaged sound level.

L_{max} The highest root-mean-square (RMS) sound level measured over a given period of time.

Loudness A subjective term for the sensation of the magnitude of sound.

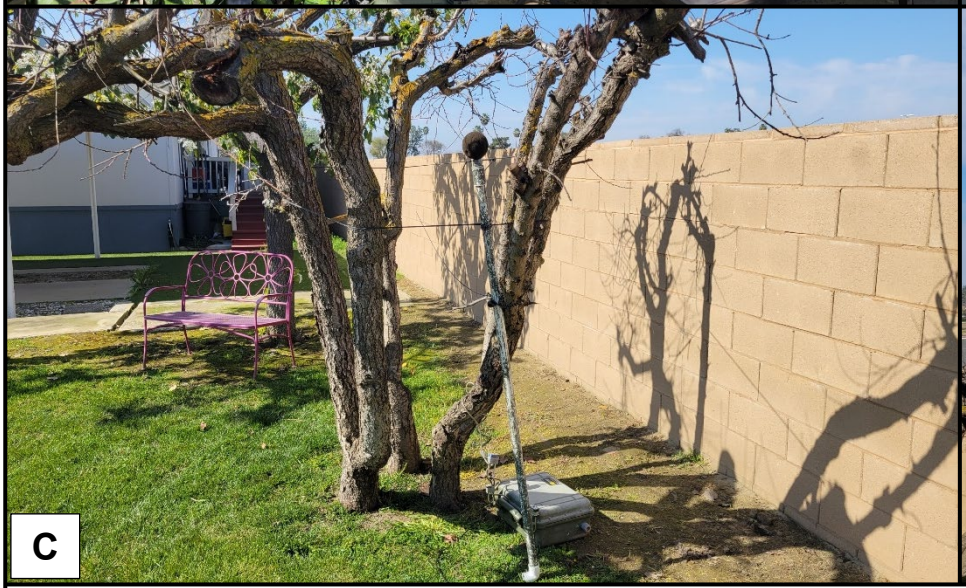
Masking The amount (or the process) by which the threshold of audibility is for one sound is raised by the presence of another (masking) sound.

Noise Unwanted sound.

Peak Noise The level corresponding to the highest (not RMS) sound pressure measured over a given period of time. This term is often confused with the "Maximum" level, which is the highest RMS level.

RT_{60} The time it takes reverberant sound to decay by 60 dB once the source has been removed.

STC Sound Transmission Class (STC): A single-number representation of a partition's noise insulation performance. This number is based on laboratory-measured, 16-band (1/3-octave) transmission loss (TL) data of the subject partition. The field-measured version of this number is the FSTC.



Legend

A: Site 1: Northwest project area, in backyard of W. Lake Dr residence
B: Site 2: Western project area, in backyard of Quince Ct residence
C: Site 3: Southeast project area, in backyard of Ash Ct residence
D: Site 3: Southeast project area, in backyard of Ash Ct residence

SWC W. Visalia Pkwy & S. Mooney Blvd
Visalia, California

BAC Field Survey Photographs

Appendix B

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Appendix C-1
Long-Term Ambient Noise Monitoring Results - Site 1
SWC W. Visalia Parkway & S. Mooney Blvd Development - Visalia, California
Wednesday, February 14, 2024

Hour	Leq	Lmax	L50	L90
12:00 AM	44	67	39	35
1:00 AM	42	59	40	36
2:00 AM	45	60	43	39
3:00 AM	47	60	46	41
4:00 AM	47	60	45	42
5:00 AM	49	59	47	44
6:00 AM	52	62	51	47
7:00 AM	57	66	55	52
8:00 AM	57	74	54	50
9:00 AM	54	71	49	46
10:00 AM	51	68	49	45
11:00 AM	50	64	48	45
12:00 PM	51	65	50	47
1:00 PM	51	71	49	46
2:00 PM	48	63	47	45
3:00 PM	49	69	48	45
4:00 PM	50	61	49	47
5:00 PM	51	65	51	48
6:00 PM	55	78	52	49
7:00 PM	51	63	51	49
8:00 PM	52	63	51	48
9:00 PM	52	67	50	46
10:00 PM	47	61	46	42
11:00 PM	47	61	46	40

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	57	48	53	52	42	48
Lmax (Maximum)	78	61	67	67	59	61
L50 (Median)	55	47	50	51	39	45
L90 (Background)	52	45	47	47	35	41

Computed DNL (dB)	55
% Daytime Energy	84%
% Nighttime Energy	16%

GPS Coordinates	36°17'26.78"N
	119°19'05.10"W

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Appendix C-2
Long-Term Ambient Noise Monitoring Results - Site 1
SWC W. Visalia Parkway & S. Mooney Blvd Development - Visalia, California
Thursday, February 15, 2024

Hour	Leq	Lmax	L50	L90
12:00 AM	48	63	46	41
1:00 AM	44	54	42	37
2:00 AM	48	54	48	41
3:00 AM	40	57	39	36
4:00 AM	44	53	42	38
5:00 AM	48	57	48	46
6:00 AM	51	71	50	46
7:00 AM	50	57	50	47
8:00 AM	52	68	49	46
9:00 AM	50	70	47	44
10:00 AM	55	72	49	45
11:00 AM	59	80	50	45
12:00 PM	50	65	48	45
1:00 PM	51	65	50	45
2:00 PM	51	60	50	47
3:00 PM	51	64	48	44
4:00 PM	48	66	46	43
5:00 PM	48	68	47	44
6:00 PM	50	70	49	46
7:00 PM	50	69	48	46
8:00 PM	48	60	47	45
9:00 PM	47	62	46	43
10:00 PM	46	64	45	42
11:00 PM	47	63	45	42

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	59	47	52	51	40	47
Lmax (Maximum)	80	57	66	71	53	60
L50 (Median)	50	46	48	50	39	45
L90 (Background)	47	43	45	46	36	41

Computed DNL (dB)	55
% Daytime Energy	83%
% Nighttime Energy	17%

GPS Coordinates	36°17'26.78"N
	119°19'05.10"W

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Appendix C-3
Long-Term Ambient Noise Monitoring Results - Site 1
SWC W. Visalia Parkway & S. Mooney Blvd Development - Visalia, California
Friday, February 16, 2024

Hour	Leq	Lmax	L50	L90
12:00 AM	43	64	40	36
1:00 AM	41	62	38	34
2:00 AM	40	54	38	31
3:00 AM	43	55	40	34
4:00 AM	46	55	45	40
5:00 AM	48	57	46	42
6:00 AM	52	70	49	45
7:00 AM	56	77	54	51
8:00 AM	54	65	52	48
9:00 AM	58	71	53	48
10:00 AM	55	76	53	49
11:00 AM	55	66	53	49
12:00 PM	53	68	51	48
1:00 PM	50	63	49	46
2:00 PM	51	70	48	45
3:00 PM	51	71	48	45
4:00 PM	53	70	48	44
5:00 PM	50	67	49	45
6:00 PM	50	71	49	46
7:00 PM	49	69	48	46
8:00 PM	49	62	49	46
9:00 PM	49	64	48	45
10:00 PM	49	67	47	43
11:00 PM	46	61	45	41

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	58	49	53	52	40	47
Lmax (Maximum)	77	62	69	70	54	60
L50 (Median)	54	48	50	49	38	43
L90 (Background)	51	44	47	45	31	38

Computed DNL (dB)	55
% Daytime Energy	88%
% Nighttime Energy	12%

GPS Coordinates	36°17'26.78"N
	119°19'05.10"W

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Appendix C-4
Long-Term Ambient Noise Monitoring Results - Site 2
SWC W. Visalia Parkway & S. Mooney Blvd Development - Visalia, California
Wednesday, February 14, 2024

Hour	Leq	Lmax	L50	L90
12:00 AM	48	70	42	36
1:00 AM	45	65	42	37
2:00 AM	50	63	46	39
3:00 AM	52	59	51	46
4:00 AM	51	65	49	45
5:00 AM	52	61	51	47
6:00 AM	55	70	54	50
7:00 AM	57	71	56	53
8:00 AM	54	77	51	46
9:00 AM	49	63	46	43
10:00 AM	49	71	45	41
11:00 AM	50	69	45	43
12:00 PM	49	66	47	44
1:00 PM	48	66	46	42
2:00 PM	48	65	45	42
3:00 PM	47	63	45	43
4:00 PM	50	61	49	45
5:00 PM	59	83	52	48
6:00 PM	56	72	53	50
7:00 PM	53	64	52	49
8:00 PM	54	64	53	50
9:00 PM	54	71	52	48
10:00 PM	50	65	48	44
11:00 PM	50	67	48	43

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	59	47	53	55	45	51
Lmax (Maximum)	83	61	68	70	59	65
L50 (Median)	56	45	49	54	42	48
L90 (Background)	53	41	46	50	36	43

Computed DNL (dB)	58
% Daytime Energy	74%
% Nighttime Energy	26%

GPS Coordinates	36°17'22.04"N
	119°19'05.07"W

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Appendix C-5
Long-Term Ambient Noise Monitoring Results - Site 2
SWC W. Visalia Parkway & S. Mooney Blvd Development - Visalia, California
Thursday, February 15, 2024

Hour	Leq	Lmax	L50	L90
12:00 AM	48	66	46	41
1:00 AM	46	57	44	39
2:00 AM	48	61	47	42
3:00 AM	42	53	40	36
4:00 AM	50	59	47	42
5:00 AM	54	60	54	52
6:00 AM	54	70	53	49
7:00 AM	54	64	54	52
8:00 AM	53	71	51	47
9:00 AM	48	71	45	43
10:00 AM	54	85	46	43
11:00 AM	57	88	47	43
12:00 PM	50	74	45	42
1:00 PM	51	77	44	41
2:00 PM	49	64	44	41
3:00 PM	46	65	43	41
4:00 PM	50	69	44	41
5:00 PM	50	70	46	44
6:00 PM	52	69	51	49
7:00 PM	54	76	51	49
8:00 PM	52	70	50	47
9:00 PM	51	66	49	47
10:00 PM	51	67	49	46
11:00 PM	53	70	51	46

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	57	46	52	54	42	51
Lmax (Maximum)	88	64	72	70	53	63
L50 (Median)	54	43	47	54	40	48
L90 (Background)	52	41	45	52	36	44

Computed DNL (dB)	57
% Daytime Energy	69%
% Nighttime Energy	31%

GPS Coordinates	36°17'22.04"N
	119°19'05.07"W

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Appendix C-6
Long-Term Ambient Noise Monitoring Results - Site 2
SWC W. Visalia Parkway & S. Mooney Blvd Development - Visalia, California
Friday, February 16, 2024

Hour	Leq	Lmax	L50	L90
12:00 AM	47	63	44	39
1:00 AM	45	64	41	35
2:00 AM	43	54	40	34
3:00 AM	47	59	45	38
4:00 AM	49	59	48	44
5:00 AM	51	60	50	45
6:00 AM	55	74	53	48
7:00 AM	59	76	58	55
8:00 AM	54	63	51	47
9:00 AM	50	73	45	42
10:00 AM	48	66	46	42
11:00 AM	47	63	45	42
12:00 PM	45	58	43	41
1:00 PM	46	66	43	41
2:00 PM	47	67	45	42
3:00 PM	50	66	46	43
4:00 PM	47	61	46	43
5:00 PM	51	67	49	46
6:00 PM	52	71	48	46
7:00 PM	50	71	49	47
8:00 PM	53	65	52	49
9:00 PM	53	69	52	49
10:00 PM	53	72	51	47
11:00 PM	50	66	49	46

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	59	45	52	55	43	50
Lmax (Maximum)	76	58	67	74	54	63
L50 (Median)	58	43	48	53	40	47
L90 (Background)	55	41	45	48	34	42

Computed DNL (dB)	57
% Daytime Energy	69%
% Nighttime Energy	31%

GPS Coordinates	36°17'22.04"N
	119°19'05.07"W

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Appendix C-7
Long-Term Ambient Noise Monitoring Results - Site 3
SWC W. Visalia Parkway & S. Mooney Blvd Development - Visalia, California
Wednesday, February 14, 2024

Hour	Leq	Lmax	L50	L90
12:00 AM	46	66	41	36
1:00 AM	44	62	40	37
2:00 AM	50	64	46	38
3:00 AM	50	64	48	43
4:00 AM	50	72	45	42
5:00 AM	51	61	50	46
6:00 AM	53	70	52	49
7:00 AM	55	80	53	50
8:00 AM	51	68	50	46
9:00 AM	48	65	46	43
10:00 AM	52	70	47	43
11:00 AM	55	68	48	43
12:00 PM	55	70	48	43
1:00 PM	52	67	48	43
2:00 PM	54	70	48	44
3:00 PM	48	62	47	44
4:00 PM	50	63	48	44
5:00 PM	50	66	49	45
6:00 PM	54	72	50	47
7:00 PM	51	67	50	47
8:00 PM	52	64	50	47
9:00 PM	51	69	49	45
10:00 PM	47	61	45	41
11:00 PM	48	64	45	39

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	55	48	52	53	44	49
Lmax (Maximum)	80	62	68	72	61	65
L50 (Median)	53	46	49	52	40	46
L90 (Background)	50	43	45	49	36	41

Computed DNL (dB)	56
% Daytime Energy	77%
% Nighttime Energy	23%

GPS Coordinates	36°17'18.47"N
	119°18'54.99"W

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Appendix C-8
Long-Term Ambient Noise Monitoring Results - Site 3
SWC W. Visalia Parkway & S. Mooney Blvd Development - Visalia, California
Thursday, February 15, 2024

Hour	Leq	Lmax	L50	L90
12:00 AM	49	70	46	40
1:00 AM	46	57	42	39
2:00 AM	51	58	49	39
3:00 AM	43	56	40	36
4:00 AM	48	61	47	41
5:00 AM	52	60	51	49
6:00 AM	51	64	50	46
7:00 AM	54	80	52	49
8:00 AM	52	68	50	45
9:00 AM	51	73	46	42
10:00 AM	51	69	48	43
11:00 AM	50	65	48	44
12:00 PM	49	67	46	43
1:00 PM	49	64	46	44
2:00 PM	49	72	46	43
3:00 PM	47	62	46	43
4:00 PM	49	66	46	43
5:00 PM	49	65	48	45
6:00 PM	52	69	51	48
7:00 PM	55	79	52	50
8:00 PM	54	71	52	49
9:00 PM	51	64	50	47
10:00 PM	51	63	49	45
11:00 PM	53	66	50	46

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	55	47	51	53	43	50
Lmax (Maximum)	80	62	69	70	56	62
L50 (Median)	52	46	48	51	40	47
L90 (Background)	50	42	45	49	36	42

Computed DNL (dB)	57
% Daytime Energy	69%
% Nighttime Energy	31%

GPS Coordinates	36°17'18.47"N
	119°18'54.99"W

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Appendix C-9
Long-Term Ambient Noise Monitoring Results - Site 3
SWC W. Visalia Parkway & S. Mooney Blvd Development - Visalia, California
Friday, February 16, 2024

Hour	Leq	Lmax	L50	L90
12:00 AM	44	56	42	38
1:00 AM	42	60	38	35
2:00 AM	41	64	38	33
3:00 AM	43	60	41	37
4:00 AM	46	57	44	40
5:00 AM	48	59	47	42
6:00 AM	52	71	50	46
7:00 AM	55	76	53	51
8:00 AM	50	66	49	45
9:00 AM	47	66	46	43
10:00 AM	48	64	46	42
11:00 AM	48	68	46	42
12:00 PM	47	64	46	43
1:00 PM	48	69	46	43
2:00 PM	53	83	47	44
3:00 PM	49	59	48	45
4:00 PM	49	60	48	45
5:00 PM	51	64	50	46
6:00 PM	52	71	50	48
7:00 PM	52	74	50	47
8:00 PM	53	73	52	48
9:00 PM	53	70	52	47
10:00 PM	54	77	50	46
11:00 PM	49	62	47	43

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	55	47	51	54	41	49
Lmax (Maximum)	83	59	69	77	56	63
L50 (Median)	53	46	48	50	38	44
L90 (Background)	51	42	45	46	33	40

Computed DNL (dB)	55
% Daytime Energy	75%
% Nighttime Energy	25%

GPS Coordinates	36°17'18.47"N
	119°18'54.99"W

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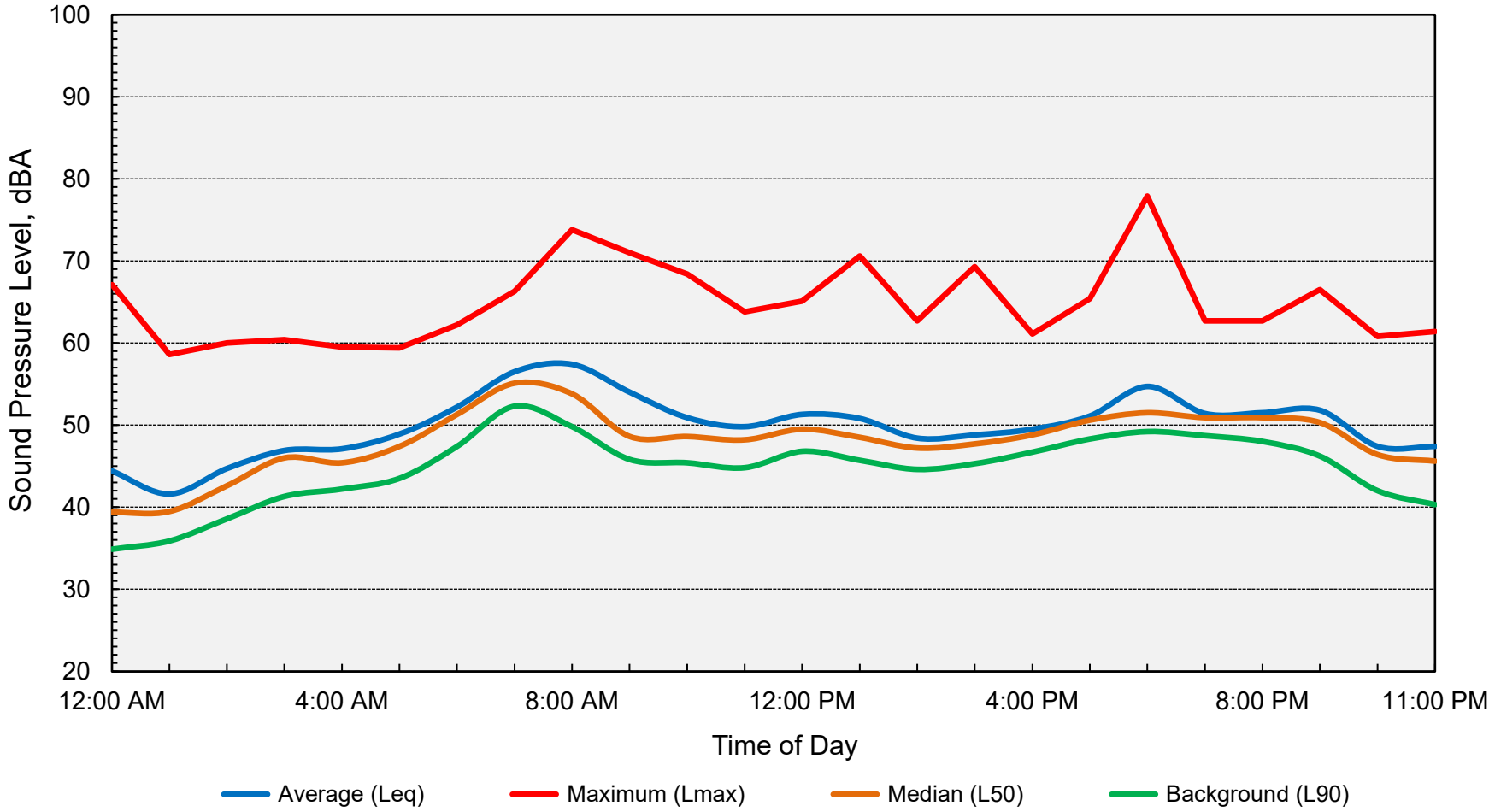
Appendix D-1
Long-Term Ambient Noise Monitoring Results - Site 1
SWC W. Visalia Parkway & S. Mooney Blvd Development - Visalia, California
Wednesday, February 14, 2024



Computed DNL = 55 dB

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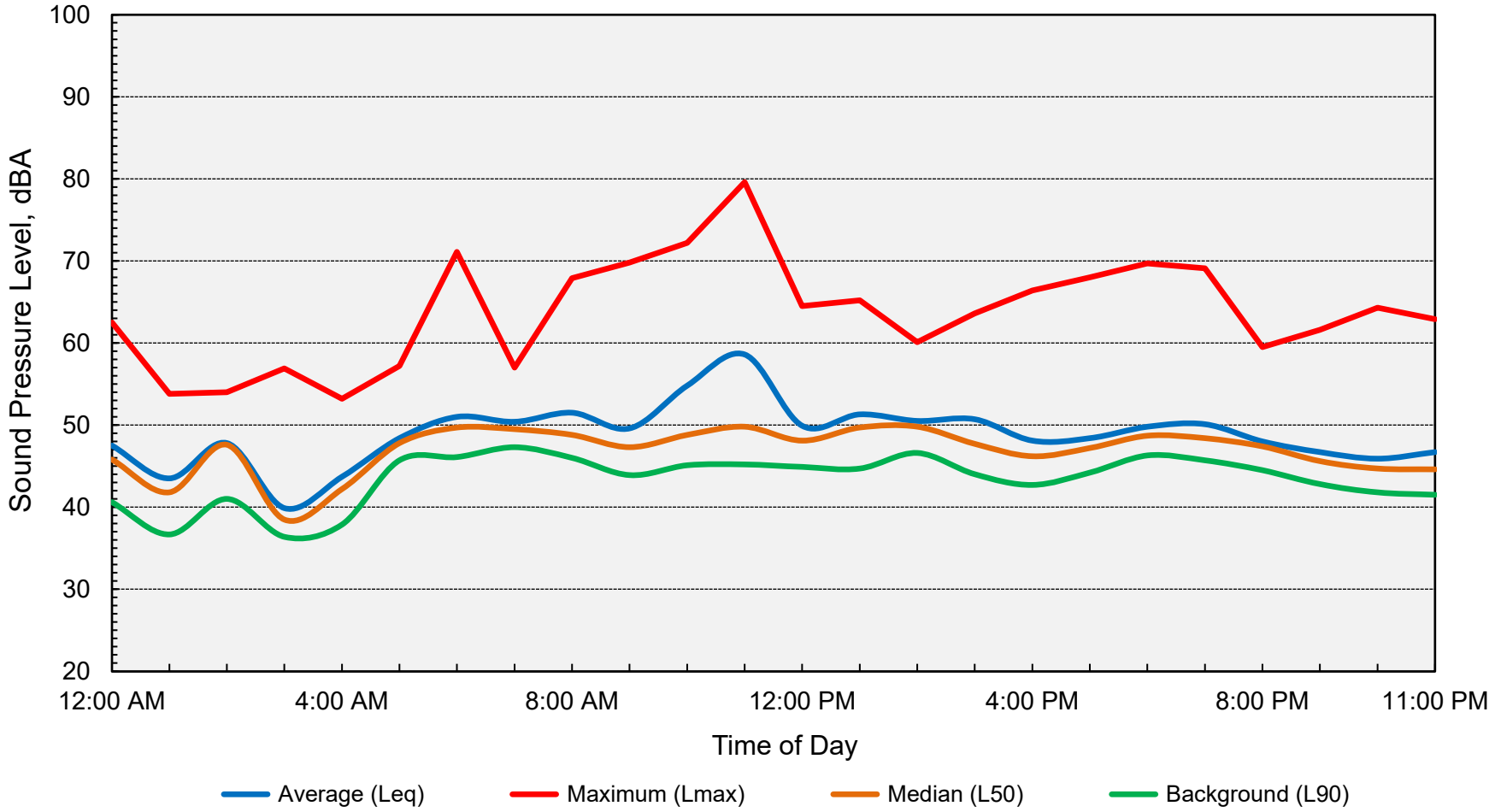
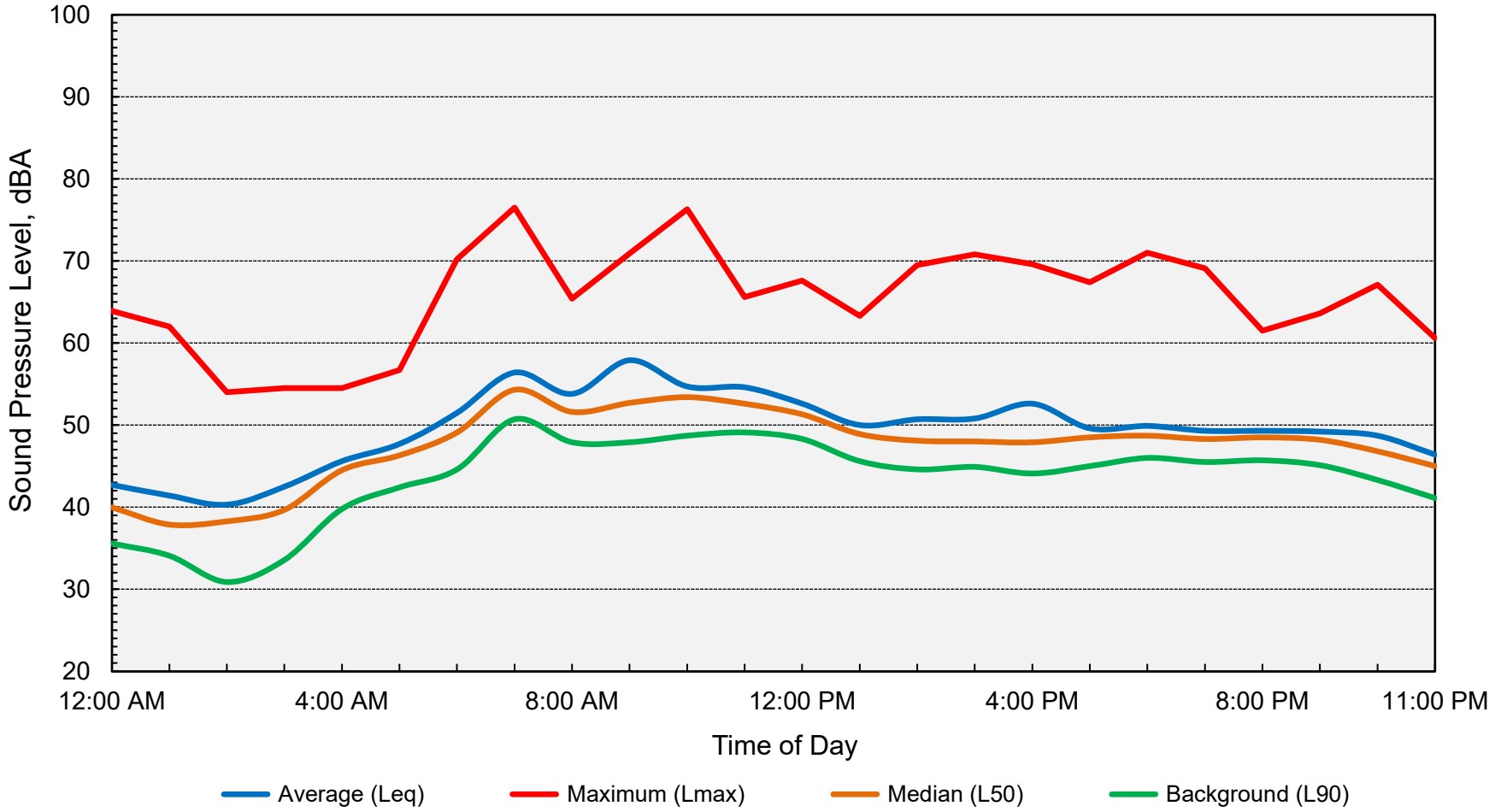
Appendix D-2
Long-Term Ambient Noise Monitoring Results - Site 1
SWC W. Visalia Parkway & S. Mooney Blvd Development - Visalia, California
Thursday, February 15, 2024



Computed DNL = 55 dB

BOLLARD
Acoustical Consultants

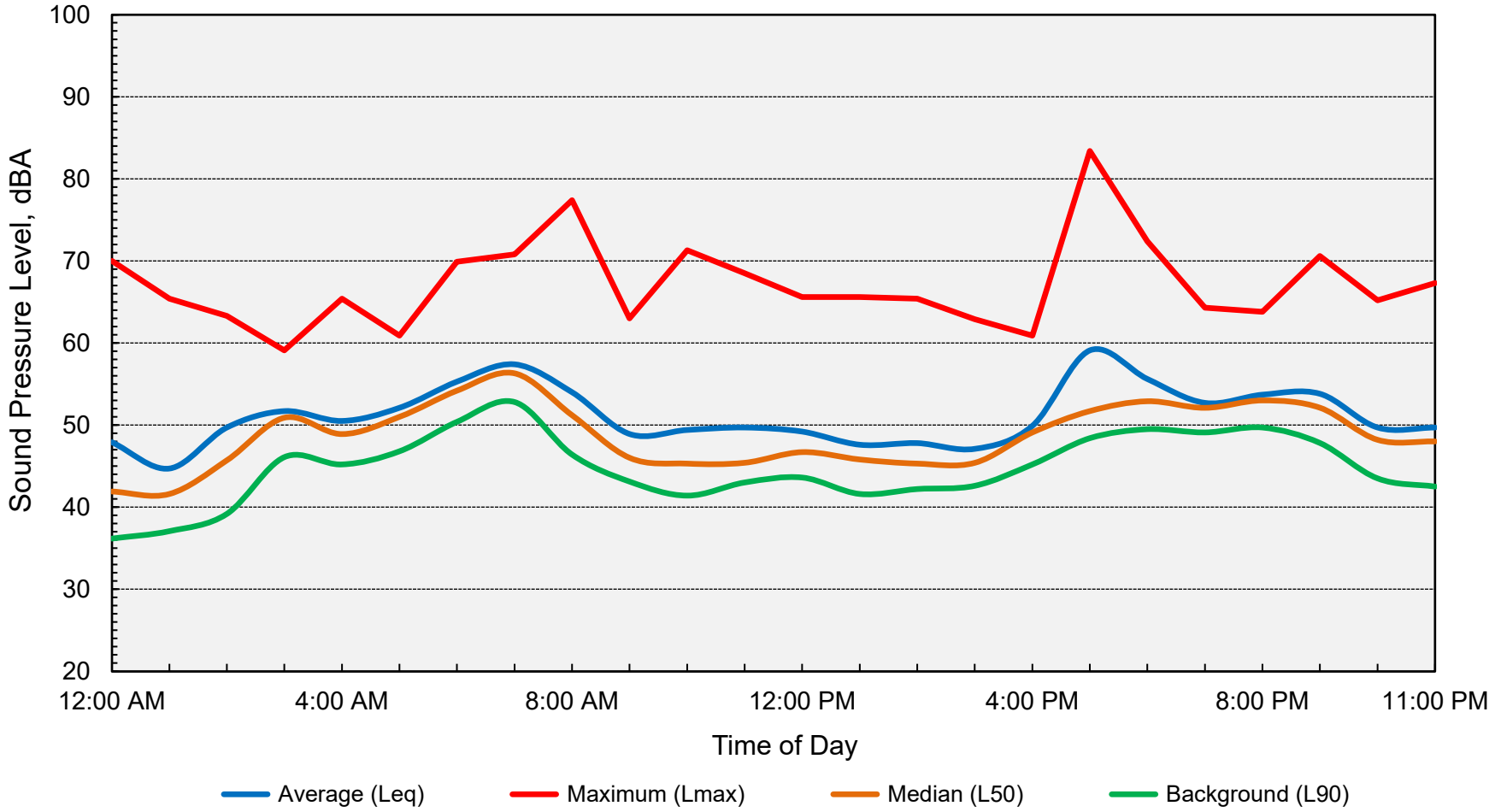
Appendix D-3
Long-Term Ambient Noise Monitoring Results - Site 1
SWC W. Visalia Parkway & S. Mooney Blvd Development - Visalia, California
Friday, February 16, 2024



Computed DNL = 55 dB

BOLLARD
Acoustical Consultants

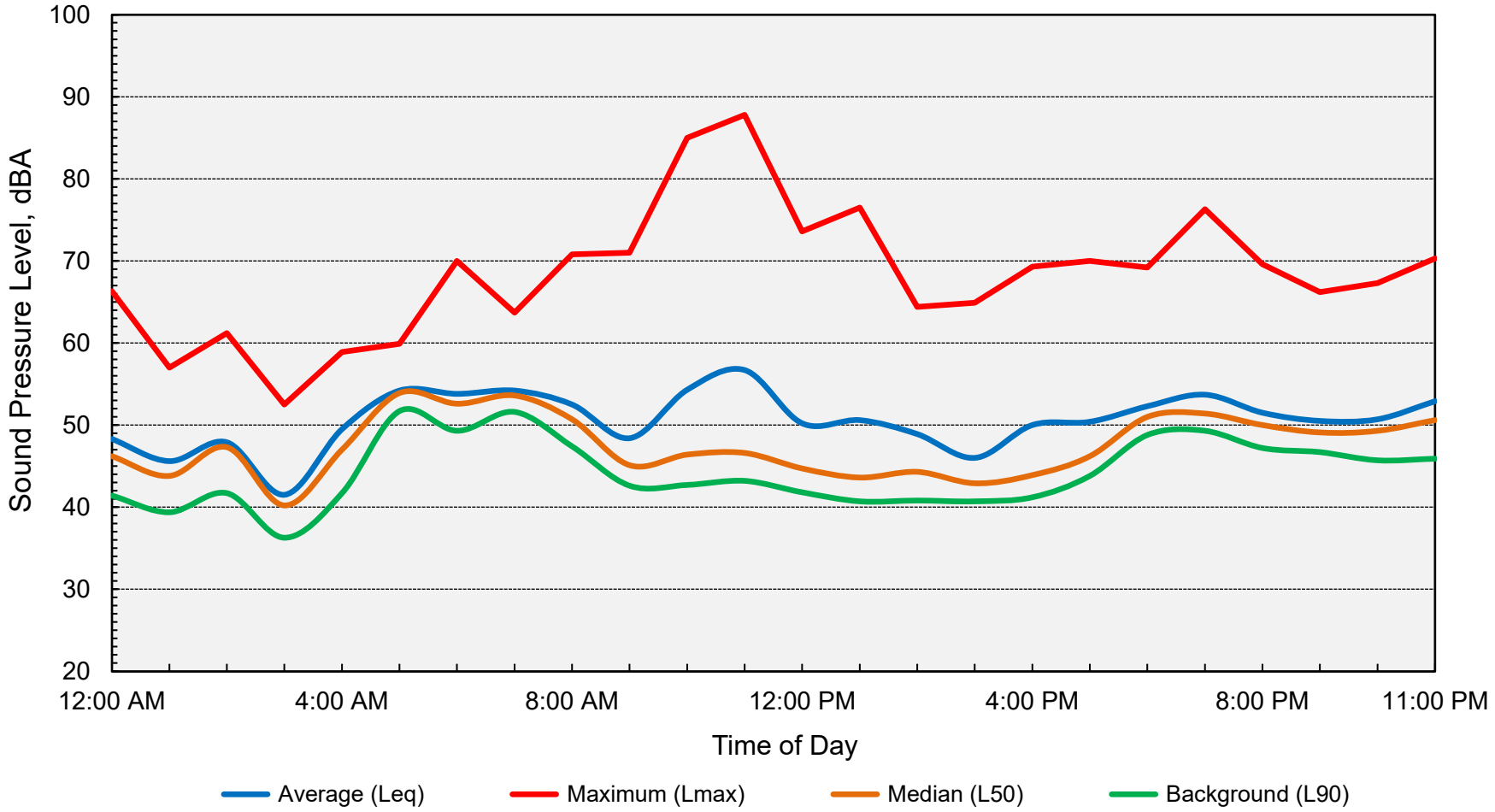
Appendix D-4
Long-Term Ambient Noise Monitoring Results - Site 2
SWC W. Visalia Parkway & S. Mooney Blvd Development - Visalia, California
Wednesday, February 14, 2024



Computed DNL = 58 dB

BOLLARD
Acoustical Consultants

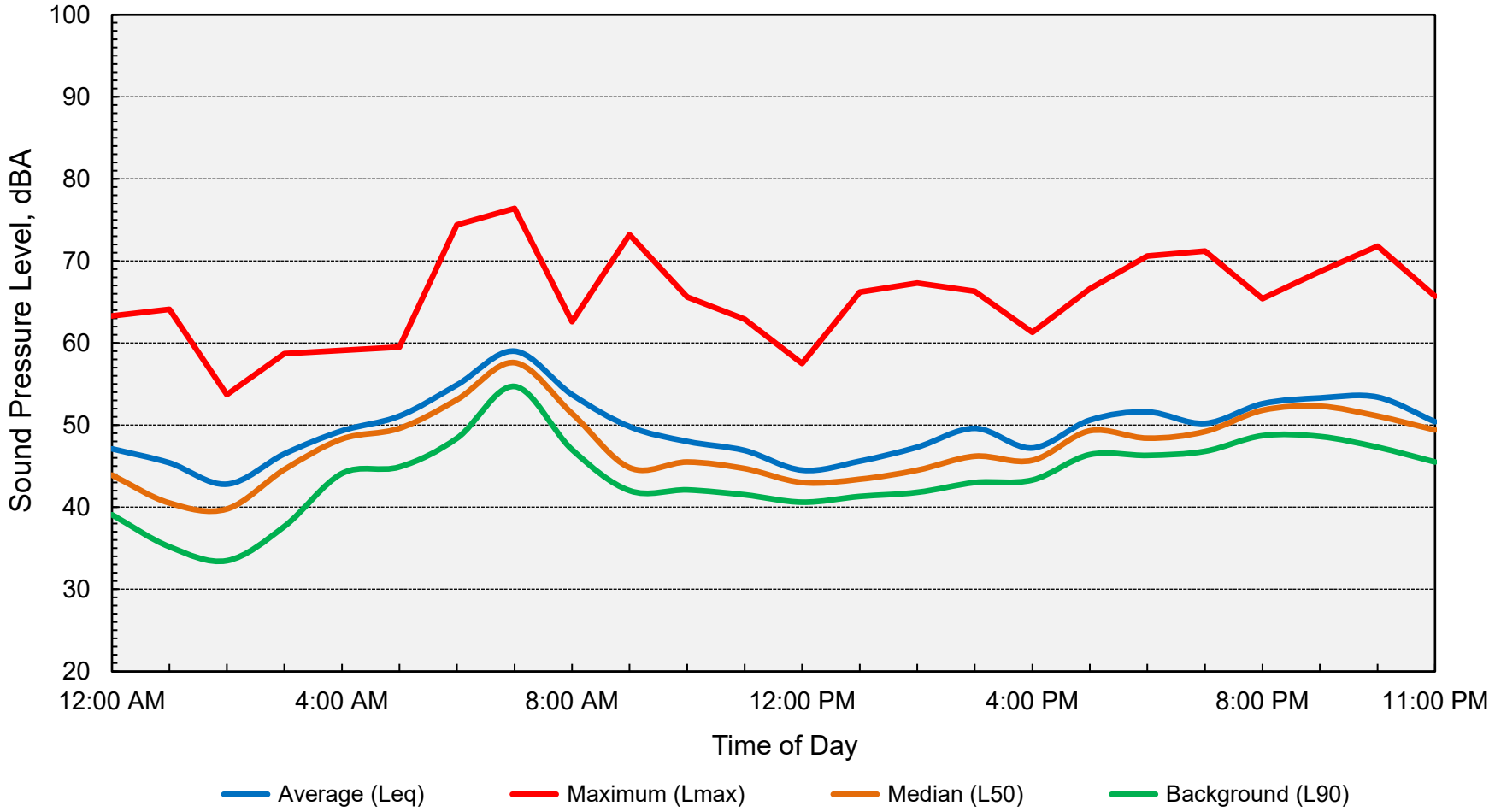
Appendix D-5
Long-Term Ambient Noise Monitoring Results - Site 2
SWC W. Visalia Parkway & S. Mooney Blvd Development - Visalia, California
Thursday, February 15, 2024



Computed DNL = 57 dB

BOLLARD
Acoustical Consultants

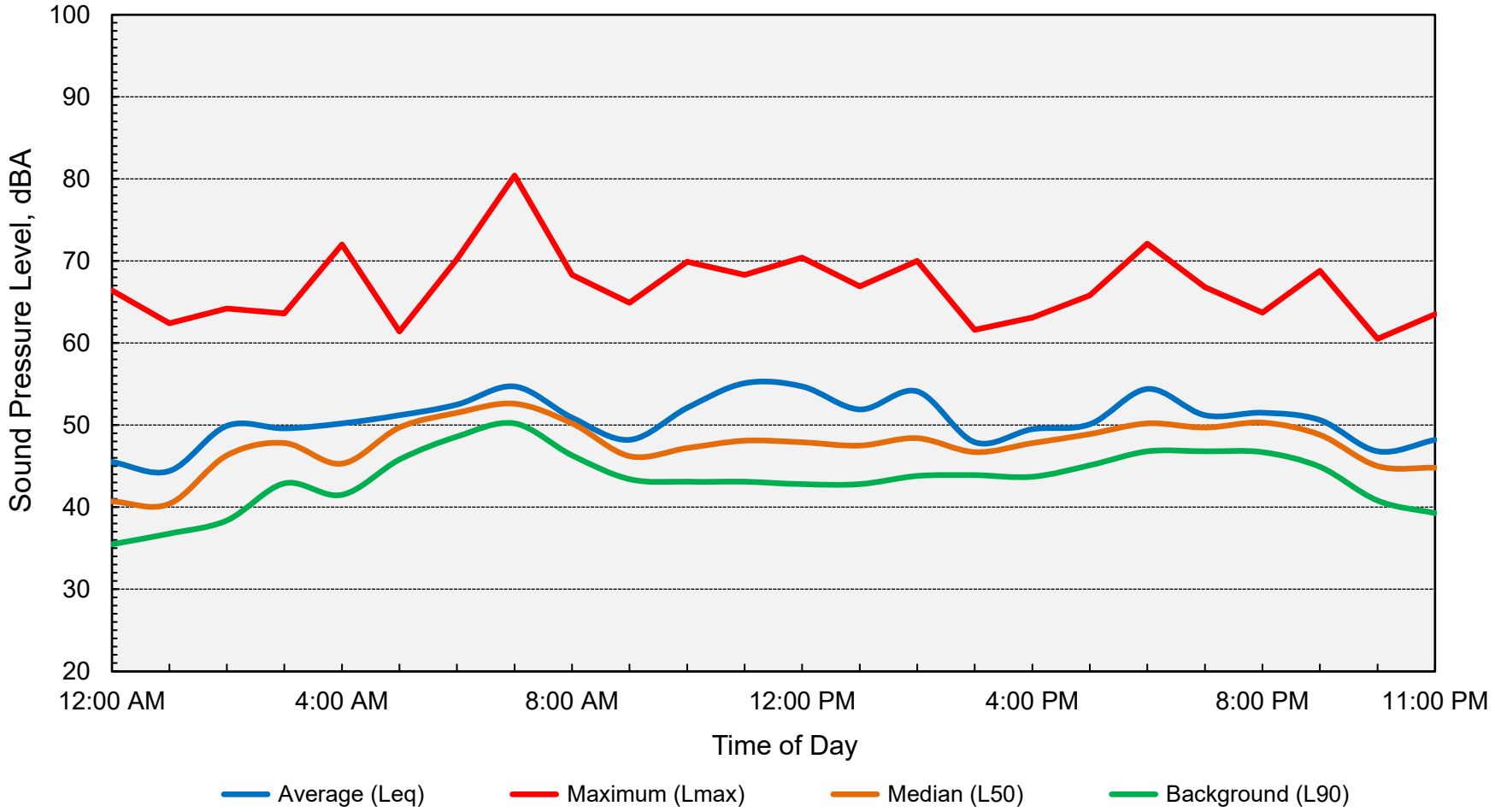
Appendix D-6
Long-Term Ambient Noise Monitoring Results - Site 2
SWC W. Visalia Parkway & S. Mooney Blvd Development - Visalia, California
Friday, February 16, 2024



Computed DNL = 57 dB

BOLLARD
Acoustical Consultants

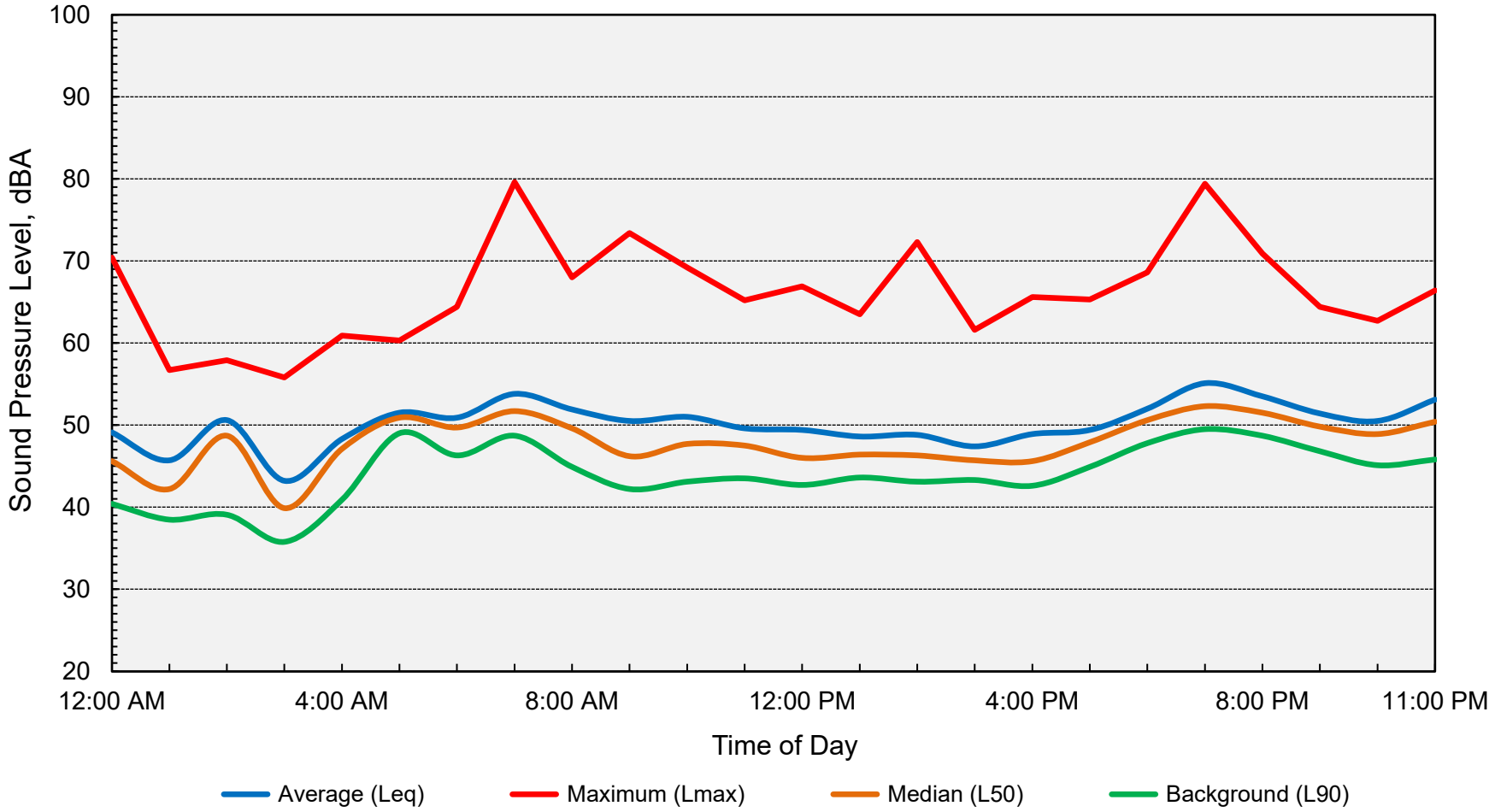
Appendix D-7
Long-Term Ambient Noise Monitoring Results - Site 3
SWC W. Visalia Parkway & S. Mooney Blvd Development - Visalia, California
Wednesday, February 14, 2024



Computed DNL = 56 dB

BOLLARD
Acoustical Consultants

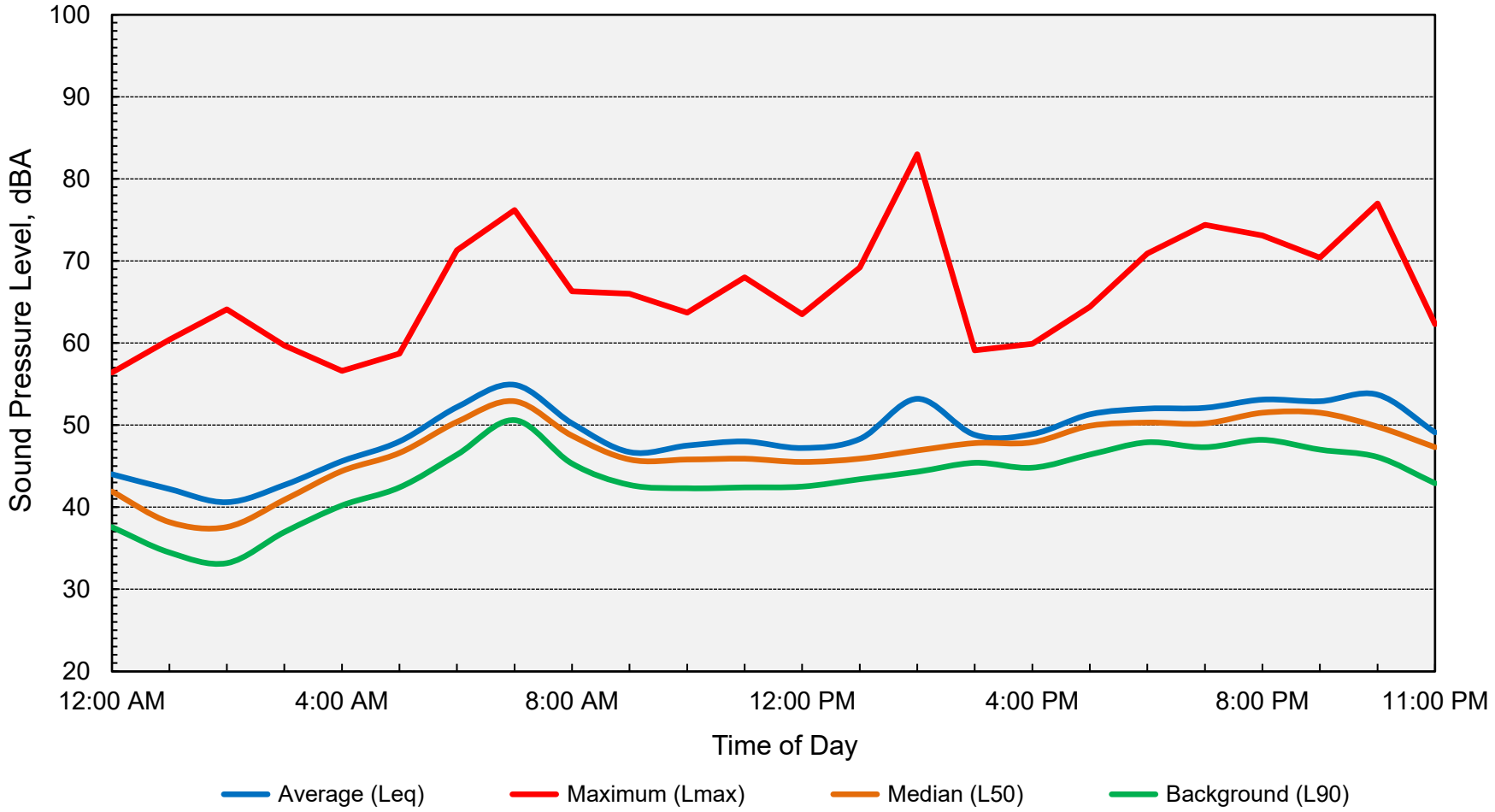
Appendix D-8
Long-Term Ambient Noise Monitoring Results - Site 3
SWC W. Visalia Parkway & S. Mooney Blvd Development - Visalia, California
Thursday, February 15, 2024



Computed DNL = 57 dB

BOLLARD
Acoustical Consultants

Appendix D-9
Long-Term Ambient Noise Monitoring Results - Site 3
SWC W. Visalia Parkway & S. Mooney Blvd Development - Visalia, California
Friday, February 16, 2024



Computed DNL = 55 dB

BOLLARD
Acoustical Consultants

Appendix E-1
Rooftop Unit Manufacturer Documentation
Enlight Lennox: Model LHT036H4, LHT060H4

OUTDOOR SOUND DATA

[1] Unit Model No.	Octave Band Sound Power Levels dBA, re 10^{-12} Watts Center Frequency - Hz							[1] Sound Rating Number dBA
	125	250	500	1000	2000	4000	8000	
024, 036, 048	63	66	70	71	68	62	53	75
060	67	72	77	76	73	68	61	82

NOTE - The octave sound power data does not include tonal corrections.

[1] Sound Rating Number according to AHRI Standard 270-95 (Includes pure tone penalty). Sound Rating Number is the overall A-Weighted Sound Power Level, (Lwa), dBA (100 Hz to 10,000 Hz).

WEIGHT DATA — UNIT

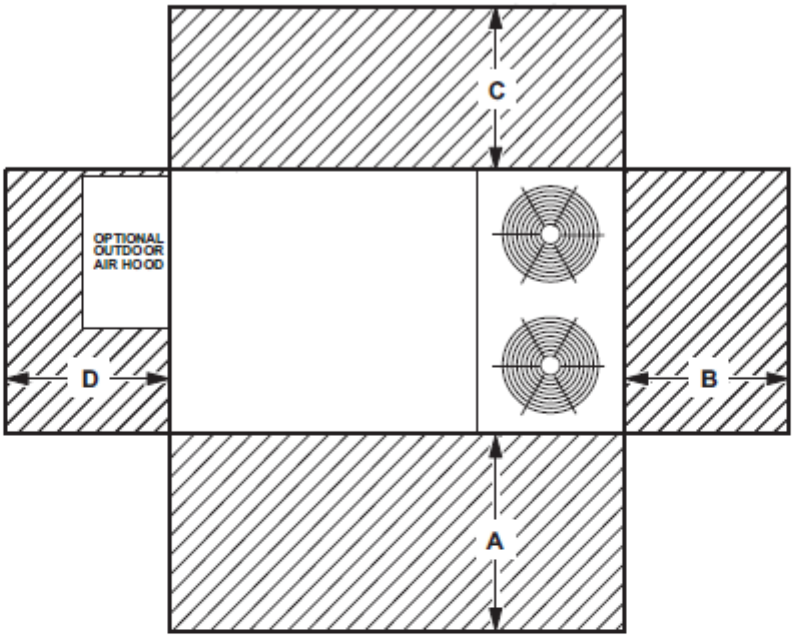
Model Number	Net		Shipping	
	lbs.	kg	lbs.	kg
024 Base Unit	646	293	686	311
024 Max. Unit	765	347	805	365
036 Base Unit	645	293	685	311
036 Max. Unit	764	347	804	365
048 Base Unit	641	291	681	309
048 Max. Unit	760	345	800	363
060 Base Unit	686	311	727	330
060 Max. Unit	792	359	833	378

WEIGHT DATA — OPTIONS / ACCESSORIES

		Shipping Weight	
		lbs.	kg
ECONOMIZER / OUTDOOR AIR / EXHAUST			
Economizer			
Economizer, Includes Combination Outdoor Air Hood and Barometric Relief Dampers		131	59
Outdoor Air Dampers			
Motorized		40	18
Manual		30	14
Power Exhaust		35	17
ELECTRIC HEAT			
5 kW		31	14
7.5 kW		31	14
15 kW		31	14
22.5 kW		35	16
30 kW		35	16
HAIL GUARDS			
All models		31	14
ROOF CURBS			
Hybrid Roof Curbs, Downflow			
8 in. height		50	23
14 in. height		70	32
18 in. height		80	36
24 in. height		100	45
Adjustable Pitch Curb, Downflow			
14 in. height		113	51
CEILING DIFFUSERS			
Step-Down	RTD11-95S	118	54
Flush	FD11-95S	118	54
Transitions	T1TRAN20N-1	21	10

Appendix E-2
Rooftop Unit Manufacturer Documentation
Enlight Lennox: Model LHT122H4E

UNIT CLEARANCES



[1] Unit Clearance	A		B		C		D		Top Clearance
	in.	mm	in.	mm	in.	mm	in.	mm	
Service Clearance	60	1524	36	914	36	914	60	1524	Unobstructed
Minimum Operation Clearance	36	914	36	914	36	914	36	914	

NOTE - Entire perimeter of unit base requires support when elevated above the mounting surface.

[1] **Service Clearance** - Required for removal of serviceable parts.
Minimum Operation Clearance - Required clearance for proper unit operation.

OUTDOOR SOUND DATA

Unit Model Number	Octave Band Sound Power Levels dBA, re 10^{-12} Watts Center Frequency - Hz							[1] Sound Rating Number (dBA)
	125	250	500	1000	2000	4000	8000	
078, 092, 102	70	79	84	83	77	72	66	88
122, 150	73	74	75	72	66	60	50	85

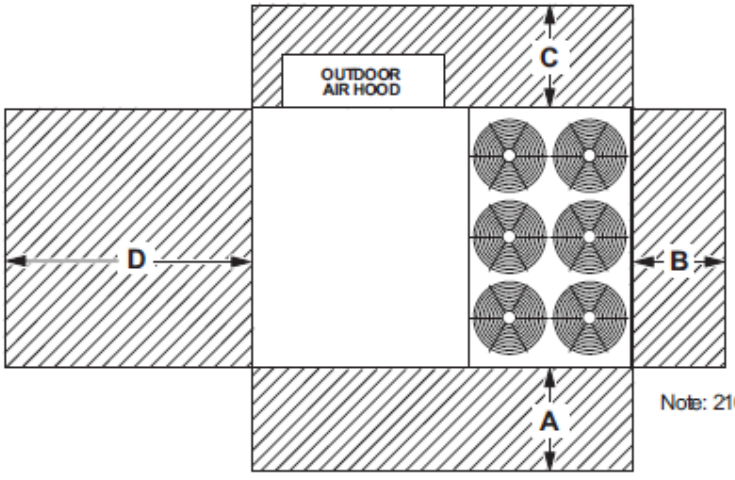
Note - The octave sound power data does not include tonal corrections.

[1] Sound Rating Number according to AHRI Standard 270-95 or AHRI Standard 370-2001 (Includes pure tone penalty). Sound Rating Number is the overall A-Weighted Sound Power Level, (Lwa), dB (100 Hz to 10,000 Hz).

Appendix E-3
Rooftop Unit Manufacturer Documentation
Enlight Lennox: Model LHT240H4M

UNIT CLEARANCES

Unit With Economizer



Note: 210-240-300 sizes shown

[1] Unit Clearance	A		B		C		D		Top Clearance
	in.	mm	in.	mm	in.	mm	in.	mm	
Service Clearance	60	1524	36	914	36	934	66	1676	Unobstructed
Minimum Operation Clearance	45	1143	36	914	36	914	41	1041	

NOTE - Entire perimeter of unit base requires support when elevated above the mounting surface.

[1] **Service Clearance** - Required for removal of serviceable parts.
Minimum Operation Clearance - Required clearance for proper unit operation.

OUTDOOR SOUND DATA

Unit Model Number	Octave Band Sound Power Levels dBA, re 10^{-12} Watts - Center Frequency - Hz							[1] Sound Rating Number (dBA)
	125	250	500	1000	2000	4000	8000	
156, 180, 240	79	84	88	89	85	82	73	94

Note - The octave sound power data does not include tonal corrections.

[1] Sound Rating Number according to AHRI Standard 370-2001 (includes pure tone penalty).
Sound Rating Number is the overall A-Weighted Sound Power Level (L_{WA}), dBA (100 Hz to 10,000 Hz).

Appendix E-4
Air Handling Unit Manufacturer Documentation
Munters: Model HCUC8040AAD

Munters

Test Report: MLR 06.008C Date: 8/2/2010

Purpose:
To document the sound emitted from the unit at 15'.

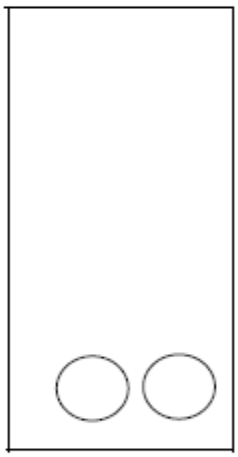
Item Under Test:
HCUc8040 Air-Cooled

Equipment:
1 Larson Davis, LxT, Sound Meter

Test Setup:
1 The unit is sitting outside on stands, 16" off the ground.
2 Reading were taken 4' from the ground and 15' from the unit.

Data: Date/Time: 8/2/10 @ 8:00 am, Ambient: 84°F, 53% RH,
1 Unit with 1 of the condensor fans running (dBA & octave band level)
2 Unit with both of the condensor fans running (dBA & octave band level)
3 Unit with both of the condenser fans off (dBA & octave band level)

dBA	68	71	63
hz	1Fan	2Fan	Off
63	77	77	68
125	71	77	64
250	68	72	61
500	67	70	59
1k	65	67	62
2k	60	63	57
4k	59	60	57
8k	56	56	56

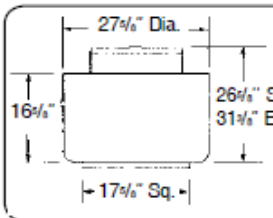


dBA	69	71	60
hz	1Fan	2Fan	Off
63	71	73	67
125	72	79	61
250	70	73	61
500	68	69	58
1k	61	64	57
2k	59	62	57
4k	57	58	57
8k	56	56	56

dBA	75	78	64
hz	1Fan	2Fan	Off
63	75	80	66
125	73	78	62
250	76	78	63
500	70	72	62
1k	67	69	57
2k	63	64	57
4k	59	59	57
8k	58	59	56

CARNES® PERFORMANCE DATA | Model VUDK 12

VUDK 12
DIRECT DRIVE



DESIGN DATA

Tip Speed = 3.27 x RPM
Unit Weight (less Motor) = 45 Lbs.
Roof Opening = 13" Sq.
Curb O. D. = 16" Sq.
Damper Size = 12" Sq.

PERFORMANCE DATA

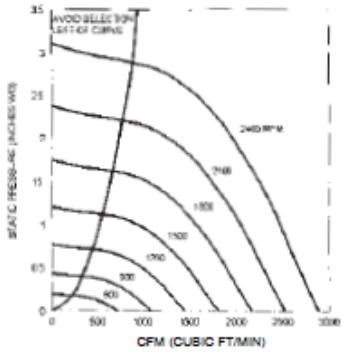
RPM Range - Motor HP					STATIC PRESSURE, INCHES W.G.								
F4+ 1/20	J3+ 1/8	M2+ 1/3	P2+ 1/2	RPM	.000	.125	.250	.375	.500	.625	.750	1.000	1.250
					CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES
SPEED CONTROLLABLE MOTORS**				550	661 .01 2.0	386 .02 1.6							
				700	841 .03 3.7	657 .03 3.2	186 .02 3.1						
				800	961 .04 5.0	804 .05 4.5	593 .05 4.2						
				825 *	991 .05 5.2	839 .05 4.8	642 .05 4.4						
				900	1081 .06 6.0	941 .06 5.6	782 .07 5.2	513 .06 5.2					
				975	1171 .08 6.9	1042 .08 6.5	906 .09 6.1	716 .09 6.0					
				1050	1261 .09 7.9	1141 .10 7.4	1023 .11 7.1	862 .11 6.9	631 .10 6.9				
				1075 *	1291 .10 8.2	1173 .11 7.8	1059 .11 7.4	910 .12 7.2	702 .11 7.2				
				1175	1411 .13 9.6	1303 .14 9.2	1198 .15 8.8	1078 .15 8.6	924 .15 8.5	708 .15 8.5			
				1275	1532 .17 11.2	1431 .18 10.8	1334 .18 10.4	1238 .19 10.0	1110 .19 9.9	957 .20 9.8	734 .18 9.9		
				1375	1652 .21 12.9	1559 .22 12.5	1468 .23 12.1	1379 .24 11.7	1275 .24 11.5	1150 .24 11.5	1005 .24 11.5		
				1500	1800 .27 15.1	1716 .28 14.8	1633 .29 14.4	1551 .30 14.1	1469 .31 13.9	1364 .31 13.7	1248 .32 13.7	935 .31 13.9	
				1575	1892 .32 16.5	1810 .33 16.3	1731 .34 16.0	1652 .35 15.5	1574 .36 15.3	1486 .36 15.2	1382 .37 15.1	1135 .37 15.2	525 .28 15.4
				1625 *	1952 .35 17.3	1873 .36 17.1	1795 .37 16.8	1719 3.8 16.3	1644 .39 16.1	1565 .40 15.9	1465 .40 15.8	1235 .40 15.9	863 .37 16.0
ALL OTHER MOTORS				1140 *	1369 .12 9.1	1258 .13 8.7	1150 .13 8.3	1021 .14 8.1	855 .14 8.0	573 .12 8.0			
				1725 *	2072 .42 18.7	1997 .43 18.4	1924 .44 18.1	1852 .45 17.7	1781 .46 17.4	1710 .47 17.2	1627 .48 17.0	1428 .48 16.9	1180 .48 17.1

Performance certified is for installation type A - free inlet, free outlet.
Speed (RPM) is nominal. Performance is based on actual speed of test.
** **To be Speed Controllable, motor must have 115/1 ODP. Other voltages and enclosures are non-speed controllable.**
* Base Unit - As run motor speeds.
+ RPM range capable with solid state speed control.
Performance ratings do not include the effects of accessories.

The sound power level ratings shown are in decibels, referred to 10^{-12} watts calculated per AMCA Standard 301. Values shown are for inlet L_{WI} sound power levels for installation Type A free inlet, free outlet. Ratings do not include the effects of duct end correction.

The sound ratings shown are loudness values in fan sones at 5 feet (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation Type A, free inlet hemispherical sone levels.

VUDK 12 AIR PERFORMANCE



VUDK 12 SOUND PERFORMANCE

RPM	SP	SOUND POWER RE 10^{-12} WATTS OCTAVE BANDS 1	2	3	4	5	6	7	8	LWA
825	.000	65	64	60	54	59	55	45	35	62
	.125	65	63	59	53	57	51	45	38	60
	.375	67	61	59	51	52	51	46	42	58
1075	.000	68	72	69	63	63	62	55	45	69
	.250	68	72	68	62	60	59	53	47	67
	.500	63	71	68	61	58	57	54	48	66
1625	.000	72	85	82	77	70	74	69	60	80
	.500	71	85	81	76	68	72	66	60	79
	1.000	73	86	81	76	67	68	66	60	78

Appendix E-6
Exhaust Fan Manufacturer Documentation
Acme: Model PDU135RGG4

Centrifugal Exhausters

PERFORMANCE DATA

Fan Model	Motor		CFM and Sones vs. Static Pressure																		Max. BHP
	HP	RPM	.000"		.125"		.250"		.375"		.500"		.625"		.750"		1.000"		1.250"		
			CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	
PDU080	1/10	1600	385	9.7	368	9.5	350	9.2	323	8.8	253	8.5									.040
		1300	313	7.4	292	7.7	261	11.0													.020
PDU100	1/10	1630	850	12.0	788	11.8	735	11.3	681	10.6	625	9.6	573	8.9							.085
		1300	678	8.3	604	7.8	537	7.5	468	6.9											.042
PDU110	1/10	1550	1017	10.1	951	10.2	885	10.6	816	9.6	731	9.5	617	9.5	506	9.5					.098
		1300	853	8.1	774	8.3	693	7.6	588	7.5	454	7.5	270	7.5							.057
		1050	689	6.0	591	6.2	468	5.5	292	5.5											.030
		860	564	4.5	441	4.2	243	4.2													.016
PDU120E4	1/4	1680	1753	13.8	1689	13.7	1611	13.6	1522	13.6	1433	13.5	1295	13.2	1155	13.1					.250
		1550	1617	13.5	1548	13.5	1457	13.1	1361	12.7	1233	12.4	1082	12.0							.200
		1300	1356	10.8	1269	9.9	1154	9.5	1001	9.6											.110
		1160	1210	9.0	1106	8.8	972	8.7	770	8.2											.080
		860	897	5.3	742	5.3															.030
PDU135F6	1/3	1160	1840	11.9	1718	11.6	1597	11.1	1470	11.0	1311	10.6									.164
		1050	1665	10.5	1531	10.0	1397	9.7	1242	9.4											.122
		860	1364	8.5	1201	8.1	1020	7.6													.067
PDU135G4	1/2	1725	2736	20	2654	19.2	2572	19.2	2491	19.0	2410	18.5	2328	18.4	2243	18.3	2052	18.1	1782	17.5	.540
		1550	2458	17.6	2367	17.1	2276	16.9	2186	16.5	2095	16.2	2000	16.1	1897	16.0	1614	15.0			.392
		1300	2062	14.0	1953	13.6	1845	13.1	1737	12.9	1619	12.7	1473	12.0							.231
		1050	1665	10.5	1531	10.0	1397	9.7	1242	9.4											.122
		860	1364	8.5	1201	8.1	1020	7.6													.067
PDU150F6	1/3	1160	2230	11.6	2073	10.9	1911	9.9	1748	10.0	1583	9.5	1353	8.9							.220
		860	1652	8.0	1439	8.4	1218	8.5	909	7.9											.090
PDU165G6	1/2	1160	3242	18.2	3087	18.5	2934	18.1	2781	17.0	2621	16.2	2439	16.1	2194	15.2	1692	15.9			.500
		1050	2935	15.9	2764	16.3	2595	16.0	2421	14.9	2227	13.7	1962	13.4	1680	13.8					.373
		860	2404	11.9	2196	12.4	1986	10.7	1725	10.6	1385	10.2									.205
PDU185G6	1/2	1160	4340	15.0	4193	15.0	4047	14.5	3900	14.0	3751	13.3	3602	12.6	3426	12.7					.600
PDU200J6	1	1160	5317	19.5	5155	18.2	4994	17.8	4830	17.8	4657	17.0	4483	17.0	4305	16.8	3898	16.1	3415	15.4	1.215

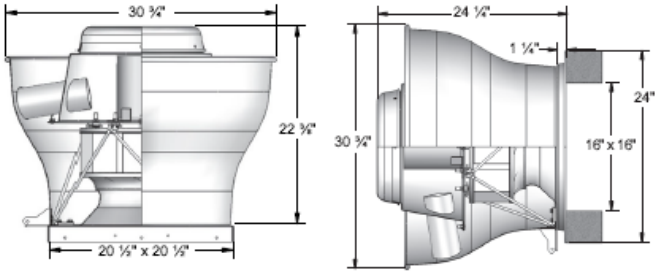
Appendix E-7
Exhaust Fan Manufacturer Documentation
Pennbarry: Model FX16R

PENN BARRY™

Fumex | FX

FX16 - FX18 | DIRECT DRIVE

FX16



(FX Units Only) Galv. Steel Base = 16 Gage
Aluminum Base = 0.064
Discharge Apron = 0.064
FX16Q Estimated Ship Weight = 71 lbs.

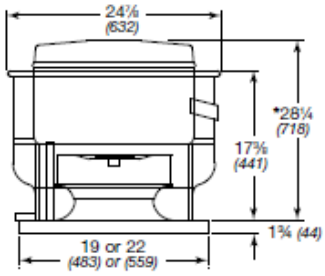
Model	Nominal			Tip Speed FPM	0.000" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		1.000" SP		1.250" SP		1.500" SP	
	HP	Max Watts	RPM		CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones
FX16V	1/6	485	1050	3788	1604	7.9	1358	6.5	1128	5.5	951	5.8	801	6.3	705	6.9	644	7.7	522	9.2	384	9.3	230	9.7
FX16S	1/3	527	1300	4690	1874	10.7	1693	9.5	1514	8.6	1326	8.0	1158	7.6	1023	7.7	913	8.2	735	9.6	572	9.7	379	9.9
FX16R	1/3(1)	590	1550	5592	2140	12.8	1994	11.9	1849	11.0	1709	10.2	1561	9.9	1410	9.6	1269	9.4	1033	9.7	812	11.1	583	10.8
FX16Q1	1/2	715	1650	5953	2531	15.2	2432	14.7	2332	14.2	2232	13.7	2114	13.1	1992	12.5	1868	11.9	1582	11.0	1320	11.5	1001	12.1
FX16Q2	3/4	890	1725	6223	2822	17.1	2753	16.8	2684	16.5	2594	16.1	2501	15.7	2418	15.4	2331	15.1	2119	14.2	1872	14.1	1566	14.2

(1) TE motor is 1/2 Hp. See additional notes at bottom of page.

Appendix E-8
Exhaust Fan Manufacturer Documentation
Greenheck: Model CUE-101-A

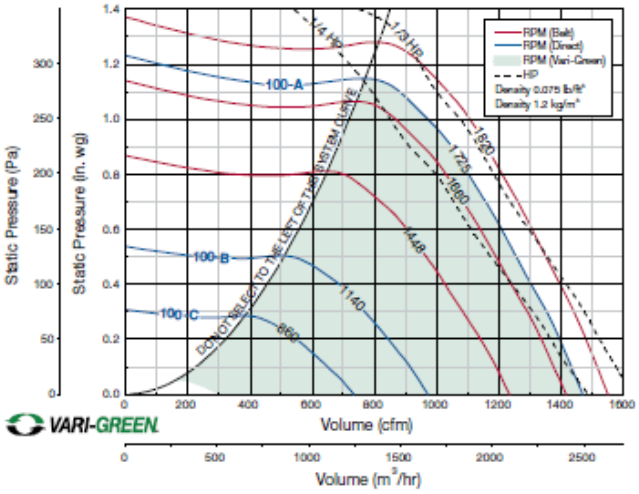
Roof Upblast/Sidewall Exhaust
Size-100: CUBE • CUE
Previously Size-101

GREENHECK
Building Value in Air.



Direct Drive RPM

C-860 RPM
B-1140 RPM
A-1725 RPM
VG-1725 RPM



All dimensions in inches *(millimeters)*, weight in pounds *(kilograms)*.
* May be greater depending on motor.
^Weight shown is largest cataloged open drip-proof motor.

	CUBE	CUE
^Approximate Weight	66 *(30)*	64 *(29)*
Damper Size	12 x 12 *(305 x 305)*	
	16 x 16 *(406 x 406)*	
Roof/Wall (without wall bracket) Opening	15⅛ x 15⅛ *(394 x 394)*	
	18⅛ x 18⅛ *(470 x 470)*	
Wall Opening with Wall Bracket	15 x 15 *(381 x 381)*	
	18 x 18 *(457 x 457)*	
Wall Opening with a Curb Through Wall	19 x 19 *(483 x 483)*	
	22 x 22 *(559 x 559)*	

Motor HP			Fan		Static Pressure in Inches wg										
Belt	Direct		RPM		0	0.125	0.25	0.375	0.5	0.625	0.75	0.875	1	1.125	
100															
1/4	VG-1/4	C-1/8	860	CFM	732	625	481								
				BHP	0.03	0.035	0.036								
				Sones	4.6	2.1	1.3								
			953	CFM	811	717	603								
				BHP	0.041	0.047	0.05								
				Sones	5.5	4.2	3.1								
			1046	CFM	890	807	707	577							
				BHP	0.054	0.061	0.066	0.065							
				Sones	6.5	6.2	5.6	5.4							
		B-1/6	1140	CFM	970	897	806	707	411						
				BHP	0.07	0.078	0.084	0.085	0.067						
				Sones	7.2	7	6.5	6	5.5						
			1252	CFM	1066	1000	920	834	732						
				BHP	0.092	0.1	0.11	0.11	0.11						
				Sones	8	8	7.6	6.9	6.5						
			1350	CFM	1149	1089	1016	940	856	745					
				BHP	0.12	0.13	0.13	0.14	0.14	0.14					
				Sones	8.9	8.9	8.6	8.1	7.5	7					
			1448	CFM	1233	1176	1112	1040	966	886	763				
				BHP	0.14	0.15	0.16	0.17	0.17	0.17	0.17				
				Sones	10.3	10.2	9.9	9.5	9	8.3	8				
			1546	CFM	1316	1264	1206	1139	1072	999	915	793			
				BHP	0.17	0.19	0.2	0.2	0.21	0.21	0.21	0.23			
				Sones	11.8	11.5	11.3	10.9	10.5	9.8	9.3	8.9			
			1660	CFM	1413	1365	1313	1251	1189	1125	1056	974	861		
				BHP	0.22	0.23	0.24	0.25	0.26	0.26	0.26	0.26	0.25		
				Sones	12.7	12.3	12	11.6	11.3	10.8	10.2	9.6	9.4		
1/3		A-1/4	1725	CFM	1468	1422	1373	1315	1255	1195	1129	1062	970		
				BHP	0.24	0.26	0.27	0.28	0.29	0.29	0.29	0.29	0.29		
				Sones	13.3	12.9	12.5	12	11.7	11.3	10.8	10.2	9.7		
			1820	CFM	1549	1505	1459	1406	1350	1293	1234	1171	1106	900	
				BHP	0.28	0.3	0.31	0.32	0.33	0.34	0.35	0.35	0.35	0.33	
				Sones	14.3	13.7	13.4	12.7	12.4	12	11.6	11.2	10.6	10.1	

MAXIMUM BHP AT A
GIVEN RPM = (RPM/3099)³
MAXIMUM RPM = 1820
TIP SPEED (ft/min) = RPM x 2.846
MAXIMUM MOTOR FRAME SIZE = 56
AVERAGE DISCHARGE VELOCITY
(FPM) = CFM/1.28

Performance certified is for installation type A: Free inlet, Free outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical sone levels.

Appendix E-9
Exhaust Fan Handler Manufacturer Documentation
CaptiveAire: Model DU50HFA

DU50HFA Performance Table

DU50HFA

CFM	Static Pressure in Inches W.G.						
	0.000	0.250	0.500	0.750	1.000	1.250	1.500
	RPM Sone/BHP	RPM Sone/BHP	RPM Sone/BHP	RPM Sone/BHP	RPM Sone/BHP	RPM Sone/BHP	RPM Sone/BHP
600	459 1.2 / 0.01	774 4.6 / 0.05	993 7.3 / 0.11	1172 10.0 / 0.18	1322 12.5 / 0.26	1456 15.0 / 0.35	1575 17.4 / 0.44
900	687 3.5 / 0.04	933 6.5 / 0.09	1118 9.1 / 0.16	1278 11.8 / 0.24	1422 14.4 / 0.33	1554 17.0 / 0.43	
1200	915 6.3 / 0.09	1117 9.1 / 0.16	1277 11.7 / 0.24	1418 14.3 / 0.32	1548 16.8 / 0.42		
1500	1143 9.5 / 0.17	1315 12.4 / 0.26	1455 15.0 / 0.35	1582 17.5 / 0.45			
1800	1372 13.4 / 0.29	1519 16.3 / 0.40	1645 18.9 / 0.50				
2100	1601 17.9 / 0.46						

Max Sizeable RPM = 2000 RPM. Table shown extended beyond this point for reference only.

Motor BMN48-375I1-ES-M52-CA-50-115 has an rpm range of 300 to 1800.
Motor BMN48-375I1-ES-M52-CA-60-115 has an rpm range of 300 to 1800.
Motor BMN48-375I2-ES-M52-CA-50-230/277 has an rpm range of 300 to 1800.
Motor BMN48-375I2-ES-M52-CA-60-230/277 has an rpm range of 300 to 1800.
Motor CK48BS20HF01-60 has an rpm range of 431 to 1725.
Motor CK48HF21HF01-50-115 has an rpm range of 1100 to 1425.
Motor CK48HF21HF01-50-230 has an rpm range of 1100 to 1425.
Motor CK48HF21HF01-60-115 has an rpm range of 1100 to 1670.
Motor CK48HF21HF01-60-230 has an rpm range of 1100 to 1670.
Motor CK48HF21HF02-50-115 has an rpm range of 1440 to 1625.
Motor CK48HF21HF02-50-230 has an rpm range of 1440 to 1625.
Motor CK48HF21HF02-60-115 has an rpm range of 1440 to 1625.
Motor CK48HF21HF02-60-230 has an rpm range of 1440 to 1625.

Performance shown is certified for Installation Type A: Free inlet, Free outlet. Performance ratings do not include the effects of appurtenances in the airstream. The sound ratings shown are loudness values in fan sones at 5 ft (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: Free inlet hemispherical sone levels.

Catalog #110C
April 2022

Appendix E-10
Exhaust Fan Handler Manufacturer Documentation
CaptiveAire: Model DU180HFA

DU180HFA Performance Table

DU180HFA

	Static Pressure in Inches W.G.													
	0.000	0.250	0.500	0.750	1.000	1.250	1.500	1.750	2.000	2.250	2.500	2.750	3.000	3.250
CFM	RPM Sone/BHP	RPM Sone/BHP	RPM Sone/BHP	RPM Sone/BHP	RPM Sone/BHP	RPM Sone/BHP	RPM Sone/BHP	RPM Sone/BHP	RPM Sone/BHP	RPM Sone/BHP	RPM Sone/BHP	RPM Sone/BHP	RPM Sone/BHP	RPM Sone/BHP
1000			639 5.2 / 0.18	774 8.2 / 0.30	893 10.2 / 0.42	998 11.6 / 0.56	1094 13.0 / 0.71	1181 14.9 / 0.85	1263 16.4 / 1.01	1337 17.8 / 1.17	1408 19.2 / 1.34	1477 21 / 1.52	1541 22 / 1.70	1600 23 / 1.88
1500			694 6.5 / 0.26	806 8.7 / 0.39	909 10.5 / 0.54	1006 11.7 / 0.70	1096 13.0 / 0.87	1182 14.9 / 1.05	1263 16.4 / 1.24	1339 17.9 / 1.43	1411 19.3 / 1.63	1481 21 / 1.84	1546 22 / 2.05	1609 23 / 2.27
2000		683 7.3 / 0.25	784 9.2 / 0.38	876 10.2 / 0.53	964 11.4 / 0.69	1047 12.1 / 0.87	1127 13.8 / 1.06	1203 15.3 / 1.26	1278 16.7 / 1.47	1349 18.0 / 1.68	1417 19.4 / 1.91	1484 21 / 2.14	1548 22 / 2.38	1610 23 / 2.63
2500	700 8.7 / 0.25	803 10.7 / 0.40	891 11.7 / 0.55	970 12.7 / 0.72	1046 12.1 / 0.90	1118 13.6 / 1.09	1188 15.0 / 1.30	1255 16.3 / 1.51	1321 17.5 / 1.74	1385 18.7 / 1.97	1448 20 / 2.22	1509 21 / 2.47	1567 22 / 2.73	1625 23 / 2.99
3000	839 12.3 / 0.43	928 13.6 / 0.61	1006 13.9 / 0.79	1077 14.2 / 0.98	1144 15.8 / 1.18	1208 17.2 / 1.39	1270 17.8 / 1.61	1330 18.6 / 1.84	1388 19.4 / 2.08	1446 20 / 2.33	1502 21 / 2.59	1557 22 / 2.86		
3500	979 14.8 / 0.68	1057 15.8 / 0.89	1127 16.6 / 1.10	1191 18.4 / 1.31	1252 19.3 / 1.54	1309 20 / 1.77	1366 21 / 2.01	1420 21 / 2.26	1472 22 / 2.51	1524 23 / 2.78				
4000	1119 17.4 / 1.02	1188 19.3 / 1.25	1251 21 / 1.49	1310 22 / 1.73	1366 22 / 1.98	1419 23 / 2.24	1470 24 / 2.50	1520 24 / 2.77						
4500	1259 22 / 1.45	1321 23 / 1.71	1379 24 / 1.98	1433 25 / 2.25	1484 26 / 2.52	1533 26 / 2.80								
5000	1399 26 / 1.99	1455 27 / 2.28	1508 27 / 2.58	1558 28 / 2.88										
5500	1539 30 / 2.64	1590 30 / 2.97			1539 27 / 2.64									

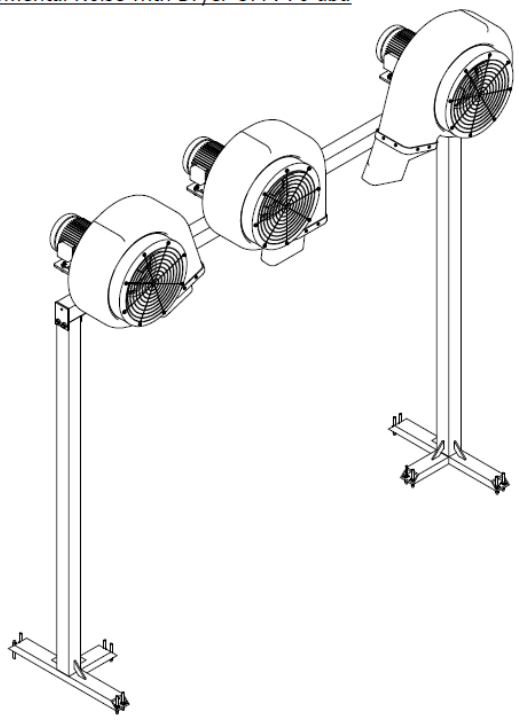
Max Sizeable RPM = 1800 RPM. Table shown extended beyond this point for reference only.

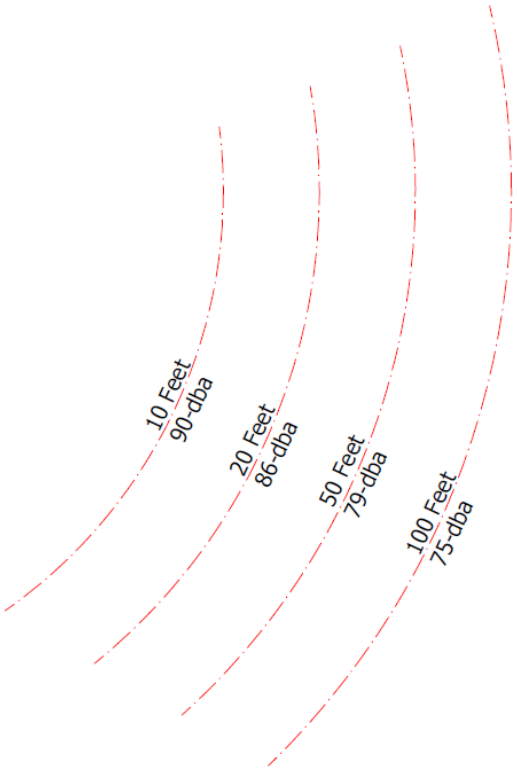
Motor 00112ET3H145T-W22 has an rpm range of 600 to 1150.
Motor 00112OT3H145T-S has an rpm range of 600 to 1150.
Motor 00152ET3E182T-W22 has an rpm range of 600 to 1150.
Motor 00152ET3H182T-W22 has an rpm range of 600 to 1150.
Motor 00152OT3E182T-S has an rpm range of 600 to 1150.
Motor 00158ET3H145T-W22 has an rpm range of 600 to 1750.
Motor 00158XT3E145T has an rpm range of 600 to 1760.
Motor 00212ET3E184T-W22 has an rpm range of 600 to 1150.
Motor 00212ET3H184T-W22 has an rpm range of 600 to 1150.
Motor 00218ET3H145T-W22 has an rpm range of 600 to 1750.
Motor 00218OT3E56Z-S48PP has an rpm range of 600 to 1700.
Motor 00318ET3H182T-W22 has an rpm range of 600 to 1750.
Motor BMN145-2.0I2-CS-UB1-50 (1200RPM) has an rpm range of 600 to 1250.
Motor BMN145-2.0I2-CS-UB1-60 (1200RPM) has an rpm range of 600 to 1250.
Motor BMN145-2.0I2-ES-UB1-50 (1800RPM) has an rpm range of 600 to 1800.
Motor BMN145-2.0I2-ES-UB1-60 (1800RPM) has an rpm range of 600 to 1800.
Motor BMN145-2.0I3-CS-UB1-50 (1200RPM) has an rpm range of 600 to 1250.
Motor BMN145-2.0I3-CS-UB1-60 (1200RPM) has an rpm range of 600 to 1250.
Motor BMN145-2.0I3-ES-UB1-50 (1800RPM) has an rpm range of 600 to 1800.
Motor BMN145-2.0I3-ES-UB1-60 (1800RPM) has an rpm range of 600 to 1800.
Motor DHP0034 has an rpm range of 600 to 1750.
Motor DTP0014 has an rpm range of 600 to 1750.
Motor DTP0016 has an rpm range of 600 to 1150.
Motor DTP0024 has an rpm range of 600 to 1740.
Motor DTP0024-50HZ has an rpm range of 600 to 1415.
Motor DTP0026 has an rpm range of 600 to 1150.
Motor DTP0034 has an rpm range of 600 to 1755.
Motor DTP0034-50HZ has an rpm range of 600 to 1438.
Motor DTP1/54 has an rpm range of 600 to 1750.
Motor DTP1/56 has an rpm range of 600 to 1150.
Motor EP0026 has an rpm range of 600 to 1150.
Motor GP0014 has an rpm range of 600 to 1800.
Motor GP0016 has an rpm range of 600 to 1150.
Motor GP0024 has an rpm range of 600 to 1740.
Motor GP0024-50 has an rpm range of 600 to 1440.
Motor GP0026 has an rpm range of 600 to 1150.
Motor GP0034 has an rpm range of 600 to 1800.
Motor GP0034-50 has an rpm range of 600 to 1440.
Motor GP1/54 has an rpm range of 600 to 1800.
Motor GP1/56 has an rpm range of 600 to 1150.

Performance shown is certified for Installation Type A: Free inlet, Free outlet. Performance ratings do not include the effects of appurtenances in the airstream. The sound ratings sho loudness values in fan sones at 5 ft (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: Free inlet hemispherical sone lev

Appendix F
Car Wash Drying Assembly Manufacturer Documentation
Sonny's Enterprises: 45 HP Blower Assembly

Enviromental Noise with Dryer OFF: 70 dba





THIRD ANGLE PROJECTION BREAK ALL SHARP CORNERS. PART TO BE FREE OF BURRS. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES	MACHINING TOLERANCES FRACTION± 1/16" .XX DECIMAL ± 0.030 .XXX DECIMAL ± 0.005 ANGULARITY ± 2° FINISH 125	DRAWN LVerdecia 8/26/2011 APPROVED 8/1/2012 CATEGORY BLOWER THIS SHEET CONTAINS CONFIDENTIAL INFORMATION, IMAGES AND TRADE SECRETS OF SONNY'S ENTERPRISES, INC. ANY UNAUTHORIZED USE OR DISCLOSURE OF ANY PORTION THEREOF IS STRICTLY PROHIBITED. THIS WORK IS THE EXCLUSIVE PROPERTY OF SONNY'S ENTERPRISES, INC. ALL RIGHTS RESERVED.	**SONNY'S ENTERPRISES** THE CARWASH FACTORY DESCRIPTION BLOWER ASSEMBLY, ONE ARCH 45HP PART NUMBER BL1-45HP-1 SHEET 2 OF 2 SIZE A SCALE N.T.S.	
MATERIAL				

Appendix G
Vacuum System Manufacturer Documentation
Vacutech: Manufacturer Noise Level Measurements

February 10th, 2016

Re: Vacutech Sound Study Projections for Bella Terra Car Wash in Huntington Beach, CA

To: Chase Russell – Owner of Bella Terra Car Wash 16061 Beach Blvd. Huntington Beach, CA

The chart below shows a cumulative average of that data taken from express car washes of this type and size. It is presented in an incremental form based on the worst case scenario of the vacuum hoses being off the hook, so to speak. Based on the collective average of the 45' reading to the 85' reading and is presented in the chart below:

Vacutech Noise Study Projections	
Average of all 19 hoses off and in use	
Average @ 45'	52.3 db
Average @ 55'	54.6 db
Average @ 65'	52.1 db
Average @ 75'	49.2 db
Average @ 85'	49.0 db

SOUND LEVEL METER USED: SIMPSON MODEL #40003 – MSHA APPROVED. MEETS OSHA AND WALSH-HEALY REQUIREMENTS FOR NOISE CONTROL. CONFORMS TO ANSI S1.4 1983, IEC 651 SPECS FOR METER TYPE.

NOTE: Typical outside vacuum system with 1.5" x 15' vacuum nozzles (4" wide by ¾" opening) in use with customer vacuuming.

May 14, 2024

Mr. Jim Shehadey
Visalia Parkway Partners, LLC
405 N Palm Avenue
Fresno, CA 93701

RE: Sam's Club Gas Station Health Risk Assessment / City of Visalia

Dear Mr. Jim Shehadey:

JK Consulting Group prepared the following Health Risk Assessment for the proposed Sam's Club Gas Station (Project) in the City of Visalia. The Project includes the development of a gas station with approximately twelve (12) multi-pump dispensers/fuel canopy along with a kiosk and underground storage tanks. The Project site is located at the southwest corner of Visalia Parkway and Mooney Boulevard (State Route 63). The Project location and site plan are depicted in Figures 1, 2, and 3. Approximately 7.5 million gallons of gasoline and 1.2 million gallons of diesel fuel will be sold annually.

AIR QUALITY

Air quality in a region is determined by the region's topography, meteorology, and existing air pollutant sources. These factors are discussed below, along with the current regulatory structure that applies to the San Joaquin Valley Air Basin (SJVAB), which encompasses the Project site, pursuant to the regulatory authority of the San Joaquin Valley Air Pollution Control District (SJVAPCD).

Climate and Meteorology

Air quality is affected by the rate and location of pollutant emissions and by climatic conditions that influence the movement and dispersion of pollutants. Atmospheric conditions, such as wind speed, wind direction and air temperature gradients, along with local and regional topography, mediate the relationship between air pollutant emissions and air quality. As noted above, the Project is located within the SJVAB, which includes Fresno, Kern (western portion), Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare counties.

The SJVAB is approximately 250 miles long and 35 miles in width and is bordered by the Coast Range Mountains on the west, the Sierra Nevada mountains on the east, and the Tehachapi Mountains to the south. Marine air, which often enters the Basin from the San Joaquin River Delta, causes the wind patterns found inside the SJVAB. The Tehachapi Mountains block airflow in from the south, the Coastal Range blocks wind entry into the Valley from the west, and the tall Sierra Nevada Mountain Range acts as a formidable barrier to the east. Weak airflow caused by these topographical factors is vertically constrained by high atmospheric pressure above the Valley. The SJVAB is hence extremely vulnerable to pollutant buildup over time. The majority of the mountains in the area are higher than summer inversion layers.

The SJVAB has a Mediterranean climate, which is characterized by infrequent rainfall and hot, dry summers. The SJVAB offers ideal ozone generation conditions given an average of 260 sunny days per year. Precipitation and fog in the Winter create optimal circumstances for particulate matter generation, even though they shield sunlight and reduce ozone levels.

Sources of Air Pollution

Air pollutant emissions in the SJVAB are generally caused by man-made sources, which encompass stationary and mobile sources. Stationary sources include point sources which are generally identified by an exhaust vent or stack (i.e., boilers). Area sources, such as residential and commercial water heaters, lawn mowers, and agricultural fields, are also categorized as stationary sources. Emissions from motor vehicles are characterized as mobile sources and include on-road (i.e., automobiles, trucks) and off-road (i.e., aircrafts, ships, trains) sources. Air pollutants can also be generated by natural means, such as the suspending of fine dust particles via high winds.

Toxic Air Contaminants

Toxic Air Contaminants (TACs) refer to a broad category of air pollutants that could result in an increase in fatalities or serious illnesses, potential risk to human health, or any combination of these. TACs are both organic and inorganic chemical substances that can be released from a range of everyday sources, such as gasoline stations, automobiles, dry cleaners, industrial operations, painting operations, and research and educational facilities. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For regulatory purposes, carcinogenic TACs are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is expressed as excess cancer cases per one million exposed individuals. Non-carcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur.

Most of the estimated health risk from TACs, according to the California Air Resources Board's (CARB) *California Almanac of Emissions and Air Quality* (2005), can be attributable to a small number of compounds. The most significant of which is PM from diesel-fueled engines, which is known as diesel particulate matter (DPM). Diesel exhaust has hundreds of different gaseous and particulate components, many of which are harmful, and has been classified as a human carcinogen. Diesel particles are so small that they penetrate deep into the lungs. According to studies, diesel PM concentrations are significantly greater near busy intersections and roads. The CARB's *Air Quality and Land Use Handbook* (2005) provides recommendations for siting new sensitive land uses within proximity to facilities known to generate TACs, as depicted in Table 1.

Acute diesel exhaust exposure may irritate the eyes, nose, throat, and lungs, as well as certain neurological consequences like lightheadedness. A cough or nausea may also be brought on by acute exposure, which can potentially make asthma worse. Experimental animal inhalation studies with chronic exposure have revealed a variety of dose-dependent lung cellular alterations, lung inflammation, and immunological consequences from diesel exhaust. There is substantial data, based on both human and laboratory studies, showing diesel exhaust is almost certainly carcinogenic. Studies on human epidemiology show a link between occupational exposure to diesel exhaust and a higher incidence of lung cancer.

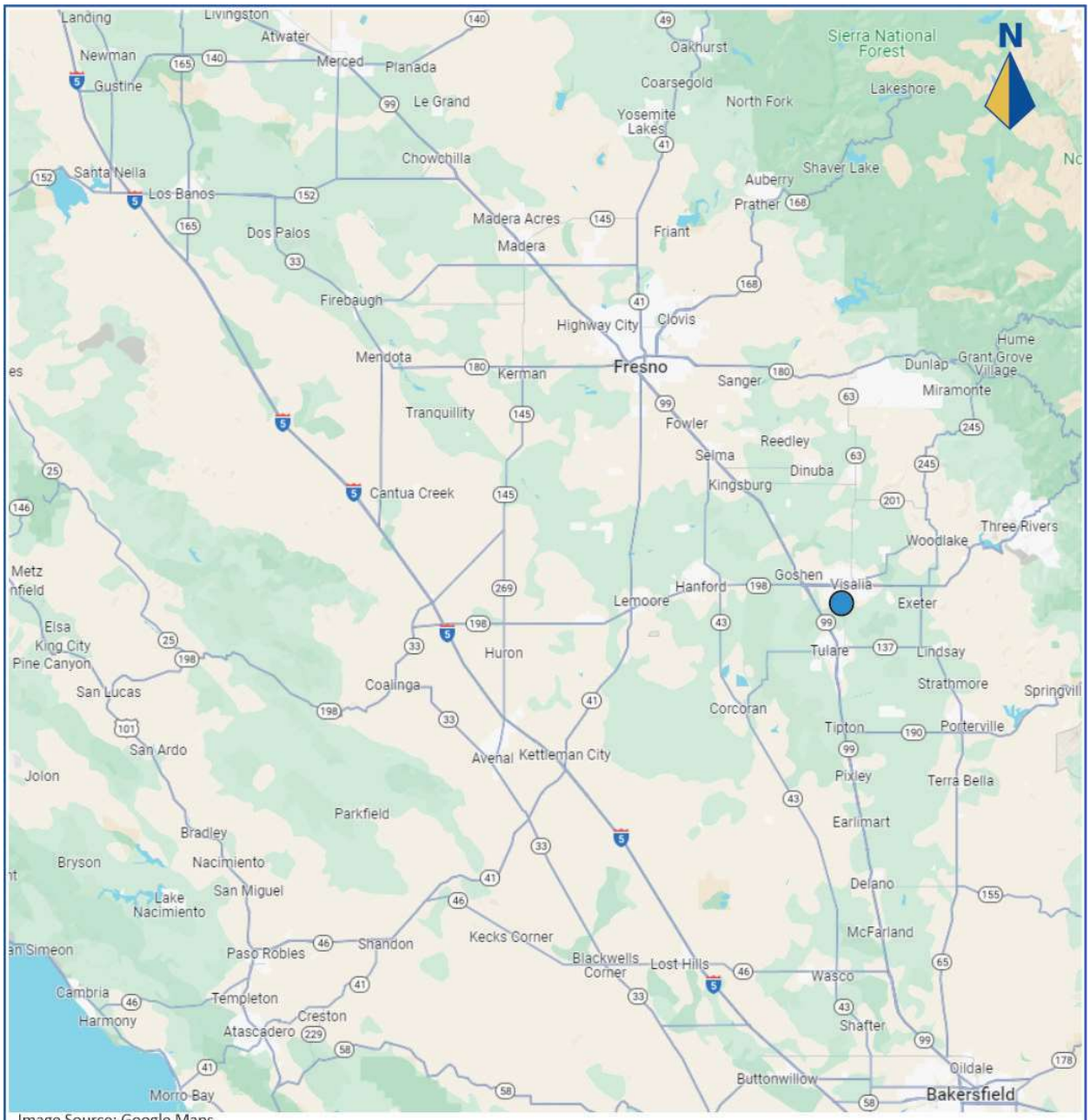


Image Source: Google Maps

FIGURE 1
Regional Location

FIGURE 2
Project Location

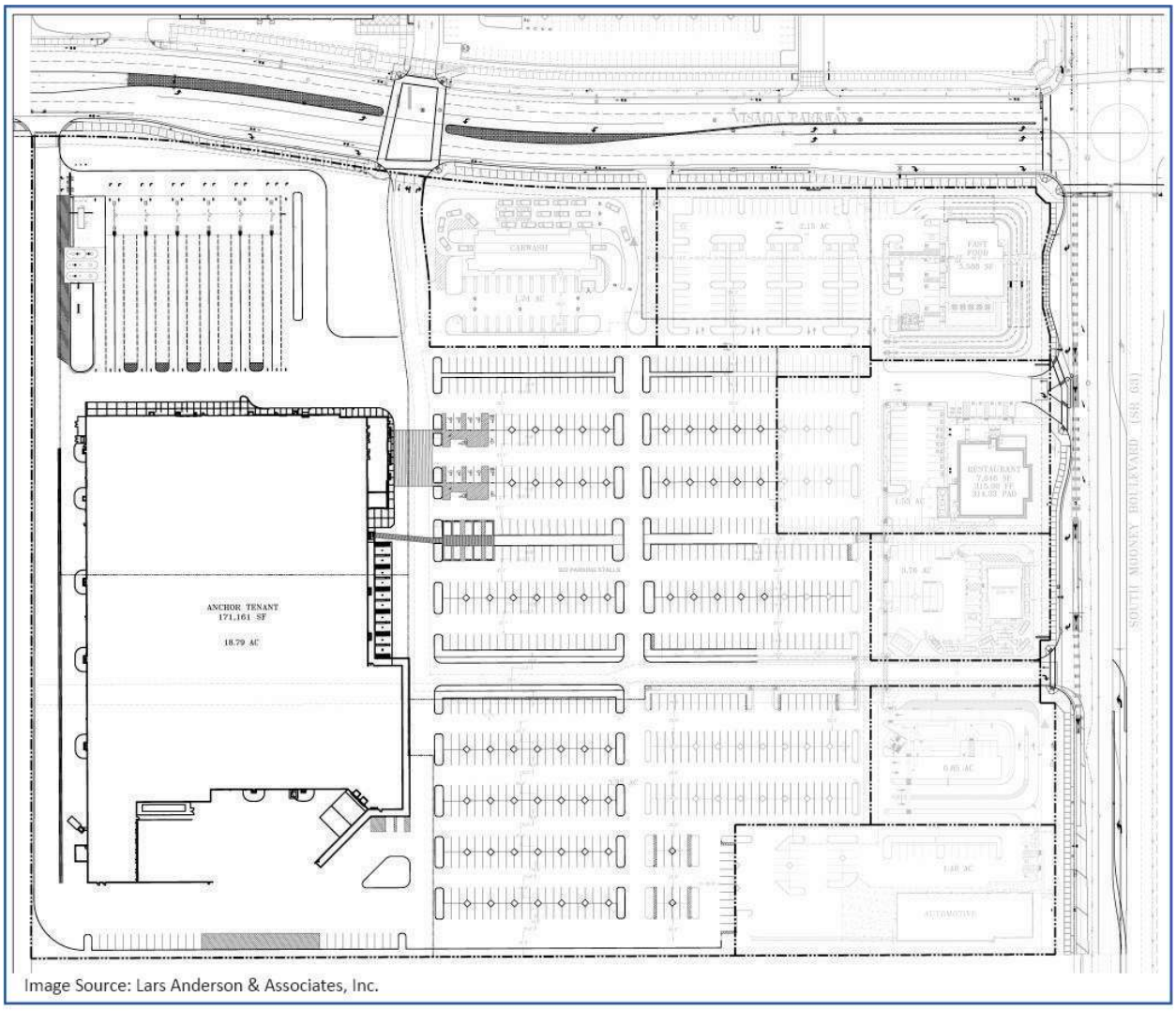


Image Source: Lars Anderson & Associates, Inc.

FIGURE 3
Project Site Plan

TABLE 1
RECOMMENDATIONS ON SITING NEW SENSITIVE LAND USES SUCH AS RESIDENCES, SCHOOLS, DAYCARE CENTERS, PLAYGROUNDS, OR MEDICAL FACILITIES*

SOURCE CATEGORY	ADVISORY RECOMMENDATIONS
Freeways and High-Traffic Roads[1]	- Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.
Distribution Centers	- Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week). - Take into account the configuration of existing distribution centers and avoid locating residences and other new sensitive land uses near entry and exit points.
Rail Yards	- Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard. - Within one mile of a rail yard, consider possible siting limitations and mitigation approaches.
Ports	- Avoid siting of new sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or the ARB on the status of pending analyses of health risks.
Refineries	- Avoid siting new sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation.
Chrome Platers	- Avoid siting new sensitive land uses within 1,000 feet of a chrome plater.
Dry Cleaners Using Perchloroethylene	- Avoid siting new sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines, provide 500 feet. For operations with 3 or more machines, consult with the local air district. - Do not site new sensitive land uses in the same building with perchloroethylene dry cleaning operations.
Gasoline Dispensing Facilities	- Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50 foot separation is recommended for typical gas dispensing facilities.

1: The recommendation to avoid siting new sensitive land uses within 500 feet of a freeway was identified in CARB's Air Quality and Land Use Handbook published in 2005. CARB recently published a technical advisory to the Air Quality and Land Use Handbook indicating that new research has demonstrated promising strategies to reduce pollution exposure along transportation corridors.

*Notes:
- These recommendations are advisory. Land use agencies have to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues.
- Recommendations are based primarily on data showing that the air pollution exposures addressed here (i.e., localized) can be reduced as much as 80% with the recommended separation.
- The relative risk for these categories varies greatly (see Table 1-2). To determine the actual risk near a particular facility, a site-specific analysis would be required. Risk from diesel PM will decrease over time as cleaner technology phases in.
- These recommendations are designed to fill a gap where information about existing facilities may not be readily available and are not designed to substitute for more specific information if it exists. The recommended distances take into account other factors in addition to available health risk data (see individual category descriptions).
- Site-specific project design improvements may help reduce air pollution exposures and should also be considered when siting new sensitive land uses.
- This table does not imply that mixed residential and commercial development in general is incompatible. Rather it focuses on known problems like dry cleaners using perchloroethylene that can be addressed with reasonable preventative actions.
- A summary of the basis for the distance recommendations can be found in the ARB Handbook: Air Quality and Land Use Handbook: A Community Health Perspective.

Source: SJVAPCD 2024

REGULATORY SETTING

Federal

The US Environmental Protection Agency (EPA) is the federal agency with significant influence on air quality policy and initiatives. The EPA regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain locomotives. As part of its enforcement responsibilities, the EPA requires each state with nonattainment areas to prepare and submit a State Implementation Plan (SIP) describing a strategy for the means to attain the federal standards for ozone and particulate matter. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution, using a combination of performance standards and market-based programs.

Clean Air Act

The Federal Clean Air Act, as amended, establishes the National Ambient Air Quality Standards (NAAQS) for several pollutants. These standards are divided into primary standards and secondary standards. Primary standards are designed to protect public health, and secondary standards are intended to protect public welfare from effects such as visibility reduction, soiling, nuisance, and other forms of damage. The Clean Air Act requires that regional plans be prepared for nonattainment areas that illustrate how the federal air quality standards could be met.

Regulation of TACs is achieved through federal and state controls on individual sources. The 1990 Clean Air Act Amendments offered a comprehensive plan for achieving significant reduction in both mobile and stationary source emissions of certain designated hazardous air pollutants, with a goal of achieving the EPA's one in 1 million cancer risk from TACs.

1990 Amendments to the Federal Clean Air Act

The 1990 amendments to the federal Clean Air Act included a provision to address air toxics. Under Title III of the federal Clean Air Act, the U.S. EPA establishes and enforces National Emission Standards for Hazardous Air Pollutants, which are national uniform standards oriented toward controlling particular hazardous air pollutants. Section 112(b) of the federal Clean Air Act identifies 189 "Air Toxics" (hazardous air pollutants), directs U.S. EPA to identify sources of the 189 pollutants, and establishes a 10-year time period for the U.S. EPA to issue technology-based emissions standards for each source category. Title III of the federal Clean Air Act provides for a second phase under which the U.S. EPA is to assess residual risk after the implementation of the first phase of standards and impose new standards, when appropriate, to protect public health.

State

The State of California Air Resources Board (CARB) sets the laws and regulations for air quality on the state level. In this capacity, CARB conducts research and sets the California Ambient Air Quality Standards (CAAQS), compiles emission inventories, develops suggested control measures, and provides oversight of

local programs. CARB also establishes emissions standards for motor vehicles sold in California, consumer products (i.e., hairspray, aerosol paints), and various types of commercial equipment.

California Clean Air Act

The California Clean Air Act (CCAA) was enacted in 1988 (California Health & Safety Code Section 39000 et seq.) and amended in 1992. The CAAQS are generally more stringent than the corresponding federal standards and incorporate additional standards for sulfates, hydrogen sulfide, vinyl chloride and visibility reducing particles. Air basins or areas that exceed the CAAQS are designated non-attainment until compliance is disclosed in an attainment plan. In California, CARB is responsible for meeting the State requirements of the federal CAA, administering the California CAA, and establishing the California ambient air quality standards (CAAQS). The California CAA, as amended in 1992, requires all air districts in the State to endeavor to achieve and maintain the CAAQS. CARB oversees the functions of local air pollution control districts and air quality management districts, which in turn administer air quality activities at the regional and county level.

Regional

The SJVAPCD is the agency responsible for monitoring and regulating air pollutant emissions from stationary, area, and indirect sources within Tulare County and throughout the SJVAB. The SJVAPCD also has responsibility for monitoring air quality and setting and enforcing limits for source emissions. CARB is the agency with the legal responsibility for regulating mobile source emissions. The SJVAPCD is precluded from such activities under State law.

District Regulation VIII (Fugitive PM10 Prohibition)

The purpose of Regulation VIII (Reg. VIII) is to reduce ambient concentrations of fine particulate matter (PM10) by requiring actions to prevent, reduce or mitigate anthropogenic fugitive dust emissions. Reg. VIII requires property owners, contractors, developers, equipment operators, farmers and public agencies to control fugitive dust emissions from specified outdoor fugitive dust sources. It specifies the following measures to control fugitive dust:

- Apply water to unpaved surfaces and area
- Use non-toxic chemical or organic dust suppressants on unpaved roads and traffic areas
- Limit or reduce vehicle speed on unpaved roads and traffic areas
- Maintain areas in a stabilized condition by restricting vehicle access
- Install wind barriers
- During high winds, cease outdoor activities that disturb the soil.
- Keep bulk materials sufficiently wet when handling
- Store and handle materials in a three-sided structure
- When storing bulk materials, apply water to the surface or cover the storage pile with a tarp
- Don’t overload haul trucks. Overloaded trucks are likely to spill bulk materials

- Cover haul trucks with a tarp or other suitable cover. Or, wet the top of the load enough to limit visible dust emissions
- Clean the interior of cargo compartments on emptied haul trucks prior to leaving a site
- Prevent trackout by installing a trackout control device
- Clean up trackout at least once a day. If along a busy road or highway, clean up trackout immediately
- Monitor dust-generating activities and implement appropriate measures for maximum dust control

Regulation of TACs is achieved through federal and state controls on individual sources. The 1990 Clean Air Act Amendments offered a comprehensive plan for achieving significant reduction in both mobile and stationary source emissions of certain designated hazardous air pollutants, with a goal of achieving the EPA's one in 1 million cancer risk from TACs.

Local

City of Visalia General Plan

The Air Quality & Greenhouse Gases section of the City of Visalia's General Plan provides air quality policies and programs to achieve desired improvements to air quality. Listed below are objectives and policies from the City of Visalia General Plan Air Quality & Greenhouse Gases section that would be applicable to the Project:

- **Objective AQ-O-1** - Coordinate air quality planning efforts with other local, regional and State agencies.
- **Objective AQ-O-2** - Strive to improve air quality by implementing emissions reduction efforts targeting mobile sources, stationary sources and construction-related sources.
- **Policy AQ-P-2** - Require use of Best Management Practices (BMPs) to reduce particulate emission as a condition of approval for all subdivisions, development plans and grading permits, in conformance with the San Joaquin Valley Air Pollution Control District Fugitive Dust Rule.
- **Policy AQ-P-9** - Continue to mitigate short-term construction impacts and long-term stationary source impacts on air quality on a case-by-case basis and continue to assess air quality impacts through environmental review. Require developers to implement Best Management Practices (BMPs) to reduce air pollutant emissions associated with the construction and operation of development projects.

PROJECT RELATED AIR QUALITY IMPACTS

The California Environmental Quality Act (CEQA) Guidelines, Appendix G, are used to assess the potential significance of Project impacts pursuant to local General Plan policies, Municipal Code standards, or applicable standards of other agencies. Under CEQA, TAC's associated with the Project would be considered significant **if the Project exposed sensitive receptors to substantial pollutant concentrations**.

Toxic Air Contaminants (TAC)

Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. The SJVAPCD's *Guidance for Assessing and Mitigating Air Quality Impacts* identifies the need for projects to analyze the potential for adverse air quality impacts to sensitive receptors. From a health risk perspective, the Project is a Type A project in that it may potentially place toxic sources in the vicinity of existing sensitive receptors. The Project is located adjacent to the Westlake Village Community, the Oak Tree Estates, and the Visalia Estates. The SJVAPCD's current thresholds of significance for TAC emissions from the operations of both permitted and non-permitted sources are presented below:

- Carcinogens: Maximally Exposed Individual risk equals or exceeds 10 in one million
- Chronic: Hazard Index equals or exceeds 1 for the Maximally Exposed Individual
- Acute: Hazard Index equals or exceeds 1 for the Maximally Exposed Individual

The characteristics of the proposed Project are consistent with the 'Gasoline Dispensing Facilities' TAC source categories presented in Table 1. The nearest sensitive receptor (residence) is located within 92 feet (28 meters) of the underground gasoline storage tanks. Table 1 indicates that a 50-foot separation is recommended for typical gas dispensing facilities and that siting 'new' sensitive land uses within 300 feet of a large gas station (facility with a throughput of 3.6 million gallons per year or greater) should be avoided. While the Project is anticipated to sell 7.5 million gallons of gasoline and 1.2 million gallons of diesel fuel annually, the recommendation related to 300 feet is related to siting new sensitive receptors adjacent to exiting gasoline dispensing facilities. The fuel dispensing area is located approximately 200 feet (60 meters) from the nearest sensitive receptor (residence). Figure 4 depicts the sensitive receptor setback from the Project underground storage tanks and dispensing facilities.

VOC emissions from the operation of the gasoline service station in addition to diesel emissions from truck traffic and idling have the potential to emit TAC's and impact sensitive receptors adjacent to the Project site. The Project will generate a maximum of three (3) daily truck trips, or approximately 20 truck deliveries per week for the purpose of refilling the underground storage tanks. Exposure to various TAC's primarily occurs through inhalation. Cancer and non-cancer health risks are related to the exposure concentration of TACs that will be generated on the Project site. The ambient concentration of TACs at the Project site is influenced by factors such as the emission rate, the distance from the emission source, the local wind speed and direction, the local topography, the land use, etc.

Vehicle DPM emissions were estimated using emission factors for particulate matter less than 10µm in diameter (PM10) generated with the 2017 version of the Emission Factor model (EMFAC) developed by the ARB. EMFAC 2017 is a mathematical model that was developed to calculate emission rates from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the ARB to project changes in future emissions from on-road mobile sources. It incorporates regional motor vehicle data, information and estimates regarding the distribution of vehicle miles traveled (VMT) by speed, and number of starts per day.

For this Project, annual average PM10 emission factors were generated by running EMFAC 2017 for vehicles in Tulare County. The EMFAC model generates emission factors in terms of grams of pollutant emitted per vehicle activity and can calculate a matrix of emission factors at specific values of temperature, relative humidity, and vehicle speed. The model was run for speeds traveled in the vicinity of the Project. To conservatively estimate air quality emissions associated with the Project, it was assumed that trucks idled for no more than five (5) minutes while onsite. In addition, it was assumed that trucks traveled at 10 miles per hour while performing onsite driving and maneuvering. Emissions estimates for diesel operated vehicles and other supporting documentation are provided in the appendices.

The emission rates provided in the California Air Resources Board and California Air Pollution Control Officers Association's *Gasoline Service Station Industrywide Risk Assessment Technical Guide* (February 18, 2022) were also used to estimate Project emissions associated with the operation of the gasoline service station. Evaporation losses due to vehicle refueling operations, underground tank breathing and emptying, and other processes were estimated for purposes of determining the Projects impact to nearby sensitive receptors. In addition, AB2588 methodology and the SJVAPCD's emission factor(s) were used for diesel storage tank emission estimates.

The SJVAPCD Prioritization Calculator was used to determine the "Total Max Score" of Project specific toxic emissions as discussed above. Projects with a Prioritization score of 10 or higher require a Health Risk Assessment with dispersion modeling. Toxic emissions associated with the Project were used as inputs to the Prioritization Calculator which generated the prioritization score for the Project as shown in Table 2. Results indicate that toxic emissions associated with the Project will generate a max score of 8.62 for sensitive receptors within 0 to 100 meters (328 feet) of the Project. Project emissions associated with the Project will not trigger dispersion modeling since the Total Max Score is less than 10. As a result, dispersion modeling is not required for the Project considering the SJVAPCD's methodology/threshold. TAC emissions generated during Project operations would not expose sensitive receptors to substantial pollutant concentrations. Therefore, mitigation is not warranted since there is a ***less than significant impact*** from Project operational emissions.

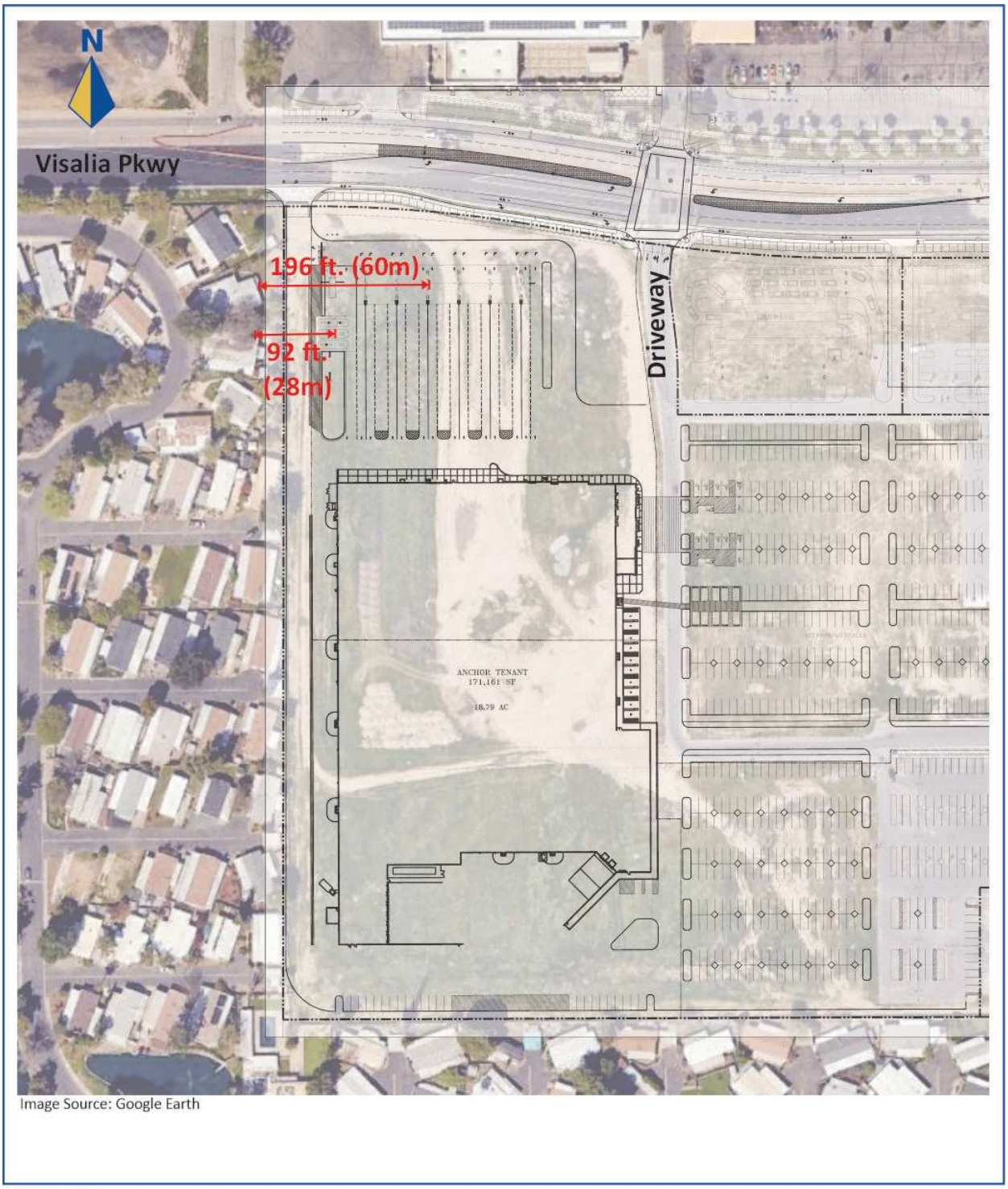


Image Source: Google Earth

FIGURE 4
Sensitive Receptor Setback

TABLE 2
TOTAL MAX SCORE FOR PROJECT EMISSIONS

Receptor Proximity and Proximity Factors		Diesel Storage Tank Fugitives	Gasoline Storage Tank Fugitives	Gasoline Dispensing Operations	Onsite Truck Idling/Mobile Sources	Total Max Score
		Max Score	Max Score	Max Score	Max Score	
0< R<100	1.000	0.00707	0.28136	8.32245	0.00716	8.61804
100≤R<250	0.250	0.00177	0.07034	2.08061	0.00179	2.15451
250≤R<500	0.040	0.00028	0.01125	0.33290	0.00029	0.34472
500≤R<1000	0.011	0.00008	0.00309	0.09155	0.00008	0.09480
1000≤R<1500	0.003	0.00002	0.00084	0.02497	0.00002	0.02585
1500≤R<2000	0.002	0.00001	0.00056	0.01664	0.00001	0.01724
2000<R	0.001	0.00001	0.00028	0.00832	0.00001	0.00862

Should you have any further questions or comments, please contact me by phone at (559) 246-4204 or by email at jellard@jkconsultinggroupllc.com.

Sincerely,

Jason Ellard, Principal
JK Consulting Group

Attachment

APPENDIX A

EMISSIONS ESTIMATES FOR DIESEL OPERATED VEHICLES

Onsite On-Road Mobile Sources

Pollutant	Vehicle Type	EMFAC Vehicle Class	Maximum Daily Trips (trips/day)	Total Annual Round-Trips (trips/yr)	Round-Trip Distance (miles)	Emission Factors [1] (gms/mile)	Emission Factors (lbs/VMT)	Annual Emissions (lbs/mile/yr)	Maximum Daily Emission Estimate (lbs/day)	Annual Average Emission Estimate (tons/yr)	lbs/year	lbs/hr
ROG	Product Trucks - Outside Sales	T7	3	1095	0.25	0.066	1.462E-04	0.2	0.000110	0.000010	0.020011	1.1E-05
Exhaust							**Total ROG Emissions**	**0.2**	**0.000110**	**0.000010**	**0.020011**	**1.1E-05**
TOG	Product Trucks - Outside Sales	T7	3	1095	0.25	0.075	1.664E-04	0.2	0.000125	0.000011	0.022781	1.25E-05
Exhaust							**Total TOG Emissions**	**0.2**	**0.000125**	**0.000011**	**0.022781**	**1.25E-05**
SO_x	Product Trucks - Outside Sales	T7	3	1095	0.25	0.028	6.216E-05	0.1	0.000047	0.000004	0.008509	4.66E-06
Exhaust							**Total SO_x Emissions**	**0.1**	**0.000047**	**0.000004**	**0.008509**	**4.66E-06**
CO	Product Trucks - Outside Sales	T7	3	1095	0.25	1.109	2.445E-03	2.7	0.001834	0.000167	0.334658	0.000183
Exhaust							**Total CO Emissions**	**2.7**	**0.001834**	**0.000167**	**0.334658**	**0.000183**
NO_x	Product Trucks - Outside Sales	T7	3	1095	0.25	7.608	1.677E-02	18.4	0.012580	0.001148	2.295902	0.001258
Exhaust							**Total NO_x Emissions**	**18.4**	**0.012580**	**0.001148**	**2.295902**	**0.001258**
CO_2	Product Trucks - Outside Sales	T7	3	1095	0.25	2984.576	6.580E+00	7,205.0	4.934898	0.450309	900.6189	0.49349
Exhaust							**Total CO_2 Emissions**	**7,205.0**	**4.934898**	**0.450309**	**900.6189**	**0.49349**
PM_{10}	Product Trucks - Outside Sales	T7	3	1095	0.25	0.007	1.525E-05	0.0	0.000011	0.000001	0.002087	1.14E-06
Exhaust							**Total PM_{10} Emissions**	**0.0**	**0.000011**	**0.000001**	**0.002087**	**1.14E-06**
$PM_{2.5}$	Product Trucks - Outside Sales	T7	3	1095	0.25	0.007	1.459E-05	0.0	0.000011	0.000001	0.001997	1.09E-06
Exhaust							**Total $PM_{2.5}$ Emissions**	**0.0**	**0.000011**	**0.000001**	**0.001997**	**1.09E-06**

References:

(1) Emission Factors source: EMFAC2017 for Tulare County Year 2023, for speed distribution of 10 mph

Assumptions:

Maximum 3 Daily Truck Trips

Onsite Idling Sources

Pollutant	Vehicle Type	EMFAC Vehicle Class	Maximum Daily Trips (trips/day)	Total Annual Round-Trips (trips/yr)	Idle Time per Trip [1] (hrs/trip)	Idle Emission Factors [2] (g/hr-veh)	Idle Emission Factors (lbs/hr-veh)	Maximum Daily Emission Estimate (lbs/day)	Annual Average Emission Estimate (tons/yr)	lbs/year	lbs/hr
ROG	Product Trucks - Outside Sales	T7	3	1095	0.09	2.186	4.82E-03	0.001301	0.000119	0.237483	5.42198E-05
							Total ROG Emissions	**0.001301**	**0.000119**	**0.237483**	**5.42198E-05**
TOG	Product Trucks - Outside Sales	T7	3	1095	0.09	2.489	5.49E-03	0.001481	0.000135	0.270356	6.17251E-05
							Total TOG Emissions	**0.001481**	**0.000135**	**0.270356**	**6.17251E-05**
CO	Product Trucks - Outside Sales	T7	3	1095	0.09	32.301	7.12E-02	0.019227	0.001754	3.508999	0.000801141
							Total CO Emissions	**0.019227**	**0.001754**	**3.508999**	**0.000801141**
NO_X	Product Trucks - Outside Sales	T7	3	1095	0.09	25.833	5.70E-02	0.015377	0.001403	2.806316	0.000640711
							Total NO_X Emissions	**0.015377**	**0.001403**	**2.806316**	**0.000640711**
CO_2	Product Trucks - Outside Sales	T7	3	1095	0.09	5648.173	1.25E+01	3.362065	0.306788	613.5768	0.140086024
							Total CO_2 Emissions	**3.362065**	**0.306788**	**613.5768**	**0.140086024**
SO_X	Product Trucks - Outside Sales	T7	3	1095	0.09	0.053	1.18E-04	0.000032	0.000003	0.005797	1.32346E-06
							Total SO_X Emissions	**0.000032**	**0.000003**	**0.005797**	**1.32346E-06**
PM_{10}	Product Trucks - Outside Sales	T7	3	1095	0.09	0.009	2.05E-05	0.000006	0.000001	0.001011	2.3075E-07
							Total PM_{10} Emissions	**0.000006**	**0.000001**	**0.001011**	**2.3075E-07**
$PM_{2.5}$	Product Trucks - Outside Sales	T7	3	1095	0.09	0.009	1.96E-05	0.000005	0.000000	0.000967	2.20768E-07
							Total $PM_{2.5}$ Emissions	**0.000005**	**0.000000**	**0.000967**	**2.20768E-07**

References:

(1) Assumes 5 minute idle time

(2) Emission Factors source: EMFAC2017 for Tulare County Year 2023.

Assumptions:

Maximum 3 Daily Truck Trips

APPENDIX B

SAM'S CLUB SERVICE STATION EMISSIONS ESTIMATES

8,800 Gallon Tank Trucks (Typical Size) - Gasoline

52,000 Gallon Storage Tank - Gasoline
625,000 Gallons Sold Per Month
7,500,000 Gallons Sold Per Year

8,800 Gallons/Hr MAX* (Phase I Loading Operation)
2,680 Gallons/Hr MAX* (Phase II Dispensing Operations)

	Emission Rate lb/1,000 Gal	Resulting lbs/year	Resulting lbs / hr
Filling Underground Tank			
Submerged Filling/Loading	0.150	1,125	1.3200
Underground Tank Breathing and Emptying	0.024	180	0.0643
Vehicle Refueling Operations			
Displacement Losses (Controlled)/Refueling	0.356	2,670	0.9541
Spillage	0.240	1,800	0.6432
Hose Permeation	0.009	68	0.0241

7,500,000 Gallons Sold Per Year

* Gasoline Service Station Industrywide Risk Assessment Technical Guidance - Mega Blitz Data

Gasoline Dispensing Operations

		LB/HR	LB/YR
Benzene	71432	0.015344049	31.20251
Ethyl Benzene	100414	0.010825155	27.54601
Hexane	110543	0.05496102	107.0626
Naphthalene	91203	0.001129681	3.149991
Propylene (propene)	115071	8.5693E-05	0.147501
Toluene	108883	0.06243591	146.2173
Xylenes	1330207	0.052049505	135.1559

Storage Tank Gasoline Fugitives

		LB/HR	LB/YR
Benzene	71432	0.0004501	1.26
Toluene	108883	0.000643	1.8
Xylenes	1330207	0.000643	1.8

Bakersfield Sam's Club Hours

6am - 9pm	M-Sa	15 hrs
9am - 7pm	Sun	10 hrs

14.3 hrs/day X 365 = 5,220 hrs/yr

8,800 Gallon Tank Trucks (Typical Size) - Diesel

8,000 Gallon Storage Tank - Diesel
3,300 Gallons Sold Per Day
100,000 Gallons Sold Per Month
1,200,000 Gallons Sold Per Year

	Emission Rate lb/1,000 Gal	lbs/hr	lbs/day	lbs / yr
Hourly	0.030	0.004		
Daily	0.030		0.099	
Annual	0.030			36.000

1,200,000 Gallons Sold

Storage Tank Diesel Fugitives

		LB/HR	LB/YR
Benzene	71432	3.52E-06	0.03168
Toluene	108883	1.93E-05	0.17352
Xylenes	1330207	1.68E-05	0.1512

APPENDIX C

SJVAPCD EMISSION FACTOR/CALCULATION WORKSHEETS

Name	Storage Tank Diesel Fugitives				
Applicability	Use this spreadsheet for VOC fugitive emission from Diesel Storge Tanks. Entries required in yellow areas, output in grey areas.				
Author or updater	Matthew Cegielski		*Last Update*	February 23, 2022	
Facility:	Sam's Club City of Visalia				
ID#:					
Project #:					

Inputs	lb /hr	lb /yr	**Formula**
VOC Rate	4.00E-03	36	Emissions are calculated by the multiplication of VOC Rates and Emission Factors.

Substances	**CAS#**	**lbs/ lb VOC**	**LB/HR**	**LB/YR**
Benzene	**71432**	8.80E-04	3.52E-06	3.17E-02
Toluene	**108883**	4.82E-03	1.93E-05	1.74E-01
Xylenes	**1330207**	4.20E-03	1.68E-05	1.51E-01

References:

* The emission factors are from the 1993 District memo "Diesel Storage Weight Fractions", test data from source tests of 75 crude oil storage tanks in the southern region.

Name	Storage Tank Gasoline Fugitives				
Applicability	Use this spreadsheet for VOC fugitive emission from Gasoline Storge Tanks. Entries required in yellow areas, output in grey areas.				
Author or updater	Matthew Cegielski		*Last Update*	March 11, 2016	
Facility:	Sam's Club City of Visalia				
ID#:					
Project #:					

Inputs	lb /hr	lb /yr	**Formula**
VOC Rate	6.43E-02	180	Emissions are calculated by the multiplication of VOC Rates and Emission Factors.

Substances	**CAS#**	**lbs/ lb VOC**	**LB/HR**	**LB/YR**
Benzene	**71432**	7.00E-03	4.50E-04	1.26E+00
Toluene	**108883**	1.00E-02	6.43E-04	1.80E+00
Xylenes	**1330207**	1.00E-02	6.43E-04	1.80E+00

References:

* The emission factors are from the 1995 District memo "Toxic Emissions Inventory Plan Regarding Diesel and Gasoline Storage Weight Fractions"

Name	Gasoline Dispensing Operations VOC from Vapor Tank Filling Loss			
Applicability	Use this spreadsheet for vapor VOC emissions from Vapor Tank Filling Loss. Entries required in yellow areas, output in gray areas.			
Author or updater	Matthew Cegielski	*Last Update*	April 28, 2022	
Facility:	Sam's Club City of Visalia			
ID#:				
Project #:				

Inputs	lb /hr	lb /yr	**Formula**
VOC Rate	1.32E+00	1.13E+03	Emissions are calculated by the multiplication of VOC Rates and Emission Factors.

Substances	**CAS#**	**lbs/ lb VOC**	**LB/HR**	**LB/YR**
Benzene	**71432**	4.57E-03	6.03E-03	5.14E+00
Ethyl Benzene	**100414**	1.07E-03	1.41E-03	1.20E+00
Hexane	**110543**	1.82E-02	2.40E-02	2.05E+01
Naphthalene	**91203**	4.45E-06	5.87E-06	5.01E-03
Propylene (propene)	**115071**	3.59E-05	4.74E-05	4.04E-02
Toluene	**108883**	1.11E-02	1.47E-02	1.25E+01
Xylenes	**1330207**	4.09E-03	5.40E-03	4.60E+00

References:

*These emission factors are from table 11, "Content of Gasoline for Substances with OEHHA Chronic Health Factor (Combined Winter/Summer) in CARB's 2022 *Gasoline Service Station Industrywide Risk Assessment Technical Guidanc*e.

Name	Gasoline Dispensing Operations VOC from Vapor Hose Permeation Loss			
Applicability	Use this spreadsheet for vapor VOC emissions from Vapor Hose Permeation Loss. Entries required in yellow areas, output in gray areas.			
Author or updater	Matthew Cegielski		*Last Update*	April 28, 2022
Facility:	Sam's Club City of Visalia			
ID#:				
Project #:				

Inputs	lb /hr	lb /yr	**Formula**
VOC Rate	2.41E-02	6.80E+01	Emissions are calculated by the multiplication of VOC Rates and Emission Factors.

Substances	**CAS#**	**lbs/ lb VOC**	**LB/HR**	**LB/YR**
Benzene	**71432**	4.57E-03	1.10E-04	3.11E-01
Ethyl Benzene	**100414**	1.07E-03	2.58E-05	7.28E-02
Hexane	**110543**	1.82E-02	4.39E-04	1.24E+00
Naphthalene	**91203**	4.45E-06	1.07E-07	3.03E-04
Propylene (propene)	**115071**	3.59E-05	8.66E-07	2.44E-03
Toluene	**108883**	1.11E-02	2.68E-04	7.55E-01
Xylenes	**1330207**	4.09E-03	9.86E-05	2.78E-01

References:

*These emission factors are from table 11, "Content of Gasoline for Substances with OEHHA Chronic Health Factor (Combined Winter/Summer) in CARB's 2022 *Gasoline Service Station Industrywide Risk Assessment Technical Guidanc*e.

Name	Gasoline Dispensing Operations VOC from Vapor Vehicle Refueling			
Applicability	Use this spreadsheet for vapor VOC emissions from Vapor Vehicle Refueling. Entries required in yellow areas, output in gray areas.			
Author or updater	Matthew Cegielski	*Last Update*	April 28, 2022	
Facility:	Sam's Club City of Visalia			
ID#:				
Project #:				

Inputs	lb /hr	lb /yr	**Formula**
VOC Rate	9.54E-01	2.67E+03	Emissions are calculated by the multiplication of VOC Rates and Emission Factors.

Substances	CAS#	lbs/ lb VOC	LB/HR	LB/YR
Benzene	**71432**	4.57E-03	4.36E-03	1.22E+01
Ethyl Benzene	**100414**	1.07E-03	1.02E-03	2.86E+00
Hexane	**110543**	1.82E-02	1.74E-02	4.86E+01
Naphthalene	**91203**	4.45E-06	4.25E-06	1.19E-02
Propylene (propene)	**115071**	3.59E-05	3.43E-05	9.60E-02
Toluene	**108883**	1.11E-02	1.06E-02	2.96E+01
Xylenes	**1330207**	4.09E-03	3.90E-03	1.09E+01

References:

*These emission factors are from table 11, "Content of Gasoline for Substances with OEHHA Chronic Health Factor (Combined Winter/Summer) in CARB's 2022 *Gasoline Service Station Industrywide Risk Assessment Technical Guidanc*e.

Name	Gasoline Dispensing Operations VOC from Vapor Breathing Loss			
Applicability	Use this spreadsheet for vapor VOC emissions from Vapor Breathing Loss. Entries required in yellow areas, output in gray areas.			
Author or updater	Matthew Cegielski	*Last Update*	April 28, 2022	
Facility:	Sam's Club City of Visalia			
ID#:				
Project #:				

Inputs	lb /hr	lb /yr	**Formula**
VOC Rate	6.43E-02	1.80E+02	Emissions are calculated by the multiplication of VOC Rates and Emission Factors.

Substances	**CAS#**	**lbs/ lb VOC**	**LB/HR**	**LB/YR**
Benzene	**71432**	4.57E-03	2.94E-04	8.23E-01
Ethyl Benzene	**100414**	1.07E-03	6.88E-05	1.93E-01
Hexane	**110543**	1.82E-02	1.17E-03	3.28E+00
Naphthalene	**91203**	4.45E-06	2.86E-07	8.01E-04
Propylene (propene)	**115071**	3.59E-05	2.31E-06	6.47E-03
Toluene	**108883**	1.11E-02	7.14E-04	2.00E+00
Xylenes	**1330207**	4.09E-03	2.63E-04	7.36E-01

References:

*These emission factors are from table 11, "Content of Gasoline for Substances with OEHHA Chronic Health Factor (Combined Winter/Summer) in CARB's 2022 *Gasoline Service Station Industrywide Risk Assessment Technical Guidanc*e.

RESUME

Jason Ellard
Owner/Principal

Jason Ellard is an engineering professional who is devoted to the success of clients and their objectives. Since receiving his BS Degree in Civil Engineering from Fresno State University, he has worked in the environmental planning and traffic engineering/planning industry for 20+ years and uses that invaluable experience to prepare air quality and greenhouse gas, energy, health risk, and noise impact assessments to the satisfaction of CEQA and NEPA requirements. At a previous firm, Jason completed numerous (300+) environmental assessments, including traffic, throughout the San Joaquin Valley in addition to the successful creation of traffic signal and signal interconnect design drawings. Jason has completed impact assessments in Fresno, Kern, Kings, Madera, Merced, Riverside, Stanislaus, San Joaquin, Sacramento, Tulare, and other Counties.

PROFESSIONAL QUALIFICATIONS

Education

- California State University, Fresno 2000-2005, Bachelor of Science in Engineering (Civil Engineering)

Years of Experience

- Twenty (20) Years; Seventeen (17) Years with VRPA Technologies, Inc. in Fresno, CA

Computer Program Proficiency

- **Environmental Planning:** CalEEMod, HARP, AermodView, TNM2.5
- **Traffic Operations:** Synchro, HCS, LOSPLAN
- **Travel Demand Forecasting:** Viper
- **Others:** AutoCAD, MicroStation, CorelDraw, Microsoft Office

PROJECT EXPERIENCE

- Josan Development – Noise Impact Assessment / City of Selma
- Nebraska Truck Parking Development – Greenhouse Gas Assessment / Fresno County
- Nightpeak Matador BESS Development – Air Quality and Noise Impact Assessment / Imperial County
- West-Shields Gas Station Development – Air Quality and Noise Impact Assessment / City of Fresno
- Dairy Expansion Project – Air Quality Impact Assessment / Fresno County
- 76 Gas Station Development – Noise Impact and VMT Assessment / City of Fresno
- CV Alliance Event Center – Air Quality Impact Assessment / Fresno County
- Peach Avenue Starbucks Development – Air Quality Impact Assessment and Indirect Source Review Application / City of Fresno
- Central Point III Industrial Development – Indirect Source Review Application / City of Visalia
- Waterfly Express Carwash Development – VMT-Driveway Assessment / City of Indio

- Yosemite Commercial Development – Noise Impact Assessment / Madera County
- Sunny Market (Grocery Store) – Air Quality Impact Assessment / Fresno County
- H2B2 USA Solar Field – Air Quality Impact Assessment / Fresno County
- Gill Truck Parking Development – Air Quality and Noise Impact Assessment / Fresno County
- Evergreen Development – Energy Assessment / City of Lake Elsinore
- Rally's Fast-Food Restaurant – Noise Impact Assessment / City of Visalia
- Duplex Development – Noise Impact Assessment / City of Fresno
- Woodville Landfill Expansion – Noise Impact Assessment / Tulare County
- Kaiser Permanente Medical Office Building – Air Quality and Noise Impact Assessment / City of Fresno
- Iron Ridge Development – Air Quality Impact Assessment / City of Visalia
- Avila Packing House – Air Quality and Health Risk Assessment / Stanislaus County
- Yosemite West Development – Air Quality and Noise Impact Assessment / Mariposa County
- Reedley Health Clinic Annexation Project – Air Quality Impact Assessment / City of Reedley
- Sessions Family Foundation Development – Air Quality Impact Assessment / City of Chowchilla
- Surf Ranch Development – Air Quality and Noise Impact Assessment / Kings County
- Miles Chemical Expansion – Air Quality and Health Risk Assessment / Madera County
- Lindsay Well Site Project – Air Quality Impact Assessment / City of Lindsay
- Deer Creek Rock Co. Expansion – Noise Impact Assessment / Tulare County
- Cutler-Orosi Community Plan Update – Noise Impact Assessment / Tulare County
- Wastewater Facility Improvement Project – Air Quality Impact Assessment / Planada Community Services District
- Portola Avenue & I-10 Interchange Project – Air Quality and Noise Impact Assessment / Riverside County
- Indian Canyon Road Widening – Air Quality and Noise Impact Assessment / Riverside County
- Running Horse Development – Noise Impact Assessment / City of Fresno
- Stonefield Development – Air Quality, Health Risk, and Noise Impact Assessment / City of McFarland
- UP Imperial County Transfer Facility – Air Quality and Noise Impact Assessment / Imperial County
- Hanford Downtown East Precise Plan – Air Quality and Noise Impact Assessment / City of Hanford
- Golden State Corridor Development – Air Quality and Noise Impact Assessment / Fresno County
- Kern River Valley Specific Plan – Air Quality and Noise Impact Assessment / Kern County
- Fairfax Union School District – Air Quality and Noise Impact Assessment / Kern County
- North Fork Hotel and Casino – Noise Impact Assessment / Madera County
- Peach Avenue Road Widening – Air Quality and Noise Impact Assessment / City of Fresno
- Grant Line Road Improvement Project – Noise Impact Assessment / City of Elk Grove
- Madera School – Noise Impact Assessment / City of Madera
- Zinkin's Fresno 40 Development – Noise Impact Assessment
- Home Depot Development – Noise Impact Assessment / City of Visalia
- Fig Garden Corporation Center – Air Quality Impact Assessment / City of Fresno
- Gettysburg & Willow Multi-Family Development – Noise Impact Assessment / City of Clovis
- Strathmore High School – Air Quality Impact Assessment / City of Strathmore
- Eastgate Estates – Air Quality Impact Assessment / Fresno County
- Avenue 13 & Raymond Road – Air Quality Impact Assessment / City of Madera
- Cal-Kern III Development – Air Quality and Noise Impact Assessment / Kern County

- Bond Road Improvement Project – Air Quality and Noise Impact Assessment / City of Elk Grove
- West McFarland Annexation – Air Quality and Noise Impact Assessment / City of McFarland
- Paladino and Morning Development – Air Quality and Noise Impact Assessment / Kern County
- San Joaquin Gardens Development – Noise Impact Assessment / City of Fresno
- Stallion Springs Development – Air Quality Impact Assessment / Kern County
- Tract 5558 Development – Air Quality and Noise Impact Assessment / City of Fresno
- Baker Lawson Development – Air Quality Impact Assessment / Fresno County
- Fresno Council of Governments (Fresno COG) 2015/2018 Regional Transportation Plan (RTP) Environmental Impact Report (EIR) – Air Quality and Noise Impact Assessment / Fresno County
- Madera County Transportation Commission (MCTC) 2015/2018 Regional Transportation Plan (RTP) Environmental Impact Report (EIR) – Air Quality and Noise Impact Assessment / Madera County
- Tulare County Association of Governments (TCAG) 2011 Regional Transportation Plan (RTP) Subsequent Environmental Impact Report (SEIR) – Air Quality Impact Assessment / Tulare County

Name	Gasoline Dispensing Operations VOC from Liquid				
Applicability	Use this spreadsheet for liquid VOC emissions from gasoline dispensing operations' spillage processes. Entries required in yellow areas, output in gray areas.				
Author or updater	Matthew Cegielski		*Last Update*	April 28, 2022	
Facility:	Sam's Club City of Visalia				
ID#:					
Project #:					

Inputs	lb /hr	lb/yr	**Formula**
VOC Rate	6.43E-01	1.80E+03	Emissions are calculated by the multiplication of VOC Rates and Emission Factors.

Substances	**CAS#**	**lbs/ liquid vapor**	**LB/HR**	**LB/YR**
Benzene	**71432**	7.07E-03	4.55E-03	1.27E+01
Ethyl Benzene	**100414**	1.29E-02	8.30E-03	2.32E+01
Hexane	**110543**	1.86E-02	1.20E-02	3.35E+01
Naphthalene	**91203**	1.74E-03	1.12E-03	3.13E+00
Propylene (propene)	**115071**	1.22E-06	7.85E-07	2.20E-03
Toluene	**108883**	5.63E-02	3.62E-02	1.01E+02
Xylenes	**1330207**	6.59E-02	4.24E-02	1.19E+02

References:

*These emission factors are from table 11, "Content of Gasoline for Substances with OEHHA Chronic Health Factor (Combined Winter/Summer) in CARB's 2022 *Gasoline Service Station Industrywide Risk Assessment Technical Guidanc*e.

ARCHAEOLOGICAL LETTER REPORT IN CONSIDERATION OF THE SWC VISALIA PARKWAY AND MOONEY BLVD. DEVELPMENT PROJECT

Presented to
Lars Andersen & Associates, Inc."
Name: LARS ANDERSEN & ASSOCIATES, INC.
Address: 4694 W JACQUELYN AVENUE, FRESNO, CA 93722
Phone: (559) 276-2790
Fax: (559) 276-0850
Representative: DANIEL J. ZOLDAK
by

People and space over time
CULTURESCAPE
6182 Carter Rd.
Mariposa, CA 95338

August 2024

SW ¼ of Section 7, T19 S, R 21E
Visalia 7.5

People and space over time
CULTURESCAPE
6182 Carter Road
Mariposa Ca. 95338
(209) 966-3327
Cell (209) 769-1095
Fax (209) 966-6435
mck@sierratel.com

In partial fulfillment of California Environmental Quality Act (CEQA), Culturescape has concluded a survey for historic resources on an undeveloped area of approximately 22.5 acres plotted in the SW ¼ of Section 7, T19 S, R 21E Visalia 7.5 Quadrangle 1990. Visalia, Tulare County, California (Appendix A: Maps)..

The results of this survey were **Negative** for any historic or prehistoric cultural materials. The location is within a partially developed parcel that has infrastructure that includes electrical conduit for streetlights and sewer drains. The largest portion of the parcel has been used to stockpile and mix imported fill soils. There are several rows of soil that exceed 6 feet in height A second example of this is at the south side of the parcel where the parcel meets a developed parking lot. There are two large piles located near one of the access roads that appears to have been used recently. Other fill material includes discarded concrete sewer man ways and pipe (Appendix C: Photos)

The parcel had 85% surface visibility with 15% covered in tumble weed on the imported fill piles. The portion along Visalia Avenue has been impacted by road construction. and mechanized land alteration for strip mall development. The soil is for the majority, Tagus, 85% Hanford, 5% Tujunga, 5% all located as silt deposited on alluvial fans and flood plains.

The project area has a low potential for buried cultural materials, however, there is always the possibility that buried deposits may be located as a result of subsurface construction. If buried materials are encountered during construction, then work must stop in that area until a qualified archaeologist can evaluate the nature and significance of the find.

Part 1: Project Information
Project Size: Approximately 22.5 acres
Name of Landowner: Sams club
Legal Location: plotted on the SW ¼ of Section 7, T19 S, R 21E Visalia 7.5 Quadrangle 1990. Tulare County, California (Appendix A: MAPS).

Project Description: Proposed Sams Club

Part 2: Archaeological Records Check Information
Date of Records Check 11/27/2023.
Southern San Joaquin Valley Information Center
Information Center File Number: 23-476
Summary of Records Check Results: The records search indicated that three previous studies have occurred within the project area, TU-01078, 01079, and 01080 with two more occurring within .5 miles, including TU-01085 and 01904. No sites were located within the project area. A description of these surveys and sites can be found in Appendix B: Records Search.

Records Check access agreement and Records Search Map are attached,
Justification: No studies were available prior to survey..

6182 Carter Road
Mariposa Ca. 95338
(209) 966-3327
Cell (209) 769-1095
Fax (209) 966-6435
mck@sierratel.com

Part 3: Native American Correspondence Information

A sacred lands search request was conducted on 10/26/2023. The NAHC returned an e-mail on 10/27/23 stating that information would be delayed by at least 4 weeks. No information has been received at the time of this report. This was carried out to solicit information and did not constitute formal consultation as provided by AB52 (Appendix C:Native American Correspondence).

Part 4: Pre-Field Research

The methodology included a records search conducted by the Southern San Joaquin Valley Information Center for the property owner and records that had close cultural affiliations. Maps on file were included. The list of the National Register of Historic Places was consulted as was the California Register of Historic Resources, the *California Inventory of Historic Resources (1976)*, the *California Historical Landmarks (1996)*, and the *California Points of Historical Interest listing* (May 1992 and updates) and the Historic Property Data File (Office of Historic Preservation current computer list, dated 6/12/2006), the Survey of Surveys (1989), and other information pertinent to the project.

Part 5: Training and Experience of Archaeological Surveyors

Name of current Archaeological Surveyor(s): M. C. Kile M.A. (Appendix E:Qualifications)

Part 6: Survey Methods and Procedures

A survey was conducted within the project area and opportunistically where access allowed. method included a ten meter transects throughout the project area.

Time spent conducting archaeological field survey: 4 hours.
Date or dates the survey was conducted on November 16, 2023.
Survey coverage intensity: Intense: see above
Ground visibility/other limitations: The entire project is within a partially developed parcel that includes stockpiles of imported fill soils. This includes electrical infrastructure, sewer lines and a developed roads and parking areas. The area has very limited sensitivity.

Part 7: Survey Results

List and description of all sites found: No sites found within the site survey area.

Part 8: Evaluation of Significance

Preliminary determination of significance of listed sites (if required): N/A

Part 9: Protection Measures

Specific enforceable protection measures: The current project does not threaten any resources.

Part 10: Implementation of Protection Measures

Discuss actions taken to carry out protection measures: None needed.

Part 11: Other Applicable Information

NA

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mck@sierratel.com

Part 12: List of Appendices

(X) A: Project Maps

(X) B: Archaeological Records Search Results

(X) C: NAHC Correspondence

(X) D: Photos

(X) E: Qualifications

Part 13: Professional Review and Approval

Signature of Archaeologist_  **(Appendix D: Qualifications)** Date Signed: December 2023

Printed name: M. C. Kile M.A.
Title: Owner,
Culturescape Location: 6182 Carter Rd Mariposa

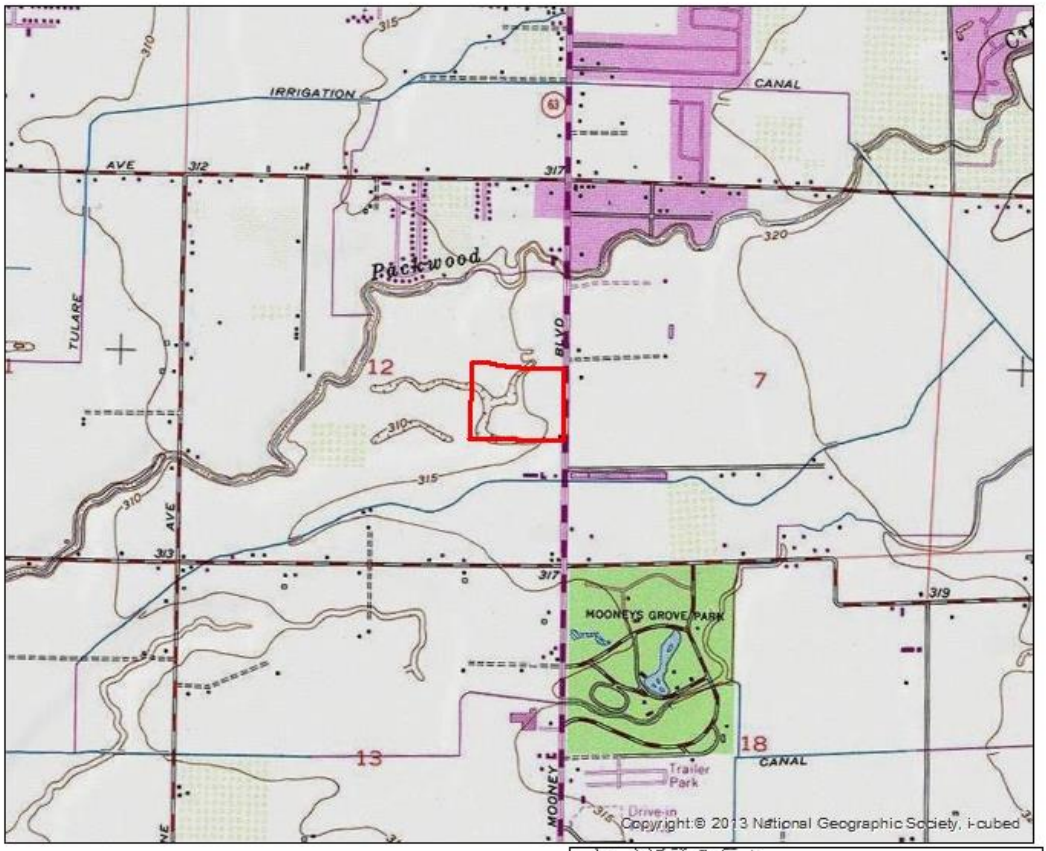
6182 Carter Road
Mariposa Ca. 95338
(209) 966-3327
Cell (209) 769-1095
Fax (209) 966-6435
mck@sierratel.com

APPENDIX A: MAPS

6182 Carter Road
Mariposa Ca. 95338
(209) 966-3327
Cell (209) 769-1095
Fax (209) 966-6435
mck@sierratel.com

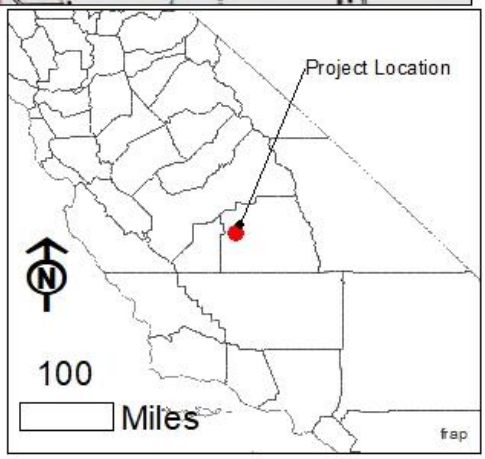
Project Location

Visalia 7.5 Quadrangle 1990.
Section 7, T19 S, R 21E
Visalia, Tulare County
20 acres



Proposed Sams Club

Sams Project Boundary



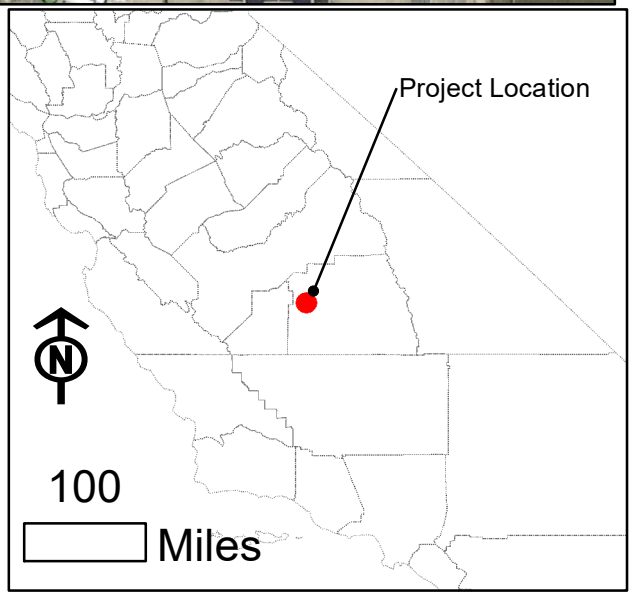
Project Location

Visalia 7.5 Quadrangle 1990.
Section 7, T19 S, R 21E
Visalia, Tulare County
18.75 acres

0 125 250 500 Feet

Proposed Sams Club

Survey Area



People and space over time
CULTURESCAPE

6182 Carter Road
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Cell (209) 769-1095
Fax (209) 966-6435
mck@sierratel.com

APPENDIX B: RECORD SEARCH

California Historical Resources Information System

CHRIS Data Request Form

ACCESS AND USE AGREEMENT NO.: 72.00 **IC FILE NO.:** _____

To: Southern San Joaquin Valley ☐ Information Center

Print Name: M. C. Kile Date: 10/19/2023

Affiliation: Culturescape

Address: 6182 Carter Road

City: Mariposa State: Ca Zip: 95338

Phone: (209) 966-3327 Fax: (209) 966-6435 Email: mck@sti.net

Billing Address (if different than above): _____

Billing Email: _____ Billing Phone: _____

Project Name / Reference: Sams Club

Project Street Address: Visalia Parkway and Mooney Blvd. Visalia

County or Counties: Tulare

Township/Range/UTMs: SW ¼ of Section 7, T19 S, R 21E.

USGS 7.5' Quad(s): Visalia

PRIORITY RESPONSE (Additional Fee): yes ☐ / no ☒

TOTAL FEE NOT TO EXCEED: $_____
(If blank, the Information Center will contact you if the fee is expected to exceed $1,000.00)

Special Instructions:

Information Center Use Only

Date of CHRIS Data Provided for this Request: _____

Confidential Data Included in Response: yes ☐ / no ☐

Notes: _____

CHRIS Data Request Form

Mark the request form as needed. Attach a PDF of your project area (with the radius if applicable) mapped on a 7.5' USGS topographic quadrangle to scale 1:24000 ratio 1:1 neither enlarged nor reduced and include a shapefile of your project area, if available. Shapefiles are the current CHRIS standard for submitting digital spatial data for your project area or radius. **Check with the appropriate IC for current availability of digital data products.**

- Documents will be provided in PDF format. Paper copies will only be provided if PDFs are not available at the time of the request or under specially arranged circumstances.
- Location information will be provided as a digital map product (Custom Maps or GIS data) unless the area has not yet been digitized. In such circumstances, the IC may provide hand drawn maps.
- In addition to the $150/hr. staff time fee, client will be charged the Custom Map fee when GIS is required to complete the request [e.g., a map printout or map image/PDF is requested and no GIS Data is requested, or an electronic product is requested (derived from GIS data) but no mapping is requested].

For product fees, see the CHRIS IC Fee Structure on the OHP website.

1. Map Format Choice:

Select One: Custom GIS Maps ☒ GIS Data ☐ Custom GIS Maps **and** GIS Data ☐ No Maps ☐

Any selection below left unmarked will be considered a "no. "

Location Information:

	Within project area	Within 1/4 mi. radius
ARCHAEOLOGICAL Resource Locations[1]	yes ☒ / no ☐	yes ☒ / no ☐
NON-ARCHAEOLOGICAL Resource Locations	yes ☐ / no ☒	yes ☐ / no ☐
Report Locations[1]	yes ☐ / no ☐	yes ☐ / no ☐
"Other" Report Locations[2]	yes ☐ / no ☐	yes ☐ / no ☐

3. Database Information:
(contact the IC for product examples, or visit the SSJVIC website for examples)

	Within project area	Within 1/4 mi. radius
ARCHAEOLOGICAL Resource Database[1]		
List (PDF format)	yes ☒ / no ☐	yes ☒ / no ☐
Detail (PDF format)	yes ☐ / no ☒	yes ☐ / no ☐
Excel Spreadsheet	yes ☐ / no ☐	yes ☐ / no ☐
NON-ARCHAEOLOGICAL Resource Database		
List (PDF format)	yes ☐ / no ☐	yes ☐ / no ☐
Detail (PDF format)	yes ☐ / no ☐	yes ☐ / no ☐
Excel Spreadsheet	yes ☐ / no ☐	yes ☐ / no ☐
Report Database[1]		
List (PDF format)	yes ☒ / no ☐	yes ☒ / no ☐
Detail (PDF format)	yes ☐ / no ☐	yes ☐ / no ☐
Excel Spreadsheet	yes ☐ / no ☐	yes ☐ / no ☐
Include "Other" Reports [2]	yes ☐ / no ☐	yes ☐ / no ☐

4. Document PDFs (paper copy only upon request)**:**

	Within project area	Within 1/4 mi. radius
ARCHAEOLOGICAL Resource Records[1]	yes ☒ / no ☐	yes ☒ / no ☐
NON-ARCHAEOLOGICAL Resource Records	yes ☐ / no ☒	yes ☐ / no ☒
Reports[1]	yes ☐ / no ☐	yes ☐ / no ☐
"Other" Reports[2]	yes ☐ / no ☐	yes ☐ / no ☐

CHRIS Data Request Form

5. Eligibility Listings and Documentation:

	Within project area	Within 1/4 mi. radius
OHP Built Environment Resources Directory[3]:		
Directory listing only (Excel format)	yes ■ / no ☐	yes ☐ / no ☐
Associated documentation[4]	yes ☐ / no ☐	yes ☐ / no ☐
OHP Archaeological Resources Directory[1,5]:		
Directory listing only (Excel format)	yes ■ / no ☐	yes ☐ / no ☐
Associated documentation[4]	yes ☐ / no ☐	yes ☐ / no ☐
***California Inventory of Historic Resources* (1976):**		
Directory listing only (PDF format)	yes ■ / no ☐	yes ☐ / no ☐
Associated documentation[4]	yes ☐ / no ☐	yes ☐ / no ☐

6. Additional Information:

The following sources of information may be available through the Information Center. However, several of these sources are now available on the OHP website and can be accessed directly. The Office of Historic Preservation makes no guarantees about the availability, completeness, or accuracy of the information provided through these sources. Indicate below if the Information Center should review and provide documentation (if available) of any of the following sources as part of this request.

Caltrans Bridge Survey	yes ■ / no ☐
Ethnographic Information	yes ■ / no ☐
Historical Literature	yes ☐ / no ☐
Historical Maps	yes ☐ / no ☐
Local Inventories	yes ☐ / no ☐
GLO and/or Rancho Plat Maps	yes ☐ / no ☐
Shipwreck Inventory	yes ☐ / no ☐
Soil Survey Maps	yes ☐ / no ☐

---

[1] In order to receive archaeological information, requestor must meet qualifications as specified in Section III of the current version of the California Historical Resources Information System Information Center Rules of Operation Manual and be identified as an Authorized User or Conditional User under an active CHRIS Access and Use Agreement.

[2] "Other" Reports GIS layer consists of report study areas for which the report content is almost entirely non-fieldwork related (e.g., local/regional history, or overview) and/or for which the presentation of the study area boundary may or may not add value to a record search.

[3] Provided as Excel spreadsheets with no cost for the rows; the only cost for this component is IC staff time. Includes, but not limited to, information regarding National Register of Historic Places, California Register of Historical Resources, California State Historical Landmarks, California State Points of Historical Interest, and historic building surveys. Previously known as the HRI and then as the HPD, it is now known as the Built Environment Resources Directory (BERD). The Office of Historic Preservation compiles this documentation and it is the source of the official status codes for evaluated resources.

[4] Associated documentation will vary by resource. Contact the IC for further details.

[5] Provided as Excel spreadsheets with no cost for the rows; the only cost for this component is IC staff time. Previously known as the Archaeological Determinations of Eligibility, now it is known as the Archaeological Resources Directory (ARD). The Office of Historic Preservation compiles this documentation and it is the source of the official status codes for evaluated resources.

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

11/27/2023

M. C. Kile
Culturescape
6182 Carter Road
Mariposa, CA 95338

Re: Sams Club
Records Search File No.: 23-476

The Southern San Joaquin Valley Information Center received your record search request for the project area referenced above, located on the Visalia USGS 7.5' quad. The following reflects the results of the records search for the project area and the 0.25 mile radius:

As indicated on the data request form, the locations of archaeological resources and reports are provided in the following format: ☐ custom GIS maps ☐ GIS data

Archaeological resources within project area:	None
Archaeological resources within 0.25 mile radius:	None
Reports within project area:	TU-01078, 01079, 01080
Reports within 0.25 mile radius:	TU-01085, 01904

NOTE: Report location information was omitted per the CHRIS Data Request Form.

Resource Database Printout (list):	☐ enclosed	☐ not requested	☒ nothing listed
Resource Database Printout (details):	☐ enclosed	☒ not requested	☐ nothing listed
Resource Digital Database Records:	☐ enclosed	☒ not requested	☐ nothing listed
Report Database Printout (list):	☒ enclosed	☐ not requested	☐ nothing listed
Report Database Printout (details):	☐ enclosed	☒ not requested	☐ nothing listed
Report Digital Database Records:	☐ enclosed	☒ not requested	☐ nothing listed
Resource Record Copies:	☐ enclosed	☐ not requested	☒ nothing listed
Report Copies:	☐ enclosed	☒ not requested	☐ nothing listed
OHP Built Environment Resources Directory:	☐ enclosed	☐ not requested	☒ nothing listed
Archaeological Determinations of Eligibility:	☐ enclosed	☐ not requested	☒ nothing listed
CA Inventory of Historic Resources (1976):	☐ enclosed	☐ not requested	☒ nothing listed

Caltrans Bridge Survey: Not available at SSJVIC; please see https://dot.ca.gov/programs/environmental-analysis/cultural-studies/california-historical-bridges-tunnels

Ethnographic Information: Not available at SSJVIC

Historical Literature: Not available at SSJVIC

Historical Maps: Not available at SSJVIC; please see http://historicalmaps.arcgis.com/usgs/

Local Inventories: Not available at SSJVIC

GLO and/or Rancho Plat Maps: Not available at SSJVIC; please see http://www.glorecords.blm.gov/search/default.aspx#searchTabIndex=0&searchByTypeIndex=1 and/or http://www.oac.cdlib.org/view?docId=hb8489p15p;developer=local;style=oac4;doc.view=items

Shipwreck Inventory: Not available at SSJVIC; please see https://www.slc.ca.gov/shipwrecks/

Soil Survey Maps: Not available at SSJVIC; please see http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Thank you for using the California Historical Resources Information System (CHRIS).

Sincerely,

Celeste M. Thomson
Coordinator

Report List

SSJVIC Record Search 23-476

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
TU-01078		2000	Busby, Colin I.	Archaeological Evaluation Report for the South Packwood Creek Specific Plan and Phase I Regional Retail Development, City of Visalia and Vicinity, Tulare County	Basin Research Associates, Inc.	
TU-01079		2001	Busby, Colin I.	Supplement to Archaeological Evaluation Report - South Packwood Creek Specific Plan and Phase I Regional Retail Development, City of Visalia and Vicinity, Tulare County	Basin Research Associates	
TU-01080		2000	Hill, Ward	Historic Evaluation Report for the Freitas Dairy Farm, 4004 South Mooney Boulevard, City of Visalia, Tulare County, California	Ward Hill / Basin Research Associates, Inc.	54-003650
TU-01085		1999	Dodd, Douglas W.	Historical Architectural Survey Report/Historic Resource Evaluation Report for Roadbed Rehabilitation and Intersection Upgrades on State Route 63 Between Tulare and Visalia, Tulare County	California Department of Transportation, District 6	
TU-01904		2021	Sauls, Consuelo Y.	Cultural Resources Assessment for the Oaks Marketplace Master Conditional Use Permit Project, City of Visalia, Tulare County, California	Taylored Archaeology	

6182 Carter Road
Mariposa Ca. 95338
(209) 966-3327
Cell (209) 769-1095
Fax (209) 966-6435
mck@sierratel.com

Appendix C: Native American Outreach

Sacred Lands File & Native American Contacts List Request

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
916-373-3710
916-373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search 11/13/2023

Project: _Sams Club

County:_Tulare

USGS 7.5 TopographicalQuadrangle Name:Visalia

Company/Firm/Agency:_Culturescape_____

Street Address:_ 6182 Carter Rd_____

City:__Mariposa_____ Zip:95338_____

Phone:_209-966-3327_____

Fax:_209 966-6435_____

Email:mck@sti.net_____

Project Description:Sams Club Project

"

Mark Kile

From: NAHC@NAHC <NAHC@nahc.ca.gov>
Sent: Thursday, November 16, 2023 12:48 PM
To: Mark Kile
Cc: Vela, Cameron@NAHC
Subject: RE: Search request for Sacred Lands
Attachments: Sacred-Lands-File-NA-Contact-Form Sams Visalia.pdf; Sams Visailia Project.pdf

Hello,

Thank you for your message. We're in receipt of your request. We have recently hired new staff, and this change in our office is creating some delays. We estimate a turn-around time of 4 weeks and don't anticipate responding sooner than the end of that time frame. Please let us know if you have any questions.

Kind regards,

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
(916) 373-3710

From: Mark Kile <mck@sti.net>
Sent: Monday, November 13, 2023 8:03 PM
To: NAHC@NAHC <NAHC@nahc.ca.gov>
Subject: Search request for Sacred Lands

Please consider this request for a search of your Sacred Lands File for the attached project.

Thank You,

M.C. Kile

CULTURESCAPE

(209) 966-3327

6182 Carter Road
Mariposa Ca. 95338
(209) 966-3327
Cell (209) 769-1095
Fax (209) 966-6435
mck@sierratel.com

APPENDIX D: Photos

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Figure 1 Overview of project area at fast food area towards car wash at northeast corner with Visalia Boulevard to the right west

Figure 2 Overview of project from Visalia Boulevard near the northwest corner southeast

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Figure 3 Overview of project area at the northwest corner south

Figure 4 Overview of project area from the southwest corner east

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Figure 5 Overview of 6' stockpile of fill soils at the southwest corner of the project area. North

Figure 6 Overview of stockpiled fill soil along western edge of project area south

People and space over time
CULTURESCAPE
6182 Carter Road
Mariposa Ca. 95338
(209) 966-3327
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Figure 7 Overview of recent mechanical earthwork with a spoils pile at center located within the project area. South

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Appendix E: Qualifications

Mark Kile
6182 Carter Road
Mariposa Ca. 95338
(209) 966-3327: Fax (209) 966-6435
mck@sti.net

DISCIPLINE/SPECIALTY

- Field transects
- Excavation
- Mapping
- Recordation
- Laboratory analysis
- Site records
- GIS
- Trimble GeoXT/XH
- Trimble Pathfinder
- ArcGIS 10.2

EDUCATION

- PhD. Program World Cultures U.C. Merced 2011/2012
- M. A. Interdisciplinary Studies Anthropology/ Geography, California State University, Stanislaus 2003
- B.A. Anthropology /Archaeology, Minor Geography 2000

TEACHING EXPERIENCE

2002-2003 –Teachers Assistant, Field Methods, CSU Stanislaus, Turlock, Ca.
2003 – Teachers Assistant GIS laboratory CSU Stanislaus, Turlock, Ca.
2008 – Guest Lecturer, California State University Stanislaus, Turlock, Ca.
2011-2012– Teachers Assistant, University of California, Merced, Ca.

- Previously held BLM Permit CA-10-03

Approved as Crew Chief Southern Nevada, Winnemucca, and Carson City Districts

SUMMARY OF QUALIFICATIONS

Mr. Kile's 18 years' experience with some of California's leading cultural resource management firms, and as a private consultant includes all phases of archaeological investigations of prehistoric and historical resources; evaluations of sites, mines, logging activity, railroads, irrigation, and hydro-electric projects for compliance with the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), and the National Historic Preservation Act (NHPA). Mr. Kile's experience includes project design, personnel management, multi-party project coordination and working knowledge of Federal, State and County laws.

AREAS OF EXPERTISE:

- A working knowledge of California Environmental Quality Act
- National Environmental Policy Act
- National Historic Preservation Act
- Consultation with Native American groups and concerned persons
- Preparation of Archaeological Research Design proposals,
- Preparation of Archaeological Technical Reports

records searches, site plotting, rectifying field records, field transects, excavation, mapping, recordation, laboratory analysis, organization of site records, use of Total Station, and Geographical Information Systems.

RELEVANT EXPERIENCE

Principal Investigator, Fine Gold, Madera 2022 Bridge 41C0001 Replacement Road 200 at Fine Gold Creek. Monitoring for Historic and prehistoric resources, recordation of historic mill site.

Principal Investigator, Eco-Village Project, Mariposa, 2020. Culturescape. Phase I Investigation of 1800 acres for the potential development of the property. This included recordation of 35 historic and prehistoric sites within a portion of the former Las Mariposas Grant.

Principal Investigator, County of Madera, the Mid-Town Connector, Oakhurst 2015- 2016, 2018-2019. Culturescape Extended Phase I Investigation of CA-MAD-2824/H**.** The purpose of the investigation was to determine vertical and horizontal extent of the site through positive identification or negative sampling of cultural materials only.
Phase II evaluation of the site to determine the eligibility of the resource for entry into the California Inventory of Historic Places

Principal Investigator/Monitor for Bridge 39C0023) La Grange Road over Dry Creek, Merced, observed demolition and directed protective measures for existing prehistoric resources.

Principal Investigator, Archaeological Survey Report of CVIN Fiber Optic Conduit and Facility Installation Escalon-Bellota Road (J6) and East Groves

Road Farmington, Ca. 2018 Phase I Survey of 1.5 miles of roadway for proposed fiber optics route.

Principal Investigator, Cultural Inventory for Ponderosa Telephone Fiber Optic Aerial Support installation, Central Camp Ca. 2018 Phase I survey of 1.5 miles of utility lines in Central Camp.

Principal Investigator, Central Valley Independent Network, The Central Valley Next Generation Broadband Infrastructure Project, Cultural Resource Inventory, Auburn, Ca. 2015 Culturescape
Phase I and report for fiber optic transmission lines.

Principal Investigator, Cultural Resources Inventory for Hillview Water Company Infrastructure Improvements, Raymond, Ca. 2015 Culturescape Phase I survey and report for compliance of the California Environmental Quality Act for requirements of the California Department of Public Health (CDPH) Proposition 50 Water Improvement Grant.

Principal Investigator, Historical Properties Survey Report and Archaeological Survey Report for Tully Road Reconstruction STPL 5411 (014) Hughson, Stanislaus County Ca. 2014 Culturescape. Phase I survey and report for compliance with FHWA guidelines.

Principal Investigator, Cultural Inventory for 13-MPRO-191 WaterSmart Grant for Madera Irrigation District Water Conservation, Telemetry and Delivery System Management Improvement Project, Madera County California. 2013 Culturescape
Phase I Survey in conjunction with a Bureau of Reclamation grant to replace manual controls and gauges with automated flume gates and flow meters. This included research into California irrigation and generally focused on built environment.

Principal Investigator, Avoidance of Site CA-COL-245/H (NTIA 101004A) Colusa, California. Central Valley Independent Network. The Central Valley Next Generation Broadband Infrastructure Project 2013 Culturescape
Phase III Investigation. This research was conducted in an effort to avoid a previously located site within downtown Colusa and to determine if there were undisturbed cultural deposits for the purpose of securing a viable route for fiber optics cables. The project consisted of excavation of 8 test units from 1 X 1 meters to 2 X 1 meters that were excavated to a depth of 2. 5 meters. The conclusion was that this substrata was disturbed throughout the proposed route.

Principal Investigator, , Cultural Resource Inventory, Evaluation and Cultural Mitigation of APN 092-030-100 El Dorado County, California for Central Valley Independent Network, The Central Valley Next Generation Broadband Infrastructure Project 2013 Culturescape, Extended Phase I Investigation and evaluation of two sites affected by a bentonite spill

Project Archaeologist, Gil Ranch Storage LLC, Madera County, Ca. 2009 ENTRIX
This project consisted of placement of 26.5 miles of pipeline for a natural gas storage facility in Madera County. Investigations included monitoring, coordinating with GRS management and various construction crews on a daily basis and coordination with Native American Monitors during excavations through recorded sites. Daily reports were used for compliance with the California Public Utilities Commission, Army Corp of Engineers, and Office of Historic Preservation

Field Supervisor, Sweetwater Mine Evaluation. Mariposa County 2006, Applied Earthworks
Field supervision and assessment of mine property for evaluation for eligibility for inclusion into the National Register of Historic Places. Reports for this project complied with Caltrans requirements California Environmental Quality Act and Section 106 of the Nation Historic Preservation Act

Field Supervisor, San Joaquin/ Big Dreamer Mine Evaluation North Fork, Madera County, 2006, Applied Earthworks.
Duties included field supervision and assessment of mine property for evaluation for eligibility for inclusion into the National Register of Historic Places. Reports for this project complied with Caltrans requirements California Environmental Quality Act and Section 106 of the Nation Historic Preservation Act

Principal Investigator, CALTRANS Contract 10- OP7704 Emergency Road Widening for Ferguson Slide, Highway 120 Priest Grade 2006 Culturescape
This project consisted of monitoring emergency road widening conducted as a result of the landslide of Ferguson Ridge on Highway 140 in Mariposa County. Duties included recordation of mine trails subsumed by highway construction and identification of historic and prehistoric artifacts. Reports for this project complied with Caltrans requirements California Environmental Quality Act and Section 106 of the Nation Historic Preservation Act