DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT
1010 10TH Street, Suite 3400, Modesto, CA 95354
Planning Phone: (209) 525-6330 Fax: (209) 525-5911
Building Phone: (209) 525-6557 Fax: (209) 525-7759

CEQA Referral Initial Study And Notice of Intent to Adopt a Mitigated Negative Declaration

Date:	**September 25, 2024**
To:	**Distribution List (See Attachment A)**
From:	**Jeremy Ballard, Senior Planner, Planning and Community Development**
Subject:	**GENERAL PLAN AMENDMENT AND REZONE APPLICATION NO. PLN2021-0052 – PATTAR TRUCKING**
Comment Period:	**September 25, 2024 – October 28, 2024**
Respond By:	**October 28, 2024**
Public Hearing Date:	**November 21, 2024**
Time:	**6:00 P.M.**
Location:	**Tenth Street Place** **1010 10th Street, Modesto, CA 95354** **Chambers – Basement Level**

You may have previously received an Early Consultation Notice regarding this project, and your comments, if provided, were incorporated into the Initial Study. Based on all comments received, Stanislaus County anticipates adopting a Mitigated Negative Declaration for this project. This referral provides notice of a 30-day comment period during which Responsible and Trustee Agencies and other interested parties may provide comments to this Department regarding our proposal to adopt the Mitigated Negative Declaration.

All applicable project documents are available for review at: Stanislaus County Department of Planning and Community Development, 1010 10th Street, Suite 3400, Modesto, CA 95354. Please provide any additional comments to the above address or call us at (209) 525-6330 if you have any questions. Thank you.

Applicant:	**Harwinder Pattar, Pattar Trucking**
Project Location:	**4325 West Taylor Road, between State Route 99 and North Washington Road, in the Keyes/Turlock area.**
APN:	**045-053-009**
Williamson Act Contract:	**N/A**
General Plan:	**Agriculture**
Current Zoning:	**General Agriculture (A-2-40)**

Project Description: **Request to amend the General Plan and zoning designations from Agriculture and General Agriculture (A-2-40) to a new Planned Development, to permit an 80 space commercial semi-truck parking facility on 6.2-acres of a 10-acre parcel.**

Full document with attachments available for viewing at:
http://www.stancounty.com/planning/pl/act-projects.shtm

GENERAL PLAN AMENDMENT AND REZONE APPLICATION NO. PLN2021-0052 – PATTAR TRUCKING
Attachment A

Distribution List

X	CA DEPT OF CONSERVATION Land Resources		STAN CO ALUC
X	CA DEPT OF FISH & WILDLIFE		STAN CO ANIMAL SERVICES
	CA DEPT OF FORESTRY (CAL FIRE)	X	STAN CO BUILDING PERMITS DIVISION
X	CA DEPT OF TRANSPORTATION DIST 10	X	STAN CO CEO
X	CA OPR STATE CLEARINGHOUSE		STAN CO CSA
X	CA RWQCB CENTRAL VALLEY REGION	X	STAN CO DER
	CENTRAL VALLEY FLOOD PROTECTION		STAN CO ERC
X	CITY OF: TURLOCK	X	STAN CO FARM BUREAU
X	COMMUNITY SERVICES DIST: KEYES	X	STAN CO HAZARDOUS MATERIALS
X	COOPERATIVE EXTENSION		STAN CO PARKS & RECREATION
	COUNTY OF:	X	STAN CO PUBLIC WORKS
X	DER - GROUNDWATER RESOURCES DIVISION		STAN CO PUBLIC WORKS - SURVEY
X	FIRE PROTECTION DIST: KEYES		STAN CO RISK MANAGEMENT
X	GSA: WEST TURLOCK SUBBASIN	X	STAN CO SHERIFF
	HOSPITAL DIST:	X	STAN CO SUPERVISOR DIST TWO: CHIESA
X	IRRIGATION DIST: TURLOCK	X	STAN COUNTY COUNSEL
X	MOSQUITO DIST: TURLOCK	X	StanCOG
X	STANISLAUS COUNTY EMERGENCY MEDICAL SERVICES	X	STANISLAUS FIRE PREVENTION BUREAU
X	MUNICIPAL ADVISORY COUNCIL: KEYES	X	STANISLAUS LAFCO
X	PACIFIC GAS & ELECTRIC	X	STATE OF CA SWRCB – DIV OF DRINKING WATER DIST. 10
	POSTMASTER:	X	SURROUNDING LAND OWNERS
X	RAILROAD: UNION PACIFIC		INTERESTED PARTIES
X	SAN JOAQUIN VALLEY APCD	X	TELEPHONE COMPANY: AT&T
X	SCHOOL DIST 1: KEYES UNION	X	TRIBAL CONTACTS (CA Government Code §65352.3)
X	SCHOOL DIST 2: TURLOCK UNIFIED		US ARMY CORPS OF ENGINEERS
	WORKFORCE DEVELOPMENT	X	US FISH & WILDLIFE
X	STAN CO AG COMMISSIONER		US MILITARY (SB 1462)
			USDA NRCS
			WATER DIST:

STANISLAUS COUNTY
CEQA REFERRAL RESPONSE FORM

TO: **Stanislaus County Planning & Community Development**
1010 10th Street, Suite 3400
Modesto, CA 95354

FROM: _____

SUBJECT: **GENERAL PLAN AMENDMENT AND REZONE APPLICATION NO. PLN2021-0052 – PATTAR TRUCKING**

Based on this agency's particular field(s) of expertise, it is our position the above described project:

_____ Will not have a significant effect on the environment.
_____ May have a significant effect on the environment.
_____ No Comments.

Listed below are specific impacts which support our determination (e.g., traffic general, carrying capacity, soil types, air quality, etc.) – (attach additional sheet if necessary)

1.
2.
3.
4.

Listed below are possible mitigation measures for the above-listed impacts: *PLEASE BE SURE TO INCLUDE WHEN THE MITIGATION OR CONDITION NEEDS TO BE IMPLEMENTED (PRIOR TO RECORDING A MAP, PRIOR TO ISSUANCE OF A BUILDING PERMIT, ETC.):*

1.
2.
3.
4.

In addition, our agency has the following comments (attach additional sheets if necessary).

_____

_____

Response prepared by:

_____

Name Title Date

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT
1010 10TH Street, Suite 3400, Modesto, CA 95354
Planning Phone: (209) 525-6330 Fax: (209) 525-5911
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CEQA INITIAL STUDY

Adapted from CEQA Guidelines APPENDIX G Environmental Checklist Form, Final Text, January 1, 2020

1.	**Project title:**	General Plan Amendment and Rezone Application No. PLN2021-0052 – Pattar Trucking
2.	**Lead agency name and address:**	Stanislaus County 1010 10th Street, Suite 3400 Modesto, CA 95354
3.	**Contact person and phone number:**	Jeremy Ballard, Senior Planner (209) 525-6330
4.	**Project location:**	4325 West Taylor Road, between State Route 99 and North Washington Road, in the Keyes/Turlock area. APN: 045-053-009.
5.	**Project sponsor's name and address:**	Harwinder Pattar 4325 West Taylor Road Turlock, CA 95380
6.	**General Plan designation:**	Agriculture
7.	**Zoning:**	General Agriculture (A-2-40)

8. Description of project:

This is a request to amend the General Plan and zoning designations from Agriculture and General Agriculture (A-2-40) to a new Planned Development, to permit an 80-space commercial tractor-trailer truck parking facility on 6.2± acres of a 10± acre parcel.

The project includes the development of a parking lot consisting of up to 80 stalls for the parking of tractor-trailers owned and operated by Pattar Trucking, and 12 passenger vehicle stalls for employee parking. No on-site parking spaces will be rented out to non-contracted employees. The site is currently improved with a single-family dwelling, agricultural barn, two storage buildings and a graveled parking area. The project proposes to convert the existing 1,725 square-foot barn and 1,933 square-foot single-family residence, located on the southwest portion of the project site, to be used for a maintenance shop for light repairs and an administrative office, respectively. On-site maintenance within the shop building will be limited to visual inspections, tire changes, and fluid checks. No engine repairs or other body work is proposed as part of the project. The subject General Plan Amendment and Rezone application was submitted in response to a Code Enforcement complaint, due to the parking of tractor-trailers, and occupancy of the dwelling and barn for maintenance and office purposes, having already been occurring on the parcel without the required land use entitlements and building permits having been obtained.

The applicant anticipates up to 12 full-time daily on-site employees on a maximum shift for administrative and mechanical work. The tractor-trailer parking area is proposed to be accessible to drivers 24 hours a day, seven days a week; however, the office and shop will only operate Monday through Friday, 8:00 a.m. to 5:00 p.m. The operation will serve the local food production industry but will include exportation of products out of state. No cargo will be stored on-site, and no loading or off-loading of trailers is proposed to occur. The site will also be enclosed with a combination of six-foot-tall chain link, wrought iron fencing, and include frontage landscape, consisting of crape myrtle street trees, hedges, groundcover, and accent plants along West Taylor Road. There is no advertising signage proposed as part of this request.

The applicant proposes to maintain storm drainage overland, utilizing the remaining vacant southeastern 3.8-acre portion of the site. Additionally, the applicant proposes to utilize the existing domestic well and septic system for the project. The project anticipates an average of 2,500 gallons per-day. Based on the number of individuals on-site per-day the existing well meets the criteria of a new public water system. The project site will maintain separate driveways for the parking lot and the shop/office area.

9. Surrounding land uses and setting: Scattered single-family dwellings and irrigated agriculture to the south and west; the Turlock Irrigation District Lateral No. 3 to the south; recreational vehicle (RV) sales and service facilities; unpermitted truck parking facilities to the northwest; commercial development and State Route 99 to north and east; and the City of Turlock to the southeast.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):
CalTrans
Stanislaus County Department of Public Works
Stanislaus County Department of Environmental Resources
Stanislaus County Department of Planning and Community Development – Building Permits Division
San Joaquin Valley Air Pollution Control District

11. Attachments:

I. Air Quality, Health Risk Analysis, and Greenhouse Gas Technical Memorandum performed by Johnson Johnson and Miller Air Quality Consulting Services, dated August 30, 2023.
II. Transportation Impact Analysis for Pattar Transport prepared by KD Anderson & Associates, Inc., dated February 21, 2023.
III. Supplemental Traffic Memorandum for the Pattar Transportation Project performed by Wood Rodgers, dated October 20, 2023.
IV. Records search from the Central California Information Center, dated March 17, 2021.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ **Aesthetics**	☐ **Agriculture & Forestry Resources**	☐ **Air Quality**
☐ **Biological Resources**	☐ **Cultural Resources**	☐ **Energy**
☐ **Geology / Soils**	☐ **Greenhouse Gas Emissions**	☐ **Hazards & Hazardous Materials**
☐ **Hydrology / Water Quality**	☐ **Land Use / Planning**	☐ **Mineral Resources**
☐ **Noise**	☐ **Population / Housing**	☐ **Public Services**
☐ **Recreation**	☒ **Transportation**	☐ **Tribal Cultural Resources**
☐ **Utilities / Service Systems**	☐ **Wildfire**	☐ **Mandatory Findings of Significance**

DETERMINATION: (To be completed by the Lead Agency)
On the basis of this initial evaluation:

☐ **I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.**

☒ **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 revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.**

☐ **I find that 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 although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.**

Signature on File **September 20, 2024**
Prepared by Jeremy Ballard, Senior Planner Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration.

Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

> **a) Earlier Analysis Used. Identify and state where they are available for review.**
>
> **b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.**
>
> **c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.**

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). References to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

> **a) the significant criteria or threshold, if any, used to evaluate each question; and**
>
> **b) the mitigation measure identified, if any, to reduce the impact to less than significant.**

ISSUES

I. AESTHETICS – Except as provided in Public Resources Code Section 21099, could the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X	
c) In non-urbanized areas, 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?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

Discussion: The only designated scenic resource in the County is along Interstate 5, which is approximately 16± miles to the west of the project site. The proposed project will not be visible from this state scenic highway. The site itself is not considered to be a scenic resource or a unique vista.

As stated in the *Project Description,* the project proposes to develop perimeter fencing and frontage landscaping. A referral response was received from the City of Turlock, stating that although the project is not located within their Local Agency Formation Commission (LAFCO) adopted Sphere of Influence (SOI), the project site abuts the City limits to the southeast. Accordingly, they are requesting full frontage improvements to the project site, consisting of the following to City standards: landscaping along the road frontage and eastern portion of the project site, within employee parking areas and the proposed drainage basin; installation of curb, gutter, sidewalk; and pavement of all driveways, drive aisles, and parking areas. Additionally, the City requested to review and approve the landscape plan and any advertising signage viewable from Taylor Road prior to issuance of a permit.

The County's General Plan SOI policy states that for projects located outside but within one mile of an adopted SOI of a City and within a City's adopted general plan area, the County has final discretion on adoption of that City's development standards. Based on the current development of West Taylor Road, curb, gutter, no pedestrian facilities exist west of State Route 99. Ultimately, the Board of Supervisors will determine as to apply the requested development standard. All other comments related to signage, paving, and landscaping will be incorporated as development standards for the project.

Any proposed lighting will be subject to a photometric lighting plan to ensure no light spillage or nightglow takes place.

The project would not substantially damage scenic resources or create a new source of light glare. With development standards in place the proposed project would not substantially degrade the existing visual character or degrade the surroundings.

Mitigation: None.

References: Application information; Stanislaus County Zoning Ordinance; Referral response from the City of Turlock dated March 28, 2022; Stanislaus County General Plan and Support Documentation[1].

II. AGRICULTURE AND FOREST 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 Department 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:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?			**X**	
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?			**X**	
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))?			**X**	
d) Result in the loss of forest land or conversion of forest land to non-forest use?			**X**	
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?			**X**	

Discussion: The site is not enrolled in a Williamson Act Contract. The USDA Natural Resources Conservation Service's Western Stanislaus County Soil Survey indicates that nearly the entire property is made Dinuba Sandy loam 0 to 1 percent slopes, which has a Storie Index of 86 and is considered Grade 1. The California Revised Storie Index is a rating system based on soil properties that dictate the potential for soils to be used for irrigated agricultural production in California. This rating system grades soils with an Index rating of 81 and 100 as excellent soils to be used for irrigated farmland. Stanislaus County considers land that meets at least one of the following requirements to be prime farmland under the Uniform Rules: parcels comprised of Grade 1 or 2 soils; irrigated pastureland which supports livestock used for the production of food and fiber; and land used for unprocessed agricultural plant production with an annual gross value of not less than eight hundred dollars per acre. The project site does meet the County's definition for prime agriculture under the County's Uniform Rules However, the California Department of Conservation's Important Farmland Maps classifies the project site as Semi-agriculture and Rural Commercial Land.

The surrounding area is comprised of scattered single-family dwellings and irrigated agriculture to the south and west; the Turlock Irrigation District Lateral No. 3 to the south, a RV sales and service facilities, an unpermitted truck parking facilities to the northwest, commercial development and State Route 99 to north and east, and the City of Turlock to the southeast. The nearest parcels in production agriculture is the 19-acre parcel, identified as Assessor Parcel Number (APN) 045-053-032, which abuts the project site to the west, and the parcels immediately to the south across the West Taylor Road and

the Turlock Irrigation District (TID) lateral. The nearest parcels enrolled in a Williamson Act Contract area is also directly to the south.

The project site is located within the TID service boundary. The project was referred to TID, which responded to the request, stating that a private irrigation pipeline is located within the project site and that if irrigation of the site is to cease then the applicant shall get approval for sealing of all irrigation gates on the property. A development standard will be added to the project to address these comments.

To allow for the development of the proposed parking facility, maintenance shop, and office, the project site must be rezoned to Planned Development based on the proposed use exceeding the criteria in the General Agriculture (A-2) zoning district that allow a use permit for truck parking. The General Plan designation of the parcel is Agriculture and must be consistent with the proposed zoning district of Planned Development; accordingly, the application includes a General Plan amendment to Planned Development as well. Goal 2, Policy 2.7 of the Agricultural Element states that, "Proposed amendments to the General Plan Diagram (map) that would allow the conversion of agricultural land to non-agricultural uses shall be approved only if they are consistent with the County's conversion criteria." Implementation 1, of the Agricultural Element's Policy 2.7 describes the procedures for processing amendments to the General Plan land use designation from "Agriculture" to another designation:

> *Conversion Consequences. The direct and indirect effects, as well as the cumulative effects, of the proposed conversion of agricultural land shall be fully evaluated.*
>
> *Conversion Considerations. In evaluating the consequences of a proposed amendment, the following factors shall be considered: plan designation; soil type; adjacent uses; proposed method of sewage treatment; availability of water, transportation, public utilities, fire and police protection, and other public services; proximity to existing airports and airstrips; impacts on air and water quality, wildlife habitat, endangered species and sensitive lands; and any other factors that may aid the evaluation process.*
>
> *Conversion Criteria. Proposed amendments to the General Plan Diagram (map) that would allow the conversion of agricultural land to urban uses shall be approved only if the Board of Supervisors makes the following findings:*
>
> *A. Overall, the proposal is consistent with the goals and policies of the General Plan.*
> *B. There is evidence on the record to show a demonstrated need for the proposed project based on population projections, past growth rates, and other pertinent data.*
> *C. No feasible alternative site exists in areas already designated for the proposed uses.*
> *D. Approval of the proposal will not constitute a part of, or encourage, piecemeal conversion of a larger agricultural area to non-agricultural uses and will not be growth-inducing (as used in the California Environmental Quality Act).*
> *E. The proposed project is designed to minimize conflict and will not interfere with agricultural operations on surrounding agricultural lands or adversely affect agricultural water supplies.*
> *F. Adequate and necessary public services and facilities are available or will be made available as a result of the development.*
> *G. The design of the proposed project has incorporated all reasonable measures, as determined during the CEQA review process, to mitigate impacts to agricultural lands, fish and wildlife resources, air quality, water quality and quantity, or other natural resources.*

While the site is unique for a variety of reasons, including its adjacency to commercial development along Taylor Court as well as the City of Turlock, and State Route 99, to the east. However, the site is physically separated from this development by the Union Pacific rail line that runs northwest to the southwest, parallel to Taylor Court, extending across Taylor Road. Conversion of the 10-acre project site to allow for the parking of semi-trucks is not anticipated to lead to, either directly or indirectly, the conversion of agricultural lands adjacent to the project or be conflict with a Williamson Act Contract or adjacent contracted lands. However, the proposed conversion would not be consistent with logical and orderly land use policies which is a requirement of the conversion criteria of Goal 2 of the Agricultural Element. From a land use perspective, it is the County's position that commercial or industrial development is incompatible with the Agriculturally designated setting of the area west of the rail-line.

The project was referred to the Department of Conservation, however no response has been received to date.

All new or expanding uses approved by discretionary permit in the A-2 zoning district or on a parcel adjoining the A-2 zoning district are required to incorporate a minimum 150-foot-wide agricultural buffer setback, or 300-foot-wide buffer setback for people-intensive uses. Public roadways, utilities, drainage facilities, rivers and adjacent riparian areas, landscaping, parking lots, and similar low people intensive uses are permitted uses within the buffer setback area. The site is adjacent to agriculturally zoned parcels to the east, north, and south. The primary use requested is parking of up 80 semi-trucks with administrative and repairs proposed to take place in existing buildings. The operation proposes up to 12 employees reporting to the site daily, which would be considered a low-people intensive use. While the parking area would be exempt from the buffer requirement, the existing buildings are within the 150-wide buffer area along the eastern parcel line. The applicant has requested an alternative to the 150-foot agricultural buffer consisting of a reduced setback of 60 feet as activities are proposed to take place within existing buildings. Six-foot-tall chain link fencing between the project site and adjacent parcel has been proposed to limit trespass. The Agricultural Commissioner's office has not stated any objection to the proposed alternative to the agricultural buffer requirement.

Mitigation: None

References: Application information; Natural Resources Conservation Service Soil Survey; application information; Stanislaus Soil Survey (1957); California State Department of Conservation Farmland Mapping and Monitoring Program - Stanislaus County Farmland 2018; Referral Response from the Turlock Irrigation District dated March 14, 2022; Stanislaus County General Plan and Support Documentation[1].

III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Conflict with or obstruct implementation of the applicable air quality plan?			**X**	
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			**X**	
c) Expose sensitive receptors to substantial pollutant concentrations?			**X**	
d) Result in other emissions (such as those odors adversely affecting a substantial number of people?			**X**	

Discussion: The proposed project is located within the San Joaquin Valley Air Basin (SJVAB) and, therefore, falls under the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). In conjunction with the Stanislaus Council of Governments (StanCOG), the SJVAPCD is responsible for formulating and implementing air pollution control strategies. The SJVAPCD's most recent air quality plans are the 2007 PM10 (respirable particulate matter) Maintenance Plan, the 2008 PM2.5 (fine particulate matter) Plan, and the 2007 Ozone Plan. These plans establish a comprehensive air pollution control program leading to the attainment of state and federal air quality standards in the SJVAB, which has been classified as "extreme non-attainment" for ozone, "attainment" for respirable particulate matter (PM-10), and "non-attainment" for PM 2.5, as defined by the Federal Clean Air Act.

The primary source of air pollutants generated by this project would be classified as being generated from "mobile" sources. Mobile sources would generally include dust from roads, farming, and automobile exhausts. Mobile sources are generally regulated by the Air Resources Board of the California EPA which sets emissions for vehicles and acts on issues regarding cleaner burning fuels and alternative fuel technologies. As such, the District has addressed most criteria air pollutants through basin wide programs and policies to prevent cumulative deterioration of air quality within the Basin. The project will increase traffic in the area and, thereby, impacting air quality.

Potential impacts on local and regional air quality are anticipated to be less than significant, falling below SJVAPCD thresholds, as a result of the nature of the proposed project and project's operation after construction. Implementation of

the proposed project would fall below the SJVAPCD significance thresholds for both short-term construction and long-term operational emissions, as discussed below. Because construction and operation of the project would not exceed the SJVAPCD significance thresholds, the proposed project would not increase the frequency or severity of existing air quality standards or the interim emission reductions specified in the air plans.

The District provided a project referral response requesting a more detail analysis of the project's construction and operational emissions be completed, utilizing the California Estimator Emission Model (CalEEMod), and, if criteria pollutants are more than 100 lbs per-day of any pollutant. Additionally, to assess potential health impacts to nearby sensitive receptors resulting from project-related toxic air contaminants (TAC) emissions, the District also recommended that a prioritization screening be conducted, with a refined Health Risk Assessment (HRA) prepared if the project is determined to exceed the District's thresholds of 20 in a million for carcinogenic risk or 1.0 for either the Acute or Chronic Hazard Indices.

An Air Quality, Health Risk Analysis, and Greenhouse Gas Technical Memorandum by Johnson Johnson and Miller Air Quality Consulting Services dated August 30, 2023 was completed for the project. The analysis found that the construction and operational phases of the proposed project would not exceed any of the District's air quality thresholds for criteria pollutants. Additionally, the analysis found that the project would not be a significant source of Toxic Air containments, exceed the thresholds for carcinogenic risk, or acute or chronic hazard indices, or be a source of odor. Ultimately, the analysis found the project as a whole would not conflict with or obstruct with any applicable air quality plans, impact sensitive receptors, or result in cumulatively considerable increases of criteria pollutants. The Air District reviewed the analysis and agreed with findings. Although, no mitigation was included, the project will still be subject to all applicable District rules. A development standard will be added to the project to ensure consultation takes place prior to issuance of any permit.

Although the applicant proposes to gravel the semi-truck parking area, a referral response was received from the City of Turlock, requesting that all commercial driveways, drive aisles, vehicle storage area and parking lots be paved in accordance with City standards. Pavement of these areas would reduce the potential amount of dust and similar pollutants being generated. The County's General Plan Sphere of Influence policy states that projects that are located outside but within one mile of an adopted sphere of influence of a City and within a City's adopted general plan area, the County has final discretion on adoption of that City's development standards. The request to pave these areas would be consistent with commercial and industrial development within the County, however, the Board of Supervisors will have the ultimate determination on whether to apply the requested development standards.

Potential impacts to air quality from the proposed project are also evaluated by Vehicle Miles Traveled (VMT). The calculation of VMT is the number of cars/trucks multiplied by the distance traveled by each car/truck. California Environmental Quality Act (CEQA) Guidelines Section 15064.3, subdivision (a), defines VMT as the amount and distance of automobile travel attributable to a project. A technical advisory on evaluating transportation impacts in CEQA published by the Governor's Office of Planning and Research (OPR) in December of 2018 clarified the definition of automobiles as referring to on-road passenger vehicles, specifically cars and light trucks. While heavy trucks are not considered in the definition of automobiles for which VMT is calculated for, heavy-duty truck VMT could be included for modeling convenience. According to the same OPR technical advisory, many local agencies have developed a screening threshold of VMT to indicate when detailed analysis is needed. Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per-day generally may be assumed to cause a less than significant transportation impact. A Transportation Impact Analysis, dated February 21, 2023 was completed for the project by KD Anderson & Associates, Inc. The analysis included the projects potential impacts on VMT, concluding that the project qualified under the small projects screening criteria, consisting of less than 110 average daily trips and concluded the project is anticipated to have less than a significant impact on VMT.

Significant impacts to air quality are not expected as a result of this project.

Mitigation: None

References: Application information; San Joaquin Valley Air Pollution Control District - Regulation VIII Fugitive Dust/PM-10 Synopsis; www.valleyair.org; Referral response from the San Joaquin Valley Air Pollution Control District dated, March 9, 2022 and January 2, 2024; Air Quality, Health Risk Analysis, and Greenhouse Gas Technical Memorandum performed by Johnson Johnson and Miller Air Quality Consulting services, dated August 30, 2023; Referral response from the City of Turlock dated March 28, 2022; Transportation Impact Analysis for Pattar Transport prepared by KD Anderson & Associates, Inc., dated February 21, 2023; Stanislaus County General Plan and Support Documentation[1].

IV. BIOLOGICAL RESOURCES -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
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?			X	
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?			X	
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			X	
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?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
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?			X	

Discussion: It does not appear this project will result in impacts to endangered species or habitats, locally designated species, or wildlife dispersal or migration corridors. There are no known sensitive or protected species or natural community located on the site. The project is located within the Ceres Quad of the California Natural Diversity Database. Special-status species known to populate the Ceres Quad include the following: Swainson's hawk, the tricolored blackbird, Steelhead (Central Valley DPS), and the Valley Elderberry Longhorn Beetle. The project site itself is located within a 1-mile buffer of a reporting of atriplex cordulata (heartscale). Additionally, a reporting of atriplex subtilis (subtle orache) was documented within 100-feet north of the project site; however, both of these species are reported in 1936 and presumed extant. Large portions of the project site have been previously disturbed by agricultural practices The project site is located just west of the Union Pacific rail line and State Route 99. Because of this, the site would have a low probability of containing suitable habitat.

The project will not conflict with a Habitat Conservation Plan, a Natural Community Conservation Plan, or other locally approved conservation plans. Impacts to endangered species or habitats, locally designated species, or wildlife dispersal or migration corridors are considered to be less than significant.

An early consultation was referred to the California Department of Fish and Wildlife and no response was received.

Mitigation: None.

References: Application information; California Department of Fish and Wildlife's Natural Diversity Database Quad Species List; Stanislaus County General Plan and Support Documentation[1].

V. CULTURAL RESOURCES -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5?			X	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?			X	
c) Disturb any human remains, including those interred outside of formal cemeteries?			X	

Discussion: As this project is request to amend the General Plan, it was referred to the tribes listed with the Native American Heritage Commission (NAHC), in accordance with SB 18, for a 90-day review period. Tribal notification of the project was not referred to any tribes in conjunction with AB 52 requirements, as Stanislaus County has not received any requests for consultation from the tribes listed with the NAHC. A response was received from the Tuolumne Me-Wuk Tribal Council stating that the parcel was considered as disturbed land and requested that a condition was placed on the project for any inadvertent discovery during the construction process. A records search conducted by the Central California Information Center (CCIC) indicated that there are no historical, cultural, or archeological resources recorded on-site but that the site has a moderate to high sensitivity for the discovery of such resources. The project site historically and continually in agricultural production, which would be less likely to include undisturbed cultural resources. A development standard will be added to the project which requires if any cultural or tribal resources are discovered during project-related activities, all work is to stop, and the lead agency and a qualified professional are to be consulted to determine the importance and appropriate treatment of the find. With development standards in place, impacts to cultural resources impacts are considered to be less-than significant.

Mitigation: None.

References: Application material; Records search from the Central California Information Center for the project site, March 17, 2021; Referral response from Tuolumne Me-Wuk Tribal Council, April 20, 2022; Stanislaus County General Plan and Support Documentation[1].

VI. ENERGY -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

Discussion: The California Environmental Quality Act (CEQA) Guidelines Appendix F states that energy consuming equipment and processes, which will be used during construction or operation such as: energy requirements of the project by fuel type and end use, energy conservation equipment and design features, energy supplies that would serve the project, total estimated daily vehicle trips to be generated by the project, and the additional energy consumed per trip by mode, shall be taken into consideration when evaluating energy impacts. Additionally, the project's compliance with applicable state or local energy legislation, policies, and standards must be considered.

A referral response was received from Turlock Irrigation District (TID) indicating that electrical services would not be impacted by the proposed project and that any new electrical services or overhead facility relocations are required to be approved by the District. Development standards will be added to the project to address the District's comments.

The proposed structures are subject to the mandatory planning and design, energy efficiency, water efficiency and conservation, material conservation and resources efficiency, and environmental quality measures of the California Green Building Standards (CALGreen) Code (California Code of Regulations, Title 24, Part 11). Building permits will be required for the conversion of the barn and single-family dwelling into the proposed shop and office. Development Standards will be added to the project requiring that a building permit be obtained and that all building permits, for the structures to be utilized under this request, be finalized by the Stanislaus County Building Permits Division prior to operation. Additionally, any future construction activities will be required to occur in compliance with all SJVAPCD regulations, as discussed in Section III – Air Quality.

Energy consuming equipment and processes include construction equipment, trucks, and the employee vehicles. As discussed in Section III – *Air Quality*, a Transportation Impact Analysis was completed for the project. The analysis included the projects potential impacts on VMT, concluding that the project qualified under the small projects screening criteria, consisting of less than 110 average daily trips and concluded the project is anticipated to have less than a significant impact on VMT.

It does not appear that this project will result in significant impacts to the wasteful, inefficient, or unnecessary consumption of energy resources. Accordingly, the potential impacts to energy are considered to be less than significant.

Mitigation: None

References: Application information; San Joaquin Valley Air Pollution Control District - Regulation VIII Fugitive Dust/PM-10 Synopsis; www.valleyair.org; Referral response from the Turlock Irrigation District dated March 14, 2022; Transportation Impact Analysis for Pattar Transport prepared by KD Anderson & Associates, Inc., dated February 21, 2023; Stanislaus County General Plan and Support Documentation[1].

VII. GEOLOGY AND SOILS -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:			**X**	
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.			**X**	
ii) Strong seismic ground shaking?			**X**	
iii) Seismic-related ground failure, including liquefaction?			**X**	
iv) Landslides?			**X**	
b) Result in substantial soil erosion or the loss of topsoil?			**X**	
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?			**X**	

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			**X**	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?			**X**	
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			**X**	

Discussion: The USDA Natural Resources Conservation Service's Western Stanislaus County Soil Survey indicates that nearly the entire property is made Dinuba Sandy loam 0 to 1 percent slopes. As contained in Chapter 5 of the General Plan Support Documentation, the areas of the County subject to significant geologic hazard are located in the Diablo Range, west of Interstate 5; however, as per the California Building Code, all of Stanislaus County is located within a geologic hazard zone (Seismic Design Category D, E, or F) and a soils test may be required at building permit application. Results from the soils test will determine if unstable or expansive soils are present. If such soils are present, special engineering of the structure will be required to compensate for the soil deficiency. Any structures constructed or converted as a result of this project will be designed and built according to building standards appropriate to withstand shaking for the area in which they are constructed. An early consultation referral response received from the Department of Public Works indicated that a grading, drainage, and erosion/sediment control plan for the project will be required, subject to Public Works review and Standards and Specifications. Likewise, prior to installation of any new on-site wastewater treatment system (OWTS), the Department of Environmental Resources (DER) provided a referral response requiring the system to meet Measure X requirements for Primary and Secondary wastewater treatment, designed to the maximum occupancy of the proposed structures based on waste/sewage flow rate, and all applicable Local Agency Management Program (LAMP) standards and setbacks. Additionally, they provided a response requesting the applicant provide a site plan showing the design, layout, and location of the OWTS and future 100% expansion area as part of the building permit review process. Any addition or expansion of a septic tank or alternative wastewater disposal system would require the approval of the Department of Environmental Resources (DER) through the building permit process, which also takes soil type into consideration within the specific design requirements.

The project site is not located near an active fault or within a high earthquake zone. Landslides are not likely due to the flat terrain of the area.

DER, Public Works, and the Building Permits Division review and approve any building or grading permit to ensure their standards are met. Development Standards regarding these standards will be applied to the project and will be triggered when a building or grading permit is requested.

Mitigation: None.

References: Application material; Referral response from the Department of Environmental Resources (DER), dated March 15, 2022; Referral response from the Stanislaus County Department of Public Works May 12, 2022; Stanislaus County General Plan and Support Documentation[1].

VIII. GREENHOUSE GAS EMISSIONS -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			**X**	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			**X**	

Discussion: The principal Greenhouse Gasses (GHGs) are carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), sulfur hexafluoride (SF6), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), and water vapor (H2O). CO2 is the reference gas for climate change because it is the predominant greenhouse gas emitted. To account for the varying warming potential of different GHGs, GHG emissions are often quantified and reported as CO2 equivalents (CO2e). In 2006, California passed the California Global Warming Solutions Act of 2006 (Assembly Bill [AB] No. 32), which requires the California Air Resources Board (ARB) design and implement emission limits, regulations, and other measures, such that feasible and cost-effective statewide GHG emissions are reduced to 1990 levels by 2020. Two additional bills, SB 350 and SB32, were passed in 2015 further amending the states Renewables Portfolio Standard (RPS) for electrical generation and amending the reduction targets to 40% of 1990 levels by 2030.

The short-term emissions of GHGs during construction, primarily composed of CO2, CH4, and N2O, would be the result of fuel combustion by construction equipment and motor vehicles. The other primary GHGs (HFCs, PFCs, and SF6) are typically associated with specific industrial sources and are not expected to be emitted by future construction at this project site.

As discussed in Section III – *Air Quality*, an Air Quality, a Health Risk Analysis, and Greenhouse Gas Technical Memorandum was prepared for the project and found that the construction and operational phases of the proposed project would not exceed air quality thresholds for all relevant criteria pollutants. Additionally, the analysis found that the project would not be a significant source of Toxic Air containments or contribute to a significant health risk on nearby sensitive receptors, or be a source of odor.

The memorandum provided an analysis of greenhouse gases as well, finding the project implementation of applicable and feasible GHG reductions would produce an annual emission of 5,627 MT Co_2e per year, which would be representative of the overall declining trend of GHG emissions consistent with 2030, 2045, and 2050 statewide targets. The analysis found the project does not obstruct the State's ability to meet its goals of reducing GHG. Additionally, the analysis found that both the County and City of Turlock do not have adopted GHG reduction plans, therefore, a local project baseline could not be articulated on a project-to-project basis. However, the analysis found the project to be consistent with CARB adopted scoping plans for GHG reductions. Ultimately, the project was found to be less than significant on impacts to GHG. Accordingly, although no mitigation was included, the project will still be subject to all applicable District rules. A development standard will be added to the project to ensure consultation takes place prior to issuance of any permit.

As discussed in Section III – *Air Quality*, a Transportation Impact Analysis was completed for the project. The analysis included the projects potential impacts on VMT, concluding that the project qualified under the small projects screening criteria, consisting of less than 110 average daily trips and concluded the project is anticipated to have less than a significant impact on VMT.

Mitigation: None.

References: Application information; San Joaquin Valley Air Pollution Control District - Regulation VIII Fugitive Dust/PM-10 Synopsis; www.valleyair.org; Referral response from the Turlock Irrigation District, dated March 14, 2022; Referral response from the San Joaquin Valley Air Pollution Control District, dated March 9, 2022; Air Quality, Health Risk Analysis, and Greenhouse Gas Technical Memorandum performed by Johnson Johnson and Miller Air Quality Consulting services, dated August 30, 2023; Transportation Impact Analysis for Pattar Transport prepared by KD Anderson & Associates, Inc., dated February 21, 2023; Stanislaus County General Plan and Support Documentation[1].

IX. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
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?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
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?			X	
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 or excessive noise for people residing or working in the project area?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			X	

Discussion: The County Department of Environmental Resources (DER) is responsible for overseeing hazardous materials. A referral response from the Hazardous Materials (Hazmat) Division of the Stanislaus County Department of Environmental Resources (DER) indicated that the project is anticipated to not have a significant impact with respect to hazards and hazardous materials, that a Phase 1 Environmental Site Assessment (ESA) and, if necessary, Phase II ESA, prior to issuance of a grading permit. During building permit review, the Environmental Health Division of the Department of Environmental Resources (DER) will review the on-site wastewater treatment systems (OWTS) and/or water wells and ensure that all applicable County Local Agency Management Program (LAMP) standards and required setbacks are maintained as applicable.

Pesticide exposure is a risk in areas located in the vicinity of agriculture. Sources of exposure include contaminated groundwater from drift from spray applications. Application of sprays is strictly controlled by the Agricultural Commissioner and can only be accomplished after first obtaining permits. Additionally, agricultural buffers as discussed in Section II – *Agriculture Resources* are intended to reduce the risk of spray exposure to surrounding people. The primary use requested is parking of up 80 semi-trucks with administrative and repairs proposed to take place in existing buildings. The operation proposes up to 12 employees reporting to the site daily, which would be considered a low-people intensive use. While the parking area would be exempt from the buffer requirement, the existing buildings are within the 150-wide buffer area along the eastern parcel line. The applicant has requested an alternative to the agricultural buffer as activities are proposed to take place within existing buildings.

The project site is not listed on the EnviroStor database managed by the CA Department of Toxic Substances Control or within the vicinity of any airport. The site is located in a Local Responsibility Area (LRA) for fire protection and is served by Keyes Fire Protection District. The project was referred to the District, and no comments have been received to date.

No significant impacts associated with hazards or hazardous materials are anticipated to occur as a result of the proposed project.

Mitigation: None.

References: Application information; Referral response from the Department of Environmental Resources – Hazardous Materials Division, dated March 8, 2022; Stanislaus County General Plan and Support Documentation[1].

X. HYDROLOGY AND WATER QUALITY -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			X	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
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:			X	
i) result in substantial erosion or siltation on- or off-site;			X	
ii) substantially increase the rate of amount of surface runoff in a manner which would result in flooding on- or off-site.			X	
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; or			X	
iv) impede or redirect flood flows?			X	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			X	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

Discussion: The project proposes to utilize an existing domestic well and septic system to serve the project. Stormwater capture will take place within a proposed basin located on-site. Areas subject to flooding have been identified in accordance with the Federal Emergency Management Act (FEMA). Run-off is not considered an issue because of several factors which limit the potential impact. These factors include the relatively flat terrain of the subject site, and relatively low rainfall intensities in the Central Valley. A referral response was received from the Central Valley Regional Water Quality Control Board, providing information on potential requirements of the project. A Development standard will be added to the project to ensure consultation with the agency takes place prior to any ground disturbance. Areas subject to flooding have been identified in accordance with the Federal Emergency Management Act. The project site itself is located in Zone X (outside the 0.2 percent floodplain) and, as such, exposure to people or structures to a significant risk of loss/injury/death involving

flooding due to levee/dam failure and/or alteration of a watercourse, at this location is not an issue with respect to this project. Flood zone requirements are enforced through the building permit process. The Building Permits Division also reviews building permits and determines if geotechnical reports are required with submission of building permits. A requirement to obtain all applicable building permits will be incorporated into the project's development standards.

A referral response received from the Stanislaus County Department of Public Works indicated that a grading, drainage, and erosion/sediment control plan for the project is required and will be subject to Public Works review and Standards and Specifications, as well as the submittal of a Storm Water Pollution Prevention Plan (SWPPP) prior to the approval of any grading plan. The submittal and approval of the grading, drainage, erosion/sediment control plan and SWPPP will be made part of the development standards for this project prior to issuance of a building permit. Accordingly, runoff associated with the construction at the proposed project site will be reviewed as part of the grading review process and be required to be maintained on-site.

A referral response was received from the City of Turlock, stating that although the project is not located within their Local Agency Formation Commission (LAFCO) adopted Sphere of Influence (SOI), the project site abuts the City limits at the southeastern portion of the parcel. Accordingly, they are requesting that the proposed stormwater basin be landscaped in accordance with City Standards, The County's General Plan SOI policy states that projects are located outside but within one mile of an adopted sphere of influence of a City and within a City's adopted general plan area, the County has final discretion on adoption of that City's development standards. Ultimately, the Board of Supervisors will determine as to apply the requested development standard.

The project site is located within the Turlock Irrigation District (TID). The project was referred to TID, who responded to the request, stating that a private irrigation pipeline is located within the project site and that if irrigation of the site is to cease then the applicant shall get approval for sealing of all irrigation gates on the property. A development standard will be added to the project to address their comments.

The Sustainable Groundwater Management Act (SGMA) was passed in 2014 with the goal of ensuring the long-term sustainable management of California's groundwater resources. SGMA requires agencies throughout California to meet certain requirements including forming Groundwater Sustainability Agencies (GSA), developing Groundwater Sustainability Plans (GSP), and achieving balanced groundwater levels within 20 years. The site is located in the West Turlock Groundwater Sustainability Agency GSA, which is a part of the Turlock Groundwater Subbasin. The GSA's initial GSP has was adopted on January 6, 2022.

The California Safe Drinking Water Act (California Health and Safety Code (CHSC) Section 116275(h)) defines a Public Water System as a system for the provision of water for human consumption through pipes or other constructed conveyances that has 15 or more service connections or regularly serves at least 25 individuals daily at least 60 days out of the year. A public water system includes the following:

1. Any collection, treatment, storage, and distribution facilities under control of the operator of the system that are used primarily in connection with the system.

2. Any collection or pretreatment storage facilities not under the control of the operator that are used primarily in connection with the system.

3. Any water system that treats water on behalf of one or more public water systems for the purpose of rendering it safe for human consumption.

The project was referred to the Stanislaus County Department of Environmental Resources (DER) – Environmental Health Division and the Environmental Review Committee (ERC), which responded that the project would have a less than significant impact but will constitute a new public water system as defined in CHSC Section 116275(h). DER responded requiring the applicant to submit an application for a water supply permit with the associated technical report to their Department which will determine if the well water meets State mandated standards for water quality. As part of the water supply permitting process, their comment letter indicated that the applicant must also obtain concurrence from the State of California Water Resources Control Board (SWRCB), Drinking Water Division, in accordance to CHSC Section 116527 (SB1263). If the well water does not meet State standards, the applicant may need to either drill a new well or install a water treatment system for the current well, which may be subject to additional environmental review. The applicant is anticipating the proposed project will consume, on average, 2,500 gallons per-day, which would be less than 3-acre feet

per year and not expected to significantly impact groundwater supply. Prior to issuance of any building permit for the proposed operation, a development standard will be applied requiring issuance of the Water Supply Permit.

As a result of the development standards required for this project, impacts associated with drainage, water quality, and runoff are expected to have a less than significant impact.

Mitigation: None

References: Application information; Referral response from the Department of Environmental Resources (DER) – Environmental Health Division, dated March 15, 2022; Referral response from the California Regional Water Quality Control Board, dated March 15, 2022; Referral response from the Stanislaus County Environmental Review Committee (ERC), dated March 15, 2022; Referral response from the City of Turlock, dated March 28, 2022; Stanislaus County General Plan and Support Documentation[1].

XI. LAND USE AND PLANNING -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Physically divide an established community?			X	
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?			X	

Discussion: This is a request to amend the General Plan and zoning designations of a 10-acre parcel from Agriculture and General Agriculture (A-2-40) to a new Planned Development, and to permit an 80-space commercial semi-truck parking facility on 6.2-acres of a 10-acre parcel. The operation proposes include minor maintenance and administrative uses within existing buildings.

The project proposes to develop a parking lot with spaces for up to 80 tractor-trailers and 12 employees which will belong to the on-site operation, Pattar Trucking. No spaces are proposed to be rented out to non-contracted employees. Additionally, an existing 1,725 square-foot barn and 1,933 square-foot single-family residence, located on the southwest portion of the project site, are proposed to be converted and used for light repairs and an administrative office, respectively. On-site maintenance within the shop building will be limited to visual inspections, tire changes, and fluid checks. No engine repairs or other body work is proposed as part of the project. The project parcel is currently operating with the proposed use, including parking of tractor-trailers and occupancy of the existing structures for commercial use without having obtained the required land use entitlements or building permits.

As stated in the *Project Description,* the project proposes to develop perimeter fencing and frontage landscaping. A referral response was received from the City of Turlock, stating that although the project is not located within their Local Agency Formation Commission (LAFCO) adopted Sphere of Influence (SOI), the project site is located immediately to the northwest of the City limits. Accordingly, the City is requesting that full frontage improvements consisting of curb, gutter, and sidewalks be installed along the project site. The City has requested that the proposed project include landscaping to City standards be installed along the project site road frontage, within employee parking areas, within the proposed storm drainage basin, and along the eastern boundary line of the project to provide additional screening of the site. The City has requested to review and approve any landscape plan, and also requested to review any future advertising signage that can be viewed from the road prior to issuance of a permit. The City has also requested that no storage of equipment or material take place outdoors without City approval, that all commercial driveways, drive aisles, vehicle storage areas and parking lots be paved in accordance with City standards, and that the project applicant pay all applicable capital facility fees.

The County's General Plan Sphere of Influence policy states that for any discretionary projects that are located outside of a City's limits but within one mile of an adopted sphere of influence (SOI) of a City, and within a City's adopted general plan area, the County has final discretion on adoption of that City's development standards. Ultimately, the Board of Supervisors will determine as to apply the requested development standards.

As stated by the Introduction to the General Plan, General Plan Amendments affect the entire County and any evaluation must give primary concern to the County as a whole; therefore, a fundamental question must be asked in each case: "Will this amendment, if adopted, generally improve the economic, physical and social well-being of the County in general?" Additionally, the County in reviewing General Plan amendments shall consider how the levels of public and private service might be affected; as well as how the proposal would advance the long-term goals of the County. In each case, in order to take affirmative action regarding a General Plan Amendment application, it must be found that the General Plan Amendment will maintain a logical land use pattern without detriment to existing and planned land uses and that the County and other affected government agencies will be able to maintain levels of service consistent with the ability of the government agencies to provide a reasonable level of service. In the case of a proposed amendment to the Land Use diagrams of the Land Use Element, an additional finding that the amendment is consistent with the goals and policies of the General Plan must also be made. Additionally, Goal 2 of the Land Use Element aims to ensure compatibility between land uses.

The Land Use Element describes the Planned Development designation as a designation intended for land which, because of demonstrably unique characteristics, may be suitable for a variety of uses without detrimental effects on other property. The Land Use Element also requires that the Agricultural Element's Conversion Criteria (Goal 2, Policy 2.7) be met when converting agricultural land to non-agricultural uses. Section II – *Agriculture Resources* contains the full discussion on the Stanislaus County's General Plan Conversion Criteria. From a land use perspective, it is the County's position that commercial development is incompatible with the existing Agriculturally designated setting west of the rail-line. While conversion of the 10-acres project site to allow for the parking of tractor-trailers would likely not lead to environmental impacts, directly or indirectly, such as conversion of agricultural lands adjacent to the project, it would not be consistent with logical and orderly land use policy either. Accordingly, staff believes amendment of the General Plan designation from Agriculture to Planned Development would have less than significant impacts to Agricultural Resources but also not be consistent with the required conversion criteria of Goal 2 of the Agricultural Element. Because of these factors, it is not anticipated that the project would lead to, directly or indirectly, conversion of agricultural lands adjacent to the project nor are impacts to those lands expected to be significant.

To approve a Rezone, the Planning Commission must find that it is consistent with the General Plan. Pursuant to the General Plan, land within a Planned Development designation should be zoned A-2 (General Agriculture) until development occurs through Planned Development zoning. Therefore, the proposed Planned Development General Plan designation and rezoning the parcel to Planned Development would be consistent.

The project will not physically divide an established community nor conflict with any habitat conservation plans.

Mitigation: None.

References: Application information; Referral response from the City of Turlock, dated March 28, 2022; Stanislaus County General Plan and Support Documentation[1].

XII. MINERAL RESOURCES -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
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?			**X**	
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?			**X**	

Discussion: The location of all commercially viable mineral resources in Stanislaus County has been mapped by the State Division of Mines and Geology in Special Report 173. There are no known significant resources on the site, nor is the project site located in a geological area known to produce resources.

Mitigation: None.

References: Application information; Stanislaus County General Plan and Support Documentation[1].

XIII. NOISE -- Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
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?			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	

Discussion: A fleet of 80 tractor-trailers will utilize the site for parking. The truck parking portion of the facility will be open 24 hours a day, seven days a week; however, the office and shop will only be open Monday through Friday, 8:00 a.m. to 5:00 p.m. The Stanislaus County General Plan Noise Element identifies the daytime (7:00 a.m. to 10:00 p.m.) maximum allowable average noise exposure for stationary noise sources to be an hourly average of 55 decibels for residentially zoned districts and maximum level of 75 decibels for industrial, manufacturing, utilities, and agriculture districts, with nighttime (10:00 p.m. to 7:00 a.m.) to be an hourly average of 45 decibels and maximum of 65 decibels, measured at residential or other noise-sensitive land use on neighboring properties. The nearest sensitive receptor is a dwelling located approximately 680-feet to the west of the project site.

The site itself is impacted by the noise generated from the Union Pacific rail line and State Route 99 to the west. All construction activities will be required to meet the noise ordinance and Noise Element standards.

The site is not located within an airport land use plan. Noise impacts are considered to be less-than significant.

Mitigation: None.

References: Application material; Stanislaus County General Plan and Support Documentation[1].

XIV. POPULATION AND HOUSING -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
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)?			X	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?			X	

Discussion: The site is not included in the vacant sites inventory for the 2016 Stanislaus County Housing Element, which covers the 5th cycle Regional Housing Needs Allocation (RHNA) for the County and will therefore not impact the County's ability to meet their RHNA. No population growth will be induced nor will any existing occupied housing be displaced as a result of this project.

Mitigation: None.

References: Stanislaus County General Plan and Support Documentation[1].

XV. PUBLIC SERVICES --	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) **Would the project result in the 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:**			X	
Fire protection?			X	
Police protection?			X	
Schools?			X	
Parks?			X	
Other public facilities?			X	

Discussion: The project site is served by the Keyes Fire Protection District for fire protection services, the Keyes Union and Turlock Joint Unified School District for school services, the Stanislaus County Sheriff Department for police protections, the Turlock Irrigation District (TID) for power and irrigation services, and proposes to be served by an on-site well and septic system for domestic water and wastewater service. County adopted Public Facilities Fees, as well as fire and school fees are required to be paid based on the development type prior to issuance of a building permit. Payment of the applicable district fees will be required prior to issuance of a building permit.

A referral response was received from the City of Turlock, stating that although the project is not located within their Local Agency Formation Commission (LAFCO) adopted Sphere of Influence (SOI), the project site abuts the City limits to the northwest, and accordingly, they are requesting the project pay all applicable citywide capital facility fees including City transportation fees. The County's General Plan SOI policy states that for projects that are located outside of city limits but within one mile of an adopted sphere of influence of a City and within a City's adopted general plan area, the County has final discretion on adoption of that City's development standards. Ultimately, the Board of Supervisors will determine as to apply the requested development standard.

As discussed in full within Section X – *Hydrology and Water Quality*, the project has proposed to develop utilize the existing domestic well for use by the proposed commercial development, and will constitute a public water system. If the existing well does not meet water quality standards, a new well may be required, which would be subject to review under the County's Well Permitting Program. As part of the water supply permitting process, any new well will be evaluated on whether environmental review will be required. Construction will be reviewed under the Building Permit process and must be reviewed and approved by DER and adhere to current Local Agency Management Program (LAMP) standards. LAMP standards include minimum setback from wells to prevent negative impacts to groundwater quality.

This project was circulated to all applicable public service providers including school, fire, police, irrigation district, and the public works department during the early consultation referral period. With development standards in place, the project is not anticipated to have any significant adverse impact on public services.

Mitigation: None.

References: Application information; Referral response from the City of Turlock, dated March 28, 2022; Referral response from the Department of Environmental Resources (DER) – Environmental Health Division, dated March 15, 2022; Stanislaus County General Plan and Support Documentation[1].

XVI. RECREATION --	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
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?			**X**	
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?			**X**	

Discussion: This project will not increase demands for recreational facilities, as such impacts typically are associated with residential development.

Mitigation: None.

References: Stanislaus County General Plan and Support Documentation[1].

XVII. TRANSPORTATION -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			**X**	
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			**X**	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?		**X**		
d) Result in inadequate emergency access?			**X**	

Discussion: Access to the proposed project is proposed to be via two driveways onto County-maintained West Taylor Road. The project proposes to develop a parking lot with up to 80 parking stalls for tractor-trailers and 12 parking stalls for passenger vehicles. The proposed facility will have up to 12 total employees on a single shift. The parking lot is proposed to be accessible to drivers 24 hours a day, seven days a week; however, the office and shop is proposed to operate Monday through Friday, 8:00 a.m. to 5:00 p.m.

A referral response from the County's Public Works Department stated the project would be required to dedicate 30-feet north of the Centerline of West Taylor Road as irrevocable offer of dedication across the entire parcel frontage. They are also requiring a dedication of a 75-feet wide road reservation across the entire parcel frontage for future road widening of West Taylor Road, development of adequate storage depth for tractor-trailer queuing on-site or otherwise development of

a deceleration lane, and complete off-site road frontage improvements along the entire parcel frontage consistent to County Standards and Specifications. Development standards will be added to the project to ensure these requirements are met prior to issuance of any permit.

Although the project fronts on a County-maintained portion of West Taylor Road, the section of West Taylor Road east of the project site falls within the City of Turlock's jurisdiction and is maintained by the City. A referral response was received from the City of Turlock requesting a transportation impact analysis (traffic study) be prepared to analyze any potentially significant impacts on the surrounding roadway system. The City also requested that full frontage improvements be installed along project site frontage, including curb, gutter, and sidewalks. The City also requested that landscaping be installed along the project site's road frontage, within employee parking areas, and along the eastern edge of the property for screening purposes, They also requested that all driveways be installed as commercial driveways to City standards, that all drive aisles, vehicle storage areas and parking lots be paved in accordance with City Standards, and the project applicant pay all applicable capital facility fees.

Following a scoping meeting with the County, the City, and representatives for the applicant, a Transportation Impact Analysis, dated February 21, 2023 was prepared for the project by KD Anderson & Associates, Inc. The analysis included a study of the project driveways, both north and southbound onramps for the Taylor Road and State Route (SR) 99 intersection approximately a quarter mile east of the site, and the Taylor Road and North Golden State Boulevard intersection. The analysis found the proposed project would generate 77 daily trips semi-truck trips and 32 daily passenger vehicle trips. The analysis determined that although level of service (LOS) can no longer be used a measurement of environmental impact, inclusion of the project's use of the studied intersections would not further impact the LOS as the analyzed intersections are currently rated at LOS F, already warranting signalization under non-project conditions. The studied noted that the Stanislaus Council of Governments (StanCOG) Regional Transportation Plan Project T-21 will improve traffic conditions at the interchange and that the applicant should pay County Developmental Fees to contribute towards that project. No other impacts related to transportation programs, safety, or inadequate emergency access were identified.

After completion, the analysis was reviewed by the County's Public Works Department, State of California Department of Transportation (Caltrans), and the City of Turlock. Caltrans stated that SR 99 at Taylor Road is not currently an STAA Terminal Access Route and that the applicant is required to submit a applications to Caltrans to request to utilize the facility as such. Additionally, Caltrans requested that the County collect a fee for improvement of the Taylor Road and SR 99 intersection. The City of Turlock requested that in an effort to mitigate the impacts identified in the analysis, the applicant pay a fair share fee of city-wide transportation fees.

To calculate the project's fair share fee, a Supplemental Traffic Memorandum for the Pattar Transport Project, dated October 20, 2023, was prepared by Wood Rodgers. Wood Rodgers determined project costs and the project's percentage of impact to the future improvements, utilizing the trip distribution from the KD Anderson & Associates analysis and the City of Turlock's 2013 Capital Facilities Fee Nexus Study of the Taylor Road & SR 99 interchange improvements project. To update the interchange improvement costs for inflation, Wood Rodgers applied a 3.4% present value rate. The original project cost based on the 2013 study was $10,363,703. The updated project cost was determined to be $14,478,393. Based on daily trip amounts, Wood Rodgers found the project would constitute a 0.77% of the total project cost, which would equate to $111,484 to be paid to the City of Turlock prior to issuance of any permit.

After review of the memorandum, the City of Turlock has requested that both the fair share fee and all applicable CFF fees be collected for the project. As collection of the City's CFF fee is not attributed to an environmental impact, like other requested City development standards, the County has final discretion on adoption of that City's development standards. Ultimately, the Board of Supervisors will determine as to apply the requested development standard.

Potential impacts to air quality from the proposed project are also evaluated by Vehicle Miles Traveled (VMT). The calculation of VMT is the number of cars/trucks multiplied by the distance traveled by each car/truck. California Environmental Quality Act (CEQA) Guidelines Section 15064.3, subdivision (a), defines VMT as the amount and distance of automobile travel attributable to a project. A technical advisory on evaluating transportation impacts in CEQA published by the Governor's Office of Planning and Research (OPR) in December of 2018 clarified the definition of automobiles as referring to on-road passenger vehicles, specifically cars and light trucks. While heavy trucks are not considered in the definition of automobiles for which VMT is calculated for, heavy-duty truck VMT could be included for modeling convenience. According to the same OPR technical advisory, many local agencies have developed a screening threshold of VMT to indicate when detailed analysis is needed. Absent substantial evidence indicating that a project would generate a potentially

significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per-day generally may be assumed to cause a less than significant transportation impact. The analysis included the projects potential impacts on VMT, concluding that the project qualified under the small projects screening criteria, consisting of less than 110 average daily trips and concluded the project is anticipated to have less than a significant impact on VMT.

Mitigation: 1. A fair share payment of 0.77% for the future improvements to the State Route 99/Taylor Road interchange estimated cost ($111,484), as adjusted to meet the most current Engineering News-Record Construction Cost Index, as recommended by the Supplemental Traffic Memorandum for the Pattar Transport Project prepared by Wood Rodger, Inc (October 20, 2023) shall be made to the City of Turlock prior to the issuance of any grading or building permit.

References: Application information; Referral response from the Department of Public Works, dated May 12, 2022; Referral response from the City of Turlock, dated March 28, 2022; Referral Response from the City of Turlock, dated April 11, 2023 and email correspondence dated July 13, 2023; Referral response from the State of California Department of Transportation, dated May 12, 2023; Transportation Impact Analysis for Pattar Transport prepared by KD Anderson & Associates, Inc., dated February 21, 2023; Supplemental Traffic Memorandum for the Pattar Transportation Project performed by Wood Rodgers, dated October 20, 2023. Stanislaus County General Plan and Support Documentation[1].

XVIII. TRIBAL CULTURAL RESOURCES -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) 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:			**X**	
i) 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			**X**	
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set for the in subdivision (c) of Public Resource 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.			**X**	

Discussion: As this project is a General Plan Amendment it was referred to the tribes listed with the Native American Heritage Commission (NAHC), in accordance with SB 18, for a 90-day review period. Tribal notification of the project was not referred to any tribes in conjunction with AB 52 requirements, as Stanislaus County has not received any requests for consultation from the tribes listed with the NAHC. One response was received from Tuolumne Me-Wuk Tribal Council stating that the parcel was considered as disturbed land. The Council also requested that a condition was placed on the project for any inadvertent discovery during the construction process. A records search conducted by the Central California Information Center (CCIC) indicated that there are no historical, cultural, or archeological resources recorded on-site but that the site has a moderate to high sensitivity for the discovery of such resources. The project site has historically and continually been disturbed in conjunction with activities related to agricultural production, and therefore would be less likely to include undisturbed cultural resources. A development standard will be added to the project which requires if any cultural

or tribal resources are discovered during project-related activities, all work is to stop, and the lead agency and a qualified professional are to be consulted to determine the importance and appropriate treatment of the find. Cultural Resources impacts are considered to be less-than significant.

Mitigation: None.

References: Application information; Records search from the Central California Information Center, dated March 17, 2021; Referral response received from Tuolumne Me-Wuk Tribal Council, April 20, 2022; Stanislaus County General Plan and Support Documentation[1].

XIX. UTILITIES AND SERVICE SYSTEMS -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			**X**	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			**X**	
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?			**X**	
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?			**X**	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			**X**	

Discussion: Limitations on providing services have not been identified. The project has proposed to utilize an existing potable domestic well and private septic system. Stormwater capture will take place within a proposed landscaped basin.

A referral response received from Stanislaus County Department of Public Works indicated that a grading, drainage, and erosion/sediment control plan for the project is required and will be subject to Public Works review and Standards and Specifications, as well as the submittal of a Storm Water Pollution Prevention Plan (SWPPP) prior to the approval of any grading plan. The submittal and approval of the grading, drainage, erosion/sediment control plan and SWPPP will be made development standards for this project prior to issuance of a building permit. A referral response was received from the Central Valley Regional Water Quality Control Board, providing information on potential requirements of the project. A Development standard will be added to the project to ensure consultation with the agency takes place prior to any ground disturbance. Accordingly, runoff associated with the construction at the proposed project site will be reviewed as part of the grading review process and be required to be maintained on-site. Additionally, any construction will be reviewed under the Building Permit process and must be reviewed and approved by the Department of Environmental Resources (DER) and adhere to current Local Agency Management Program (LAMP) standards. LAMP standards include minimum setback from wells and septic systems to prevent negative impacts to groundwater quality.

As discussed in Section X – *Hydrology and Water Quality* the project will constitute a new public water system as defined in CHSC Section 116275(h). The applicant will be required to submit an application for a water supply permit with the associated technical report to Stanislaus County DER which will determine if the well water meets State mandated standards for water quality and must also obtain concurrence from the State of California Water Resources Control Board (SWRCB), Drinking Water Division, in accordance to CHSC Section 116527 (SB1263). If the well water does not meet State standards, the applicant may need to either drill a new well or install a water treatment system for the current well which may be subject to additional environmental review. The applicant is anticipating the proposed project will consume, on average, 2,500 gallons per-day, which would not be considered a significant impact to groundwater resources. Prior to issuance of any building permit for the proposed operation, a development standard will be applied requiring issuance of the Water Supply Permit.

A referral response was received from Turlock Irrigation District (TID) indicating that electrical services would not be impacted by the proposed project and that any new electrical services or overhead facility relocations are required to be approved by the District. Development standards will be added to the project to ensure the District's approval.

The project is not anticipated to have a significant impact to utilities and service systems.

Mitigation: None.

References: Application information; Referral Response from the Turlock Irrigation District dated March 14, 2022; Referral response from the California Regional Water Quality Control Referral response from the Department of Environmental Resources (DER) dated, March 15, 2022; Referral Response from the Stanislaus County Environmental Review Committee (ERC) dated, March 15, 2022; Stanislaus County General Plan and Support Documentation[1].

XX. WILDFIRE – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?			**X**	
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?			**X**	
c) Require the installation of 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?			**X**	
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?			**X**	

Discussion: The Stanislaus County Local Hazard Mitigation Plan identifies risks posed by disasters and identifies ways to minimize damage from those disasters. With the Wildfire Hazard Mitigation Activities of this plan in place, impacts to an adopted emergency response plan or emergency evacuation plan are anticipated to be less-than significant. The terrain of the site is relatively flat, and the site has access to a County-maintained road. The site is located in a Local Responsibility Area (LRA) for fire protection and is served by Keyes Fire Protection District. The project was referred to the District, but no response was received. California Building Code establishes minimum standards for the protection of life and property by increasing the ability of a building to resist intrusion of flame and embers. All construction is required to meet fire code, which will be verified through the building permit review process. A grading and drainage plan will be required and all fire

protection, and emergency vehicle access standards met. These requirements will be applied as development standards for the project.

Wildfire risk and risks associated with postfire land changes are considered to be less-than significant.

Mitigation: None.

References: Stanislaus County General Plan and Support Documentation[1].

XXI. MANDATORY FINDINGS OF SIGNIFICANCE --	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
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?			**X**	
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.)			**X**	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			**X**	

Discussion: The project is located on the west of State Route (SR) 99, in the southern section of Stanislaus County, abutting the City of Turlock city limits to the northwest. Surrounding land uses consist of scattered single-family dwellings to the south and west, RV Sales and Service, an unpermitted truck parking operation to the north, commercial development, State Route 99 to north and east, and the City of Turlock to the southeast. The project site has a General Plan designation of Agriculture and a zoning designation of General Agriculture (A-2-40). A rezone to a Planned Development district is necessary for the development of the project as the use is not permitted under the current A-2 zoning.

An analysis of potential projects in the vicinity of the project site that could contribute to cumulative traffic impacts found two projects: Use Permit Application No. PLN2023-0026 – *Singh Trucking*, a request to park of up to 12 tractor-trailers, as permitted by use permit in the General Agricultural (A-2) zoning district; and Use Permit Application No. PLN2023-0047-*Best RV*, a request to amend its current zoning of Planned Development (351) and (253) to allow for construction of a two story, 129,608 square-foot recreational vehicle (RV) sales and service building, a detached 16,086 square-foot canopy for vehicle sales staging, a 1,374 square-foot storage shed, and to allow for the sale of both motorized and non-motorized RVs. As found in the original Traffic Impact Analysis for the adoption of P-D (351), the intersection of Taylor Road and SR 99 was already considered to exceed the threshold for adequate levels of service, warranting signalization and included mitigation to come in the form of payment of the County Public Facilities fee and a fair-share contribution towards the future improvements at the SR 99 and Taylor Road interchange. Best RV has already paid their fair share payment of $143,878.83 as part of Phase 1 of their approved development. County Public Facility Fees will be paid for all new proposed structures, if the latest use permit is approved. Singh Trucking, while not subject to the same mitigation because of the proposed project's size would be subject County Public Facility Fees which would include funding for roadway projects if approved. Ultimately, all three projects, through payment of fair share fees and County Public Facility Fees would contribute to

improvement to an already impacted intersection, therefore, it is not expected that the project would not lead to significant impacts to transportation resources.

Section II – *Agriculture and Forest Resources* and Section XI - *Land Use and Planning* contain a full discussion of the land use action and amendment of the General Plan, concluding, that while conversion of these 10 acres to allow for the parking of semi-trucks would likely not lead to environmental impacts, directly or indirectly, it would not be consistent with logical and orderly land use policy either. Thus, the amendment of the General Plan designation from Agriculture to Planned Development would have less than significant impacts to Agricultural Resources but also not be consistent with the required conversion criteria of Goal 2 of the Agricultural Element.

As discussed in Section X – *Hydrology and Water Quality*, the use of the existing well for the project site will meet the definition of a public water system, which requires the applicant must submit an application for a water supply permit with the associated technical report to Stanislaus County DER. The system must also obtain concurrence from the State of California Water Resources Control Board (SWRCB), Drinking Water Division. If the well water does not meet State of California standards, the applicant may need to either drill a new well or install a water treatment system for the new well. Title 22 compliant well testing will take place during the test well process, which may be subject to additional environmental review. The applicant is anticipating the proposed project will consume, on average, 2,500 gallons per-day, which would be less than 3-acre feet per year and not expected to significantly impact groundwater supply. DER has determined the well will have a less than significant impact on groundwater resources.

Review of this project has not indicated any features which might significantly impact the environmental quality of the site and/or the surrounding area.

Mitigation: None.

References: Initial Study; Stanislaus County General Plan and Support Documentation[1].

[1]Stanislaus County General Plan and Support Documentation adopted in August 23, 2016, as amended. ***Housing Element*** adopted on April 5, 2016.

Stanislaus County

Planning and Community Development

Mitigation Monitoring and Reporting Program

Adapted from CEQA Guidelines sec. 15097 Final Text, October 26, 1998

SEPTEMBER 20, 2024

1. Project title and location:	General Plan Amendment and Rezone Application No. PLN2021-0052 – Pattar Trucking 4325 West Taylor Road, between State Route 99 and North Washington Road, in the Keyes/Turlock area. 045-053-009.
2. Project Applicant name and address:	Harwinder Pattar 4325 West Taylor Road Turlock, CA 95380
3. Person Responsible for Implementing Mitigation Program (Applicant Representative):	Harwinder Pattar
4. Contact person at County:	Jeremy Ballard, Senior Planner (209) 525-6330

MITIGATION MEASURES AND MONITORING PROGRAM:

List all Mitigation Measures by topic as identified in the Mitigated Negative Declaration and complete the form for each measure.

XVI. TRANSPORTATION/TRAFFIC

No.1	Mitigation Measure:	As recommended by the October 20, 2023 Supplemental Traffic Memorandum prepared by Wood Rodgers, Inc, a fair share payment of 0.77% for the future improvements to the State Route 99/Taylor Road interchange estimated to cost $111,484, as adjusted to meet the most current Engineering News-Record Construction Cost Index, shall be made to the City of Turlock prior to the issuance of any grading or building permit.
	Who Implements the Measure:	Stanislaus County Department of Planning and Community Development
	When should the measure be implemented:	Prior to issuance of a grading or building permit
	When should it be completed:	Prior to issuance of a grading or building permit

Who verifies compliance:	Stanislaus County Department of Planning and Community Development
Other Responsible Agencies:	City of Turlock

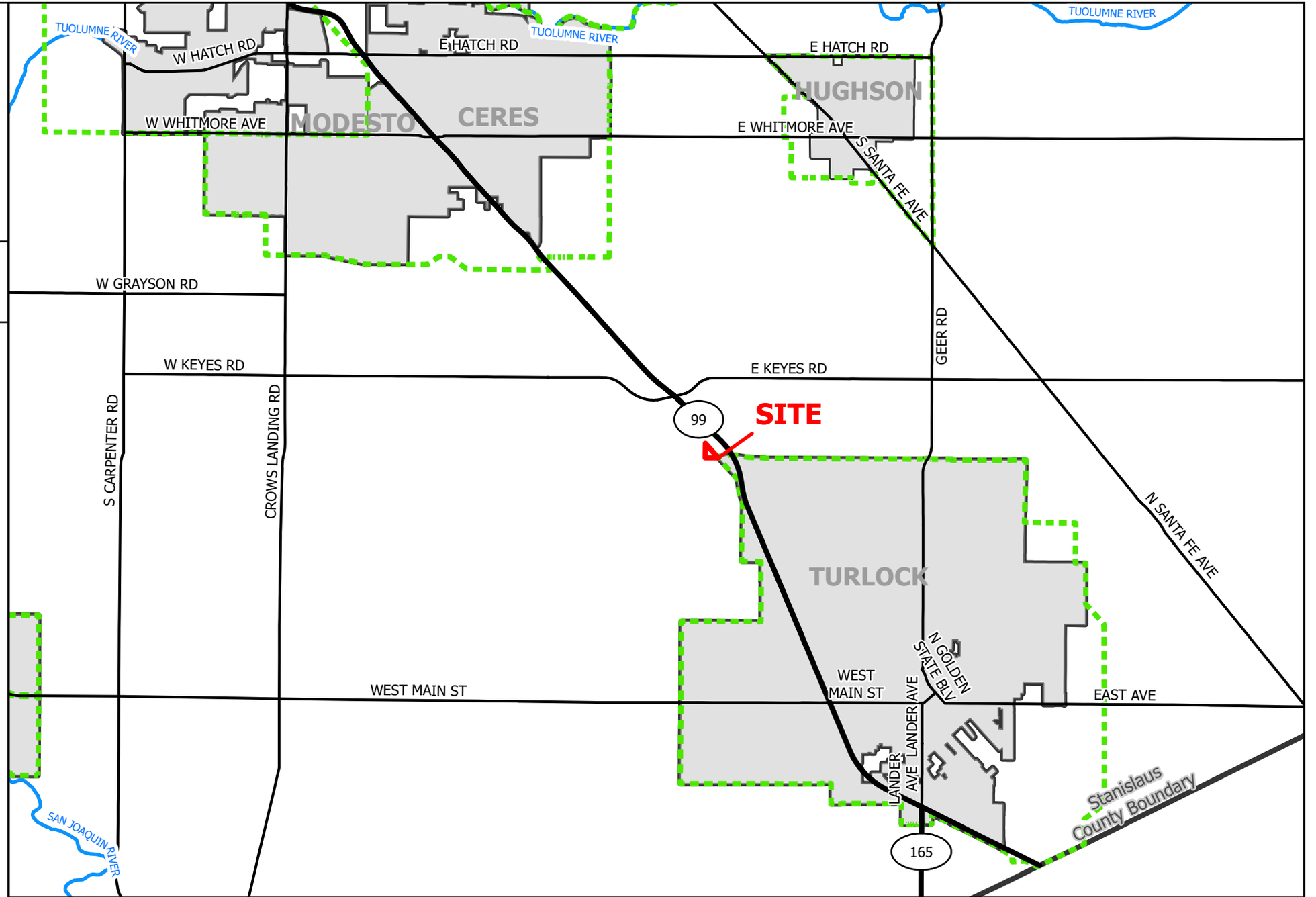
I, the undersigned, do hereby certify that I understand and agree to be responsible for implementing the Mitigation Program for the above listed project.

Signature on File	9/23/24
Person Responsible for Implementing Mitigation Program	Date

PATTAR TRUCKING

GPA REZ PLN2021-0052

AREA MAP

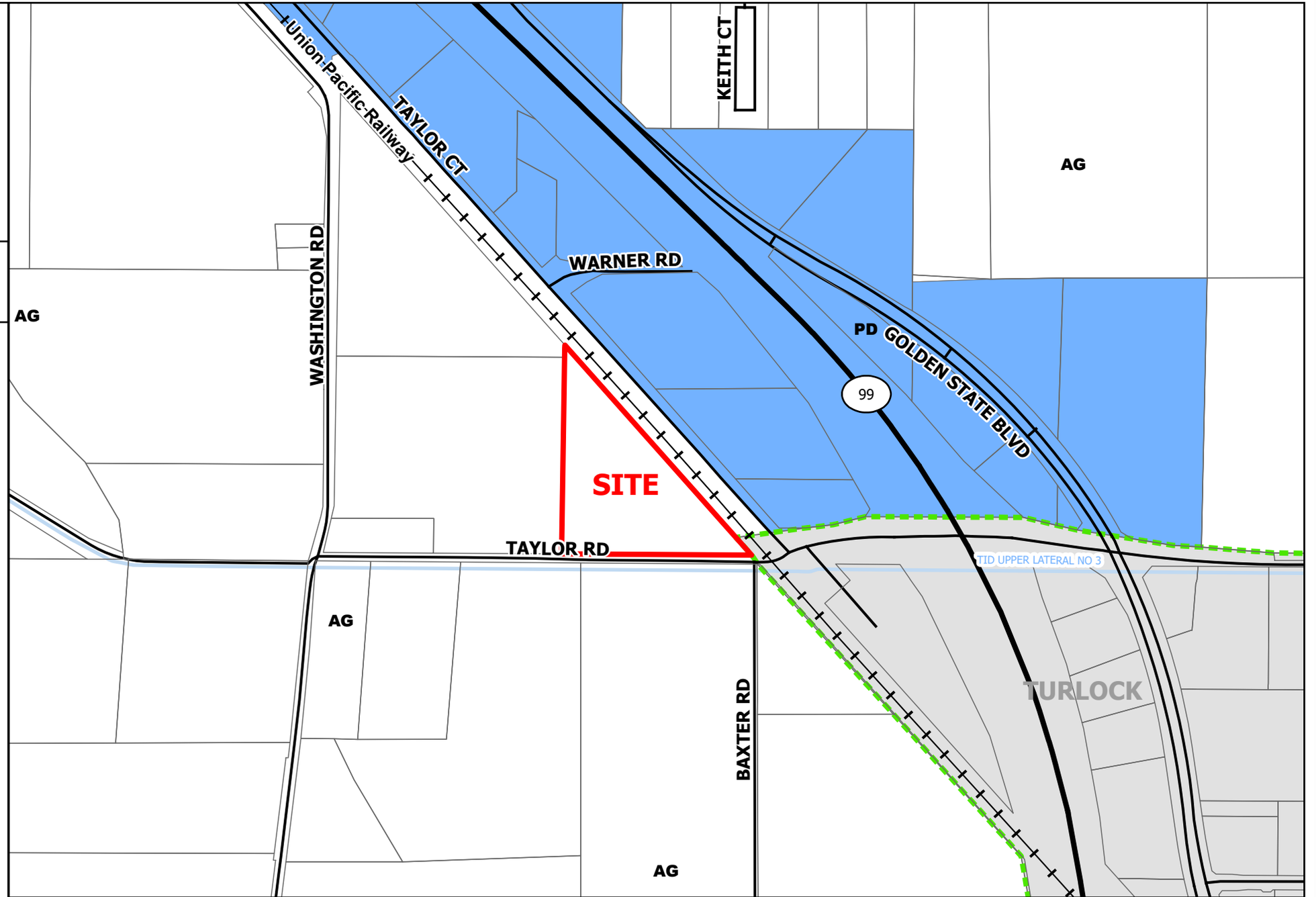


Source: Planning Department GIS Date Exported: 9/12/2024

PATTAR TRUCKING

GPA REZ PLN2021-0052

GENERAL PLAN



LEGEND

- Project Site
- Parcel
- LAFCO Adopted Sphere of Influence
- Highway
- Street
- Railroad
- Canal

General Plan

- Agriculture
- City
- Planned Development

N

0 490 980 Feet

0 125 250 Meters

Source: Planning Department GIS

Date Exported: 9/12/2024

PATTAR TRUCKING

GPA REZ PLN2021-0052

ZONING

LEGEND

- Project Site
- Parcel
- LAFCO Adopted Sphere of Influence
- Highway
- Street
- Railroad
- Canal

Zoning Designation

- General Agriculture A-2-10
- General Agriculture A-2-40
- City
- Planned Development

N

0 490 980 Feet

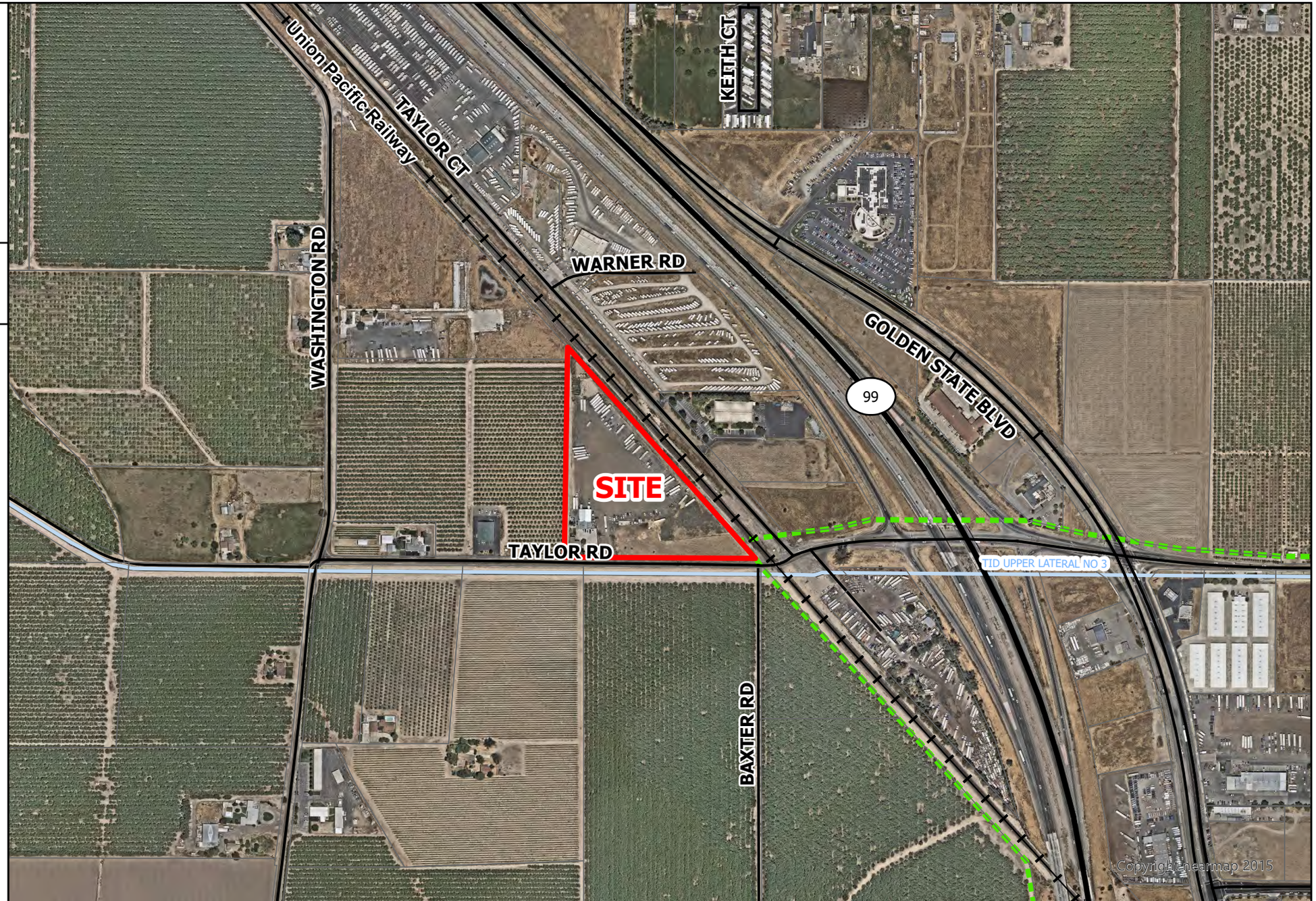
0 125 250 Meters

Source: Planning Department GIS Date Exported: 9/12/2024

PATTAR TRUCKING

GPA REZ PLN2021-0052

2023 AERIAL AREA MAP



LEGEND

- Project Site
- Parcel
- LAFCO Adopted Sphere of Influence
- Highway
- Street
- Railroad
- Canal

N

0 490 980 Feet

0 125 250 Meters

Source: Planning Department GIS

Date Exported: 9/12/2024

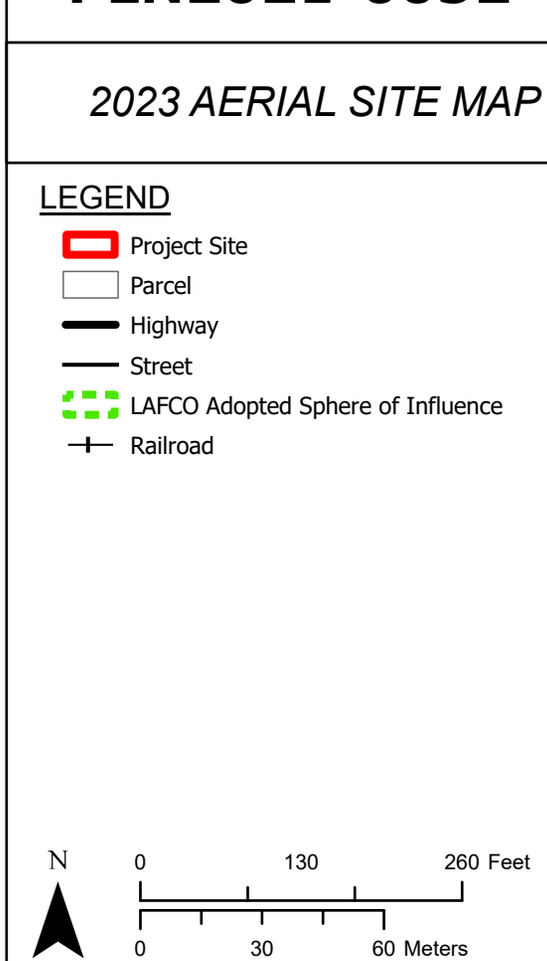
PATTAR TRUCKING

GPA REZ PLN2021-0052

2023 AERIAL SITE MAP

LEGEND

- Project Site
- Parcel
- Highway
- Street
- LAFCO Adopted Sphere of Influence
- Railroad



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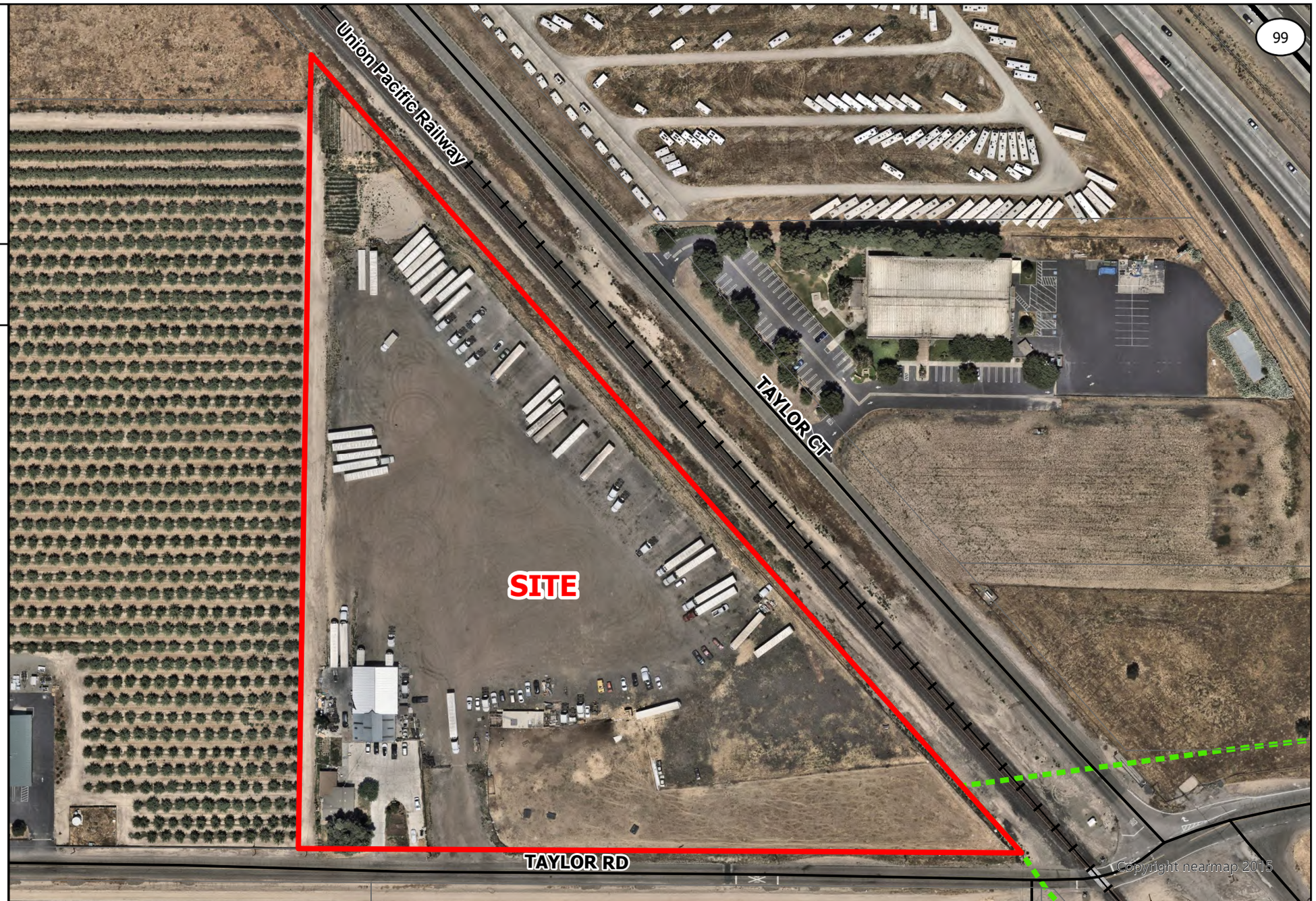


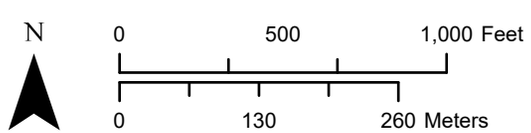
PATTAR TRUCKING

GPA REZ PLN2021-0052

ACREAGE MAP

LEGEND

- Project Site
- Parcel
- LAFCO Adopted Sphere of Influence
- Highway
- Street
- Railroad
- Canal



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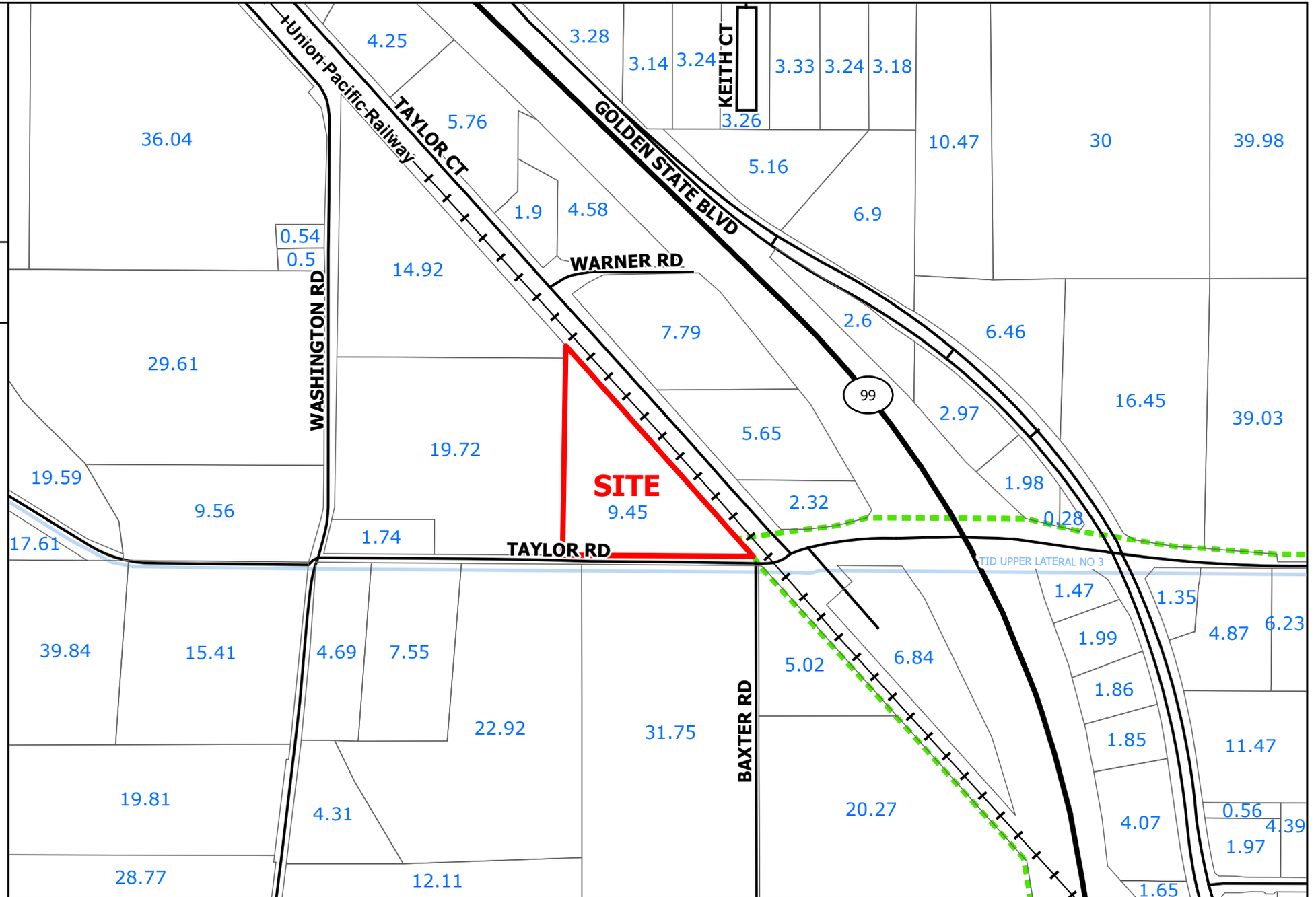
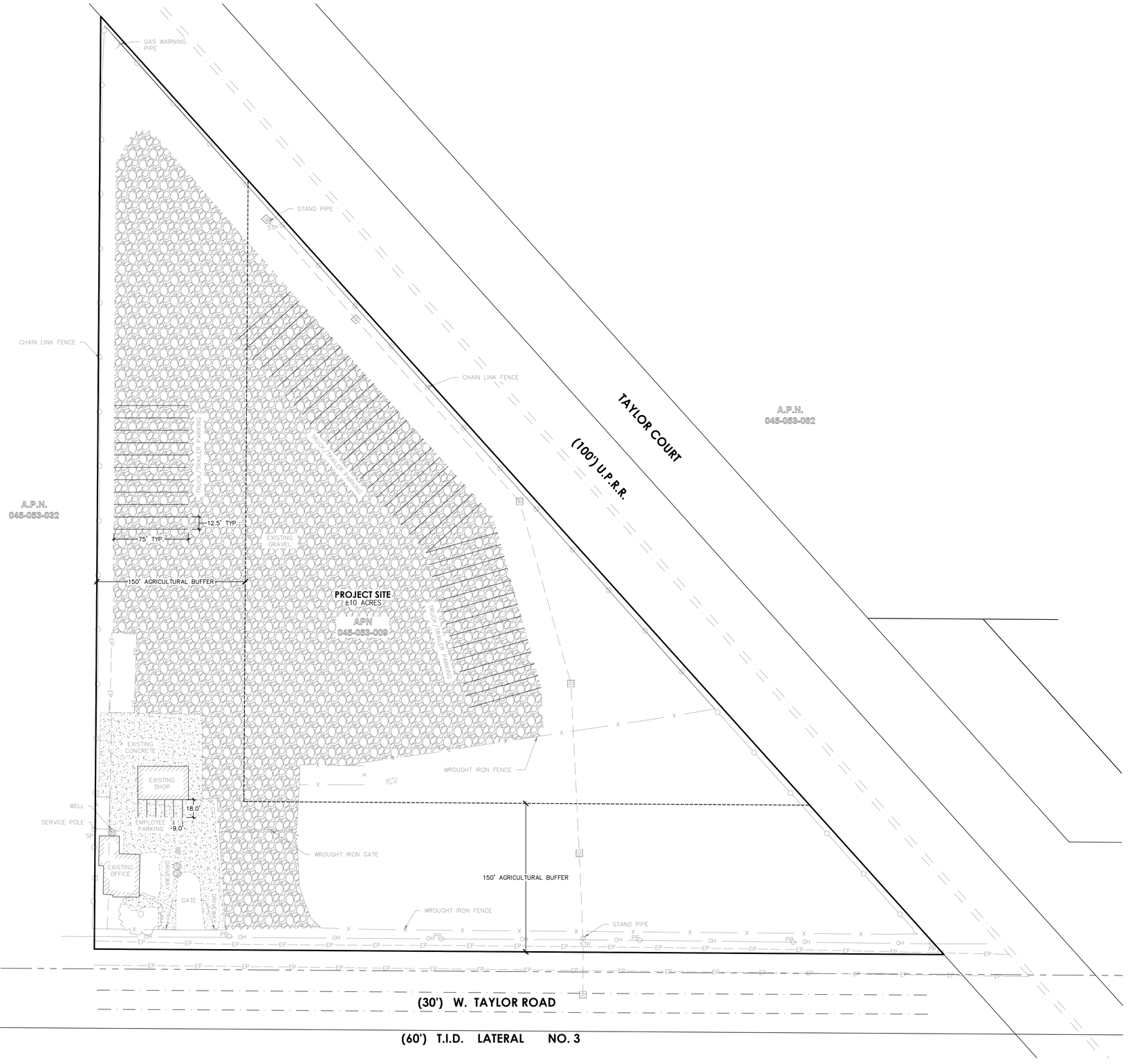
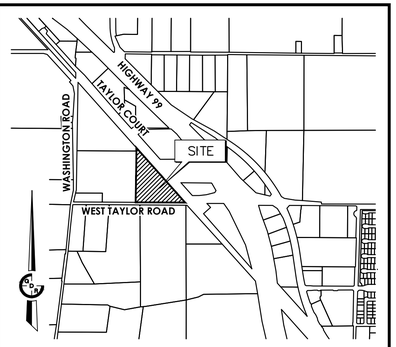






VICINITY MAP

CITY OF TURLOCK, STANISLAUS COUNTY, STATE OF CALIFORNIA

PROPERTY OWNER / APPLICANT

NAME:	PATTAR, KERWONDER S. / SANDHU FAMILY TRUST
CONTACT:	SEAN PATTAR
MAILING ADDRESS:	4325 W. TAYLOR ROAD
CITY/STATE/ZIP:	TURLOCK, CA 95380
PHONE:	209.634.3849
EMAIL:	tiwana@pattartransport.com
SITE ADDRESS:	4325 W. TAYLOR ROAD
CITY/STATE/ZIP:	TURLOCK, CA 95380

EXISTING CONDITIONS

A.P.N.:	045-053-009
EXISTING PARCELS:	1
EXISTING ACREAGE:	±10 ACRES
EXISTING GENERAL PLAN:	AGRICULTURE
EXISTING ZONING:	A-2-40

NOTES

WATER:	ON-SITE WELL
SEWER:	ON-SITE SEPTIC AND LEACH FIELD
STORM DRAINAGE:	OVERLAND DISCHARGE

1. NO IMPROVEMENTS ARE PROPOSED WITH THIS APPLICATION.
2. NO BOUNDARY SURVEY HAS BEEN PERFORMED. BOUNDARY IS BASED ON RECORD INFORMATION.

PROPERTY DESCRIPTION

ALL THAT PORTION OF THE SOUTHWEST QUARTER OF SECTION 32, TOWNSHIP 4 SOUTH, RANGE 10 EAST, M.D.B. & M., DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT WHERE THE SOUTHWESTERLY LINE OF THE RIGHT OF WAY OF THE CENTRAL PACIFIC RAILROAD COMPANY INTERSECTS THE SOUTH LINE OF SAID SECTION 32, THENCE WEST ALONG THE SOUTH LINE OF SAID SECTION 32 A DISTANCE OF 876.60 FEET; THENCE NORTH AS RIGHT ANGLES TO SAID SOUTH LINE AND PARALLEL TO THE WEST LINE OF SAID SECTION, TO THE SOUTHWESTERLY LINE OF THE RIGHT OF WAY OF SAID CENTRAL PACIFIC RAILROAD COMPANY, THENCE IN A SOUTHEASTERLY DIRECTION ALONG SAID RIGHT OF WAY TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM THE SOUTH 20 FEET.

SHEET INDEX

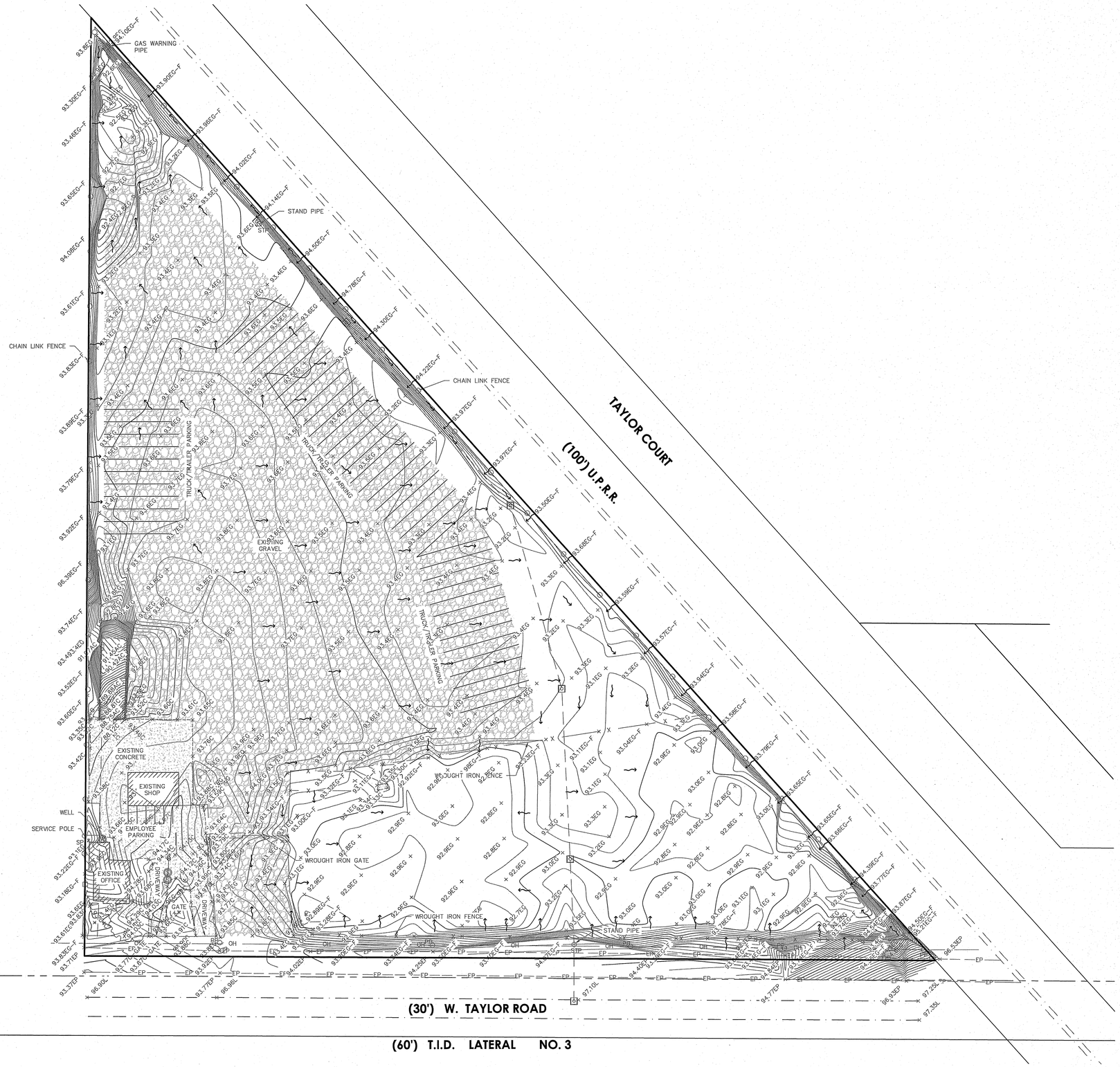
GDR ENGINEERING, INC.
ENGINEERING/SURVEYING/PLANNING
3525 MITCHELL ROAD, SUITE G CERES, CA 95307
TELEPHONE: (209) 538-3360 FAX: (209) 538-7370
WWW.GDRENGINEERING.COM

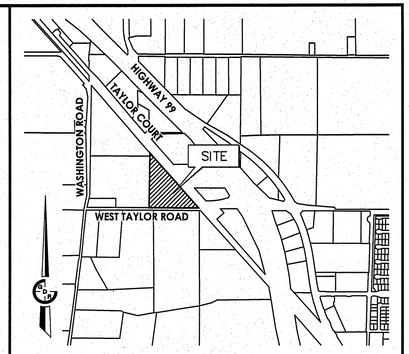
PATTAR TRANSPORT
WEST TAYLOR TRUCKING YARD
EXISTING SITE PLAN

SCALE: 1"=50' DATE: 01/21/2022

DWG NO. 20067 Existing Site Plan.dwg
DRAWN: H. SANGHERA
CHECKED: M. GARCIA

SHEET: 1 OF 5
FILE NO. 20067





VICINITY MAP

CITY OF TURLOCK, STANISLAUS COUNTY, STATE OF CALIFORNIA

LEGEND

EXISTING

- IRRIGATION LINE
- CHAIN LINK FENCE
- WIRE FENCE
- RIGHT OF WAY
- CENTERLINE
- CANAL LINER
- OVERHEAD LINES
- RAILROAD
- WELL
- VALVE
- POWER POLES
- 98.5 ELEVATIONS
- FLOW DIRECTION

ABBREVIATIONS:

C	CONCRETE
EG	EXISTING GROUND
EP	EDGE OF PAVEMENT
F	FENCE
L	LINER
OH	OVERHEAD
PP	POWER POLE
T.I.D.	TURLOCK IRRIGATION DISTRICT
U.P.R.R.	UNION PACIFIC RAILROAD
W	WEST

LEGEND & ABBREVIATIONS

BENCHMARK:
DISK STAMPED "J 698 1943" SET IN CANAL BRIDGE WING WALL
ELEV=**98.81 (NAVD 88 DATUM)**

FACILITIES SHOWN ON THIS MAP ARE BASED ON AN OBSERVATION OF SURFACE FEATURES AND FROM RECORD INFORMATION PROVIDED BY UTILITY COMPANIES. NO ATTEMPT WAS MADE TO LOCATE UNDERGROUND FACILITIES THAT WERE NOT READILY APPARENT FROM A VISUAL INSPECTION OF SURFACE FEATURES. THE ACTUAL LOCATION OF ALL UNDERGROUND FACILITIES MUST BE VERIFIED PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

NOTES

THIS TOPOGRAPHIC SURVEY PERFORMED **FEBRUARY 11, 2021** IS BASED ON AN OBSERVATION OF SURFACE FEATURES AND INFORMATION PROVIDED BY LOCAL UTILITY COMPANIES, AND RECORD DRAWINGS. NO ATTEMPT WAS MADE TO LOCATE UNDERGROUND FACILITIES THAT WERE NOT READILY APPARENT FROM SURFACE OBSERVATION.

LICENSED LAND SURVEYOR
SEAN HARP
No. 7823
STATE OF CALIFORNIA

SEAN HARP, L.S. 7823 — DATE 1/21/2022

SURVEYOR'S STATEMENT

GDR ENGINEERING, INC.
ENGINEERING/SURVEYING/PLANNING
3525 MITCHELL ROAD, SUITE G CERES, CA 95307
TELEPHONE: (209) 538-3360 FAX: (209) 538-7370
WWW.GDRENGINEERING.COM

PATTAR TRANSPORT
WEST TAYLOR TRUCKING YARD
TOPOGRAPHIC SURVEY

SCALE: 1"=50' DATE: 01/21/2022

DWG NO. 20067 Existing Site Plan.dwg
DRAWN: H. SANGHERA
CHECKED: M. GARCIA

SHEET: 2 OF 5
FILE NO. 20067

50 25 0 50 100
(If this sheet is not 24x36, it is a reduced print)

EXISTING SHOP - NORTH

EXISTING SHOP - EAST

EXISTING SHOP - SOUTH

EXISTING SHOP - WEST

EXISTING OFFICE - NORTH

EXISTING OFFICE - EAST

EXISTING OFFICE - SOUTH

EXISTING OFFICE - WEST

GDR ENGINEERING, INC.
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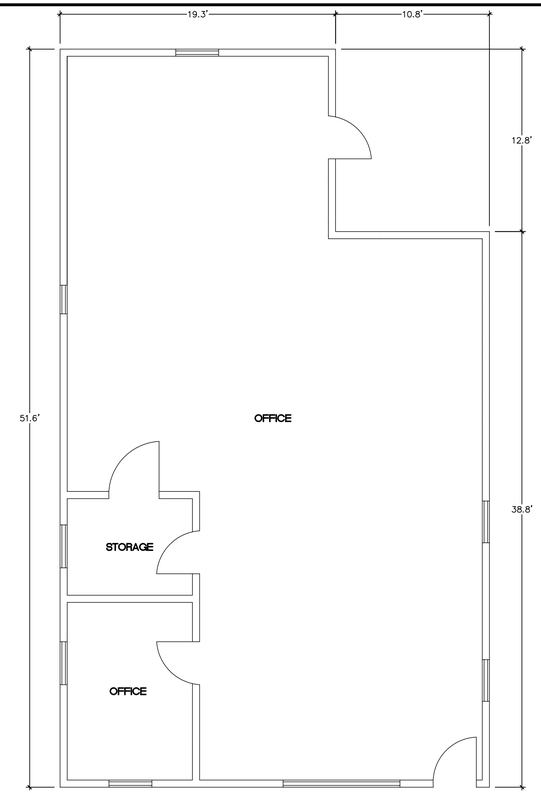
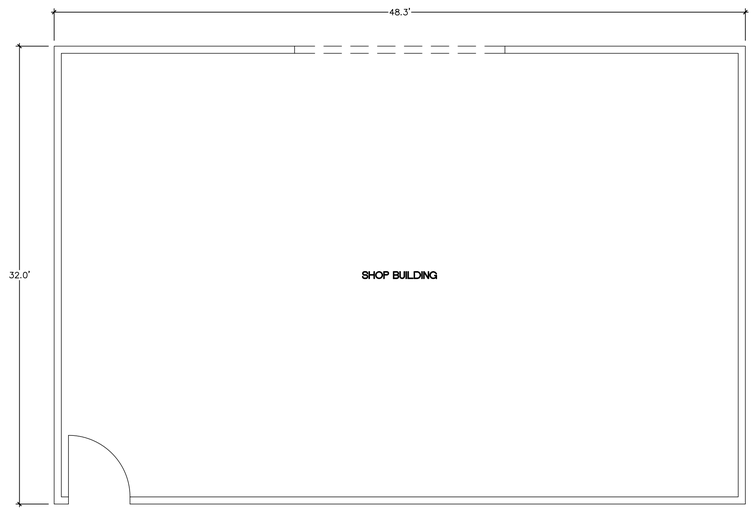
WWW.GDRENGINEERING.COM

PATTAR TRANSPORT
WEST TAYLOR TRUCKING YARD
EXISTING BUILDING ELEVATIONS

SCALE: NTS DATE: 01/21/2022
DWG NO. 20067 Existing Site Plan.dwg
DRAWN: H. SANGHERA
CHECKED: M. GARCIA
SHEET: 3 OF 5
FILE NO. 20067



EXISTING OFFICE SCALE: 1" = 5'

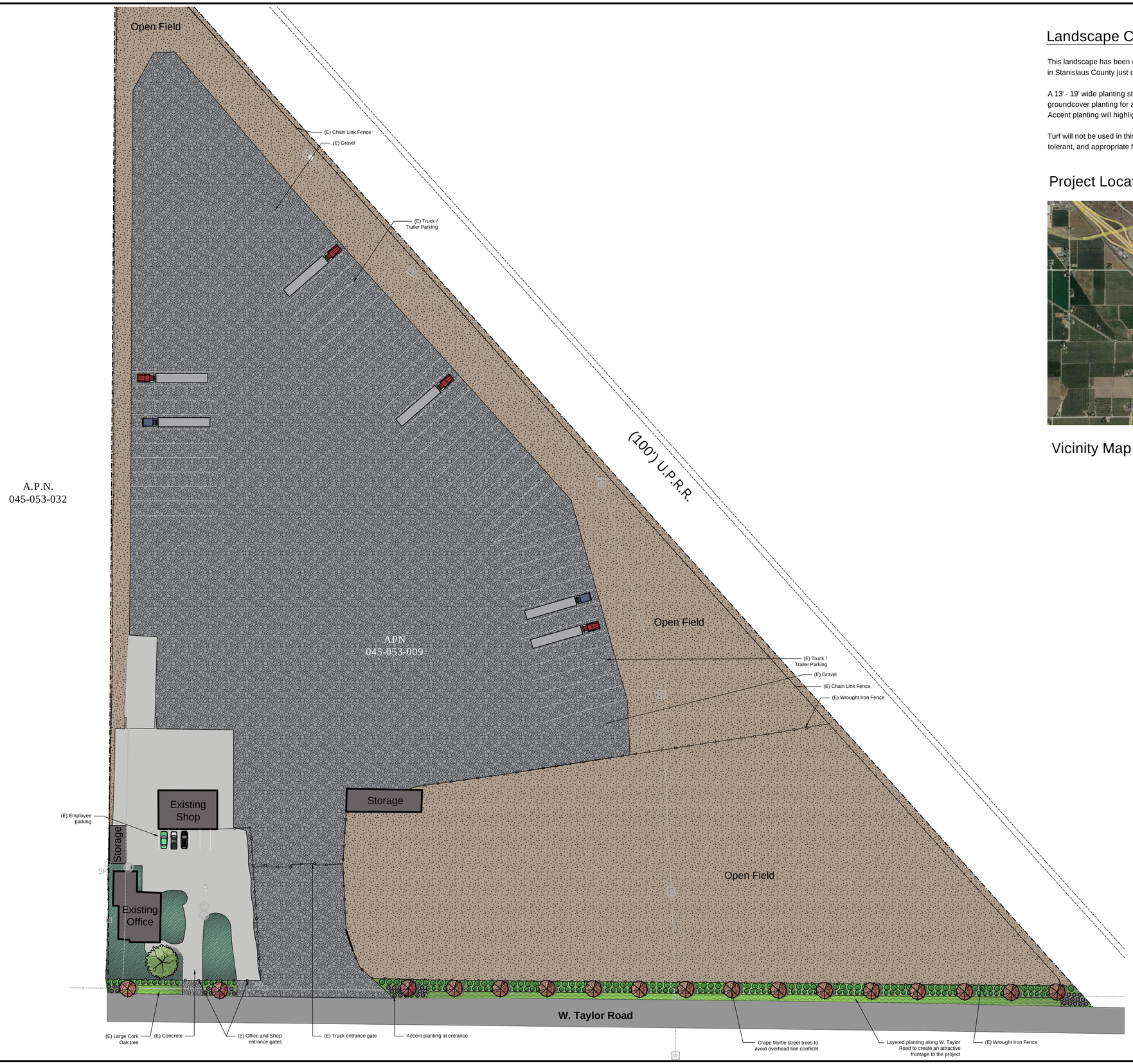


EXISTING SHOP SCALE: 1" = 5'

GDR ENGINEERING, INC.
ENGINEERING/SURVEYING/PLANNING
3525 MITCHELL ROAD, SUITE G CERES, CA 95307
TELEPHONE: (209) 538-3360 FAX: (209) 538-7370
WWW.GDRENGINEERING.COM

PATTAR TRANSPORT
WEST TAYLOR TRUCKING YARD
EXISTING BUILDING FLOOR PLANS

SCALE: 1"=5' DATE: 01/21/2022
DWG NO. 20067 Existing Site Plan.dwg
DRAWN: H. SANGHERA
CHECKED: M. GARCIA
SHEET: 4 OF 5
FILE NO. 20067



Landscape Concept Statement

This landscape has been designed to provide a clean edge to the north side of W. Taylor Road in Stanislaus County just outside the City of Turlock boundary.

A 13' - 19' wide planting strip between W. Taylor Road and the existing fence allow for shrub and groundcover planting for an attractive border between the project and the well traveled road. Accent planting will highlight the entry.

Turf will not be used in this project, and plants will be chosen to be low maintenance, drought tolerant, and appropriate for Turlock's planting zone.

Project Location

Vicinity Map

LICENSED LANDSCAPE ARCHITECT
LINDA M. FISH
1-31-23
STATE OF CALIFORNIA

Revisions:

L LindaFish
Landscape Architect
fishlandscape@sbcglobal.net
(209)656-7177
PLA #4346

Preliminary Landscape Plan

Pattar Transport
4325 W. Taylor Road
Turlock, CA 95380

Scale: 1"=40-'0"

Date: 1-4-22

Drawn: LF

Sheet Number: L0

To: Pattar Transport
4325 W. Taylor Road
Turlock, CA 95380

From: Johnson Johnson and Miller Air Quality Consulting Services
Richard Miller, Air Quality and Climate Change Specialist
rmiller.jjm.environmental@gmail.com
kjohnson.jjm.environmental@gmail.com

Pattar Transport GPA Project

Date: August 30, 2023

Subject: Air Quality, Health Risk Analysis, and Greenhouse Gas Technical Memorandum

This Air Quality, Health Risk Analysis, and Greenhouse Gas Technical Memorandum was prepared to evaluate whether the estimated criteria air pollutant, ozone precursor, toxic air contaminant (TAC), and/or greenhouse gas (GHG) emissions generated from operation of the Pattar Transport GPA Project (proposed project or project) would cause significant impacts to air or GHG resources. The methodology follows the Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI) prepared by the San Joaquin Valley Air Pollution Control District (SJVAPCD) for the quantification of emissions and evaluation of potential impacts to air resources.1 The GHG analysis follows Stanislaus County guidance and the SJVAPCD's Guidance for Valley Land-Use Agencies in Addressing GHG Emission Impacts for New Projects under the California Environmental Quality Act (CEQA).[2]

Project Location and Description

The Pattar Transport GPA Project (project or proposed project) consists of the operation of a semi-truck parking facility with 80 graveled parking stalls, onsite vehicle parking for 12 employees, a concrete pavement area, a 1,725 square foot truck maintenance shop building, and a 1,933 square foot administrative office on 6.2 acres of a 10-acre parcel. Approximately 4.4 acres is covered with gravel and approximately 3.8 acres is undeveloped and includes an area for overland storm drainage. The project will serve the local food production industry and include exportation of products out of state. The project site is located at 4325 West Taylor Road, between State Route 99 and North Washington Road in the Keyes/Turlock area of Stanislaus County, California (APN 045-053-009).

Pattar Transport currently operates commercial truck parking at their site at 4325 W. Taylor Road. Pattar Transport is requesting a General Plan Amendment (GPA) and Rezone to Planned Development to permit the existing operation to continue on the 10.0-acre parcel. The parcel has a current land use designation of Agriculture with Zoning of A-2-20. Approximately 6.2 acres of the site is developed with two existing structures, a concrete pavement area, and a gravel area for parking. Pattar Transport is seeking approval for the following current uses: outdoor parking for up to 80 trucks, a shop building for light truck maintenance (e.g., visual inspection, fluid level checks, tire changes) an office for the business and parking for employees and drivers.

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1 San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed August 14, 2023.

2 San Joaquin Valley Air Pollution Control District (SJVAPCD). 2009. Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA. December 17. Website: https://www.valleyair.org/Programs/CCAP/12-17-09/3%20CCAP%20-%20FINAL%20LU%20Guidance%20-%20Dec%2017%202009.pdf. Accessed August 14, 2023.

An aerial view of the project site is shown in Figure 1. The project site plan is included as part of Attachment A and is shown overlain at the project site in Figure 2.

Figure 1 – Project Site—Aerial Vicinity

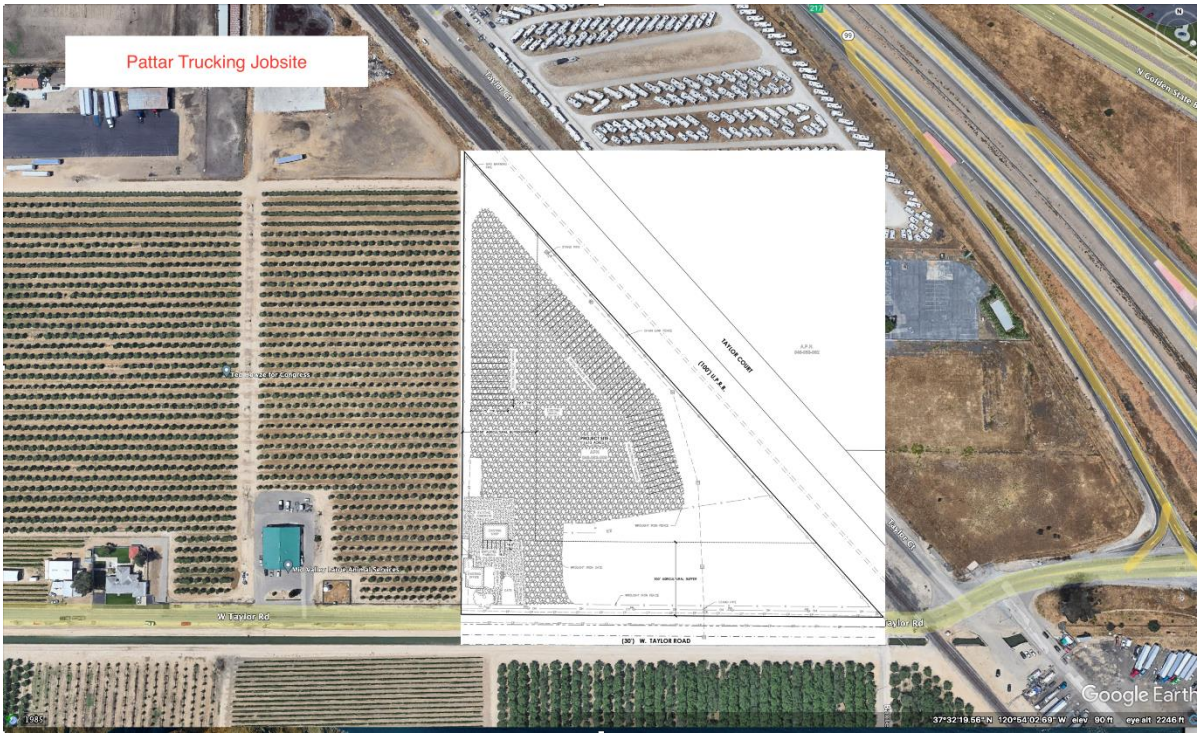

Figure 2 – Project Site—Site Plan Overlay

Environmental Setting

Air quality impacts are both local and regional. Regional and local air quality is impacted by topography, dominant airflows, atmospheric inversions, location, and season. The project is located in Stanislaus County. The project site and all of Stanislaus County are in the San Joaquin Valley Air Basin (Air Basin or SJV Air Basin), which experiences some of the most challenging environmental conditions for air quality in the nation. The following section describes these conditions as they pertain to the Air Basin. The information in this section is primarily from the SJVAPCD's GAMAQI.[3]

Topography

The topography of a region is important for air quality because mountains can block airflow that would help disperse pollutants and can channel air from upwind areas that transports pollutants to downwind areas. The SJVAPCD covers the entirety of the SJV Air Basin. The Air Basin is generally shaped like a bowl. It is open in the north and is surrounded by mountain ranges on all other sides. The Sierra Nevada mountains are along the eastern boundary (8,000 to 14,000 feet in elevation), the Coast Ranges are along the western boundary (3,000 feet in elevation), and the Tehachapi Mountains are along the southern boundary (6,000 to 8,000 feet in elevation).

Climate

The climate is important for air quality because of differences in the atmosphere's ability to trap pollutants close to the ground, which creates adverse air quality; inversely, the atmosphere's ability to rapidly disperse pollutants over a wide area prevents high concentrations from accumulating under different climatic conditions. The SJV Air Basin has an "inland Mediterranean" climate and is characterized by long, hot, dry summers and short, foggy winters. Sunlight can be a catalyst in the formation of some air pollutants (such as ozone); the SJV Air Basin averages over 260 sunny days per year.

Inversion layers are significant in determining pollutant concentrations. Concentration levels can be related to the amount of mixing space below the inversion. Temperature inversions that occur on the summer days are usually encountered 2,000 to 2,500 feet above the valley floor. In winter months, overnight inversions occur 500 to 1,500 feet above the valley floor.

Dominant airflows provide the driving mechanism for transport and dispersion of air pollution. The mountains surrounding the SJV Air Basin form natural horizontal barriers to the dispersion of air contaminants. The wind generally flows south-southeast through the valley, through the Tehachapi Pass and into the Mojave Desert Air Basin portion of Kern County. As the wind moves through the SJV Air Basin, it mixes with the air pollution generated locally, generally transporting air pollutants from the north to the south in the summer and in a reverse flow in the winter.

The winds and unstable air conditions experienced during the passage of winter storms result in periods of low pollutant concentrations and excellent visibility. Between winter storms, high pressure and light winds allow cold moist air to pool on the San Joaquin Valley floor. This creates strong, low-level temperature inversions and very stable air conditions, which can lead to Tule fog. Wintertime conditions favorable to fog formation are also conditions favorable to high concentrations of $PM_{2.5}$ and PM_{10}.

Air Quality Standards

The Clean Air Act requires states to develop a general plan to attain and maintain the standards in all areas of the country and a specific plan to attain the standards for each area designated nonattainment.

[3] San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed August 14, 2023.

These plans, known as State Implementation Plans or SIPs, are developed by state and local air quality management agencies and submitted to EPA for approval.

The SIP for the State of California is administered by the CARB, which has overall responsibility for statewide air quality maintenance and air pollution prevention. California's SIP incorporates individual federal attainment plans for each regional air district. SIPs are prepared by the regional air district and sent to CARB to be approved and incorporated into the California SIP. Federal attainment plans include the technical foundation for understanding air quality (e.g., emission inventories and air quality monitoring), control measures and strategies, and enforcement mechanisms.

The CARB also administers the California Ambient Air Quality Standards (CAAQS) for the 10 air pollutants designated in the California Clean Air Act. The state air pollutants include the six federal criteria pollutant standards listed above as well as visibility-reducing particulates, hydrogen sulfide, sulfates, and vinyl chloride. The federal and state ambient air quality standards are summarized in Table 1.

Table 1: California and National Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards	National Standards	
		Concentration	Primary	Secondary
Ozone	1 Hour	0.09 ppm (180 µg/m^3)	—	Same as Primary Standard
	8 Hour	0.070 ppm (137 µg/m^3)	0.070ppm (137 µg/m^3)	
Respirable Particulate Matter	24 Hour	50 µg/m^3	150 µg/m3	Same as Primary Standard
	Annual Arithmetic Mean	20 µg/m^3	—	
Fine Particulate Matter	24 Hour	—	35 µg/m^3	Same as Primary Standard
	Annual Arithmetic Mean	12 µg/m^3	12 µg/m^3	
Carbon Monoxide	1 Hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	—
	8 Hour	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	—
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)	—	—
Nitrogen Dioxide	1 Hour	0.18 ppm (339 µg/m^3)	100 ppb (188 µg/m^3)	—
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)	0.053 ppm (100 µg/m^3)	Same as Primary Standard
Sulfur Dioxide	1 Hour	0.25 ppm (655 µg/m^3)	75 ppb (196 µg/m^3)	—
	3 Hour	—	—	0.5 ppm (1300 µg/m^3)
	24 Hour	0.04 ppm (105 µg/m^3)	0.14 ppm (for certain areas)	—
	Annual Arithmetic Mean	—	0.030 ppm (for certain areas)	—
Lead	30-Day Average	1.5 µg/m^3	—	—
	Calendar Quarter	—	1.5 µg/m^3	

Pollutant	Averaging Time	California Standards	National Standards	
		Concentration	Primary	Secondary
	Rolling 3-Month Average	—	0.15 µg/m^3	Same as Primary Standard
Visibility-Reducing Particles	8 Hour	See Footnote 1	No National Standards	
Sulfates	24 Hour	25 µg/m^3		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)		
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m^3)		

Notes:
1 - In 1989, the CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.
µg/m3 =micrograms per cubic meter
CARB = California Air Resources Board
mg/m3 = milligrams per cubic meter
ppm = parts per million
Source: California Air Resources Board (CARB). 2017. Air Quality Standards. Website: https://www.baaqmd.gov/about-air-quality/research-and-data/air-quality-standards-and-attainment-status. Accessed August 1, 2023.

Modeling Parameters and Assumptions

The following modeling parameters and assumptions were used to generate criteria air pollutant, GHG, and TAC emissions for the proposed project.

Air Pollutants and GHGs Assessed

Criteria Pollutants Assessed

The following criteria air pollutants were assessed in this analysis: reactive organic gases (ROG),[4] oxides of nitrogen (NO_X), carbon monoxide (CO), sulfur dioxide (SO_2), particulate matter less than 10 microns in diameter (PM_{10}), and particulate matter less than 2.5 microns in diameter ($PM_{2.5}$). Note that the proposed project would emit ozone precursors ROG and NO_X. However, the proposed project would not directly emit ozone since it is formed in the atmosphere during the photochemical reaction of ozone precursors.

General descriptions and most relevant effects from pollutant exposure of the criteria pollutants of concern are listed in Table 2 below.

Table 2: Descriptions of Criteria Pollutants of Concern

Criteria Pollutant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
Ozone	Ozone is a photochemical pollutant as it is not emitted directly into the atmosphere but is formed by a complex series of chemical reactions between volatile organic compounds (VOC), nitrous oxides (NO_X), and sunlight. Ozone is a regional pollutant that is generated over a large area and is transported and spread by the wind.	Ozone is a secondary pollutant; thus, it is not emitted directly into the lower level of the atmosphere. The primary sources of ozone precursors (VOC and NO_X) are mobile sources (on-road and off-road vehicle exhaust).	Irritate respiratory system; reduce lung function; breathing pattern changes; reduction of breathing capacity; inflame and damage cells that line the lungs; make lungs more susceptible to infection; aggravate asthma; aggravate other chronic lung diseases; cause permanent lung damage; some immunological changes; increased mortality risk; vegetation and property damage.
Particulate matter (PM_{10}) Particulate matter ($PM_{2.5}$)	Suspended particulate matter is a mixture of small particles that consist of dry solid fragments, droplets of water, or solid cores with liquid coatings. The particles vary in shape, size, and composition. PM_{10} refers to particulate matter that is between 2.5 and 10 microns in diameter, (one micron is one-millionth of a meter). $PM_{2.5}$ refers to particulate matter that is 2.5 microns or less in diameter, about one-thirtieth	Stationary sources include fuel or wood combustion for electrical utilities, residential space heating, and industrial processes; construction and demolition; metals, minerals, and petrochemicals; wood products processing; mills and elevators used in agriculture; erosion from tilled lands; waste disposal, and recycling.	• Short-term exposure (hours/days): irritation of the eyes, nose, throat; coughing; phlegm; chest tightness; shortness of breath; aggravate existing lung disease, causing asthma attacks and acute bronchitis; those with heart disease can suffer heart attacks and arrhythmias. • Long-term exposure: reduced lung function; chronic

[4] Note: Although there are slight differences in the definition of ROGs and VOCs, the two terms are often used interchangeably. VOC = volatile organic compounds.

Criteria Pollutant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
	the size of the average human hair.	Mobile or transportation related sources are from vehicle exhaust and road dust. Secondary particles form from reactions in the atmosphere.	bronchitis; changes in lung morphology; death.
Nitrogen dioxide (NO_2)	During combustion of fossil fuels, oxygen reacts with nitrogen to produce nitrogen oxides—NO_X (NO, NO_2, NO_3, N_2O, N_2O_3, N_2O_4, and N_2O_5). NO_X is a precursor to ozone, PM_{10}, and $PM_{2.5}$ formation. NO_X can react with compounds to form nitric acid and related small particles and result in particulate matter (PM) related health effects.	NO_X is produced in motor vehicle internal combustion engines and fossil fuel-fired electric utility and industrial boilers. Nitrogen dioxide forms quickly from NO_X emissions. NO_2 concentrations near major roads can be 30 to 100 percent higher than those at monitoring stations.	Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; contributions to atmospheric discoloration; increased visits to hospital for respiratory illnesses.
Carbon monoxide (CO)	CO is a colorless, odorless, toxic gas. CO is somewhat soluble in water; therefore, rainfall and fog can suppress CO conditions. CO enters the body through the lungs, dissolves in the blood, replaces oxygen as an attachment to hemoglobin, and reduces available oxygen in the blood.	CO is produced by incomplete combustion of carbon-containing fuels (e.g., gasoline, diesel fuel, and biomass). Sources include motor vehicle exhaust, industrial processes (metals processing and chemical manufacturing), residential wood burning, and natural sources.	Ranges depending on exposure: slight headaches; nausea; aggravation of angina pectoris (chest pain) and other aspects of coronary heart disease; decreased exercise tolerance in persons with peripheral vascular disease and lung disease; impairment of central nervous system functions; possible increased risk to fetuses; death.
Sulfur dioxide (SO_2)	Sulfur dioxide is a colorless, pungent gas. At levels greater than 0.5 parts per million (ppm), the gas has a strong odor, similar to rotten eggs. Sulfur oxides (SO_X) include sulfur dioxide and sulfur trioxide. Sulfuric acid is formed from sulfur dioxide, which can lead to acid deposition and can harm natural resources and materials. Although sulfur dioxide concentrations have been reduced to levels well below state and federal standards, further reductions are desirable because sulfur dioxide is a precursor to sulfate and PM_{10}.	Human caused sources include fossil-fuel combustion, mineral ore processing, and chemical manufacturing. Volcanic emissions are a natural source of sulfur dioxide. The gas can also be produced in the air by dimethyl sulfide and hydrogen sulfide. Sulfur dioxide is removed from the air by dissolution in water, chemical reactions, and transfer to soils and ice caps. The sulfur dioxide levels in the State are well below the maximum standards.	Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient sulfur dioxide levels. It is not clear whether the two pollutants act synergistically or one pollutant alone is the predominant factor.
Source: U.S. Environmental Protection Agency (EPA). Criteria Air Pollutants. Website: https://www.epa.gov/criteria-air-pollutants. Accessed August 1, 2023.			

GHGs Assessed

This analysis was restricted to GHGs identified by AB 32, which include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3). The proposed project would generate a variety of GHGs, including several defined by AB 32 such as CO_2, CH_4, and N_2O.

Water vapor could be emitted from evaporated water used for landscaping and other uses, but this is not a significant impact because water vapor concentrations in the upper atmosphere are primarily due to climate feedbacks rather than emissions from project-related activities.

Ozone is a GHG; however, unlike the other GHGs, ozone in the troposphere is relatively short-lived and can be reduced in the troposphere on a daily basis. Stratospheric ozone can be reduced through reactions with other pollutants.

Certain GHGs defined by AB 32 would not be emitted by the project. Perfluorocarbons and sulfur hexafluoride are typically used in industrial applications, none of which would be used by the project. Therefore, it is not anticipated that the project would emit perfluorocarbons or sulfur hexafluoride.

GHG emissions associated with the proposed project construction as well as future operations were estimated using CO_2 equivalent (CO_2e) emissions as a proxy for all GHG emissions. In order to obtain the CO_2e, an individual GHG is multiplied by its Global Warming Potential (GWP). The GWP designates on a pound for pound basis the potency of the GHG compared to CO_2.

Toxic Air Contaminants Assessed

Toxic Air Contaminants

A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations.

The California Almanac of Emissions and Air Quality—2009 Edition presents the relevant concentration and cancer risk data for the ten TACs that pose the most substantial health risk in California based on available data.[5] The ten TACs are acetaldehyde, benzene, 1.3-butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, perchloroethylene, and diesel particulate matter (DPM).

Some studies indicate that DPM poses the greatest health risk among the TACs listed above. A 10-year research program demonstrated that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic health risk.[6] In addition to increasing the risk of lung cancer, exposure to diesel exhaust can have other health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. Diesel exhaust is a major source of fine particulate pollution as well, and studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems.

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[5] California Air Resources Board (CARB). 2009. The California Almanac of Emissions and Air Quality—2009 Edition. Website: https://www.gsweventcenter.com/Draft_SEIR_References/2009_xxxx_CARB_California_Almanac.pdf. Accessed August 1, 2023.

[6] California Air Resources Board (CARB). 1998. The Toxic Air Contaminant Identification Process: Toxic Air Contaminant Emissions from Diesel-fueled Engines. Website: www.arb.ca.gov/toxics/dieseltac/factsht1.pdf. Accessed August 1, 2023.

Diesel Particulate Matter

For purposes of this study, DPM exhaust emissions are represented as PM_{10}.

The project would generate passenger vehicle and truck trips from employees, visitors, deliveries, and service vehicles traveling to and from the project site. The main source of DPM from the long-term operations of the proposed project would be from combustion of diesel fuel in diesel-powered engines in on-road trucks, while additional DPM would be emitted from on-site equipment. On-site motor vehicle emissions refer to DPM exhaust emissions from the motor vehicle traffic that would travel and idle within the project site each day.

Asbestos

Asbestos is the name given to a number of naturally occurring fibrous silicate minerals that have been mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. The three most common types of asbestos are chrysotile, amosite, and crocidolite. Chrysotile, also known as white asbestos, is the most common type of asbestos found in buildings. Chrysotile makes up approximately 90 to 95 percent of all asbestos contained in buildings in the United States. Exposure to asbestos is a health threat; exposure to asbestos fibers may result in health issues such as lung cancer, mesothelioma (a rare cancer of the thin membranes lining the lungs, chest, and abdominal cavity), and asbestosis (a non-cancerous lung disease that causes scarring of the lungs). Exposure to asbestos can occur during demolition or remodeling of buildings that were constructed prior to the 1977 ban on asbestos for use in buildings. Exposure to naturally occurring asbestos can occur during soil-disturbing activities in areas with deposits present.

Model Selection

Air pollutant emissions can be estimated by using emission factors and a level of activity. Emission factors are the emission rate of a pollutant given the activity over time; for example, grams of NO_X per horsepower-hour. CARB has published emission factors for on-road mobile vehicles/trucks in the EMFAC mobile source emissions model and emission factors for off-road equipment and vehicles in the OFFROAD emissions model. An air emissions model (or calculator) combines the emission factors and the various levels of activity and outputs the emissions for the various pieces of equipment.

The project is located in Stanislaus County and within the SJV Air Basin. The modeling follows SJVAPCD guidance where applicable from its GAMAQI. The models used in this analysis are summarized as follows:

- Operational criteria pollutant and GHG emissions: CalEEMod, version 2022.1 (Specifically version 2022.1.1.18)
- Operational TAC emissions (including DPM): EMission FACtor (EMFAC) 2021
- Dispersion Model: American Meteorological Society/ Environmental Protection Agency Regulatory Model (AERMOD), version 22112
- Health Risk Metric Calculations: Hot Spots Analysis & Reporting Program 2 (HARP2)

Criteria Pollutants and GHG Emissions

The California Emissions Estimator Model (CalEEMod) is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operations from a variety of land use projects. CalEEMod quantifies direct emissions from construction and operation activities (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and

water use. Furthermore, CalEEMod identifies mitigation measures to reduce criteria pollutant and GHG emissions along with calculating the benefits achieved from measures chosen by the user.

CalEEMod was developed for the California Air Pollution Control Officers Association (CAPCOA) in collaboration with the California Air Districts. Default data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California Air Districts to account for local requirements and conditions.

CalEEMod is a comprehensive tool for quantifying air quality impacts from land use projects located throughout California. The model can be used for a variety of situations where an air quality analysis is necessary or desirable such as preparing CEQA or National Environmental Policy Act documents, conducting pre-project planning, and, verifying compliance with local air quality rules and regulations, etc.

CalEEMod version CalEEMod 2022.1 was used to estimate construction and operational impacts of the proposed project. CalEEMod version 2022.1 was the most recent version of CalEEMod at the time emissions were estimated in August 2023.

Assumptions

Construction Assumptions

Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and prevailing weather conditions. Construction emissions result from on-site and off-site activities. On-site emissions principally consist of exhaust emissions from the activity levels of heavy-duty construction equipment, motor vehicle operation, and fugitive dust (mainly PM_{10}) from disturbed soil. Additionally, paving operations and application of architectural coatings release VOC emissions. Off-site emissions are caused by motor vehicle exhaust from delivery vehicles, worker traffic, and road dust (PM_{10} and $PM_{2.5}$).

As noted in the project description, Pattar Transport currently operates commercial truck parking at their site at 4325 W. Taylor Road. The proposed project consists of a GPA and Rezone to Planned Development to permit the existing operation to continue on the 10.0-acre parcel. No construction is included as part of the project.

Operational Modeling Assumptions

Operational emissions are those emissions that would occur during long-term operations of the proposed project.

Motor Vehicles

Trip rates and trip generation assumptions were made to be consistent with the traffic study that was prepared for the project.[7] Table 3 presents trip generation characteristics for projected trips for the project.

[7] LSA. 2023. Traffic Impact Study for 4531 and 4579 S. Maple Avenue M-3 (Heavy Industrial) Rezone Project.

Table 3: Project Daily Trips used to Estimate Project Emissions

Description	Daily Truck Trips (trips per day)	Daily Automobile Trips (trips per day)
Short Haul Trip Generation	20	20
Long Haul Trip Generation	15	19
Proposed Trip Generation	31	38
Employees Trip Generation	-	32
Total Daily Trips	**66**	**109**

Source: KD Anderson & Associates, Inc. 2023. Transportation Impact Analysis for Pattar Transport GPA Project—Stanislaus County, California.

Trip Lengths and Vehicle Fleet Mix

Trip lengths are for primary trips. Trip purposes are primary, diverted, and pass-by trips. Diverted trips take a slightly different path than a primary trip. Project trips were assumed to be primary trips.

The vehicle fleet mix is defined as the mix of motor vehicle classes active during the operation of the proposed project. Emission factors are assigned to the expected vehicle mix as a function of vehicle class, speed, and fuel use (gasoline- and diesel-powered vehicles).

Industrial land use projects can be expected to have longer than average truck trip lengths compared to the default trip length in CalEEMod. The Transportation Impact Analysis prepared for the project categorized truck trips into short haul trips and long haul trips. The truck trip lengths applied in this assessment are consistent with the trip distribution identified in the project-specific Transportation Impact Analysis. As noted in the Transportation Impact Analysis, long haul trucks in the project area typically follow routes along SR 99 to and from regional distribution centers or warehouses primarily in the Stockton/Modesto metropolitan area. Short haul trucks travel SR 99 north and south to pick up goods in the Central Valley and deliver them to the Bay Area, Sacramento, and Los Angeles areas. Consistent with the Transportation Impact Analysis, this analysis assumes that truck traffic is oriented to the south (35%) and north (65%) on SR 99.

A one-way truck trip length of 50 miles was assumed for the short haul trips, which would encompass trips to the Stockton/Modesto metropolitan area. A one-way truck trip length of 172 miles was assumed for the long haul trips, which is based on the weighted average of the measured distances from the project site to the edge of the SJV Air Basin to the north and south. The adjusted fleet mixes used the CalEEMod default fleet mix for Stanislaus County as the basis; the calculations for the adjusted fleet mix are included as part of Attachment A.

Transportation Refrigeration Units

Based on applicant provided information, it is anticipated that trucks making trips to and from the project site would be equipped with a Transportation Refrigeration Unit (TRU). It was assumed that trailers with TRUs will remain on-site while loading, unloading, and awaiting departure.

Area Sources

Consumer Products

Consumer products are various solvents used in non-industrial applications, which emit VOCs during their product use. “Consumer Product” means a chemically formulated product used by household and

institutional consumers, including but not limited to: detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. It does not include other paint products, furniture coatings, or architectural coatings. CalEEMod includes default consumer product use rates based on building square footage. The default emission factors developed for CalEEMod were used for consumer products associated with parking uses and the general consumer product category.

Architectural Coatings (Painting)

Paints release VOC emissions during application and drying. The buildings in the project would be repainted on occasion. The project is required to comply with the SJVAPCD Rule 4601—Architectural Coatings. The rule required flat paints to meet a standard of 50 grams per liter (g/l) and gloss paints 100 g/l by 2012 for an average rate of 65 g/l. Effective January 1, 2022, nonflat gloss and semigloss paints are also required to meet the 50 g/l standard, providing lower VOC emissions for buildings constructed after that date. Therefore, the analysis uses the 50 g/l emission factor for the analysis.

Landscaping Emissions

CalEEMod estimates a total of 180 days for which landscaping equipment would be used to estimate potential emissions for the proposed project.

Indirect Emissions

For GHG emissions, CalEEMod contains calculations to estimate indirect GHG emissions. Indirect emissions are emissions where the location of consumption or activity is different from where actual emissions are generated. For example, electricity would be consumed at the proposed project site; however, emissions associated with producing that electricity are generated off-site at a power plant. Since the electricity can vary greatly based on locations, the user should override these values if they have more specific information regarding their specific water supply and treatment.

Energy Use

Electricity used by the project (for lighting, etc.) would result in emissions from the power plants that would generate electricity distributed on the electrical power grid. Electricity emissions estimates are only used in the GHG analysis.

The project would generate emissions from the combustion of natural gas for water heaters, heat, etc. CalEEMod has two categories for natural gas consumption: Title 24 and non-Title 24.

The emissions associated with the building electricity and natural gas usage (non-hearth) were estimated based on the land use type and size. Values for a project served by Pacific Gas and Electric (PG&E) were used in the analysis.

The Renewable Electricity Standards took effect in 2020. The Renewable Electricity Standard requires that electricity providers include a minimum of 33 percent renewable energy in their portfolios by the year 2020. PG&E provides estimates of its emission factor per megawatt hour of electricity delivered to its customers. PG&E provides emission factors for the electricity it provides to customers for its energy portfolio that is used to estimate project emissions. CalEEMod 2022.1 includes PG&E emission factor based on actual rates reported by the utility. The utilities in California will be required to increase the use of renewable energy sources to 60 percent by 2030.

Other Indirect Emissions (Water Use, Wastewater Use, and Solid Waste)

CalEEMod includes calculations for indirect GHG emissions for electricity consumption, water consumption, and solid waste disposal. For water consumption, CalEEMod calculates embedded energy

(e.g., treatment, conveyance, distribution) associated with providing each gallon of potable water to the project. For solid waste disposal, GHG emissions are associated with the disposal of solid waste generated by the proposed project into landfills. CalEEMod default data was used for inputs associated with solid waste and water consumption.

Offroad Equipment

Offroad equipment was based on the peak-season estimates provided by the project applicant. Assumptions used to estimate emissions are included as part of Attachment A.

Stationary Equipment

Based on applicant-provided information, no stationary sources are currently included as part of the commercial truck parking project at 4325 W. Taylor Road. Proposed or future stationary sources would require permits from the SJVAPCD prior to their installation or operation. Any future equipment that would be considered a stationary source would need to meet SJVAPCD emission limits for regulated pollutants pursuant to Rule 2201. The equipment will also meet SJVAPCD BPS for GHG emissions.

Vegetation

There is currently carbon sequestration occurring on-site in the form of vegetation in the form of landscaping next to the buildings in the southwest corner of the project site and along the west boundary. Further, the undeveloped area in the southeast portion of the project site is sparsely vegetated with shrubbery. The applicant is seeking a GPA and Rezone, and the proposed project is not anticipated to result in a loss of carbon sequestration. Therefore, a change carbon sequestration was not calculated in this assessment.

Refrigerants

Buildings requiring cold storage are not envisioned as part of proposed project. CalEEMod defaults for refrigerants that would result in GHG emissions were used in this analysis.

Health Risk Assessment Assumptions

An HRA was completed to evaluate potential health risks associated with the generation of TACs during operational activities associated with the proposed project. Assumptions used in the HRA are summarized below, while complete calculations parameters are provided as part of Attachment B.

Model Selection and Parameters

An air dispersion model is a mathematical formulation used to estimate the air quality impacts at specific locations (receptors) surrounding a source of emissions given the rate of emissions and prevailing meteorological conditions. The air dispersion model applied in this assessment was the United States Environmental Protection Agency (EPA) AERMOD (version 22112) air dispersion model. Specifically, AERMOD was used to estimate levels of air emissions at sensitive receptor locations from potential sources of project-generated TACs. The use of AERMOD provides a refined methodology for estimating construction impacts by utilizing long-term, measured representative meteorological data for the project site and a representative construction schedule.

The modeling analysis also considered the spatial distribution and elevation of each emitting source in relation to the sensitive receptors. Direction-dependent calculations were obtained by identifying the Universal Transverse Mercator (UTM) coordinates for each source location. Terrain elevations were obtained for the project site using the AERMAP model, the AERMOD terrain data pre-processor. Elevation data for the area were obtained and included in the model runs to account for complex terrain. The air dispersion model assessment used meteorological data from the Modesto 23258 Station. The

meteorological data used was preprocessed for use with AERMOD by the SJVAPCD and included data for the years 2010 to 2014; all years were used in the assessment. To evaluate the proposed project's localized impacts at the point of maximum impact, all receptors were placed within the breathing zone at 1.2 meters above ground level.

Project operations were assessed assuming a 24-hour-per-day, and seven day-per-week schedule. Detailed parameters and complete calculations are contained in Attachment B. Attachment B also includes a representation of the DPM modeling parameters, including modeled on-site vehicle travel, vehicle idling locations, and locations of sensitive receptors within approximately ¼-mile 1,320 feet of the project boundary.

Air Toxics Generated during Operations—DPM

The project would generate passenger vehicle and truck trips from visitors, vendors, and employees traveling to and from the project site. Customers visits to the property are expected to be limited due to the nature of the project operations. The main source of DPM from the long-term operations of the proposed project would be from combustion of diesel fuel in diesel-powered engines in on-road trucks. On-site motor vehicle emissions refer to DPM exhaust emissions from the motor vehicle traffic that would travel and idle within the project site each day. Additional DPM would be emitted from TRUs.

The vehicle fleet mix representation in CalEEMod for trucks consists of Light-Heavy-Duty trucks (LHDT), Medium-Heavy-Duty trucks (MHDT), and Heavy-Heavy-Duty trucks (HHDT). In this analysis, 100 percent of truck trips were assumed to be generated by heavy-heavy-duty trucks to provide a conservative estimate of emissions. Emission factors are assigned to the expected vehicle mix as a function of vehicle age, vehicle class, speed, and fuel type.

Each operational emission source to be evaluated requires geometrical and emission release specifications for use in the air dispersion model.

Operational emissions for the proposed project were assessed assuming the first year of operations would occur in 2023. Exhaust emissions of DPM (as PM_{10} exhaust) were estimated using EMFAC2021. EMFAC2021 was selected, as this is the database that informs the version of CalEEMod that was used to estimate regional project-generated emissions (CalEEMod version 2022.1). It was assumed that emission factors were constant for the years beyond 2023, which provides a conservative estimate of DPM emissions and associated health risks. DPM emissions are expected to decline as older, higher polluting vehicles continue to be replaced by newer cleaner vehicles. This decline is not fully accounted for in the HRA completed for the proposed project. The emission factors, AERMOD data, and HARP2 files used in the analysis are provided in Attachment B.

Cancer Risk

The model was run to obtain annual average concentration in micrograms per cubic meter [µg/m³] at residential sensitive receptor locations. Consistent with SJVAPCD guidance, a health risk computation was performed to determine the risk of developing an excess cancer risk calculated on a 70-year exposure scenario. The chronic and carcinogenic health risk calculations are based on the standardized equations contained in the U.S. EPA Human Health Evaluation Manual (1991) and OEHHA's 2015 Guidance Manual.[8,9]

[8] U.S. Environmental Protection Agency (EPA). 1991. Human Health Evaluation Manual. Website: https://www.epa.gov/sites/default/files/2015-11/documents/defaultExposureParams.pdf. Accessed August 1, 2023.

[9] California Office of Environmental Health Hazards Assessment (OEHHA). 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines. Guidance Manual for Preparation of Health Risk Assessments. February. Website: http://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf. Accessed August 1, 2023.

Based on the OEHHA methodology, the residential inhalation cancer risk from the annual average DPM concentrations is calculated by multiplying the daily inhalation or oral dose, by a cancer potency factor, the age sensitivity factor (ASF), the frequency of time spent at home (for residents only), and the exposure duration divided by averaging time, to yield the excess cancer risk. These factors are discussed in more detail below. Cancer risk must be separately calculated for specified age groups, because of age differences in sensitivity to carcinogens and age differences in intake rates (per kg body weight). Separate risk estimates for these age groups provide a health-protective estimate of cancer risk by accounting for greater susceptibility in early life, including both age-related sensitivity and amount of exposure.

Exposure through inhalation (Dose-air) is a function the breathing rate, the exposure frequency, and the concentration of a substance in the air. For residential exposure, the breathing rates are determined for specific age groups, so Dose-air is calculated for each of these age groups, 3rd trimester, 0<2, 2<9, 2<16, 16<30 and 16-70 years. To estimate cancer risk, the dose was estimated by applying the following formula to each ground-level concentration:

$\text{Dose-air} = (C_{air} * \{BR/BW\} * A * EF * 10^{-6})$

Where:

Dose-air	=	dose through inhalation (mg/kg/day)
Cair	=	air concentration (µg/m³) from air dispersion model
{BR/BW}	=	daily breathing rate normalized to body weight (L/kg body weight – day) (361 L\kg BW-day for 3rd Trimester, 1,090 L/kg BW-day for 0<2 years, 861 L/kg BW-day for 2<9 years, 745 L/kg BW-day for 2<16 years, 335 L/kg BW-day for 16<30 years, and 290 L/kg BW-day 30<70 years)
A	=	Inhalation absorption factor (unitless [1])
EF	=	exposure frequency (unitless), days/365 days (0.96 [approximately 350 days per year])
10^{-6}	=	conversion factor (micrograms to milligrams, liters to cubic meters)

OEHHA developed ASFs to take into account the increased sensitivity to carcinogens during early-in-life exposure. In the absence of chemical-specific data, OEHHA recommends a default ASF of 10 for the third trimester to age 2 years, an ASF of 3 for ages 2 through 15 years to account for potential increased sensitivity to carcinogens during childhood and an ASF of 1 for ages 16 through 70 years.

Fraction of time at home (FAH) during the day is used to adjust exposure duration and cancer risk from a specific facility's emissions, based on the assumption that exposure to the facility's emissions are not occurring away from home. The following FAH values were used in this assessment:

- From the third trimester to age <2 years: 100 percent (the OEHHA-recommended value is 85 percent of time is spent at home; however, 100 percent was assumed in order to present a conservative analysis and to conform to SJVAPCD recommendations);
- From age 2 through <16 years: 100 percent (the OEHHA-recommended value is 72 percent of time is spent at home; however, 100 percent was assumed in order to present a conservative analysis and to conform to SJVAPCD recommendations); and

- From age 16 years and greater: 73 percent (the OEHHA-recommended value is 73 percent of time is spent at home; however, 100 percent was assumed in order to present a conservative analysis and to conform to SJVAPCD recommendations).

To estimate the cancer risk, the dose is multiplied by the cancer potency factor, the ASF, the exposure duration divided by averaging time, and the frequency of time spent at home (for residents only):

$Risk_{inh\text{-}res} = (Dose_{air} * CPH * ASF * ED/AT * FAH)$

Where:

$Risk_{inh\text{-}res}$	=	residential inhalation cancer risk (potential chances per million)
$Dose_{air}$	=	daily dose through inhalation (mg/kg-day)
CPF	=	inhalation cancer potency factor ($mg/kg\text{-}day^{-1}$)
ASF	=	age sensitivity factor for a specified age group (unitless)
ED	=	exposure duration (in years) for a specified age group
AT	=	averaging time of lifetime cancer risk (years)
FAH	=	fraction of time spent at home (unitless)

Chronic Non-Cancer Hazard

Non-cancer chronic impacts are calculated by dividing the annual average concentration by the Reference Exposure Level (REL) for that substance. The REL is defined as the concentration at which no adverse non-cancer health effects are anticipated. The following equation was used to determine the non-cancer risk:

Hazard Quotient = C_i/REL_i

Where:

C_i	=	Concentration in the air of substance i (annual average concentration in $\mu g/m^3$)
REL_i	=	Chronic noncancer Reference Exposure Level for substance i ($\mu g/m^3$)

Thresholds

Air pollutant emissions have regional effects and localized effects. This analysis assesses the regional effects of the project's criteria pollutant emissions in comparison to SJVAPCD thresholds of significance for long-term operation of the project. Localized emissions from project operation are also assessed using concentration-based thresholds that determine if the project would result in a localized exceedance of any

ambient air quality standards or would make a cumulatively considerable contribution to an existing exceedance.

The primary pollutants of concern during project operation are ROG, NO_X, PM_{10}, and $PM_{2.5}$. The SJVAPCD GAMAQI adopted in 2015 contains thresholds for ROG and NO_X; SO_X, CO, PM_{10}, and $PM_{2.5}$.

Ozone is a secondary pollutant that can be formed miles away from the source of emissions through reactions of ROG and NO_X emissions in the presence of sunlight. Therefore, ROG and NO_X are termed ozone precursors. The San Joaquin Valley Air Basin (SJVAB) often exceeds the state and national ozone standards. Therefore, if the project emits a substantial quantity of ozone precursors, the project may contribute to an exceedance of the ozone standard. The SJVAB also exceeds air quality standards for PM_{10}, and $PM_{2.5}$; therefore, substantial project emissions may contribute to an exceedance for these pollutants.

The SJVAPCD adopted significance thresholds for construction-related and operational ROG, NO_X, PM, CO, and SO_X, these thresholds are included in Table 4.

Table 4: SJVAPCD Project-level Air Quality CEQA Thresholds of Significance

Pollutant	Significance Threshold	
	Construction Emissions (tons/year)	Operational Emission (tons/year)
CO	100	100
NO_X	10	10
ROG	10	10
SO_X	27	27
PM_{10}	15	15
$PM_{2.5}$	15	15

Source: SJVAPCD. 2015. Guidance for Assessing and Mitigating Air Quality Impacts. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed August 14, 2023.

Addressing Air Quality CEQA Impact Questions

Table 5: Summary of Air Quality Impact Analysis

Air Quality *Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.*	
Would the project:	**Significance Finding**
a) Conflict with or obstruct implementation of the applicable air quality plan?	Less than Significant Impact
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard?	Less than Significant Impact
c) Expose sensitive receptors to substantial pollutant concentrations?	Less than Significant Impact
d) Result in other emissions (such as those leading to odors or) adversely affecting a substantial number of people?	Less than Significant Impact

Air Quality Mitigation Measures

No mitigation is required.

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

Less Than Significant Impact.

Air Quality Plans (AQPs) are plans for reaching attainment of air quality standards. The assumptions, inputs, and control measures are analyzed to determine if the Air Basin can reach attainment for the ambient air quality standards. The proposed project site is located within the jurisdictional boundaries of the SJVAPCD. To show attainment of the standards, the SJVAPCD analyzes the growth projections in the Valley, contributing factors in air pollutant emissions and formations, and existing and adopted emissions controls. The SJVAPCD then formulates a control strategy to reach attainment that includes both State and SJVAPCD regulations and other local programs and measures. For projects that include stationary sources of emissions, the SJVAPCD relies on project compliance with Rule 2201—New and Modified Stationary Source Review to ensure that growth in stationary source emissions would not interfere with the applicable AQP. Projects exceeding the offset thresholds included in the rule are required to purchase offsets in the form of Emission Reduction Credits (ERCs).

The CEQA Guidelines indicate that a significant impact would occur if the project would conflict with or obstruct implementation of the applicable air quality plan. The GAMAQI indicates that projects that do not exceed SJVAPCD regional criteria pollutant emissions quantitative thresholds would not conflict with or obstruct the applicable AQP. An additional criterion regarding the project's implementation of control measures was assessed to provide further evidence of the project's consistency with current AQPs. This document proposes the following criteria for determining project consistency with the current AQPs:

1. Will the project result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQPs? This measure is determined by comparison to the regional and localized thresholds identified by the District for Regional and Local Air Pollutants.

2. Will the project comply with applicable control measures in the AQPs?

The use of the criteria listed above is a standard approach for CEQA analysis of projects in the SJVAPCD's jurisdiction, as well as within other air districts, for the following reasons:

- Significant contribution to existing or new exceedances of the air quality standards would be inconsistent with the goal of attaining the air quality standards.
- AQP emissions inventories and attainment modeling are based on growth assumptions for the area within the air district's jurisdiction.
- AQPs rely on a set of air district-initiated control measures as well as implementation of federal and state measures to reduce emissions within their jurisdictions, with the goal of attaining the air quality standards.

Contribution to Air Quality Violations

As discussed in Impact AIR-2 below, emissions of ROG, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$ associated with the proposed project would not exceed the SJVAPCD's significance thresholds (see Table 6). Therefore, the proposed project would not be considered to obstruct implementation of the applicable air quality plan or be in conflict with the applicable air quality plan.

Air Quality Plan Control Measures

The AQP contains a number of control measures that are enforceable requirements through the adoption of rules and regulations. The following rules and regulations are relevant to the project:

Rule 2201—New and Modified Stationary Source Review Rule. The review of new and modified Stationary Sources of air pollution and to provide mechanisms including emission trade-offs by which Authorities to Construct such sources may be granted, without interfering with the attainment or maintenance of Ambient Air Quality Standards

Rule 4201—Particulate Matter Concentration. This rule shall apply to any source operation that emits or may emit dust, fumes, or total suspended particulate matter.

Rule 4309—Boilers, Steam Generators, and Process Heaters. The purpose of this rule is to limit emissions of oxides of nitrogen (NO_X) and carbon monoxide (CO) from boilers, steam generators, and process heaters. This rule applies to any gaseous fuel or liquid fuel fired boiler, steam generator, or process heater with a total rated heat input greater than 5 million Btu per hour.

Rule 4601—Architectural Coatings. The purpose of this rule is to limit Volatile Organic Compounds (VOC) emissions from architectural coatings. Emissions are reduced by limits on VOC content and providing requirements on coatings storage, cleanup, and labeling. Only compliant components are available for purchase in the San Joaquin Valley.

Rule 4641—Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations. The purpose of this rule is to limit VOC emissions from asphalt paving and maintenance operations. If asphalt paving will be used, then the paving operations will be subject to Rule 4641. This regulation is enforced on the asphalt provider.

Rule 4702—Internal Combustion Engines. The purpose of this rule is to limit the emissions of NO_X, carbon monoxide (CO), VOC, and sulfur oxides (SO_X) from internal combustion engines. If the project includes emergency generators, the equipment is required to comply with Rule 4702.

Regulation VIII—Fugitive PM_{10} Prohibitions. This regulation is a control measure that is one main strategies from the 2006 PM_{10} for reducing the PM_{10} emissions that are part of fugitive dust. Projects over 10 acres are required to file a Dust Control Plan (DCP) containing dust control practices sufficient to comply with Regulation VIII. Rule 8021 regulates construction and demolition activities, road construction, bulk materials storage, paved and unpaved roads, carryout and trackout, etc. All development projects that involve soil disturbance are subject to at least one provision of the Regulation VIII series of rules.

Rule 9510—Indirect Source Review (ISR) is a control measure in the 2006 PM_{10} Plan that requires NO_X and PM_{10} emission reductions from development projects in the San Joaquin Valley. The NO_X emission reductions help reduce the secondary formation of PM_{10} in the atmosphere (primarily ammonium nitrate and ammonium sulfate) and also reduce the formation of ozone. Reductions in directly emitted PM_{10} reduce particles such as dust, soot, and aerosols. Rule 9510 is also a control measure in the 2016 Plan for the 2008 8-Hour Ozone Standard. Developers of projects subject to Rule 9510 must reduce emissions occurring during construction and operational phases through on-site measures or pay off-site mitigation fees.

The project would comply with all applicable CARB and SJVAPCD rules and regulations. Therefore, the project complies with this criterion and would not conflict with or obstruct implementation of the applicable air quality attainment plan.

Conclusion

The project's emissions would be less than significant for all criteria pollutants and would not result in inconsistency with the AQP for this criterion. The project would comply with all applicable rules and regulations from the applicable air quality plans. Considering the project's less-than-significant contribution to air quality violations and the project's adherence to applicable rules and regulations, the project would not be considered inconsistent with the AQP; the impact would be less than significant.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard?

Less Than Significant Impact.

To result in a less than significant impact, emissions of nonattainment pollutants must be below the SJVAPCD's regional significance thresholds. This is an approach recommended by the SJVAPCD's in its GAMAQI. The SJVAB is in nonattainment for ozone, PM_{10} (State only), and $PM_{2.5}$. Ozone is a secondary pollutant that can be formed miles from the source of emissions, through reactions of ROG and NO_X emissions in the presence of sunlight. Therefore, ROG and NO_X are termed ozone precursors. As such, the primary pollutants of concern during project operation are ROG, NO_X, PM_{10}, and $PM_{2.5}$. The air quality standards were set to protect public health, including the health of sensitive individuals (such as children, the elderly, and the infirm). Therefore, when the concentration of those pollutants exceeds the standard, it is likely that some sensitive individuals in the population would experience adverse health effects. However, the health effects are a factor of the dose-response curve. Concentration of the pollutant in the air (dose), the length of time exposed, and the response of the individual are factors involved in the severity and nature of health impacts. If a significant health impact results from project emissions, it does not mean that 100 percent of the population would experience health effects.

Since the SJVAB is nonattainment for ozone, PM_{10}, and $PM_{2.5}$, it is considered to have an existing significant cumulative health impact without the project. When this occurs, the analysis considers whether the project's contribution to the existing violation of air quality standards is cumulatively considerable. The SJVAPCD regional thresholds for NO_X, ROG/VOC, PM_{10}, or $PM_{2.5}$ are applied as cumulative contribution thresholds. Projects that exceed the regional thresholds would have a cumulatively considerable health impact.

The SJVAPCD GAMAQI adopted in 2015 contains thresholds for CO, NO_X, ROG, SO_X, PM_{10}, and $PM_{2.5}$. Air pollutant emissions have both regional and localized effects. The project's regional emissions are compared to the applicable SJVAPCD below.

Criteria Pollutant Emission Estimates

Construction Emissions (Regional)

No construction is included as part of the project.

Operational Emissions (Regional)—Non-Permitted

Operational emissions occur over the lifetime of the project. The SJVAPCD considers permitted and non-permitted emission sources separately when making significance determinations. In addition, the annual operational emissions are also considered separately from construction emissions. Operational emissions are shown in Table 6.

The emissions output for project operation for the 2023 operational year are summarized in Table 6. As shown in Table 6, the operational emissions would be less than the thresholds of significance for all criteria air pollutants.

Table 6: Summary of Operational Emissions of Criteria Air Pollutants – Unmitigated

Source	Emissions (tons/year)					
	ROG	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Area	0.03	< 0.01	0.01	< 0.01	< 0.01	< 0.01
Energy	< 0.01	0.01	0.01	< 0.01	< 0.01	< 0.01
Mobile (Passenger Vehicles + Trucks)	0.13	6.73	1.55	0.06	1.67	0.52
TRUs	0.29	1.12	7.80	0.01	0.03	0.03
Annual Total	**0.45**	**7.86**	**9.37**	**0.07**	**1.70**	**0.55**
Significance Thresholds	**10**	**10**	**100**	**27**	**15**	**15**
Exceed Significance Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:

Emissions were quantified using CalEEMod based on project details and estimated operating year for the proposed project. Totals may not sum exactly due to rounding.

Source: CalEEMod Output and Additional Supporting Information (Attachment A).

Operational Emissions (Regional)—Permitted

The SJVAPCD GAMAQI recommends assessing the emissions from permitted sources of emissions separate from non-permitted sources. The SJVAPCD's permitting process ensures that emissions of criteria pollutants from permitted equipment and activities at stationary sources are reduced or mitigated to below the SJVAPCD's thresholds of significance. SJVAPCD implementation of New Source Review (NSR) ensures that there is no net increase in emissions above specified thresholds from new and modified Stationary Sources subject to the rule for all nonattainment pollutants and their precursors. Permitted sources emitting more than the NSR Offset Thresholds for any criteria pollutant must, in general, offset all emission increases in excess of the thresholds.

No stationary sources are included as part of the proposed project. If stationary sources are proposed in the future, they would require SJVAPCD permits. As part of the permitting process, the SJVAPCD will prepare an engineering evaluation of all permitted equipment to determine the controls required to achieve best available control technology (BACT) requirements. The permitted emissions are dependent on the control technology selected and any process limits included in the permit conditions.

Permitted sources will be required to comply with SJVAPCD BACT requirements. Compliance with regulations would ensure that the project's stationary sources would not exceed SJVAPCD thresholds of significance; therefore, the project's estimated permitted emissions would be less than significant.

Conclusion

As shown in Table 6, the project's regional emissions would not exceed the applicable regional criteria pollutant emissions quantitative thresholds. In addition, any permitted sources will be required to comply with SJVAPCD BACT requirements. Therefore, the project would not result in significant cumulative health impacts.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact.

Emissions occurring at or near the project have the potential to create a localized impact that could expose sensitive receptors to substantial pollutant concentrations. Sensitive receptors are considered land uses or other types of population groups that are more sensitive to air pollution than others due to their exposure. Sensitive population groups include children, the elderly, the acutely and chronically ill, and those with cardio-respiratory diseases. The SJVAPCD considers a sensitive receptor to be a location that houses or attracts children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Examples of sensitive receptors include hospitals, residences, convalescent facilities, and schools.

Description of the land uses surrounding the project site are provided below.

- North – Taylor Court Road, Highway 99, and North Golden State Boulevard run diagonally north of the project with several acres in between the roads occupied by Woods Furniture Galleries, Best RV Center, and Drydock RV & Boat Storage. The nearest residence to the north of the project is approximately 1,320 feet (0.25 miles) from the project boundary.
- East – East of the project is Taylor Court Road, Highway 99, and North Golden State Boulevard running diagonally to the jobsite. Best Western Orchard Inn and Grizzly Rock Café are within 0.25 miles east of the project, beyond which is farmland with a few scattered rural homes. The nearest residence to the east of the project is approximately 3,115 feet (0.59 miles) from the project boundary

- South – Empower Truck and Trailer Repair and Bawa Truck and Trailer Repair are located southeast of the project site. Directly south of the project site is developed farmland. Southwest of the project is developed farmland with two (2) rural homes. ○ The nearest residence to the south of the project is approximately 1,003 feet (0.19 miles) from the project boundary
- West – West of the project site is developed farmland with a few rural homes, Railside Jersey Farms, and Mid Valley Large Animal Services. The nearest residence to the west of the project is approximately 686.4 feet (0.13 miles) from the project boundary.

John H. Pitman High School is the closest school to the project site and is located approximately 4,805 feet (0.91 mile) southeast from the project site. Walnut Elementary School and Turlock Junior High School are the next closest schools and are both approximately 1.5 miles from the project site.

Localized Impacts

Emissions occurring at or near the project have the potential to create a localized impact also referred to as an air pollutant hotspot. Localized emissions are considered significant if when combined with background emissions, they would result in exceedance of any health-based air quality standard. In locations that already exceed standards for these pollutants, significance is based on a significant impact level (SIL) that represents the amount that is considered a cumulatively considerable contribution to an existing violation of an air quality standard. The pollutants of concern for localized impact in the SJVAB are NO_2, SO_X, and CO.

The SJVAPCD has provided guidance for screening localized impacts in the GAMAQI that establishes a screening threshold of 100 pounds per day of any criteria pollutant. If a project exceeds 100 pounds per day of any criteria pollutant, then ambient air quality modeling would be necessary. If the project does not exceed 100 pounds per day of any criteria pollutant, then it can be assumed that it would not cause a violation of an ambient air quality standard.

Operation: Localized Concentrations of PM_{10}, $PM_{2.5}$, CO, and NO_X

Localized impacts could occur in areas with a single large source of emissions such as a power plant or with multiple sources concentrated in a small area such as a distribution center. The maximum daily operational emissions were calculated for the 2023 operational year. Operational emissions include those generated on-site by area sources (such as consumer products and landscape maintenance), energy use from natural gas combustion, and motor vehicles operation at the project site. In addition, the project would generate emissions during operations from TRUs. Motor vehicle emissions are estimated for on-site operations using trip lengths for on-site travel. The trip lengths were adjusted to analyze on-site emissions.

Table 7: Localized Concentrations of PM_{10}, $PM_{2.5}$, CO, and NO_X for Operations

Source	On-site Emissions (pounds per day)				
	ROG	NO_X	CO	PM_{10}	$PM_{2.5}$
Area	0.15	< 0.01	< 0.01	< 0.01	< 0.01
Energy	< 0.01	0.03	0.03	< 0.01	< 0.01
Mobile (Passenger Vehicles + Trucks)	0.38	1.46	2.18	0.14	0.04
TRUs	1.57	6.16	42.74	0.16	0.16
Total	**2.10**	**7.65**	**44.95**	**0.30**	**0.20**
Significance Thresholds	**—**	**100**	**100**	**100**	**100**
Exceed Significance Thresholds?	**—**	**No**	**No**	**No**	**No**

Source of Emissions: CalEEMod Output and Additional Supporting Information (Attachment A).

Source of Thresholds: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed August 14, 2023.

As shown in Table 7 below, operational modeling of on-site emissions for the project indicate that the project would not exceed 100 pounds per day for each of the criteria pollutants. Therefore, based on the SJVAPCD's guidance, the operational emissions would not cause an ambient air quality standard violation. As such, impacts would be less than significant.

Toxic Air Contaminants

Construction

No construction is included as part of the project.

Operations

Project operations would involve the use of diesel-fueled trucks and TRUs that emit DPM, which is considered a TAC. The SJVAPCD's current threshold of significance for TAC emissions is an increase in cancer risk for the maximally exposed individual of 20 in a million (formerly 10 in a million). A project-level assessment was conducted of the potential community health risk and health hazard impacts on surrounding sensitive receptors resulting from the emissions of TACs from project operations over a 70-year exposure scenario. For reasons previously discussed (see Modeling Parameters and Assumptions), an analysis of TACs (including DPM) was performed using the EPA-approved AERMOD model, which is an air dispersion model accepted by the SJVAPCD for preparing HRAs. AERMOD version 22112 and HARP2 were used for this analysis. Consistent with SJVAPCD guidance, the health risk computation was performed to determine the risk of developing an excess cancer risk calculated on a 70-year exposure scenario. Results of the HRA are summarized in Table 8. The complete HRA prepared for the proposed project, including calculations and HARP2 output data, are included in Attachment B.

Table 8: Summary of the Health Impacts from Project Operations (70-year Scenario)

Exposure Scenario	Maximum Cancer Risk (Risk per Million)	Chronic Non-Cancer Hazard Index	Acute Non-Cancer Hazard Index
DPM from Project Operations	9.66	0.0018	0.0000
70-Year Exposure at the MER (from DPM Emissions)	**9.66**	**0.0018**	**0.0000**
Applicable Threshold of Significance	**20**	**1**	**1**
Threshold Exceeded?	**No**	**No**	**No**

Notes:
MER = Maximally Exposed Receptor
Pattar Transport GPA Project – Location of MER: 37°32'14.1"N 120°53'58.6"W
Source: Attachment B.

As shown in Table 8, health risk metrics from operations of the project would not exceed the cancer risk, chronic hazard, or acute hazard threshold levels. The primary source of the emissions responsible for chronic risk are from diesel-powered TRUs and diesel trucks. DPM does not have an acute risk factor. Since the project does not exceed the applicable SJVAPCD thresholds for cancer risk, acute risk, or chronic risk, the impact related to the project's potential to expose sensitive receptors to substantial pollutant concentrations from the project's generation of TACs during project operations would be less than significant.

Valley Fever

Valley fever, or coccidioidomycosis, is an infection caused by inhalation of the spores of the fungus, *Coccidioides immitis* (*C. immitis*). The spores live in soil and can live for an extended time in harsh environmental conditions. Activities or conditions that increase the amount of fugitive dust contribute to greater exposure, and they include dust storms, grading, and recreational off-road activities.

The San Joaquin Valley is considered an endemic area for Valley fever. The San Joaquin Valley is considered an endemic area for Valley fever. During 2000–2018, a total of 65,438 coccidioidomycosis cases were reported in California; median statewide annual incidence was 7.9 per 100,000 population and varied by region from 1.1 in Northern and Eastern California to 90.6 in the Southern San Joaquin Valley, with the largest increase (15-fold) occurring in the Northern San Joaquin Valley. Incidence has been consistently high in six counties in the Southern San Joaquin Valley (Fresno, Kern, Kings, Madera, Tulare, and Merced counties) and Central Coast (San Luis Obispo County) regions.[10] California experienced 7,962 new probable or confirmed cases of Valley fever in 2021. A total of 68 confirmed or probable Valley fever cases were reported in Stanislaus County in 2022, while 90 cases were reported in 2021.[11]

[10] Centers for Disease Control and Prevention (CDC). 2020. Regional Analysis of Coccidioidomycosis Incidence—California, 2000–2018. Website: https://www.cdc.gov/mmwr/volumes/69/wr/mm6948a4.htm?s_cid=mm6948a4_e. Accessed December 13, 2022.

[11] California Department of Public Health (CDPH). 2023. Coccidioidomycosis in California Provisional Monthly Report January – July 2023 (as of July 31, 2023). Website: https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/CocciinCA ProvisionalMonthlyReport.pdf. Accessed August 14, 2023.

The distribution of *C. immitis* within endemic areas is not uniform and growth sites are commonly small (a few tens of meters) and widely scattered. Known sites appear to have some ecological factors in common suggesting that certain physical, chemical, and biological conditions are more favorable for *C. immitis* growth. Avoidance, when possible, of sites favorable for the occurrence of *C. immitis* is a prudent risk management strategy. Listed below are ecologic factors and sites favorable for the occurrence of *C. immitis*:

1) Rodent burrows (often a favorable site for *C. immitis*, perhaps because temperatures are more moderate and humidity higher than on the ground surface)
2) Old (prehistoric) Indian campsites near fire pits
3) Areas with sparse vegetation and alkaline soils
4) Areas with high salinity soils
5) Areas adjacent to arroyos (where residual moisture may be available)
6) Packrat middens
7) Upper 30 centimeters of the soil horizon, especially in virgin undisturbed soils
8) Sandy, well-aerated soil with relatively high water-holding capacities

Sites within endemic areas less favorable for the occurrence of *C. immitis* include:

1) Cultivated fields
2) Heavily vegetated areas (e.g., grassy lawns)
3) Higher elevations (above 7,000 feet)
4) Areas where commercial fertilizers (e.g., ammonium sulfate) have been applied
5) Areas that are continually wet
6) Paved (asphalt or concrete) or oiled areas
7) Soils containing abundant microorganisms
8) Heavily urbanized areas where there is little undisturbed virgin soil.[12]

The project is situated on a site previously disturbed that does not provide a suitable habitat for spores. Specifically, the project site is currently developed. Pattar Transport currently operates commercial truck parking at their site at 4325 W. Taylor Road. Pattar Transport is seeking a GPA and Rezone to Planned Development to permit the existing operation to continue on the 10.0-acre parcel. Therefore, implementation of the proposed project would have a low probability of the site having *C. immitis* growth sites and exposure to the spores from disturbed soil.

During operations, dust emissions are anticipated to be relatively small because the areas that passenger vehicles and trucks would travel are paved or covered in gravel; other areas where activity would occur are occupied by the project buildings. These conditions would lessen the possibility of the project

[12] United States Geological Survey (USGS). 2000. Operational Guidelines (Version 1.0) for Geological Fieldwork in Areas Endemic for Coccidioidomycosis (Valley Fever), 2000, Open-File Report 2000-348. Website: https://pubs.usgs.gov/of/2000/0348/pdf/of00-348.pdf. Accessed December 13, 2022.

providing habitat suitable for *C. immitis* spores and for generating fugitive dust that may contribute to Valley fever exposure. Impacts would be less than significant.

Naturally Occurring Asbestos

Review of the map of areas where naturally occurring asbestos in California are likely to occur found no such areas in the project area. Therefore, development of the project is not anticipated to expose receptors to naturally occurring asbestos.[13] Impacts would be less than significant.

Impact Analysis Summary

In summary, the project would not exceed SJVAPCD localized emission daily screening levels for any criteria pollutant. The project is not a significant source of TAC emissions during project operations. The project is not in an area with suitable habitat for Valley fever spores and is not in area known to have naturally occurring asbestos. Therefore, the project would not result in significant impacts to sensitive receptors.

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

Less Than Significant Impact.

Two situations create a potential for odor impact. The first occurs when a new odor source is located near an existing sensitive receptor. The second occurs when a new sensitive receptor locates near an existing source of odor. The proposed project is of the first type only since it involves a potential new odor source and would not locate any new sensitive receptors.

Odor impacts on residential areas and other sensitive receptors, such as hospitals, day-care centers, schools, etc. warrant the closest scrutiny, but consideration should also be given to other land uses where people may congregate, such as recreational facilities, worksites, and commercial areas.

The screening levels for these land use types are shown in Table 9.

[13] U.S. Geological Survey. 2011. Van Gosen, B.S., and Clinkenbeard, J.P. California Geological Survey Map Sheet 59. Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California. Open-File Report 2011-1188 Website: https://pubs.usgs.gov/of/2011/1188/. Accessed December 13, 2022.

Table 9: Screening Levels for Potential Odor Sources

Odor Generator	Screening Distance
Wastewater Treatment Facilities	2 miles
Sanitary Landfill	1 mile
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	1 mile
Chemical Manufacturing	1 mile
Fiberglass Manufacturing	1 mile
Painting/Coating Operations (e.g., auto body shop)	1 mile
Food Processing Facility	1 mile
Feed Lot/Dairy	1 mile
Rendering Plant	1 mile
Wastewater Treatment Facilities	2 miles
Source of Thresholds: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed August 14, 2023.	

Construction

No construction is included as part of the project.

Operations

Implementation of the proposed project would not substantially increase objectionable odors in the area and would not introduce any new sensitive receptors to the area that could be affected by any existing objectionable odor sources in the area. Land uses that are typically identified as sources of objectionable odors include landfills, transfer stations, sewage treatment plants, wastewater pump stations, composting facilities, asphalt batch plants, rendering plants, and other land uses outlined in Table 9. The proposed project would not engage in any of these activities. Minor sources of odors that would be associated with typical truck parking and repair facilities, such as exhaust from mobile sources (including diesel-fueled heavy trucks), are known to have temporary and less concentrated odors. Considering the low intensity of potential odor emissions, the project's operational activities would not expose receptors to objectionable odor emissions. Therefore, the proposed project would not be considered to be a generator of objectionable odors during operations. As such, the impact would be less than significant.

Greenhouse Gas Emissions Estimation Summary and Greenhouse Gas Impact Analysis

Thresholds of Significance

San Joaquin Valley Air Pollution Control District

The SJVAPCD's Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA presents a tiered approach to analyzing project significance with respect to GHG emissions. Project GHG emissions are considered less than significant if they can meet any of the following conditions, evaluated in the order presented:

- Project is exempt from CEQA requirements;
- Project complies with an approved GHG emission reduction plan or GHG mitigation program;
- Project implements Best Performance Standards (BPS); or
- Project demonstrates that specific GHG emissions would be reduced or mitigated by at least 29 percent compared to Business-as-Usual (BAU), including GHG emission reductions achieved since the 2002-2004 baseline period.

The SJVAPCD's Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA includes thresholds based on whether the project will reduce or mitigate GHG levels by 29 percent from BAU levels compared with 2005 levels by 2020.[14] This level of GHG reduction is based on the target established by CARB's AB 32 Scoping Plan, approved in 2008.

Project-level Thresholds

Section 15064.4(b) of the CEQA Guidelines' amendments for GHG emissions states that a lead agency may take into account the following three considerations in assessing the significance of impacts from GHG emissions.

- Consideration #1: The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting.
- Consideration #2: Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- Consideration #3: The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of GHG emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an Environmental Impact Report (EIR) must be prepared for the project.

The SJVAPCD has not yet adopted BPS for development projects. For development projects, BPS means, "Any combination of identified GHG emission reduction measures, including project design elements and land use decisions that reduce project-specific GHG emission reductions by at least 29 percent compared with business as usual."

[14] San Joaquin Valley Air Pollution Control District (SJVAPCD). 2009. "Final Staff Report, Addressing Greenhouse Gas Emissions Impacts under the California Environmental Quality Act." Website: http://www.valleyair.org/programs/CCAP/11-05-09/1_CCAP_FINAL_CEQA_GHG_Draft_Staff_Report_Nov_05_2009.pdf. December 2009. Accessed August 1, 2023.

The 29 percent GHG reduction level is based on the target established by CARB's AB 32 Scoping Plan, approved in 2008. The GHG reduction level for the State to reach 1990 emission levels by 2020 was reduced to 21.7 percent from BAU in 2020 in the 2014 First Update to the Scoping Plan to account for slower than projected growth after the 2008 recession.[15] First occupancy at the project site is expected to occur in 2024, which is after the AB 32 target year. The SJVAPCD has not updated its guidance to address SB 32 2030 targets or AB 1279 2045 targets. Therefore, whether the project's GHG emissions would result in a significant impact on the environment is determined by assessing consistency with relevant GHG reduction plans.

Quantification of Greenhouse Gas Emissions for Informational Purposes

Construction

No construction is included as part of the proposed project. =

Operations

Operational or long-term emissions occur over the life of the project. Sources of emissions may include motor vehicles and trucks, energy usage, water usage, waste generation, and area sources, such as landscaping activities. Operational GHG emissions associated with the proposed project were estimated using CalEEMod 2022.1. Please see the "Assumptions" sections of this technical memorandum for details regarding assumptions and methodology used to estimate emissions. Operational GHG emissions for the 2023 operational year are shown in Table 10. Complete CalEEMod output files and additional supporting information are also included in Attachment A.

Table 10: Unmitigated Project Operational GHG Emissions (Buildout Year Scenario)

Emission Source	Buildout Year Total Emissions (MT CO_2e per year)
Area	0.05
Energy	35.42
Mobile (Passenger Vehicles)	99.17
Mobile (Trucks)	5,489.31
Refrigerants	0.08
Water	2.11
Waste	1.23
Total (MT CO_2e per year)	**5,627**
Source of Buildout Year Emissions: CalEEMod Output (Attachment A).	

[15] California Air Resources Board (CARB). 2014. First Update to the Climate Change Scoping Plan. Website: http://www.arb.ca.gov/cc/scopingplan/document/updatedscopingplan2013.htm. Accessed August 1, 2023.

Addressing Greenhouse Gas CEQA Impact Questions

Table 11: Summary of Greenhouse Gas Impact Analysis

Greenhouse Gas Emissions	
Would the project:	**Significance Finding**
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less than Significant Impact
b) Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less than Significant Impact

Greenhouse Gas Mitigation Measures

No mitigation is required.

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

Less Than Significant Impact.

The following analysis assesses the project's compliance with Consideration #3 regarding consistency with adopted plans to reduce GHG emissions. The project is in unincorporated Stanislaus County, near the City of Turlock. Neither Stanislaus County nor the City of Turlock have adopted a GHG reduction plan. In addition, Stanislaus County has not completed the GHG inventory, benchmarking, or goal-setting process required to identify a reduction target and take advantage of the streamlining provisions contained in the CEQA Guidelines amendments adopted for SB 97 and clarifications provided in the CEQA Guidelines amendments adopted on December 28, 2018. The SJVAPCD has adopted a Climate Action Plan, but it does not contain measures that are applicable to the project. Therefore, the SJVAPCD Climate Action Plan cannot be applied to the project. Since no other local or regional Climate Action Plan is in place, the project is assessed for its consistency with CARB's adopted Scoping Plans.

Consistency with CARB's Adopted Scoping Plans

The State's regulatory program implementing the 2008 Scoping Plan is now fully mature. All regulations envisioned in the Scoping Plan have been adopted, and the effectiveness of those regulations has been estimated by the agencies during the adoption process and then tracked to verify their effectiveness after implementation. The combined effect of this successful effort is that the State now projects that it will meet the 2020 target and achieve continued progress toward meeting post-2020 targets. Governor Brown, in the introduction to Executive Order B-30-15, stated "California is on track to meet or exceed the current target of reducing greenhouse gas emissions to 1990 levels by 2020, as established in the California Global Warming Solutions Act of 2006 (AB 32)."

Consistency with SB 32 and the 2017 Scoping Plan

The 2017 Climate Change Scoping Plan Update (2017 Scoping Plan) includes the strategy that the State intends to pursue to achieve the 2030 targets of Executive Order S-3-05 and SB 32. Table 12 provides an analysis of the project's consistency with the 2017 Scoping Plan Update measures.

Table 12: Consistency with SB 32 2017 Scoping Plan Update

Scoping Plan Measure	Project Consistency
SB 350 50% Renewable Mandate. Utilities subject to the legislation will be required to increase their renewable energy mix from 33% in 2020 to 50% in 2030 (now 60% under SB 100).	**Consistent**. The project will purchase electricity from a utility subject to the SB 350 Renewable Mandate. The specific provider for this project is Pacific Gas and Electric Company (PG&E). In February 2018, PG&E announced that it had reached California's 2020 renewable energy goal three (3) years ahead of schedule and delivers nearly 80 percent of its electricity from GHG-free resources.[1]
SB 350 Double Building Energy Efficiency by 2030. This is equivalent to a 20 percent reduction from 2014 building energy usage compared to current projected 2030 levels.	**Consistent**. This measure applies to existing buildings. New structures are required to comply with Title 24 Energy Efficiency Standards that are expected to increase in stringency over time; however, the project includes existing buildings and would not include new construction. Buildings associated with the proposed project would benefit from regulations applicable to PG&E (the utility provider for the project). Any renovations would comply with the applicable Title 24 Energy Efficiency Standards in effect at the time building permits are received.
Low Carbon Fuel Standard. This measure requires fuel providers to meet an 18 percent reduction in carbon content by 2030.	**Consistent**. This is a Statewide measure that cannot be implemented by a project applicant or lead agency. However, vehicles accessing the project site would be subject to the standards. Vehicles accessing the project site will use fuel containing lower carbon content as the fuel standard is implemented.
Mobile Source Strategy (Cleaner Technology and Fuels Scenario). Vehicle manufacturers will be required to meet existing regulations mandated by the LEV III and Heavy-Duty Vehicle programs. The strategy includes a goal of having 4.2 million ZEVs on the road by 2030 and increasing numbers of ZEV trucks and buses.	**Consistent**. Future employees and visitors can be expected to purchase increasing numbers of more fuel-efficient and zero emission cars and trucks each year.
Sustainable Freight Action Plan. The plan's target is to improve freight system efficiency 25 percent by increasing the value of goods and services produced from the freight sector, relative to the amount of carbon that it produces by 2030. This would be achieved by deploying over 100,000 freight vehicles and equipment capable of zero emission operation and maximize near-zero emission freight vehicles and equipment powered by renewable energy by 2030.	**Consistent.** The measure applies to owners and operators of trucks and freight operations. The proposed project would support truck and freight operations. The project operator(s) and truck owners that would service future operations can participate in incentives programs on electric vehicles and charging equipment for trucks once a final project has been identified. Deliveries and freight operations are expected to be made by increasing number of ZEV trucks as a result of more stringent regulations, incentive programs, infrastructure developments, and increased access/availability of relevant technology.
Short-Lived Climate Pollutant (SLCP) Reduction Strategy. The strategy requires the reduction of SLCPs by 40 percent from 2013 levels by 2030 and the reduction of black carbon by 50 percent from 2013 levels by 2030.	**Consistent**. The project does not include sources that produce significant quantities of methane or black carbon. However, diesel trucks accessing the site will achieve significant reductions in $PM_{2.5}$ with adopted regulations that will reduce this source of black carbon.
SB 375 Sustainable Communities Strategies. Requires Regional Transportation Plans to include a sustainable communities strategy for reduction of per capita vehicle miles traveled.	**Consistent**. The project is not within an SCS priority area and so is not subject to requirements applicable to those areas.
Post-2020 Cap-and-Trade Program. The Post 2020 Cap-and-Trade Program continues the	**Consistent.** The post-2020 Cap-and-Trade Program indirectly affects people who use the products and

Scoping Plan Measure	Project Consistency
existing program for another 10 years. The Cap-and-Trade Program applies to large industrial sources such as power plants, refineries, and cement manufacturers.	services produced by the regulated industrial sources when increased cost of products or services (such as electricity and fuel) are transferred to the consumers. The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in-state or imported. Accordingly, GHG emissions associated with CEQA projects' electricity usage are indirectly covered by the Cap-and-Trade Program. The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and from combustion of other fossil fuels not directly covered at large sources in the program's first compliance period.
Natural and Working Lands Action Plan. CARB is working in coordination with several other agencies at the federal, state, and local levels, stakeholders, and with the public, to develop measures as outlined in the Scoping Plan Update and the governor's Executive Order B-30-15 to reduce GHG emissions and to cultivate net carbon sequestration potential for California's natural and working land.	**Not Applicable**. The project would not be considered working lands. As described in the project description, Pattar Transport currently operates commercial truck parking at their site at 4325 W. Taylor Road. The project includes a GPA and Rezone to Planned Development to permit the existing operation to continue on the 10.0-acre parcel.
Source: California Air Resources Board (CARB). 2017. The 2017 Climate Change Scoping Plan Update. January 20. Website: https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf. Accessed August 15, 2023. [1] Pacific Gas and Electric (PG&E). 2018. PG&E Clean Energy Deliveries Already Meet Future Goals. Website: www.pge.com/en/about/newsroom/newsdetails/index.page?title=20180220_pge_clean_energy_deliveries_already_meet_future_goals. Accessed August 15, 2023.	

As described in Table 12, the proposed project would be consistent with applicable 2017 Scoping Plan Update measures and would not obstruct the implementation of others that are not applicable. The State's regulatory program is able to target both new and existing development because the two most important strategies, motor vehicle fuel efficiency and emissions from electricity generation, obtain reductions equally from existing sources and new sources. This is because all vehicle operators use cleaner low carbon fuels and buy vehicles subject to the fuel efficiency regulations and all building owners or operators purchase cleaner energy from the grid that is produced by increasing percentages of renewable fuels. This includes regulations on mobile sources such as the Pavley standards that apply to all vehicles purchased in California, the LCFS (Low Carbon Fuel Standard) that applies to all fuel sold in California, and the Renewable Portfolio Standard and Renewable Energy Standard under SB 100 that apply to utilities providing electricity to all California end users.

Moreover, the Scoping Plan strategy will achieve more than average reductions from energy and mobile source sectors that are the primary sources related to development projects and lower than average reductions from other sources such as agriculture. The proposed project's operational GHG emissions would principally be generated from electricity consumption and vehicle use (including heavy trucks), which are directly under the purview of the Scoping Plan strategy and have experienced reductions above the State average reduction. Considering the information summarized above, the proposed project would be consistent with the State's AB 32 and SB 32 GHG reduction goals.

Consistency Regarding GHG Reduction Goals for 2050 under Executive Order S-3-05 and GHG Reduction Goals for 2045 under the 2022 Scoping Plan

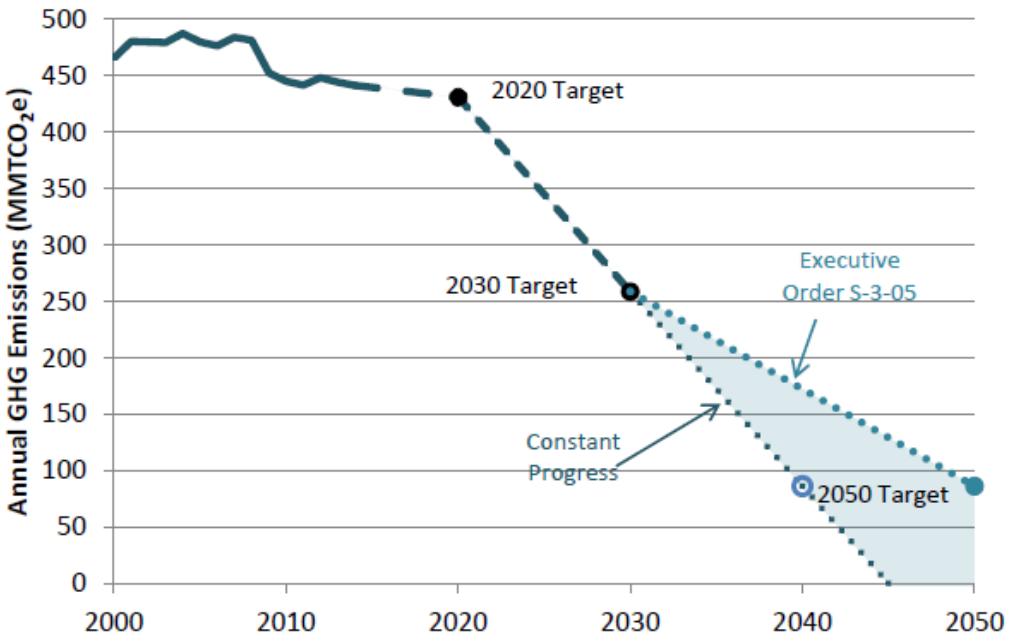
Regarding goals for 2050 under Executive Order S-3-05, at this time it is not possible to quantify the emissions savings from future regulatory measures, as they have not yet been developed; nevertheless, it can be anticipated that operation of the proposed project would comply with whatever measures are enacted that State lawmakers decide would lead to an 80 percent reduction below 1990 levels by 2050. In its 2008 Scoping Plan, CARB acknowledged that the "measures needed to meet the 2050 are too far in the future to define in detail." In the First Scoping Plan Update; however, CARB generally described the type of activities required to achieve the 2050 target: "energy demand reduction through efficiency and activity changes; large scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and rapid market penetration of efficiency and clean energy technologies that requires significant efforts to deploy and scale markets for the cleanest technologies immediately."

CARB recognized that AB 32 established an emissions reduction trajectory that will allow California to achieve the more stringent 2050 target: "These [greenhouse gas emission reduction] measures also put the State on a path to meet the long-term 2050 goal of reducing California's GHG emissions to 80 percent below 1990 levels. This trajectory is consistent with the reductions that are needed globally to stabilize the climate." In addition, CARB's First Update "lays the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050," and many of the emission reduction strategies recommended by CARB would serve to reduce the proposed project's post-2020 emissions level to the extent applicable by law:

- **Energy Sector:** Continued improvements in California's appliance and building energy efficiency programs and initiatives, such as the State's zero net energy building goals, would serve to reduce the proposed project's emissions level. Additionally, further additions to California's renewable resource portfolio would favorably influence the project's emissions level.
- **Transportation Sector:** Anticipated deployment of improved vehicle efficiency, zero emission technologies, lower carbon fuels, and improvement of existing transportation systems all will serve to reduce the project's emissions level.
- **Water Sector:** The project's emissions level will be reduced as a result of further desired enhancements to water conservation technologies.
- **Waste Management Sector:** Plans to further improve recycling, reuse and reduction of solid waste will beneficially reduce the project's emissions level.

For the reasons described above, the project's post-2020 emissions trajectory is expected to follow a declining trend, consistent with the 2030 and 2050 targets. The trajectory required to achieve the post-2020 targets is shown in Figure 3.

Figure 3: California's Path to Achieving the 2050 Target



Source: CARB 2017 Scoping Plan Update

In his January 2015 inaugural address, former Governor Brown expressed a commitment to achieve "three ambitious goals" that he would like to see accomplished by 2030 to reduce the State's GHG emissions:

- Increasing the State's Renewable Portfolio Standard from 33 percent in 2020 to 50 percent in 2030;
- Cutting the petroleum use in cars and trucks in half; and
- Doubling the efficiency of existing buildings and making heating fuels cleaner.

These expressions of executive branch policy may be manifested in adopted legislative or regulatory action through the state agencies and departments responsible for achieving the State's environmental policy objectives, particularly those relating to global climate change. Studies show that the State's existing and proposed regulatory framework will allow the State to reduce its GHG emissions level to 40 percent below 1990 levels by 2030, and to 80 percent below 1990 levels by 2050. Even though these studies did not provide an exact regulatory and technological roadmap to achieve the 2030 and 2050 goals, they demonstrated that various combinations of policies could allow the statewide emissions level to remain very low through 2050, suggesting that the combination of new technologies and other regulations not analyzed in the studies could allow the State to meet the 2050 target.

Given the proportional contribution of mobile source-related GHG emissions to the State's inventory, recent studies also show that relatively new trends—such as the increasing importance of web-based shopping, the emergence of different driving patterns, and the increasing effect of web-based applications on transportation choices—are beginning to substantially influence transportation choices and the energy used by transportation modes. These factors have changed the direction of transportation trends in recent years and will require the creation of new models to effectively analyze future transportation patterns and

the corresponding effect on GHG emissions. For the reasons described above, the proposed project future emissions trajectory is expected to follow a declining trend, consistent with the 2030, 2045, and 2050 targets.

The 2017 Scoping Plan provides an intermediate target that is intended to achieve reasonable progress toward the 2050 target. In addition, the 2022 Scoping Plan outlines objectives, regulations, planning efforts, and investments in clean technologies and infrastructure that outlines how the State can achieve carbon-neutrality by 2045. Accordingly, taking into account the proposed project's design features and the progress being made by the State towards reducing emissions in key sectors such as transportation, industry, and electricity, the proposed project would be consistent with State GHG Plans and would further the State's goals of reducing GHG emissions 40 percent below 1990 levels by 2030, carbon neutral by 2045, and 80 percent below 1990 levels by 2050, and does not obstruct their attainment.

Impact Analysis Summary

As described above, the proposed project would be consistent with State GHG Plans and would not obstruct the State's ability to meet its goals of reducing GHG emissions 40 percent below 1990 levels by 2030, carbon neutral by 2045, and 80 percent below 1990 levels by 2050. Therefore, the project's generation of GHG emissions would not result in a significant impact on the environment.

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

Less Than Significant Impact.

The following analysis assesses the project's compliance with Consideration #3 regarding consistency with adopted plans to reduce GHG emissions. The project is in unincorporated Stanislaus County, near the City of Turlock. Neither Stanislaus County nor the City of Turlock have adopted a GHG reduction plan. In addition, the County has not completed the GHG inventory, benchmarking, or goal-setting process required to identify a reduction target and take advantage of the streamlining provisions contained in the CEQA Guidelines amendments adopted for SB 97 and clarifications provided in the CEQA Guidelines amendments adopted on December 28, 2018. The SJVAPCD has adopted a Climate Action Plan, but it does not contain measures that are applicable to the project. Therefore, the SJVAPCD Climate Action Plan cannot be applied to the project. Since no other local or regional Climate Action Plan is in place, the project is assessed for its consistency with CARB's adopted Scoping Plans. This assessment is included under Impact GHG-A above. As demonstrated in the analysis contained under Impact GHG-A, the project would not conflict with any applicable plan, policy, or regulation of an agency adopted to reduce the emissions of greenhouse gases. This impact would be less than significant.

Attachments

Attachment A – CalEEMod Output and Additional Supporting Information

Attachment B – Health Risk Assessment

ATTACHMENT A

CalEEMod Output and Additional Supporting Information

CalEEMod Output and Additional Supporting Information

Table of Contents

Modeling Assumptions/Additional Supporting Information

- **Project Site Vicinity Map**
- **Site Plan Overlay Map**
- **Project Site Plan**
- **Trip Generation Table (page from the Transportation Impact Analysis)**

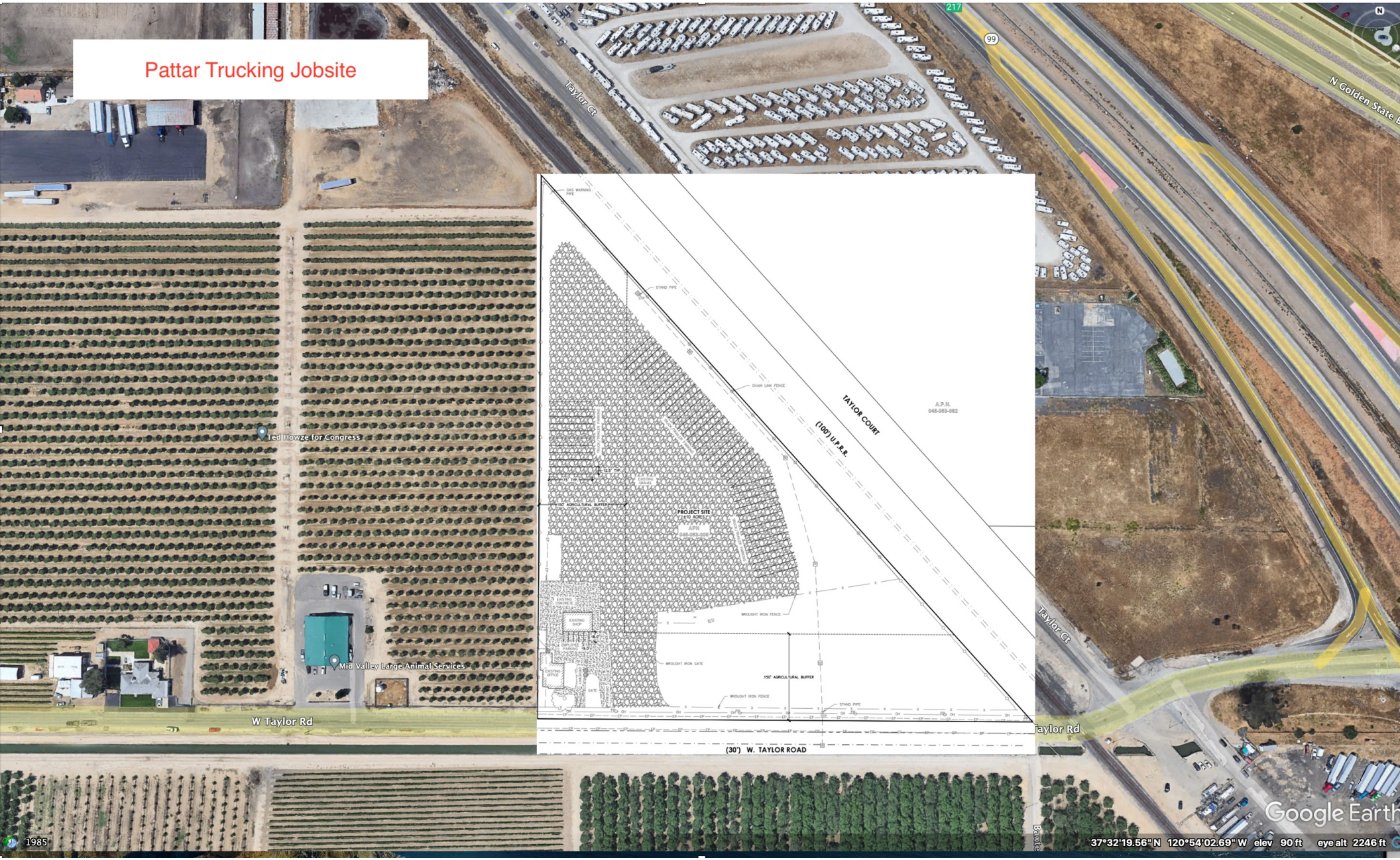
CalEEMod Output Files

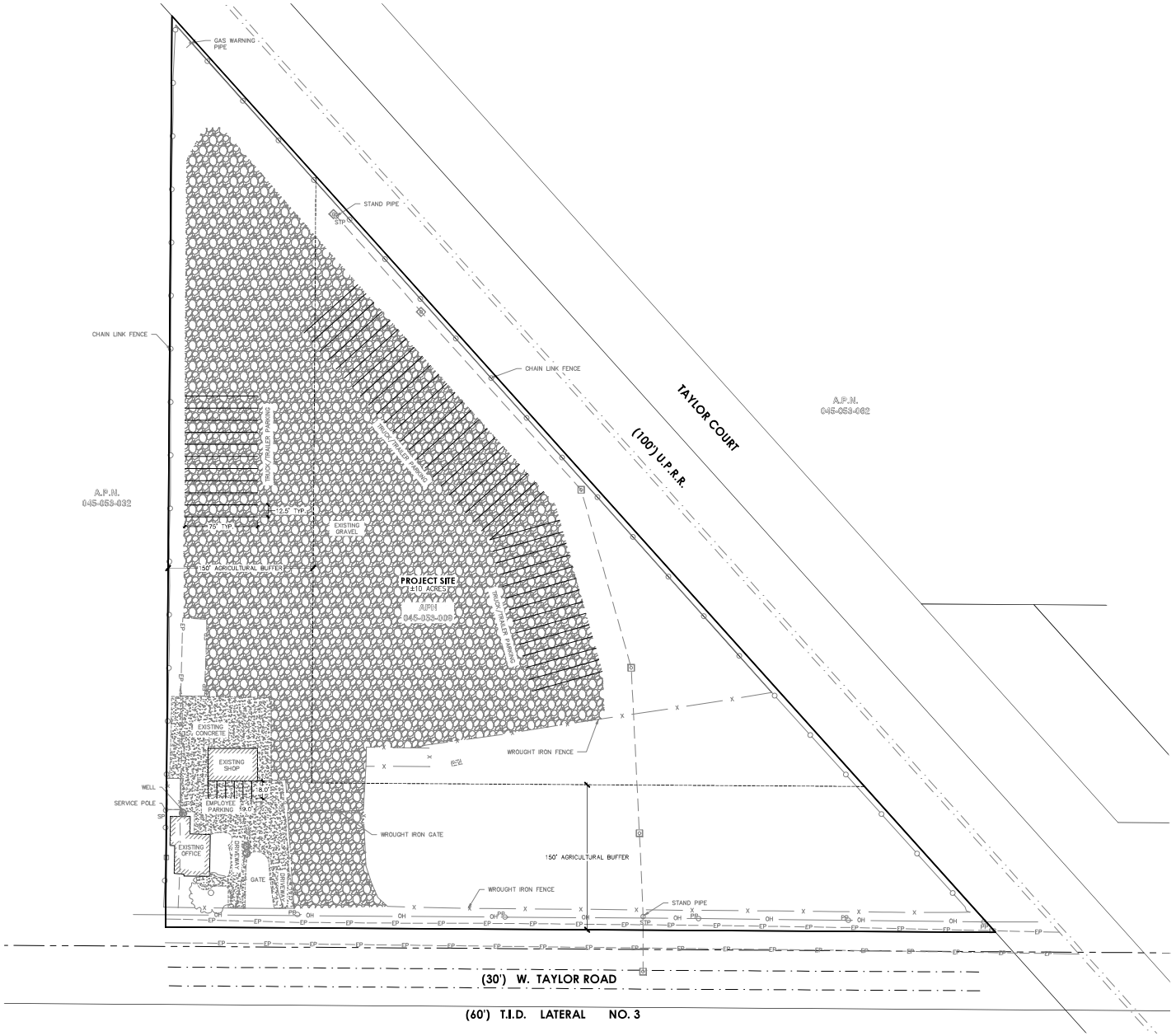
- **Project Operations in the 2023 Operational Year (Passenger Vehicles, Trucks, Building, and Area Sources)**
- **Localized Operational Emissions (On-site and Localized Emissions from Project Sources)**

Additional Calculations

- **Emissions from Project Operation Transportation Refrigeration Units (TRUs)**


Project Vicinity Map
Legend
Pattar Trucking Jobsite
W Taylor Rd
N Golden State Blvd
Taylor Ct
Baxter Rd
N Washington Rd
Google Earth
1000 ft
N


Pattar Trucking Jobsite
Taylor Ct
217
99
N Golden State
Ted Howze for Congress
Mid Valley Large Animal Services
W Taylor Rd
TAYLOR COURT
(100) U.P.R.R.
PROJECT SITE
A.P.N.
045-083-062
045-083-009
150' AGRICULTURAL BUFFER
WROUGHT IRON FENCE
WROUGHT IRON GATE
STAND PIPE
CHAIN LINK FENCE
EXISTING SHOP
EXISTING OFFICE
(30') W. TAYLOR ROAD
Taylor Rd
Google Earth
1985
37°32'19.56" N 120°54'02.69" W elev 90 ft eye alt 2246 ft



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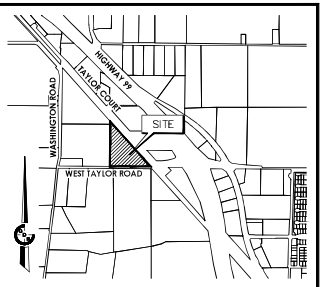

VICINITY MAP
CITY OF TURLOCK, STANISLAUS COUNTY, STATE OF CALIFORNIA

PROPERTY OWNER / APPLICANT

NAME:	PATTAR, KERWONDER S. / SANDHU FAMILY TRUST
CONTACT:	SEAN PATTAR
MAILING ADDRESS:	4325 W. TAYLOR ROAD
CITY/STATE/ZIP:	TURLOCK, CA 95380
PHONE:	209.634.3849
EMAIL:	tlwana@pattartransport.com
SITE ADDRESS:	4325 W. TAYLOR ROAD
CITY/STATE/ZIP:	TURLOCK, CA 95380

EXISTING CONDITIONS

A.P.N.:	045-053-009
EXISTING PARCELS:	1
EXISTING ACREAGE:	±10 ACRES
EXISTING GENERAL PLAN:	AGRICULTURE
EXISTING ZONING:	A-2-40

NOTES

WATER:	ON-SITE WELL
SEWER:	ON-SITE SEPTIC AND LEACH FIELD
STORM DRAINAGE:	OVERLAND DISCHARGE

1. NO IMPROVEMENTS ARE PROPOSED WITH THIS APPLICATION.
2. NO BOUNDARY SURVEY HAS BEEN PERFORMED. BOUNDARY IS BASED ON RECORD INFORMATION.

PROPERTY DESCRIPTION

ALL THAT PORTION OF THE SOUTHWEST QUARTER OF SECTION 32, TOWNSHIP 4 SOUTH, RANGE 10 EAST, M.D.B. & M., DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT WHERE THE SOUTHWESTERLY LINE OF THE RIGHT OF WAY OF THE CENTRAL PACIFIC RAILROAD COMPANY INTERSECTS THE SOUTH LINE OF SAID SECTION 32, THENCE WEST ALONG THE SOUTH LINE OF SAID SECTION 32 A DISTANCE OF 876.60 FEET; THENCE NORTH AS RIGHT ANGLES TO SAID SOUTH LINE AND PARALLEL TO THE WEST LINE OF SAID SECTION, TO THE SOUTHWESTERLY LINE OF THE RIGHT OF WAY OF SAID CENTRAL PACIFIC RAILROAD COMPANY, THENCE IN A SOUTHEASTERLY DIRECTION ALONG SAID RIGHT OF WAY TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM THE SOUTH 20 FEET.

SHEET INDEX

GDR ENGINEERING, INC.
ENGINEERING/SURVEYING/PLANNING
3525 MITCHELL ROAD, SUITE G CERES, CA 95307
TELEPHONE: (209) 538-3360 FAX: (209) 538-7370
WWW.GDRENGINEERING.COM

PATTAR TRANSPORT
WEST TAYLOR TRUCKING YARD
EXISTING SITE PLAN

SCALE: 1"=50' DATE: 01/21/2022
DWG NO. 20067 Existing Site Plan.dwg SHEET 1 OF 5
DRAWN: M. SANGHERA
CHECKED: M. GARCIA FILE NO. 20067

Trip Distribution. Long haul trucks in this area typically follow routes along SR 99 to and from regional distribution centers or warehouses primarily in the Stockton / Modesto metropolitan area. In addition, short haul trucks travel SR 99 north and south to pick up goods in the valley and deliver them to the Bay Area, Sacramento and Los Angeles areas. This analysis assumes that truck traffic is oriented to the south (35%) and north (65%) on SR 99.

Automobile trips would generally be made between truck parking and the residences of drivers and employees. Based on the project location, we would expect that most reside in Turlock and Modesto. As a result, most automobile traffic (80%) will arrive likely from the north via SR 99 and the east via W. Taylor Road. Figure 5 presents the project's total trips under these assumptions.

TABLE 5
PROJECT TRIP GENERATION ESTIMATE

Unit	Unit	Quantity	Trucks			Automobiles		
			In	Out	Total	In	Out	Total
AM Peak Hour								
Short Haul	20 spaces	1	0% (0)	100% (10)	0.50 (10)	100% (10)	0% (0)	0.50 (10)
Long Haul	20 spaces	1	8% (0)	92% (4)	0.20 (4)	80% (4)	20% (1)	0.25 (5)
Proposed	40 spaces*	1	0% (0)	100% (20)	0.50 (20)	100% (20)	0% (0)	0.50 (20)
Employees	person	16	-	-	-	100% (16)	0% (0)	1.00 (16)
Total			***(0)***	***(34)***	***(34)***	***(50)***	***(1)***	***(51)***
PM Peak Hour								
Short Haul	20 spaces	1	100% (10)	0% (0)	0.50 (10)	0% (0)	100% (10)	0.50 (10)
Long Haul	20 spaces	1	75% (3)	25% (1)	0.20 (4)	25% (1)	75% (3)	0.20 (4)
Proposed	40 spaces*	1	100% (20)	0% (0)	0.50 (20)	0% (0)	100% (20)	0.50 (20)
Employees	person	16	-	-	-	0% (0)	100% (16)	1.00 (16)
Total			***(33)***	***(1)***	***(34)***	***(1)***	***(49)***	***(50)***
Daily								
Short Haul	20 spaces	1	50% (10)	50% (10)	1.00 (20)	50% (10)	50% (10)	1.00 (20)
Long Haul	20 spaces	1	43% (6)	57% (9)	0.764 (15)	43% (8)	57% (11)	0.955 (19)
Proposed	40 spaces†	1	43% (13)	57% (18)	0.764 (31)	43% (16)	57% (22)	0.955 (38)
Employees	1 person	16	-	-	-	50% (16)	50% (16)	2.00 (32)
Total			***(29)***	***(37)***	***(66)***	***(50)***	***(59)***	***(109)***

* assumed short haul as worst case scenario (trips generated)

† assumed long haul as worst case scenario

Pattar Trucking Project Operations Custom Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pattar Trucking Project Operations
Operational Year	2023
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.10
Precipitation (days)	29.0
Location	37.537694, -120.897467
County	Stanislaus
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2215
EDFZ	14
Electric Utility	Turlock Irrigation District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.18

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Office Building	1.93	1000sqft	0.04	1,933	290	—	—	—

General Light Industry	1.73	1000sqft	0.04	1,725	260	—	—	—
Parking Lot	92.0	Space	0.83	0.00	5,410	—	—	—
Other Asphalt Surfaces	5.29	Acre	5.29	0.00	34,552	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.41	0.75	35.2	9.12	0.30	0.58	8.70	9.28	0.55	2.33	2.88	—	32,258	32,258	0.62	5.02	79.4	33,848
Area	0.03	0.15	< 0.005	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.65	0.65	< 0.005	< 0.005	—	0.66
Energy	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	188	188	0.06	0.08	—	214
Water	—	—	—	—	—	—	—	—	—	—	—	1.42	5.67	7.09	0.15	0.01	—	12.8
Waste	—	—	—	—	—	—	—	—	—	—	—	2.12	0.00	2.12	0.21	0.00	—	7.42
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.45	0.45
Total	1.44	0.90	35.2	9.31	0.30	0.58	8.70	9.28	0.55	2.33	2.88	3.54	32,452	32,456	1.04	5.11	79.9	34,083
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.37	0.71	37.6	8.47	0.30	0.58	8.70	9.28	0.55	2.33	2.88	—	32,194	32,194	0.63	5.02	2.06	33,708
Area	—	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	188	188	0.06	0.08	—	214

Water	—	—	—	—	—	—	—	—	—	—	—	1.42	5.67	7.09	0.15	0.01	—	12.8
Waste	—	—	—	—	—	—	—	—	—	—	—	2.12	0.00	2.12	0.21	0.00	—	7.42
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.45	0.45
Total	1.37	0.83	37.6	8.50	0.30	0.58	8.70	9.28	0.55	2.33	2.88	3.54	32,387	32,391	1.05	5.11	2.51	33,942
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.37	0.71	36.9	8.50	0.30	0.58	8.57	9.15	0.55	2.30	2.85	—	32,209	32,209	0.63	5.02	34.3	33,755
Area	0.01	0.14	< 0.005	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.32	0.32	< 0.005	< 0.005	—	0.32
Energy	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	188	188	0.06	0.08	—	214
Water	—	—	—	—	—	—	—	—	—	—	—	1.42	5.67	7.09	0.15	0.01	—	12.8
Waste	—	—	—	—	—	—	—	—	—	—	—	2.12	0.00	2.12	0.21	0.00	—	7.42
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.45	0.45
Total	1.39	0.85	36.9	8.61	0.30	0.58	8.57	9.15	0.55	2.30	2.85	3.54	32,403	32,407	1.05	5.11	34.8	33,990
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.25	0.13	6.73	1.55	0.06	0.11	1.56	1.67	0.10	0.42	0.52	—	5,333	5,333	0.10	0.83	5.68	5,588
Area	< 0.005	0.03	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.05	0.05	< 0.005	< 0.005	—	0.05
Energy	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	31.1	31.1	0.01	0.01	—	35.4
Water	—	—	—	—	—	—	—	—	—	—	—	0.24	0.94	1.17	0.02	< 0.005	—	2.11
Waste	—	—	—	—	—	—	—	—	—	—	—	0.35	0.00	0.35	0.04	0.00	—	1.23
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Total	0.25	0.16	6.74	1.57	0.06	0.11	1.56	1.67	0.10	0.42	0.52	0.59	5,365	5,365	0.17	0.85	5.75	5,627

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.37	0.35	0.20	3.49	0.01	< 0.005	0.58	0.58	< 0.005	0.15	0.15	—	641	641	0.03	0.02	2.86	650
General Light Industry	0.13	0.05	4.11	0.77	0.03	0.06	0.91	0.98	0.06	0.24	0.31	—	3,569	3,569	0.07	0.56	8.59	3,748
Parking Lot	0.90	0.34	30.9	4.86	0.26	0.51	7.21	7.72	0.49	1.94	2.43	—	28,048	28,048	0.53	4.43	68.0	29,451
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.41	0.75	35.2	9.12	0.30	0.58	8.70	9.28	0.55	2.33	2.88	—	32,258	32,258	0.62	5.02	79.4	33,848
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.34	0.32	0.26	2.86	0.01	< 0.005	0.58	0.58	< 0.005	0.15	0.15	—	574	574	0.03	0.02	0.07	581
General Light Industry	0.13	0.05	4.39	0.77	0.03	0.06	0.91	0.98	0.06	0.24	0.31	—	3,570	3,570	0.07	0.56	0.22	3,740
Parking Lot	0.90	0.33	32.9	4.84	0.26	0.51	7.21	7.72	0.49	1.94	2.43	—	28,050	28,050	0.53	4.43	1.76	29,386
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.37	0.71	37.6	8.47	0.30	0.58	8.70	9.28	0.55	2.33	2.88	—	32,194	32,194	0.63	5.02	2.06	33,708
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	0.06	0.06	0.04	0.53	< 0.005	< 0.005	0.10	0.10	< 0.005	0.03	0.03	—	97.8	97.8	< 0.005	< 0.005	0.20	99.2
General Light Industry	0.02	0.01	0.79	0.14	0.01	0.01	0.16	0.18	0.01	0.04	0.06	—	591	591	0.01	0.09	0.61	620
Parking Lot	0.16	0.06	5.90	0.88	0.05	0.09	1.30	1.39	0.09	0.35	0.44	—	4,644	4,644	0.09	0.73	4.86	4,870
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.25	0.13	6.73	1.55	0.06	0.11	1.56	1.67	0.10	0.42	0.52	—	5,333	5,333	0.10	0.83	5.68	5,588

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	66.0	66.0	0.03	0.04	—	77.6
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	28.9	28.9	0.01	0.02	—	34.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	52.7	52.7	0.02	0.03	—	62.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	148	148	0.06	0.08	—	174

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	66.0	66.0	0.03	0.04	—	77.6
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	28.9	28.9	0.01	0.02	—	34.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	52.7	52.7	0.02	0.03	—	62.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	148	148	0.06	0.08	—	174
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	10.9	10.9	< 0.005	0.01	—	12.8
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	4.78	4.78	< 0.005	< 0.005	—	5.62
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	8.73	8.73	< 0.005	< 0.005	—	10.3
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	24.4	24.4	0.01	0.01	—	28.7

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	19.9	19.9	< 0.005	< 0.005	—	20.0
General Light Industry	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.4	20.4	< 0.005	< 0.005	—	20.4
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	40.3	40.3	< 0.005	< 0.005	—	40.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	19.9	19.9	< 0.005	< 0.005	—	20.0
General Light Industry	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.4	20.4	< 0.005	< 0.005	—	20.4
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	40.3	40.3	< 0.005	< 0.005	—	40.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.29	3.29	< 0.005	< 0.005	—	3.30

General Light Industry	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.37	3.37	< 0.005	< 0.005	—	3.38
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.67	6.67	< 0.005	< 0.005	—	6.68

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.03	0.03	< 0.005	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.65	0.65	< 0.005	< 0.005	—	0.66
Total	0.03	0.15	< 0.005	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.65	0.65	< 0.005	< 0.005	—	0.66
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer Products	—	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.05	0.05	< 0.005	< 0.005	—	0.05
Total	< 0.005	0.03	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.05	0.05	< 0.005	< 0.005	—	0.05

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.66	1.88	2.54	0.07	< 0.005	—	5.04

General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.76	2.18	2.95	0.08	< 0.005	—	5.84
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.22	0.22	< 0.005	< 0.005	—	0.26
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	1.39	1.39	< 0.005	< 0.005	—	1.63
Total	—	—	—	—	—	—	—	—	—	—	—	1.42	5.67	7.09	0.15	0.01	—	12.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.66	1.88	2.54	0.07	< 0.005	—	5.04
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.76	2.18	2.95	0.08	< 0.005	—	5.84
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.22	0.22	< 0.005	< 0.005	—	0.26
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	1.39	1.39	< 0.005	< 0.005	—	1.63
Total	—	—	—	—	—	—	—	—	—	—	—	1.42	5.67	7.09	0.15	0.01	—	12.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.11	0.31	0.42	0.01	< 0.005	—	0.83
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.13	0.36	0.49	0.01	< 0.005	—	0.97
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.04	0.04	< 0.005	< 0.005	—	0.04

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.23	0.23	< 0.005	< 0.005	—	0.27
Total	—	—	—	—	—	—	—	—	—	—	—	0.24	0.94	1.17	0.02	< 0.005	—	2.11

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.97	0.00	0.97	0.10	0.00	—	3.39
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	1.15	0.00	1.15	0.12	0.00	—	4.03
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2.12	0.00	2.12	0.21	0.00	—	7.42
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.97	0.00	0.97	0.10	0.00	—	3.39

General Light Industry	—	—	—	—	—	—	—	—	—	—	—	1.15	0.00	1.15	0.12	0.00	—	4.03
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2.12	0.00	2.12	0.21	0.00	—	7.42
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.16	0.00	0.16	0.02	0.00	—	0.56
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.19	0.00	0.19	0.02	0.00	—	0.67
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.35	0.00	0.35	0.04	0.00	—	1.23

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.45	0.45
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.45	0.45
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.45	0.45
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.45	0.45
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07	0.07
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	109	109	109	39,785	821	821	821	299,524
General Light Industry	20.0	20.0	20.0	7,300	1,000	1,000	1,000	365,000
Parking Lot	46.0	46.0	46.0	16,790	7,917	7,917	7,917	2,889,559
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	5,487	1,829	15,985

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	39,541	609	0.2373	0.3390	62,090
General Light Industry	17,309	609	0.2373	0.3390	63,533
Parking Lot	31,595	609	0.2373	0.3390	0.00
Other Asphalt Surfaces	0.00	609	0.2373	0.3390	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	343,559	4,005
General Light Industry	398,906	3,591
Parking Lot	0.00	74,720
Other Asphalt Surfaces	0.00	477,212

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	1.80	—
General Light Industry	2.14	—
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
General Light Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

8. User Changes to Default Data

Screen	Justification
Operations: Vehicle Data	Project-specific trip generation rates applied, consistent with the Transportation Impact Analysis for Pattar Transport GPA Project. Project-specific trip lengths applied to truck trips (see supporting information).
Operations: Fleet Mix	Fleet mixes adjusted for passenger vehicle trips, short haul truck trips, and long haul truck trips.

Localized Pattar Trucking Project Operations (Localized Screening Analysis) Custom Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Localized Pattar Trucking Project Operations (Localized Screening Analysis)
Operational Year	2023
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.10
Precipitation (days)	29.0
Location	37.537694, -120.897467
County	Stanislaus
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2215
EDFZ	14
Electric Utility	Turlock Irrigation District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.18

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Office Building	1.93	1000sqft	0.04	1,933	290	—	—	—

General Light Industry	1.73	1000sqft	0.04	1,725	260	—	—	—
Parking Lot	92.0	Space	0.83	0.00	5,410	—	—	—
Other Asphalt Surfaces	5.29	Acre	5.29	0.00	34,552	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.45	0.54	1.39	2.09	< 0.005	0.01	0.14	0.14	0.01	0.04	0.04	3.54	651	654	0.46	0.16	1.40	714
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.39	0.47	1.49	2.21	< 0.005	0.01	0.14	0.14	0.01	0.04	0.04	3.54	645	648	0.47	0.16	0.48	707
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.41	0.49	1.44	2.09	< 0.005	0.01	0.13	0.14	0.01	0.03	0.04	3.54	645	649	0.46	0.16	0.86	708
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.07	0.09	0.26	0.38	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	0.59	107	107	0.08	0.03	0.14	117

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.42	0.38	1.36	1.91	< 0.005	0.01	0.14	0.14	0.01	0.04	0.04	—	457	457	0.04	0.07	0.95	478
Area	0.03	0.15	< 0.005	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.65	0.65	< 0.005	< 0.005	—	0.66
Energy	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	188	188	0.06	0.08	—	214
Water	—	—	—	—	—	—	—	—	—	—	—	1.42	5.67	7.09	0.15	0.01	—	12.8
Waste	—	—	—	—	—	—	—	—	—	—	—	2.12	0.00	2.12	0.21	0.00	—	7.42
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.45	0.45
Total	0.45	0.54	1.39	2.09	< 0.005	0.01	0.14	0.14	0.01	0.04	0.04	3.54	651	654	0.46	0.16	1.40	714
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.39	0.35	1.46	2.18	< 0.005	0.01	0.14	0.14	0.01	0.04	0.04	—	451	451	0.05	0.07	0.02	473
Area	—	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	188	188	0.06	0.08	—	214
Water	—	—	—	—	—	—	—	—	—	—	—	1.42	5.67	7.09	0.15	0.01	—	12.8
Waste	—	—	—	—	—	—	—	—	—	—	—	2.12	0.00	2.12	0.21	0.00	—	7.42
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.45	0.45
Total	0.39	0.47	1.49	2.21	< 0.005	0.01	0.14	0.14	0.01	0.04	0.04	3.54	645	648	0.47	0.16	0.48	707
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.39	0.35	1.41	1.99	< 0.005	0.01	0.13	0.14	0.01	0.03	0.04	—	451	451	0.04	0.07	0.41	473
Area	0.01	0.14	< 0.005	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.32	0.32	< 0.005	< 0.005	—	0.32
Energy	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	188	188	0.06	0.08	—	214
Water	—	—	—	—	—	—	—	—	—	—	—	1.42	5.67	7.09	0.15	0.01	—	12.8
Waste	—	—	—	—	—	—	—	—	—	—	—	2.12	0.00	2.12	0.21	0.00	—	7.42

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.45	0.45
Total	0.41	0.49	1.44	2.09	< 0.005	0.01	0.13	0.14	0.01	0.03	0.04	3.54	645	649	0.46	0.16	0.86	708
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.07	0.06	0.26	0.36	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	74.7	74.7	0.01	0.01	0.07	78.3
Area	< 0.005	0.03	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.05	0.05	< 0.005	< 0.005	—	0.05
Energy	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	31.1	31.1	0.01	0.01	—	35.4
Water	—	—	—	—	—	—	—	—	—	—	—	0.24	0.94	1.17	0.02	< 0.005	—	2.11
Waste	—	—	—	—	—	—	—	—	—	—	—	0.35	0.00	0.35	0.04	0.00	—	1.23
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Total	0.07	0.09	0.26	0.38	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	0.59	107	107	0.08	0.03	0.14	117

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.34	0.33	0.10	1.14	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.02	—	102	102	0.02	0.01	0.38	106
General Light Industry	0.02	0.02	0.38	0.23	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	107	107	0.01	0.02	0.17	113
Parking Lot	0.06	0.04	0.88	0.53	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	247	247	0.01	0.04	0.40	260

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.42	0.38	1.36	1.91	< 0.005	0.01	0.14	0.14	0.01	0.04	0.04	—	457	457	0.04	0.07	0.95	478
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.31	0.30	0.12	1.39	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.02	—	93.9	93.9	0.03	0.01	0.01	98.0
General Light Industry	0.02	0.01	0.41	0.24	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	108	108	0.01	0.02	< 0.005	114
Parking Lot	0.05	0.03	0.93	0.55	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	249	249	0.01	0.04	0.01	261
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.39	0.35	1.46	2.18	< 0.005	0.01	0.14	0.14	0.01	0.04	0.04	—	451	451	0.05	0.07	0.02	473
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.06	0.05	0.02	0.22	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	15.9	15.9	< 0.005	< 0.005	0.03	16.5
General Light Industry	< 0.005	< 0.005	0.07	0.04	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	17.8	17.8	< 0.005	< 0.005	0.01	18.7
Parking Lot	0.01	0.01	0.17	0.10	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	41.0	41.0	< 0.005	0.01	0.03	43.1
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.07	0.06	0.26	0.36	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	74.7	74.7	0.01	0.01	0.07	78.3

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	66.0	66.0	0.03	0.04	—	77.6
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	28.9	28.9	0.01	0.02	—	34.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	52.7	52.7	0.02	0.03	—	62.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	148	148	0.06	0.08	—	174
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	66.0	66.0	0.03	0.04	—	77.6
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	28.9	28.9	0.01	0.02	—	34.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	52.7	52.7	0.02	0.03	—	62.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	148	148	0.06	0.08	—	174

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	10.9	10.9	< 0.005	0.01	—	12.8
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	4.78	4.78	< 0.005	< 0.005	—	5.62
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	8.73	8.73	< 0.005	< 0.005	—	10.3
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	24.4	24.4	0.01	0.01	—	28.7

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	19.9	19.9	< 0.005	< 0.005	—	20.0
General Light Industry	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.4	20.4	< 0.005	< 0.005	—	20.4
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	40.3	40.3	< 0.005	< 0.005	—	40.4

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	19.9	19.9	< 0.005	< 0.005	—	20.0
General Light Industry	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.4	20.4	< 0.005	< 0.005	—	20.4
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	40.3	40.3	< 0.005	< 0.005	—	40.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.29	3.29	< 0.005	< 0.005	—	3.30
General Light Industry	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.37	3.37	< 0.005	< 0.005	—	3.38
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.67	6.67	< 0.005	< 0.005	—	6.68

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.03	0.03	< 0.005	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.65	0.65	< 0.005	< 0.005	—	0.66
Total	0.03	0.15	< 0.005	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.65	0.65	< 0.005	< 0.005	—	0.66
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.05	0.05	< 0.005	< 0.005	—	0.05

Total	< 0.005	0.03	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.05	0.05	< 0.005	< 0.005	—	0.05

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.66	1.88	2.54	0.07	< 0.005	—	5.04
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.76	2.18	2.95	0.08	< 0.005	—	5.84
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.22	0.22	< 0.005	< 0.005	—	0.26
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	1.39	1.39	< 0.005	< 0.005	—	1.63
Total	—	—	—	—	—	—	—	—	—	—	—	1.42	5.67	7.09	0.15	0.01	—	12.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.66	1.88	2.54	0.07	< 0.005	—	5.04
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.76	2.18	2.95	0.08	< 0.005	—	5.84
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.22	0.22	< 0.005	< 0.005	—	0.26

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	1.39	1.39	< 0.005	< 0.005	—	1.63
Total	—	—	—	—	—	—	—	—	—	—	—	1.42	5.67	7.09	0.15	0.01	—	12.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.11	0.31	0.42	0.01	< 0.005	—	0.83
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.13	0.36	0.49	0.01	< 0.005	—	0.97
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.04	0.04	< 0.005	< 0.005	—	0.04
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.23	0.23	< 0.005	< 0.005	—	0.27
Total	—	—	—	—	—	—	—	—	—	—	—	0.24	0.94	1.17	0.02	< 0.005	—	2.11

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.97	0.00	0.97	0.10	0.00	—	3.39
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	1.15	0.00	1.15	0.12	0.00	—	4.03

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2.12	0.00	2.12	0.21	0.00	—	7.42
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.97	0.00	0.97	0.10	0.00	—	3.39
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	1.15	0.00	1.15	0.12	0.00	—	4.03
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2.12	0.00	2.12	0.21	0.00	—	7.42
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.16	0.00	0.16	0.02	0.00	—	0.56
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.19	0.00	0.19	0.02	0.00	—	0.67
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.35	0.00	0.35	0.04	0.00	—	1.23

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.45	0.45
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.45	0.45
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.45	0.45
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.45	0.45
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07	0.07
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	109	109	109	39,785	109	109	109	39,785
General Light Industry	20.0	20.0	20.0	7,300	20.0	20.0	20.0	7,300
Parking Lot	46.0	46.0	46.0	16,790	46.0	46.0	46.0	16,790
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	5,487	1,829	15,985

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	39,541	609	0.2373	0.3390	62,090
General Light Industry	17,309	609	0.2373	0.3390	63,533
Parking Lot	31,595	609	0.2373	0.3390	0.00
Other Asphalt Surfaces	0.00	609	0.2373	0.3390	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	343,559	4,005
General Light Industry	398,906	3,591
Parking Lot	0.00	74,720
Other Asphalt Surfaces	0.00	477,212

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	1.80	—
General Light Industry	2.14	—
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
General Light Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

8. User Changes to Default Data

Screen	Justification
Operations: Vehicle Data	Project-specific trip generation rates applied, consistent with the Transportation Impact Analysis for Pattar Transport GPA Project. Trip lengths updated to one (1) mile to account for on-site + localized emissions.
Operations: Fleet Mix	Fleet mixes adjusted for passenger vehicle trips, short haul truck trips, and long haul truck trips.

Pattar Transport GPA Project

TRU Emission Assumptions for Operational HRA Inputs

Truck Trips per day	66.00	
HHDT and MHDT Trucks Onsite per Day	**33.00**	**(assumed 100% HHDT)**

TRU Emission Factor (grams per day)

PM10

73.26 g/day total

PM10

0.000847917 g/sec total

Emissions at Area 1 (average g/sec)	**Emissions at Area 2 (average g/sec)**
6.783333E-04	1.695833E-04

Pattar Transport GPA Project

TRU use Onsite - Emission Estimates

	TRUs/day*	Time Onsite per day assumed (hours)
Project Total	33	6

TRU Emission Factor (grams per hour)				
NO_X	PM_{10}	SO_X	CO	VOC
14.11	0.37	0.18	97.92	3.6

TRU Emission Factor (grams per day)				
NO_X	PM_{10}	SO_X	CO	VOC
2793.78	73.26	35.64	19388.16	712.8

TRU Emission Factor (grams per second)				
NO_X	PM_{10}	SO_X	CO	VOC
0.0323354	0.0008479	0.0004125	0.2244	0.00825

TRU Emission Factor (lbs/day)				
NO_X	PM_{10}	SO_X	CO	VOC
6.1592306	0.1615107	0.07857275	42.743576	1.571455

TRU Emission Factor (lbs/year)				
NO_X	PM_{10}	SO_X	CO	VOC
2248.1192	58.951388	28.67905384	15601.405	573.58108

TRU Emission Factor (tons/year)				
NO_X	PM_{10}	SO_X	CO	VOC
1.124060	0.029476	0.014340	7.800703	0.286791

Notes:

m (lb) = m (g) / 453.59237

ATTACHMENT B

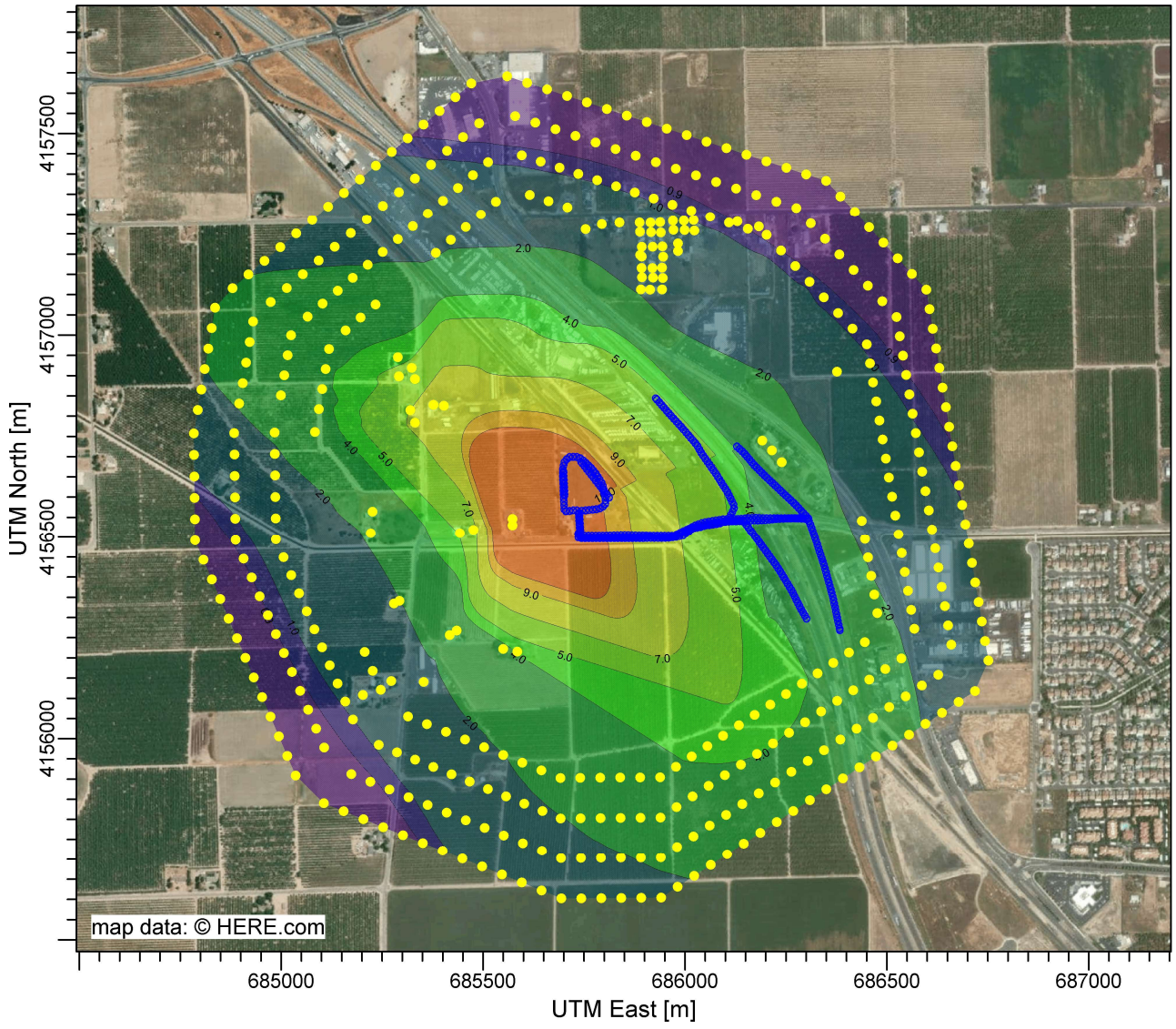
Health Risk Assessment

Health Risk Assessment

General Parameters

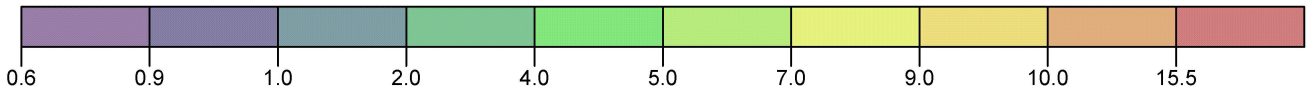
PROJECT TITLE:

Graphical Representation of AERMOD Inputs and Air Dispersion Trend (Unit Emissions)



PLOT FILE OF ANNUAL VALUES AVERAGED ACROSS 5 YEARS FOR SOURCE GROUP: ON1 ug/m^3

Max: 15.5 [ug/m^3] at (685572.99, 4156545.81)



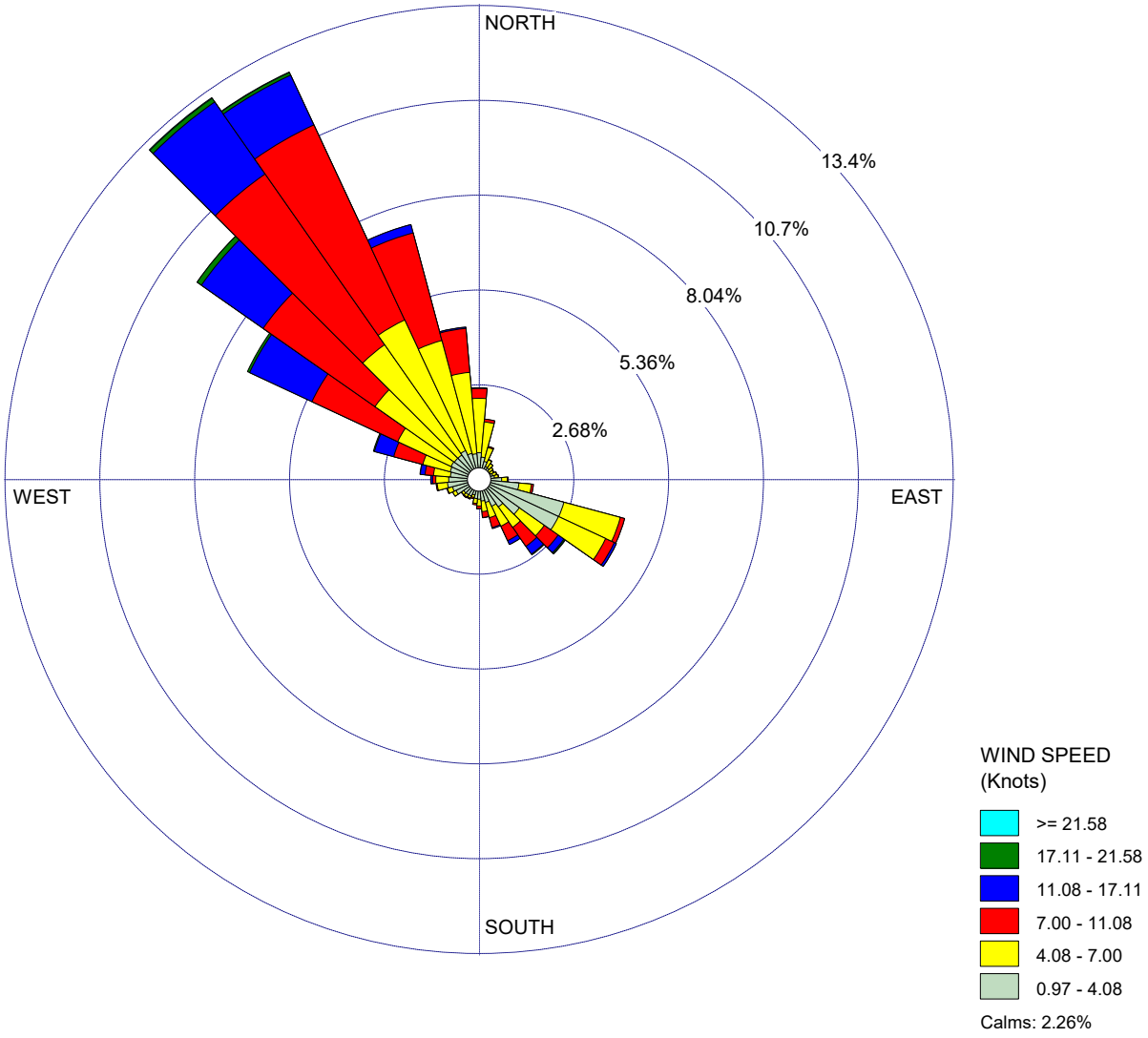
COMMENTS:	SOURCES: **7**	COMPANY NAME:	
	RECEPTORS: **442**	MODELER:	
	OUTPUT TYPE: **Concentration**	SCALE: 1:17,037 0 0.5 km	
	MAX: **15.5 ug/m^3**	DATE: **8/30/2023**	PROJECT NO.:

WIND ROSE PLOT:

Wind Rose - Station (#23258) – Blowing From

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:	DATA PERIOD: **Start Date: 1/1/2013 - 00:00** **End Date: 12/31/2017 - 23:59**	COMPANY NAME:	
		MODELER:	
	CALM WINDS: **2.26%**	TOTAL COUNT: **43582 hrs.**	
	AVG. WIND SPEED: **6.28 Knots**	DATE: **8/30/2023**	PROJECT NO.:

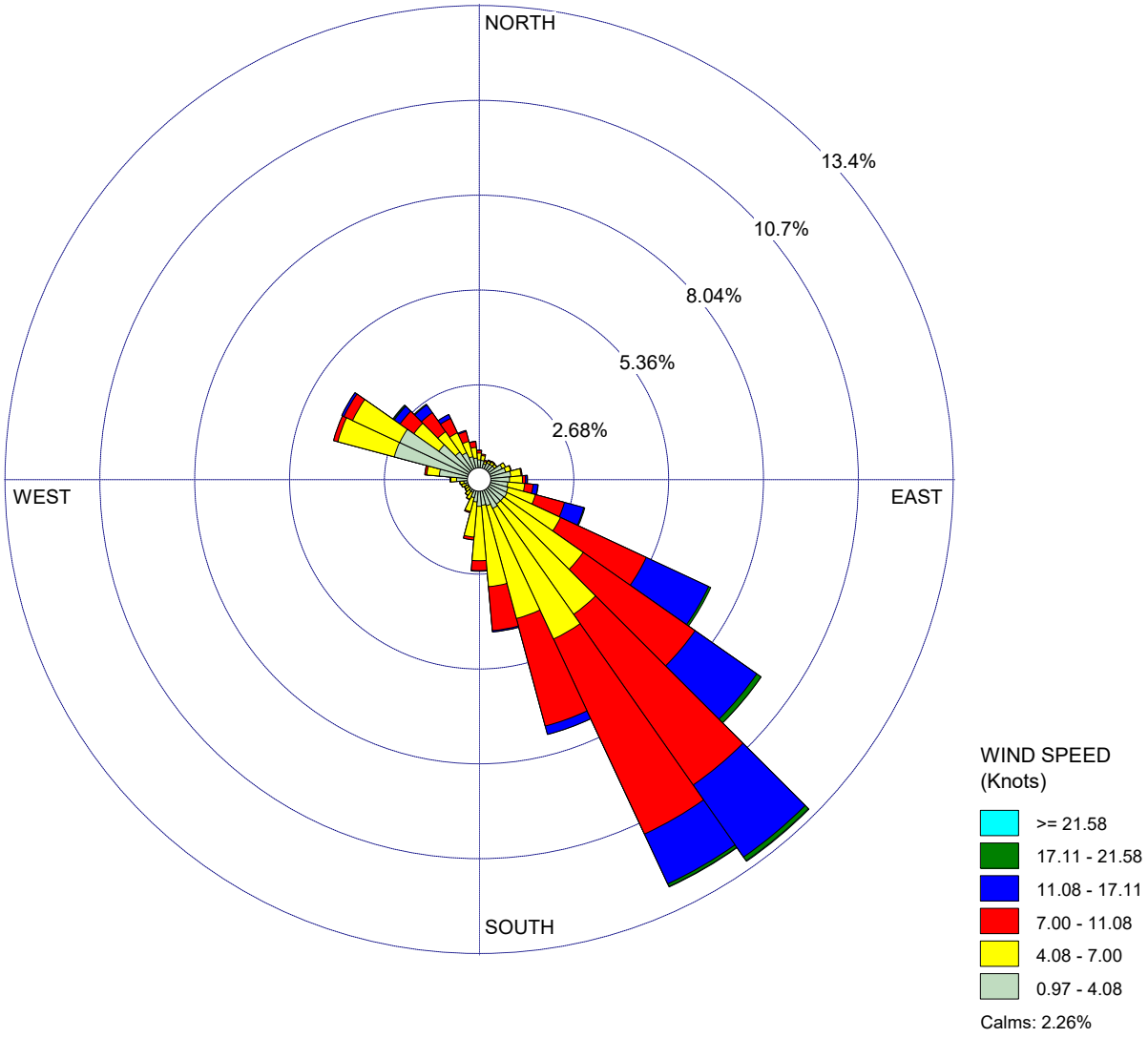
WRPLOT View - Lakes Environmental Software

WIND ROSE PLOT:

Wind Rose - Station (#23258) – Blowing To

DISPLAY:

Wind Speed
Flow Vector (blowing to)



COMMENTS:	DATA PERIOD: **Start Date: 1/1/2013 - 00:00** **End Date: 12/31/2017 - 23:59**	COMPANY NAME:	
		MODELER:	
	CALM WINDS: **2.26%**	TOTAL COUNT: **43582 hrs.**	
	AVG. WIND SPEED: **6.28 Knots**	DATE: **8/30/2023**	PROJECT NO.:

WRPLOT View - Lakes Environmental Software

Health Risk Assessment

Operational DPM

Pattar Transport GPA Project **DPM - Project Operations**

Emission Assumptions

Emission Factors

1) Truck Emissions

(1) EMFAC2021 for emission rates

(a) Calculations for	Stanislaus County - 2023 Operational Year
(b) Truck Mix	100% HHD
(c) Truck Idle	One instance per trip
(d) Onsite Vehicle Travel Speed	5 mph for trucks
(e) Offsite Vehicle Travel Speed	5-25 mph aggregated for trucks (per SJVAPCD staff comment on modeling assumptions for a similar project)

Traffic Allocation

1) Traffic distribution based on site layout identified in the site plan
2) Project-specific trip generation
3) Onsite travel emissions generated from diesel vehicles
4) Onsite idling emissions generated only by trucks

Emission Source Configuration

1) Project onsite truck traffic represented by a line source
2) Project onsite truck idling represented as line sources (series of point sources)
3) Offsite vehicles represented by four(4) line sources

Onsite Vehicle Travel Segments

Segment	**Source ID**	**Segment Travel Distance (m)**	
On-site Truck Travel	Onsite1	520.8	
Onsite Truck Idling			
On-site Idling – Location 1	Idle1	117.6	Idle 1
On-site Idling – Location 2	Idle2	58.7	Idle 2

Offsite Vehicle Travel Segments

Segment		**Segment Travel Distance (m)**	
Off-site Truck Route 1	OFF1	721.1	From Project Site Towards South
Off-site Truck Route 2	OFF2	871.5	From South Towards Project Site
Off-site Truck Route 3	OFF3	761.8	From North Towards Project Site
Off-site Truck Route 4	OFF4	836.2	From Project Site Towards North

Other Input Parameters

Truck Operations (hr/day): 24

Pattar Transport GPA Project

Vehicle Fleet Mix

Total Daily Truck Trips		Trucks	Total Daily Truck Trips
(Trips/day)	Daily Trips	66.000	66.00
66	Fleet Mix	100.0%	100.0%

—

Vehicle Fleet

	Trucks Project Vehicle Mix	**% Diesel**	**Total Number of Daily Trips**	**Number of Daily Diesel Trips**	**Number of Daily Non-Trips**	**Total Number of Daily Trips**	**% Diesel Trips**	**% Non-Diesel Trips**	**Total Trips**
HHDT (4+ axle truck)	100.0%	100.0%	66	66.0	0	66	100.00%	0.00%	
Truck Subtotal	100.0%		66	66.0	0	66	100.00%	0.00%	100.00%

Truck fleet mix consistent with the project CalEEMod runs used in the Air Quality Analysis.
Assumed 100% diesel for HHDT.

Pattar Transport GPA Project

Trip Distribution

Vehicle Allocation - Number of Daily Diesel Trips

Allocation of Truck Trips

Percent Allocation - On-site Travel

100% On-site Travel – Route 1 (DSL trucks)
100% Total Diesel Truck Trips

Segment - On-site Travel	Source ID	LDA	LDT1	LDT2	MDT	LHDT1	LHDT2	MHDT	HHDT	OBUS	UBUS	SBUS	MH	Total
On-site Truck Travel	Onsite1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.0	0.0	0.0	0.0	0.0	66.0
Total Diesel Trucks	—	0	0	0	0	0	0	0	66	0	0	0	0	66

Percent Allocation of Trips - On-site Diesel Truck Idling

80.0% On-site Idling – Location 1
20.0% On-site Idling – Location 2
100% Total Diesel Truck Trips (one on-site idling occurrence per trip)

Segment - On-site Truck Idle	Source ID	LDA	LDT1	LDT2	MDT	LHDT1	LHDT2	MHDT	HHDT	OBUS	UBUS	SBUS	MH	Total
On-site Idling – Location 1	Idle1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.8	0.0	0.0	0.0	0.0	52.8
On-site Idling – Location 2	Idle2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.2	0.0	0.0	0.0	0.0	13.2
Total Idling (Diesel Trucks Idling)	—	0	0	0	0	0	0	0	66	0	0	0	0	66

Pattar Transport GPA Project

Diesel Vehicle Emissions

Processes Modeled

Diesel vehicle exhaust

Diesel vehicle idling

Facility Operations

24 hrs/day, 52 weeks/year

On-site Travel Links Modeled

Link	Truck Type	Average Speed (mph)	Emission Factor (g/mi)	Trips per Daily (in and out)	Link Length (m)	Link Length (mi)	Ave Emissions Over Link (g/day)	Ave Emissions (lbs/day)	Average Emissions (g/sec)	Emissions for all Vehicles (g/sec)
Onsite1	**HHDT**	5	0.132	66.0	520.8	0.32	2.825E+00	6.22E-03	3.270E-05	**3.2697E-05**

Pattar Transport GPA Project

Diesel Truck Idling Emissions

Onsite Vehicle Travel Segments	Truck Type	DPM Emission Factor (grams/day)	Idling Time (min)	Number Idling Vehicle Trips/day	Emissions (g/day)	Emissions (lb/day)	Average Emissions (g/sec)	Total Emissions for all Vehicles (g/sec)
Idle1	**HHDT**	1.445	15	52.8	7.95E-01	1.75E-03	9.20E-06	**9.1982E-06**
Idle2	**HHDT**	1.445	15	13.2	1.99E-01	4.38E-04	2.30E-06	**2.2996E-06**

Pattar Transport GPA Project

Project Operations **24 hours/day**

Emission Rates **Running Emissions 5-25 mph Averaged (EMFAC2021 for Stanislaus County by vehicle type and speed)**

Offsite DSL Truck Roadway Emissions

Segment ID	Description	% total Trips
Off1	Off-site Truck Route 1	17.5%
Off2	Off-site Truck Route 2	17.5%
Off3	Off-site Truck Route 3	32.5%
Off4	Off-site Truck Route 4	32.5%
	Total	100.0%

Segment ID: Off1

Travel Distance: 721.1 meters

Operations 24 hours/day

Vehicle Class	Daily Trips (trips/day)	Emission Factor (g/mi)	Travel Distance (mi)	Emissions (g/day)	Emissions (g/sec)
HHDT-DSL	11.6	0.1575432	0.45	0.815	9.43E-06
Total	11.6				**9.43E-06**

Segment ID: Off2
Travel Distance: 871.5 meters
Operations 24 hours/day

Vehicle Class	Daily Trips (trips/day)	Emission Factor (g/mi)	Travel Distance (mi)	Emissions (g/day)	Emissions (g/sec)
HHDT-DSL	11.6	0.0398225	0.54	0.249	2.88E-06
Total	11.6				**2.88E-06**

Segment ID: Off3
Travel Distance: 761.8 meters
Operations 24 hours/day

Vehicle Class	Daily Trips (trips/day)	Emission Factor (g/mi)	Travel Distance (mi)	Emissions (g/day)	Emissions (g/sec)
HHDT-DSL	21.5	0.0099946	0.47	0.101	1.17E-06
Total	21.5				**1.17E-06**

Segment ID: Off4
Travel Distance: 836.2 meters
Operations 24 hours/day

Vehicle Class	Daily Trips (trips/day)	Emission Factor (g/mi)	Travel Distance (mi)	Emissions (g/day)	Emissions (g/sec)
HHDT-DSL	21.5	0.0101330	0.52	0.113	1.31E-06
Total	21.5				**1.31E-06**

DPM - Project Operations **2023**

EMFAC Running Diesel Exhaust Emissions
in units of grams/mile

Source: EMFAC2021 (v1.0.2) Emission Rates - Stanislaus County
Tulare County

		Emission Factor (g/mi)			
		5 mph	**10 mph**	**25 mph**	**35 mph**
HHDT	DSL	0.132	0.03	0.008	—

Off-site Truck Running Emissions for the Health Risk Screening Analysis—Pattar Transport GPA Project

Source: EMFAC2021 (v1.0.2) Emission Rates
Region Type: County
Region: Stanislaus
Calendar Year: 2023
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, g/mile for RUNEX, PMBW and PMTW, mph for Speed, kWh/mile for Energy Consumption, gallon/mile for Fuel Consumption. PHEV calculated based on total VMT.

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	VMT	NOx_RUNEX	PM2.5_RUNEX	PM10_RUNEX	CO2_RUNEX	CH4_RUNEX	N2O_RUNEX	ROG_RUNEX	TOG_RUNEX	CO_RUNEX	SOx_RUNEX
Stanislaus	2023	HHDT	Aggregate	5	Diesel	541.5074853	20.81580416	0.126576893	0.132300139	3560.230988	0.029767469	0.560915842	0.640885439	0.729599287	1.479537745	0.033713258
Stanislaus	2023	HHDT	Aggregate	10	Diesel	5773.543127	9.381902727	0.02557265	0.026728932	3014.576946	0.006691133	0.474947826	0.144058251	0.163999353	0.806161409	0.028546241
Stanislaus	2023	HHDT	Aggregate	15	Diesel	12607.72092	5.674291696	0.011537448	0.01205912	2417.995332	0.00240679	0.380956149	0.051817537	0.058990321	0.428982886	0.02289697
Stanislaus	2023	HHDT	Aggregate	20	Diesel	25673.25558	3.842620064	0.007232708	0.007559739	2098.417601	0.001348496	0.330606548	0.029032752	0.033051578	0.292914592	0.01987076
Stanislaus	2023	HHDT	Aggregate	25	Diesel	15065.15855	3.459058223	0.008357041	0.008734909	1894.98591	0.001117534	0.298555802	0.024060203	0.02739071	0.230906336	0.017944383
						Total	43.17367687	0.17927674	0.187382839	12986.20678	0.041331422	2.045982166	0.889854181	1.013031249	3.238502968	0.122971613

Running Emissions 5-25 MPH Averaged		NOx_RUNEX	PM2.5_RUNEX	PM10_RUNEX	CO2_RUNEX	CH4_RUNEX	N2O_RUNEX	ROG_RUNEX	TOG_RUNEX	CO_RUNEX	SOx_RUNEX
	HHDT	8.6347	0.0359	0.0375	2597.2414	0.0083	0.4092	0.1780	0.2026	0.6477	0.0246

Pattar Transport GPA Project
Summary of DPM Emissions in Pounds

Diesel Truck Idling Emissions

Segment - On-site Truck Idle		Emissions (g/day)	Emissions (lb/day)	Emissions (lb/year)	Max Emissions in an Hour (lbs/hr)	Source Group
On-site Idling – Location 1	Idle 1	0.794727922	0.001750502	0.638933241	0.00017505	IDLE1
On-site Idling – Location 2	Idle 2	0.19868198	0.000437626	0.15973331	4.37626E-05	IDLE2
	Subtotal Idle	**0.993409902**	**0.002188128**	**0.798666551**		

TRU Emissions

Segment		Emissions (lb/year)	Emissions (lb/day)	Max Emissions in an Hour (lbs/hr)
On-site TRUs – Location 1		47.16111076	0.129208523	0.012920852
On-site TRUs – Location 2		11.79027769	0.032302131	0.003230213
	Subtotal TRUs	**58.95138845**	**0.161510653**	**0.016151065**

Segment - On-site Truck Idle	Source ID	Source #	Source Group	Emissions (lb/day)	Emissions (lb/year)	Max Emissions in an Hour (lbs/hr)
On-site Idling – Location 1	IDLE1	-	Idle1	0.130959025	47.800044	0.013095902
On-site Idling – Location 2	IDLE2	-	Idle2	0.032739756	11.950011	0.003273976
		Subtotal Idle + TRUs for HARP2 Inputs		**0.163698781**	**59.750055**	**0.016369878**

Diesel Truck On-site Travel Emissions (5 mph)

Segment	Source ID	Source #	Source Group	Emissions (g/day)	Emissions (lb/day)	Emissions (lb/year)	Max Emissions in an Hour (lbs/hr)
On-site Truck Travel	On1	-	On1	2.824978406	0.006222419	2.271183079	0.000622242
		Subtotal On-site Travel		**2.824978406**	**0.006222419**	**2.271183079**	

Diesel Truck Localized Off-site Travel Emissions (5-25 mph aggregated)

Segment	Source ID	Source #	Source Group	Emissions (g/day)	Emissions (lb/day)	Emissions (lb/year)	Max Emissions in an Hour (lbs/hr)
Off-site Truck Route 1	OFF1	-	Off1	0.815111361	0.001795399	0.655320808	0.000299233
Off-site Truck Route 2	OFF2	-	Off2	0.249010443	0.000548481	0.20019562	9.14135E-05
Off-site Truck Route 3	OFF3	-	Off3	0.101455426	0.00022347	0.081566587	3.7245E-05
Off-site Truck Route 4	OFF4	-	Off3	0.112905164	0.00024869	0.090771773	4.14483E-05
		Subtotal Off-site Travel		**1.278482394**	**0.002816041**	**1.027854788**	

Notes: Divided pounds per day by 10 hours to estimate maximum pounds in an hour.

Health Risk Summary (Summary of HARP2 Results - Operational DPM)

Pattar Transport GPA Project Operations

	RISK_SUM	Cancer Risk/million	MAXHI NonCancer Chronic	MAXHI Acute
Maximum Risk	9.660E-06	9.66	1.841E-03	0.00E+00

	X	Y
MEI UTM	685572.99	4156545.81
Lat/Long	37°32'14.1"N	120°53'58.6"W
Receptor #	427	

*HARP - HRACalc v22118 8/30/2023 4:56:25 PM - Cancer Risk - Input File: F:\Move\0007-002\PATTAR DPM\hra\Pattar Trucking DPMHRAInput.hra
*HARP - HRACalc v22118 8/30/2023 4:56:25 PM - Chronic Risk - Input File: F:\Move\0007-002\PATTAR DPM\hra\Pattar Trucking DPMHRAInput.hra
*HARP - HRACalc v22118 8/30/2023 4:56:25 PM - Acute Risk - Input File: F:\Move\0007-002\PATTAR DPM\hra\Pattar Trucking DPMHRAInput.hra

REC	GRP	X	Y	RISK_SUM	SCENARIO	MAXHI NonCancerChronic	MAXHI Acute
1	ALL	685977.56	4155930.08	3.198E-06	70YrCancerHighEnd_InhSoilDermMMilk	6.094E-04	0.00E+00
2	ALL	686016.53	4155955.83	3.515E-06	70YrCancerHighEnd_InhSoilDermMMilk	6.699E-04	0.00E+00
3	ALL	686055.50	4155981.58	3.838E-06	70YrCancerHighEnd_InhSoilDermMMilk	7.314E-04	0.00E+00
4	ALL	686094.46	4156007.33	4.145E-06	70YrCancerHighEnd_InhSoilDermMMilk	7.899E-04	0.00E+00
5	ALL	686133.43	4156033.07	4.396E-06	70YrCancerHighEnd_InhSoilDermMMilk	8.377E-04	0.00E+00
6	ALL	686172.39	4156058.82	4.544E-06	70YrCancerHighEnd_InhSoilDermMMilk	8.659E-04	0.00E+00
7	ALL	686211.36	4156084.57	4.556E-06	70YrCancerHighEnd_InhSoilDermMMilk	8.682E-04	0.00E+00
8	ALL	686250.33	4156110.31	4.435E-06	70YrCancerHighEnd_InhSoilDermMMilk	8.451E-04	0.00E+00
9	ALL	686289.29	4156136.06	4.213E-06	70YrCancerHighEnd_InhSoilDermMMilk	8.027E-04	0.00E+00
10	ALL	686328.26	4156161.81	3.931E-06	70YrCancerHighEnd_InhSoilDermMMilk	7.492E-04	0.00E+00
11	ALL	686367.23	4156187.55	3.621E-06	70YrCancerHighEnd_InhSoilDermMMilk	6.900E-04	0.00E+00
12	ALL	686406.19	4156213.30	3.276E-06	70YrCancerHighEnd_InhSoilDermMMilk	6.242E-04	0.00E+00
13	ALL	686445.16	4156239.05	2.882E-06	70YrCancerHighEnd_InhSoilDermMMilk	5.492E-04	0.00E+00
14	ALL	686476.43	4156310.86	2.418E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.607E-04	0.00E+00
15	ALL	686468.73	4156356.93	2.329E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.438E-04	0.00E+00
16	ALL	686461.03	4156402.99	2.228E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.245E-04	0.00E+00
17	ALL	686453.33	4156449.06	2.126E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.050E-04	0.00E+00
18	ALL	686445.63	4156495.12	2.032E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.871E-04	0.00E+00
19	ALL	686437.93	4156541.19	1.947E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.710E-04	0.00E+00
20	ALL	685938.60	4155904.34	2.896E-06	70YrCancerHighEnd_InhSoilDermMMilk	5.518E-04	0.00E+00
21	ALL	685889.14	4155903.96	2.752E-06	70YrCancerHighEnd_InhSoilDermMMilk	5.245E-04	0.00E+00
22	ALL	685839.69	4155903.58	2.591E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.937E-04	0.00E+00
23	ALL	685790.24	4155903.20	2.419E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.610E-04	0.00E+00
24	ALL	685740.79	4155902.83	2.241E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.271E-04	0.00E+00
25	ALL	685691.34	4155902.45	2.056E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.918E-04	0.00E+00
26	ALL	685979.14	4155830.62	2.498E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.760E-04	0.00E+00
27	ALL	686018.92	4155856.91	2.728E-06	70YrCancerHighEnd_InhSoilDermMMilk	5.199E-04	0.00E+00
28	ALL	686058.70	4155883.19	2.966E-06	70YrCancerHighEnd_InhSoilDermMMilk	5.652E-04	0.00E+00
29	ALL	686098.47	4155909.47	3.206E-06	70YrCancerHighEnd_InhSoilDermMMilk	6.109E-04	0.00E+00
30	ALL	686138.25	4155935.76	3.433E-06	70YrCancerHighEnd_InhSoilDermMMilk	6.541E-04	0.00E+00
31	ALL	686178.03	4155962.04	3.619E-06	70YrCancerHighEnd_InhSoilDermMMilk	6.895E-04	0.00E+00
32	ALL	686217.81	4155988.32	3.732E-06	70YrCancerHighEnd_InhSoilDermMMilk	7.112E-04	0.00E+00
33	ALL	686257.59	4156014.61	3.751E-06	70YrCancerHighEnd_InhSoilDermMMilk	7.148E-04	0.00E+00
34	ALL	686297.36	4156040.89	3.676E-06	70YrCancerHighEnd_InhSoilDermMMilk	7.004E-04	0.00E+00
35	ALL	686337.14	4156067.17	3.523E-06	70YrCancerHighEnd_InhSoilDermMMilk	6.713E-04	0.00E+00
36	ALL	686376.92	4156093.46	3.318E-06	70YrCancerHighEnd_InhSoilDermMMilk	6.323E-04	0.00E+00
37	ALL	686416.70	4156119.74	3.079E-06	70YrCancerHighEnd_InhSoilDermMMilk	5.867E-04	0.00E+00
38	ALL	686456.48	4156146.02	2.812E-06	70YrCancerHighEnd_InhSoilDermMMilk	5.359E-04	0.00E+00
39	ALL	686496.26	4156172.31	2.525E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.811E-04	0.00E+00
40	ALL	686536.03	4156198.59	2.233E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.256E-04	0.00E+00
41	ALL	686567.95	4156271.90	1.908E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.636E-04	0.00E+00
42	ALL	686560.09	4156318.92	1.843E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.512E-04	0.00E+00
43	ALL	686552.23	4156365.95	1.771E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.376E-04	0.00E+00
44	ALL	686544.38	4156412.97	1.701E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.242E-04	0.00E+00
45	ALL	686536.52	4156460.00	1.639E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.123E-04	0.00E+00
46	ALL	686528.66	4156507.02	1.584E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.018E-04	0.00E+00
47	ALL	686520.80	4156554.05	1.532E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.920E-04	0.00E+00
48	ALL	686512.94	4156601.07	1.478E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.816E-04	0.00E+00
49	ALL	686505.08	4156648.10	1.417E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.699E-04	0.00E+00
50	ALL	686497.22	4156695.13	1.351E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.574E-04	0.00E+00
51	ALL	686489.36	4156742.15	1.285E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.449E-04	0.00E+00
52	ALL	686481.50	4156789.18	1.224E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.333E-04	0.00E+00
53	ALL	686473.64	4156836.20	1.168E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.225E-04	0.00E+00
54	ALL	686465.78	4156883.23	1.112E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.120E-04	0.00E+00

55	ALL	686457.92	4156930.25	1.056E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.013E-04	0.00E+00
56	ALL	685939.36	4155804.34	2.278E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.341E-04	0.00E+00
57	ALL	685889.91	4155803.96	2.172E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.138E-04	0.00E+00
58	ALL	685840.46	4155803.58	2.056E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.917E-04	0.00E+00
59	ALL	685791.00	4155803.21	1.935E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.687E-04	0.00E+00
60	ALL	685741.55	4155802.83	1.811E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.451E-04	0.00E+00
61	ALL	685692.10	4155802.45	1.682E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.205E-04	0.00E+00
62	ALL	685980.53	4155731.04	2.010E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.829E-04	0.00E+00
63	ALL	686020.94	4155757.74	2.182E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.158E-04	0.00E+00
64	ALL	686061.35	4155784.45	2.361E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.498E-04	0.00E+00
65	ALL	686101.76	4155811.15	2.543E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.846E-04	0.00E+00
66	ALL	686142.17	4155837.85	2.726E-06	70YrCancerHighEnd_InhSoilDermMMilk	5.194E-04	0.00E+00
67	ALL	686182.58	4155864.55	2.897E-06	70YrCancerHighEnd_InhSoilDermMMilk	5.521E-04	0.00E+00
68	ALL	686222.99	4155891.25	3.038E-06	70YrCancerHighEnd_InhSoilDermMMilk	5.790E-04	0.00E+00
69	ALL	686263.40	4155917.95	3.127E-06	70YrCancerHighEnd_InhSoilDermMMilk	5.959E-04	0.00E+00
70	ALL	686303.81	4155944.65	3.148E-06	70YrCancerHighEnd_InhSoilDermMMilk	5.999E-04	0.00E+00
71	ALL	686344.22	4155971.35	3.099E-06	70YrCancerHighEnd_InhSoilDermMMilk	5.905E-04	0.00E+00
72	ALL	686384.63	4155998.05	2.992E-06	70YrCancerHighEnd_InhSoilDermMMilk	5.702E-04	0.00E+00
73	ALL	686425.04	4156024.75	2.842E-06	70YrCancerHighEnd_InhSoilDermMMilk	5.416E-04	0.00E+00
74	ALL	686465.45	4156051.45	2.663E-06	70YrCancerHighEnd_InhSoilDermMMilk	5.074E-04	0.00E+00
75	ALL	686505.86	4156078.15	2.462E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.691E-04	0.00E+00
76	ALL	686546.27	4156104.85	2.245E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.278E-04	0.00E+00
77	ALL	686586.68	4156131.55	2.023E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.854E-04	0.00E+00
78	ALL	686627.09	4156158.25	1.805E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.439E-04	0.00E+00
79	ALL	686659.51	4156232.73	1.560E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.972E-04	0.00E+00
80	ALL	686651.53	4156280.50	1.510E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.877E-04	0.00E+00
81	ALL	686643.55	4156328.27	1.456E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.775E-04	0.00E+00
82	ALL	686635.56	4156376.04	1.404E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.676E-04	0.00E+00
83	ALL	686627.58	4156423.81	1.358E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.588E-04	0.00E+00
84	ALL	686619.59	4156471.58	1.319E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.514E-04	0.00E+00
85	ALL	686611.61	4156519.35	1.284E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.447E-04	0.00E+00
86	ALL	686603.63	4156567.13	1.248E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.378E-04	0.00E+00
87	ALL	686595.64	4156614.90	1.207E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.300E-04	0.00E+00
88	ALL	686587.66	4156662.67	1.161E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.212E-04	0.00E+00
89	ALL	686579.68	4156710.44	1.111E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.117E-04	0.00E+00
90	ALL	686571.69	4156758.21	1.062E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.025E-04	0.00E+00
91	ALL	686563.71	4156805.98	1.017E-06	70YrCancerHighEnd_InhSoilDermMMilk	1.938E-04	0.00E+00
92	ALL	686555.72	4156853.75	9.749E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.858E-04	0.00E+00
93	ALL	686547.74	4156901.53	9.337E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.779E-04	0.00E+00
94	ALL	686539.76	4156949.30	8.918E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.699E-04	0.00E+00
95	ALL	686531.77	4156997.07	8.489E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.618E-04	0.00E+00
96	ALL	685940.12	4155704.34	1.845E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.516E-04	0.00E+00
97	ALL	685890.67	4155703.97	1.764E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.361E-04	0.00E+00
98	ALL	685841.22	4155703.59	1.677E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.196E-04	0.00E+00
99	ALL	685791.77	4155703.21	1.589E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.028E-04	0.00E+00
100	ALL	685742.32	4155702.83	1.499E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.856E-04	0.00E+00
101	ALL	685692.86	4155702.45	1.406E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.678E-04	0.00E+00
102	ALL	685981.80	4155631.38	1.656E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.155E-04	0.00E+00
103	ALL	686022.72	4155658.41	1.789E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.409E-04	0.00E+00
104	ALL	686063.63	4155685.45	1.926E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.670E-04	0.00E+00
105	ALL	686104.55	4155712.48	2.066E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.937E-04	0.00E+00
106	ALL	686145.46	4155739.52	2.209E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.209E-04	0.00E+00
107	ALL	686186.38	4155766.55	2.351E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.480E-04	0.00E+00
108	ALL	686227.29	4155793.59	2.484E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.733E-04	0.00E+00
109	ALL	686268.21	4155820.62	2.593E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.941E-04	0.00E+00
110	ALL	686309.12	4155847.66	2.664E-06	70YrCancerHighEnd_InhSoilDermMMilk	5.076E-04	0.00E+00
111	ALL	686350.04	4155874.69	2.684E-06	70YrCancerHighEnd_InhSoilDermMMilk	5.114E-04	0.00E+00
112	ALL	686390.95	4155901.72	2.652E-06	70YrCancerHighEnd_InhSoilDermMMilk	5.053E-04	0.00E+00
113	ALL	686431.87	4155928.76	2.575E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.907E-04	0.00E+00
114	ALL	686472.78	4155955.79	2.465E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.696E-04	0.00E+00
115	ALL	686513.70	4155982.83	2.329E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.439E-04	0.00E+00
116	ALL	686554.61	4156009.86	2.176E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.147E-04	0.00E+00
117	ALL	686595.53	4156036.90	2.011E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.831E-04	0.00E+00
118	ALL	686636.44	4156063.93	1.838E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.502E-04	0.00E+00
119	ALL	686677.35	4156090.96	1.664E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.171E-04	0.00E+00
120	ALL	686718.27	4156118.00	1.496E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.851E-04	0.00E+00
121	ALL	686751.10	4156193.40	1.305E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.488E-04	0.00E+00
122	ALL	686743.02	4156241.77	1.266E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.413E-04	0.00E+00
123	ALL	686734.93	4156290.14	1.225E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.334E-04	0.00E+00
124	ALL	686726.85	4156338.51	1.185E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.258E-04	0.00E+00
125	ALL	686718.77	4156386.88	1.149E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.190E-04	0.00E+00
126	ALL	686710.68	4156435.24	1.119E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.133E-04	0.00E+00
127	ALL	686702.60	4156483.61	1.093E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.084E-04	0.00E+00

128	ALL	686694.51	4156531.98	1.069E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.037E-04	0.00E+00
129	ALL	686686.43	4156580.35	1.041E-06	70YrCancerHighEnd_InhSoilDermMMilk	1.984E-04	0.00E+00
130	ALL	686678.35	4156628.72	1.009E-06	70YrCancerHighEnd_InhSoilDermMMilk	1.922E-04	0.00E+00
131	ALL	686670.26	4156677.09	9.717E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.852E-04	0.00E+00
132	ALL	686662.18	4156725.46	9.331E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.778E-04	0.00E+00
133	ALL	686654.10	4156773.83	8.959E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.707E-04	0.00E+00
134	ALL	686646.01	4156822.19	8.613E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.641E-04	0.00E+00
135	ALL	686637.93	4156870.56	8.290E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.580E-04	0.00E+00
136	ALL	686629.84	4156918.93	7.974E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.519E-04	0.00E+00
137	ALL	686621.76	4156967.30	7.652E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.458E-04	0.00E+00
138	ALL	686613.68	4157015.67	7.322E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.395E-04	0.00E+00
139	ALL	686605.59	4157064.04	6.985E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.331E-04	0.00E+00
140	ALL	685940.89	4155604.35	1.528E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.913E-04	0.00E+00
141	ALL	685891.44	4155603.97	1.465E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.792E-04	0.00E+00
142	ALL	685841.99	4155603.59	1.399E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.666E-04	0.00E+00
143	ALL	685792.53	4155603.21	1.332E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.538E-04	0.00E+00
144	ALL	685743.08	4155602.83	1.265E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.410E-04	0.00E+00
145	ALL	685693.63	4155602.46	1.195E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.277E-04	0.00E+00
146	ALL	685206.69	4156214.48	1.147E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.186E-04	0.00E+00
147	ALL	685226.67	4156167.67	1.120E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.135E-04	0.00E+00
148	ALL	685246.65	4156120.86	1.090E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.076E-04	0.00E+00
149	ALL	685313.83	4156054.99	1.120E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.134E-04	0.00E+00
150	ALL	685361.01	4156035.92	1.192E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.271E-04	0.00E+00
151	ALL	685408.20	4156016.85	1.279E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.436E-04	0.00E+00
152	ALL	685455.39	4155997.79	1.387E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.643E-04	0.00E+00
153	ALL	685502.58	4155978.72	1.518E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.893E-04	0.00E+00
154	ALL	685549.77	4155959.65	1.665E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.173E-04	0.00E+00
155	ALL	685596.96	4155940.58	1.813E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.455E-04	0.00E+00
156	ALL	685644.15	4155921.52	1.947E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.711E-04	0.00E+00
157	ALL	685083.65	4156760.79	2.369E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.515E-04	0.00E+00
158	ALL	685005.87	4156449.47	9.697E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.848E-04	0.00E+00
159	ALL	685024.95	4156404.79	9.674E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.843E-04	0.00E+00
160	ALL	685044.02	4156360.11	9.652E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.839E-04	0.00E+00
161	ALL	685063.10	4156315.43	9.614E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.832E-04	0.00E+00
162	ALL	685082.17	4156270.75	9.549E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.820E-04	0.00E+00
163	ALL	685101.25	4156226.06	9.453E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.801E-04	0.00E+00
164	ALL	685120.32	4156181.38	9.320E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.776E-04	0.00E+00
165	ALL	685139.39	4156136.70	9.155E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.745E-04	0.00E+00
166	ALL	685158.47	4156092.02	8.965E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.708E-04	0.00E+00
167	ALL	685177.54	4156047.34	8.754E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.668E-04	0.00E+00
168	ALL	685241.66	4155984.46	8.949E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.705E-04	0.00E+00
169	ALL	685286.71	4155966.26	9.404E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.792E-04	0.00E+00
170	ALL	685331.75	4155948.06	9.927E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.892E-04	0.00E+00
171	ALL	685376.79	4155929.86	1.056E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.012E-04	0.00E+00
172	ALL	685421.84	4155911.66	1.132E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.158E-04	0.00E+00
173	ALL	685466.88	4155893.45	1.223E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.331E-04	0.00E+00
174	ALL	685511.92	4155875.25	1.325E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.524E-04	0.00E+00
175	ALL	685556.97	4155857.05	1.429E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.723E-04	0.00E+00
176	ALL	685602.01	4155838.85	1.528E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.911E-04	0.00E+00
177	ALL	685647.06	4155820.65	1.613E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.074E-04	0.00E+00
178	ALL	684986.80	4156494.15	9.750E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.858E-04	0.00E+00
179	ALL	684986.17	4156547.24	1.037E-06	70YrCancerHighEnd_InhSoilDermMMilk	1.976E-04	0.00E+00
180	ALL	684985.54	4156600.33	1.127E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.147E-04	0.00E+00
181	ALL	684984.91	4156653.43	1.262E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.406E-04	0.00E+00
182	ALL	684984.29	4156706.52	1.465E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.792E-04	0.00E+00
183	ALL	684983.66	4156759.61	1.743E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.322E-04	0.00E+00
184	ALL	684906.79	4156446.16	8.002E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.525E-04	0.00E+00
185	ALL	684926.77	4156399.35	7.983E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.521E-04	0.00E+00
186	ALL	684946.75	4156352.54	7.971E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.519E-04	0.00E+00
187	ALL	684966.74	4156305.73	7.952E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.515E-04	0.00E+00
188	ALL	684986.72	4156258.92	7.917E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.509E-04	0.00E+00
189	ALL	685006.70	4156212.12	7.863E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.498E-04	0.00E+00
190	ALL	685026.69	4156165.31	7.782E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.483E-04	0.00E+00
191	ALL	685046.67	4156118.50	7.675E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.463E-04	0.00E+00
192	ALL	685066.65	4156071.69	7.546E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.438E-04	0.00E+00
193	ALL	685086.63	4156024.88	7.398E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.410E-04	0.00E+00
194	ALL	685106.62	4155978.07	7.235E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.379E-04	0.00E+00
195	ALL	685173.79	4155912.20	7.382E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.407E-04	0.00E+00
196	ALL	685220.98	4155893.13	7.721E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.471E-04	0.00E+00
197	ALL	685268.17	4155874.06	8.103E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.544E-04	0.00E+00
198	ALL	685315.35	4155854.99	8.555E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.630E-04	0.00E+00

199	ALL	685362.54	4155835.93	9.105E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.735E-04	0.00E+00
200	ALL	685409.73	4155816.86	9.767E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.861E-04	0.00E+00
201	ALL	685456.92	4155797.79	1.053E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.006E-04	0.00E+00
202	ALL	685504.11	4155778.72	1.135E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.163E-04	0.00E+00
203	ALL	685551.30	4155759.66	1.217E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.319E-04	0.00E+00
204	ALL	685598.49	4155740.59	1.292E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.462E-04	0.00E+00
205	ALL	685645.68	4155721.52	1.356E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.583E-04	0.00E+00
206	ALL	684886.81	4156492.97	8.049E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.534E-04	0.00E+00
207	ALL	684886.18	4156546.06	8.512E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.622E-04	0.00E+00
208	ALL	684885.55	4156599.15	9.162E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.746E-04	0.00E+00
209	ALL	684884.92	4156652.24	1.011E-06	70YrCancerHighEnd_InhSoilDermMMilk	1.927E-04	0.00E+00
210	ALL	684884.29	4156705.34	1.148E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.188E-04	0.00E+00
211	ALL	684883.67	4156758.43	1.337E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.547E-04	0.00E+00
212	ALL	684807.56	4156443.18	6.739E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.284E-04	0.00E+00
213	ALL	684828.32	4156394.57	6.723E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.281E-04	0.00E+00
214	ALL	684849.07	4156345.96	6.715E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.280E-04	0.00E+00
215	ALL	684869.82	4156297.35	6.704E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.278E-04	0.00E+00
216	ALL	684890.57	4156248.74	6.685E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.274E-04	0.00E+00
217	ALL	684911.32	4156200.13	6.654E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.268E-04	0.00E+00
218	ALL	684932.07	4156151.52	6.605E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.259E-04	0.00E+00
219	ALL	684952.82	4156102.91	6.537E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.246E-04	0.00E+00
220	ALL	684973.57	4156054.30	6.449E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.229E-04	0.00E+00
221	ALL	684994.33	4156005.70	6.345E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.209E-04	0.00E+00
222	ALL	685015.08	4155957.09	6.227E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.187E-04	0.00E+00
223	ALL	685035.83	4155908.48	6.099E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.162E-04	0.00E+00
224	ALL	685105.58	4155840.07	6.214E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.184E-04	0.00E+00
225	ALL	685154.59	4155820.27	6.476E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.234E-04	0.00E+00
226	ALL	685203.59	4155800.47	6.763E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.289E-04	0.00E+00
227	ALL	685252.59	4155780.66	7.096E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.352E-04	0.00E+00
228	ALL	685301.60	4155760.86	7.499E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.429E-04	0.00E+00
229	ALL	685350.60	4155741.06	7.987E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.522E-04	0.00E+00
230	ALL	685399.61	4155721.26	8.561E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.631E-04	0.00E+00
231	ALL	685448.61	4155701.46	9.203E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.754E-04	0.00E+00
232	ALL	685497.61	4155681.66	9.870E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.881E-04	0.00E+00
233	ALL	685546.62	4155661.86	1.052E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.004E-04	0.00E+00
234	ALL	685595.62	4155642.06	1.110E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.114E-04	0.00E+00
235	ALL	685644.63	4155622.26	1.158E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.206E-04	0.00E+00
236	ALL	684786.81	4156491.79	6.781E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.292E-04	0.00E+00
237	ALL	684786.18	4156544.88	7.138E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.360E-04	0.00E+00
238	ALL	684785.56	4156597.97	7.625E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.453E-04	0.00E+00
239	ALL	684784.93	4156651.06	8.312E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.584E-04	0.00E+00
240	ALL	684784.30	4156704.15	9.280E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.768E-04	0.00E+00
241	ALL	684783.67	4156757.25	1.060E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.020E-04	0.00E+00
242	ALL	685118.46	4156965.67	3.544E-06	70YrCancerHighEnd_InhSoilDermMMilk	6.752E-04	0.00E+00
243	ALL	685110.06	4156916.22	3.605E-06	70YrCancerHighEnd_InhSoilDermMMilk	6.869E-04	0.00E+00
244	ALL	685101.66	4156866.77	3.389E-06	70YrCancerHighEnd_InhSoilDermMMilk	6.459E-04	0.00E+00
245	ALL	685093.25	4156817.31	2.956E-06	70YrCancerHighEnd_InhSoilDermMMilk	5.632E-04	0.00E+00
246	ALL	685024.47	4156999.82	2.898E-06	70YrCancerHighEnd_InhSoilDermMMilk	5.522E-04	0.00E+00
247	ALL	685016.07	4156950.36	2.911E-06	70YrCancerHighEnd_InhSoilDermMMilk	5.548E-04	0.00E+00
248	ALL	685007.67	4156900.91	2.741E-06	70YrCancerHighEnd_InhSoilDermMMilk	5.223E-04	0.00E+00
249	ALL	684999.26	4156851.45	2.426E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.624E-04	0.00E+00
250	ALL	684930.45	4157033.78	2.421E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.613E-04	0.00E+00
251	ALL	684921.83	4156983.05	2.408E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.589E-04	0.00E+00
252	ALL	684913.21	4156932.33	2.263E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.312E-04	0.00E+00
253	ALL	684904.60	4156881.61	2.014E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.838E-04	0.00E+00
254	ALL	684895.98	4156830.89	1.722E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.281E-04	0.00E+00
255	ALL	684836.46	4157067.94	2.057E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.920E-04	0.00E+00
256	ALL	684827.87	4157017.36	2.034E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.876E-04	0.00E+00
257	ALL	684819.27	4156966.78	1.916E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.650E-04	0.00E+00
258	ALL	684810.68	4156916.20	1.724E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.285E-04	0.00E+00
259	ALL	684802.09	4156865.63	1.497E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.853E-04	0.00E+00
260	ALL	684793.49	4156815.05	1.275E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.429E-04	0.00E+00
261	ALL	685708.75	4157317.47	1.229E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.342E-04	0.00E+00
262	ALL	685662.12	4157332.72	1.208E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.301E-04	0.00E+00
263	ALL	685615.49	4157347.98	1.182E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.252E-04	0.00E+00
264	ALL	685531.63	4157331.26	1.260E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.401E-04	0.00E+00
265	ALL	685494.41	4157299.30	1.384E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.637E-04	0.00E+00
266	ALL	685457.18	4157267.33	1.530E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.916E-04	0.00E+00
267	ALL	685419.96	4157235.37	1.702E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.242E-04	0.00E+00
268	ALL	685382.74	4157203.40	1.892E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.605E-04	0.00E+00
269	ALL	685233.84	4157075.54	2.862E-06	70YrCancerHighEnd_InhSoilDermMMilk	5.453E-04	0.00E+00

270	ALL	685196.62	4157043.58	3.164E-06	70YrCancerHighEnd_InhSoilDermMMilk	6.029E-04	0.00E+00
271	ALL	685159.40	4157011.61	3.401E-06	70YrCancerHighEnd_InhSoilDermMMilk	6.481E-04	0.00E+00
272	ALL	686376.34	4156909.71	1.277E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.434E-04	0.00E+00
273	ALL	686155.54	4157263.01	9.265E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.766E-04	0.00E+00
274	ALL	686108.91	4157278.26	9.469E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.804E-04	0.00E+00
275	ALL	686062.28	4157293.51	9.652E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.839E-04	0.00E+00
276	ALL	686015.64	4157308.77	9.811E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.870E-04	0.00E+00
277	ALL	685969.01	4157324.02	9.944E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.895E-04	0.00E+00
278	ALL	685922.38	4157339.27	1.004E-06	70YrCancerHighEnd_InhSoilDermMMilk	1.914E-04	0.00E+00
279	ALL	685875.74	4157354.53	1.009E-06	70YrCancerHighEnd_InhSoilDermMMilk	1.924E-04	0.00E+00
280	ALL	685829.11	4157369.78	1.009E-06	70YrCancerHighEnd_InhSoilDermMMilk	1.922E-04	0.00E+00
281	ALL	685782.47	4157385.03	1.003E-06	70YrCancerHighEnd_InhSoilDermMMilk	1.911E-04	0.00E+00
282	ALL	685735.84	4157400.29	9.931E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.892E-04	0.00E+00
283	ALL	685689.21	4157415.54	9.803E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.868E-04	0.00E+00
284	ALL	685642.57	4157430.79	9.648E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.839E-04	0.00E+00
285	ALL	685595.94	4157446.05	9.471E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.805E-04	0.00E+00
286	ALL	685512.08	4157429.34	1.001E-06	70YrCancerHighEnd_InhSoilDermMMilk	1.907E-04	0.00E+00
287	ALL	685474.86	4157397.37	1.085E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.067E-04	0.00E+00
288	ALL	685437.64	4157365.41	1.182E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.252E-04	0.00E+00
289	ALL	685400.41	4157333.44	1.295E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.467E-04	0.00E+00
290	ALL	685363.19	4157301.48	1.424E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.713E-04	0.00E+00
291	ALL	685325.97	4157269.51	1.563E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.978E-04	0.00E+00
292	ALL	685288.74	4157237.55	1.709E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.257E-04	0.00E+00
293	ALL	685251.52	4157205.58	1.865E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.554E-04	0.00E+00
294	ALL	685214.30	4157173.62	2.042E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.891E-04	0.00E+00
295	ALL	685177.07	4157141.65	2.249E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.286E-04	0.00E+00
296	ALL	685139.85	4157109.69	2.478E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.721E-04	0.00E+00
297	ALL	685102.63	4157077.72	2.692E-06	70YrCancerHighEnd_InhSoilDermMMilk	5.130E-04	0.00E+00
298	ALL	685065.40	4157045.76	2.839E-06	70YrCancerHighEnd_InhSoilDermMMilk	5.410E-04	0.00E+00
299	ALL	686202.18	4157247.76	9.031E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.721E-04	0.00E+00
300	ALL	686237.59	4157209.12	9.286E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.769E-04	0.00E+00
301	ALL	686273.00	4157170.48	9.499E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.810E-04	0.00E+00
302	ALL	686308.41	4157131.84	9.674E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.843E-04	0.00E+00
303	ALL	686343.83	4157093.20	9.816E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.871E-04	0.00E+00
304	ALL	686379.24	4157054.56	9.923E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.891E-04	0.00E+00
305	ALL	686414.65	4157015.92	9.985E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.903E-04	0.00E+00
306	ALL	686450.07	4156977.28	9.991E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.904E-04	0.00E+00
307	ALL	686226.16	4157331.59	7.548E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.438E-04	0.00E+00
308	ALL	686176.41	4157347.86	7.715E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.470E-04	0.00E+00
309	ALL	686126.67	4157364.13	7.861E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.498E-04	0.00E+00
310	ALL	686076.93	4157380.40	7.992E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.523E-04	0.00E+00
311	ALL	686027.19	4157396.67	8.110E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.545E-04	0.00E+00
312	ALL	685977.44	4157412.94	8.211E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.565E-04	0.00E+00
313	ALL	685927.70	4157429.21	8.279E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.578E-04	0.00E+00
314	ALL	685877.96	4157445.48	8.306E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.583E-04	0.00E+00
315	ALL	685828.22	4157461.75	8.291E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.580E-04	0.00E+00
316	ALL	685778.47	4157478.02	8.239E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.570E-04	0.00E+00
317	ALL	685728.73	4157494.29	8.159E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.555E-04	0.00E+00
318	ALL	685678.99	4157510.56	8.058E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.536E-04	0.00E+00
319	ALL	685629.25	4157526.83	7.939E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.513E-04	0.00E+00
320	ALL	685579.51	4157543.10	7.802E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.487E-04	0.00E+00
321	ALL	685490.06	4157525.28	8.221E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.567E-04	0.00E+00
322	ALL	685450.35	4157491.18	8.860E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.688E-04	0.00E+00
323	ALL	685410.65	4157457.08	9.596E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.829E-04	0.00E+00
324	ALL	685370.94	4157422.99	1.046E-06	70YrCancerHighEnd_InhSoilDermMMilk	1.993E-04	0.00E+00
325	ALL	685331.24	4157388.89	1.145E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.181E-04	0.00E+00
326	ALL	685291.53	4157354.80	1.253E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.388E-04	0.00E+00
327	ALL	685251.83	4157320.70	1.367E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.604E-04	0.00E+00
328	ALL	685212.12	4157286.60	1.485E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.830E-04	0.00E+00
329	ALL	685172.42	4157252.51	1.614E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.076E-04	0.00E+00
330	ALL	685132.71	4157218.41	1.765E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.364E-04	0.00E+00
331	ALL	685093.01	4157184.32	1.942E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.701E-04	0.00E+00
332	ALL	685053.30	4157150.22	2.132E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.063E-04	0.00E+00
333	ALL	685013.60	4157116.12	2.301E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.384E-04	0.00E+00
334	ALL	684973.89	4157082.03	2.404E-06	70YrCancerHighEnd_InhSoilDermMMilk	4.580E-04	0.00E+00
335	ALL	686275.90	4157315.32	7.357E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.402E-04	0.00E+00
336	ALL	686311.31	4157276.68	7.527E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.434E-04	0.00E+00
337	ALL	686346.72	4157238.04	7.671E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.462E-04	0.00E+00
338	ALL	686382.14	4157199.40	7.790E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.484E-04	0.00E+00
339	ALL	686417.55	4157160.76	7.889E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.503E-04	0.00E+00
340	ALL	686452.96	4157122.12	7.971E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.519E-04	0.00E+00
341	ALL	686488.37	4157083.48	8.028E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.530E-04	0.00E+00

342	ALL	686523.79	4157044.84	8.053E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.535E-04	0.00E+00
343	ALL	686300.24	4157399.04	6.279E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.196E-04	0.00E+00
344	ALL	686250.87	4157415.19	6.411E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.222E-04	0.00E+00
345	ALL	686201.49	4157431.34	6.528E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.244E-04	0.00E+00
346	ALL	686152.11	4157447.49	6.632E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.264E-04	0.00E+00
347	ALL	686102.74	4157463.64	6.727E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.282E-04	0.00E+00
348	ALL	686053.36	4157479.79	6.815E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.299E-04	0.00E+00
349	ALL	686003.98	4157495.94	6.891E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.313E-04	0.00E+00
350	ALL	685954.61	4157512.09	6.947E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.324E-04	0.00E+00
351	ALL	685905.23	4157528.24	6.976E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.329E-04	0.00E+00
352	ALL	685855.85	4157544.39	6.973E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.329E-04	0.00E+00
353	ALL	685806.48	4157560.54	6.944E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.323E-04	0.00E+00
354	ALL	685757.10	4157576.69	6.892E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.313E-04	0.00E+00
355	ALL	685707.72	4157592.84	6.825E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.301E-04	0.00E+00
356	ALL	685658.35	4157608.99	6.746E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.286E-04	0.00E+00
357	ALL	685608.97	4157625.14	6.657E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.269E-04	0.00E+00
358	ALL	685559.60	4157641.29	6.553E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.249E-04	0.00E+00
359	ALL	685470.81	4157623.60	6.866E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.308E-04	0.00E+00
360	ALL	685431.39	4157589.75	7.334E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.398E-04	0.00E+00
361	ALL	685391.98	4157555.91	7.861E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.498E-04	0.00E+00
362	ALL	685352.57	4157522.06	8.466E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.613E-04	0.00E+00
363	ALL	685313.15	4157488.22	9.165E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.746E-04	0.00E+00
364	ALL	685273.74	4157454.37	9.948E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.896E-04	0.00E+00
365	ALL	685234.33	4157420.53	1.079E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.056E-04	0.00E+00
366	ALL	685194.92	4157386.68	1.166E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.221E-04	0.00E+00
367	ALL	685155.50	4157352.84	1.255E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.391E-04	0.00E+00
368	ALL	685116.09	4157318.99	1.351E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.575E-04	0.00E+00
369	ALL	685076.68	4157285.15	1.462E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.787E-04	0.00E+00
370	ALL	685037.26	4157251.30	1.593E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.036E-04	0.00E+00
371	ALL	684997.85	4157217.45	1.741E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.317E-04	0.00E+00
372	ALL	684958.44	4157183.61	1.888E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.597E-04	0.00E+00
373	ALL	684919.02	4157149.76	2.006E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.823E-04	0.00E+00
374	ALL	684879.61	4157115.92	2.067E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.939E-04	0.00E+00
375	ALL	686349.62	4157382.89	6.128E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.168E-04	0.00E+00
376	ALL	686385.03	4157344.25	6.248E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.191E-04	0.00E+00
377	ALL	686420.45	4157305.61	6.348E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.210E-04	0.00E+00
378	ALL	686455.86	4157266.97	6.433E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.226E-04	0.00E+00
379	ALL	686491.27	4157228.33	6.507E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.240E-04	0.00E+00
380	ALL	686526.68	4157189.69	6.569E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.252E-04	0.00E+00
381	ALL	686562.10	4157151.05	6.617E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.261E-04	0.00E+00
382	ALL	686597.51	4157112.41	6.647E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.267E-04	0.00E+00
383	ALL	685890.60	4157112.95	1.911E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.641E-04	0.00E+00
384	ALL	685913.58	4157112.39	1.854E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.532E-04	0.00E+00
385	ALL	685943.29	4157112.95	1.771E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.375E-04	0.00E+00
386	ALL	685893.41	4157142.66	1.732E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.300E-04	0.00E+00
387	ALL	685920.87	4157142.09	1.673E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.189E-04	0.00E+00
388	ALL	685944.97	4157140.97	1.624E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.095E-04	0.00E+00
389	ALL	685919.19	4157165.64	1.564E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.981E-04	0.00E+00
390	ALL	685892.28	4157165.64	1.617E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.082E-04	0.00E+00
391	ALL	685943.29	4157166.76	1.512E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.881E-04	0.00E+00
392	ALL	685889.11	4157198.05	1.478E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.816E-04	0.00E+00
393	ALL	685893.03	4157194.13	1.488E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.835E-04	0.00E+00
394	ALL	685945.72	4157193.57	1.400E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.668E-04	0.00E+00
395	ALL	685919.94	4157218.23	1.351E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.574E-04	0.00E+00
396	ALL	685893.03	4157218.23	1.392E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.652E-04	0.00E+00
397	ALL	685944.04	4157219.35	1.310E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.497E-04	0.00E+00
398	ALL	685888.55	4157255.23	1.268E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.416E-04	0.00E+00
399	ALL	685916.01	4157254.67	1.235E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.353E-04	0.00E+00
400	ALL	685940.12	4157253.55	1.207E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.300E-04	0.00E+00
401	ALL	685914.33	4157278.21	1.167E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.223E-04	0.00E+00
402	ALL	685887.43	4157278.21	1.197E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.282E-04	0.00E+00
403	ALL	685938.43	4157279.33	1.136E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.164E-04	0.00E+00
404	ALL	685971.51	4157260.27	1.148E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.187E-04	0.00E+00
405	ALL	685998.97	4157259.71	1.115E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.124E-04	0.00E+00
406	ALL	686023.07	4157258.59	1.088E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.073E-04	0.00E+00
407	ALL	685997.29	4157283.25	1.058E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.016E-04	0.00E+00
408	ALL	685970.38	4157283.25	1.089E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.075E-04	0.00E+00
409	ALL	686021.39	4157284.37	1.029E-06	70YrCancerHighEnd_InhSoilDermMMilk	1.960E-04	0.00E+00
410	ALL	685753.83	4157262.05	1.389E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.646E-04	0.00E+00
411	ALL	685794.19	4157274.38	1.306E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.489E-04	0.00E+00
412	ALL	685837.91	4157278.30	1.250E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.382E-04	0.00E+00
413	ALL	686129.39	4157281.67	9.193E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.752E-04	0.00E+00
414	ALL	686183.20	4157268.77	8.873E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.691E-04	0.00E+00
415	ALL	685982.53	4157226.73	1.230E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.343E-04	0.00E+00

416	ALL	685982.53	4157207.68	1.290E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.458E-04	0.00E+00
417	ALL	685319.95	4156814.90	6.662E-06	70YrCancerHighEnd_InhSoilDermMMilk	1.269E-03	0.00E+00
418	ALL	685331.16	4156783.91	6.720E-06	70YrCancerHighEnd_InhSoilDermMMilk	1.281E-03	0.00E+00
419	ALL	685331.16	4156891.40	6.179E-06	70YrCancerHighEnd_InhSoilDermMMilk	1.177E-03	0.00E+00
420	ALL	685291.59	4156898.00	5.597E-06	70YrCancerHighEnd_InhSoilDermMMilk	1.067E-03	0.00E+00
421	ALL	685323.25	4156919.10	5.554E-06	70YrCancerHighEnd_InhSoilDermMMilk	1.058E-03	0.00E+00
422	ALL	685288.96	4156945.48	4.828E-06	70YrCancerHighEnd_InhSoilDermMMilk	9.200E-04	0.00E+00
423	ALL	686191.52	4156739.86	2.934E-06	70YrCancerHighEnd_InhSoilDermMMilk	5.590E-04	0.00E+00
424	ALL	686215.27	4156715.46	2.867E-06	70YrCancerHighEnd_InhSoilDermMMilk	5.463E-04	0.00E+00
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426	ALL	685476.00	4156518.59	4.722E-06	70YrCancerHighEnd_InhSoilDermMMilk	8.999E-04	0.00E+00
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429	ALL	685442.34	4156509.92	3.913E-06	70YrCancerHighEnd_InhSoilDermMMilk	7.456E-04	0.00E+00
430	ALL	685221.73	4156510.17	1.749E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.334E-04	0.00E+00
431	ALL	685226.03	4156563.88	1.942E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.701E-04	0.00E+00
432	ALL	685292.64	4156341.50	1.684E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.208E-04	0.00E+00
433	ALL	685549.83	4156222.12	2.826E-06	70YrCancerHighEnd_InhSoilDermMMilk	5.385E-04	0.00E+00
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436	ALL	685417.22	4156256.42	2.014E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.838E-04	0.00E+00
437	ALL	685279.34	4156334.93	1.609E-06	70YrCancerHighEnd_InhSoilDermMMilk	3.066E-04	0.00E+00
438	ALL	685202.12	4156108.07	9.870E-07	70YrCancerHighEnd_InhSoilDermMMilk	1.881E-04	0.00E+00
439	ALL	685272.43	4156142.77	1.182E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.252E-04	0.00E+00
440	ALL	685352.90	4156140.58	1.388E-06	70YrCancerHighEnd_InhSoilDermMMilk	2.644E-04	0.00E+00
441	ALL	685402.79	4156825.85	8.897E-06	70YrCancerHighEnd_InhSoilDermMMilk	1.695E-03	0.00E+00
442	ALL	685377.05	4156827.83	8.135E-06	70YrCancerHighEnd_InhSoilDermMMilk	1.550E-03	0.00E+00

HARP2 - HRACalc (dated 22118) 8/30/2023 4:56:25 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: HighEnd

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 70

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 2
2<9 Years Bin: 0
2<16 Years Bin: 14
16<30 Years Bin: 0
16 to 70 Years Bin: 54

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False

```
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

**********
INHALATION

Daily breathing rate: LongTerm24HR

**Worker Adjustment Factors**
Worker adjustment factors enabled: NO

**Fraction at time at home**
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

**********
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Mixed

**********
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment.  Please see the input file for details.
Tier2 - What was changed: ED or start age changed
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: F:\Move\0007-002\PATTAR DPM\hra\Pattar Trucking
DPMCancerRisk.csv
Cancer risk total by receptor saved to: F:\Move\0007-002\PATTAR DPM\hra\Pattar Trucking
DPMCancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: F:\Move\0007-002\PATTAR DPM\hra\Pattar Trucking
DPMNCChronicRisk.csv
Chronic risk total by receptor saved to: F:\Move\0007-002\PATTAR DPM\hra\Pattar Trucking
```

```
DPMNCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: F:\Move\0007-002\PATTAR DPM\hra\Pattar Trucking
DPMNCAcuteRisk.csv
Acute risk total by receptor saved to: F:\Move\0007-002\PATTAR DPM\hra\Pattar Trucking
DPMNCAcuteRiskSumByRec.csv
HRA ran successfully
```

TRANSPORTATION IMPACT ANALYSIS

FOR

PATTAR TRANSPORT GPA PROJECT

Stanislaus County, California

Prepared For:

Pattar Transport
4325 W. Taylor Road
Turlock, CA 95380

Prepared By:

KD Anderson & Associates, Inc.
3853 Taylor Road, Suite G
Loomis, CA 95650
(916) 660-1555

February 21, 2023

5050-01

TRANSPORTATION IMPACT ANALYSIS FOR PATTAR TRANSPORT
Stanislaus County, California

TABLE OF CONTENTS

KDA

TRANSPORTATION IMPACT ANALYSIS FOR
PATTAR TRANSPORT
Stanislaus County, California

INTRODUCTION

This report addresses the transportation impacts and traffic operational effects of the Pattar Transport Trucking Facilities in Stanislaus County, CA. Pattar Transport currently operates commercial truck parking at their site at 4325 W. Taylor Road. Pattar Transport is requesting a General Plan Amendment and Rezone to Planned Development to permit the existing operation to continue on the 10.0 acre parcel. The parcel has a current land use designation of Agriculture with Zoning of A-2-20. About 6.2 acres of the site is developed with two existing structures, a concrete pavement area and a gravel area for parking. Pattar Transport desires approval for the following current uses: outdoor parking for up to 80 trucks, a shop building for light truck maintenance (e.g., visual inspection, fluid level checks, tire changes) an office for the business and parking for employees and drivers. Figure 1 locates the project along W. Taylor Road.

The analysis will address adequacy of the site access for trucks, the project's impact to safety at the SR 99 / Taylor Road interchange and the project impacts to regional Vehicle Miles Traveled (VMT) under SB 743. Because the project is already in operation the analysis will compare a 'No Project' condition and 'With Project' conditions. The 'No Project' condition assumes the GPA is not granted and the business would be forced to close.

VICINITY MAP

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figure 1

BACKGROUND INFORMATION

Existing Facilities / Background Traffic Operating Conditions

The text which follows describes the circulation system in the area of these projects.

State Route 99 (SR 99). SR 99 is a major regional route that traverses the state of Californian from an interchange on Interstate 5 near Bakersfield north to Tehama County. SR 99 is generally a six-lane conventional highway in the north portion of Stanislaus County. Project access at the W. Taylor Road / SR 99 junction is provided at a grade separated interchange. The most recent traffic volume counts available from the California Department of Transportation (Caltrans) indicate that in 2020 SR 99 carried an Average Annual Daily Traffic (AADT) volume of 103,000 vehicles per day south of W. Taylor Road and 122,000 AADT to the north. Trucks comprise about 16% of the daily volume, and SR 99 is designated an STAA truck route. The posted speed limit is 65 mph.

W. Taylor Road. W. Taylor Road is a Principal Arterial that extends from the N. Washington Road intersection west of SR 99 to Geer Road where it becomes E. Taylor Road and continues to N. Gratton Road. The portion of W. Taylor Road west of SR 99 is a two-lane facility with 11-12 foot travel lanes and limited shoulders. The rural prima facie 55 mph speed limit applies. The daily traffic volume on W. Taylor Road west of SR 99 is estimated to be 2,500 vehicles per day based on interpolation of new peak hour counts at the SR 99 interchange's intersections.

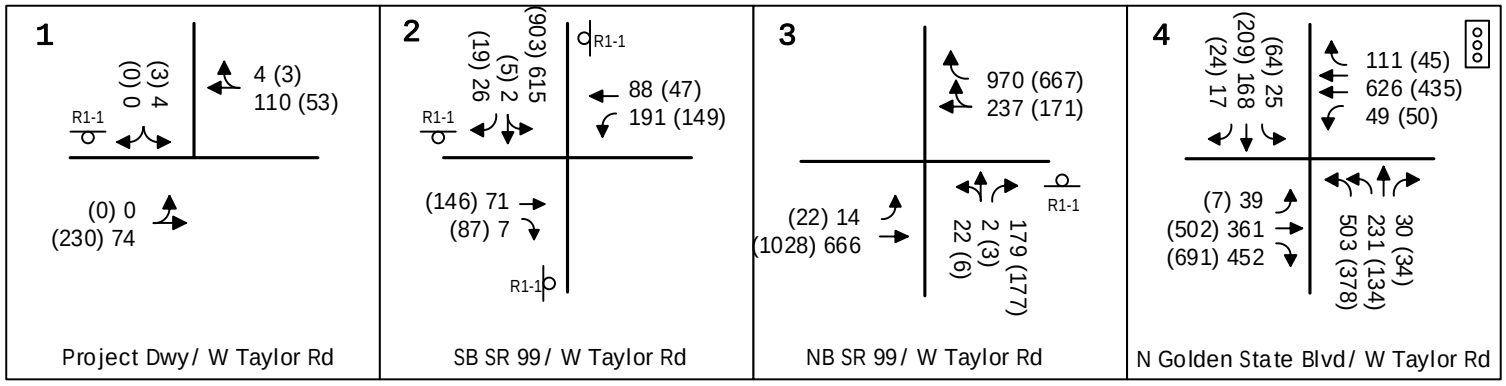
Today W. Taylor Road is not designated an STAA terminal route. A formal application to Caltrans to designate the portion of the road from SR 99 to the project site would be required, and supporting information confirming the adequacy of the interchange and the project site access would be needed. This is outside the scope of work for this analysis.

SR 99 / W. Taylor Road interchange. This grade separated interchange is configured as a diamond with direct connecting on-ramps in both directions and off-ramps. Traffic control for the southbound ramps provides for free movement for the off-ramp with stop control along W. Taylor Road. The northbound off-ramp is stop controlled with free movement along W. Taylor Road. The westbound approach includes a right only lane and a shared through-right lane for on-ramp traffic.

W. Taylor Road / N. Golden State Blvd Intersection. This intersection just east of the NB ramps is controlled by a traffic signal. The signal is an 8-phase signal with protected left turn phases. Northbound Golden State Blvd consists of dual left turn lanes while the other three approaches are single lane. Each of the approaches include free right turn lanes with the eastbound to southbound movement entering Golden State Blvd in its own lane. Crosswalks are present on all approaches and the intersection is illuminated.

Peak Hour Traffic Volumes / Operations. New a.m. (i.e., 7:00 to 9:00 am) and p.m. (i.e., 4:00 to 6:00 pm) peak hour traffic counts were made at the two ramp intersections and the Golden State Blvd intersection on October 13, 2022. The highest hourly volumes within each period are presented in Figure 2. In addition, traffic into and out of the Pattar Transport site were counted.

Current traffic counts were used to identify the operating Level of Service (LOS) at the local intersections including the SR 99 ramp intersections and the W. Taylor Road / Golden State Blvd intersection. The LOS was based on the methodologies contained in the Highway Capacity Manual, 6th Edition and these volumes were used to determine whether traffic signals may already be warranted.



Legend

XX	AM Peak Hour Volume
(XX)	PM Peak Hour Volume
R1-1	Stop Sign
	Signalized Intersection

NORTH

N.T.S.

EXISTING TRAFFIC VOLUMES AND LANE CONFIGURATIONS

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figure 2

EXISTING CONDITIONS

Intersection Levels of Service. As shown in Table 1 the northbound and southbound ramp intersections currently operate at unacceptable levels of service, at LOS E and F. Stanislaus County employs LOS C as the minimum standard at roadway intersections. The peak hour signal warrant is also met at both intersections.

95th Percentile Queues. As shown in Table 2 existing 95th percentile queues are accommodated at the project driveway and at the W. Taylor Road / Golden State Blvd intersection. However, queues along Taylor Road at the southbound off-ramp are extensive. This is due to the stop control along W. Taylor Road to accommodate the high southbound left turning traffic which is uncontrolled. Right turning traffic at the northbound off-ramp includes a free right turn into an added lane between the ramp and the Golden State Blvd intersection; consequently, queues along the northbound off-ramp are low.

TABLE 1
EXISTING INTERSECTION LEVELS OF SERVICE

Location	Control	AM Peak Hour		PM Peak Hour		Traffic Signal Warrants Met?
		Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS	
W. Taylor Rd / Access	SB Stop	9.6	A	10.3	B	No
W. Taylor Rd / SR 99 SB ramps	EB Stop	62.3	F	523.3	F	Yes
	WB Stop	>999	F	*	F	
W. Taylor Rd / SR 99 NB ramps	NB Stop	46.1	E	43.1	E	Yes
	EB Lt	12.3	B	9.8	A	
W. Taylor Rd / Golden State Blvd	Signal	24.7	C	29.5	C	N/A

N/A – not applicable
* not calculable

TABLE 2
EXISTING INTERSECTION QUEUE LENGTHS

Location	Lane	Storage (feet)	AM Peak Hour		PM Peak Hour	
			Volume (vph)	95th % Queue (feet)	Volume (vph)	95th % Queue (feet)
W. Taylor Rd / Access	SB	---	4	<25’	3	<25
W. Taylor Rd / SR 99 SB ramps	EB Th	520’[1]	78	80’	233	392’
	WB Th	480’[2]	88	113’	47	92’
	WB Lt	190’	191	615’	149	*
W. Taylor Rd / SR 99 NB ramps	NB	1,270’[3]	203	<25	186	<25
	EB Lt	160’	14	<25	22	<25
W. Taylor Rd /Golden State Blvd	NB Lt (2)	330’	503	153’	378	120’
	SB Lt	150’	25	<25	64	45’
	EB Lt	215’	39	28’	7	<25’
	WB Lt	200’	49	35’	50	35’

[1] distance from stop bar to railroad crossing
[2] distance from stop bar to NB off-ramp intersection
[3] distance from stop bar to ramp-freeway gore
* not calculable

BASELINE CONDITIONS

The Baseline condition represents the roadway network under the assumption that a General Plan Amendment is not granted. Traffic from the Pattar driveway was subtracted from the Existing condition to arrive at the Baseline condition. Existing trips to and from the site are shown in Figure 3 while the Baseline condition is shown in Figure 4.

Intersection Levels of Service. Table 3 illustrates the level of service where the Pattar Transport site closed. Similar to the existing conditions the northbound and southbound ramp intersections will operate at unacceptable levels of service, at LOS E and F. The peak hour signal warrant is also met at both intersections.

95th Percentile Queues. 95th percentile queues at the Taylor Road / SB 99 ramps intersection will continue to exceed available storage as shown in Table 4. Queues at the NB ramps intersection and at the Golden State Blvd intersection will remain acceptable.

TABLE 3
BASELINE INTERSECTION LEVELS OF SERVICE

Location	Control	AM Peak Hour		PM Peak Hour		Traffic Signal Warrants Met?
		Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS	
W. Taylor Rd / Access	---	---	---	---	---	---
W. Taylor Rd / SR 99 SB ramps	EB Stop	61.7	F	513.5	F	Yes
	WB Stop	>999	F	*	F	
W. Taylor Rd / SR 99 NB ramps	NB Stop	44.2	E	42.3	E	Yes
	EB Lt	12.3	B	9.8	A	
W. Taylor Rd / Golden State Blvd	Signal	24.7	C	29.4	C	N/A

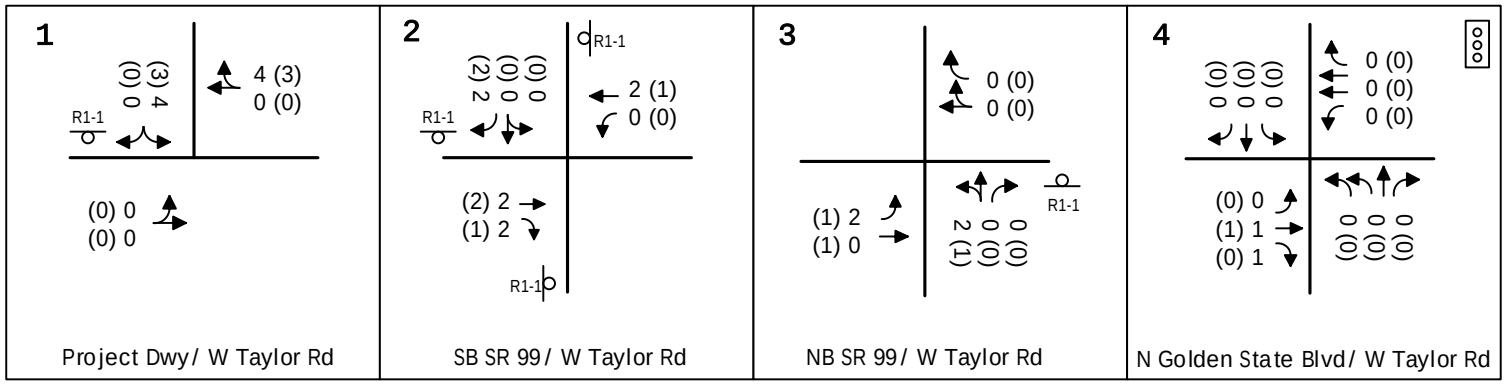
N/A – not applicable

* not calculable

TABLE 4
BASELINE INTERSECTION QUEUE LENGTHS

Location	Lane	Storage (feet)	AM Peak Hour		PM Peak Hour	
			Volume (vph)	95th % Queue (feet)	Volume (vph)	95th % Queue (feet)
W. Taylor Rd / Access	---	---	---	---	---	---
W. Taylor Rd / SR 99 SB ramps	EB Th	520'[1]	74	78'	230	388'
	WB Th	480'[2]	86	110'	45	88'
	WB Lt	190'	191	610'	149	*
W. Taylor Rd / SR 99 NB ramps	NB	1,270'[3]	201	<25	185	<25
	EB Lt	160'	12	<25	21	<25
W. Taylor Rd /Golden State Blvd	NB Lt (2)	330'	503	153'	378	123'
	SB Lt	150'	25	<25	64	45'
	EB Lt	215'	39	28'	7	<25'
	WB Lt	200'	49	35'	50	35'

[1] distance from stop bar to railroad crossing
[2] distance from stop bar to NB off-ramp intersection
[3] distance from stop bar to ramp-freeway gore
* not calculable



Legend

XX AM Peak Hour Volume

(XX) PM Peak Hour Volume

R1-1 Stop Sign

Signalized Intersection

NORTH

N.T.S.

SITE TRAFFIC VOLUMES AND LANE CONFIGURATIONS

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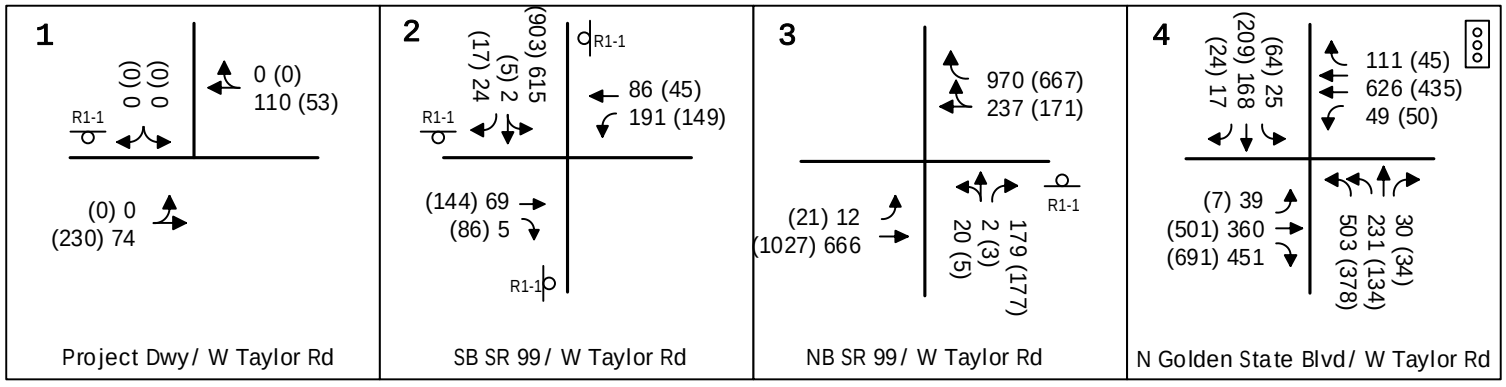
figure 3



Legend

XX AM Peak Hour Volume

(XX) PM Peak Hour Volume

R1-1 Stop Sign

Signalized Intersection

NORTH

N.T.S.

BASELINE TRAFFIC VOLUMES AND LANE CONFIGURATIONS

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figure 4

DESCRIPTION OF PROPOSED PROJECT

The project consists of:

- Outdoor parking for up to 80 spaces for trucks / trailers
- automobile parking spaces
- truck service shop building for minor maintenance
- office

The project proponent has about 16 on-site employees.

Project Travel Characteristics

Type of Trucking Operation. The operational characteristics of the project have been identified in terms of the amount of truck and automobile activity and the time periods of that travel. Typically, trucking operations fall into two categories: "Long haul" or "Local Distribution or Agricultural Harvesting / Processing Support." For long haul trucks the typical routine sends drivers away from the site for extended periods of time. On a typical weeklong haul, most trucks return to the site on Friday and leave early Sunday or Monday, and most drivers try to operate outside peak traffic hours. Trips to the east coast can take longer. During the week some trucks may come and go for inspection or maintenance or if the drivers have to come home during the week. Alternatively, local based trucking typically leaves the site each weekday and returns that afternoon /evening. In both cases, a driver would travel by automobile to and from the site before beginning or ending his trips. Some of the truck drivers would park their personal auto at the site and others would be dropped off. The project proponents intend to provide 80 truck parking spaces.

Trip Generation. This project's trip generation was estimated based on available resources and our understanding of the characteristics of these uses. The project proponent has indicated that this site will be used by both long haul truckers operating to the midwest as well as local drivers making day trips to the Bay Area, and north and south throughout the San Joaquin Valley.

Long haul truck trip generation rates were developed from 24-hr truck traffic counts at a large (440 spaces) truck parking area in Yuba City. That site generated 334 total truck trips (143 in and 191 out) on a Thursday, or 0.76 daily truck trips per space. It was assumed that drivers would generate automobile trips at the same time that trucks entered and exited. Based on discussion with the applicant it was assumed that about ¾ of the drivers would drive to the site while the remaining ¼ would be picked up and dropped off.

The project's trucking activities combine both short haul routes and long haul routes and result in the daily and peak hour trip generation forecasts presented in the Table 5. In addition, employee traffic will occur, and this analysis assumes that ½ of these employees enter or depart during peak hours. As shown, all together, the project could generate 66 daily truck trips each day and 109 automobile trips, for a total of 175 daily trips by vehicles of all types.

Ancillary Uses. The site plan indicates the presence of a truck service building. The use will provide minor maintenance services to the truckers who are already on site.

Trip Distribution. Long haul trucks in this area typically follow routes along SR 99 to and from regional distribution centers or warehouses primarily in the Stockton / Modesto metropolitan area. In addition, short haul trucks travel SR 99 north and south to pick up goods in the valley and deliver them to the Bay Area, Sacramento and Los Angeles areas. This analysis assumes that truck traffic is oriented to the south (35%) and north (65%) on SR 99.

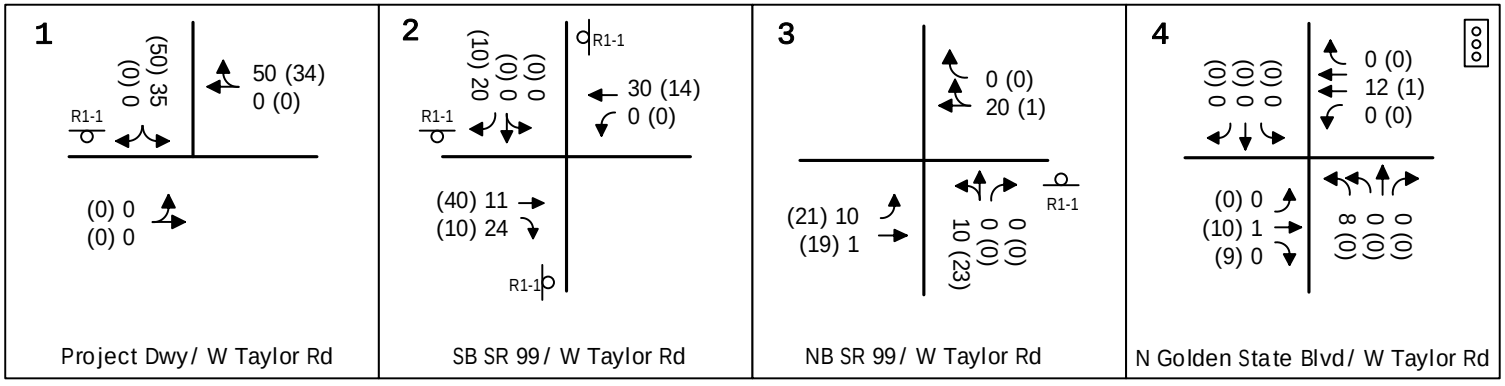
Automobile trips would generally be made between truck parking and the residences of drivers and employees. Based on the project location, we would expect that most reside in Turlock and Modesto. As a result, most automobile traffic (80%) will arrive likely from the north via SR 99 and the east via W. Taylor Road. Figure 5 presents the project's total trips under these assumptions.

TABLE 5
PROJECT TRIP GENERATION ESTIMATE

Unit	Unit	Quantity	Trucks			Automobiles		
			In	Out	Total	In	Out	Total
AM Peak Hour								
Short Haul	20 spaces	1	0% (0)	100% (10)	0.50 (10)	100% (10)	0% (0)	0.50 (10)
Long Haul	20 spaces	1	8% (0)	92% (4)	0.20 (4)	80% (4)	20% (1)	0.25 (5)
Proposed	40 spaces*	1	0% (0)	100% (20)	0.50 (20)	100% (20)	0% (0)	0.50 (20)
Employees	person	16	-	-	-	100% (16)	0% (0)	1.00 (16)
Total			***(0)***	***(34)***	***(34)***	***(50)***	***(1)***	***(51)***
PM Peak Hour								
Short Haul	20 spaces	1	100% (10)	0% (0)	0.50 (10)	0% (0)	100% (10)	0.50 (10)
Long Haul	20 spaces	1	75% (3)	25% (1)	0.20 (4)	25% (1)	75% (3)	0.20 (4)
Proposed	40 spaces*	1	100% (20)	0% (0)	0.50 (20)	0% (0)	100% (20)	0.50 (20)
Employees	person	16	-	-	-	0% (0)	100% (16)	1.00 (16)
Total			***(33)***	***(1)***	***(34)***	***(1)***	***(49)***	***(50)***
Daily								
Short Haul	20 spaces	1	50% (10)	50% (10)	1.00 (20)	50% (10)	50% (10)	1.00 (20)
Long Haul	20 spaces	1	43% (6)	57% (9)	0.764 (15)	43% (8)	57% (11)	0.955 (19)
Proposed	40 spaces†	1	43% (13)	57% (18)	0.764 (31)	43% (16)	57% (22)	0.955 (38)
Employees	1 person	16	-	-	-	50% (16)	50% (16)	2.00 (32)
Total			***(29)***	***(37)***	***(66)***	***(50)***	***(59)***	***(109)***

* assumed short haul as worst case scenario (trips generated)

† assumed long haul as worst case scenario



Legend

XX	AM Peak Hour Volume
(XX)	PM Peak Hour Volume
R1-1	Stop Sign
	Signalized Intersection

NORTH

N.T.S.

PROJECT BUILDOUT TRAFFIC VOLUMES AND LANE CONFIGURATIONS

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5050-01 RA 2/8/2023

figure 5

PROJECT TRANSPORTATION IMPACTS UNDER CEQA

The purpose of this analysis is to identify potential transportation impacts under the requirements of the California Environmental Quality Act (CEQA) as well as traffic operational effects as they relate to the introduction of project automobile and truck traffic on state highways. CEQA impacts relating to Vehicle Miles Traveled (VMT) with regular operation of the project has been discussed within the context of screening criteria presented in Governors' Office of Planning and Research (OPR) CEQA guidance. A traffic operations analysis was also conducted to identify the project's effects on state highway safety and with regards to Stanislaus County General Plan policies.

Vehicle Miles Traveled (VMT) Impact

SB 743 requires the Governor's Office of Planning and Research (OPR) to identify new metrics for identifying and mitigating transportation impacts within CEQA. For land use projects, OPR identified Vehicle Miles Traveled (VMT) per capita, VMT per employee, and net VMT as new metrics for transportation analysis. The CEQA Guidelines state that lead agencies, such as Stanislaus County, may establish "thresholds of significance" to assist with the determination of significant impacts of a project. The CEQA Guidelines generally state that projects that decrease VMT can be assumed to have a less than significant transportation impact. The CEQA Guidelines do not provide any specific criteria on how to determine what level of project VMT would be considered a significant impact.

The extent to which VMT analysis is applicable to this project has been considered from several perspectives and is discussed in the materials which follow:

Vehicle Types. OPR guidance notes that CEQA VMT analysis is intended to focus on passenger vehicles.

Section 15064.3, subdivision (a), states, "For the purposes of this section, 'vehicle miles traveled' refers to the amount and distance of automobile travel attributable to a project." Here, the term "automobile" refers to on-road passenger vehicles, specifically cars and light trucks.

OPR guidance allows Heavy-duty truck VMT to be included for modeling convenience and ease of calculation (for example, where models or data provide combined auto and heavy truck VMT).

Methods and Significance Criteria. The OPR *Technical Advisory* provides general direction regarding the methods to be employed and significance criteria to evaluate VMT impacts, absent policies adopted by local agencies. The directive addresses several aspects of VMT impact analysis, and is organized as follows:

- ***Screening Criteria***: Screening criteria are intended to quickly identify when a project should be expected to cause a less-than-significant VMT impact without conducting a detailed study.
- ***Significance Thresholds***: Significance thresholds define what constitutes an acceptable level of VMT effect and what could be considered a significant level of VMT effect requiring mitigation.

- ***Analysis Methodology***: These are the potential procedures and tools for producing VMT forecasts to use in the VMT impact assessment.
- ***Mitigation***: Projects that are found to have a significant VMT impact based on the adopted significance thresholds are required to implement mitigation measures to reduce impacts to a less than significant level (or to the extent feasible).

Screening Criteria. Screening criteria can be used to quickly identify whether sufficient evidence exists to presume a project will have a less than significant VMT impact without conducting a detailed study. However, each project should be evaluated against the evidence supporting that screening criteria to determine if it applies. Under OPR guidance projects meeting at least one of the criteria below can be presumed to have a less than significant VMT impact, absent substantial evidence that the project will lead to a significant impact.

- ***Small Projects***: Defined as a project that generates 110 or fewer average daily vehicle trips.
- ***Affordable Housing***: Defined as a project consisting of deed-restricted affordable housing.
- ***Local Serving Retail***: Defined as retail uses of 50,000 square feet or less can be presumed to have a less than significant impact.
- ***Proximity to High Quality Transit***: The directive notes that employment and residential development located within ½ mile of a high-quality transit corridor offering 15 minute headways can be presumed to have a less than significant impact.

Screenline Evaluation. The extent to which the VMT impacts of the project can be presumed to be less than significant has been determined based on review of the OPR directive's screening criteria and general guidance.

The OPR ***Small Project*** criteria was reviewed to determine its applicability to this project. The regular operation of the facility with 80 truck spaces is projected to result in 109 daily automobile trips. As the OPR 110 ADT threshold for automobiles is not exceeded, this project's VMT impacts can be presumed to be less than significant without additional assessment.

Impacts to Other Transportation Modes

Pedestrian Facilities. There are few developed areas around the project to create pedestrian travel to and from the site. Pedestrians would use the roadway shoulder or edge of pavement within the project vicinity. As the number of additional vehicle trips caused by the project is low and few if any pedestrians are likely, the project's impact to pedestrian facilities is not significant, and mitigation is not required.

Bicycle Facilities. The same issues affecting pedestrian travel also affect bicycles. The project's distance to potential employee residences is too far to make bicycling a feasible option, the project's limited trip generation would not result in any new vehicle / bicycle conflicts or exacerbate current deficiencies, and the project's impact to bicycle facilities and travel is not significant, and mitigation is not required.

Transit. StanRTA and Turlock Transit provide transit services to the Turlock area. Some employees could elect to use transit service if it was convenient to the site. The closest route to the site is the Turlock Transit #3 route. The closest regular stop on this route is to the south at the W. Christoffersen Parkway / Golden State Blvd intersection, about 1¼ miles away. This distance is generally beyond normal expectations for regular transit use. Because few truckers riding transit are anticipated, the project's impact on transit use based on ridership is not significant, and mitigation is not required.

Safety Impacts to Caltrans Facilities

Considerations. While Level of Service analysis is no longer a CEQA consideration, a project's impacts to safety on Caltrans facilities remains a significance criterion under CEQA. Under current practice, safety impacts on state facilities are typically considered within the context of queuing on off-ramps and in turn lanes at intersections, truck turning requirements and the need for alternative traffic control devices. Queuing that spills over from a turn lane or extends down an off-ramp to the mainline freeway could represent significant safety issues. Intersections where truck paths leave the pavement or encroach into opposing lanes are a safety issue. Operation of an intersection with inappropriate traffic control devices would also represent a potential safety issue.

Evaluation. The project could add automobile and truck traffic through the SR 99 / W. Taylor Road interchange. As noted under Existing and Baseline conditions queues along W. Taylor Road at the SB SR 99 ramps are extensive as off-ramp traffic is uncontrolled while W. Taylor Road is stop controlled. The added traffic volume is unlikely to add an appreciable increase in queuing that might cause a safety issue along W. Taylor Road. As it relates to mainline SR 99 the added project traffic will not add an appreciable amount of traffic on the off-ramps. Overall, the project's impact to safety on state facilities is not significant, and mitigation is not required.

TRAFFIC OPERATIONAL ANALYSIS

This report section addresses the traffic operational effects of the project within the context of Stanislaus County General Plan policies and the adequacy of site access.

Baseline Plus Project Conditions

The Baseline plus Project condition represents the roadway network under the assumption that a General Plan Amendment is granted. Traffic from the projected project to and from the Pattar site was added to the Baseline condition to arrive at the Baseline plus Project condition. Project trips are shown in Figure 5 while the Baseline plus Project condition is shown in Figure 6.

Intersection Levels of Service. Table 6 illustrates the level of service at each of the study intersections. The project driveway and W. Taylor Road / Golden State Blvd intersections will continue to operate at acceptable levels of service. The SB SR 99 / W. Taylor Road intersection will continue to operate at LOS F conditions along W. Taylor Road. The level of service at the NB SR 99 / W. Taylor Road intersection will continue to operate below Stanislaus County LOS thresholds, operating at LOS F. The peak hour signal warrant will continue to be met at both intersections.

95th Percentile Queues. 95th percentile queues at the Taylor Road / SB 99 ramps intersection will continue to exceed available storage as shown in Table 7. Queues at the NB ramps intersection and at the Golden State Blvd intersection will remain acceptable.

TABLE 6
BASELINE PLUS PROJECT INTERSECTION LEVELS OF SERVICE

Location	Control	AM Peak Hour		PM Peak Hour		Traffic Signal Warrants Met?
		Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS	
W. Taylor Rd / Access	SB Stop	10.0	B	10.9	B	No
W. Taylor Rd / SR 99 SB ramps	EB Stop	59.2	F	737.7	F	Yes
	WB Stop	>999	F	*	F	
W. Taylor Rd / SR 99 NB ramps	NB Stop	56.2	F	64.2	F	Yes
	EB Lt	12.6	B	10.0	A	
W. Taylor Rd / Golden State Blvd	Signal	25.0	C	30.2	C	N/A

N/A – not applicable
* not calculable

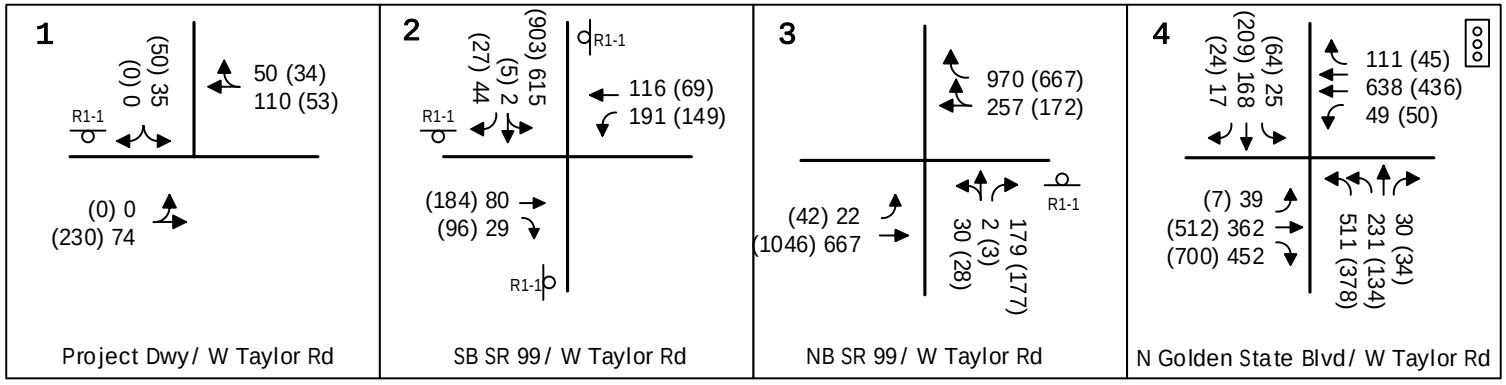
TABLE 7
BASELINE PLUS PROJECT INTERSECTION QUEUE LENGTHS

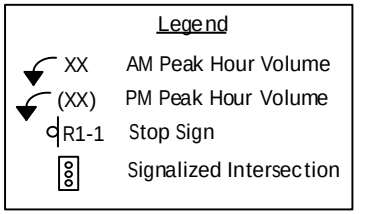
Location	Lane	Storage (feet)	AM Peak Hour		PM Peak Hour	
			Volume (vph)	95th % Queue (feet)	Volume (vph)	95th % Queue (feet)
W. Taylor Rd / Access	SB	---	35	<25’	50	<25
W. Taylor Rd / SR 99 SB ramps	EB Th	520’[1]	109	98’	280	518’
	WB Th	480’[2]	116	180’	69	153’
	WB Lt	190’	191	640’	149	*
W. Taylor Rd / SR 99 NB ramps	NB	1,270’[3]	211	35	208	35
	EB Lt	160’	22	<25	42	<25
W. Taylor Rd /Golden State Blvd	NB Lt (2)	330’	511	158’	378	123’
	SB Lt	150’	25	<25	64	48’
	EB Lt	215’	39	28’	7	<25’
	WB Lt	200’	49	35’	50	35’

[1] distance from stop bar to railroad crossing
[2] distance from stop bar to NB off-ramp intersection
[3] distance from stop bar to ramp-freeway gore
* not calculable

Site Access Evaluation. Access into the site is provided with an 80'± driveway which leads to a gated access about 100 feet from the roadway. Anticipated traffic volumes and truck turning requirements were reviewed at the site access to determine whether proposed improvements are adequate or additional improvements are justified. Paved shoulders are not present along W. Taylor Road in the project vicinity. Functionally, the existing layout provides the widths needed to allow California Legal trucks to enter or exit the site without encroaching into the opposing travel lane or leaving the pavement. *AutoTurn* templates for California Legal trucks are provided in the appendix.

Sight Distance. The alignment of W. Taylor Road in this area is level and straight. About 750 feet east of the site, W. Taylor Road has an 'S' curve is present across the Union Pacific (UP) rail line. Sight distance measured 15 feet from the edge of the travel way looking west satisfies the Caltrans Minimum Sight Distance (Table 201.1 500 feet at 55 mph) and Corner Sight Distance (Table 405.1a 925 feet at 55 mph) requirements. Looking east to the UP rail crossing the sight distance is about 850 feet and satisfies both MSD and CSD requirements for right turning vehicles. Sight distance templates are provided in the appendix.





N.T.S.

BASELINE AND BUILDOUT TRAFFIC VOLUMES AND LANE CONFIGURATIONS

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Transportation Engineers

5050-01 RA 2/8/2023

figure 6

FINDINGS / RECOMMENDATIONS/ IMPROVEMENTS

The preceding analysis has identified project impacts that may occur without identifying any recommendations or improvements. The text that follows identifies a strategy for recommendations to the 'No Project' conditions or improvements to the 'Plus Project' conditions.

Existing Conditions

Recommendations. The W. Taylor Road / SB SR 99 ramps intersection currently operates at LOS F conditions. As the intersection is stop controlled along W. Taylor Road westbound queues back up beyond the northbound off-ramp intersection during the peak hours. Eastbound traffic backs up about 400 feet. The W. Taylor Road / NB SR 99 intersection operates at LOS E in both peak periods. However, as the NB right turn lane can turn into an added lane between the ramps and Golden State Blvd the queues are low. Both intersections meet the peak hour signal warrant.

StanCOG has identified two projects in their recent Regional Transportation Plan (RTP) that will improve traffic conditions at the interchange. Project T-21 will widen W. Taylor Road between Golden State Blvd and SR-99 from two lanes to four lanes. Bike lanes will also be added as part of the project. This project is scheduled to be open to traffic in 2025. Funding is through Development Fees and Surface Transportation Block Grant (STBG). Project T-26 will reconstruct the existing SR 99 / W. Taylor Road interchange. This project is scheduled to be open to traffic in 2030. Funding is through CMAQ, Development Fees and the STIP.

Baseline Conditions

Recommendations. Should the County not grant a GPA and the business close the W. Taylor Road / SB SR 99 ramps intersection will continue to operate at LOS F conditions. Westbound queues will continue to back up beyond the northbound off-ramp intersection during the peak hours and eastbound traffic will continue to back up about 400 feet. The W. Taylor Road / NB SR 99 intersection will continue to operate at LOS E in both peak periods with short queues. Both intersections will continue to meet the peak hour signal warrant.

As identified in the Existing Conditions, the RTP projects will improve traffic flow by widening W. Taylor Road to four lanes by 2025 with the interchange being reconstructed and operational by 2030.

Baseline plus Project Conditions

Recommendations. The project intends to expand operations by providing 80 total parking spaces on site. The W. Taylor Road / SB SR 99 ramps intersection will continue to operate at LOS F conditions and westbound queues will continue to back up beyond the northbound off-ramp intersection during the peak hours. The queues along the eastbound approach will lengthen and will back up to just east of the railroad; rail traffic would not be interrupted. The W. Taylor Road / NB SR 99 intersection will continue to operate below Stanislaus County thresholds, at LOS F in both peak periods. Both intersections will continue to meet the peak hour signal warrant.

As previously noted, the RTP projects will improve traffic flow by widening W. Taylor Road to four lanes by 2025 with the interchange being reconstructed and operational by 2030. The project should pay Development Fees, as appropriate as part of the GPA and Rezone.

APPENDIX

Traffic Counts
Level of Service Calcs
Site Distance and AutoTurn Access

Prepared by National Data & Surveying Services

SR 99/Golden State Hwy SB Off-Ramp & W Taylor Rd

Peak Hour Turning Movement Count

ID: 22-090115-001
City: Turlock

Day: Thursday
Date: 10/13/2022

PEAK HOURS	COUNT PERIODS
07:30 AM - 08:30 AM	7:00 AM - 09:00 AM
NONE	NONE
04:15 PM - 05:15 PM	4:00 PM - 06:00 PM

SOUTHBOUND — SR 99/Golden State Hwy SB Off-Ramp

AM	26	2	615	0	0	AM
NOON	0	0	0	0	0	NOON
PM	19	5	903	0	0	PM

EASTBOUND — W Taylor Rd

AM	NOON	PM	
114	0	66	⇦
0	0	0	↶ 0
0	0	0	↱ 0
71	0	146	→ 0
7	0	87	↴ 0
AM	NOON	PM	

WESTBOUND — W Taylor Rd

PM	NOON	AM	
0	0	0	↰ 0
47	0	88	← 0
149	0	191	↰ 0
0	0	0	↰ 0
1049	0	686	⇨
PM	NOON	AM	

NORTHBOUND — SR 99/Golden State Hwy SB Off-Ramp

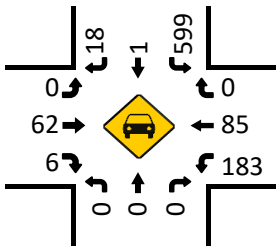
PM	241	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	200	0	0	0	0	AM

CONTROL

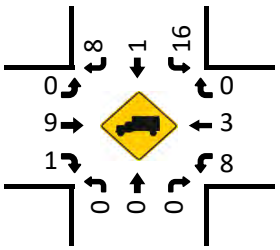
2-Way Stop (EB/WB)

TEV	1000 AM	0 NOON	1356 PM
PHF	0.86		0.92

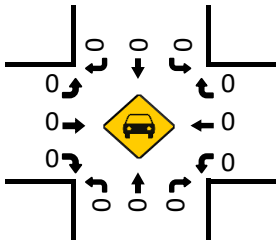
Cars (AM)



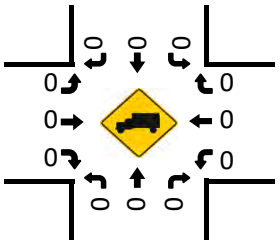
HT (AM)



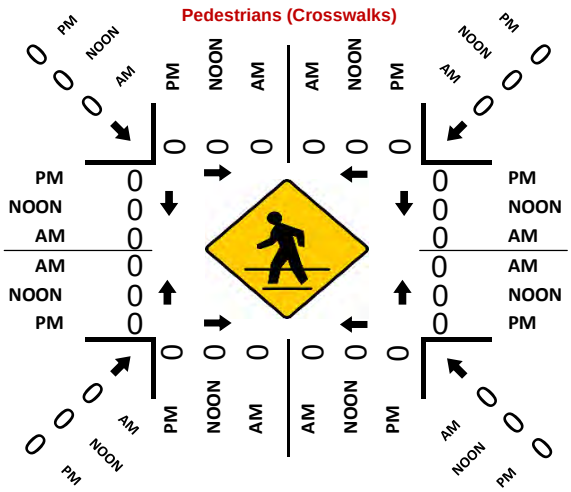
Cars (NOON)



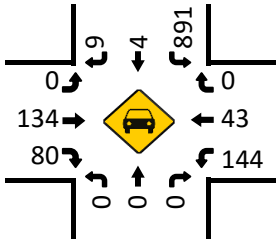
HT (NOON)



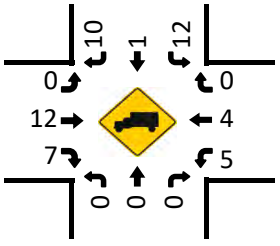
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: SR 99/Golden State Hwy SB Off-Ramp & W Taylor Rd
City: Turlock
Control: 2-Way Stop (EB/WB)

Project ID: 22-090115-001
Date: 10/13/2022

Data - Total

NS/EW Streets:	SR 99/Golden State Hwy SB Off-Ramp				SR 99/Golden State Hwy SB Off-Ramp				W Taylor Rd				W Taylor Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	79	2	1	0	0	8	1	0	37	18	0	0	146
7:15 AM	0	0	0	0	117	0	2	0	0	16	1	0	28	20	0	0	184
7:30 AM	0	0	0	0	171	1	2	0	0	16	2	0	45	13	0	0	250
7:45 AM	0	0	0	0	176	0	7	0	0	23	0	0	52	34	0	0	292
8:00 AM	0	0	0	0	141	0	7	0	0	19	0	0	39	27	0	0	233
8:15 AM	0	0	0	0	127	1	10	0	0	13	5	0	55	14	0	0	225
8:30 AM	0	0	0	0	113	0	5	0	0	12	3	0	36	15	0	0	184
8:45 AM	0	0	0	0	142	0	6	0	0	13	0	0	39	11	0	0	211
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	1066	4	40	0	0	120	12	0	331	152	0	0	1725
APPROACH %'s :					96.04%	0.36%	3.60%	0.00%	0.00%	90.91%	9.09%	0.00%	68.53%	31.47%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	615	2	26	0	0	71	7	0	191	88	0	0	1000
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.874	0.500	0.650	0.000	0.000	0.772	0.350	0.000	0.868	0.647	0.000	0.000	0.856
					0.878				0.848				0.811				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	227	1	5	0	0	31	13	0	32	18	0	0	327
4:15 PM	0	0	0	0	221	0	7	0	0	36	22	0	41	10	0	0	337
4:30 PM	0	0	0	0	210	2	4	0	0	30	20	0	34	12	0	0	312
4:45 PM	0	0	0	0	247	2	6	0	0	41	24	0	34	13	0	0	367
5:00 PM	0	0	0	0	225	1	2	0	0	39	21	0	40	12	0	0	340
5:15 PM	0	0	0	0	221	0	1	0	0	38	16	0	26	6	0	0	308
5:30 PM	0	0	0	0	211	2	2	0	0	27	14	0	31	8	0	0	295
5:45 PM	0	0	0	0	236	1	4	0	0	19	9	0	36	11	0	0	316
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	1798	9	31	0	0	261	139	0	274	90	0	0	2602
APPROACH %'s :					97.82%	0.49%	1.69%	0.00%	0.00%	65.25%	34.75%	0.00%	75.27%	24.73%	0.00%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	903	5	19	0	0	146	87	0	149	47	0	0	1356
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.914	0.625	0.679	0.000	0.000	0.890	0.906	0.000	0.909	0.904	0.000	0.000	0.924
					0.909				0.896				0.942				

National Data & Surveying Services Intersection Turning Movement Count

Location: SR 99/Golden State Hwy SB Off-Ramp & W Taylor Rd
City: Turlock
Control: 2-Way Stop (EB/WB)

Project ID: 22-090115-001
Date: 10/13/2022

Data - Cars

NS/EW Streets:	SR 99/Golden State Hwy SB Off-Ramp				SR 99/Golden State Hwy SB Off-Ramp				W Taylor Rd				W Taylor Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	76	0	1	0	0	6	1	0	36	18	0	0	138
7:15 AM	0	0	0	0	115	0	1	0	0	14	1	0	27	19	0	0	177
7:30 AM	0	0	0	0	166	1	2	0	0	16	2	0	43	13	0	0	243
7:45 AM	0	0	0	0	175	0	7	0	0	22	0	0	50	31	0	0	285
8:00 AM	0	0	0	0	137	0	3	0	0	16	0	0	37	27	0	0	220
8:15 AM	0	0	0	0	121	0	6	0	0	8	4	0	53	14	0	0	206
8:30 AM	0	0	0	0	110	0	4	0	0	11	1	0	32	13	0	0	171
8:45 AM	0	0	0	0	136	0	4	0	0	9	0	0	38	10	0	0	197
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	1036	1	28	0	0	102	9	0	316	145	0	0	1637
APPROACH %'s :					97.28%	0.09%	2.63%	0.00%	0.00%	91.89%	8.11%	0.00%	68.55%	31.45%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	599	1	18	0	0	62	6	0	183	85	0	0	954
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.856	0.250	0.643	0.000	0.000	0.705	0.375	0.000	0.863	0.685	0.000	0.000	0.837
					0.849				0.773				0.827				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	225	0	3	0	0	31	13	0	31	14	0	0	317
4:15 PM	0	0	0	0	219	0	4	0	0	34	21	0	41	9	0	0	328
4:30 PM	0	0	0	0	206	1	1	0	0	25	18	0	34	10	0	0	295
4:45 PM	0	0	0	0	244	2	3	0	0	39	20	0	32	12	0	0	352
5:00 PM	0	0	0	0	222	1	1	0	0	36	21	0	37	12	0	0	330
5:15 PM	0	0	0	0	221	0	1	0	0	37	15	0	24	6	0	0	304
5:30 PM	0	0	0	0	207	2	1	0	0	27	12	0	31	6	0	0	286
5:45 PM	0	0	0	0	232	1	2	0	0	19	9	0	35	11	0	0	309
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	1776	7	16	0	0	248	129	0	265	80	0	0	2521
APPROACH %'s :					98.72%	0.39%	0.89%	0.00%	0.00%	65.78%	34.22%	0.00%	76.81%	23.19%	0.00%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	891	4	9	0	0	134	80	0	144	43	0	0	1305
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.913	0.500	0.563	0.000	0.000	0.859	0.952	0.000	0.878	0.896	0.000	0.000	0.927
					0.908				0.907				0.935				

National Data & Surveying Services Intersection Turning Movement Count

Location: SR 99/Golden State Hwy SB Off-Ramp & W Taylor Rd
City: Turlock
Control: 2-Way Stop (EB/WB)

Project ID: 22-090115-001
Date: 10/13/2022

Data - HT

NS/EW Streets:	SR 99/Golden State Hwy SB Off-Ramp				SR 99/Golden State Hwy SB Off-Ramp				W Taylor Rd				W Taylor Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	3	2	0	0	0	2	0	0	1	0	0	0	8
7:15 AM	0	0	0	0	2	0	1	0	0	2	0	0	1	1	0	0	7
7:30 AM	0	0	0	0	5	0	0	0	0	0	0	0	2	0	0	0	7
7:45 AM	0	0	0	0	1	0	0	0	0	1	0	0	2	3	0	0	7
8:00 AM	0	0	0	0	4	0	4	0	0	3	0	0	2	0	0	0	13
8:15 AM	0	0	0	0	6	1	4	0	0	5	1	0	2	0	0	0	19
8:30 AM	0	0	0	0	3	0	1	0	0	1	2	0	4	2	0	0	13
8:45 AM	0	0	0	0	6	0	2	0	0	4	0	0	1	1	0	0	14
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	30	3	12	0	0	18	3	0	15	7	0	0	88
APPROACH %'s :					66.67%	6.67%	26.67%	0.00%	0.00%	85.71%	14.29%	0.00%	68.18%	31.82%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	16	1	8	0	0	9	1	0	8	3	0	0	46
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.667	0.250	0.500	0.000	0.000	0.450	0.250	0.000	1.000	0.250	0.000	0.000	0.605
					0.568				0.417				0.550				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	2	1	2	0	0	0	0	0	1	4	0	0	10
4:15 PM	0	0	0	0	2	0	3	0	0	2	1	0	0	1	0	0	9
4:30 PM	0	0	0	0	4	1	3	0	0	5	2	0	0	2	0	0	17
4:45 PM	0	0	0	0	3	0	3	0	0	2	4	0	2	1	0	0	15
5:00 PM	0	0	0	0	3	0	1	0	0	3	0	0	3	0	0	0	10
5:15 PM	0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	4
5:30 PM	0	0	0	0	4	0	1	0	0	0	2	0	0	2	0	0	9
5:45 PM	0	0	0	0	4	0	2	0	0	0	0	0	1	0	0	0	7
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	22	2	15	0	0	13	10	0	9	10	0	0	81
APPROACH %'s :					56.41%	5.13%	38.46%	0.00%	0.00%	56.52%	43.48%	0.00%	47.37%	52.63%	0.00%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	12	1	10	0	0	12	7	0	5	4	0	0	51
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.750	0.250	0.833	0.000	0.000	0.600	0.438	0.000	0.417	0.500	0.000	0.000	0.750
					0.719				0.679				0.750				

National Data & Surveying Services Intersection Turning Movement Count

Location: SR 99/Golden State Hwy SB Off-Ramp & W Taylor Rd
City: Turlock
Control: 2-Way Stop (EB/WB)

Project ID: 22-090115-001
Date: 10/13/2022

Data - Bikes

NS/EW Streets:	SR 99/Golden State Hwy SB Off-Ramp				SR 99/Golden State Hwy SB Off-Ramp				W Taylor Rd				W Taylor Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: SR 99/Golden State Hwy SB Off-Ramp & W Taylor Rd Project ID: 22-090115-001
City: Turlock Date: 10/13/2022

Data - Pedestrians (Crosswalks)

NS/EW Streets:	SR 99/Golden State Hwy SB Off-Ramp		SR 99/Golden State Hwy SB Off-Ramp		W Taylor Rd		W Taylor Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	04:15 PM - 05:15 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

SR 99/Golden State Hwy NB On-Ramp & W Taylor Rd

Peak Hour Turning Movement Count

ID: 22-090115-002
City: Turlock

Day: Thursday
Date: 10/13/2022

PEAK HOURS	COUNT PERIODS
07:15 AM - 08:15 AM	7:00 AM - 09:00 AM
NONE	NONE
04:30 PM - 05:30 PM	4:00 PM - 06:00 PM

SOUTHBOUND — SR 99/Golden State Hwy NB On-Ramp

AM	0	0	0	0	986	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	692	PM

EASTBOUND — W Taylor Rd

AM	NOON	PM	
259	0	177	⇦
0	0	0	↶ 0
14	0	22	↱ 0
666	0	1028	→ 0
0	0	0	↴ 0
AM	NOON	PM	

WESTBOUND — W Taylor Rd

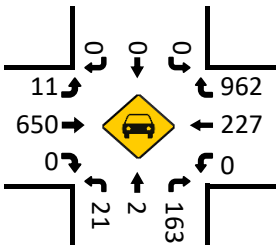
PM	NOON	AM	
667	0	970	↰ 0
171	0	237	← 0
0	0	0	↰ 0
0	0	0	↰ 0
1205	0	845	⇨
PM	NOON	AM	

NORTHBOUND — SR 99/Golden State Hwy NB On-Ramp

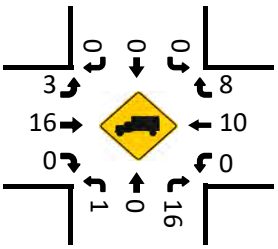
PM	0	0	6	3	177	PM
NOON	0	0	0	0	0	NOON
AM	0	0	22	2	179	AM

CONTROL			
1-Way Stop (NB)			
TEV	2090 AM	0 NOON	2074 PM
PHF	0.89		0.95

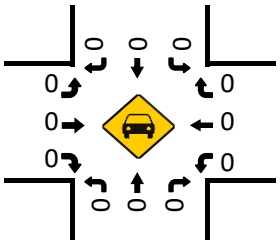
Cars (AM)



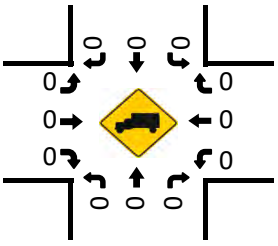
HT (AM)



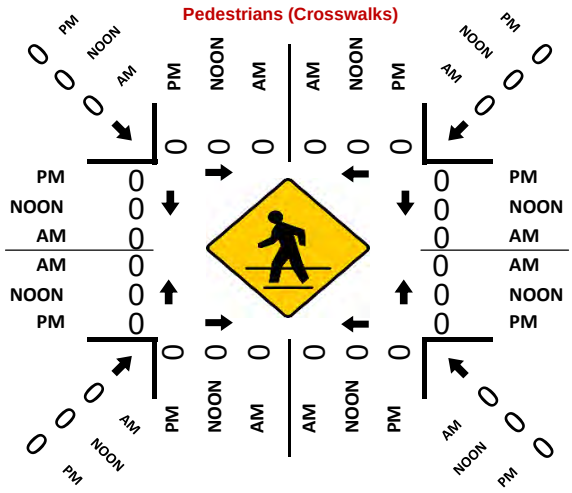
Cars (NOON)



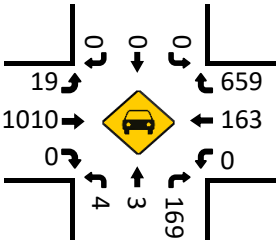
HT (NOON)



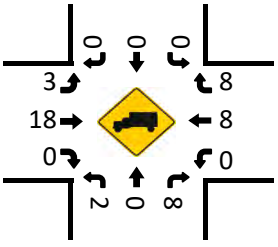
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: SR 99/Golden State Hwy NB On-Ramp & W Taylor Rd
City: Turlock
Control: 1-Way Stop (NB)

Project ID: 22-090115-002
Date: 10/13/2022

Data - Total

NS/EW Streets:	SR 99/Golden State Hwy NB On-Ramp				SR 99/Golden State Hwy NB On-Ramp				W Taylor Rd				W Taylor Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	2	0	31	0	0	0	0	0	1	85	0	0	0	55	233	0	407
7:15 AM	2	0	38	0	0	0	0	0	1	132	0	0	0	45	264	0	482
7:30 AM	2	0	38	0	0	0	0	0	3	178	0	0	0	61	302	0	584
7:45 AM	7	1	48	0	0	0	0	0	6	198	0	0	0	75	228	0	563
8:00 AM	11	1	55	0	0	0	0	0	4	158	0	0	0	56	176	0	461
8:15 AM	6	0	40	0	0	0	0	0	2	137	0	0	0	61	190	0	436
8:30 AM	3	0	32	0	0	0	0	0	3	122	0	0	0	48	176	0	384
8:45 AM	2	1	25	0	0	0	0	0	4	149	0	0	0	47	133	0	361
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	35	3	307	0	0	0	0	0	24	1159	0	0	0	448	1702	0	3678
APPROACH %'s :	10.14%	0.87%	88.99%	0.00%					2.03%	97.97%	0.00%	0.00%	0.00%	20.84%	79.16%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	22	2	179	0	0	0	0	0	14	666	0	0	0	237	970	0	2090
PEAK HR FACTOR :	0.500	0.500	0.814	0.000	0.000	0.000	0.000	0.000	0.583	0.841	0.000	0.000	0.000	0.790	0.803	0.000	0.895
	0.757								0.833				0.831				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	3	1	46	0	0	0	0	0	5	262	0	0	0	45	167	0	529
4:15 PM	1	0	42	0	0	0	0	0	5	250	0	0	0	51	157	0	506
4:30 PM	3	0	43	0	0	0	0	0	2	240	0	0	0	44	154	0	486
4:45 PM	2	0	33	0	0	0	0	0	4	283	0	0	0	43	147	0	512
5:00 PM	1	2	41	0	0	0	0	0	8	256	0	0	0	51	173	0	532
5:15 PM	0	1	60	0	0	0	0	0	8	249	0	0	0	33	193	0	544
5:30 PM	1	0	40	0	0	0	0	0	4	237	0	0	0	37	146	0	465
5:45 PM	2	1	51	0	0	0	0	0	5	247	0	0	0	45	112	0	463
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	13	5	356	0	0	0	0	0	41	2024	0	0	0	349	1249	0	4037
APPROACH %'s :	3.48%	1.34%	95.19%	0.00%					1.99%	98.01%	0.00%	0.00%	0.00%	21.84%	78.16%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	6	3	177	0	0	0	0	0	22	1028	0	0	0	171	667	0	2074
PEAK HR FACTOR :	0.500	0.375	0.738	0.000	0.000	0.000	0.000	0.000	0.688	0.908	0.000	0.000	0.000	0.838	0.864	0.000	0.953
	0.762								0.915				0.927				

National Data & Surveying Services Intersection Turning Movement Count

Location: SR 99/Golden State Hwy NB On-Ramp & W Taylor Rd
City: Turlock
Control: 1-Way Stop (NB)

Project ID: 22-090115-002
Date: 10/13/2022

Data - Cars

NS/EW Streets:	SR 99/Golden State Hwy NB On-Ramp				SR 99/Golden State Hwy NB On-Ramp				W Taylor Rd				W Taylor Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	2	0	27	0	0	0	0	0	0	82	0	0	0	54	231	0	396
7:15 AM	1	0	36	0	0	0	0	0	0	128	0	0	0	44	261	0	470
7:30 AM	2	0	34	0	0	0	0	0	3	174	0	0	0	58	300	0	571
7:45 AM	7	1	46	0	0	0	0	0	6	195	0	0	0	71	226	0	552
8:00 AM	11	1	47	0	0	0	0	0	2	153	0	0	0	54	175	0	443
8:15 AM	6	0	37	0	0	0	0	0	1	127	0	0	0	59	183	0	413
8:30 AM	3	0	30	0	0	0	0	0	3	118	0	0	0	42	171	0	367
8:45 AM	1	1	24	0	0	0	0	0	2	141	0	0	0	46	124	0	339
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	33	3	281	0	0	0	0	0	17	1118	0	0	0	428	1671	0	3551
APPROACH %'s :	10.41%	0.95%	88.64%	0.00%					1.50%	98.50%	0.00%	0.00%	0.00%	20.39%	79.61%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	21	2	163	0	0	0	0	0	11	650	0	0	0	227	962	0	2036
PEAK HR FACTOR :	0.477	0.500	0.867	0.000	0.000	0.000	0.000	0.000	0.458	0.833	0.000	0.000	0.000	0.799	0.802	0.000	0.891
	0.788								0.822				0.830				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	1	1	46	0	0	0	0	0	5	259	0	0	0	42	163	0	517
4:15 PM	1	0	42	0	0	0	0	0	4	247	0	0	0	50	152	0	496
4:30 PM	2	0	41	0	0	0	0	0	2	231	0	0	0	43	153	0	472
4:45 PM	1	0	32	0	0	0	0	0	2	280	0	0	0	41	145	0	501
5:00 PM	1	2	39	0	0	0	0	0	8	251	0	0	0	48	170	0	519
5:15 PM	0	1	57	0	0	0	0	0	7	248	0	0	0	31	191	0	535
5:30 PM	0	0	39	0	0	0	0	0	4	233	0	0	0	36	144	0	456
5:45 PM	2	0	49	0	0	0	0	0	4	245	0	0	0	44	109	0	453
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	8	4	345	0	0	0	0	0	36	1994	0	0	0	335	1227	0	3949
APPROACH %'s :	2.24%	1.12%	96.64%	0.00%					1.77%	98.23%	0.00%	0.00%	0.00%	21.45%	78.55%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	4	3	169	0	0	0	0	0	19	1010	0	0	0	163	659	0	2027
PEAK HR FACTOR :	0.500	0.375	0.741	0.000	0.000	0.000	0.000	0.000	0.594	0.902	0.000	0.000	0.000	0.849	0.863	0.000	0.947
	0.759								0.912				0.926				

National Data & Surveying Services Intersection Turning Movement Count

Location: SR 99/Golden State Hwy NB On-Ramp & W Taylor Rd
City: Turlock
Control: 1-Way Stop (NB)

Project ID: 22-090115-002
Date: 10/13/2022

Data - HT

NS/EW Streets:	SR 99/Golden State Hwy NB On-Ramp				SR 99/Golden State Hwy NB On-Ramp				W Taylor Rd				W Taylor Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	4	0	0	0	0	0	1	3	0	0	0	1	2	0	11
7:15 AM	1	0	2	0	0	0	0	0	1	4	0	0	0	1	3	0	12
7:30 AM	0	0	4	0	0	0	0	0	0	4	0	0	0	3	2	0	13
7:45 AM	0	0	2	0	0	0	0	0	0	3	0	0	0	4	2	0	11
8:00 AM	0	0	8	0	0	0	0	0	2	5	0	0	0	2	1	0	18
8:15 AM	0	0	3	0	0	0	0	0	1	10	0	0	0	2	7	0	23
8:30 AM	0	0	2	0	0	0	0	0	0	4	0	0	0	6	5	0	17
8:45 AM	1	0	1	0	0	0	0	0	2	8	0	0	0	1	9	0	22
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	0	26	0	0	0	0	0	7	41	0	0	0	20	31	0	127
APPROACH %'s :	7.14%	0.00%	92.86%	0.00%					14.58%	85.42%	0.00%	0.00%	0.00%	39.22%	60.78%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	1	0	16	0	0	0	0	0	3	16	0	0	0	10	8	0	54
PEAK HR FACTOR :	0.250	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.375	0.800	0.000	0.000	0.000	0.625	0.667	0.000	0.750
	0.531								0.679				0.750				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	2	0	0	0	0	0	0	0	0	3	0	0	0	3	4	0	12
4:15 PM	0	0	0	0	0	0	0	0	1	3	0	0	0	1	5	0	10
4:30 PM	1	0	2	0	0	0	0	0	0	9	0	0	0	1	1	0	14
4:45 PM	1	0	1	0	0	0	0	0	2	3	0	0	0	2	2	0	11
5:00 PM	0	0	2	0	0	0	0	0	0	5	0	0	0	3	3	0	13
5:15 PM	0	0	3	0	0	0	0	0	1	1	0	0	0	2	2	0	9
5:30 PM	1	0	1	0	0	0	0	0	0	4	0	0	0	1	2	0	9
5:45 PM	0	1	2	0	0	0	0	0	1	2	0	0	0	1	3	0	10
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	5	1	11	0	0	0	0	0	5	30	0	0	0	14	22	0	88
APPROACH %'s :	29.41%	5.88%	64.71%	0.00%					14.29%	85.71%	0.00%	0.00%	0.00%	38.89%	61.11%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	2	0	8	0	0	0	0	0	3	18	0	0	0	8	8	0	47
PEAK HR FACTOR :	0.500	0.000	0.667	0.000	0.000	0.000	0.000	0.000	0.375	0.500	0.000	0.000	0.000	0.667	0.667	0.000	0.839
	0.833								0.583				0.667				

National Data & Surveying Services Intersection Turning Movement Count

Location: SR 99/Golden State Hwy NB On-Ramp & W Taylor Rd
City: Turlock
Control: 1-Way Stop (NB)

Project ID: 22-090115-002
Date: 10/13/2022

Data - Bikes

NS/EW Streets:	SR 99/Golden State Hwy NB On-Ramp				SR 99/Golden State Hwy NB On-Ramp				W Taylor Rd				W Taylor Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: SR 99/Golden State Hwy NB On-Ramp & W Taylor Rd Project ID: 22-090115-002
City: Turlock Date: 10/13/2022

Data - Pedestrians (Crosswalks)

NS/EW Streets:	SR 99/Golden State Hwy NB On-Ramp		SR 99/Golden State Hwy NB On-Ramp		W Taylor Rd		W Taylor Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	1	0	0	0	0	0	1
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	1	0	0	0	0	0	1
APPROACH %'s :			100.00%	0.00%					
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

N Golden State Blvd & W Taylor Rd

Peak Hour Turning Movement Count

ID: 22-090115-003
City: Turlock

Day: Thursday
Date: 10/13/2022

PEAK HOURS

AM: 07:30 AM - 08:30 AM
NOON: NONE
PM: 04:30 PM - 05:30 PM

COUNT PERIODS

AM: 7:00 AM - 09:00 AM
NOON: NONE
PM: 4:00 PM - 06:00 PM

CONTROL: Signalized

	AM	NOON	PM
TEV	2612	0	2573
PHF	0.92		0.96

SOUTHBOUND (N Golden State Blvd)

AM	17	168	25	0	381	AM
NOON	0	0	0	0	0	NOON
PM	24	209	64	0	186	PM

EASTBOUND (W Taylor Rd)

AM	NOON	PM	
1146	0	837	
0	0	0	0
39	0	7	0
361	0	502	0
452	0	691	0
AM	NOON	PM	

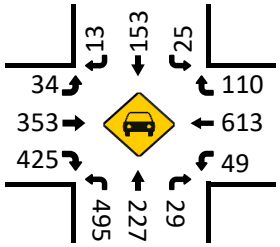
WESTBOUND (W Taylor Rd)

PM	NOON	AM	
45	0	111	0
435	0	626	0
50	0	49	0
0	0	0	0
600	0	416	
PM	NOON	AM	

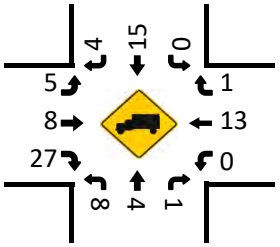
NORTHBOUND (N Golden State Blvd)

PM	950	0	378	134	34	PM
NOON	0	0	0	0	0	NOON
AM	669	0	503	231	30	AM

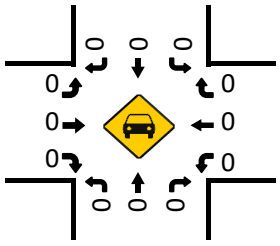
Cars (AM)



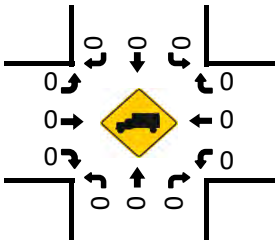
HT (AM)



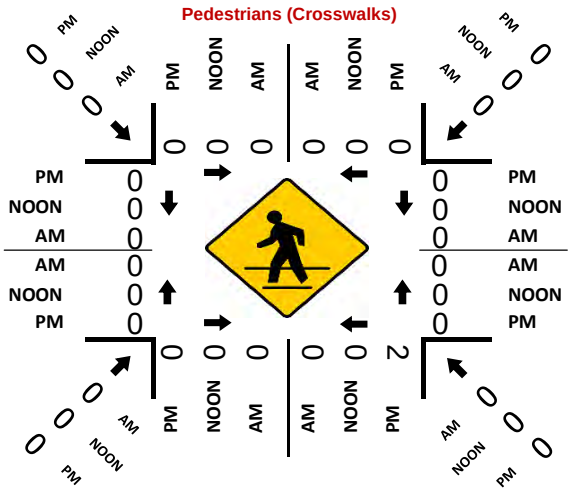
Cars (NOON)



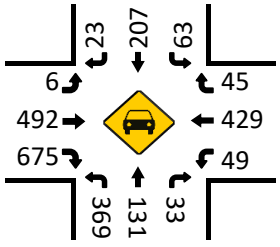
HT (NOON)



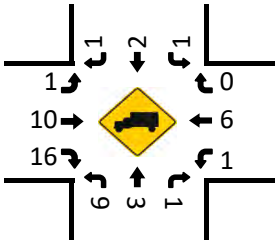
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: N Golden State Blvd & W Taylor Rd
City: Turlock
Control: Signalized

Project ID: 22-090115-003
Date: 10/13/2022

Data - Total

NS/EW Streets:	N Golden State Blvd				N Golden State Blvd				W Taylor Rd				W Taylor Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	107	10	0	0	2	19	2	0	4	59	55	0	2	176	10	0	446
7:15 AM	119	28	5	0	3	29	1	0	10	75	83	0	8	196	12	0	569
7:30 AM	154	64	0	0	1	38	6	0	10	92	111	0	7	197	33	0	713
7:45 AM	135	65	10	0	6	29	5	0	12	98	142	0	15	167	27	0	711
8:00 AM	90	50	8	0	11	45	3	0	11	92	108	0	15	135	29	0	597
8:15 AM	124	52	12	0	7	56	3	0	6	79	91	0	12	127	22	0	591
8:30 AM	97	38	9	0	6	34	7	0	11	76	70	0	11	120	12	0	491
8:45 AM	72	25	0	0	11	24	7	0	5	70	97	0	13	97	10	0	431
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	898	332	44	0	47	274	34	0	69	641	757	0	83	1215	155	0	4549
APPROACH %'s :	70.49%	26.06%	3.45%	0.00%	13.24%	77.18%	9.58%	0.00%	4.70%	43.69%	51.60%	0.00%	5.71%	83.62%	10.67%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	503	231	30	0	25	168	17	0	39	361	452	0	49	626	111	0	2612
PEAK HR FACTOR :	0.817	0.888	0.625	0.000	0.568	0.750	0.708	0.000	0.813	0.921	0.796	0.000	0.817	0.794	0.841	0.000	0.916
	0.876				0.795				0.845				0.829				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	92	44	12	0	15	41	7	0	5	135	164	0	15	111	12	0	653
4:15 PM	99	47	9	0	13	34	6	0	10	115	160	0	19	103	8	0	623
4:30 PM	77	37	7	0	16	43	5	0	3	118	169	0	5	116	10	0	606
4:45 PM	91	25	13	0	13	47	7	0	0	131	189	0	21	91	11	0	639
5:00 PM	108	43	6	0	15	53	5	0	1	119	175	0	9	113	10	0	657
5:15 PM	102	29	8	0	20	66	7	0	3	134	158	0	15	115	14	0	671
5:30 PM	72	26	8	0	11	50	5	0	5	131	156	0	8	109	13	0	594
5:45 PM	72	22	7	0	9	58	6	0	5	124	169	0	6	76	9	0	563
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	713	273	70	0	112	392	48	0	32	1007	1340	0	98	834	87	0	5006
APPROACH %'s :	67.52%	25.85%	6.63%	0.00%	20.29%	71.01%	8.70%	0.00%	1.35%	42.33%	56.33%	0.00%	9.62%	81.84%	8.54%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	378	134	34	0	64	209	24	0	7	502	691	0	50	435	45	0	2573
PEAK HR FACTOR :	0.875	0.779	0.654	0.000	0.800	0.792	0.857	0.000	0.583	0.937	0.914	0.000	0.595	0.938	0.804	0.000	0.959
	0.869				0.798				0.938				0.920				

National Data & Surveying Services Intersection Turning Movement Count

Location: N Golden State Blvd & W Taylor Rd
City: Turlock
Control: Signalized

Project ID: 22-090115-003
Date: 10/13/2022

Data - Cars

NS/EW Streets:	N Golden State Blvd				N Golden State Blvd				W Taylor Rd				W Taylor Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	104	10	0	0	2	18	2	0	3	56	53	0	2	176	10	0	436
7:15 AM	116	28	4	0	3	27	0	0	10	71	82	0	8	196	12	0	557
7:30 AM	153	63	0	0	1	27	5	0	10	90	104	0	7	193	33	0	686
7:45 AM	135	65	9	0	6	29	3	0	12	98	136	0	15	164	27	0	699
8:00 AM	89	49	8	0	11	42	2	0	10	87	101	0	15	133	28	0	575
8:15 AM	118	50	12	0	7	55	3	0	2	78	84	0	12	123	22	0	566
8:30 AM	92	36	9	0	6	34	4	0	7	76	67	0	11	118	12	0	472
8:45 AM	65	25	0	0	11	22	6	0	3	66	94	0	13	96	9	0	410
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	872	326	42	0	47	254	25	0	57	622	721	0	83	1199	153	0	4401
APPROACH %'s :	70.32%	26.29%	3.39%	0.00%	14.42%	77.91%	7.67%	0.00%	4.07%	44.43%	51.50%	0.00%	5.78%	83.55%	10.66%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	495	227	29	0	25	153	13	0	34	353	425	0	49	613	110	0	2526
PEAK HR FACTOR :	0.809	0.873	0.604	0.000	0.568	0.695	0.650	0.000	0.708	0.901	0.781	0.000	0.817	0.794	0.833	0.000	0.903
	0.869				0.735				0.825				0.828				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	85	42	12	0	15	41	6	0	5	135	160	0	15	111	11	0	638
4:15 PM	95	46	9	0	13	33	6	0	10	115	158	0	19	102	6	0	612
4:30 PM	76	35	7	0	16	43	4	0	3	113	164	0	5	115	10	0	591
4:45 PM	88	25	12	0	12	46	7	0	0	128	186	0	20	91	11	0	626
5:00 PM	104	42	6	0	15	52	5	0	0	117	171	0	9	111	10	0	642
5:15 PM	101	29	8	0	20	66	7	0	3	134	154	0	15	112	14	0	663
5:30 PM	69	26	8	0	11	50	5	0	4	130	154	0	8	109	13	0	587
5:45 PM	68	22	7	0	9	58	6	0	4	122	167	0	6	76	9	0	554
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	686	267	69	0	111	389	46	0	29	994	1314	0	97	827	84	0	4913
APPROACH %'s :	67.12%	26.13%	6.75%	0.00%	20.33%	71.25%	8.42%	0.00%	1.24%	42.53%	56.23%	0.00%	9.62%	82.04%	8.33%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	369	131	33	0	63	207	23	0	6	492	675	0	49	429	45	0	2522
PEAK HR FACTOR :	0.887	0.780	0.688	0.000	0.788	0.784	0.821	0.000	0.500	0.918	0.907	0.000	0.613	0.933	0.804	0.000	0.951
	0.877				0.788				0.934				0.927				

National Data & Surveying Services Intersection Turning Movement Count

Location: N Golden State Blvd & W Taylor Rd
City: Turlock
Control: Signalized

Project ID: 22-090115-003
Date: 10/13/2022

Data - HT

NS/EW Streets:	N Golden State Blvd				N Golden State Blvd				W Taylor Rd				W Taylor Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	3	0	0	0	0	1	0	0	1	3	2	0	0	0	0	0	10
7:15 AM	3	0	1	0	0	2	1	0	0	4	1	0	0	0	0	0	12
7:30 AM	1	1	0	0	0	11	1	0	0	2	7	0	0	4	0	0	27
7:45 AM	0	0	1	0	0	0	2	0	0	0	6	0	0	3	0	0	12
8:00 AM	1	1	0	0	0	3	1	0	1	5	7	0	0	2	1	0	22
8:15 AM	6	2	0	0	0	1	0	0	4	1	7	0	0	4	0	0	25
8:30 AM	5	2	0	0	0	0	3	0	4	0	3	0	0	2	0	0	19
8:45 AM	7	0	0	0	0	2	1	0	2	4	3	0	0	1	1	0	21
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	26	6	2	0	0	20	9	0	12	19	36	0	0	16	2	0	148
APPROACH %'s :	76.47%	17.65%	5.88%	0.00%	0.00%	68.97%	31.03%	0.00%	17.91%	28.36%	53.73%	0.00%	0.00%	88.89%	11.11%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	8	4	1	0	0	15	4	0	5	8	27	0	0	13	1	0	86
PEAK HR FACTOR :	0.333	0.500	0.250	0.000	0.000	0.341	0.500	0.000	0.313	0.400	0.964	0.000	0.000	0.813	0.250	0.000	0.796
	0.406				0.396				0.769				0.875				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	7	2	0	0	0	0	1	0	0	0	4	0	0	0	1	0	15
4:15 PM	4	1	0	0	0	1	0	0	0	0	2	0	0	1	2	0	11
4:30 PM	1	2	0	0	0	0	1	0	0	5	5	0	0	1	0	0	15
4:45 PM	3	0	1	0	1	1	0	0	0	3	3	0	1	0	0	0	13
5:00 PM	4	1	0	0	0	1	0	0	1	2	4	0	0	2	0	0	15
5:15 PM	1	0	0	0	0	0	0	0	0	0	4	0	0	3	0	0	8
5:30 PM	3	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	7
5:45 PM	4	0	0	0	0	0	0	0	1	2	2	0	0	0	0	0	9
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	27	6	1	0	1	3	2	0	3	13	26	0	1	7	3	0	93
APPROACH %'s :	79.41%	17.65%	2.94%	0.00%	16.67%	50.00%	33.33%	0.00%	7.14%	30.95%	61.90%	0.00%	9.09%	63.64%	27.27%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	9	3	1	0	1	2	1	0	1	10	16	0	1	6	0	0	51
PEAK HR FACTOR :	0.563	0.375	0.250	0.000	0.250	0.500	0.250	0.000	0.250	0.500	0.800	0.000	0.250	0.500	0.000	0.000	0.850
	0.650				0.500				0.675				0.583				

National Data & Surveying Services Intersection Turning Movement Count

Location: N Golden State Blvd & W Taylor Rd
City: Turlock
Control: Signalized

Project ID: 22-090115-003
Date: 10/13/2022

Data - Bikes

NS/EW Streets:	N Golden State Blvd				N Golden State Blvd				W Taylor Rd				W Taylor Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	2
5:45 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	2	2	0	0	0	0	0	0	2	0	0	0	7
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	50.00%	50.00%	0.00%	0.00%					100.00%	0.00%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
	0.250				0.250												

National Data & Surveying Services Intersection Turning Movement Count

Location: N Golden State Blvd & W Taylor Rd
City: Turlock

Project ID: 22-090115-003
Date: 10/13/2022

Data - Pedestrians (Crosswalks)

NS/EW Streets:	N Golden State Blvd		N Golden State Blvd		W Taylor Rd		W Taylor Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	2	0	0	0	0	2
5:30 PM	0	0	2	0	1	0	0	0	3
5:45 PM	0	0	1	0	0	0	0	0	1
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	3	2	1	0	0	0	6
APPROACH %'s :			60.00%	40.00%	100.00%	0.00%			
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	0	0	0	2	0	0	0	0	2
PEAK HR FACTOR :				0.250					0.250
				0.250					

Prepared by NDS/ATD

VOLUME

4325 W Taylor Rd/Pattar Transport Dwy & W Taylor Rd

Day: Tuesday
Date: 10/11/2022

City: Turlock
Project #: CA22_090116_001

DAILY TOTALS	NB	SB	EB	WB	Total
	43	46	0	0	89

AM Period	NB		SB		EB		WB		TOTAL	
0:00	0		0						0	
0:15	0		0						0	
0:30	0		0						0	
0:45	0		1	1					1	1
1:00	0		0						0	
1:15	0		0						0	
1:30	0		0						0	
1:45	0		0						0	
2:00	0		0						0	
2:15	0		0						0	
2:30	0		0						0	
2:45	0		0						0	
3:00	0		0						0	
3:15	0		0						0	
3:30	0		1						1	
3:45	0		0	1					0	1
4:00	0		1						1	
4:15	0		0						0	
4:30	0		0						0	
4:45	1	1	0	1					1	2
5:00	1		1						2	
5:15	1		2						3	
5:30	0		0						0	
5:45	0	2	0	3					0	5
6:00	0		0						0	
6:15	0		0						0	
6:30	1		0						1	
6:45	3	4	0						3	4
7:00	1		2						3	
7:15	0		2						2	
7:30	0		0						0	
7:45	2	3	1	5					3	8
8:00	0		1						1	
8:15	0		0						0	
8:30	0		0						0	
8:45	0		0	1					0	1
9:00	0		0						0	
9:15	0		0						0	
9:30	0		1						1	
9:45	2	2	0	1					2	3
10:00	0		1						1	
10:15	2		2						4	
10:30	0		0						0	
10:45	3	5	0	3					3	8
11:00	2		1						3	
11:15	1		3						4	
11:30	1		1						2	
11:45	0	4	1	6					1	10
TOTALS		21		22						**43**
SPLIT %		48.8%		51.2%						**48.3%**

PM Period	NB		SB		EB		WB		TOTAL	
12:00	0		0						0	
12:15	1		1						2	
12:30	0		2						2	
12:45	4	5	3	6					7	11
13:00	1		1						2	
13:15	0		1						1	
13:30	0		0						0	
13:45	0	1	0	2					0	3
14:00	1		0						1	
14:15	1		0						1	
14:30	0		0						0	
14:45	1	3	0						1	3
15:00	0		1						1	
15:15	1		1						2	
15:30	0		2						2	
15:45	0	1	0	4					0	5
16:00	0		0						0	
16:15	0		0						0	
16:30	1		1						2	
16:45	0	1	0	1					0	2
17:00	0		0						0	
17:15	0		0						0	
17:30	0		0						0	
17:45	1	1	1	1					2	2
18:00	1		0						1	
18:15	1		1						2	
18:30	0		1						1	
18:45	0	2	1	3					1	5
19:00	0		0						0	
19:15	2		1						3	
19:30	0		0						0	
19:45	0	2	0	1					0	3
20:00	0		0						0	
20:15	1		1						2	
20:30	2		1						3	
20:45	1	4	2	4					3	8
21:00	0		0						0	
21:15	0		0						0	
21:30	0		0						0	
21:45	0		0						0	
22:00	0		0						0	
22:15	1		1						2	
22:30	0		0						0	
22:45	1	2	0	1					1	3
23:00	0		0						0	
23:15	0		0						0	
23:30	0		1						1	
23:45	0		0	1					0	1
TOTALS		22		24						**46**
SPLIT %		47.8%		52.2%						**51.7%**

DAILY TOTALS	NB	SB	EB	WB	Total
	43	46	0	0	89

AM Peak Hour	10:15	11:00			**10:45**	**PM Peak Hour**	12:15	12:15			**12:15**
AM Pk Volume	7	6			**12**	**PM Pk Volume**	6	7			**13**
Pk Hr Factor	0.583	0.500			**0.750**	**Pk Hr Factor**	0.375	0.583			**0.464**
7 - 9 Volume	3	6	0	0	**9**	**4 - 6 Volume**	2	2	0	0	**4**
7 - 9 Peak Hour	7:00	7:00			**7:00**	**4 - 6 Peak Hour**	16:00	16:00			**16:00**
7 - 9 Pk Volume	3	5	0	0	**8**	**4 - 6 Pk Volume**	1	1	0	0	**2**
Pk Hr Factor	0.375	0.625	0.000	0.000	**0.667**	**Pk Hr Factor**	0.250	0.250	0.000	0.000	**0.250**

Prepared by NDS/ATD

VOLUME

4325 W Taylor Rd/Pattar Transport Dwy & W Taylor Rd

Day: Wednesday
Date: 10/12/2022

City: Turlock
Project #: CA22_090116_001

DAILY TOTALS	NB	SB	EB	WB	Total
	49	49	0	0	98

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
0:00	1		0						1		12:00	2		0						2	
0:15	0		1						1		12:15	0		1						1	
0:30	0		0						0		12:30	0		2						2	
0:45	0	1	0	1					0	2	12:45	2	4	1	4					3	8
1:00	0		0						0		13:00	0		1						1	
1:15	0		0						0		13:15	0		0						0	
1:30	0		0						0		13:30	2		3						5	
1:45	0		0						0		13:45	1	3	0	4					1	7
2:00	0		0						0		14:00	2		2						4	
2:15	0		0						0		14:15	0		1						1	
2:30	0		0						0		14:30	0		0						0	
2:45	0		0						0		14:45	0	2	0	3					0	5
3:00	0		0						0		15:00	1		1						2	
3:15	1		0						1		15:15	1		2						3	
3:30	0		1						1		15:30	2		1						3	
3:45	0	1	0	1					0	2	15:45	2	6	1	5					3	11
4:00	0		0						0		16:00	0		1						1	
4:15	1		1						2		16:15	1		0						1	
4:30	0		0						0		16:30	1		0						1	
4:45	0	1	0	1					0	2	16:45	0	2	0	1					0	3
5:00	0		0						0		17:00	0		2						2	
5:15	0		0						0		17:15	1		1						2	
5:30	0		0						0		17:30	0		0						0	
5:45	0		0						0		17:45	2	3	0	3					2	6
6:00	0		0						0		18:00	1		3						4	
6:15	0		1						1		18:15	1		2						3	
6:30	1		1						2		18:30	1		0						1	
6:45	3	4	0	2					3	6	18:45	0	3	0	5					0	8
7:00	0		2						2		19:00	0		0						0	
7:15	3		0						3		19:15	0		0						0	
7:30	0		2						2		19:30	1		1						2	
7:45	2	5	0	4					2	9	19:45	0	1	0	1					0	2
8:00	0		0						0		20:00	0		0						0	
8:15	0		2						2		20:15	0		0						0	
8:30	0		0						0		20:30	1		1						2	
8:45	1	1	0	2					1	3	20:45	1	2	0	1					1	3
9:00	0		1						1		21:00	0		1						1	
9:15	0		0						0		21:15	0		0						0	
9:30	0		0						0		21:30	0		0						0	
9:45	1	1	0	1					1	2	21:45	0		0	1					0	1
10:00	1		1						2		22:00	0		0						0	
10:15	0		1						1		22:15	0		0						0	
10:30	2		0						2		22:30	0		0						0	
10:45	0	3	2	4					2	7	22:45	0		0						0	
11:00	1		0						1		23:00	1		0						1	
11:15	1		0						1		23:15	0		0						0	
11:30	2		1						3		23:30	0		1						1	
11:45	0	4	2	3					2	7	23:45	1	2	1	2					2	4
TOTALS		21		19						40	TOTALS		28		30						58
SPLIT %		52.5%		47.5%						40.8%	SPLIT %		48.3%		51.7%						59.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	49	49	0	0	98

AM Peak Hour	6:30		11:45							6:30	PM Peak Hour	15:00		13:30								13:30
AM Pk Volume	7		5							10	PM Pk Volume	6		6								11
Pk Hr Factor	0.583		0.625							0.833	Pk Hr Factor	0.750		0.500								0.550
7 - 9 Volume	6		6		0		0			12	4 - 6 Volume	5		4		0		0				9
7 - 9 Peak Hour	7:00		7:00							7:00	4 - 6 Peak Hour	17:00		16:30								17:00
7 - 9 Pk Volume	5		4		0		0			9	4 - 6 Pk Volume	3		3		0		0				6
Pk Hr Factor	0.417		0.500		0.000		0.000			0.750	Pk Hr Factor	0.375		0.375		0.000		0.000				0.750

Prepared by NDS/ATD

VOLUME

4325 W Taylor Rd/Pattar Transport Dwy & W Taylor Rd

Day: Thursday
Date: 10/13/2022

City: Turlock
Project #: CA22_090116_001

DAILY TOTALS	NB	SB	EB	WB	Total
	37	40	0	0	77

AM Period	NB		SB		EB		WB		TOTAL	
0:00	0		0						0	
0:15	1		0						1	
0:30	0		1						1	
0:45	0	1	0	1					0	2
1:00	0		0						0	
1:15	0		0						0	
1:30	0		0						0	
1:45	0		0						0	
2:00	0		0						0	
2:15	0		0						0	
2:30	0		0						0	
2:45	0		0						0	
3:00	0		0						0	
3:15	0		0						0	
3:30	0		0						0	
3:45	0		0						0	
4:00	0		0						0	
4:15	1		0						1	
4:30	0		1						1	
4:45	0	1	0	1					0	2
5:00	0		0						0	
5:15	0		0						0	
5:30	0		0						0	
5:45	0		0						0	
6:00	0		0						0	
6:15	0		0						0	
6:30	0		0						0	
6:45	2	2	0						2	2
7:00	0		1						1	
7:15	1		0						1	
7:30	0		1						1	
7:45	1	2	0	2					1	4
8:00	2		1						3	
8:15	0		1						1	
8:30	3		0						3	
8:45	0	5	2	4					2	9
9:00	0		2						2	
9:15	0		0						0	
9:30	1		0						1	
9:45	0	1	0	2					0	3
10:00	0		2						2	
10:15	0		0						0	
10:30	0		0						0	
10:45	2	2	0	2					2	4
11:00	0		0						0	
11:15	0		2						2	
11:30	0		0						0	
11:45	0		0	2					0	2
TOTALS	14		14						**28**	
SPLIT %	50.0%		50.0%						**36.4%**	

PM Period	NB		SB		EB		WB		TOTAL	
12:00	2		0						2	
12:15	0		1						1	
12:30	1		0						1	
12:45	1	4	0	1					1	5
13:00	0		0						0	
13:15	0		2						2	
13:30	2		2						4	
13:45	0	2	0	4					0	6
14:00	1		1						2	
14:15	0		1						1	
14:30	1		0						1	
14:45	0	2	0	2					0	4
15:00	1		0						1	
15:15	0		2						2	
15:30	0		0						0	
15:45	1	2	0	2					1	4
16:00	1		0						1	
16:15	2		1						3	
16:30	2		3						5	
16:45	0	5	1	5					1	10
17:00	0		0						0	
17:15	0		2						2	
17:30	0		1						1	
17:45	1	1	0	3					1	4
18:00	0		1						1	
18:15	1		0						1	
18:30	0		0						0	
18:45	0	1	0	1					0	2
19:00	0		0						0	
19:15	1		1						2	
19:30	0		0						0	
19:45	1	2	1	2					2	4
20:00	0		0						0	
20:15	1		2						3	
20:30	0		2						2	
20:45	0	1	0	4					0	5
21:00	1		1						2	
21:15	0		0						0	
21:30	0		0						0	
21:45	0	1	0	1					0	2
22:00	1		0						1	
22:15	0		0						0	
22:30	0		0						0	
22:45	0	1	1	1					1	2
23:00	0		0						0	
23:15	0		0						0	
23:30	0		0						0	
23:45	1	1	0						1	1
TOTALS	23		26						**49**	
SPLIT %	46.9%		53.1%						**63.6%**	

DAILY TOTALS	NB	SB	EB	WB	Total
	37	40	0	0	77

AM Peak Hour	7:45	8:15			**8:00**	**PM Peak Hour**	15:45	16:30			**15:45**
AM Pk Volume	6	5			**9**	**PM Pk Volume**	6	6			**10**
Pk Hr Factor	0.500	0.625			**0.750**	**Pk Hr Factor**	0.750	0.500			**0.500**
7 - 9 Volume	7	6	0	0	**13**	**4 - 6 Volume**	6	8	0	0	**14**
7 - 9 Peak Hour	7:45	8:00			**8:00**	**4 - 6 Peak Hour**	16:00	16:30			**16:00**
7 - 9 Pk Volume	6	4	0	0	**9**	**4 - 6 Pk Volume**	5	6	0	0	**10**
Pk Hr Factor	0.500	0.500	0.000	0.000	**0.750**	**Pk Hr Factor**	0.625	0.500	0.000	0.000	**0.500**

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	74	110	4	4	0
Future Vol, veh/h	0	74	110	4	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	80	120	4	4	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	124	0	-	0	202	122
Stage 1	-	-	-	-	122	-
Stage 2	-	-	-	-	80	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1463	-	-	-	787	929
Stage 1	-	-	-	-	903	-
Stage 2	-	-	-	-	943	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1463	-	-	-	787	929
Mov Cap-2 Maneuver	-	-	-	-	787	-
Stage 1	-	-	-	-	903	-
Stage 2	-	-	-	-	943	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1463	-	-	-	787
HCM Lane V/C Ratio	-	-	-	-	0.006
HCM Control Delay (s)	0	-	-	-	9.6
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	332.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	71	7	191	88	0	0	0	0	615	2	26
Future Vol, veh/h	0	71	7	191	88	0	0	0	0	615	2	26
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	-	-	100	150	-	-	-	-	-	-	-	65
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	83	8	222	102	0	0	0	0	715	2	30

Major/Minor	Minor2			Minor1					Major2			
Conflicting Flow All	-	1432	2	1478	1432	-			0	0	0	
Stage 1	-	1432	-	0	0	-			-	-	-	
Stage 2	-	0	-	1478	1432	-			-	-	-	
Critical Hdwy	-	6.52	6.22	7.12	6.52	-			4.12	-	-	
Critical Hdwy Stg 1	-	5.52	-	-	-	-			-	-	-	
Critical Hdwy Stg 2	-	-	-	6.12	5.52	-			-	-	-	
Follow-up Hdwy	-	4.018	3.318	3.518	4.018	-			2.218	-	-	
Pot Cap-1 Maneuver	0	134	1082	~ 104	134	0			-	-	0	
Stage 1	0	200	-	-	-	0			-	-	0	
Stage 2	0	-	-	~ 157	200	0			-	-	0	
Platoon blocked, %										-		
Mov Cap-1 Maneuver	-	134	1082	~ 52	134	-			-	-	-	
Mov Cap-2 Maneuver	-	134	-	~ 52	134	-			-	-	-	
Stage 1	-	200	-	-	-	-			-	-	-	
Stage 2	-	-	-	~ 91	200	-			-	-	-	

Approach	EB	WB	SB
HCM Control Delay, s	62.3	$ 1144.9	
HCM LOS	F	F	

Minor Lane/Major Mvmt	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	134	1082	52	134	-	-
HCM Lane V/C Ratio	0.616	0.008	4.271	0.764	-	-
HCM Control Delay (s)	67.6	8.4	$ 1631.6	88.5	-	-
HCM Lane LOS	F	A	F	F	-	-
HCM 95th %tile Q(veh)	3.2	0	24.6	4.5	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

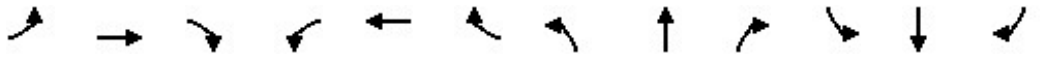
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	666	0	0	237	970	22	2	179	0	0	0
Future Vol, veh/h	14	666	0	0	237	970	22	2	179	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	None
Storage Length	150	-	-	-	-	0	-	-	75	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	748	0	0	266	1090	25	2	201	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1356	0	-	-	-	0	1591	2136	-
Stage 1	-	-	-	-	-	-	780	780	-
Stage 2	-	-	-	-	-	-	811	1356	-
Critical Hdwy	4.12	-	-	-	-	-	6.42	6.52	-
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	-	-	-	3.518	4.018	-
Pot Cap-1 Maneuver	507	-	0	0	-	-	118	49	0
Stage 1	-	-	0	0	-	-	452	406	0
Stage 2	-	-	0	0	-	-	437	217	0
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	507	-	-	-	-	-	114	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	114	0	-
Stage 1	-	-	-	-	-	-	438	0	-
Stage 2	-	-	-	-	-	-	437	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.3	0	46.1
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	114	-	507	-	-	-
HCM Lane V/C Ratio	0.237	-	0.031	-	-	-
HCM Control Delay (s)	46.1	0	12.3	-	-	-
HCM Lane LOS	E	A	B	-	-	-
HCM 95th %tile Q(veh)	0.9	-	0.1	-	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	361	452	49	626	111	503	231	30	25	168	17
Future Volume (veh/h)	39	361	452	49	626	111	503	231	30	25	168	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	392	0	53	680	0	547	251	0	27	183	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	74	472		86	921		728	583		53	245	
Arrive On Green	0.04	0.25	0.00	0.05	0.26	0.00	0.21	0.31	0.00	0.03	0.13	0.00
Sat Flow, veh/h	1781	1870	1585	1781	3554	1585	3456	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	42	392	0	53	680	0	547	251	0	27	183	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1585	1728	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.4	12.3	0.0	1.8	10.8	0.0	9.2	6.6	0.0	0.9	5.8	0.0
Cycle Q Clear(g_c), s	1.4	12.3	0.0	1.8	10.8	0.0	9.2	6.6	0.0	0.9	5.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	74	472		86	921		728	583		53	245	
V/C Ratio(X)	0.57	0.83		0.62	0.74		0.75	0.43		0.51	0.75	
Avail Cap(c_a), veh/h	144	605		144	1379		1733	583		144	363	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	29.1	21.9	0.0	28.9	21.0	0.0	22.9	16.9	0.0	29.5	25.9	0.0
Incr Delay (d2), s/veh	2.5	7.6	0.0	2.6	1.2	0.0	1.6	0.5	0.0	2.7	4.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.1	9.5	0.0	1.4	7.2	0.0	6.1	4.5	0.0	0.7	4.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.6	29.5	0.0	31.5	22.2	0.0	24.5	17.4	0.0	32.2	30.5	0.0
LnGrp LOS	C	C		C	C		C	B		C	C	
Approach Vol, veh/h		434			733			798			210	
Approach Delay, s/veh		29.7			22.8			22.2			30.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	25.5	7.7	22.1	17.7	14.3	7.3	22.5
Change Period (Y+Rc), s	* 4.7	6.2	* 4.7	* 6.5	* 4.7	6.2	* 4.7	6.5
Max Green Setting (Gmax), s	* 5	14.0	* 5	* 20	* 31	12.0	* 5	24.0
Max Q Clear Time (g_c+I1), s	2.9	8.6	3.8	14.3	11.2	7.8	3.4	12.8
Green Ext Time (p_c), s	0.0	0.5	0.0	1.0	1.9	0.3	0.0	3.2

Intersection Summary	
HCM 6th Ctrl Delay	24.7
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	230	53	3	3	0
Future Vol, veh/h	0	230	53	3	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	250	58	3	3	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	61	0	-	0	310	60
Stage 1	-	-	-	-	60	-
Stage 2	-	-	-	-	250	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1542	-	-	-	682	1005
Stage 1	-	-	-	-	963	-
Stage 2	-	-	-	-	792	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1542	-	-	-	682	1005
Mov Cap-2 Maneuver	-	-	-	-	682	-
Stage 1	-	-	-	-	963	-
Stage 2	-	-	-	-	792	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1542	-	-	-	682
HCM Lane V/C Ratio	-	-	-	-	0.005
HCM Control Delay (s)	0	-	-	-	10.3
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	91.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	146	87	149	47	0	0	0	0	903	5	19
Future Vol, veh/h	0	146	87	149	47	0	0	0	0	903	5	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	-	-	100	150	-	-	-	-	-	-	-	65
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	159	95	162	51	0	0	0	0	982	5	21

Major/Minor	Minor2			Minor1					Major2			
Conflicting Flow All	-	1969	5	2096	1969	-			0	0	0	
Stage 1	-	1969	-	0	0	-			-	-	-	
Stage 2	-	0	-	2096	1969	-			-	-	-	
Critical Hdwy	-	6.52	6.22	7.12	6.52	-			4.12	-	-	
Critical Hdwy Stg 1	-	5.52	-	-	-	-			-	-	-	
Critical Hdwy Stg 2	-	-	-	6.12	5.52	-			-	-	-	
Follow-up Hdwy	-	4.018	3.318	3.518	4.018	-			2.218	-	-	
Pot Cap-1 Maneuver	0	~ 63	1078	~ 38	63	0			-	-	0	
Stage 1	0	~ 108	-	-	-	0			-	-	0	
Stage 2	0	-	-	~ 68	108	0			-	-	0	
Platoon blocked, %										-		
Mov Cap-1 Maneuver	-	~ 63	1078	-	63	-			-	-	-	
Mov Cap-2 Maneuver	-	~ 63	-	-	63	-			-	-	-	
Stage 1	-	~ 108	-	-	-	-			-	-	-	
Stage 2	-	-	-	-	108	-			-	-	-	

Approach	EB	WB	SB
HCM Control Delay, s$	523.3		
HCM LOS	F	-	

Minor Lane/Major Mvmt	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	63	1078	-	63	-	-
HCM Lane V/C Ratio	2.519	0.088	-	0.811	-	-
HCM Control Delay (s)	$ 830	8.7	-	170.1	-	-
HCM Lane LOS	F	A	-	F	-	-
HCM 95th %tile Q(veh)	15.7	0.3	-	3.7	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

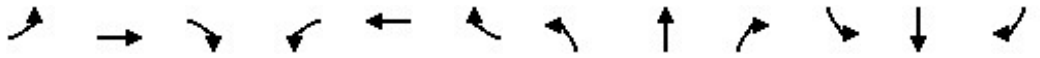
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	1028	0	0	171	667	6	3	177	0	0	0
Future Vol, veh/h	22	1028	0	0	171	667	6	3	177	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	None
Storage Length	150	-	-	-	-	0	-	-	75	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	1082	0	0	180	702	6	3	186	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	882	0	-	-	-	0	1659	2010	-
Stage 1	-	-	-	-	-	-	1128	1128	-
Stage 2	-	-	-	-	-	-	531	882	-
Critical Hdwy	4.12	-	-	-	-	-	6.42	6.52	-
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	-	-	-	3.518	4.018	-
Pot Cap-1 Maneuver	767	-	0	0	-	-	107	59	0
Stage 1	-	-	0	0	-	-	309	279	0
Stage 2	-	-	0	0	-	-	590	364	0
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	767	-	-	-	-	-	104	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	104	0	-
Stage 1	-	-	-	-	-	-	300	0	-
Stage 2	-	-	-	-	-	-	590	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.2	0	43.1
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	104	-	767	-	-	-
HCM Lane V/C Ratio	0.091	-	0.03	-	-	-
HCM Control Delay (s)	43.1	0	9.8	-	-	-
HCM Lane LOS	E	A	A	-	-	-
HCM 95th %tile Q(veh)	0.3	-	0.1	-	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	502	691	50	435	45	378	134	34	64	209	24
Future Volume (veh/h)	7	502	691	50	435	45	378	134	34	64	209	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	7	523	0	52	453	0	394	140	0	67	218	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	16	569		84	1215		550	472		96	276	
Arrive On Green	0.01	0.30	0.00	0.05	0.34	0.00	0.16	0.25	0.00	0.05	0.15	0.00
Sat Flow, veh/h	1781	1870	1585	1781	3554	1585	3456	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	7	523	0	52	453	0	394	140	0	67	218	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1585	1728	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.3	17.4	0.0	1.8	6.2	0.0	7.0	3.9	0.0	2.4	7.3	0.0
Cycle Q Clear(g_c), s	0.3	17.4	0.0	1.8	6.2	0.0	7.0	3.9	0.0	2.4	7.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	16	569		84	1215		550	472		96	276	
V/C Ratio(X)	0.43	0.92		0.62	0.37		0.72	0.30		0.69	0.79	
Avail Cap(c_a), veh/h	138	580		138	1321		1660	472		138	348	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	31.8	21.7	0.0	30.2	16.0	0.0	25.7	19.5	0.0	30.0	26.6	0.0
Incr Delay (d2), s/veh	6.5	19.8	0.0	2.8	0.2	0.0	1.8	0.3	0.0	3.3	9.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	14.7	0.0	1.4	3.9	0.0	4.8	2.8	0.0	1.8	6.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.3	41.5	0.0	33.0	16.2	0.0	27.5	19.8	0.0	33.3	35.9	0.0
LnGrp LOS	D	D		C	B		C	B		C	D	
Approach Vol, veh/h		530			505			534			285	
Approach Delay, s/veh		41.5			17.9			25.5			35.3	
Approach LOS		D			B			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.2	22.5	7.7	26.1	15.0	15.7	5.3	28.6
Change Period (Y+Rc), s	* 4.7	6.2	* 4.7	* 6.5	* 4.7	6.2	* 4.7	6.5
Max Green Setting (Gmax), s	* 5	14.0	* 5	* 20	* 31	12.0	* 5	24.0
Max Q Clear Time (g_c+I1), s	4.4	5.9	3.8	19.4	9.0	9.3	2.3	8.2
Green Ext Time (p_c), s	0.0	0.3	0.0	0.2	1.3	0.3	0.0	2.4

Intersection Summary	
HCM 6th Ctrl Delay	29.5
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	74	110	0	0	0
Future Vol, veh/h	0	74	110	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	80	120	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	120	0	-	0	200	120
Stage 1	-	-	-	-	120	-
Stage 2	-	-	-	-	80	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1468	-	-	-	789	931
Stage 1	-	-	-	-	905	-
Stage 2	-	-	-	-	943	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1468	-	-	-	789	931
Mov Cap-2 Maneuver	-	-	-	-	789	-
Stage 1	-	-	-	-	905	-
Stage 2	-	-	-	-	943	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1468	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	319.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱	↰	↑						↲	↱
Traffic Vol, veh/h	0	69	5	191	86	0	0	0	0	615	2	24
Future Vol, veh/h	0	69	5	191	86	0	0	0	0	615	2	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	-	-	100	150	-	-	-	-	-	-	-	65
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	80	6	222	100	0	0	0	0	715	2	28

Major/Minor	Minor2			Minor1					Major2			
Conflicting Flow All	-	1432	2	1475	1432	-			0	0	0	
Stage 1	-	1432	-	0	0	-			-	-	-	
Stage 2	-	0	-	1475	1432	-			-	-	-	
Critical Hdwy	-	6.52	6.22	7.12	6.52	-			4.12	-	-	
Critical Hdwy Stg 1	-	5.52	-	-	-	-			-	-	-	
Critical Hdwy Stg 2	-	-	-	6.12	5.52	-			-	-	-	
Follow-up Hdwy	-	4.018	3.318	3.518	4.018	-			2.218	-	-	
Pot Cap-1 Maneuver	0	134	1082	~ 104	134	0			-	-	0	
Stage 1	0	200	-	-	-	0			-	-	0	
Stage 2	0	-	-	~ 157	200	0			-	-	0	
Platoon blocked, %										-		
Mov Cap-1 Maneuver	-	134	1082	~ 54	134	-			-	-	-	
Mov Cap-2 Maneuver	-	134	-	~ 54	134	-			-	-	-	
Stage 1	-	200	-	-	-	-			-	-	-	
Stage 2	-	-	-	~ 94	200	-			-	-	-	

Approach	EB	WB	SB
HCM Control Delay, s	61.7	$ 1099.2	
HCM LOS	F	F	

Minor Lane/Major Mvmt	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	134	1082	54	134	-	-
HCM Lane V/C Ratio	0.599	0.005	4.113	0.746	-	-
HCM Control Delay (s)	65.6	8.3	$ 1555.6	85.6	-	-
HCM Lane LOS	F	A	F	F	-	-
HCM 95th %tile Q(veh)	3.1	0	24.4	4.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

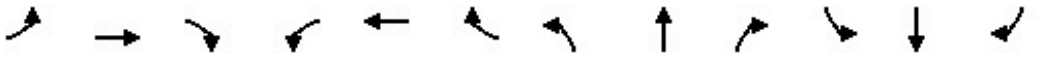
Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	666	0	0	237	970	20	2	179	0	0	0
Future Vol, veh/h	12	666	0	0	237	970	20	2	179	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	None
Storage Length	150	-	-	-	-	0	-	-	75	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	748	0	0	266	1090	22	2	201	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1356	0	-	-	-	0	1585	2130	-
Stage 1	-	-	-	-	-	-	774	774	-
Stage 2	-	-	-	-	-	-	811	1356	-
Critical Hdwy	4.12	-	-	-	-	-	6.42	6.52	-
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	-	-	-	3.518	4.018	-
Pot Cap-1 Maneuver	507	-	0	0	-	-	119	50	0
Stage 1	-	-	0	0	-	-	455	408	0
Stage 2	-	-	0	0	-	-	437	217	0
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	507	-	-	-	-	-	116	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	116	0	-
Stage 1	-	-	-	-	-	-	443	0	-
Stage 2	-	-	-	-	-	-	437	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.2	0	44.2
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	116	-	507	-	-	-
HCM Lane V/C Ratio	0.213	-	0.027	-	-	-
HCM Control Delay (s)	44.2	0	12.3	-	-	-
HCM Lane LOS	E	A	B	-	-	-
HCM 95th %tile Q(veh)	0.8	-	0.1	-	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	360	451	49	626	111	503	231	30	25	168	17
Future Volume (veh/h)	39	360	451	49	626	111	503	231	30	25	168	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	391	0	53	680	0	547	251	0	27	183	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	74	472		86	921		728	583		53	245	
Arrive On Green	0.04	0.25	0.00	0.05	0.26	0.00	0.21	0.31	0.00	0.03	0.13	0.00
Sat Flow, veh/h	1781	1870	1585	1781	3554	1585	3456	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	42	391	0	53	680	0	547	251	0	27	183	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1585	1728	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.4	12.2	0.0	1.8	10.8	0.0	9.2	6.6	0.0	0.9	5.8	0.0
Cycle Q Clear(g_c), s	1.4	12.2	0.0	1.8	10.8	0.0	9.2	6.6	0.0	0.9	5.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	74	472		86	921		728	583		53	245	
V/C Ratio(X)	0.57	0.83		0.62	0.74		0.75	0.43		0.51	0.75	
Avail Cap(c_a), veh/h	144	605		144	1379		1733	583		144	363	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	29.1	21.9	0.0	28.9	21.0	0.0	22.9	16.9	0.0	29.5	25.9	0.0
Incr Delay (d2), s/veh	2.5	7.5	0.0	2.6	1.2	0.0	1.6	0.5	0.0	2.7	4.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.1	9.4	0.0	1.4	7.2	0.0	6.1	4.5	0.0	0.7	4.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.6	29.3	0.0	31.5	22.2	0.0	24.5	17.4	0.0	32.2	30.5	0.0
LnGrp LOS	C	C		C	C		C	B		C	C	
Approach Vol, veh/h		433			733			798			210	
Approach Delay, s/veh		29.6			22.8			22.2			30.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	25.5	7.7	22.1	17.7	14.3	7.3	22.5
Change Period (Y+Rc), s	* 4.7	6.2	* 4.7	* 6.5	* 4.7	6.2	* 4.7	6.5
Max Green Setting (Gmax), s	* 5	14.0	* 5	* 20	* 31	12.0	* 5	24.0
Max Q Clear Time (g_c+I1), s	2.9	8.6	3.8	14.2	11.2	7.8	3.4	12.8
Green Ext Time (p_c), s	0.0	0.5	0.0	1.0	1.9	0.3	0.0	3.2

Intersection Summary	
HCM 6th Ctrl Delay	24.7
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	230	53	0	0	0
Future Vol, veh/h	0	230	53	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	250	58	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	58	0	-	0	308	58
Stage 1	-	-	-	-	58	-
Stage 2	-	-	-	-	250	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1546	-	-	-	684	1008
Stage 1	-	-	-	-	965	-
Stage 2	-	-	-	-	792	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1546	-	-	-	684	1008
Mov Cap-2 Maneuver	-	-	-	-	684	-
Stage 1	-	-	-	-	965	-
Stage 2	-	-	-	-	792	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1546	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	88.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱	↰	↑						↱	↱
Traffic Vol, veh/h	0	144	86	149	45	0	0	0	0	903	5	17
Future Vol, veh/h	0	144	86	149	45	0	0	0	0	903	5	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	-	-	100	150	-	-	-	-	-	-	-	65
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	157	93	162	49	0	0	0	0	982	5	18

Major/Minor	Minor2			Minor1					Major2			
Conflicting Flow All	-	1969	5	2094	1969	-			0	0	0	
Stage 1	-	1969	-	0	0	-			-	-	-	
Stage 2	-	0	-	2094	1969	-			-	-	-	
Critical Hdwy	-	6.52	6.22	7.12	6.52	-			4.12	-	-	
Critical Hdwy Stg 1	-	5.52	-	-	-	-			-	-	-	
Critical Hdwy Stg 2	-	-	-	6.12	5.52	-			-	-	-	
Follow-up Hdwy	-	4.018	3.318	3.518	4.018	-			2.218	-	-	
Pot Cap-1 Maneuver	0	~ 63	1078	~ 38	63	0			-	-	0	
Stage 1	0	~ 108	-	-	-	0			-	-	0	
Stage 2	0	-	-	~ 68	108	0			-	-	0	
Platoon blocked, %										-		
Mov Cap-1 Maneuver	-	~ 63	1078	-	63	-			-	-	-	
Mov Cap-2 Maneuver	-	~ 63	-	-	63	-			-	-	-	
Stage 1	-	~ 108	-	-	-	-			-	-	-	
Stage 2	-	-	-	-	108	-			-	-	-	

Approach	EB	WB	SB
HCM Control Delay, s$	513.5		
HCM LOS	F	-	

Minor Lane/Major Mvmt	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	63	1078	-	63	-	-
HCM Lane V/C Ratio	2.484	0.087	-	0.776	-	-
HCM Control Delay (s)	$ 815	8.7	-	161.8	-	-
HCM Lane LOS	F	A	-	F	-	-
HCM 95th %tile Q(veh)	15.5	0.3	-	3.5	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

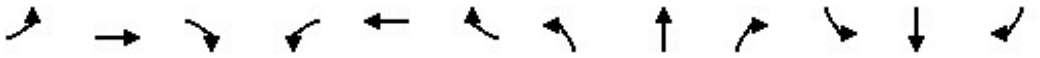
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	1027	0	0	171	667	5	3	177	0	0	0
Future Vol, veh/h	21	1027	0	0	171	667	5	3	177	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	None
Storage Length	150	-	-	-	-	0	-	-	75	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	1081	0	0	180	702	5	3	186	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	882	0	-	-	-	0	1656	2007	-
Stage 1	-	-	-	-	-	-	1125	1125	-
Stage 2	-	-	-	-	-	-	531	882	-
Critical Hdwy	4.12	-	-	-	-	-	6.42	6.52	-
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	-	-	-	3.518	4.018	-
Pot Cap-1 Maneuver	767	-	0	0	-	-	108	59	0
Stage 1	-	-	0	0	-	-	310	280	0
Stage 2	-	-	0	0	-	-	590	364	0
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	767	-	-	-	-	-	105	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	105	0	-
Stage 1	-	-	-	-	-	-	301	0	-
Stage 2	-	-	-	-	-	-	590	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.2	0	42.3
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	105	-	767	-	-	-
HCM Lane V/C Ratio	0.08	-	0.029	-	-	-
HCM Control Delay (s)	42.3	0	9.8	-	-	-
HCM Lane LOS	E	A	A	-	-	-
HCM 95th %tile Q(veh)	0.3	-	0.1	-	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	501	691	50	435	45	378	134	34	64	209	24
Future Volume (veh/h)	7	501	691	50	435	45	378	134	34	64	209	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	7	522	0	52	453	0	394	140	0	67	218	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	16	568		84	1214		550	472		97	276	
Arrive On Green	0.01	0.30	0.00	0.05	0.34	0.00	0.16	0.25	0.00	0.05	0.15	0.00
Sat Flow, veh/h	1781	1870	1585	1781	3554	1585	3456	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	7	522	0	52	453	0	394	140	0	67	218	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1585	1728	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.3	17.4	0.0	1.8	6.2	0.0	7.0	3.9	0.0	2.4	7.3	0.0
Cycle Q Clear(g_c), s	0.3	17.4	0.0	1.8	6.2	0.0	7.0	3.9	0.0	2.4	7.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	16	568		84	1214		550	472		97	276	
V/C Ratio(X)	0.43	0.92		0.62	0.37		0.72	0.30		0.69	0.79	
Avail Cap(c_a), veh/h	138	580		138	1322		1661	472		138	348	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	31.8	21.7	0.0	30.2	16.0	0.0	25.7	19.5	0.0	30.0	26.5	0.0
Incr Delay (d2), s/veh	6.5	19.7	0.0	2.8	0.2	0.0	1.8	0.3	0.0	3.3	9.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	14.6	0.0	1.4	3.9	0.0	4.9	2.8	0.0	1.8	6.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.3	41.4	0.0	32.9	16.2	0.0	27.5	19.8	0.0	33.3	35.8	0.0
LnGrp LOS	D	D		C	B		C	B		C	D	
Approach Vol, veh/h		529			505			534			285	
Approach Delay, s/veh		41.3			17.9			25.5			35.2	
Approach LOS		D			B			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.2	22.5	7.7	26.1	15.0	15.7	5.3	28.5
Change Period (Y+Rc), s	* 4.7	6.2	* 4.7	* 6.5	* 4.7	6.2	* 4.7	6.5
Max Green Setting (Gmax), s	* 5	14.0	* 5	* 20	* 31	12.0	* 5	24.0
Max Q Clear Time (g_c+I1), s	4.4	5.9	3.8	19.4	9.0	9.3	2.3	8.2
Green Ext Time (p_c), s	0.0	0.3	0.0	0.2	1.3	0.3	0.0	2.4

Intersection Summary	
HCM 6th Ctrl Delay	29.4
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	74	110	50	35	0
Future Vol, veh/h	0	74	110	50	35	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	80	120	54	38	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	174	0	-	0	227	147
Stage 1	-	-	-	-	147	-
Stage 2	-	-	-	-	80	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1403	-	-	-	761	900
Stage 1	-	-	-	-	880	-
Stage 2	-	-	-	-	943	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1403	-	-	-	761	900
Mov Cap-2 Maneuver	-	-	-	-	761	-
Stage 1	-	-	-	-	880	-
Stage 2	-	-	-	-	943	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1403	-	-	-	761
HCM Lane V/C Ratio	-	-	-	-	0.05
HCM Control Delay (s)	0	-	-	-	10
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection	
Int Delay, s/veh	403.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	80	29	191	116	0	0	0	0	615	2	44
Future Vol, veh/h	0	80	29	191	116	0	0	0	0	615	2	44
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	-	-	100	150	-	-	-	-	-	-	-	65
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	93	34	222	135	0	0	0	0	715	2	51

Major/Minor	Minor2			Minor1					Major2			
Conflicting Flow All	-	1432	2	1496	1432	-			0	0	0	
Stage 1	-	1432	-	0	0	-			-	-	-	
Stage 2	-	0	-	1496	1432	-			-	-	-	
Critical Hdwy	-	6.52	6.22	7.12	6.52	-			4.12	-	-	
Critical Hdwy Stg 1	-	5.52	-	-	-	-			-	-	-	
Critical Hdwy Stg 2	-	-	-	6.12	5.52	-			-	-	-	
Follow-up Hdwy	-	4.018	3.318	3.518	4.018	-			2.218	-	-	
Pot Cap-1 Maneuver	0	134	1082	~ 101	~ 134	0			-	-	0	
Stage 1	0	200	-	-	-	0			-	-	0	
Stage 2	0	-	-	~ 153	200	0			-	-	0	
Platoon blocked, %										-		
Mov Cap-1 Maneuver	-	134	1082	~ 43	~ 134	-			-	-	-	
Mov Cap-2 Maneuver	-	134	-	~ 43	~ 134	-			-	-	-	
Stage 1	-	200	-	-	-	-			-	-	-	
Stage 2	-	-	-	~ 79	200	-			-	-	-	

Approach	EB	WB	SB
HCM Control Delay, s	59.2	$ 1336.9	
HCM LOS	F	F	

Minor Lane/Major Mvmt	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	134	1082	43	134	-	-
HCM Lane V/C Ratio	0.694	0.031	5.165	1.007	-	-
HCM Control Delay (s)	77.6	8.4	$ 2061.6	143.7	-	-
HCM Lane LOS	F	A	F	F	-	-
HCM 95th %tile Q(veh)	3.9	0.1	25.6	7.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

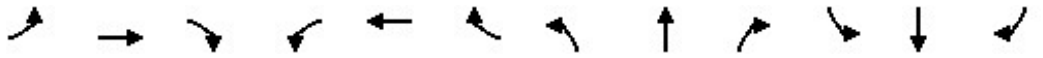
Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	667	0	0	257	970	30	2	179	0	0	0
Future Vol, veh/h	22	667	0	0	257	970	30	2	179	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	None
Storage Length	150	-	-	-	-	0	-	-	75	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	25	749	0	0	289	1090	34	2	201	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1379	0	-	-	-	0	1633	2178	-
Stage 1	-	-	-	-	-	-	799	799	-
Stage 2	-	-	-	-	-	-	834	1379	-
Critical Hdwy	4.12	-	-	-	-	-	6.42	6.52	-
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	-	-	-	3.518	4.018	-
Pot Cap-1 Maneuver	497	-	0	0	-	-	111	46	0
Stage 1	-	-	0	0	-	-	443	398	0
Stage 2	-	-	0	0	-	-	426	212	0
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	497	-	-	-	-	-	105	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	105	0	-
Stage 1	-	-	-	-	-	-	421	0	-
Stage 2	-	-	-	-	-	-	426	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.4	0	56.2
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	105	-	497	-	-	-
HCM Lane V/C Ratio	0.342	-	0.05	-	-	-
HCM Control Delay (s)	56.2	0	12.6	-	-	-
HCM Lane LOS	F	A	B	-	-	-
HCM 95th %tile Q(veh)	1.4	-	0.2	-	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	362	452	49	638	111	511	231	30	25	168	17
Future Volume (veh/h)	39	362	452	49	638	111	511	231	30	25	168	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	393	0	53	693	0	555	251	0	27	183	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	74	477		86	930		735	586		53	245	
Arrive On Green	0.04	0.26	0.00	0.05	0.26	0.00	0.21	0.31	0.00	0.03	0.13	0.00
Sat Flow, veh/h	1781	1870	1585	1781	3554	1585	3456	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	42	393	0	53	693	0	555	251	0	27	183	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1585	1728	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.4	12.4	0.0	1.8	11.2	0.0	9.4	6.7	0.0	0.9	5.9	0.0
Cycle Q Clear(g_c), s	1.4	12.4	0.0	1.8	11.2	0.0	9.4	6.7	0.0	0.9	5.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	74	477		86	930		735	586		53	245	
V/C Ratio(X)	0.57	0.82		0.62	0.74		0.76	0.43		0.51	0.75	
Avail Cap(c_a), veh/h	142	598		142	1364		1713	586		142	359	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	29.4	22.0	0.0	29.2	21.2	0.0	23.1	17.0	0.0	29.9	26.2	0.0
Incr Delay (d2), s/veh	2.5	7.5	0.0	2.7	1.3	0.0	1.6	0.5	0.0	2.7	4.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.1	9.5	0.0	1.4	7.5	0.0	6.3	4.5	0.0	0.7	4.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.0	29.4	0.0	31.9	22.4	0.0	24.7	17.5	0.0	32.6	31.0	0.0
LnGrp LOS	C	C		C	C		C	B		C	C	
Approach Vol, veh/h		435			746			806			210	
Approach Delay, s/veh		29.7			23.1			22.5			31.3	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	25.8	7.7	22.5	18.0	14.4	7.3	22.9
Change Period (Y+Rc), s	* 4.7	6.2	* 4.7	* 6.5	* 4.7	6.2	* 4.7	6.5
Max Green Setting (Gmax), s	* 5	14.0	* 5	* 20	* 31	12.0	* 5	24.0
Max Q Clear Time (g_c+I1), s	2.9	8.7	3.8	14.4	11.4	7.9	3.4	13.2
Green Ext Time (p_c), s	0.0	0.5	0.0	1.0	1.9	0.3	0.0	3.2

Intersection Summary	
HCM 6th Ctrl Delay	25.0
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	230	53	34	50	0
Future Vol, veh/h	0	230	53	34	50	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	250	58	37	54	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	95	0	-	0	327	77
Stage 1	-	-	-	-	77	-
Stage 2	-	-	-	-	250	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1499	-	-	-	667	984
Stage 1	-	-	-	-	946	-
Stage 2	-	-	-	-	792	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1499	-	-	-	667	984
Mov Cap-2 Maneuver	-	-	-	-	667	-
Stage 1	-	-	-	-	946	-
Stage 2	-	-	-	-	792	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1499	-	-	-	667
HCM Lane V/C Ratio	-	-	-	-	0.081
HCM Control Delay (s)	0	-	-	-	10.9
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Intersection	
Int Delay, s/veh	146.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	184	96	149	69	0	0	0	0	903	5	27
Future Vol, veh/h	0	184	96	149	69	0	0	0	0	903	5	27
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	-	-	100	150	-	-	-	-	-	-	-	65
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	200	104	162	75	0	0	0	0	982	5	29

Major/Minor	Minor2			Minor1					Major2			
Conflicting Flow All	-	1969	5	2121	1969	-			0	0	0	
Stage 1	-	1969	-	0	0	-			-	-	-	
Stage 2	-	0	-	2121	1969	-			-	-	-	
Critical Hdwy	-	6.52	6.22	7.12	6.52	-			4.12	-	-	
Critical Hdwy Stg 1	-	5.52	-	-	-	-			-	-	-	
Critical Hdwy Stg 2	-	-	-	6.12	5.52	-			-	-	-	
Follow-up Hdwy	-	4.018	3.318	3.518	4.018	-			2.218	-	-	
Pot Cap-1 Maneuver	0	~ 63	1078	~ 37	~ 63	0			-	-	0	
Stage 1	0	~ 108	-	-	-	0			-	-	0	
Stage 2	0	-	-	~ 66	108	0			-	-	0	
Platoon blocked, %										-		
Mov Cap-1 Maneuver	-	~ 63	1078	-	~ 63	-			-	-	-	
Mov Cap-2 Maneuver	-	~ 63	-	-	~ 63	-			-	-	-	
Stage 1	-	~ 108	-	-	-	-			-	-	-	
Stage 2	-	-	-	-	108	-			-	-	-	

Approach	EB	WB	SB
HCM Control Delay, s$	737.7		
HCM LOS	F	-	

Minor Lane/Major Mvmt	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	63	1078	-	63	-	-
HCM Lane V/C Ratio	3.175	0.097	-	1.19	-	-
HCM Control Delay (s)	$ 1118	8.7	-	285.1	-	-
HCM Lane LOS	F	A	-	F	-	-
HCM 95th %tile Q(veh)	20.7	0.3	-	6.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

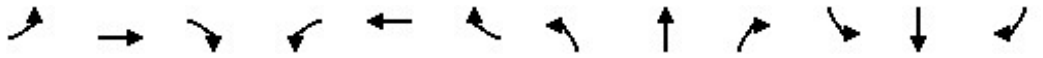
Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	1046	0	0	172	667	28	3	177	0	0	0
Future Vol, veh/h	42	1046	0	0	172	667	28	3	177	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	None
Storage Length	150	-	-	-	-	0	-	-	75	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	44	1101	0	0	181	702	29	3	186	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	883	0	-	-	-	0	1721	2072	-
Stage 1	-	-	-	-	-	-	1189	1189	-
Stage 2	-	-	-	-	-	-	532	883	-
Critical Hdwy	4.12	-	-	-	-	-	6.42	6.52	-
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	-	-	-	3.518	4.018	-
Pot Cap-1 Maneuver	766	-	0	0	-	-	98	54	0
Stage 1	-	-	0	0	-	-	289	261	0
Stage 2	-	-	0	0	-	-	589	364	0
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	766	-	-	-	-	-	92	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	92	0	-
Stage 1	-	-	-	-	-	-	273	0	-
Stage 2	-	-	-	-	-	-	589	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.4	0	64.2
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	92	-	766	-	-	-
HCM Lane V/C Ratio	0.355	-	0.058	-	-	-
HCM Control Delay (s)	64.2	0	10	-	-	-
HCM Lane LOS	F	A	A	-	-	-
HCM 95th %tile Q(veh)	1.4	-	0.2	-	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	512	700	50	436	45	378	134	34	64	209	24
Future Volume (veh/h)	7	512	700	50	436	45	378	134	34	64	209	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	7	533	0	52	454	0	394	140	0	67	218	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	16	575		83	1226		549	471		96	275	
Arrive On Green	0.01	0.31	0.00	0.05	0.34	0.00	0.16	0.25	0.00	0.05	0.15	0.00
Sat Flow, veh/h	1781	1870	1585	1781	3554	1585	3456	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	7	533	0	52	454	0	394	140	0	67	218	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1585	1728	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.3	17.9	0.0	1.9	6.2	0.0	7.0	3.9	0.0	2.4	7.3	0.0
Cycle Q Clear(g_c), s	0.3	17.9	0.0	1.9	6.2	0.0	7.0	3.9	0.0	2.4	7.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	16	575		83	1226		549	471		96	275	
V/C Ratio(X)	0.43	0.93		0.62	0.37		0.72	0.30		0.70	0.79	
Avail Cap(c_a), veh/h	137	575		137	1312		1648	471		137	345	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.0	21.8	0.0	30.4	16.0	0.0	26.0	19.7	0.0	30.2	26.8	0.0
Incr Delay (d2), s/veh	6.5	21.4	0.0	2.8	0.2	0.0	1.8	0.3	0.0	3.4	9.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	15.3	0.0	1.4	3.9	0.0	4.9	2.8	0.0	1.9	6.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.6	43.3	0.0	33.2	16.2	0.0	27.7	20.0	0.0	33.6	36.3	0.0
LnGrp LOS	D	D		C	B		C	C		C	D	
Approach Vol, veh/h		540			506			534			285	
Approach Delay, s/veh		43.2			17.9			25.7			35.7	
Approach LOS		D			B			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.2	22.6	7.7	26.5	15.0	15.8	5.3	28.9
Change Period (Y+Rc), s	* 4.7	6.2	* 4.7	* 6.5	* 4.7	6.2	* 4.7	6.5
Max Green Setting (Gmax), s	* 5	14.0	* 5	* 20	* 31	12.0	* 5	24.0
Max Q Clear Time (g_c+I1), s	4.4	5.9	3.9	19.9	9.0	9.3	2.3	8.2
Green Ext Time (p_c), s	0.0	0.3	0.0	0.0	1.3	0.3	0.0	2.4

Intersection Summary	
HCM 6th Ctrl Delay	30.2
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.


FEET
0
100
200
N
SIGHT DIST = 852'
SIGHT DISTANCE
LOOKING EAST


FEET
0
100
200
N
SIGHT DIST = 1000'
SIGHT DISTANCE
LOOKING WEST

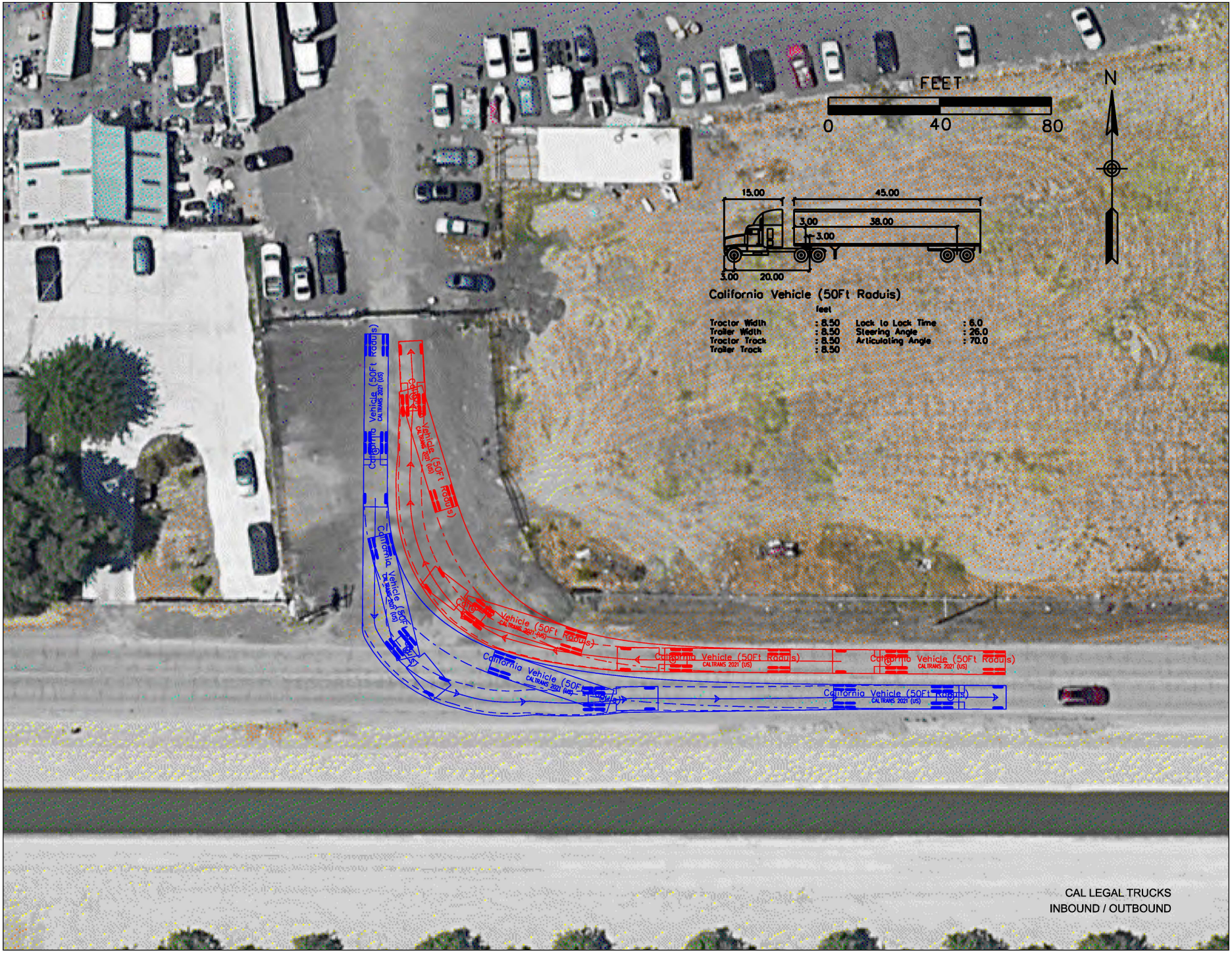
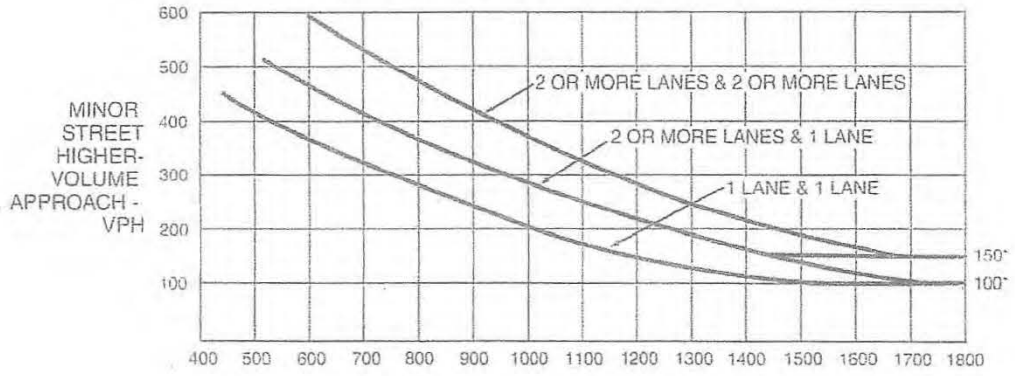

FEET
0
40
80
N
15.00
45.00
3.00
38.00
3.00
3.00
20.00
California Vehicle (50Ft Raduis)
feet
Tractor Width : 8.50
Trailer Width : 8.50
Tractor Track : 8.50
Trailer Track : 8.50
Lock to Lock Time : 6.0
Steering Angle : 26.0
Articulating Angle : 70.0
CAL LEGAL TRUCKS
INBOUND / OUTBOUND

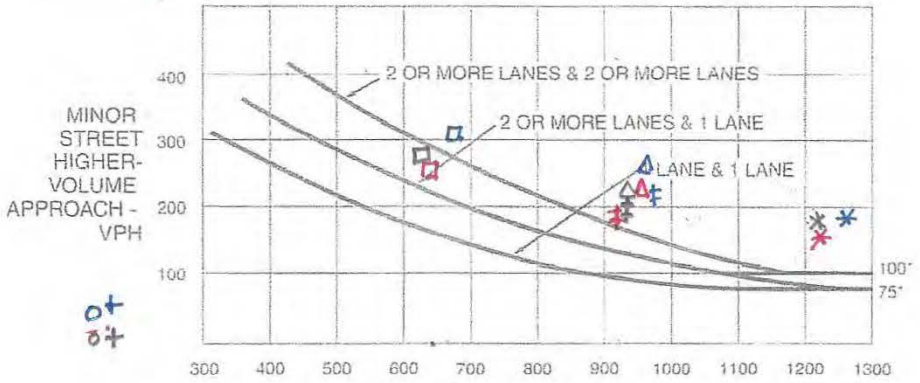
Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

	SITE	SB 99	NB 99
EXIST AM	o	□	‡
EXIST PM	+	△	*
BASELINE AM		□	‡
BASELINE PM		△	*
BASELINE + PROJ. AM	o	□	‡
BASELINE + PROJ. PM	+	△	*

Memorandum

WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME

To: Harwinder Pattar
Pattar Transport
4325 W Taylor Road
Turlock, CA 95380

From: Pranesh Tarikere, PE
Nicole Scappaticci, PE

Date: October 20, 2023

Subject: **Supplemental Traffic Memorandum for the Pattar Transport Project**

INTRODUCTION

This memorandum has been prepared to present a Supplemental Traffic Memorandum for the proposed Pattar Transport Project (Project). The Project site is located at 4325 W. Taylor Road in Stanislaus County CA (County), on an approximately 10-acre site, near the northwestern corner of the City of Turlock (City). The Project location is shown in **Attachment A**. The Project site was previously studied in the *Transportation Impact Analysis for Pattar Transport GPA Project* (KD Anderson & Associates, Inc., dated February 21, 2023) (Pattar Transport TIA), which is included in **Attachment B**.

This supplemental memorandum intends to provide a Project fair share contribution estimate for future improvements to the Taylor Road Interchange with State Route (SR) 99 as well as roadway segment operations under "General Plan" and "General Plan Plus Project" conditions.

PROJECT DESCRIPTION

The Project site's current land use designation is Agriculture with a zoning of A-2-20. Approximately 6.2 acres of the site is currently developed and operating with two existing structures, a concrete pavement area, and a gravel area for parking. The Project is requesting a General Plan Amendment and Rezone to Planned Development to permit the following existing operations and uses: outdoor parking for up to 80 trucks, a shop building for light truck maintenance (e.g., visual inspection, fluid level checks, tire changes) an office for the business, and parking for employees and drivers. Project access is provided via an existing driveway near 4325 W Taylor Road, approximately 0.25 miles west of State Route 99 (SR 99).

ROADWAY SEGMENT OPERATIONS

Future year General Plan build-out traffic conditions were used to determine Project effect of the roadway segments of Taylor Road between Taylor Court and Mountain View Road and Golden State Boulevard south of Taylor Road. General Plan baseline average daily traffic (ADT) volumes were obtained from the *Best RV Center Project Traffic Impact Analysis* (Pinnacle Traffic Engineering, December 31, 2018) (Best RV Center TIA). Taylor Road east of SR 99 to west of Golden State Boulevard is currently two lanes and Golden State Boulevard south of Taylor Road is currently four lanes. Under City of Turlock General Plan buildout conditions, Taylor road west of SR 99 would be widened to a four-lane expressway, Taylor Road between SR 99 and Golden State Boulevard would be widened to a six-lane expressway, and Golden State Boulevard would be widened to a six-lane expressway. Taylor Road east of Golden State Boulevard would remain a two-lane collector.

Project ADT was added to the General Plan condition roadway segments based on the Project trip generation and distribution found in the Pattar Transport TIA to obtain General Plan Plus Project roadway segment ADT. The Pattar Transport TIA estimated a daily Project trip generation of 66 trucks and 109 passenger cars. A

ATTACHMENT III

passenger car equivalent (PCE) of 2.0 was applied to the Project's truck traffic for a total daily trip generation of 241. The Project ADT added to the study roadway segments and to SR 99 is shown on **Attachment A**.

Table 1 provides roadway segment level of service (LOS) under General Plan and General Plan Plus Project conditions.

Table 1. LOS Based on Daily Traffic Thresholds

Segment	General Plan Conditions Classification[1]	Max. ADT for Acceptable LOS[2]	Project ADT (PCE)	General Plan		General Plan Plus Project	
				ADT[1]	LOS	ADT	LOS
Taylor Rd west of SR 99	4-Lane Expressway	35,000	241	26,100	B	26,341	B
Taylor Rd between SR 99 and Golden State Blvd	6-Lane Expressway	52,000	44	51,810	D	51,854	D
Taylor Rd east of Golden State Blvd	2-Lane Collector	11,000	26	8,196	B	8,222	B
Golden State Blvd south of Taylor Rd	6-Lane Expressway	52,000	18	36,730	B	36,748	B

Notes:
[1] Source: Table 7 of the Best RV Center Project Traffic Impact Analysis (Pinnacle Traffic Engineering, December 31, 2018)
[2] Source: Table 3.3-1 of the City of Turlock General Plan Draft Environmental Impact Report (June 2012)

As shown in **Table 1**, the study roadway segments are projected to operate acceptably under future General Plan and General Plan Plus Project conditions.

PROJECT FAIR SHARE CONTRIBUTION

The Pattar Transport TIA identified LOS F operations at the Southbound SR 99 Ramps & Taylor Road and Northbound SR 99 Ramps & Taylor Road under existing and "plus Project" conditions. Therefore, City and County staff has requested that the Project include a determination of the Project's fair share percentage towards the future SR 99 & Taylor Road interchange improvements.

The City of Turlock *Capital Facilities Fee Nexus Study* (November 12, 2013) provides an estimate of future improvements at the SR 99 & Taylor Road interchange of $10,363,703. Consistent with fair share calculations performed in the Best RV Center TIA for the SR 99 & Taylor Road interchange, Project fair share has been calculated based on the number of daily Project trips estimated to use the interchange ramps. The Project is estimated to add a total ADT of 197 passenger car equivalent trips to the interchange ramps. Based on the City's General Plan conditions ADT contained in the Best RV Center TIA, the SR 99 interchange ramps would experience a future ADT of 25,513 (51,854 - 26,341). Therefore, the Project would comprise approximately 0.77% (197 / 25,513) of the General Plan Plus Project volumes using the interchange. The interchange improvements cost from the 2013 Nexus Study was updated to a present value using a rate of 3.4% per year, as calculated from construction cost index data from Engineering News-Record. The Project fair share contribution calculation is shown below:

Present Value of Taylor Rd/SR 99 Interchange Project = Past Value$*(1+r)^n$

$= \$10,363,703*(1+0.034)^{(2023-2013)} = \$14,478,393$

Project Fair Share Contribution: $14,478,393 * 0.77% = $111,484

The Project would pay the fair-share contribution toward the future SR 99 & Taylor Road interchange improvements directly to the City of Turlock.

ATTACHMENT A

PROJECT LOCATION AND STUDY FACILITIES

Project Location and Study Vicinity

Pattar Transport Supplemental Traffic Memorandum
Stanislaus County, CA
October 2023

Attachment A

WOOD RODGERS

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Attachment B

Transportation Impact Analysis for Pattar Transportation

Of

Attachment III

Supplemental Traffic Memorandum for the Pattar Transportation Project

ON FILE WITH PLANNING AND COMMUNITY DEVLEOPMENT DEPARTMENT*

*Attachment B of Attachment III has been removed as it is a duplicate of Attachment II of this document

CENTRAL CALIFORNIA INFORMATION CENTER
California Historical Resources Information System
Department of Anthropology – California State University, Stanislaus
One University Circle, Turlock, California 95382
(209) 667-3307

Alpine, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus & Tuolumne Counties

Date: 3/17/2021

Records Search File#:11708N
Project: Rezone for 4325 W. Taylor Road, Turlock, CA; GDR Project No. 20067; SW ¼ Section 32, T4S R10E

Sean Harp, Principal Land Surveyor
3525 Mitchell Road, Suite G
Ceres, CA 95307
209-538-3360 sean@gdrengr.com

Billing address; P.O. Box 1033
Ceres, CA 95307

Dear Mr. Harp:

We have conducted a records search as per your request for the above-referenced project area located on the Ceres USGS 7.5-minute quadrangle map in Stanislaus County.

Search of our files includes review of our maps for the specific project area and the immediate vicinity of the project area, and review of the following:

National Register of Historic Places (NRHP)
California Register of Historical Resources (CRHR)
California Inventory of Historic Resources (1976)
California Historical Landmarks
California Points of Historical Interest listing
Office of Historic Preservation Built Environment Resource Directory (BERD) and the Archaeological Determinations of Eligibility (ADOE)
Survey of Surveys (1989)
Caltrans State and Local Bridges Inventory
General Land Office Plats
Other pertinent historic data available at the CCaIC for each specific county

The following details the results of the records search:

Prehistoric or historic resources within the project area:

- There are no formally recorded prehistoric or historic archaeological resources or historic buildings within the project area.

- The General Land Office Survey Plat for T4S R10E does not show any historic features within Section 32.

- The Official Map of the County of Stanislaus, California (1906) shows O. McHenry as the historic landowner at that time.

- The 1916 edition of the Ceres USGS quadrangle shows one building within the project area that would be at least 105 years in age or older; the Southern Pacific Railroad is shown on the eastern side of the project, and both Taylor Road and Washington Avenue are referenced as established thoroughfares. The 1953 edition of the Ceres quadrangle references an additional four buildings within the project area that would be 68 years in age (or older). We have no further information on file regarding these possible historical resources.

Prehistoric or historic resources within the immediate vicinity of the project area: The only historical resource that has been recorded is a segment of Lateral No. 3 south of Taylor Road. We must caution that little archaeological or historical research has been conducted on private parcels in this portion of Stanislaus County.

Resources that are known to have value to local cultural groups: None has been formally reported to the Information Center.

Previous investigations within the project area: None has been formally reported to the Information Center.

Recommendations/Comments:

Please be advised that a historical resource is defined as a building, structure, object, prehistoric or historic archaeological site, or district possessing physical evidence of human activities over 45 years old. Since the project area has not been subject to previous investigations, there may be unidentified features involved in your project that are 45 years or older and considered as historical resources requiring further study and evaluation by a qualified professional of the appropriate discipline.

If the current project does not include ground disturbance, further study for archaeological resources is not recommended at this time. If ground disturbance is considered a part of the current project, we recommend further review for the possibility of identifying prehistoric or historic-era archaeological resources.

If the proposed project contains buildings or structures that meet the minimum age requirement (45 years in age or older) it is recommended that the resource/s be assessed by a professional familiar with architecture and history of the county. Review of the available historic building/structure data has included only those sources listed above and should not be considered comprehensive.

If at any time you might require the services of a qualified professional the Statewide Referral List for Historical Resources Consultants is posted for your use on the internet at http://chrisinfo.org

If archaeological resources are encountered during project-related activities**,** work should be temporarily halted in the vicinity of the discovered materials and workers should avoid altering the materials and their context until a qualified professional archaeologist has evaluated the situation and provided appropriate recommendations. Project personnel should not collect cultural resources.

If human remains are discovered, California Health and Safety Code Section 7050.5 requires you to protect the discovery and notify the county coroner, who will determine if the find is Native American. If the remains are recognized as Native American, the coroner shall then notify the Native American Heritage Commission (NAHC). California Public Resources Code Section 5097.98 authorizes the NAHC to appoint a Most Likely Descendant (MLD) who will make recommendations for the treatment of the discovery.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the State 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.

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

We thank you for contacting this office regarding historical resource preservation. Please let us know when we can be of further service. Thank you for completing the **Access Agreement Short Form.**

Note: Billing will be transmitted separately via email from the Financial Services office ($150.00), payable within 60 days of receipt of the invoice.

If you wish to include payment by Credit Card, you must wait to receive the official invoice from Financial Services so that you can reference the CMP # (Invoice Number), and then contact the link below:

https://commerce.cashnet.com/ANTHROPOLOGY

Sincerely,

E. A. Greathouse

E. A. Greathouse, Coordinator
Central California Information Center
California Historical Resources Information System

* Invoice Request sent to: ARBilling@csustan.edu, CSU Stanislaus Financial Services