INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

El Monte & Crawford Development Project

Prepared for:

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PROJECT INFORMATION

This document is the Initial Study for the potential environmental effects of the Dinuba El Monte & Crawford Development Project (Project) proposed in the City of Dinuba (City). To accommodate this Project, the City will need to approve a General Plan Amendment, Zone Change, and Tentative Subdivision Map. The City of Dinuba will act as the Lead Agency for this project pursuant to the California Environmental Quality Act (CEQA) and the CEQA Guidelines. Copies of all materials referenced in this report are available for review in the project file during regular business hours at the Dinuba Public Works Department at 1088 E. Kamm Ave, Dinuba, CA 93618.

Project title

El Monte & Crawford Development Project

Lead agency name and address

City of Dinuba
1088 E Kamm Ave
Dinuba, CA 93618

Contact person and phone number

Karl Schoettler
City of Dinuba
(559) 591-5924
Email: karl@weplancities.com

Project location

The City of Dinuba lies in the Central San Joaquin Valley region, in the northwestern portion of Tulare County (see Figure 1). The City is approximately eight miles northeast of State Route (SR) 99 and 5.5 miles west of SR 63. The proposed Project lies in the eastern part of the City, northeast of East El Monte Way and Crawford Avenue/Road 88 (see Figure 2). The proposed 96-lot single-family residential subdivision and 4.74-acre commercial area will be located on approximately 27.2 acres of Assessor's Parcel Number 013-090-037 (see Figure 3).

Project sponsor's name/address

Ken Turner
810 W. Main Street
Visalia, CA 93291

General plan designation

Medium Density Residential, Community Commercial

Zoning

R-1-6 (One-Family Residential), C-3 (Community Commercial)

Project Description

The proposed Project consists of development of 96 single-family residences, approximately 4.74 acres of commercial development, approximately 1.11-acre neighborhood park, a ponding basin, and other associated improvements. The Project would require site approval of a General Plan Amendment, Zone Change, and Tentative Subdivision Map for the respective residential and commercial areas (see Figure 3 for Site Plan).

Project Components

- Approval of a General Plan Amendment for a southern portion of the site from "Community Commercial" to "Medium Density Residential"
- Approval of Zone change for a southern portion of the site from C-3 (Community Commercial) to R-1-6 (One-Family Residential)
- Approval of Tentative Subdivision Map
- Development of 96 single-family residential units
- Development of 4.74 acres of commercial area, for a buildout of up to 82,604 square feet of commercial space
- Development of a 1.11-acre neighborhood park
- Development of a 0.81-acre storm basin
- Construction of internal roads, landscaping, and a block wall per City Standards
- Construction of curb, gutter and sidewalks, per City Standards

- Connection to City utilities, including stormwater, sewer and water

Site Circulation

Access to the proposed commercial would be provided along El Monte Way and access to the proposed residential development would be provided along Crawford Avenue.

Surrounding Land Uses/Existing Conditions

The proposed Project site supports recently disked inactive agricultural land.

Lands surrounding the proposed Project are described as follows:

- North: Single family residences
- South: General commercial, Dinuba Junior Academy School
- East: Agricultural land, vacant land, commercial building
- West: Single family residences, general commercial

Other Public Agencies Involved

- Approval of a General Plan Amendment by the City of Dinuba
- Approval of a Zone Change by the City of Dinuba
- Approval of a Site Plan Review by the City of Dinuba
- Approval of a Tentative Subdivision Map by the City of Dinuba
- Approval of Building Permits by the City of Dinuba
- Adoption of a Mitigated Negative Declaration by the City of Dinuba
- State of California Native American Heritage Commission
- San Joaquin Valley Air Pollution Control District
- Central Valley Regional Water Quality Control Board
- Compliance with other federal, state and local requirements

Tribal Consultation

The City of Dinuba has not received any project-specific requests from any Tribes in the geographic area with which it is traditionally and culturally affiliated with or otherwise to be notified about projects in the City of Dinuba.

Figure 1 – Location

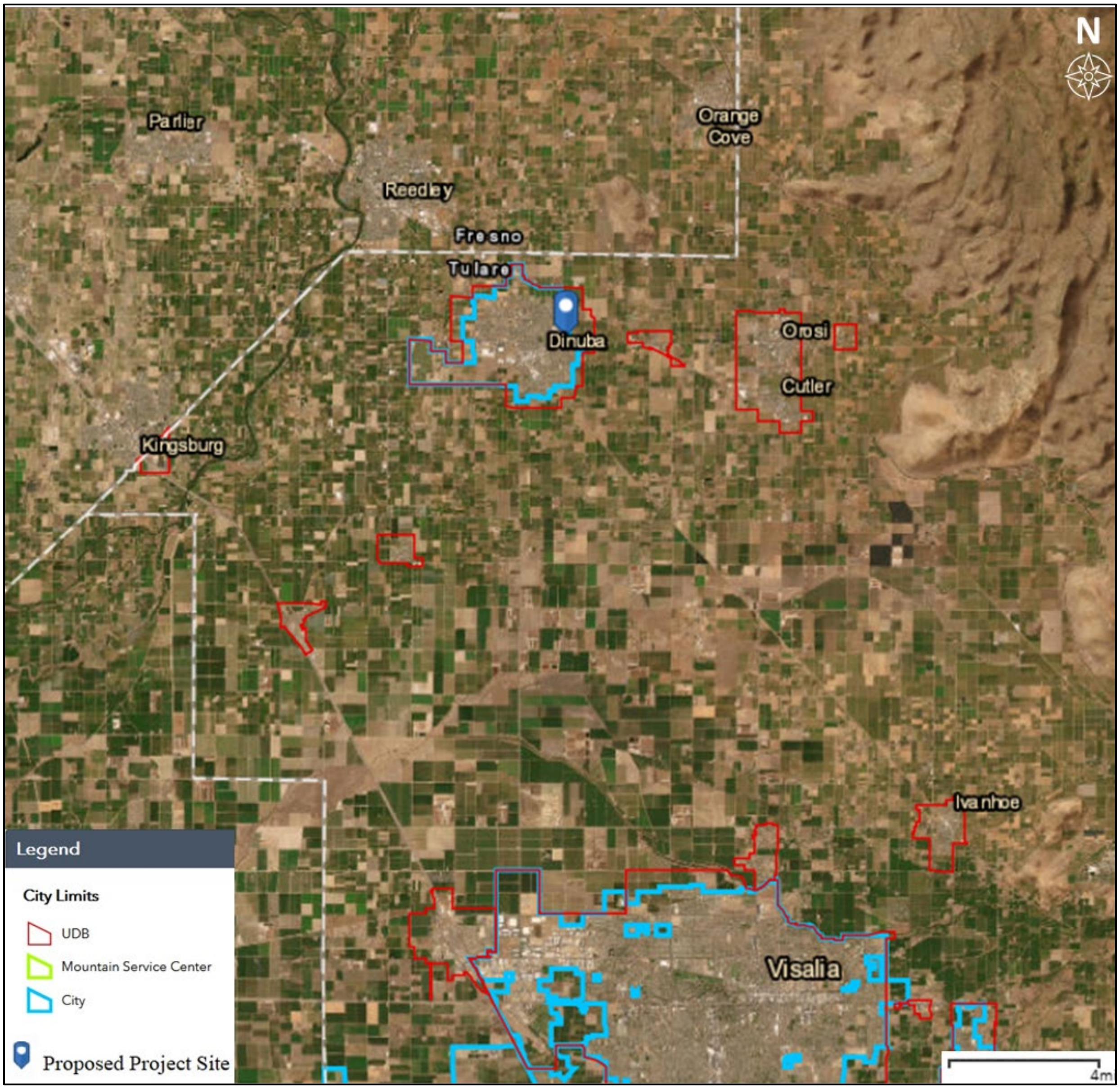

Figure 2 – Site Aerial

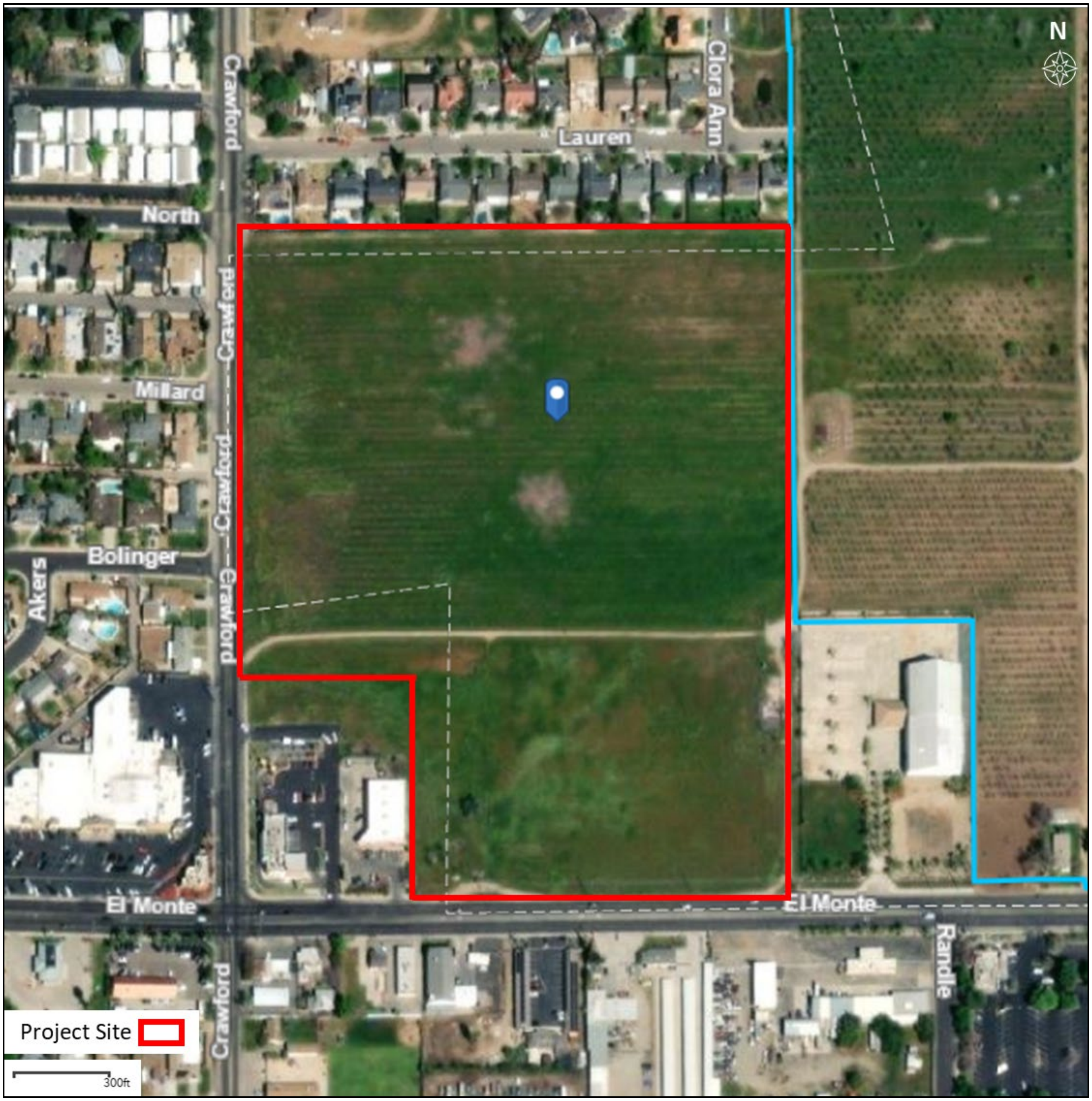

Figure 3 – Site Plan

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 Resources and Forest 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

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.

Karl Schoettler
Planning Consultant
City of Dinuba

10/16/23
Date

ENVIRONMENTAL CHECKLIST

I. AESTHETICS

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
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 regulations governing scenic quality?	☐	☐	☒	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

ENVIRONMENTAL SETTING

The proposed Project site is located in the eastern part of the City of Dinuba, in the northeastern portion of Tulare County in the central San Joaquin Valley region. The site is surrounded by residential, commercial, and agricultural uses. The Project site is generally flat and is bounded to the west by Crawford Avenue and to the south by El Monte Avenue.

Land uses surrounding the proposed Project are:

- North: Single family residences
- South: General commercial, Dinuba Junior Academy School

- East: Agricultural land, vacant land, commercial building
- West: Single family residences, general commercial

RESPONSES

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

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

Less Than Significant Impact. A scenic vista is defined as a viewpoint that provides expansive views of highly valued landscape for the benefit of the general public. The site consists of recently disked inactive agricultural land. The City of Dinuba does not identify any scenic vistas within the Project area. Tulare County identifies El Monte Way/Avenue 416 as part of a system of County scenic routes according to Figure 7.1 of the Tulare County General Plan.[1] However, as the proposed Project is located within city of Dinuba limits and surrounded with similar residential and commercial uses, views from this roadway to scenic resources would be unaffected by the development of the Project. There are no officially designated or eligible State Scenic Highways near the Project area.

Therefore, the Project has ***less than significant impact*** on scenic vistas or designated scenic resources or highways.

Mitigation Measures: None are required.

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 regulations governing scenic quality?

Less than Significant Impact. The proposed Project would alter the existing visual character of public views of the site from vacant land to fully developed single-family residences and commercial buildings. Upon approval of the General Plan Amendment, Zone Change, and Tentative Subdivision Map, the Project design is subject to the City's Design Guidelines adopted for the City's General Plan which apply to site layout, building design, landscaping, interior street design, lighting, parking and signage. Per the

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[1] Tulare County General Plan

City's Design Guidelines, detailed architectural plans, color palettes and building materials as well as landscaping plans will be submitted by the Project developer to the City of Dinuba. The plans shall be required prior to issuance of any building permits. The review shall be substantially based on the building plans and elevations illustrated within this document.

The improvements such as those proposed by the Project are typical of City urban areas and are generally expected from residents of the City. These improvements would not substantially degrade the visual character of the area and would not diminish the visual quality of the area, as they would be consistent with the existing urban visual setting. The proposed Project itself is not visually imposing against the scale of the existing adjacent residential and commercial buildings and nature of the surrounding area.

Therefore, the Project would have ***less than significant impacts*** on the visual character of the area.

Mitigation Measures: None are required.

d) <u>Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?</u>

Less Than Significant Impact. Nighttime lighting is necessary to provide and maintain safe, secure, and attractive environments; however, these lights have the potential to produce spillover light and glare and waste energy, and if designed incorrectly, could be considered unattractive. Light that falls beyond the intended area is referred to as "light trespass". Types of light trespass include spillover light and glare. Minimizing all these forms of obtrusive light is an important environmental consideration. A less obtrusive and well-designed energy efficient fixture would face downward, emit the correct intensity of light for the use, and incorporate energy timers.

Spillover light is light emitted by a lighting installation that falls outside the boundaries of the property on which the installation is sited. Spillover light can adversely affect light-sensitive uses, such as residential neighborhoods at nighttime. Because light dissipates as it travels from the source, the intensity of a light fixture is often increased at the source to compensate for the dissipated light. This can further increase the amount of light that illuminates adjacent uses. Spillover light can be minimized by using only the level of light necessary, and by using cutoff type fixtures or shielded light fixtures, or a combination of fixture types.

Glare results when a light source directly in the field of vision is brighter than the eye can comfortably accept. Squinting or turning away from a light source is an indication of glare. The presence of a bright light in an otherwise dark setting may be distracting or annoying, referred to as discomfort glare, or it may diminish the ability to see other objects in the darkened environment, referred to as disability glare.

Glare can be reduced by design features that block direct line of sight to the light source and that direct light downward, with little or no light emitted at high (near horizontal) angles, since this light would travel long distances. Cutoff-type light fixtures minimize glare because they emit relatively low-intensity light at these angles.

Current sources of light in the Project area are from adjacent urban uses, including streetlights from the residences to the north and west, and commercial buildings to the southwest and south. The Project would necessitate street lighting and such lighting that would be subject to City standards. Accordingly, potential impacts would be considered ***less than significant***.

Mitigation Measures: None are required.

II. AGRICULTURE AND FOREST RESOURCES

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	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?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
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))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
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?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The proposed Project site is located in eastern Dinuba in Tulare County within the San Joaquin Valley, California. The proposed Project site is along the eastern boundary of the City, adjacent to County agricultural land.

RESPONSES

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?

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

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))?

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

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?

No Impact. The northern portion of the site is designated as *Farmland of Statewide Importamce*, while the southern portion of the site is designated as *Semi-Agricultural and Rural* by the State Farmland Mapping and Monitoring Program (FMMP).[2] No *Prime Farmland, Unique Farmland* or *Farmland of Local Importance*, or land under Williamson Act contracts occur in the proposed Project area.

The site is located within City limits and designated for residential and commercial urban uses, such as the proposed Project. As such, potential impacts resulting from the conversion of agricultural land was analyzed in the City of Dinuba General Plan EIR (SCH#2006091107) and a Statement of Overriding Conditions was adopted.

The Project site is on the valley floor and as such, does not contain forest or timberland. As such, there are ***no impacts***.

Mitigation Measures: None are required.

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[2] California Important Farmland Finder, Department of Conservation. https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed July 2023.

III. AIR QUALITY

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
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?	☐	☐	☒	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d. Result in other emissions (such as those leading to odors or adversely affecting a substantial number of people)?	☐	☐	☒	☐

The following information was provided by an Air Quality, Health Risk Analysis, Greenhouse Gas, and Energy Technical Memorandum that was performed on behalf of the proposed Project by Johnson, Johnson & Miller Air Quality Consulting Services, report date July 30, 2023. The report can be read in its entirety in Appendix A.

RESPONSES

a) <u>Conflict with or obstruct implementation of the applicable air quality plan?</u>

b) <u>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?</u>

c) <u>Expose sensitive receptors to substantial pollutant concentrations?</u>

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.

Contribution to Air Quality Violations

As discussed in Impact III(b) 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 during the construction phase (see Table 1). Similarly, emissions of ROG, NO_X, CO, SO_X, $PM_{2.5}$ or PM_{10} during operations would not exceed any applicable threshold of significance (see Table 2). Therefore, regarding this criterion, the Project would be considered less than significant.

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 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 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. This rule reduces the impact of NO_X and PM_{10} emissions from growth within the SJVAB. The rule places application and emission reduction requirements on development projects meeting applicability criteria in order to reduce emissions through on-site mitigation, off-site District-administered projects, or a combination of the two.

Conclusion

The proposed 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 with regards to this criterion.

The Project's regional operational emissions would not exceed any applicable SJVAPCD prior to the incorporation of mitigation measures (see Impact III(b)). Therefore, the Project would be considered consistent with the existing AQPs.

Based on the findings above, the proposed Project would not conflict with or obstruct implementation of the applicable air quality plan. The impact would be ***less than significant***.

Mitigation Measures: None are required.

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?

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 construction and operation are ROG, NO_X, PM_{10}, and $PM_{2.5}$.

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. 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 regional thresholds below to address if the Project would result in a cumulatively considerable net increase of any criteria pollutant (including ozone precursors) of concern.

Criteria Pollutant Emission Estimates

Construction Emissions (Regional)

Construction emissions associated with the development envisioned for the proposed Project are shown in Table 1 prior to the incorporation of any mitigation.

Table 1
Summary of Construction Emissions of Criteria Air Pollutants – Unmitigated[3]

Emissions Source	Emissions (Tons/Year)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Project Construction (2023)	0.17	1.64	1.56	< 0.01	0.26	0.14
Project Construction (2024)	0.22	1.74	2.27	< 0.01	0.16	0.08
Project Construction (2025)	0.82	0.21	0.29	< 0.01	0.02	0.01
Total Construction Duration						
Project Total	**1.21**	**3.59**	**4.12**	**< 0.01**	**0.44**	**0.23**
Significance Thresholds	**10**	**10**	**100**	**27**	**15**	**15**
Exceed Significance Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**
Notes:						

[3] El Monte Way & Crawford Ave Mixed-Use Project in Dinuba. Air Quality, Health Risk Analysis, Greenhouse Gas, and Energy Technical Memorandum. Johnson Johnson and Miller Air Quality Consulting Services. Prepared on July 30, 2023. Appendix A.

PM_{10} and $PM_{2.5}$ emissions are from the mitigated output to reflect compliance with Regulation VIII—Fugitive PM_{10} Prohibitions.
Source of Emissions: Modeling Assumptions and CalEEMod Output Files (Attachment A of Appendix 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 July 21, 2023.

As shown in Table 1 above, emissions from construction activities associated with the proposed Project would fall below the significance thresholds. Therefore, regional and cumulative impacts associated with construction of the proposed Project are less than significant.

Operational Emissions (Regional)

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 associated with the proposed Project are shown in Table 2. Operational emissions were estimated using a full buildout scenario in the earliest year of operations (2024), which provides a conservative estimate of emissions and resulting potential impacts.

Table 2
Summary of Operational Emissions of Criteria Air Pollutants – Unmitigated[4]

Source	Emissions (tons/year)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area	1.23	0.04	0.83	0.00	0.00	0.00
Energy	0.01	0.21	0.11	0.00	0.02	0.02
Mobile (Automobiles)	3.7	3.17	21.54	0.04	3.38	0.89
Annual Total (2024)	**4.94**	**3.42**	**22.48**	**0.04**	**3.4**	**0.91**
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 earliest operational year for the proposed Project.
Source: Modeling Assumptions and CalEEMod Output Files (Attachment A of Appendix A).

[4] Ibid.

As shown in Table 2, operational emissions would not exceed the applicable SJVAPCD thresholds of significance for ROG, NO_X, CO, SO_X, PM_{10}, or $PM_{2.5}$. Therefore, the impact from operations of the Project would be ***less than significant***.

Conclusion

As shown in Table 1, the Project's regional emissions would not exceed the applicable regional criteria pollutant emissions quantitative thresholds during Project construction. During operations, the Project would not exceed the applicable regional criteria pollutant emissions quantitative thresholds (see Table 2). Therefore, the impact would be ***less than significant***.

Mitigation Measures: None are required.

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.

The closest existing sensitive receptors to the Project site include residential receptors, the closest of which include existing single-family homes located within approximately 50 feet north of the Project boundary. Land uses surrounding the Project site are described below.

- North – The nearest residence to the Project boundary is approximately 50 feet (0.01 mile) to the north. Directly north of the Project are 55 homes within 0.25 mile, a small ponding basin and open graded land with several streets laid out for future development. To the northeast is all farmland with fruit trees. To the northwest is a mobile home park with 128 mobile homes within 0.25 mile of the Project. Just north of the mobile home park are 40 single family residential homes within 0.25 mile of the Project. Just beyond 0.25 mile to the northwest of the Project are two (2) schools: Kennedy Elementary School and Washington Intermediate School.

- East – The nearest residence to the east of the Project is approximately 105 feet (0.02 miles) from the Project boundary. To the east of the Project is the Island Event Center, five (5) homes and mostly farmland with fruit trees within 0.25 mile.

- South – The nearest residence to the south of the Project is approximately 105 feet (0.02 miles) from the Project boundary. South of the Project is Dinuba Junior Academy Christian School, El Monte Motel, G Auto Glass, StorMax of Dinuba, Express Car Rental, Jack in the Box, Oliver's Car Wash, Dinuba Auto Plaza, Dinuba Feed and Produce and Mercantile Row Shopping Center with several more businesses. South of the businesses are approximately 140 homes within 0.25 miles of the Project. Within 0.50 mile of the Project to the southwest is Dinuba High School and Jefferson Elementary School to the south.
- West – The nearest residence to the west of the project is approximately 475 feet (.09 miles) from the Project boundary. West of the project are 105 homes within 0.25 mile and several businesses including a McDonalds, Autozone Auto Parts, Tulare County WIC Program, Camaron Pelado Restaurant and United Market Shopping Center with: United Market Grocery Store, Me-n-Ed's Pizza, Tony's Smoke Shop, Shoe Master, Liquor Locker, The Hair Lounge and Las Espuelas Restaurant.

See Attachment B (Construction Health Risk Assessment and Operational Health Risk Screening) of Appendix A for a graphical representation of the sensitive receptor locations within approximately ¼-mile of 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.

<u>Construction: Localized Concentrations of PM_{10}, $PM_{2.5}$, CO, SO_X, and NO_X</u>

Local construction impacts would be short-term in nature lasting only during the duration of construction. As shown in Table 3 below, on-site construction emissions would be less than 100 pounds per day for each of the criteria pollutants. To present a conservative estimate, on-site emissions for on-road construction vehicles were included in the localized analysis. Based on the SJVAPCD's guidance, the construction emissions would not cause an ambient air quality standard violation.

Table 3
Localized Concentrations of PM_{10}, $PM_{2.5}$, CO, and NO_X for Construction – Unmitigated[5]

Emission Source	On-site Emissions (pounds per day)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Highest Daily (2023)	5.66	52.89	52.51	0.1	10.95	6.29
Highest Daily (2024)	2.56	20.29	26.59	0.04	1.79	1.00
Highest Daily (2025)	46.82	12.47	17.25	0.03	1.35	0.60
Total Construction Duration						
Highest Daily Maximum	**46.82**	**52.89**	**52.51**	**0.1**	**10.95**	**6.29**
Significance Thresholds	**—**	**100**	**100**	**100**	**100**	**100**
Exceed Significance Thresholds?	**—**	**No**	**No**	**No**	**No**	**No**

Note: Overlap of construction activities is based on the construction schedule shown in Table 2 and Attachment A.

Source of Emissions: Modeling Assumptions and CalEEMod Output Files (Attachment A). Maximum daily emissions represent the maximum daily emissions between the Summer and Winter scenarios.

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 July 21, 2023.

Operation: Localized Concentrations of PM_{10}, $PM_{2.5}$, CO, SO_X, 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 would occur at project buildout, which was modeled for the year 2024 (the earliest year of operations). 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. Motor vehicle emissions are estimated for on-site operations using trip lengths for on-site travel and ¼-mile of off-site emissions.

[5] Ibid.

Table 4
Localized Concentrations of PM_{10}, $PM_{2.5}$, CO, and NO_X for Operations[6]

Source	On-site Emissions (pounds per day)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area	7.35	0.88	9.36	0.01	0.07	0.07
Energy	0.07	1.16	0.58	0.01	0.09	0.09
Mobile (Automobiles)	22.92	16.11	134.08	0.23	18.55	4.86
Total	**30.34**	**18.15**	**144.02**	**0.25**	**18.71**	**5.02**
Significance Thresholds	—	**100**	**100**	**100**	**100**	**100**
Exceed Significance Thresholds?	—	**No**	**Yes**	**No**	**No**	**No**

Source of Emissions: Modeling Assumptions and CalEEMod Output Files (Attachment A of Appendix 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 July 21, 2023.

The Project would not exceed SJVAPCD screening thresholds for localized operational criteria pollutant impacts for NO_X, SO_X, PM_{10}, or $PM_{2.5}$; however, emissions would exceed the localized screening thresholds for CO. Specifically, mobile-source emissions are the main contributor to this exceedance in from the proposed mixed-use Project. A project that would not create or contribute to a carbon monoxide hotspot would not be considered to have a localized CO impact. As discussed below, a CO hotspot is not anticipated to occur in the Project vicinity and impacts would be less than significant.

Localized high levels of CO are associated with traffic congestion and idling or slow-moving vehicles. A CO hotspot represents a condition wherein high concentrations of CO may be produced by motor vehicles accessing a congested traffic intersection under heavy traffic volume conditions. It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when idling at intersections. Accordingly, vehicle emissions standards have become increasingly more stringent.

The analysis prepared for CO attainment in the South Coast Air Basin (SoCAB) by the South Coast Air Quality Management District (SCAQMD) can be used to assist in evaluating potential for CO exceedances in other air basins. Although the SoCAB and the SCAQMD would not be the applicable air basin or air district for the proposed Project, the CO hotspot analysis contained in the SCAQMD 1992 CO

[6] Ibid.

Plan can still be used to determine potential CO hotspot impacts from the proposed Project. This is because CO exceedances are caused by idling vehicles. By using the 1992 CO Plan as a worst-case scenario, the proposed Project can measure CO impacts against intersections that experienced significantly more vehicle traffic than adjacent to the proposed Project site.

In the 1992 CO Plan, a CO hot spot analysis was conducted for four busy intersections in Los Angeles at the peak morning and afternoon time periods. The intersections evaluated included Long Beach Boulevard and Imperial Highway (Lynwood); Wilshire Boulevard and Veteran Avenue (Westwood); Sunset Boulevard and Highland Avenue (Hollywood); and La Cienega Boulevard and Century Boulevard (Inglewood). The busiest intersection evaluated was that at Wilshire Boulevard and Veteran Avenue, which has a daily traffic volume of approximately 100,000 vehicles per day. Subsequently the CO Plan determined that no CO hotspot would occur even with 100,000 vehicles per day at this one intersection.

Toxic Air Contaminants

<u>Construction – Health Risk Analysis</u>

Project construction would involve the use of diesel-fueled vehicles and equipment 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). The SJVAPCD’s 2015 GAMAQI does not currently recommend analysis of TAC emissions from project construction activities, but instead focuses on projects with operational emissions that would expose sensitive receptors over a typical lifetime of 70 years. In addition, the most intense construction activities of the Project’s construction would occur during site preparation and grading phases over a short period. There are no conditions unique to the Project site that would require more intense construction activity compared to typical development. Examples of situations that would warrant closer scrutiny may include sites that would require extensive excavation and hauling due to existing site conditions. Building construction typically requires limited amounts of diesel equipment relative to site clearing activities. Nonetheless, a construction HRA was prepared as part of this analysis.

The results of the HRA prepared for Project construction for cancer risk and long-term chronic cancer risk are summarized below. Construction emissions were estimated assuming adherence to all applicable rules, regulations, and Project design features. The construction emissions were assumed to be distributed over the Project area with a working schedule of eight hours per day and five days per week. Emissions were adjusted by a factor of 4.2 to convert for use with a 24-hour-per-day, 365 day-per-year averaging period. Health risk calculations were completed using HARP2. Detailed parameters and complete calculations are included in Attachment B of Appendix A.

The estimated health and hazard impacts at the Maximally Exposed Receptor (MER) from the Project's construction emissions are provided in Table 5.

Table 5
Summary of the Health Impacts from Unmitigated Construction of the Project[7]

Exposure Scenario	Maximum Cancer Risk (Risk per Million)	Chronic Non-Cancer Hazard Index	Acute Non-Cancer Hazard Index
Risks and Hazards at the MER			
Risks and Hazards at the MER	12.89	0.0105	0.0000
Significance Threshold	**20**	**1**	**1**
Threshold Exceeded in Any Scenario?	**No**	**No**	**No**

MER = Maximally Exposed Receptor

El Monte Way & Crawford Ave Mixed-Use Project Unmitigated Construction MER: Receptor #537 (36°32'57.1"N 119°22'29.0"W

Source: Construction Health Risk Assessment and Operational Health Risk Screening (Attachment B of Appendix A).

As shown in Table 5, estimated health risks from elevated DPM concentrations during construction of the proposed Project would not exceed the applicable health risk significance thresholds. Therefore, the proposed Project would not result in a significant impact on nearby sensitive receptors from TACs during construction.

Operations

Unlike warehouses or distribution centers, the daily vehicle trips generated by the proposed commercial and residential mixed-use Project would be primarily generated by passenger vehicles. Passenger vehicles typically use gasoline engines rather than the diesel engines that are found in heavy-duty trucks. Gasoline-powered vehicles do emit TACs in the form of toxic organic gases, some of which are carcinogenic. Compared to the combustion of diesel, the combustion of gasoline had relatively low emissions of TACs. Thus, residential projects typically produce limited amounts of TAC emissions during operation. Nonetheless, it is anticipated that there would be some heavy-duty trucks visiting the Project site during operations. Consistent with SJVAPCD guidance, an operational prioritization screening analysis was completed for the proposed Project.

Operational DPM emissions from diesel trucks were estimated using EMFAC2021 emission factors and estimated truck travel and idling at the Project site. The emissions were entered into the SJVAPCD Prioritization Screening Tool to determine the risk scores, with complete calculations and assumptions

[7] Ibid.

included as part of Attachment B of Appendix A. The results of the screening analysis are provided in Table 6.

Table 6
Prioritization Tool Health Risk Screening Results[8]

Impact Source	Cancer Risk Score	Chronic Risk Score	Acute Risk Score
Diesel Trucks	10.96	0.0061	0.000
Total Risk from Project Operations	**10.96**	**0.0061**	**0.000**
Screening Risk Score Threshold	**10**	**1**	**1**
Screening Thresholds Exceeded?	**Yes**	**No**	**No**
Source: Construction Health Risk Assessment and Operational Health Risk Screening (Attachment B of Appendix A)			

As noted in Table 6, cancer risks from Project operations do not fall under the SJVAPCD prioritization screening level of 10 in million. A prioritization score of 10 or greater is considered to be potentially significant and a refined HRA using dispersion modeling should be performed to determine significance. Therefore, a project-specific HRA was conducted for the proposed Project.

Results of the HRA are summarized in Table 7 below. Because the same receptors could be exposed to Project operations and Project construction, Table 7 also includes health risks from Project operations plus construction. The complete HRA prepared for the proposed Project, including HARP2 calculations, is included as part of Appendix A.

Table 6
Health Risk Assessment Results – Project Operations and Combined Health Risks from Construction and Operations

Impact Source	Cancer Risk Score	Chronic Risk Score	Acute Risk Score
Project Operations at the MER	4.57	0.0009	0.000
Project Operations + Construction at the Construction MER	14.20	0.0107	0.0000
Project Operations + Construction at the Operational MER	4.72	0.0010	0.0000
Risks and Hazards at the MER (Highest of Any Scenario)	**14.20**	**0.0107**	**0.0000**
Significance Threshold	**20**	**1**	**1**

[8] Ibid.

Impact Source	Cancer Risk Score	Chronic Risk Score	Acute Risk Score
Exceeds Individual Source Threshold?	**No**	**No**	**No**
Source: Attachment B of Appendix A *El Monte Way & Crawford Ave Mixed-Use Project Unmitigated Construction MER: Receptor #537 (36°32'57.1"N 119°22'29.0"W)* *El Monte Way & Crawford Ave Mixed-Use Project Operational MER: Receptor #484 (36°32'43.8"N 119°23'00.2"W)*			

As shown in Table 7, the Project would not exceed the cancer risk or chronic hazard threshold levels. The primary source of the emissions responsible for chronic risk are from diesel trucks. DPM does not have an acute risk factor. Since the Project does not exceed the applicable SJVAPCD health risk thresholds for cancer risk, acute risk, or chronic risk—prior to the incorporation of mitigation—this impact 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.[9] California experienced 7,517 new probable or confirmed cases of Valley fever in 2022. A total of 319 suspect, probable, and confirmed Valley fever cases were reported in Tulare County in 2022.[10]

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.*

9 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 July 21, 2023.

10 California Department of Public Health (CDPH). 2021. Coccidioidomycosis in California Provisional Monthly Report January – April 2023 (as of April 30, 2023). Website: https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/CocciinCA ProvisionalMonthlyReport.pdf. Accessed July 21, 2023.

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.[11]

The Project is situated on a site previously disturbed that does not provide a suitable habitat for spores. Specifically, the Project site had been previously disturbed for agricultural purposes and consists of an existing warehouse. 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.

Although conditions are not favorable, construction activities could generate fugitive dust that contains *C. immitis* spores. The Project will minimize the generation of fugitive dust during construction activities by complying with SJVAPCD's Regulation VIII. Therefore, this regulation, combined with the relatively

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[11] 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 July 21, 2023.

low probability of the presence of *C. immitis* spores would reduce Valley fever impacts to less than significant.

During operations, dust emissions are anticipated to be relatively small because most of the Project area where operational activities would occur would be occupied by the proposed residential subdivision and related homes, pavement, and internal streets. This condition would lessen the possibility of the Project site 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 immediate Project area. Therefore, development of the Project is not anticipated to expose receptors to naturally occurring asbestos.[12] Impacts would be less than significant.

Operations—The Project's Potential to Locate Sensitive Receptor Near Existing Sources of TACs

As a mixed-use consisting of residential and commercial uses, the Project would locate sensitive receptors (future residents) to a site where future Project residents could be subject to existing sources of TACs at the Project site. However, the California Supreme Court concluded in *California Building Industry Association (CBIA) v. Bay Area Air Quality Management District (BAAQMD)* that agencies subject to CEQA are not required to analyze the impact of existing environmental conditions on a Project's future users or residents. Therefore, this impact will not be further addressed in this document.

Impact Analysis Summary

In summary, the Project would not exceed SJVAPCD localized emission daily screening levels for any criteria pollutant during project construction. The Project would not exceed SJVAPCD localized emission daily screening levels for NO_X, SO_X, PM_{10}, or $PM_{2.5}$ during Project operations and would not cause a CO hotspot. The Project is not a significant source of TAC emissions during construction or operation. 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.

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[12] 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 July 21, 2023.

d) Result in other emissions (such as those leading to odors 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. 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.

Although the Project is less than one mile from the nearest sensitive receptor, the Project is not expected to be a significant source of odors. The screening levels for these land use types are shown in Table 8.

Table 7
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 July 21, 2023.

Construction

During construction, various diesel-powered vehicles and equipment in use on-site would create localized odors. These odors would be temporary and intermittent, which would decrease the likelihood of the odors concentrating in a single area or lingering for any notable period of time. As such, these odors would likely not be noticeable for extended periods of time beyond the Project's site boundaries. The potential for odor impacts from construction of the proposed Project would, therefore, be less than significant.

Operations

Project as a Potential Odor Generator

The development of the proposed mixed-use project consisting of commercial and residential uses 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 8. The proposed mixed-use commercial and residential Project would not engage in any of these activities. Minor sources of odors that would be associated with typical residential and neighborhood commercial land uses, such as exhaust from mobile sources (including diesel-fueled vehicles), are known to have temporary and less concentrated odors. Considering the low intensity of potential odor emissions, the proposed 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, impacts would be ***less than significant***.

Project as a Receptor

With the *CBIA v. BAAQMD* ruling, analysis of odor impacts on receivers is not required for CEQA compliance unless the project would exacerbate the impact. As discussed above, the Project would not be considered a major source of odors during construction or operation. Therefore, no further analysis is needed. Considering this information, impacts would be ***less than significant***.

Mitigation Measures: None are required.

IV. BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
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?	☐	☒	☐	☐

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

ENVIRONMENTAL SETTING

The proposed Project site is located in a portion of the central San Joaquin Valley that has, for decades, experienced intensive agricultural and urban disturbances. Current agricultural endeavors in the region include dairies, groves, and row crops.

Like most of California, the Central San Joaquin Valley experiences a Mediterranean climate. Warm dry summers are followed by cool moist winters. Summer temperatures usually exceed 90 degrees Fahrenheit, and the relative humidity is generally very low. Winter temperatures rarely raise much above 70 degrees Fahrenheit, with daytime highs often below 60 degrees Fahrenheit. Annual precipitation within the proposed Project site is about 10 inches, almost 85% of which falls between the months of October and March. Nearly all precipitation falls in the form of rain and storm-water readily infiltrates the soils of the surrounding the sites.

Native plant and animal species once abundant in the region have become locally extirpated or have experienced large reductions in their populations due to conversion of upland, riparian, and aquatic habitats to agricultural and urban uses. Remaining native habitats are particularly valuable to native wildlife species including special status species that still persist in the region.

A Biological Resource Evaluation (BRE) was performed on behalf of the Project by Colibri Ecological Consulting in July of 2023 and is the basis of the impact analysis. The BRE report can be found in its entirety in Appendix B.

A field reconnaissance survey of the Project site was conducted as part of the BRE. The Project site and a 50-foot buffer surrounding the Project site were walked and thoroughly inspected to evaluate and document the potential for the area to support state- or federally protected resources. All plants except those under cultivation or planted in residential areas and all vertebrate wildlife species observed within the survey area were identified and documented. The survey area was evaluated for the presence of regulated habitats, including lakes, streams, and other waters using methods described in the *Wetlands Delineation Manual* and regional supplement (USACE 1987, 2008) and as defined by the CDFW (https://www.wildlife.ca.gov/conservation/lsa) or under the Porter-Cologne Water quality Control Act. An additional buffer of 0.5 miles around the Project site was inspected for potential nesting sites for special-status raptors. The 0.5-mile buffer was surveyed by driving public roads and identifying the presence of large trees or other potentially suitable substrates for nesting raptors.

RESPONSES

a) <u>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?</u>

Less Than Significant Impact. The proposed Project consists of development of 96 single-family residences, approximately 4.74 acres of commercial development, approximately 1.11-acre neighborhood park, a ponding basin, and other associated improvements. The Project site was bordered by commercial development to the south, residential development to the north and east, and inactive agriculture, commercial development, and a peach orchard to the east.

The Project site supports inactive agricultural fields dominated by ruderal forbs and nonnative grasses. According to the BRE, no habitats potentially regulated under the jurisdiction of the CDFW, SWRCB, or USACE were present in the survey area. This Project, which will result in temporary and permanent impacts to agricultural land cover, will not 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 CDFW or USFWS as no such species are expected to occur on or near the Project site. Any impacts to special status species are considered ***less than significant.***

Mitigation Measures: None are required.

b) <u>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?</u>

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less Than Significant Impact. According to the BRE, the proposed Project will not 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 CDFW or USFWS as no riparian habitat or other sensitive natural community was present in the survey area. The proposed Project will not 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 as no impacts to wetlands will occur. As such, there will be ***less than significant impacts.***

Mitigation Measures: None are required.

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?

Less Than Significant Impact with Mitigation. The proposed Project could impede the use of nursery sites for native birds protected under the MBTA and CFGC. Migratory birds are expected to nest on and near the Project site. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. Disturbance that causes nest abandonment or loss of reproductive effort can be considered take under the MBTA and CFGC. Loss of fertile eggs or nesting birds, or any activities resulting in nest abandonment, could constitute a significant effect if the species is particularly rare in the region. Construction activities such as excavating, trenching, and grading that disturb a nesting bird on the Project site or immediately adjacent to the construction zone could constitute a significant impact. The implementation of **BIO-1** would ensure that potential impacts remain ***less than significant.***

Mitigation Measures:

BIO-1

1. To the extent practicable, construction shall be scheduled to avoid the nesting season, which extends from February through August.
2. If it is not possible to schedule construction between September and January, preconstruction surveys for nesting birds shall be conducted by a qualified biologist to ensure that no active nests will be disturbed during Project implementation. A preconstruction survey shall be

conducted no more than 14 days prior to the initiation of construction activities. During this survey, the qualified biologist shall inspect all potential nest substrates in and immediately adjacent to the impact area for nests. If an active nest is found close enough to the construction area to be disturbed by these activities, the qualified biologist shall determine the extent of a construction-free buffer to be established around the nest. If work cannot proceed without disturbing the nesting birds, work may need to be halted or redirected to other areas until nesting and fledging are completed or the nest has otherwise failed for non-construction related reasons.

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

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?

No Impact. According to the BRE, the proposed Project will not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance as no trees or biologically sensitive areas will be impacted. The development will also not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or state habitat conservation plan as no such plan has been adopted. As such, there is ***no impact***.

Mitigation Measures: None are required.

V. CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☒	☐	☐
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

ENVIRONMENTAL SETTING

Archaeological resources are places where human activity has measurably altered the earth or left deposits of physical remains. Archaeological resources may be either prehistoric (before the introduction of writing in a particular area) or historic (after the introduction of writing). The majority of such places in this region are associated with either Native American or Euroamerican occupation of the area. The most frequently encountered prehistoric and early historic Native American archaeological sites are village settlements with residential areas and sometimes cemeteries; temporary camps where food and raw materials were collected; smaller, briefly occupied sites where tools were manufactured or repaired; and special-use areas like caves, rock shelters, and sites of rock art. Historic archaeological sites may include foundations or features such as privies, corrals, and trash dumps.

RESPONSES

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

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

Less Than Significant Impact With Mitigation. A record search of the project area and the environs within one half-mile was conducted at the Southern San Joaquin Archaeological Information Center. Information Center staff conducted the record search, RS# 23-225, on June 26, 2023 (see Appendix C). The record search revealed that there have been no cultural resource studies in the project area, with five studies conducted within one-half mile radius (TU-00181, 00405, 01684, 01765, 01822).

There is one recorded resource within the project area, with 28 additional recorded resources within one-half mile radius (see Appendix C for full list). These resources consist of single-family properties, commercial buildings, and a religious building. The site is currently vacant of buildings and supports inactive agricultural fields which are disked frequently. There are no known or visible cultural or archaeological resources, paleontological resources, or human remains that exist on the surface of the project area.

There are no recorded cultural resources within the Project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, for the California State Historic Landmarks.

Although no significant cultural or archaeological resources, paleontological resources or human remains have been identified in the project area, the possibility exists that such resources or remains may be discovered during Project site preparation, excavation and/or grading activities. Mitigation Measures CUL – 1 and CUL – 2 will be implemented to ensure that Project will result in ***less than significant impacts with mitigation***.

Mitigation Measures:

CUL – 1

Should evidence of prehistoric archeological resources be discovered during construction, the contractor shall halt all work within 25 feet of the find and the resource shall be evaluated by a qualified archaeologist. If evidence of any archaeological, cultural, and/or historical deposits is found, hand excavation and/or mechanical excavation shall proceed to evaluate the deposits for determination of significance as defined by the CEQA guidelines. The archaeologist shall submit reports, to the satisfaction of the City of Dinuba, describing the testing program and subsequent results. These reports shall identify any program mitigation that the project proponent shall complete in order to mitigate archaeological impacts (including resource recovery and/or avoidance testing and analysis, removal, reburial, and curation of archaeological resources).

CUL – 2

In order to ensure that the proposed project does not impact buried human remains during construction, the project proponent shall be responsible for on-going monitoring of project construction. Prior to the issuance of any grading permit, the project proponent shall provide the City of Dinuba with documentation identifying construction personnel that will be responsible for on-site monitoring. If buried human remains are encountered during construction, further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall be halted until the Tulare County coroner is contacted and the coroner has made the determinations and notifications required pursuant to Health and Safety Code Section 7050.5. If the coroner determines that Health and Safety Code Section 7050.5(c) require that he give notice to the Native American Heritage Commission, then such notice shall be given within 24 hours, as required by Health and Safety Code Section 7050.5(c). In that event, the NAHC will conduct the notifications required by Public Resources Code Section 5097.98. Until the consultations described below have been completed, the landowner shall further ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices where Native American human remains are located, is not disturbed by further development activity until the landowner has discussed and conferred with the Most Likely Descendants on all reasonable options regarding the descendants' preferences and treatments, as prescribed by Public Resources Code Section 5097.98(b). The NAHC will mediate any disputes regarding treatment of remains in accordance with Public Resources Code Section 5097.94(k). The landowner shall be entitled to exercise rights established by Public Resources Code Section 5097.98(e) if any of the circumstances established by that provision become applicable.

VI. ENERGY

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	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?	☐	☐	☒	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

The following information was provided by an Air Quality, Health Risk Analysis, Greenhouse Gas, and Energy Technical Memorandum that was performed on behalf of the proposed project by Johnson, Johnson & Miller Air Quality Consulting Services, report date July 30, 2023. The report can be read in its entirety in Appendix A.

The energy requirements for the proposed Project were determined using the construction and operational estimates generated from the Air Quality Analysis (refer to Attachment A of Appendix A for related CalEEMod output files). The calculation worksheets for fuel consumption rates for off-road construction equipment and on-road vehicles are provided in Attachment C of Appendix A.

RESPONSES

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

Less Than Significant Impact.

This impact addresses energy consumption from the short-term construction and long-term operations, discussed separately below.

Short-Term Energy Demand - Construction

<u>Off-Road Equipment</u>

Table 9 provides estimates of the Project's construction fuel consumption from off-road construction equipment for the entire Project, categorized by construction activity.

Table 8
Construction Off-Road Fuel Consumption[13]

Project Component	Construction Activity	Fuel Consumption (gallons)
El Monte Way & Crawford Ave Mixed-Use Project (On-site, Off-road Equipment Use)	Site Preparation	1,824
	Grading	5,743
	Building Construction	20,706
	Paving	888
	Architectural Coating	103
Construction Total		**29,264**
Source: Energy Consumption Calculations (Attachment C of Appendix A).		

As shown in Table 9, use of off-road equipment associated with construction of the proposed project is estimated to consume approximately 29,264 gallons of diesel fuel over the entire construction duration. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the City of Dinuba, the larger Tulare County region, or other parts of California. Therefore, it is expected that construction fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region.

<u>On-Road Vehicles</u>

On-road vehicles for construction workers, vendors, and haulers would require fuel for travel to and from the site during construction. Table 10 provides an estimate of the total on-road vehicle fuel usage during construction. There are no unusual Project characteristics that would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in other parts of the Tulare County region or the state. Therefore, it is expected that construction fuel consumption associated with the proposed Project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region.

[13] El Monte Way & Crawford Ave Mixed-Use Project-Dinuba. Air Quality, Health Risk Analysis, Greenhouse Gas, and Energy Technical Memorandum. Johnson Johnson and Miller Air Quality Consulting Services. Prepared on July 30, 2023. Appendix A.

Table 9
Construction On-Road Fuel Consumption

	Project Component	Total Annual Fuel Consumption (gallons)
El Monte Way & Crawford Ave Mixed-Use Project (On-site, Off-road Equipment Use)	Site Preparation	135
	Grading	2,430
	Building Construction	12,710
	Paving	210
	Architectural Coating	155
Total Construction On-Road Fuel Consumption		**15,640**
Source: Energy Consumption Calculations (Attachment C).		

Other Energy Consumption Anticipated During Project Construction

Other equipment could include construction lighting, field services (office trailers), and electrically driven equipment such as pumps and other tools. The project site is located in the City of Dinuba. As construction activities would occur primarily during daylight hours, it is anticipated that the use of construction lighting would be minimal. Singlewide mobile office trailers, which are commonly used in construction staging areas, generally range in size from 160 square feet to 720 square feet. A typical 720-square-foot office trailer would consume approximately 19,605 kWh during the approximate 1.41-year construction phase (Attachment C).

Long-Term Operations

Building Energy Demand

As shown in Table 11 and Table 12, the proposed Project is estimated to demand 1,825,429 kilowatt-hours (KWhr) of electricity and 4,544,470 1,000-British Thermal Units (kBTU) of natural gas, respectively, on an annual basis.

Table 10
Long-Term Electricity Usage

Land Use	Total Electricity Demand (KWhr/year)
Single-family Housing	897,272
Strip Mall	872,305
Other Asphalt Surfaces	0
City Park	0
Parking Lot	55,852
Total Project Consumption	**1,825,429**
Source: Energy Consumption Calculations (Attachment C of Appendix A).	

Table 11
Long-Term Natural Gas Usage

Land Use	Total Natural Gas Demand (kBTU/year)
Single-family Housing	3,735,583
Strip Mall	808,887
Other Asphalt Surfaces	0
City Park	0
Parking Lot	0
Total Project Consumption	**4,544,470**
Source: Energy Consumption Calculations (Attachment C of Appendix A).	

Buildings and infrastructure constructed pursuant to the proposed Project (including the proposed single-family homes) would comply with the versions of CCR Titles 20 and 24, including California Green Building Standards (CALGreen), that are applicable at the time that building permits are issued. The proposed Project is estimated to demand 1,825,429 KWhr of electricity per year and 4,544,470 kBTU of natural gas per year. As the Project site is currently undeveloped, this would represent an increase in demand for electricity and natural gas.

It would be expected that building energy consumption associated with the proposed Project would not be any more inefficient, wasteful, or unnecessary than for any other similar buildings in the City of Dinuba or the larger Tulare County region. Current state regulatory requirements for new building construction contained in the 2022 CALGreen and Title 24 standards would increase energy efficiency and reduce energy demand in comparison to most existing development, and therefore would reduce actual environmental effects associated with energy use from the proposed Project. Additionally, the CALGreen and Title 24 standards have increased efficiency standards through each update. The most recent 2022 standards became effective January 1, 2023 and will be updated in the next cycle that will become effective at the start of 2026. Therefore, while the proposed Project would result in increased electricity and natural gas demand, electricity and natural gas would be consumed more efficiently than most existing development due to compliance with the latest building standards.

Based on the above information, the proposed Project would not result in the inefficient or wasteful consumption of electricity or natural gas, and impacts would be ***less than significant***.

Transportation Energy Demand

Table 13 provides an estimate of the daily and annual fuel consumed by vehicles traveling to and from the proposed Project. These estimates were derived using the same assumptions used in the operational air quality analysis for the proposed Project.

Table 12
Long-Term Operational Vehicle Fuel Consumption

Vehicle Type	Annual VMT	Average Fuel Economy (miles/ gallon)	Total Daily Fuel Consumption (gallons)	Total Annual Fuel Consumption (gallons)
Passenger Cars (LDA)	4,378,555	30.14	398.0	145,261
Light Trucks (Pickups) and Medium Vehicles	4,136,019	22.05	513.9	187,573
Light-Heavy to Medium-Heavy Diesel Trucks	507,588	11.56	120.3	43,925
Heavy-heavy Trucks	150,829	5.96	69.3	25,306
Motorcycles	176,735	41.76	11.6	4,232
Other	65,003	7.56	23.6	8,601
Total	**9,414,729**	**—**	**1,136.7**	**414,898**

Notes:
VMT = vehicle miles traveled
Percent of Vehicle Trips and VMT provided by CalEEMod.
"Other" consists of buses and motor homes.
Source: Energy Consumption Calculations (Attachment C of Appendix A).

As shown above, annual vehicular fuel consumption is estimated to be 414,898 gallons of gasoline and diesel fuel combined. Using rates calculated for the 2024 operational year, daily consumption is estimated at approximately 1,136.7 gallons of fuel (see Attachment C of Appendix A).

The daily vehicular fuel consumption is estimated to be 1,136.7 gallons of combined gasoline and diesel fuel. Annual consumption is estimated at 414,898 gallons. In addition, the proposed Project would constitute development within an established community and would not be opening a new geographical area for development. As such, the proposed Project would not result in unusually long trip lengths for future residents, visitors, vendors, employees, or customers. The Project area is located near other residential and commercial land uses, including adjacent single-family homes to the north and west of the Project area and commercial uses to the south of the Project. The proposed Project would be well-positioned to accommodate an existing community and provide housing for planned growth. Vehicles accessing the site would be typical of vehicles accessing similar residential uses in the City of Dinuba, Tulare County, and surrounding areas. For these reasons, vehicular fuel consumption associated with the proposed Project would not be any more inefficient, wasteful, or unnecessary than for any other similar land use activities in the region, and impacts would be ***less than significant***.

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

Less Than Significant Impact. The Project proposes the construction of new residential development that would be built in accordance with all applicable rules and regulations. Compliance with established and applicable regulations would ensure that the Project would not conflict with or obstruct any state or local plan for renewable energy or energy efficiency. Moreover, compliance with Title 24 standards would ensure that the proposed Project would not conflict with any energy conservation policies related to the proposed Project's building envelope, mechanical systems, and indoor and outdoor lighting. Notably, the applicable Title 24 standards require the Project to include on-site renewable energy to serve the future Project occupants and residents. In addition, the proposed Project would constitute development within an established community. Specifically, the Project site is adjacent to built-up areas of the City of Dinuba. As such, the Project would not be opening a new geographical area for development such that it would not result in unusually long trip lengths for future Project residents, employees, visitors, customers, or vendors. In addition, the proposed mixed-use development is specifically designed for increased walkability, facilitated by the proposed pedestrian connectivity throughout the Project site.

For the above reasons, the proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and impacts would be ***less than significant***.

VII. GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
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.	☐	☐	☒	☐
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☒	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
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?	☐	☐	☐	☒
d. Be located on expansive soil, as defined in Table 18-1-B of the most recently adopted Uniform Building Code	☐	☐	☒	☐

creating substantial risks to life or property?				
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?	☐	☐	☐	☒
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

ENVIRONMENTAL SETTING

Dinuba is located near the eastern edge of the Central Valley, which is a nearly flat northwest-southeast trending basin approximately 450 miles long and approximately 75 miles wide. The City of Dinuba is located on soils characterized by a thick section of sedimentary rock overlying a granitic basement layer. The hazards due to ground-shaking are considered low due to the relative distance of the City from seismic faults. The nearest faults are the Sierra Nevada Fault Zone (approximately 60 miles east), the San Joaquin Fault (approximately 75 miles northwest), and the San Andreas Fault (approximately 75 miles to the southwest). The City of Dinuba is located in a Seismic Zone II, as defined by the California Uniform Building Code.

RESPONSES

a-i) <u>Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving 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.</u>

a-ii) <u>Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?</u>

a-iii) <u>Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?</u>

a-iv) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

Less Than Significant Impact. The proposed project site is not located in an earthquake fault zone as delineated by the 1972 Alquist-Priolo Earthquake Fault Zoning Map Act.[14] The nearest known potentially active fault is the Sierra Nevada Fault Zone, located approximately 60 miles east of the site. No active faults have been mapped within the project boundaries, so there is no potential for fault rupture. It is anticipated that the proposed Project site would be subject to some ground acceleration and ground shaking associated with seismic activity during its design life. The proposed Project site would be engineered and constructed in strict accordance with the earthquake resistant design requirements contained in the latest edition of the California Building Code (CBC) for seismic zone II, as well as Title 24 of the California Administrative Code, and therefore would avoid potential seismically induced hazards on planned structures.

The proposed Project site has a generally flat topography, which would preclude the likeliness of a landslide. The impact of seismic or landslide hazards on the project would be ***less than significant.***

Mitigation Measures: None are required.

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

Less Than Significant Impact. The proposed Project consists of development of 96 single-family residences, approximately 4.74 acres of commercial development, approximately 1.11-acre neighborhood park, a ponding basin, and other associated improvements on approximately 27.2 acres. The Project site is currently vacant with minimal vegetation, has a generally flat topography and is surrounded by agricultural land to the east and residential and commercial uses to the north, west, and south. Construction activities associated with the Project involves ground preparation work for the new housing development and associated improvements. These activities could expose barren soils to sources of wind or water, resulting in the potential for erosion and sedimentation on and off the Project site. During construction, nuisance flow caused by minor rain could flow off-site. The City and/or contractor would be required to employ appropriate sediment and erosion control BMPs as part of a Stormwater Pollution Prevention Plan (SWPPP) that would be required in the California National Pollution Discharge Elimination System (NPDES). As such, any impacts would be considered ***less than significant.***

[14] Earthquake Hazard Zones, California Department of Conservation. https://maps.conservation.ca.gov/cgs/EQZApp/app/. Accessed August 2023.

Mitigation Measures: None are required.

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?

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

Less Than Significant Impact. See Section VI a. above. The site is not at significant risk from ground shaking, liquefaction, or landslide and is otherwise considered geologically stable. The City of Dinuba sits on top of a mix of different loam classifications; however the predominant soil in the proposed Project area is Exeter loamy sand.[15] This soil type is characterized as moderately well drained with medium runoff. This soil also has low shrink/swell potential, which is generally not conducive to liquefaction. Additionally, liquefaction typically occurs when there is shallow groundwater, low-density non-plastic soils, and high-intensity ground motion.

The City of Dinuba is on relatively flat terrain which precludes the occurrence of landslides. Subsidence is typically related to over-extraction of groundwater from certain types of geologic formations where the water is partly responsible for supporting the ground surface. The City of Dinuba is not recognized by the U.S. Geological Service as being in an area of subsidence.[16] Additionally, ongoing potential impacts of groundwater depletion and subsidence are constantly being monitored by USGS through a system of extensometers positioned throughout the San Joaquin valley. Continuous measurements and aquifer-system response analysis enables appropriate governing of parameters set to mitigate subsidence impacts in the region. Impacts are considered ***less than significant***.

Mitigation Measures: None are required.

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?

[15] U.S. Department of Agriculture. Natural Resource Conservation Service. Web Soil Survey. https://websoilsurvey.sc.egov.usda.gov/app/WebSoilSurvey.aspx. Accessed August 2023.

[16] U.S. Geological Service. Areas of Land Subsidence in California. https://ca.water.usgs.gov/land_subsidence/california-subsidence-areas.html Accessed Auguts 2023.

No Impact. The proposed Project does not include the construction, replacement, or disturbance of septic tanks or alternative wastewater disposal systems. The Project will be required to tie into the existing City sewer system (See Utilities section for more details). Therefore, there is ***no impact.***

Mitigation Measures: None are required.

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

Less Than Significant Impact. As identified in the cultural studies performed for the Project site (see Appendix C), there are no known paleontological resources on or near the site. Mitigation measures have been added that will protect unknown (buried) resources during construction, including paleontological resources. There are no unique geological features on site or in the area. Therefore, there is a ***less than significant impact***.

Mitigation Measures: None are required.

VIII. GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

The following information was provided by an Air Quality, Health Risk Analysis, Greenhouse Gas, and Energy Technical Memorandum that was performed on behalf of the proposed project by Johnson, Johnson & Miller Air Quality Consulting Services, report date July 30, 2023. The report can be read in its entirety in Appendix A.

RESPONSES

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

The City of Dinuba has not adopted a GHG reduction plan. In addition, the City 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. The County of Tulare has adopted a Climate Action Plan; however, the County of Tulare's Climate Action Plan is only applicable to unincorporated areas of Tulare County.

Because the Project is within the City of Dinuba and the City would serve as the lead agency, the County of Tulare's Climate Action Plan is not applicable to the Project. 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

Consistency with AB 32 and CARB's 2008 Scoping Plan

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. Former 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 CARB's 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 14 provides an analysis of the Project's consistency with the 2017 Scoping Plan Update measures.

Table 13
Consistency with SB 32 Scoping Plan

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. *(The requirement is now 60% in 2030 per SB 100.)*	**Consistent**: The project will purchase electricity from a utility subject to the SB 350 Renewable Mandate.
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.	**Not Applicable**. This measure applies to existing buildings. There are no existing structures included as part of the project. New structures are required to comply with Title 24 Energy Efficiency Standards that are expected to increase in stringency over time. New buildings constructed as part of the proposed project would comply with the applicable Title 24 Energy Efficiency Standards in effect at the time building permits are received. The current Title 24 regulations are the 2022 Title 24 standards, which become effective January 1, 2023. The next update would become effective January 1, 2026.
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.

Scoping Plan Measure	Project Consistency
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 project occupants and visitors can be expected to purchase increasing numbers of more fuel efficient and zero emission cars and trucks each year. The CALGreen Code requires electrical service in new single-family housing to be EV charger-ready. In addition, home deliveries and commercial deliveries will be made by increasing numbers of ZEV delivery trucks as the statewide fleet is expected to get cleaner over time.
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.	**Not Applicable.** The measure applies to owners and operators of trucks and freight operations. The mixed-use project consists of residential and commercial uses and would not be considered an industrial land use or a large freight operator. However, commercial and home deliveries are expected to be made by increasing numbers of ZEV delivery trucks as technology continues to improve accessibility to ZEV vehicles and as regulations are phased in over time.
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 residences will only include natural gas hearths that produce very little black carbon compared with wood burning fireplaces and heaters in line with the SJVAPCD's Guidance for Assessing and Mitigating Air Quality Impacts mitigation measures.[1] Commercial uses contemplated as part of the proposed project are not expected to be sources 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 will provide mixed-use residential and commercial development in the region that is consistent with the Regional Transportation Plan/Sustainable Communities Strategy (SCS) strategy to increase development densities to reduce VMT. The project includes mixed-use development including residential and commercial uses within the same area, which will also contribute to reductions in VMT.
Post-2020 Cap-and-Trade Program. The Post 2020 Cap-and-Trade Program continues the existing program for another 10 years. The Cap-and-Trade Program applies to large industrial sources such as power plants, refineries, and cement manufacturers.	**Consistent.** The post-2020 Cap-and-Trade Program indirectly affects people who use the products and 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 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.

Scoping Plan Measure	Project Consistency
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 is residential and commercial development and will not be considered natural or working lands.
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 July 21, 2023. *[1] San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMA. Accessed July 21, 2023.*	

As described in Table 14, 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 mixed-use Project's operational GHG emissions would principally be generated from electricity consumption and vehicle use, 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.

<u>Consistency Regarding GHG Reduction Goals for 2050 under Executive Order S-3-05 and GHG Reduction Goals for 2045 under CARB's 2022 Scoping Plan</u>

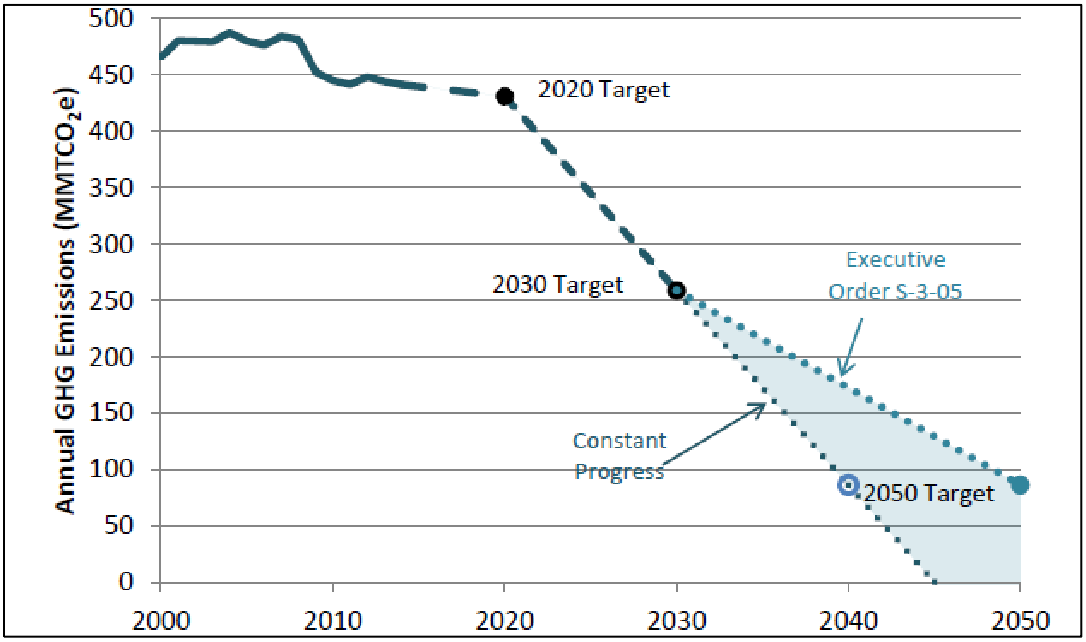
Regarding goals for 2050 under Executive Order S-3-05, at this time it is not possible to quantify the emissions savings from future regulatory measures, as they have not yet been developed; nevertheless, it can be anticipated that operation of the proposed Project would comply with whatever measures 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 4.

Figure 4
Path to Achieving 2050 Emissions Targets



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's 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. There would be ***less than significant impacts*** from greenhouse gas emissions**.**

Mitigation Measures: None are required.

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

Less Than Significant Impact. As discussed under Impact VIII(a) above, neither the City of Dinuba nor the County of Tulare have adopted a GHG reduction plan that would be applicable to the proposed Project. In addition, the City of Dinuba 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. 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.

The County of Tulare has adopted a Climate Action Plan; however, the County of Tulare's Climate Action Plan is only applicable to unincorporated areas of Tulare County and would not be appliable to the proposed Project because the project is within the City of Dinuba. 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 VIII(a) above. As demonstrated in the analysis contained under Impact VIII(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***.

Mitigation Measures: None are required.

IX. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
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?	☐	☐	☐	☒
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
f. Impair implementation of or physically interfere with an adopted emergency	☐	☐	☐	☒

	response plan or emergency evacuation plan?				
g.	Expose people or structures either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The proposed Project site is located in the eastern portion of the City of Dinuba. The site is has been recently disked and is current vacant with miniman vegetation. The area immediately surrounding the proposed Project consists of agricultural, commercial, and residential uses.

RESPONSES

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

b) <u>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?</u>

Less Than Significant Impact. The proposed Project consists of development of 96 single-family residences, approximately 4.74 acres of commercial development, approximately 1.11-acre neighborhood park, a ponding basin, and other associated improvements. Proposed Project construction activities may involve the use and transport of hazardous materials. These materials may include fuels, oils, mechanical fluids, and other chemicals used during construction. Transportation, storage, use, and disposal of hazardous materials during construction activities would be required to comply with applicable federal, state, and local statutes and regulations. Compliance would ensure that human health and the environment are not exposed to hazardous materials. In addition, the Project would be required to comply with the National Pollutant Discharge Elimination System (NPDES) permit program through the submission and implementation of a Stormwater Pollution Prevention Plan during construction activities to prevent contaminated runoff from leaving the Project site. Therefore, no significant impacts would occur during construction activities.

The operational phase of the proposed Project would occur after construction is completed and residents move in to occupy the residential structures and employees come in on a day-to-day basis. The proposed Project will include land uses that are considered compatible with the surrounding uses. None of these land uses routinely transport, use, or dispose of hazardous materials, or present a reasonably foreseeable release of hazardous materials, with the exception of common residential grade hazardous materials such as household and commercial cleaners, paint, etc. The proposed Project would not create a significant hazard through the routine transport, use, or disposal of hazardous materials, nor would a significant hazard to the public or to the environment through the reasonably foreseeable upset and accidental conditions involving the likely release of hazardous materials into the environment occur. Therefore, the proposed Project will not create a significant hazard to the public or the environment and any impacts would be ***less than significant***.

Mitigation Measures: None are required.

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

Less Than Significant Impact. Kennedy Elementary School and Washington Intermediate School are located approximately 0.25 miles to the northwest of the proposed Project site, Jefferson Elementary School is located approximately 0.53 miles to the south, and Dinuba High School is located approximately 0.63 miles to the southwest. As the proposed Project includes the development of single-family residences, it is not reasonably foreseeable that the proposed Project will cause a significant impact by emitting hazardous waste or bringing hazardous materials within one-quarter mile of an existing or proposed school. Residential land uses do not generate, store, or dispose of significant quantities of hazardous materials. Community commercial activities also do not normally involve dangerous activities that could expose persons onsite or in the surrounding areas to large quantities of hazardous materials. See also Responses a. and b. regarding hazardous material handling. There would a ***less than significant impact.***

Mitigation Measures: None are required.

d) <u>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?</u>

No Impact. A database search was conducted to identify recorded hazardous materials incidents in the Project area. The search included cleanup sites under Federal Superfund (National Priorities List), State Response, and other federal, state, and local agency lists. The proposed Project site is not located on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (Geotracker[17] and DTSC Envirostor[18] databases). There is ***no impact.***

Mitigation Measures: None are required.

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

Less Than Significant Impact. There are no private or public airstrips in the Project vicinity. The Sequoia Field Airport is located approximately 7.5 miles to the southeast of the proposed Project site. Thus, any impacts are ***less than significant***.

Mitigation Measures: None are required.

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

No Impact. The Project will not interfere with any adopted emergency response or evacuation plan. There is ***no impact.***

Mitigation Measures: None are required.

g) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No Impact. There are no wildlands on or near the Project site. There is ***no impact***.

Mitigation Measures: None are required.

[17] Geotracker Database, California State Water Resources Control Board. https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=dinuba. Accessed August 2023.

[18] EnviroStor Database, California Department of Toxic Control Substances. https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=dinuba. Accessed August 2023.

X. HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	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?	☐	☐	☒	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
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:	☐	☐	☒	☐
i. Result in substantial erosion or siltation on- or off- site;	☐	☐	☒	☐
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
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	☐	☐	☒	☐
iv. impede or redirect flood flows?	☐	☐	☒	☐

X. HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The City of Dinuba is located in the Tulare Lake hydrologic region, specifically within the Kings sub-basin of the San Joaquin Valley groundwater basin[19]. Groundwater levels in this area are considered plentiful and have shown an increase since droughts recorded in 1976-77 and 1987-92. California's Groundwater Bulletin 118 estimates that the Kings sub-basin totals approximately 1,530 square miles and contains nearly 90 million acre-feet of groundwater. Dinuba has a groundwater depth of approximately 50 feet below the surface.

RESPONSES

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

Less Than Significant Impact. The proposed Project site is located on approximately 27.2 acres acres and consists of development of 96 single-family residences, approximately 4.74 acres of commercial development, approximately 1.11-acre neighborhood park, a ponding basin, and other associated improvements. Grading, excavation and loading activities associated with construction activities could temporarily increase runoff, erosion, and sedimentation. Construction activities also could result in soil

[19] City of Dinuba, General Plan Update Draft Environmental Impact Report, December 2006. Page 3 – 74.

compaction and wind erosion effects that could adversely affect soils and reduce the revegetation potential at construction sites and staging areas.

Three general sources of potential short-term construction-related stormwater pollution associated with the proposed project are: 1) the handling, storage, and disposal of construction materials containing pollutants; 2) the maintenance and operation of construction equipment; and 3) earth moving activities which, when not controlled, may generate soil erosion and transportation, via storm runoff or mechanical equipment. Generally, routine safety precautions for handling and storing construction materials may effectively mitigate the potential pollution of stormwater by these materials. These same types of common sense, "good housekeeping" procedures can be extended to non-hazardous stormwater pollutants such as sawdust and other solid wastes.

Poorly maintained vehicles and heavy equipment leaking fuel, oil, antifreeze, or other fluids on the construction site are also common sources of stormwater pollution and soil contamination. In addition, grading activities can greatly increase erosion processes. Two general strategies are recommended to prevent construction silt from entering local storm drains. First, erosion control procedures should be implemented for those areas that must be exposed. Secondly, the area should be secured to control offsite migration of pollutants. These Best Management Practices (BMPs) would be required in theStormwater Pollution Prevention Plan (SWPPP) to be prepared prior to commencement of Project construction. When properly designed and implemented, these "good-housekeeping" practices are expected to reduce short-term construction-related impacts to less than significant.

In accordance with the National Pollution Discharge Elimination System (NPDES) Stormwater Program, the Project will be required to comply with existing regulatory requirements to prepare a SWPPP designed to control erosion and the loss of topsoil to the extent practicable using BMPs that the Regional Water Quality Control Board (RWQCB) has deemed effective in controlling erosion, sedimentation, runoff during construction activities. The specific controls are subject to the review and approval by the RWQCB and are an existing regulatory requirement.

The City of Dinuba will provide water to the Project site and the Project will be required to tie into the City's existing water service infrastructure. The Project will comply with all City ordinances and standards to assure proper grading and drainage. Compliance with all local, state, and federal regulations will prevent violation of water quality standards or waste discharge requirements. The Project will be required to prepare a grading and drainage plan for review and approval by the City Engineer, prior to issuance of building permits. Therefore, any impacts will be ***less than significant***.

Mitigation Measures: None are required.

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

Less Than Significant Impact. Site development will result in an increased demand for water. The City of Dinuba relies on groundwater as its sole water supply source. The City currently operates eight drinking water wells that are located throughout the PWS service area. In addition to the groundwater wells, the City maintains two elevated storage tanks with a capacity of 1.25 million gallons and the 2.0 MG Northeast Water Reservoir, a ground level tank and booster pump station.[20]

The City of Dinuba is part of the Kings River East Groundwater Sustainability Agency (KREGSA) which prepared a Groundwater Sustainability Plan (GSP) of which the City of Dinuba is a participant. The City adopted it's latest Urban Water Management Plan (UWMP) on December 2021. The UWMP states that with implementation of the projects and management actions identified in the KREGSA GSP, the City's groundwater supplies are anticipated to be sustainable and available to meet the projected demands of its Public Water System service area.[21]

The site has been planned for residential and commercial development in the General Plan and as such, has been accounted for in the City infrastructure planning documents. Project demands for groundwater resources would not substantially deplete groundwater supplies and/or otherwise interfere with groundwater recharge efforts being implemented by the City of Dinuba. Future demand can be met with continued groundwater pumping and conservation measures. Additionally, compliance with existing State regulations will ensure that impacts to groundwater supply will be ***less than significant.***

Mitigation Measures: None are required.

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:

   i. result in substantial erosion or siltation on- or offsite;

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

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[20] City of Dinuba 2020 Urban Water Management Plan, December 2021. Pg 6-1.

[21] Ibid.

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

iv. impede or redirect flood flows?

Less Than Significant Impact. The Project site currently is currently vacant and consists of ruderal forbs and nonnative grasses.

The proposed Project will change drainage patterns of the site through the installation of impervious surfaces and structures (houses, driveways, streets, etc.) and will be required by the City to be graded to facilitate proper stormwater drainage into the stormwater basin included with the Project. Storm water during construction will be managed as part of the Storm Water Pollution Prevention Plan (SWPPP). A copy of the SWPPP will be retained on-site during construction.

The proposed Project site is located within Flood Zone "A" which are defined as "Special Flood Hazard Areas without Base Flood Elevation" as indicated by FEMA flood hazard map 06107C0340E, effective 6/16/2009. The proposed development will be built in accordance with the current City ordinances and California Building Code regarding construction in flood zones. The Project consists of development of a pond basin and will be designed for adequate storm drainage. Accordingly, the chance of flooding (and therefore the release of pollutants due to flooding) at the site is remote. Impacts are ***less than significant.***

Mitigation Measures: None are required.

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

Less Than Significant Impact. As discussed in Impact X(c), the proposed Project site is located within a Special Flood Hazard Area, Flood Zone "A". The Project includes development of a ponding basin, along with adequate storm drainage. The proposed development will be required to prepare and submit a water quality control plan to be implemented during construction, as required by the National Pollutant Discharge Elimination System. This plan must be reviewed and approved by the City Engineer prior to the start of construction.

There are no inland water bodies that could be potentially susceptible to a seiche in the Project vicinity. This precludes the possibility of a seiche inundating the Project site. The Project site is more than 100 miles from the Pacific Ocean, a condition that precludes the possibility of inundation by tsunami. There are no steep slopes that would be susceptible to a mudflow in the Project vicinity, nor are there any volcanically active features that could produce a mudflow in the City of Dinuba. This precludes the possibility of a mudflow inundating the Project site. Any impacts are ***less than significant***.

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

No Impact. The Project will not conflict with any water quality control plans or sustainable groundwater management plan. However, as mentioned in Section c., all new development within the City of Dinuba Planning Area must conform to standards and plans contained in the Dinuba Stormwater Drainage Master Plan. By conforming to all standards and policies as outlined, there will be ***no impacts*** associated with the Project.

Mitigation Measures: None are required.

XI. LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Physically divide an established community?	☐	☐	☒	☐
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?	☐	☐	☒	☐

ENVIRONMENTAL SETTING

The proposed Project site is in the eastern portion of the City of Dinuba. The City of Dinuba lies in the Central San Joaquin Valley region, in the northwestern portion of Tulare County. The City is approximately eight miles northeast of State Route (SR) 99 and 5.5 miles west of SR 63.

RESPONSES

a) <u>Physically divide an established community?</u>

b) <u>Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the General Plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?</u>

Less Than Significant Impact. The proposed Project is located in the eastern portion of the City of Dinuba and consists of development of 96 single-family residences, approximately 4.74 acres of commercial development, approximately 1.11-acre neighborhood park, a ponding basin, and other associated improvements. The proposed site is entirely within the City limits of Dinuba.

The northern portion of site is currently zoned as One-Family Residential (R-1-6) and designated in the General Plan as Medium Residential. The southern portion of the site is currently zoned and designated in the GP as Community Commercial. The Project would require site approval of a General Plan Amendment and Zone Change for a portion of the Community Commercial area to Residential. The

Project would also require the approval of a Tentative Subdivision Map for the respective residential and commercial areas.

The Project site is bounded by existing commercial businesses southwest of and adjacent to the site, to the west by Crawford Avenue/Road 88 and commercial businesses and residences beyond, to the south by El Monte Way/Avenue 416 and commercial businesses beyond, to the north by single-family residences, and to the east by agricultural land. The Project would provide housing and commercial opportunities to the residents of Dinuba and improve access to existing surrounding areas. The proposed development has no characteristics that would physically divide the City of Dinuba. Any impacts will be ***less than significant impact.***

Mitigation Measures: None are required.

XII. MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

Tulare County commercially extracts important minerals such as sand, gravel, crushed rock and natural gas.[22] Other minerals have been mined in the county to a smaller extent, including tungsten, chromite, copper, gold, lead, manganese, silver, zinc, barite, feldspar, limestone and silica. Aggregate resources are considered the County's most valuable extractive mineral.

RESPONSES

a) <u>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?</u>

b) <u>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?</u>

No Impact. There are no known mineral resources in the proposed Project area and the site is not included in a State classified mineral resource zones. No mineral resource locations are within the vicinity of the City of Dinuba.[23] Therefore, there is ***no impact***.

Mitigation Measures: None are required.

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[22] Tulare County General Plan Background Report, February 2010. Page 10-17.

[23] City of Dinuba General Plan Update Background Report, October 2006. Page 9-12.

XIII. NOISE

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	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?	☐	☐	☒	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
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?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

Noise is often described as unwanted sound. Although sound can be easily measured, the perception of noise and the physical response to sound complicate the analysis of its impact on people. The City of Dinuba is impacted by a multitude of noise sources. Principal noise sources include traffic on roadways, agricultural noise and industrial noise. Mobile sources of noise, especially cars and trucks, are the most common and significant sources of noise in most communities, and they are predominant sources of noise in the City. The Project site is located in an area with a mix of uses. The predominant noise sources in the Project area include traffic on local roadways, residential noise (lawn movers, audio equipment, voices, etc.), commercial activity noise, and potential noise from the nearby agricultural land uses.

RESPONSES

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?

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

Less Than Significant Impact.

Short-term (Construction) Noise Impacts

Proposed Project construction related activities will involve temporary noise sources. Typical construction related equipment include graders, trenchers, small tractors and excavators. During the proposed Project construction, noise from construction related activities will contribute to the noise environment in the immediate vicinity. Table 15 indicates the anticipated noise levels of the typical construction-related equipment (i.e., graders, trenchers, tractors) based on a distance of 50-feet between the equipment and the sensitive noise receptor.[24]

Table 15
Typical Construction Noise Levels

Equipment	Typical Noise Level (dBA) 50 ft from Source
Air Compressor	80
Backhoe	80
Compactor	82
Concrete Mixer	85
Dozer	85
Generator	82
Grader	85
Jack Hammer	88
Loader	85
Paver	85
Truck	84

[24] The Noise and Vibration Impact Assessment Manual, Federal Transit Administration, U.S. Department of Transportation. September 2018. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Table 7-1. Accessed August 2023.

The distinction between short-term construction noise impacts and long-term operational noise impacts is a typical one in both CEQA documents and local noise ordinances, which generally recognize the reality that short-term noise from construction is inevitable and cannot be mitigated beyond a certain level. Thus, local agencies frequently tolerate short-term noise at levels that they would not accept for permanent noise sources. A more severe approach would be impractical and might preclude the kind of construction activities that are to be expected from time to time in urban environments. Most residents of urban areas recognize this reality and expect to hear construction activities on occasion.

Long-term (Operational) Noise Impacts

The primary source of on-going noise from the Project will be from vehicles traveling on internal access roads and from traffic traveling along El Monte Way and Crawford Avenue. The Project will result in an increase in traffic on some roadways in the Project area. However, the relatively low number of new trips associated with the Project is not likely to increase the ambient noise levels by a significant amount. The area is active with vehicles, residential housing, commercial, and agricultural land uses, so the proposed Project will not introduce a new significant source of noise that isn't already occurring in the area.

Vibration Levels

Typical outdoor sources of perceptible ground borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. Construction vibrations can be transient, random, or continuous. Construction associated with the proposed Project includes the construction of The proposed Project consists of development of 96 single-family residences, approximately 4.74 acres of commercial development, approximately 1.11-acre neighborhood park, and a ponding basin. The site construction will also include internal access roads, street lighting, site landscaping and additional related improvements.

The approximate threshold of vibration perception is 65 VdB, while 85 VdB is the vibration acceptable only if there are an infrequent number of events per day. Table 16 describes the typical construction equipment vibration levels.[25]

[25] Ibid.

Table 16
Typical Construction Vibration Levels

Equipment	VdB at 25 ft
Small Bulldozer	58
Jackhammer	79

Vibration from construction activities will be temporary and not exceed the Federal Transit Administration (FTA) threshold for the nearest residences which are located to the north and west of the Project site.

Therefore, the impact is considered ***less than significant.***

Mitigation Measures: None are required.

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?

No Impact. The Project is not located within an airport land use plan, and the City of Dinuba does not contain any airport or airstrip. Therefore, there is ***no impact***.

Mitigation Measures: None are required.

XIV. POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Induce substantial 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)?	☐	☐	☒	☐
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐

ENVIRONMENTAL SETTING

The proposed Project site currently supports recently disked inactive agricultural land. The Project site is bounded by existing commercial businesses southwest of and adjacent to the site, to the west by Crawford Avenue/Road 88 and commercial businesses and residences beyond, to the south by El Monte Way/Avenue 416 and commercial businesses beyond, to the north by single-family residences, and to the east by agricultural land.

RESPONSES

a) Induce substantial 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)?

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

Less Than Significant Impacts. Dinuba's population has exhibited major growth since 2000. The population in 2000 was 16,844[26], while the current population is 25,469.[27] This represents an approximate increase of 51.2%. Estimates for 2023 shows that the City has 7,170 housing units with an average of 3.58

[26] City of Dinuba General Plan Update Background Report, October 2006. Page 4-1.

[27] E-5 Population and Housing Estimates for Cities, Counties, and the State, 2020-2023. California Department of Finance, May 2023. http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/ Accessed August 2023.

people per household.[28] There are 96 new homes associated with the proposed Project and there are no residential structures currently on-site. The site would provide additional housing for approximately 351 people. This is a relatively small population and is not expected to affect any regional population, housing or employment projections anticipated by City documents.

Additionally, the site is designated as "Medium Density Residential" and "Community Commercial" by the Dinuba General Plan and as such, the increase in population has been planned for. The proposed Project would require approval of a General Plan Amendment, Zone Change, and Tentative Subdivision Map to modify some of the residential and commercial areas. The City of Dinuba's primary industry is agriculture, but there is sufficient labor force in the area to support many other types of industries. The proposed Project will alleviate some overcrowding in the regional population by contributing reliable housing, and will additionally provide temporary construction jobs to the local work force. In conclusion, the Project implementation will not displace substantial numbers of people and instead provide needed housing. Any impacts are considered ***less than significant***.

Mitigation Measures: None are required.

[28] Ibid.

XV. PUBLIC SERVICES

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☒	☐
Parks?	☐	☐	☒	☐
Other public facilities?	☐	☐	☒	☐

ENVIRONMENTAL SETTING

The proposed Project site is located in the eastern portion of the City of Dinuba. The Project site is bounded by existing commercial businesses southwest of and adjacent to the site, to the west by Crawford Avenue/Road 88 and commercial businesses and residences beyond, to the south by El Monte Way/Avenue 416 and commercial businesses beyond, to the north by single-family residences, and to the west by agricultural land. The existing Project area is protected by the City of Dinuba Police Department, which is headquartered at 680 S. Alta Avenue. The Dinuba Fire Department is located at 496 East Tulare Street in downtown Dinuba. There are no public parks or schools in the immediate vicinity of the proposed Project site.

RESPONSES

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

Fire protection?

Less Than Significant Impact. The proposed Project would be served by the Dinuba Fire Department, which is located at 496 East Tulare Street, Dinuba, approximately 0.5 miles southwest of the Project site. The Dinuba Fire Department offers a full range of services including fire/rescue, emergency medical treatment and transport, fire prevention, and hazardous materials first response within the Dinuba City Limits.

The proposed Project would be required to comply with all applicable fire and building safety codes (California Building Code and Uniform Fire Code) to ensure fire safety elements are incorporated into final Project design, including the providing designated fire lanes marked as such. Proposed interior streets will be required to provide appropriate widths and turning radii to safely accommodate emergency response and the transport of emergency/public safety vehicles. The proposed Project will also be designed to meet Fire Department requirements regarding water flow, water storage requirements, hydrant spacing, infrastructure sizing, and emergency access. As a result, appropriate fire safety considerations will be included as part of the final design of the Project. The proposed Project at full buildout will add to the number of "customers" served, however, the Fire Department has capacity for the additional service need. No additional fire equipment, personnel, or services are anticipated to be required by Project implementation. In addition, the Project applicant will be required to pay all associated impact fees related to public services. As such, any impacts are ***less than significant***.

Police Protection?

Less Than Significant Impact. Protection services would be provided to the proposed Project site from the existing Dinuba Police Department, which is approximately 1.1 miles southwest of the Project site at 680 South Alta Avenue, Dinuba. The Dinuba Police Department provides a full range of police services. The Project site is located in an area currently served by the Dinuba Police Department; the Department would not need to expand its existing service area or construct a new facility to serve the Project site. In addition, the Project applicant will be required to pay all associated impact fees related to public services. Impacts are ***less than significant.***

<u>Schools?</u>

Less Than Significant Impact. Educational services for the proposed Project will be provided by the Dinuba Unified School District (DUSD). Dinuba Unified School District operates eleven schools within the planning area; six elementary schools, one middle school, one traditional high school, one continuing education school, one independent study school, and one adult education school.

Since the proposed Project includes the addition of approximately 96 residential units, the number of students in the school district will increase. New development projects are required by state law to pay development impact fees to the school districts at the time of building permit issuance. These impact fees are used by the school districts to maintain existing and develop new facilities, as needed.

While development of the 96 residential units alone is not expected to require the alteration of existing or construction of new school facilities, the development will contribute to the cumulative need for increased school facilities. The timing of when new school facilities would be required or details about size and location cannot be known until such facilities are planned and proposed, and any attempt to analyze impacts to a potential future facility would be speculative. As the future new school facilities are further planned and developed, they would be subject to their own separate CEQA review in order to identify and mitigate any potential environmental impacts. Therefore, the impact is ***less than significant.***

<u>Parks?</u>

Less Than Significant Impact. The proposed Project includes the development of an approximately 1.11-acre neighborhood park and a ponding basin within the site design. However, the Project will also be required to pay City Park facility impact fees to compensate for any service demand increase on existing parks within the Dinuba area. Impacts are ***less than significant.***

<u>Other public facilities?</u>

Less Than Significant Impact. The proposed Project is within the land use and growth projections identified in the City's General Plan and other infrastructure studies. The Project, therefore, would not result in increased demand for, or impacts on, other public facilities such as library services. Any impacts would be ***less than significant***.

Mitigation Measures: None are required.

XVI. RECREATION

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	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?	☐	☐	☒	☐
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?	☐	☐	☒	☐

ENVIRONMENTAL SETTING

There are twelve parks within the City of Dinuba; Alice Park, Centennial Park, Felix Delgado Park, Gregory Park, K/C Vista Park, Nebraska Park, Pamela Park/Basin, Rose Ann Vuich Park, Roosevelt Park/Dinuba Community Center, Entertainment Plaza, Peachwood Park and Ponding Basin, and Rotary Park. These parks are managed by the City of Dinuba's Parks and Community Services Department. This department also supervises and coordinates a wide variety of community programs and activities.

RESPONSES

a) <u>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?</u>

b) <u>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?</u>

Less Than Significant Impact. The proposed Project consists of development of 96 single-family residences, approximately 4.74 acres of commercial development, approximately 1.11-acre neighborhood park, a ponding basin, and other associated improvements. However, the increase of approximately 351 persons resulting from the Project would have a relatively small impact on existing recreational facilities. In order to implement the goals and objectives of the City's General Plan, and to mitigate the impacts caused by future development in the City, park facilities must be constructed. The City Council has determined that a Park Facilities Fee is needed in order to finance these public facilities and to pay for each development's fair share of the construction and acquisition costs. The Project Applicant will be required to pay development impact fees as determined by the City of Park Facilities Fees. The Project will still be required to pay City park facility impact fees, as required. Therefore, impacts are considered ***less than significant impacts***.

Mitigation Measures: None are required.

XVII. TRANSPORTATION/TRAFFIC

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	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?	☐	☒	☐	☐
b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☒	☐	☐
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d. Result in inadequate emergency access?	☐	☐	☒	☐

ENVIRONMENTAL SETTING

The proposed Project is a mixed-use development located on the northeast corner of El Monte Way and Crawford Avenue in Dinuba, CA, consisting of 96 single-family dwelling units and 82,600 square feet of retail shopping. As currently planned, access to the proposed commercial would be provided along El Monte Way and access to the proposed residential development would be provided along Crawford Avenue. The site is currently vacant land. Residential land uses exist to the west, north, and south of the proposed Project. Agricultural land uses exist to the east of the Project. There are also commercial and industrial land uses in the vicinity of the Project.

Important roadways serving the Project are discussed below.

Alta Avenue is a north-south arterial that extends throughout the City of Dinuba. In the vicinity of the Project it exists as a four-lane roadway with curb and gutter and provides access to commercial, residential, and agricultural land uses.

Crawford Avenue is a north-south arterial that extends from Avenue 384 to E American Avenue. In the vicinity of the project it exists as a two-lane roadway with curb and gutter. Crawford Avenue provides access to commercial, residential, and agricultural land uses.

El Monte Way is an east-west arterial that extends west from Road 72 through the City of Orosi. In the vicinity of the Project it exists as four-lane roadway with curb and gutter. El Monte Way provides access to commercial, residential, and agricultural land uses.

Lincoln Avenue is a north-south collector that extends from Avenue 424 to El Monte Way. Lincoln Avenue exists as a two-lane roadway and provides access to residential land uses.

Perry Avenue is a north-south local roadway that extends from Millard Way to El Monte Way. Perry Avenue provides access to residential land uses.

Saginaw Avenue is an east-west collector that extends from Alta Avenue to Road 92. In the vicinity of the project it exists as two-lane roadway and provides access to residential, educational, commercial, and agricultural land uses.

Sierra Way is an east-west collector that extends from College Avenue to Road 112. In the vicinity of the project it exists as two-lane roadway and provides access to residential, educational, commercial, and agricultural land uses.

Tulare Avenue is a primarily north-south collector that extends south from El Monte Way. In the vicinity of the project it exists as a two-lane roadway and provides access to residential, religious, and commercial land uses.

A Traffic Study was prepared for the Project by Ruettgers & Schuler Civil Engineers on October 2023 (See Appendix D) and is the basis of analysis for the following transportation analysis.

RESPONSES

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

Less Significant Impact with Mitigation.

Trip Generation and Design Hour Volumes

The ADT, AM and PM peak hour rate equations, and peak hour directional splits for ITE Land Use Codes 210 (Single-Family Detached Housing) and 821 (Shopping Plaza 40-150k) were used to estimate the Project traffic in Table 17.[29]

Table 17
Project Trip Generation

General Information			**Daily Trips**		**AM Peak Hour Trips**			**PM Peak Hour Trips**		
ITE Code	Development Type	Variable	ADT RATE	ADT	Rate	In % Split/ Trips	Out % Split/ Trips	Rate	In % Split/ Trips	Out % Split/ Trips
210	Single-Family detached Housing	96 Dwelling Units	eq	972	eq	25% 18	75% 54	eq	63% 60	37% 36
821	Shopping Plaza (40-150k)	82.6 1000 sq ft GLA	eq	7770	3.53	62% 181	38% 111	9.03	48% 361	52% 391
Sub-total				8742		199	165		421	427
Adjustments										
Capture		5%		437		9	6		18	20
Pass-by		15%		1,311		27	17		54	59
Total				**6,994**		**163**	**142**		**349**	**348**

**calculated using the Institute of Transportation Engineers (ITE) Trip Generation, 11th Edition*

Trip Distribution and Assignment

The Project trip distribution in Table 18 represents the most likely travel routes for traffic accessing the Project. Project traffic distribution was estimated based on a review of the potential draw from population centers within the region and the types of land uses involved.

[29] Traffic Study - Mixed-Use Development Located on the Northeast Corner of El Monte Way & Crawford Ave, Dinuba CA. October 2023. Ruettgers & Schuler Civil Engineers. Appendix D, page 6.

Table 18
Project Trip Distribution

Direction	Percent
North	20
East	5
South	20
West	55

Existing and Future Traffic

Weekday peak hour turning movements were counted at the following intersections in August 2023 (see Appendix for count data). Annual growth rates ranging between 1.50% and 4.06% were applied to existing traffic volumes to estimate future traffic volumes for the year 2043. These growth rates were estimated based on a review of existing and approved future developments in the vicinity of the project and TCAG traffic model data. See Appendix D for figures.[30]

Intersection Analysis

A capacity analysis of the study intersections was conducted using Synchro software from Trafficware. The analysis was performed for each of the following traffic scenarios:

- Existing (2023)
- Existing (2023) + Project
- Future (2043)
- Future (2043) + Project

Level of service (LOS) criteria for unsignalized and signalized intersections, as defined in HCM 2010, are presented in Tables 19-20 below.[31] The Tulare County Regional Transportation Plan designates LOS D as the minimum acceptable intersection peak hour level of service.

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30 Ibid, page 7.

31 Ibid, page 13.

Table 19
Level of Service Creitera Unsignalized Intersection

Average Control Delay (sec/veh)	Level of Service	Expected Delay to Minor Street Traffic
≤ 10	A	Little or no delay
> 10 and ≤ 15	B	Short traffic delays
> 15 and ≤ 25	C	Average traffic delays
> 25 and ≤ 35	D	Long traffic delays
> 35 and ≤ 50	E	Very long traffic delays
> 50	F	Extreme delays

Table 20
Level of Service Creitera Signalized Intersections

Volume/Capacity	Control Delay (sec/veh)	Level of Service
< 0.60	≤ 10	A
0.61 - 0.70	> 10 and ≤ 20	B
0.71 - 0.80	> 20 and ≤ 35	C
0.81 - 0.90	> 35 and ≤ 55	D
0.91 - 1.00	> 55 and ≤ 80	E
> 1.0	> 80	F

Peak hour level of service for the study intersections is presented in Tables 21 and 22. The City of Dinuba Circulation Element states that the peak hour level of service for intersections shall be no lower than LOS C for urban areas. It should be noted that LOS D is allowed if the intersection is currently operating at an LOS D prior to the addition of the Project traffic in the existing scenario.[32]

[32] Ibid, page 14-15.

Table 21
PM Intersection Level of Service

#	Intersection	Control Type	2023	2023+ Project	2043	2043+ Project	2043+ Project w/Mitigation[1]
1	Lincoln Ave & Saginaw Ave	AWSC	A	A	A	A	-
2	Crawford Ave & Saginaw Ave	AWSC	B	B	E (47.7)	E (49.6)	B
3	Rd 80/Alta Ave & El Monte Way	Signal	D	D	D	D	-[2]
4	Lincoln Ave & El Monte Way	NB SB	E (35.0) C	F (56.7) F (110.9)	F (>300) F (>300)	F (>300) F (>300)	C
5	Perry Ave & El Monte Way	Signal	C	C	C	C	-
6	Crawford Ave & El Monte Way	Signal	D	D	D	D	-[2]
7	Crawford Ave & Sierra Way	AWSC	B	B	F (53.0)	F (53.7)	B

***1** Mitigation shown in Table 27*
***2** Mitigation not necessary due to LOS D in existing year scenario*

Table 22
PM Intersection Level of Service

#	Intersection	Control Type	2023	2023+ Project	2043	2043+ Project	2043+ Project w/Mitigation[1]
1	Lincoln Ave & Saginaw Ave	AWSC	A	A	B	B	-
2	Crawford Ave & Saginaw Ave	AWSC	B	B	E (45.0)	E (46.8)	B
3	Rd 80/Alta Ave & El Monte Way	Signal	C	C	C	C	-
4	Lincoln Ave & El Monte Way	NB SB	C C	D (26.5) D (26.2)	F (>300) F (>300)	F (>300) F (>300)	C
5	Perry Ave & El Monte Way	Signal	B	B	C	C	-
6	Crawford Ave & El Monte Way	Signal	D	D	D	D	-[2]
7	Crawford Ave & Sierra Way	AWSC	B	B	F (52.6)	F (53.1)	B

***1** Mitigation shown in Table 27*
***2** Mitigation not necessary due to LOS D in existing year scenario*

Traffic Signal Warrant Analysis

Peak hour signal warrants were evaluated for the unsignalized intersections within the study based on the 2014 California Manual on Uniform Traffic Control Devices (2014 CA MUTCD). Peak hour signal warrants assess delay to traffic on minor street approaches when entering or crossing a major street. Signal warrant analysis results are shown in Tables 23 and 24.

Table 23
Traffic Signal Warrants – Weekday PM Peak Hour

		2023			2023+Project			2043			2043+Project		
#	Intersection	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met
1	Lincoln Ave at Saginaw Ave	231	33	NO	282	98	NO	408	59	NO	459	124	NO
2	Crawford Ave at Saginaw Ave	692	106	NO	734	139	NO	1343	156	YES	1385	189	YES
4	Lincoln Ave at El Monte Way	1066	46	NO	1329	116	YES	1870	72	NO	2133	142	YES
7	Crawford Ave at Sierra Way	582	105	NO	645	119	NO	1115	183	YES	1178	192	YES

Table 24
Traffic Signal Warrants – Weekday AM Peak Hour

		2023			2023+Project			2043			2043+Project		
#	Intersection	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met
1	Lincoln Ave at Saginaw Ave	306	83	NO	330	99	NO	535	153	NO	559	169	NO
2	Crawford Ave at Saginaw Ave	662	111	NO	679	127	NO	1257	163	YES	1274	179	YES
4	Lincoln Ave at El Monte Way	781	97	NO	895	130	YES	1444	165	YES	1558	198	YES
7	Crawford Ave at Sierra Way	533	124	NO	560	131	NO	999	221	YES	1026	225	YES

It is important to note that a signal warrant defines the minimum condition under which signalization of an intersection might be warranted. Meeting this threshold does not suggest traffic signals are required, but rather, that other traffic factors and conditions be considered in order to determine whether signals are truly justified.

It is also noted that signal warrants do not necessarily correlate with level of service. An intersection may satisfy a signal warrant condition and operate at or above an acceptable level of service or operate below an acceptable level of service and not meet signal warrant criteria.

Roadway Analysis

A capacity analysis of the study roadways was conducted using Table 4 in the State of Florida Department of Transportation *Quality/Level of Service Handbook* dated June 2020 (see Appendix). The City of Dinuba Circulation Element states that the peak hour level of service for roadways shall be no lower than LOS C for urban areas. It should be noted that LOS D is allowed if a roadway segment is currently operating at an LOS D prior to the addition of the Project traffic in the existing scenario. The analysis was performed for the following AM and PM traffic scenarios:

- Existing (2023)
- Existing (2023) + Project
- Future Cumulative (2043)
- Future Cumulative (2043) + Project

Table 25
PM Roadway Level of Service

Street	2023 Two-Way LOS		2023+Project Two-Way LOS		2043 Two-Way LOS		2043+Project Two-Way LOS	
	VOL	LOS	VOL	LOS	VOL	LOS	VOL	LOS
El Monte Way: Alta Ave - Lincoln Ave	1351	C	1539	C	2276	D	2464	D
El Monte Way: Lincoln Ave - Tulare St	998	C	1364	C	1766	D	2132	D
El Monte Way: Tulare St - Rd 88	1212	C	1684	C	1795	C	2267	C
Lincoln Avenue: Saginaw Ave - Ave 416	101	C	246	C	156	C	301	C
Crawford Ave: Ave 420 - Ave 416	830	C	965	C	1370	C	1505	C
Crawford Ave: Ave 416 - Sierra Wy	756	C	842	C	1133	C	1219	C

Table 26
AM Roadway Level of Service

Street	2023 Two-Way LOS		2023+Project Two-Way LOS		2043 Two-Way LOS		2043+Project Two-Way LOS	
	VOL	LOS	VOL	LOS	VOL	LOS	VOL	LOS
El Monte Way: Alta Ave - Lincoln Ave	1119	C	1202	C	1908	D	1991	D
El Monte Way: Lincoln Ave - Tulare St	722	C	881	C	1357	C	1516	C
El Monte Way: Tulare St - Rd 88	851	C	1057	C	1312	C	1518	C
Lincoln Avenue: Saginaw Ave - Ave 416	156	C	220	C	276	C	340	C
Crawford Ave: Ave 420 - Ave 416	903	C	936	C	1370	C	1403	C
Crawford Ave: Ave 416 - Sierra Wy	799	C	837	C	1097	C	1135	C

Improvements

Intersection and roadway improvements needed by the year 2043 to maintain or improve the operational level of service of the street system in the vicinity of the Project are presented in Tables 27 and 28.[33]

Table 27
Future Intersection Improvements

#	Intersection	Total Improvements Required by 2043	Project Share
2	Crawford Ave & Saginaw Ave	Signal	9.57%
4	Lincoln Ave & El Monte Way	Signal	28.27%
7	Crawford Ave & Sierra Way	Signal	11.42%

[33] Ibid, page 19.

Table 28
Future Roadway Improvements

Roadway Segment	Total Improvements Required by 2043	Project Share
El Monte Way: Alta Ave – Lincoln Ave	Add Two Lanes	16.89%
El Monte Way: Lincoln Ave – Tulare St	Add Two Lanes	32.28%

Project percent share is calculated using the following formula:

$$\% \text{ Share} = \frac{\text{Project Traffic}}{(\text{Future+Project Traffic}) - \text{Existing Traffic}} \times 100\%$$

In summary, all seven study intersections currently operate at or above LOS D during peak hours with and without Project traffic in 2023. The intersections of Crawford Avenue & Saginaw Avenue, Lincoln Avenue & El Monte Way, and Crawford Avenue & Sierra Way are anticipated to operate below LOS D in 2043 prior to the addition of Project traffic.

It is important to note that since the intersections degrade to LOS D in 2043 and do not currently operate at LOS D, improvements are required to operate at LOS C or better. All roadway segments within the scope of the study currently operate above LOS C during peak hours prior to, and with the addition of Project traffic in 2023. The roadway segments of El Monte Way from Alta Avenue to Lincoln Avenue and El Monte Way from Lincoln Avenue to Tulare Street are anticipated to operate at LOS D in 2043 prior to the addition of Project traffic.

As such, potential impacts will be ***less than significant with mitigation incorporation.***

Mitigation Measure:

TRA-1: The Applicant shall pay the City of Dinuba for their Fair Share Portion of intersection and roadway improvements described in Table 27 and 28 to maintain or improve the operational level of service of the street system in the vicinity of the Project.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less Than Significant Impact with Mitigation. An evaluation of vehicle miles traveled (VMT) for Project traffic was conducted in accordance with California Environmental Quality Act (CEQA) requirements.

The City of Dinuban has adopted the "County of Tulare SB 743 Guidelines", dated June 8, 2020, which contains recommendations regarding VMT assessment, significance thresholds and mitigation measures.

The proposed Project includes both commercial and residential components. The commercial portion of the Project is considered locally serving retail as defined by the City of Tulare SB 743 guidelines, dated June 8, 2020. Locally serving retail screens out of analysis and is considered to have a less than significant VMT impact. Therefore, only the vehicle trips generated by the residential portion of the Project were used in the VMT analysis and mitigation.

Baseline VMT was determined utilizing data from the California Statewide Travel Demand Model (CSTDM). The proposed residential Project is located in Traffic Analysis Zone (TAZ) 2776, which has an average VMT/capita of 11.95 miles. The proposed residential Project is considered a typical project within the TAZ and therefore the Project would be expected to have the same VMT per capita. There are no special considerations with the Project to assume the Project would produce a VMT/capita lower than the average for the TAZ. The threshold of significance for residential Project VMT/capita is if the Project VMT is below the average in the TAZ where the Project is located. Since VMT/capita is assumed to be equal to the average for the aforementioned zone, it is anticipated that the proposed project will have a significant transportation impact prior to mitigation.

The Tulare County guidelines include detailed instructions for mitigation if a project has significant impacts. The guidelines state "The preferred method of VMT mitigation in Tulare County is for project applicants to provide transportation improvements that facilitate travel by walking, bicycling, or transit." In accordance with these guidelines, a survey was conducted within a half mile of the Project to determine any pedestrian, bicycle or transit facilities deficiencies exist. After review, ADA compliant wheelchair ramps are proposed to be constructed. The identified improvements include mitigation measure TRA-2 and are shown in Figure 5.

The guidelines include a minimum cost for mitigation of $20 per daily trip generated by the Project or 0.5% of the total construction cost of the Project (not including land acquisition). The mixed-use Project includes both residential and commercial land uses but it is important to note that the commercial portion of the Project will "screen out" of any mitigation measures due to being classified as locally-serving retail. As shown in Table 17, the Project, excluding the locally-serving retail, is anticipated to generate 972 daily trips, which equates to a target value of improvements of $19,440. The total mitigation cost is estimated at approximately $21,600 with a 20% contingency.

Pursuant to the guidelines, if a project provides mitigation which meets the minimum threshold listed above, the project can presume a 1% reduction in VMT. The assumed VMT/capita reduction is 1% of 11.95 or 0.1195. The resulting VMT/capita after mitigation is 11.83 which is below the average VMT/capita in the TAZ which the Project is located. After mitigation, the Project will have a less than significant transportation impact.

With implementation of the mitigation measures identified for VMT, and shown below, the Project will have a ***less than significant impact with mitigation*** incorporation.

Mitigation Measures:

TRA-2 The applicant shall install ADA compliant ramps at the following locations prior to issuance of occupation permits:

- Two (2) ADA compliant curb ramps at Roberts Place & Bolinger Way
- Two (2) ADA compliant curb ramps at Akers Way & Bolinger Way
- Two (2) ADA compliant curb ramps at Akers Way

Figure 5
VMT Mitigation

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

Less Than Significant Impact. The proposed Project has been designed for ease of access, adequate circulation/movement, and is typical of residential and commercial developments in the City of Dinuba. On-site circulation patterns do not involve high speeds, sharp curves or dangerous intersections. Although there will be an increase in the volume of vehicles accessing the site and surrounding areas, the proposed Project will not present a substantial increase in hazards. Any impacts are considered ***less than significant.***

Mitigation Measures: None are required.

d) Result in inadequate emergency access?

Less Than Significant Impact. The proposed Project does not involve a change to any emergency response plan. As currently planned, access to the proposed commercial would be provided along El Monte Way and access to the proposed residential development would be provided along Crawford Avenue. The site will remain accessible to emergency vehicles of all sizes. As such, potential impacts are ***less than significant.***

Mitigation Measures: None are required.

XVIII. TRIBAL CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	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:				
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	☐	☐	☒	☐
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of the Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

RESPONSES

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

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

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

Less Than Significant Impact. In accordance with Assembly Bill (AB) 52 and Senate Bill (SB) 18, potentially affected Tribes were formally notified of this Project and were given the opportunity to request consultation on the Project. The City contacted the Native American Heritage Commission, requesting a contact list of applicable Native American Tribes, which was provided to the City. The City provided letters to the listed Tribes on May 23, 2023, notifying them of the Project and requesting consultation, if desired. The City did not receive any responses from the tribes contacted. Therefore, there is a ***less than significant impact***.

Mitigation Measures: None are required.

XIX. UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	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?	☐	☐	☒	☐
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

ENVIRONMENTAL SETTING

The proposed Project will be required to connect to water, sewer, stormwater and wastewater services provided by the City of Dinuba and may be subject to water use fees and/or development fees to be provided such service. In addition, the Project will require solid waste disposal services.

RESPONSES

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?

Less than Significant Impact. The proposed Project consists of development of 96 single-family residences, approximately 4.74 acres of commercial development, approximately 1.11-acre neighborhood park, a ponding basin, and other associated improvements. The Project site is located within the service territory of the City of Dinuba. Operational discharge flows treated at the City's wastewater treatment facility would be required to comply with applicable water discharge requirements issued by the Central Valley Regional Water Quality Control Board (RWQCB). Compliance with conditions or permit requirements established by the City as well as water discharge requirements outlined by the Central Valley RWQCB would ensure that wastewater discharges coming from the proposed Project site and treated by the WWTF system would not exceed applicable Central Valley RWQCB wastewater treatment requirements.

As discussed in Section X, Hydrology and Water Quality, with an increase in the area of impervious surfaces on the Project site, an increase in the amount of storm water runoff is anticipated. The site will be designed so that storm water is collected and deposited in the City's existing storm drain system. The storm water collection system design will be subject to review and approval by the City Public Works Department. Storm water during construction will be managed as part of the Storm Water Pollution Prevention Plan (SWPPP). A copy of the SWPPP is retained on-site during construction. Thus, the proposed Project would have a ***less than significant impact.***

Mitigation Measures: None are required.

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

Less Than Significant Impact. Water service would be provided to the Project by the City of Dinuba. The City of Dinuba relies on groundwater as its sole water supply source. The system has a capacity of approximately 11 million gallons per day (7,600 GPM), and average daily demand is 4.2 million gallons per day (or 2,900 GPM).[34] According to the City's 2020 Urban Water Management Plan, the City currently operates eight drinking water wells that are located throughout the PWS service area. In addition to the groundwater wells, the City maintains two elevated storage tanks with a capacity of 1.25 million gallons and the 2.0 MG Northeast Water Reservoir, a ground level tank and booster pump station in the northeast section of the City.[35] The City is a member of the Kings River East Groundwater Sustainability Agency (KREGSA). The City's main water supply comes from eight active underground water wells distributed throughout the City. The water is treated and delivered to the community by the City of Dinuba water system. The most recent KREGSA GSP Annual Report indicates that groundwater levels at Representative Monitoring Sites near the City are above their designated Minimum Thresholds and on track to meet the forecast groundwater level projections and Interim Milestones established for these wells.[36]

The City anticipates that its sources of supplies will be available to meet demands on a consistent basis for all year types throughout the planning horizon of the UWMP. The proposed development will be required to follow the City's General Plan and Zoning Ordinances which include land use goals, policies, and implementation measures for developments regarding water use. The Project developer will also be required to pay the City of Dinuba's water system impact fees. Funds accrued under this fee are used to make capital improvements to the City's water system, including conservation improvements. The site has been designated in the General Pland and zoned for residential and commercial uses. Impacts are ***less than significant impact.***

Mitigation Measures: None are required.

c) <u>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?</u>

Less Than Significant Impact. The proposed Project will result in wastewater from residential units and general commercial stores that will be discharged into the City's existing wastewater treatment system.

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34 City of Dinuba 2015-2023 Housing Element. Pg 6-9. Accessed August 2023.

35 City of Dinuba 2020 Urban Water Management Plan. Pg 6-1. Accessed August 2023.

36 Ibid. Pg 1-3.

The wastewater will be typical of other urban/residential and general commercial developments consisting of bathrooms, kitchen drains, and other similar features. The Project will not discharge any unusual or atypical wastewater that would violate the City's waste discharge requirements. Therefore, assuming compliance with applicable standards and payment of requiredimpact fees and connection charges, the Project would not result in a significant impact related to construction or expansions of existing wastewater treatment facilities. The impact of the Project on wastewater treatment is ***less than significant***.

Mitigation Measures: None are required.

d) <u>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?</u>

e) <u>Comply with federal, state, and local statutes and regulations related to solid waste?</u>

Less Than Significant Impact. The City of Dinuba, through a private contractor, provides weekly curbside solid waste collection services to all households, businesses, and industries within City limits. Solid waste is taken to the Visalia Landfill, which is operated by Tulare County. Furthermore, the proposed Project would be required to comply with all standards related to solid waste diversion, reduction, and recycling during project construction and operation. The Project is not expected to generate an excess of solid waste beyond what is considered typical of residential and general commercial land uses. The proposed Project will comply with all federal, state and local statutes and regulations related to solid waste. As such, any impacts would be ***less than significant.***

Mitigation Measures: None are required.

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 Incorporation	Less than Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
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?	☐	☐	☒	☐
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
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?	☐	☐	☒	☐

ENVIRONMENTAL SETTING

The City of Dinuba's planning area is composed of urbanized portions of land and the surrounding agricultural fields. The Project site has ensured fire protection by the Dinuba Fire Department, located at 496 East Tulare Street approximately 0.5 miles southwest of the site. Given the location of the nearest fire station, response time is expected to be extremely quick in the rare event of a fire event.

The proposed Project site's elevation is approximately 340 feet above sea level in an area of intense urban and agricultural development. The Project site is bounded by existing commercial businesses southwest of and adjacent to the site, to the west by Crawford Avenue/Road 88 and commercial businesses and residences beyond, to the south by El Monte Way/Avenue 416 and commercial businesses beyond, to the north by single-family residences, and to the west by agricultural land.

RESPONSES

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

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?

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

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?

Less Than Significant Impact. The proposed Project is located in an area developed with residential, commercial, and agricultural uses, which precludes the risk of wildfire. The area is flat in nature which would limit the risk of downslope flooding and landslides, and limit any wildfire spread. The proposed Project does not require the installation or maintenance of associated infrastructure that would increase wildfire risk or result in impacts to the environment. To receive building permits, the proposed Project would be required to be in compliance with the adopted emergency response plan. As such, any wildfire risk to the project structures or people would be ***less than significant.***

Mitigation Measures: None are required.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b. 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)?	☐	☐	☒	☐
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

RESPONSES

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

Less Than Significant Impact With Mitigation. The analyses of environmental issues contained in this Initial Study indicate that the proposed Project is not expected to have a substantial impact on the environment or on any resources identified in the Initial Study. Mitigation measures have been incorporated in the Project to reduce all potentially significant impacts to ***less than significant***.

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)?

Less Than Significant Impact. CEQA Guidelines Section 15064(i) states that a Lead Agency shall consider whether the cumulative impact of a project is significant and whether the effects of the project are cumulatively considerable. The assessment of the significance of the cumulative effects of a project must, therefore, be conducted in connection with the effects of past projects, other current projects, and probable future projects. Due to the nature of the Project and consistency with environmental policies, incremental contributions to impacts are considered less than cumulatively considerable. The proposed Project would not contribute substantially to adverse cumulative conditions, or create any substantial indirect impacts (i.e., increase in population could lead to an increase need for housing, increase in traffic, air pollutants, etc.). The impact is ***less than significant***.

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

Less Than Significant Impact With Mitigation. The analyses of environmental issues contained in this Initial Study indicate that the Project is not expected to have substantial impact on human beings, either directly or indirectly. Mitigation measures have been incorporated in the Project to reduce all potentially significant impacts to ***less than significant***.

LIST OF PREPARERS

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Appendix A - Air Quality Memo

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El Monte Way & Crawford Ave Mixed-Use Project—Dinuba

Report Date: July 30, 2023

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

This Air Quality, Health Risk, Greenhouse Gas, and Energy 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 construction and/or operation of the El Monte Way & Crawford Ave Mixed-Use Project (proposed project or project) would cause significant impacts to air quality, GHG, or energy 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 references 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 El Monte Way & Crawford Ave Mixed-Use Project (project or proposed project) is a mixed-use development proposed by Blue Sky Rentals in the City of Dinuba, California. The project consists of a 96-unit single family residential subdivision on 22.57 acres, up to 82,604 square feet of commercial space on 3.36 acres, a 0.81-acre ponding basin, and a 1.11-acre park. The Assessor's Parcel Number (APN) associated with the project site is 013-090-037 and is located near the Southwest corner of East El Monte Way and South Crawford Avenue on the central eastern edge of Dinuba, 93618. There are two (2) existing businesses at the Southwest corner of East El Monte Way and South Crawford Avenue which will remain and are not part of the project, (McDonalds restaurant and an Autozone Auto Parts store). An aerial view of the project site is shown in Figure 1, and the site plan included as part of Attachment A.

[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 July 21, 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 July 21, 2023.

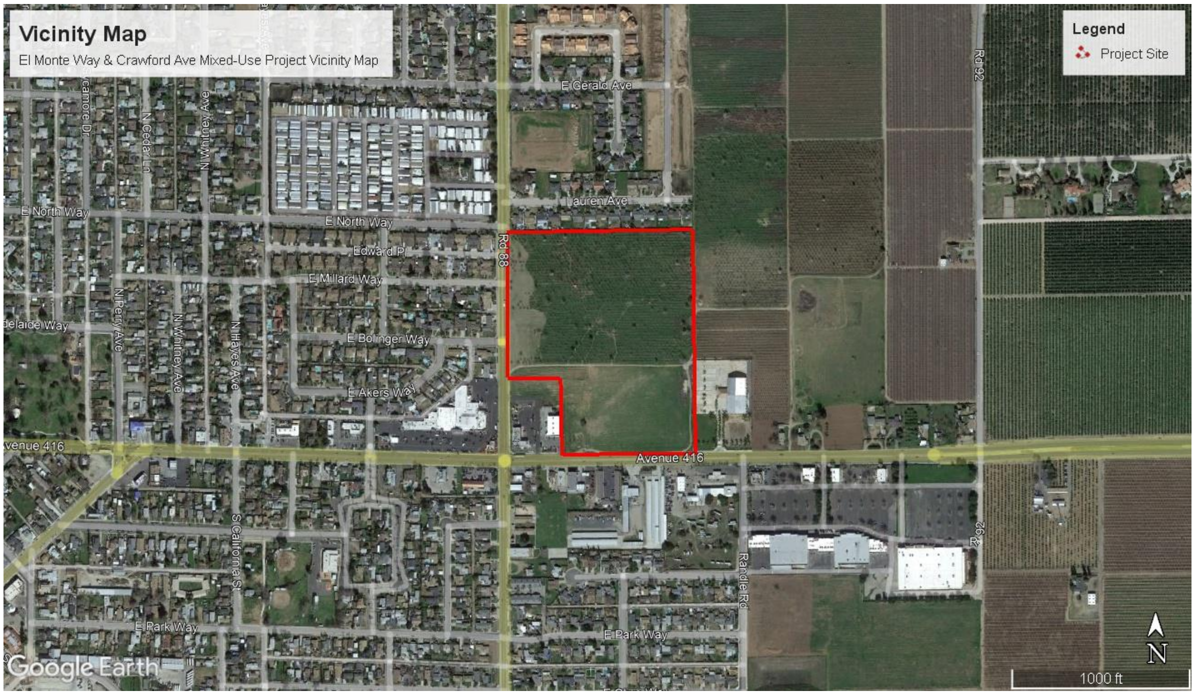

Figure 1 – El Monte Way & Crawford Ave Mixed-Use Project—Aerial View of Project Location

Summary of Analysis Results

The following is a summary of the analysis results. As shown below, the proposed project would result in less than impacts to air quality, GHG, and energy resources.

Impact AIR-A: The proposed project would not conflict with or obstruct implementation of the applicable air quality plan. **Less than significant impact.**

Impact AIR-B: The proposed project would not 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 (including releasing emissions, which exceed quantitative thresholds for ozone precursors)? **Less than significant impact.**

Impact AIR-C: The proposed project would not expose sensitive receptors to substantial pollutant concentrations. **Less than significant impact.**

Impact AIR-D: The proposed project would not create objectionable odors affecting a substantial number of people. **Less than significant impact.**

Impact GHG-A: The proposed project would not generate direct or indirect greenhouse gas emissions that would result in a significant impact on the environment. **Less than significant impact.**

Impact GHG-B: The proposed project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. **Less than significant impact**.

Impact Energy-A: The proposed project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. **Less than significant impact.**

Impact Energy-B: The proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. **Less than significant impact**.

Mitigation Measures

Air Quality Mitigation Measures

No mitigation is required.

Greenhouse Gas Emissions Mitigation Measures

No mitigation is required.

Energy Mitigation Measures

No mitigation is required.

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),[3] 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 below.

Table 1: 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 the size of the average human hair.	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. Mobile or transportation related sources are from	• 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 bronchitis; changes in lung morphology; death.

[3] 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
		vehicle exhaust and road dust. Secondary particles form from reactions in the atmosphere.	
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 June 13, 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 residential 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 specific 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.[4] 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.[5] 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.

[4] California Air Resources Board (CARB). 2009. The California Almanac of Emissions and Air Quality—2009 Edition. Website: https://www.arb.ca.gov/aqd/almanac/almanac09/almanac2009all.pdf.

[5] 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.

DPM

For purposes of this study, DPM exhaust emissions are represented as exhaust PM_{10}. During project operations, the mixed-use project would generate primarily passenger vehicle trips from residents, employees, and visitors; however, the project would also generate truck trips from deliveries and other services. 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.

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 the City of Dinuba, within Tulare County and within the San Joaquin Valley Air Basin. The modeling follows SJVAPCD guidance, where applicable, from its GAMAQI. The models used in this analysis are summarized as follows:

- Construction emissions: CalEEMod, version 2022.1 (specifically, 2022.1.1.14)
- Operational emissions: CalEEMod, version 2022.1 (specifically, 2022.1.1.14)
- Operational TAC emissions: 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. Further, 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 July 2023.

Assumptions

Construction Modeling 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 would release VOC emissions. Off-site emissions are caused by motor vehicle exhaust from delivery vehicles, worker traffic, and road dust (PM_{10} and $PM_{2.5}$).

Schedule

CalEEMod includes default equipment lists and construction schedules. Where project-specific information was unknown, CalEEMod default values were used.

Table 2 shows the conceptual construction schedule for the proposed project. The construction schedule utilized in the analysis represents a “worst-case” analysis scenario, since emission factors for construction equipment decrease as the analysis year increases due to improvements in technology and more stringent regulatory requirements. Therefore, construction emission estimates would decrease if the construction schedule moved to later years. The duration of construction activity and associated equipment represent a reasonable approximation of the expected construction fleet as required per CEQA guidelines. The site-specific construction fleet may vary due to specific project needs at the time of construction.

Table 2: Project Construction Schedule

Construction Activity	Start Date	End Date	Workdays
Site Preparation	10/2/2023	10/27/2023	20
Grading	10/28/2023	12/29/2023	45
Building Construction	10/15/2023	2/15/2025	350
Paving	12/30/2023	2/16/2024	35
Architectural Coating	1/11/2025	2/28/2025	35
Note: The construction schedule utilized in the analysis represents a “worst-case” analysis scenario since emission factors for construction equipment decrease as the analysis year increases due to improvements in technology and more stringent regulatory requirements. Therefore, construction emissions would decrease if the construction schedule moved to later years. Source: Modeling Assumptions and CalEEMod Output Files (Attachment A).			

Equipment

Construction equipment for each construction activity is shown in Table 3. Construction equipment usage was based on CalEEMod-default values.

Table 3: Project Construction Equipment

Construction Activity	Equipment Type	Pieces of Equipment	Usage (hours/day)	Horsepower	Load Factor	Fuel Type
Site Preparation	Rubber Tired Dozers	3	8	367	0.40	Diesel
	Tractors/Loaders/Backhoes	4	8	84	0.37	Diesel
Grading	Graders	1	8	148	0.41	Diesel
	Excavators	2	8	36	0.38	Diesel
	Tractors/Loaders/Backhoes	2	8	84	0.37	Diesel
	Scrapers	2	8	423	0.48	Diesel
	Rubber Tired Dozers	1	8	367	0.40	Diesel
Building Construction	Forklifts	3	8	82	0.20	Diesel
	Generator Sets	1	8	14	0.74	Diesel
	Cranes	1	7	367	0.29	Diesel
	Welders	1	8	46	0.45	Diesel
	Tractors/Loaders/Backhoes	3	7	84	0.37	Diesel
Paving	Pavers	2	8	81	0.42	Diesel
	Paving Equipment	2	8	89	0.36	Diesel
	Rollers	2	8	36	0.38	Diesel
Architectural Coating	Air Compressors	1	6	37	0.48	Diesel
Source: Modeling Assumptions and CalEEMod Output Files (Attachment A).						

Vehicles Trips

Table 4 provides a summary of the construction-related vehicle trips. CalEEMod default values were used to estimate the number of construction-related vehicle trips. Additional vendor trips were included in the site preparation, grading, paving, and architectural coating construction activity phases to account for the delivery of materials. It was assumed that up to 2,500 cubic yards of import and 2,500 cubic yards of export would occur during the grading period.

The fleet mix for worker trips is light-duty passenger vehicles to light-duty trucks. The vendor trips fleet mix is composed of a mixture of medium and heavy-duty diesel trucks. The hauling trips were assumed to be 100 percent heavy-duty diesel truck trips. CalEEMod default trip lengths for a project in Tulare County were used for the construction trips.

Table 4: Construction Vehicle Trips

Construction Task	Worker Trips per Day	Vendor Trips per Day	Haul Trips per Day
Site Preparation	17.5	2.0	0.0
Grading	20.0	1.0	13.9
Building Construction	61.0	23.8	0.0
Paving	15.0	2.0	0.0
Architectural Coating	12.2	1.0	0.0

Notes: Additional vendor trips were added to the site preparation, grading, paving, and architectural coating construction activity phases to account for delivery of materials.

Source: Modeling Assumptions and CalEEMod Output Files (Attachment A).

Operational Modeling Assumptions

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

Motor Vehicles

Motor vehicle emissions refer to exhaust and road dust emissions from the automobiles that would travel to and from the proposed project site. Project-specific trip rates were used in the analysis, consistent with the project-specific traffic analysis prepared by Ruettgers & Schuler Civil Engineers. CalEEMod default values were used for the land uses not listed in the traffic analysis.

Table 5: Project Trip Generation Calculations used to Estimate Project Emissions

Land Use	Average Daily Trips (trips per day)
Single-Family Detached Housing	972
Commercial (Strip Mall)	4,175
Park	1.28
Total Average Daily Project Trips	**5,148**

Notes: [1] Source: Project-specific traffic analysis prepared by Ruettgers & Schuler Civil Engineers (see Attachment A).

[2] Source: CalEEMod default values were used to estimate emissions.

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. The CalEEMod default rates for percentages of primary, diverted, and pass-by trips were used for the passenger vehicle run.

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). The vehicle fleet mix was revised to reflect the residential fleet mix approved by SJVAPCD for each year analyzed.

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. The default emission factors developed for CalEEMod were used for consumer products.

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 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 & Electric Company (PG&E) and Southern California Gas 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. 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 were used for inputs associated with solid waste.

Offroad Equipment

Stationary Sources

No stationary sources are included as part of the mixed-use proposed project consisting of residential and commercial uses.

Vegetation

There is currently limited carbon sequestration occurring on-site in the form of existing vegetation. The proposed project would meet any requirements set forth by the City of Dinuba regarding landscaping/open space that may result in the inclusion of vegetation. For this analysis, it was assumed that the loss and addition of carbon sequestration that are due to the proposed project would be balanced; therefore, emissions due to carbon sequestration were not included.

Refrigerants

Buildings requiring cold storage are not included as part of the proposed mixed-use project. CalEEMod default values were applied to the proposed single-family homes and commercial buildings associated with the mixed-use project.

Health Risk Assessment Assumptions

A Health Risk Assessment (HRA) was completed to evaluate potential health risks associated with the generation of TACs during construction 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 pollutant concentrations at existing 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 operational 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 Visalia Station (Station #93144). The meteorological data used was preprocessed for use with AERMOD by the SJVAPCD and included data for the years 2007 to 2010; all years were used in the assessment. All receptors were placed within the breathing zone at 1.2 meters above ground level.

Detailed parameters and complete calculations are contained in Attachment B. Attachment B also includes a representation of the operational DPM modeling parameters, including modeled on-site vehicle travel and locations of sensitive receptors within approximately ¼-mile (1,320 feet) of the project boundary.

Cancer Risk

The model was run to obtain annual average concentration in micrograms per cubic meter [$\mu g/m^3$] at sensitive receptor locations. Receptor were placed at sensitive receptors locations with ¼-mile (1,320 feet) of the project site and in the closest receptor locations in each direction from the project site. 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. Cancer risk and non-cancer hazard calculations were completed using HARP2. 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.[6,7]

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:

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

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6 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 June 13, 2023.

7 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 June 13, 2023.

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 be consistent with SJVAPCD guidance);
- 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 be consistent with SJVAPCD guidance); 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 be consistent with SJVAPCD guidance).

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):

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

Where:

$Risk_{inh-res}$	=	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 μg/m^3)
REL_i	=	Chronic noncancer Reference Exposure Level for substance i (μg/m^3)

The non-cancer chronic hazard index was calculated in HARP2. The primary source of the emissions responsible for chronic risk are from diesel trucks. DPM does not have an acute risk factor; however, HARP2 was run to obtain the following for each modeled receptor: cancer risk, chronic hazard index, and acuate hazard index.

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 short-term construction activities and long-term operation of the project. Localized emissions from project construction and 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 construction and 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 regional construction-related and operational ROG, NO_X, PM, CO, and SO_X, these thresholds are included in Table 6.

Table 6: SJVAPCD Proposed 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 July 21, 2023.		

Table 7: Health Risk Assessment Thresholds

Health Risk Metric	Applicable Threshold of Significance
Maximum Cancer Risk (Risk per Million)	20
Chronic Non-Cancer Hazard Index	1
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 July 21, 2023.	

Additional thresholds of significance are discussed, where applicable, in the appropriate impact analysis.

Fugitive Dust

Construction

Fugitive dust would be generated from site grading and other earth-moving activities. Most of this fugitive dust would remain localized and would be deposited near the project site. However, the potential for impacts from fugitive dust exists unless control measures are implemented to reduce the emissions from the project site. Therefore, adherence to Regulation VIII would be required during construction of the proposed project. Regulation VIII would require fugitive dust control measures that are consistent with best management practices (BMPs) established by the SJVAPCD to reduce the proposed project's construction-generated fugitive dust impacts to a less than significant level.

The SJVAPCD (SJVAPCD or District) adopted Regulation VIII in 1993 and its most recent amendments became effective on October 1, 2004. This is a basic summary of the regulation's requirements as they apply to construction sites. These regulations affect all workers at a regulated construction site, including everyone from the landowner to the subcontractors. Violations of Regulation VIII are subject to enforcement action including fines.[8]

Visible Dust Emissions may not exceed 20 percent opacity during periods when soil is being disturbed by equipment or by wind at any time. Visible Dust Emissions opacity of 20 percent means dust that would obstruct an observer's view of an object by 20 percent. District inspectors are state certified to evaluate visible emissions. Dust control may be achieved by applying water before/during earthwork and onto unpaved traffic areas, phasing work to limit dust, and setting up wind fences to limit windblown dust.

Soil Stabilization is required at regulated construction sites after normal working hours and on weekends and holidays. This requirement also applies to inactive construction areas such as phased projects where disturbed land is left unattended. Applying water to form a visible crust on the soil and restricting vehicle access are often effective for short-term stabilization of disturbed surface areas. Long-term methods include applying dust suppressants and establishing vegetative cover.

Carryout and Trackout occur when materials from emptied or loaded vehicles falls onto a paved surface or shoulder of a public road or when materials adhere to vehicle tires and are deposited onto a paved surface or shoulder of a public road. Should either occur, the material must be cleaned up at least daily, and immediately if it extends more than 50 feet from the exit point onto a paved road. The appropriate clean-up methods require the complete removal and cleanup of mud and dirt from the paved surface and shoulder. Using a blower device or dry sweeping with any mechanical device other than a PM_{10}-efficient street sweeper is a violation. Larger construction sites, or sites with a high amount of traffic on one or more days, must prevent carryout and trackout from occurring by installing gravel pads, grizzlies, wheel washers, paved interior roads, or a combination thereof at each exit point from the site. In many cases, cleaning up trackout with water is also prohibited as it may lead to plugged storm drains. Prevention is the best method.

Unpaved Access and Haul Roads, as well as unpaved vehicle and equipment traffic areas at construction sites must have dust control. Speed limit signs limiting vehicle speed to 15 mph or less at construction sites must be posted every 500 feet on uncontrolled and unpaved roads.

Storage Piles and Bulk Materials have handling, storage, and transportation requirements that include applying water when handling materials, wetting or covering stored materials, and installing wind barriers to limit visible dust emissions. Also, limiting vehicle speeds, loading haul trucks with a freeboard of six inches or greater along with applying water to the top of the load, and covering the cargo compartments are effective measures for reducing visible dust emissions and carryout from vehicles transporting bulk materials.

Dust Control Plans identify the dust sources and describe the dust control measures that will be implemented before, during, and after any dust generating activity for the duration of the project. Owners or operators are required to submit plans to the SJVAPCD at least 30 days prior to commencing the work for the following:

- Residential developments of ten or more acres of disturbed surface area.
- Non-residential developments of five or more acres of disturbed surface area.
- The relocation of more than 2,500 cubic yards per day of materials on at least three days.

8 San Joaquin Valley Air Pollution Control District (SJVAPCD). 2007. Compliance Assistance Bulletin. Website: http://www.valleyair.org/busind/comply/pm10/forms/RegVIIICAB.pdf. Accessed June 13, 2023.

Operations may not commence until the SJAVPCD has approved the Dust Control Plan. A copy of the plan must be on site and available to workers and District employees. All work on the site is subject to the requirements of the approved dust control plan. A failure to abide by the plan by anyone on site may be subject to enforcement action. Owners or operators of construction projects that are at least one acre in size and where a Dust Control Plan is not required, must provide written notification to the SJVAPCD at least 48 hours in advance of any earthmoving activity.

Record Keeping is required to document compliance with the rules and must be kept for each day any dust control measure is used. The SJVAPCD has developed record forms for water application, street sweeping, and "permanent" controls such as applying long term dust palliatives, vegetation, ground cover materials, paving, or other durable materials. Records must be kept for one year after the end of dust generating activities (Title V sources must keep records for five years).

Exemptions exist for several activities. Those occurring above 3,000 feet in elevation are exempt from all Regulation VIII requirements. Further, Rule 8021 – Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities exempts the following construction and earthmoving activities:

- Blasting activities permitted by California Division of Industrial Safety.
- Maintenance or remodeling of existing buildings provided the addition is less than 50% of the size of the existing building or less than 10,000 square feet (due to asbestos concerns, contact the SJVAPCD at least two weeks ahead of time).
- Additions to single family dwellings.
- The disking of weeds and vegetation for fire prevention on sites smaller than ½ acre.
- Spreading of daily landfill cover to preserve public health and safety and to comply with California Integrated Waste Management Board requirements.

Nuisances are prohibited at all times because District Rule 4102 – Nuisance applies to all construction sources of fugitive dust, whether or not they are exempt from Regulation VIII. It is important to monitor dust-generating activities and implement appropriate dust control measures to limit the public's exposure to fugitive dust.

Addressing Air Quality CEQA Impact Questions

Table 8: 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-B 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 during the construction phase (see Table 9). Similarly, emissions of ROG, NO_X, CO, SO_X, PM_{10} or $PM_{2.5}$ during operations would not exceed any applicable threshold of significance (see Table 10). Therefore, regarding this criterion, the project would be considered less than significant.

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 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 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. This rule reduces the impact of NO_X and PM_{10} emissions from growth within the SJVAB. The rule places application and emission reduction requirements on development projects meeting applicability criteria in order to reduce emissions through on-site mitigation, off-site District-administered projects, or a combination of the two.

Conclusion

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 with regards to this criterion.

The project's regional operational emissions would not exceed any applicable SJVAPCD prior to the incorporation of mitigation measures (see Impact AIR-B). Therefore, the project would be considered consistent with the existing AQPs.

Based on the findings above, the proposed project would not conflict with or obstruct implementation of the applicable air quality plan. 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 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 construction and operation are ROG, NO_X, PM_{10}, and $PM_{2.5}$.

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. 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 regional thresholds below to address if the project would result in a cumulatively considerable net increase of any criteria pollutant (including ozone precursors) of concern.

Criteria Pollutant Emission Estimates

Construction Emissions (Regional)

Construction emissions associated with the development envisioned for the proposed project are shown in Table 9 prior to the incorporation of any mitigation.

Table 9: Summary of Construction Emissions of Criteria Air Pollutants – Unmitigated

Emissions Source	Emissions (Tons/Year)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Project Construction (2023)	0.17	1.64	1.56	< 0.01	0.26	0.14
Project Construction (2024)	0.22	1.74	2.27	< 0.01	0.16	0.08
Project Construction (2025)	0.82	0.21	0.29	< 0.01	0.02	0.01
Total Construction Duration						
Project Total	**1.21**	**3.59**	**4.12**	**< 0.01**	**0.44**	**0.23**
Significance Thresholds	**10**	**10**	**100**	**27**	**15**	**15**
Exceed Significance Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:

PM_{10} and $PM_{2.5}$ emissions are from the mitigated output to reflect compliance with Regulation VIII—Fugitive PM_{10} Prohibitions.

Source of Emissions: Modeling Assumptions and CalEEMod Output Files (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 July 21, 2023.

As shown in Table 9 above, emissions from construction activities associated with the proposed project would fall below the applicable significance thresholds. Therefore, regional and cumulative impacts associated with construction of the proposed project are less than significant.

Operational Emissions (Regional)

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 associated with the proposed project are shown in Table 10. Operational emissions were estimated using a full buildout scenario in the earliest year of operations (2024), which provides a conservative estimate of emissions and resulting potential impacts.

Table 10: 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	1.23	0.04	0.83	0.00	0.00	0.00
Energy	0.01	0.21	0.11	0.00	0.02	0.02
Mobile (Automobiles)	3.70	3.17	21.54	0.04	3.38	0.89
Annual Total (2024)	**4.94**	**3.42**	**22.48**	**0.04**	**3.40**	**0.91**
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 earliest operational year for the proposed project.
Source: Modeling Assumptions and CalEEMod Output Files (Attachment A).

As shown in Table 10, operational emissions would not exceed the applicable SJVAPCD thresholds of significance for ROG, NO_X, CO, SO_X, PM_{10}, or $PM_{2.5}$. Therefore, the impact from operations of the project would be less than significant.

Conclusion

As shown in Table 9, the project's regional emissions would not exceed the applicable regional criteria pollutant emissions quantitative thresholds during project construction. During operations, the project would not exceed the applicable regional criteria pollutant emissions quantitative thresholds (see Table 10). Therefore, the impact would be less than significant.

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.

The closest existing sensitive receptors to the project site include residential receptors, the closest of which include existing single-family homes located within approximately 50 feet north of the project boundary. Land uses surrounding the project site are described below.

- North – The nearest residence to the project boundary is approximately 50 feet (0.01 mile) to the north. Directly north of the project are 55 homes within 0.25 mile, a small ponding basin and open graded land with several streets laid out for future development. To the northeast is all farmland with fruit trees. To the northwest is a mobile home park with 128 mobile homes within 0.25 mile of the project. Just north of the mobile home park are 40 single family residential homes within 0.25 mile of the project. Just beyond 0.25 mile to the northwest of the project are two (2) schools: Kennedy Elementary School and Washington Intermediate School.
- East – The nearest residence to the east of the project is approximately 105 feet (0.02 miles) from the project boundary. To the east of the project is the Island Event Center, five (5) homes and mostly farmland with fruit trees within 0.25 mile.
- South – The nearest residence to the south of the project is approximately 105 feet (0.02 miles) from the project boundary. South of the Project is Dinuba Junior Academy Christian School, El Monte Motel, G Auto Glass, StorMax of Dinuba, Express Car Rental, Jack in the Box, Oliver's Car Wash, Dinuba Auto Plaza, Dinuba Feed and Produce and Mercantile Row Shopping Center with several more businesses. South of the businesses are approximately 140 homes within 0.25 miles of the project. Within 0.50 mile of the project to the southwest is Dinuba High School and Jefferson Elementary School to the south.

- West – The nearest residence to the west of the project is approximately 475 feet (.09 miles) from the project boundary. West of the project are 105 homes within 0.25 mile and several businesses including a McDonalds, Autozone Auto Parts, Tulare County WIC Program, Camaron Pelado Restaurant and United Market Shopping Center with: United Market Grocery Store, Me-n-Ed's Pizza, Tony's Smoke Shop, Shoe Master, Liquor Locker, The Hair Lounge and Las Espuelas Restaurant.

See Attachment B (Construction Health Risk Assessment and Operational Health Risk Screening) for a graphical representation of the sensitive receptor locations within approximately ¼-mile of 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.

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

Local construction impacts would be short-term in nature lasting only during the duration of construction. As shown in Table 11 below, on-site construction emissions would be less than 100 pounds per day for each of the criteria pollutants. To present a conservative estimate, on-site emissions for on-road construction vehicles were included in the localized analysis. Based on the SJVAPCD's guidance, the construction emissions would not cause an ambient air quality standard violation.

Table 11: Localized Concentrations of PM_{10}, $PM_{2.5}$, CO, and NO_X for Construction – Unmitigated

Construction Emission Source	On-site Emissions (pounds per day)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Highest Daily (2023)	5.66	52.89	52.51	0.10	10.95	6.29
Highest Daily (2024)	2.56	20.29	26.59	0.04	1.79	1.00
Highest Daily (2025)	46.82	12.47	17.25	0.03	1.35	0.60
Total Construction Duration						
Highest Daily Maximum	**46.82**	**52.89**	**52.51**	**0.10**	**10.95**	**6.29**
Significance Thresholds	**—**	**100**	**100**	**100**	**100**	**100**
Exceed Significance Thresholds?	**—**	**No**	**No**	**No**	**No**	**No**

Note: Overlap of construction activities is based on the construction schedule shown in Table 2 and Attachment A.

Source of Emissions: Modeling Assumptions and CalEEMod Output Files (Attachment A). Maximum daily emissions represent the maximum daily emissions between the Summer and Winter scenarios.

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 July 21, 2023.

Operation: Localized Concentrations of PM_{10}, $PM_{2.5}$, CO, SO_X, 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 would occur at project buildout, which was modeled for the year 2024 (the earliest year of operations). 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. Motor vehicle emissions are estimated for on-site operations using trip lengths for on-site travel and ¼-mile of off-site emissions. Localized emissions are shown in Table 12 below.

Table 12: 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	SO_X	PM_{10}	$PM_{2.5}$
Area	7.35	0.88	9.36	0.01	0.07	0.07
Energy	0.07	1.16	0.58	0.01	0.09	0.09
Mobile (Automobiles)	22.92	16.11	134.08	0.23	18.55	4.86
Total	**30.34**	**18.15**	**144.02**	**0.25**	**18.71**	**5.02**
Significance Screening Thresholds	**—**	**100**	**100**	**100**	**100**	**100**
Exceed Significance Screening Thresholds?	**—**	**No**	**Yes**	**No**	**No**	**No**

Source of Emissions: Modeling Assumptions and CalEEMod Output Files (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 July 21, 2023.

The project would not exceed SJVAPCD screening thresholds for localized operational criteria pollutant impacts for NO_X, SO_X, PM_{10}, or $PM_{2.5}$; however, emissions would exceed the localized screening thresholds for CO. Specifically, mobile-source emissions are the main contributor to this exceedance in from the proposed mixed-use project. A project that would not create or contribute to a carbon monoxide hotspot would not be considered to have a localized CO impact. As discussed below, a CO hotspot is not anticipated to occur in the project vicinity and impacts would be less than significant.

Localized high levels of CO are associated with traffic congestion and idling or slow-moving vehicles. A CO hotspot represents a condition wherein high concentrations of CO may be produced by motor vehicles accessing a congested traffic intersection under heavy traffic volume conditions. It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when idling at intersections. Accordingly, vehicle emissions standards have become increasingly more stringent.

The analysis prepared for CO attainment in the South Coast Air Basin (SoCAB) by the South Coast Air Quality Management District (SCAQMD) can be used to assist in evaluating potential for CO exceedances in other air basins. Although the SoCAB and the SCAQMD would not be the applicable air basin or air district for the proposed project, the CO hotspot analysis contained in the SCAQMD 1992 CO Plan can still be used to determine potential CO hotspot impacts from the proposed project. This is because CO exceedances are caused by idling vehicles. By using the 1992 CO Plan as a worst-case scenario, the proposed project can measure CO impacts against intersections that experienced significantly more vehicle traffic than adjacent to the proposed project site.

In the 1992 CO Plan, a CO hot spot analysis was conducted for four busy intersections in Los Angeles at the peak morning and afternoon time periods. The intersections evaluated included Long Beach Boulevard and Imperial Highway (Lynwood); Wilshire Boulevard and Veteran Avenue (Westwood); Sunset Boulevard and Highland Avenue (Hollywood); and La Cienega Boulevard and Century Boulevard (Inglewood). The busiest intersection evaluated was that at Wilshire Boulevard and Veteran Avenue, which has a daily traffic volume of approximately 100,000 vehicles per day. Subsequently the CO Plan determined that no CO hotspot would occur even with 100,000 vehicles per day at this one intersection.

As noted in Table 5, the proposed project would generate 5,148 daily vehicle trips. The addition of the proposed project's anticipated trips to the existing traffic in Dinuba would not result in traffic volumes that would exceed the amounts analyzed in the 1992 CO Plan. Therefore, none of the intersections near the project site would have peak-hour traffic volumes exceeding those at the intersections modeled in the 2003 AQMP, nor would there be any reason unique to the local meteorology to conclude that this intersection would yield higher CO concentrations if modeled in detail. In conclusion, the addition of the proposed project's daily trips would not generate a CO hotspot at local intersections and operational CO impact would be less than significant.

Toxic Air Contaminants

Construction

Project construction would involve the use of diesel-fueled vehicles and equipment 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). The SJVAPCD's 2015 GAMAQI does not currently recommend analysis of TAC emissions from project construction activities, but instead focuses on projects with operational emissions that would expose sensitive receptors over a typical lifetime of 70 years. In addition, the most intense construction activities of the project's construction would occur during site preparation and grading phases over a short period. There are no conditions unique to the project site that would require more intense construction activity compared to typical development. Examples of situations that would warrant closer scrutiny may include sites that would require extensive excavation and hauling due to existing site conditions. Building construction typically requires limited amounts of diesel equipment relative to site clearing activities. Nonetheless, a construction HRA was prepared as part of this analysis.

The results of the HRA prepared for project construction for cancer risk and long-term chronic cancer risk are summarized below. Construction emissions were estimated assuming adherence to all applicable rules, regulations, and project design features. The construction emissions were assumed to be distributed over the project area with a working schedule of eight hours per day and five days per week. Emissions were adjusted by a factor of 4.2 to convert for use with a 24-hour-per-day, 365 day-per-year averaging period. Health risk calculations were completed using HARP2. Detailed parameters and complete calculations are included in Attachment B.

The estimated health and hazard impacts at the Maximally Exposed Receptor (MER) from the project's construction emissions are provided in Table 13.

Table 13: Summary of the Health Impacts from Unmitigated Construction of the Project

Exposure Scenario	Maximum Cancer Risk (Risk per Million)	Chronic Non-Cancer Hazard Index	Acute Non-Cancer Hazard Index
Risks and Hazards at the MER			
Risks and Hazards at the MER	12.89	0.0105	0.0000
Significance Threshold	**20**	**1**	**1**
Threshold Exceeded in Any Scenario?	**No**	**No**	**No**
MER = Maximally Exposed Receptor El Monte Way & Crawford Ave Mixed-Use Project Unmitigated Construction MER: Receptor #537 (36°32'57.1"N 119°22'29.0"W) Source: Construction Health Risk Assessment and Operational Health Risk Screening (Attachment B).			

As shown in Table 13, estimated health risks from elevated DPM concentrations during construction of the proposed project would not exceed the applicable health risk significance thresholds. Therefore, the proposed project would not result in a significant impact on nearby sensitive receptors from TACs during construction.

Operations

Unlike warehouses or distribution centers, the daily vehicle trips generated by the proposed commercial and residential mixed-use project would be primarily generated by passenger vehicles. Passenger vehicles typically use gasoline engines rather than the diesel engines that are found in heavy-duty trucks. Gasoline-powered vehicles do emit TACs in the form of toxic organic gases, some of which are carcinogenic. Compared to the combustion of diesel, the combustion of gasoline had relatively low emissions of TACs. Thus, residential projects typically produce limited amounts of TAC emissions during operation. Nonetheless, it is anticipated that there would be some heavy-duty trucks visiting the project site during operations. Consistent with SJVAPCD guidance, an operational prioritization screening analysis was completed for the proposed project.

Operational DPM emissions from diesel trucks were estimated using EMFAC2021emission factors and estimated truck travel and idling at the project site. The emissions were entered into the SJVAPCD Prioritization Screening Tool to determine the risk scores, with complete calculations and assumptions included as part of Attachment B. The results of the screening analysis are provided in Table 14.

Table 14: Prioritization Tool Health Risk Screening Results

Impact Source	Cancer Risk Score	Chronic Risk Score	Acute Risk Score
Diesel Trucks	10.96	0.0061	0.000
Total Risk from Project Operations	**10.96**	**0.0061**	**0.000**
Screening Risk Score Threshold	**10**	**1**	**1**
Screening Thresholds Exceeded?	**Yes**	**No**	**No**
Source: Operational Health Risk Screening (Attachment B)			

As noted in Table 14, cancer risks from project operations do not fall under the SJVAPCD prioritization screening level of 10 in million. A prioritization score of 10 or greater is considered to be potentially significant and a refined HRA using dispersion modeling should be performed to determine significance. Therefore, a project-specific HRA was conducted for the proposed project.

Results of the HRA are summarized in Table 15 below. Because the same receptors could be exposed to project operations and project construction, Table 15 also includes health risks from project operations plus construction. The complete HRA prepared for the proposed project, including HARP2 calculations, is included as part of Appendix B of this technical report.

Table 15: Health Risk Assessment Results – Project Operations and Combined Health Risks from Construction and Operations

Impact Source	Cancer Risk Score	Chronic Risk Score	Acute Risk Score
Project Operations at the MER	4.57	0.0009	0.000
Project Operations + Construction at the Construction MER	14.20	0.0107	0.0000
Project Operations + Construction at the Operational MER	4.72	0.0010	0.0000
Risks and Hazards at the MER (Highest of Any Scenario)	**14.20**	**0.0107**	**0.0000**
Significance Threshold	**20**	**1**	**1**
Exceeds Individual Source Threshold?	**No**	**No**	**No**
Source: Attachment B El Monte Way & Crawford Ave Mixed-Use Project Unmitigated Construction MER: Receptor #537 (36°32'57.1"N 119°22'29.0"W) El Monte Way & Crawford Ave Mixed-Use Project Operational MER: Receptor #484 (36°32'43.8"N 119°23'00.2"W)			

As shown in Table 15, the project would not exceed the cancer risk or chronic hazard threshold levels. The primary source of the emissions responsible for chronic risk are from diesel trucks. DPM does not have an acute risk factor. Since the project does not exceed the applicable SJVAPCD health risk thresholds for cancer risk, acute risk, or chronic risk—prior to the incorporation of mitigation—this impact 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.[9] California experienced 7,517 new probable or confirmed cases of Valley fever in 2022. A total of 319 suspect, probable, and confirmed Valley fever cases were reported in Tulare County in 2022.[10]

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.[11]

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9 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 July 21, 2023.

10 California Department of Public Health (CDPH). 2021. Coccidioidomycosis in California Provisional Monthly Report January – April 2023 (as of April 30, 2023). Website: https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/CocciinCA ProvisionalMonthlyReport.pdf. Accessed July 21, 2023.

11 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 July 21, 2023.

The project is situated on a site previously disturbed that does not provide a suitable habitat for spores. Specifically, the project site had been previously disturbed for agricultural purposes and consists of an existing warehouse. 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.

Although conditions are not favorable, construction activities could generate fugitive dust that contains *C. immitis* spores. The project will minimize the generation of fugitive dust during construction activities by complying with SJVAPCD's Regulation VIII. Therefore, this regulation, combined with the relatively low probability of the presence of *C. immitis* spores would reduce Valley fever impacts to less than significant.

During operations, dust emissions are anticipated to be relatively small because most of the project area where operational activities would occur would be occupied by the proposed residential subdivision and related homes, pavement, and internal streets. This condition would lessen the possibility of the project site 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 immediate project area. Therefore, development of the project is not anticipated to expose receptors to naturally occurring asbestos.[12] Impacts would be less than significant.

Operations—The Project's Potential to Locate Sensitive Receptor Near Existing Sources of TACs

As a mixed-use consisting of residential and commercial uses, the project would locate sensitive receptors (future residents) to a site where future project residents could be subject to existing sources of TACs at the project site. However, the California Supreme Court concluded in *California Building Industry Association (CBIA) v. Bay Area Air Quality Management District (BAAQMD)* that agencies subject to CEQA are not required to analyze the impact of existing environmental conditions on a project's future users or residents. Therefore, this impact will not be further addressed in this document.

Impact Analysis Summary

In summary, the project would not exceed SJVAPCD localized emission daily screening levels for any criteria pollutant during project construction. The project would not exceed SJVAPCD localized emission daily screening levels for NO_X, SO_X, PM_{10}, or $PM_{2.5}$ during project operations and would not cause a CO hotspot. The project is not a significant source of TAC emissions during construction or operation. 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.

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[12] 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 July 21, 2023.

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.

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.

Although the project is less than one mile from the nearest sensitive receptor, the project is not expected to be a significant source of odors. The screening levels for these land use types are shown in Table 16.

Table 16: 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 July 21, 2023.	

Construction

During construction, various diesel-powered vehicles and equipment in use on-site would create localized odors. These odors would be temporary and intermittent, which would decrease the likelihood of the odors concentrating in a single area or lingering for any notable period of time. As such, these odors would likely not be noticeable for extended periods of time beyond the project’s site boundaries. The potential for odor impacts from construction of the proposed project would, therefore, be less than significant.

Operations

Project as a Potential Odor Generator

The development of the proposed mixed-use project consisting of commercial and residential uses 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 16. The proposed mixed-use commercial and residential project would not engage in any of these activities. Minor sources of odors that would be associated with typical residential and neighborhood commercial land uses, such as exhaust from mobile sources (including diesel-fueled vehicles), are known to have temporary and less concentrated odors. Considering the low intensity of potential odor emissions, the proposed 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, impacts would be less than significant.

Project as a Receptor

With the *CBIA v. BAAQMD* ruling, analysis of odor impacts on receivers is not required for CEQA compliance unless the project would exacerbate the impact. As discussed above, the project would not be considered a major source of odors during construction or operation. Therefore, no further analysis is needed. Considering this information, impacts would be less than significant.

Greenhouse Gas Emissions Estimation Summary and Greenhouse Gas Impact Analysis

Thresholds of Significance

Section 15064.4(b) of the CEQA Guidelines 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 greenhouse gas 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 greenhouse gas 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 greenhouse gas 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 EIR must be prepared for the project. In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.

Under the SJVAPCD guidance, projects meeting one of the following would have a less than significant impact on climate change:

- Exempt from CEQA;
- Complies with an approved GHG emission reduction plan or GHG mitigation program;
- Project achieves 29 percent GHG reductions by using approved Best Performance Standards; and
- Project achieves AB 32 targeted 29 percent GHG reductions compared with "business as usual."

The SJVAPCD has not yet adopted BPS for development projects that could be used to streamline the GHG analysis. For development projects, BPS means, "[a]ny 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."

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.[13] 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.

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[13] 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 May 24, 2023.

Quantification of Greenhouse Gas Emissions for Informational Purposes

Construction

GHG emissions generated during all construction activities were combined and are shown in Table 17.

Table 17: Summary of Construction-Generated Greenhouse Gas Emissions

Emissions Source	MT CO_{2e} per Year
Project Construction (2023)	295
Project Construction (2024)	417
Project Construction (2025)	53
Project Construction Total	**765**
Amortized over 30 Years	**25.5**
Notes: MT CO_2e = metric tons of carbon dioxide equivalent Source: Modeling Assumptions and CalEEMod Output Files (Attachment A).	

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 a full buildout scenario in the earliest operation year are shown in Table 18. Complete CalEEMod output files and additional supporting information are also included in Attachment A.

Table 18: Project Operational GHG Emissions (Buildout Year Scenario)

Emission Source	Unmitigated Buildout Year Total Emissions (MT CO_2e per year)
Area	40
Energy	412
Mobile (Automobiles)	3,786
Refrigerants	0
Water	22
Waste	57
Total (MT CO_2e per year)	**4,317**
Source of Emissions: Modeling Assumptions and CalEEMod Output Files (Attachment A).	

Addressing Greenhouse Gas CEQA Impact Questions

Table 19: 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 City of Dinuba has not adopted a GHG reduction plan. In addition, the City 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. The County of Tulare has adopted a Climate Action Plan; however, the County of Tulare's Climate Action Plan is only applicable to unincorporated areas of Tulare County. Because the project is within the City of Dinuba and the City would serve as the lead agency, the County of Tulare's Climate Action Plan is not applicable to the project. 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

Consistency with AB 32 and CARB's 2008 Scoping Plan

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. Former 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 CARB's 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 20 provides an analysis of the project's consistency with the 2017 Scoping Plan Update measures.

Table 20: Consistency with SB 32 Scoping Plan

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. *(The requirement is now 60% in 2030 per SB 100.)*	**Consistent**: The project will purchase electricity from a utility subject to the SB 350 Renewable Mandate.
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.	**Not Applicable**. This measure applies to existing buildings. There are no existing structures included as part of the project. New structures are required to comply with Title 24 Energy Efficiency Standards that are expected to increase in stringency over time. New buildings constructed as part of the proposed project would comply with the applicable Title 24 Energy Efficiency Standards in effect at the time building permits are received. The current Title 24 regulations are the 2022 Title 24 standards, which become effective January 1, 2023. The next update would become effective January 1, 2026.
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 project occupants and visitors can be expected to purchase increasing numbers of more fuel efficient and zero emission cars and trucks each year. The CALGreen Code requires electrical service in new single-family housing to be EV charger-ready. In addition, home deliveries and commercial deliveries will be made by increasing numbers of ZEV delivery trucks as the statewide fleet is expected to get cleaner over time.
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.	**Not Applicable.** The measure applies to owners and operators of trucks and freight operations. The mixed-use project consists of residential and commercial uses and would not be considered an industrial land use or a large freight operator. However, commercial and home deliveries are expected to be made by increasing numbers of ZEV delivery trucks as technology continues to improve accessibility to ZEV vehicles and as regulations are phased in over time.
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 residences will only include natural gas hearths that produce very little black carbon compared with wood burning fireplaces and heaters in line with the SJVAPCD's Guidance for Assessing and Mitigating Air Quality Impacts mitigation measures.[1] Commercial uses contemplated as part of the proposed project are not expected to be sources 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 will provide mixed-use residential and commercial development in the region that is consistent with the Regional Transportation Plan/Sustainable Communities Strategy (SCS) strategy to increase development densities to reduce VMT. The project includes mixed-use development including

Scoping Plan Measure	Project Consistency
	residential and commercial uses within the same area, which will also contribute to reductions in VMT.
Post-2020 Cap-and-Trade Program. The Post 2020 Cap-and-Trade Program continues the existing program for another 10 years. The Cap-and-Trade Program applies to large industrial sources such as power plants, refineries, and cement manufacturers.	**Consistent.** The post-2020 Cap-and-Trade Program indirectly affects people who use the products and 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 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 is residential and commercial development and will not be considered natural or working lands.

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 July 21, 2023.
[1] San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMA. Accessed July 21, 2023.

As described in Table 20, 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 mixed-use project's operational GHG emissions would principally be generated from electricity consumption and vehicle use, 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 CARB's 2022 Scoping Plan

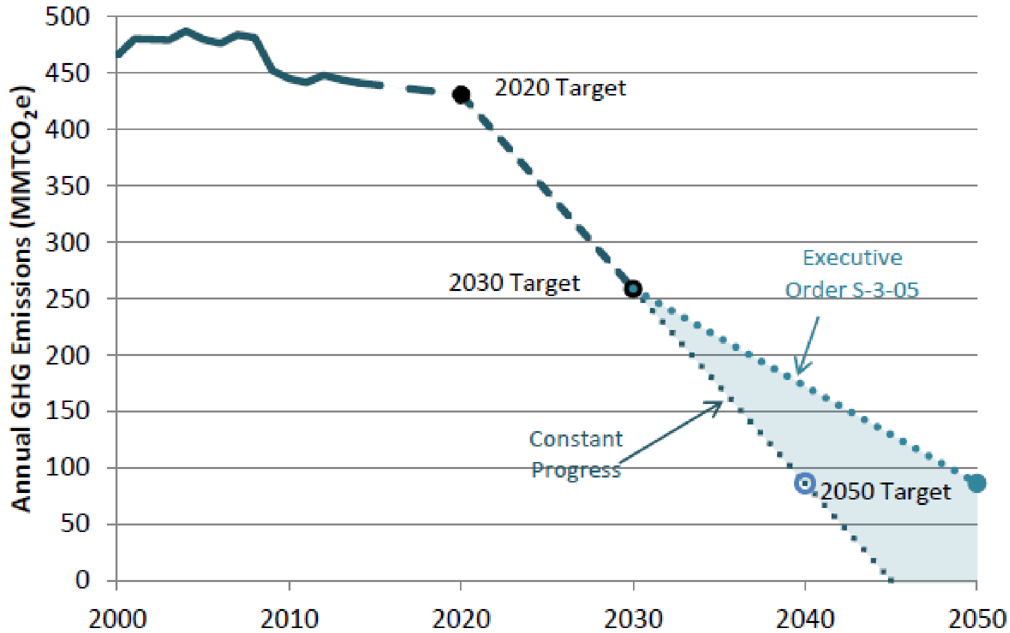
Regarding goals for 2050 under Executive Order S-3-05, at this time it is not possible to quantify the emissions savings from future regulatory measures, as they have not yet been developed; nevertheless, it can be anticipated that operation of the proposed project would comply with whatever measures 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 2.

Figure 2: 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's 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. As discussed under Impact GHG-A, neither the City of Dinuba nor the County of Tulare have adopted a GHG reduction plan that would be applicable to the proposed project. In addition, the City of Dinuba 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. 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. The County of Tulare has adopted a Climate Action Plan; however, the County of Tulare's Climate Action Plan is only applicable to unincorporated areas of Tulare County and would not be appliable to the proposed project because the project is within the City of Dinuba. 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.

Energy

Environmental Setting

Pacific Gas and Electric Company (PG&E) provides electricity and natural gas service to the City of Dinuba and the project site. Upon buildout of the project site, electricity to the project site would be provided by PG&E. All electricity infrastructure would be located underground and would tie-in to existing infrastructure.

PG&E was ahead of schedule in meeting the California's RPS 2020 mandate of serving their load with at least 33 percent RPS-eligible resources. In 2020, approximately 85 percent of the electricity PG&E supplied was from GHG-free sources including nuclear, large hydroelectric, and eligible renewable sources of energy.[14]

Methodology

The energy requirements for the proposed project were determined using the construction and operational estimates generated from the Air Quality Analysis (refer to Attachment A for related CalEEMod output files). The calculation worksheets for fuel consumption rates for off-road construction equipment and on-road vehicles are provided in Attachment C. Short-term construction energy consumption is discussed below.

Short-Term Construction

Off-Road Equipment

Table 21 provides estimates of the project's construction fuel consumption from off-road construction equipment for the entire project, categorized by construction activity.

Table 21: Construction Off-Road Fuel Consumption

Project Component	Construction Activity	Fuel Consumption (gallons)
El Monte Way & Crawford Ave Mixed-Use Project (On-site, Off-road Equipment Use)	Site Preparation	1,824
	Grading	5,743
	Building Construction	20,706
	Paving	888
	Architectural Coating	103
Construction Total		**29,264**
Source: Energy Consumption Calculations (Attachment C).		

As shown in Table 21, use of off-road equipment associated with construction of the proposed project is estimated to consume approximately 29,264 gallons of diesel fuel over the entire construction duration. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the City of Dinuba, the larger Tulare County region, or other parts of California. Therefore, it is expected that construction fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region.

[14] Pacific Gas & Electric (PG&E). 2021. Corporate Sustainability Report 2021. Website: https://www.pgecorp.com/corp_responsibility/reports/2021/pf04_renewable_energy.html. Accessed July 2023.

On-Road Vehicles

On-road vehicles for construction workers, vendors, and haulers would require fuel for travel to and from the site during construction. Table 22 provides an estimate of the total on-road vehicle fuel usage during construction. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in other parts of the Tulare County region or the state. Therefore, it is expected that construction fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region.

Table 22: Construction On-Road Fuel Consumption

	Project Component	Total Annual Fuel Consumption (gallons)
El Monte Way & Crawford Ave Mixed-Use Project (On-site, Off-road Equipment Use)	Site Preparation	135
	Grading	2,430
	Building Construction	12,710
	Paving	210
	Architectural Coating	155
Total Construction On-Road Fuel Consumption		**15,640**
Source: Energy Consumption Calculations (Attachment C).		

Other Energy Consumption Anticipated During Project Construction

Other equipment could include construction lighting, field services (office trailers), and electrically driven equipment such as pumps and other tools. The project site is located in the City of Dinuba. As construction activities would occur primarily during daylight hours, it is anticipated that the use of construction lighting would be minimal. Singlewide mobile office trailers, which are commonly used in construction staging areas, generally range in size from 160 square feet to 720 square feet. A typical 720-square-foot office trailer would consume approximately 19,605 kWh during the approximate 1.41-year construction phase (Attachment C).

Long-Term Operations

Transportation Energy Demand

Table 23 provides an estimate of the daily and annual fuel consumed by vehicles traveling to and from the proposed project. These estimates were derived using the same assumptions used in the operational air quality analysis for the proposed project.

Table 23: Long-Term Operational Vehicle Fuel Consumption

Vehicle Type	Annual VMT	Average Fuel Economy (miles/ gallon)	Total Daily Fuel Consumption (gallons)	Total Annual Fuel Consumption (gallons)
Passenger Cars (LDA)	4,378,555	30.14	398.0	145,261
Light Trucks (Pickups) and Medium Vehicles	4,136,019	22.05	513.9	187,573
Light-Heavy to Medium-Heavy Diesel Trucks	507,588	11.56	120.3	43,925

Vehicle Type	Annual VMT	Average Fuel Economy (miles/ gallon)	Total Daily Fuel Consumption (gallons)	Total Annual Fuel Consumption (gallons)
Heavy-heavy Trucks	150,829	5.96	69.3	25,306
Motorcycles	176,735	41.76	11.6	4,232
Other	65,003	7.56	23.6	8,601
Total	**9,414,729**	**—**	**1,136.7**	**414,898**
Notes: VMT = vehicle miles traveled Percent of Vehicle Trips and VMT provided by CalEEMod. “Other” consists of buses and motor homes. Source: Energy Consumption Calculations (Attachment C).				

As shown above, annual vehicular fuel consumption is estimated to be 414,898 gallons of gasoline and diesel fuel combined. Using rates calculated for the 2024 operational year, daily consumption is estimated at approximately 1,136.7 gallons of fuel (see Attachment C).

Building Energy Demand

As shown in Table 24 and Table 25, the proposed project is estimated to demand 1,825,429 kilowatt-hours (KWhr) of electricity and 4,544,470 1,000-British Thermal Units (kBTU) of natural gas, respectively, on an annual basis.

Table 24: Long-Term Electricity Usage

Land Use	Total Electricity Demand (KWhr/year)
Single-family Housing	897,272
Strip Mall	872,305
Other Asphalt Surfaces	0
City Park	0
Parking Lot	55,852
Total Project Consumption	**1,825,429**
Source: Energy Consumption Calculations (Attachment C).	

Table 25: Long-Term Natural Gas Usage

Land Use	Total Natural Gas Demand (kBTU/year)
Single-family Housing	3,735,583
Strip Mall	808,887
Other Asphalt Surfaces	0
City Park	0
Parking Lot	0
Total Project Consumption	**4,544,470**

Source: Energy Consumption Calculations (Attachment C).

Addressing Energy CEQA Impact Questions

This section discusses potential energy impacts associated with the proposed project and provides mitigation measures where necessary.

Table 26: Summary of Energy Impact Analysis

Energy	
Would the project:	**Significance Finding**
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Less than Significant Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	Less than Significant Impact

Energy Mitigation Measures

No mitigation is required.

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

Less Than Significant Impact.

This impact addresses the energy consumption from both the short-term construction and long-term operations are discussed separately below.

Construction Energy Demand

As summarized in Table 21 and Table 22, the proposed project would require 29,264 gallons of diesel fuel for construction off-road equipment and 15,640 gallons of gasoline and diesel for on-road vehicles during construction. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or other parts of the state. In addition, the overall construction schedule and process is already designed to be efficient in order to avoid excess monetary costs. For example, equipment and fuel are not typically used wastefully due to the added expense associated with renting the equipment, maintaining it, and fueling it. Therefore, it is expected that construction fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region, and as such, impacts would be less than significant.

Long-Term Energy Demand

Building Energy Demand

Buildings and infrastructure constructed pursuant to the proposed project (including the proposed single-family homes) would comply with the versions of CCR Titles 20 and 24, including California Green Building Standards (CALGreen), that are applicable at the time that building permits are issued. The proposed project is estimated to demand 1,825,429 KWhr of electricity per year and 4,544,470 kBTU of natural gas per year. As the project site is currently undeveloped, this would represent an increase in demand for electricity and natural gas.

It would be expected that building energy consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than for any other similar buildings in the City of Dinuba or the larger Tulare County region. Current state regulatory requirements for new building construction contained in the 2022 CALGreen and Title 24 standards would increase energy efficiency and reduce energy demand in comparison to most existing development, and therefore would reduce actual environmental effects associated with energy use from the proposed project. Additionally, the CALGreen and Title 24 standards have increased efficiency standards through each update. The most recent 2022 standards became effective January 1, 2023 and will be updated in the next cycle that will become effective at the start of 2026. Therefore, while the proposed project would result in increased electricity and natural gas demand, electricity and natural gas would be consumed more efficiently than most existing development due to compliance with the latest building standards.

Based on the above information, the proposed project would not result in the inefficient or wasteful consumption of electricity or natural gas, and impacts would be less than significant.

Transportation Energy Demands

The daily vehicular fuel consumption is estimated to be 1,136.7 gallons of combined gasoline and diesel fuel. Annual consumption is estimated at 414,898 gallons. In addition, the proposed project would constitute development within an established community and would not be opening a new geographical area for development. As such, the proposed project would not result in unusually long trip lengths for future residents, visitors, vendors, employees, or customers. The project area is located near other residential and commercial land uses, including adjacent single-family homes to the north and west of the project area and commercial uses to the south of the project. The proposed project would be well-positioned to accommodate an existing community and provide housing for planned growth. Vehicles accessing the site would be typical of vehicles accessing similar residential uses in the City of Dinuba, Tulare County, and surrounding areas. For these reasons, vehicular fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than for any other similar land use activities in the region, and impacts would be less than significant.

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

Less Than Significant Impact.

The project proposes the construction of new residential development that would be built in accordance with all applicable rules and regulations. Compliance with established and applicable regulations would ensure that the project would not conflict with or obstruct any state or local plan for renewable energy or energy efficiency. Moreover, compliance with Title 24 standards would ensure that the proposed project would not conflict with any energy conservation policies related to the proposed project's building envelope, mechanical systems, and indoor and outdoor lighting. Notably, the applicable Title 24 standards require the project to include on-site renewable energy to serve the future project occupants and residents. In addition, the proposed project would constitute development within an established community. Specifically, the project site is adjacent to built-up areas of the City of Dinuba. As such, the project would not be opening a new geographical area for development such that it would not result in unusually long trip lengths for future project residents, employees, visitors, customers, or vendors . In addition, the proposed mixed-use development is specifically designed for increased walkability, facilitated by the proposed pedestrian connectivity throughout the project site.

For the above reasons, the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and impacts would be less than significant.

Attachments

Attachment A – Modeling Assumptions and CalEEMod Output Files

Attachment B – Construction Health Risk Assessment and Operational Health Risk Screening

Attachment C – Energy Consumption Calculations

ATTACHMENT A

Modeling Assumptions and CalEEMod Output Files

Modeling Assumptions and CalEEMod Output Files

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Modeling Assumptions/Additional Supporting Information

- **El Monte Way & Crawford Ave Mixed-Use Project Construction Assumptions**
- **Project Site Vicinity Map**
- **Project Site Plan**
- **Project Trip Generation Assumptions**

CalEEMod Output Files

- **Unmitigated Project Construction & Buildout Operations in the Earliest Year (2024)**
- **Maximum Daily On-site/Localized Construction and Operational Emissions**

El Monte Way & Crawford Ave Mixed-Use Project Construction Assumptions

Construction Phase			**Num Days**	
Phase Name	**Start Date**	**End Date**	**Week**	**Num Days**
Site Preparation	10/2/2023	10/27/2023	5	20
Grading	10/28/2023	12/29/2023	5	45
Building Construction	10/15/2023	2/15/2025	5	350
Paving	12/30/2023	2/16/2024	5	35
Architectural Coating	1/11/2025	2/28/2025	5	35

OffRoad Equipment					
Phase Name	**Offroad Equipment Type**	**Amount**	**Usage Hours**	**Horse Power**	**Load Factor**
Site Preparation	Rubber Tired Dozers	3	8	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8	84	0.37
Grading	Graders	1	8	148	0.41
Grading	Excavators	2	8	36	0.38
Grading	Tractors/Loaders/Backhoes	2	8	84	0.37
Grading	Scrapers	2	8	423	0.48
Grading	Rubber Tired Dozers	1	8	367	0.40
Building Construction	Forklifts	3	8	82	0.20
Building Construction	Generator Sets	1	8	14	0.74
Building Construction	Cranes	1	7	367	0.29
Building Construction	Welders	1	8	46	0.45
Building Construction	Tractors/Loaders/Backhoes	3	7	84	0.37
Paving	Pavers	2	8	81	0.42
Paving	Paving Equipment	2	8	89	0.36
Paving	Rollers	2	8	36	0.38
Architectural Coating	Air Compressors	1	6	37	0.48

Trips and VMT	**Worker Trip**	**Vendor Trip**	**Hauling Trip**	**Worker Trip**	**Vendor Trip**	**Hauling Trip**
Phase Name	**Number**	**Number**	**Number**	**Length**	**Length**	**Length**
Site Preparation	17.50	2.00	0.00	7.7	6.8	20
Grading	20.00	1.00	13.89	7.7	6.8	20
Building Construction	60.99	23.80	0.00	7.7	6.8	20
Paving	15.00	2.00	0.00	7.7	6.8	20
Architectural Coating	12.20	1.00	0.00	7.7	6.8	20


Project Location
Crawford Ave.
El Monte Way
north

OWNER
DWELLE FAMILY LIMITED PARTNERSHIP

APPLICANT
KEN TURNER
810 W. MAIN STREET
VISALIA, CA 93291
KEN@BLUESKYRENTS.COM
559-310-0442

SUBDIVIDER
KEN TURNER
810 W. MAIN STREET
VISALIA, CA 93291
KEN@BLUESKYRENTS.COM
559-310-0442

AGENT
AW ENGINEERING
ALLEN WILLIAMS
810 W. ACEQUIA AVE.
VISALIA, CA 93291
AWILLIAMS@AWE-INC.COM
PHONE: (559) 713-6139

PROPERTY INFORMATION
ZONING: R-1-6, C-3

PROPOSED ZONING: R-1-6, C-3

EXISTING LAND USE: MEDIUM RESIDENTIAL, NEIGHBORHOOD COMMERCIAL

STRUCTURES: NO EXISTING STRUCTURES

WATER SUPPLY: CITY OF DINUBA

SEWAGE DISPOSAL: CITY OF DINUBA

STORM DRAINAGE: ON-SITE POND

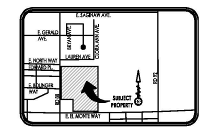
RESIDENTIAL S.F. ACREAGE: 22.57

COMMERCIAL S.F. ACREAGE: 3.36

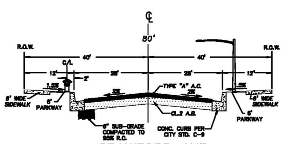
OFF-SITE SEWER NOTE: THE SEWER MAIN FOR THIS PROJECT WILL GO INTO "P" STREET WHICH IS CURRENTLY IN NEED OF BEING UPSIZED.

EL MONTE WAY & CRAWFORD AVE.

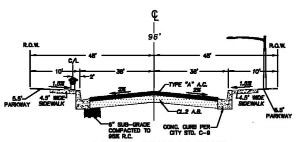
THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF DINUBA, COUNTY OF TULARE, STATE OF CALIFORNIA AND IS DESCRIBED AS FOLLOWS:
THAT PORTION OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 9, TOWNSHIP 16 SOUTH, RANGE 24 EAST, MOUNT DIABLO BASE AND MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF TULARE, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF, DESCRIBED AS FOLLOWS:
BEGINNING AT THE SOUTHWEST CORNER OF SAID SECTION 9; THENCE EAST 16.33 CHAINS; THENCE NORTH 19.59 CHAINS; THENCE WEST 16.33 CHAINS; THENCE SOUTH 19.59 CHAINS TO THE POINT OF BEGINNING.
EXCEPTING THEREFROM THAT PORTION THEREOF DESCRIBED AS FOLLOWS:
BEGINNING AT THE SOUTHWEST CORNER OF SAID SECTION 9; THENCE EAST ALONG THE SOUTH LINE THEREOF, 1,053.12 FEET; THENCE NORTH PARALLEL WITH THE WEST LINE OF SAID SECTION, 347 FEET TO THE TRUE POINT OF BEGINNING; THENCE NORTH PARALLEL WITH THE WEST LINE OF SAID SECTION, 203 FEET; THENCE SOUTH 89°33'30" WEST, 55 FEET; THENCE SOUTH PARALLEL WITH THE WEST LINE OF SAID SECTION, 203 FEET; THENCE NORTH 89°33'30" EAST 55 FEET TO THE POINT OF BEGINNING.
ALSO EXCEPTING THEREFROM THE SOUTH 40 FEET AND THE WEST 40 FEET THEREOF AS GRANTED TO THE COUNTY OF TULARE BY DEED RECORDED JUNE 20, 1959 IN BOOK 2847, PAGE 127 OF OFFICIAL RECORDS, FILE NO. 20434.
ALSO EXCEPTING THEREFROM THE WEST 340 FEET OF THE SOUTH 455 FEET OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 9, TOWNSHIP 16 SOUTH, RANGE 24 EAST, MOUNT DIABLO BASE AND MERIDIAN, IN THE COUNTY OF TULARE, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.



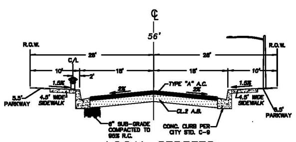
VICINITY MAP
CITY OF DINUBA
SCALE: 1"=1000'
COUNTY OF TULARE



CRAWFORD AVE. N.T.S.



E. EL MONTE WAY N.T.S.



LOCAL STREETS N.T.S.

811
Know what's below. Call before you dig.

80' 0 40' 80'
1" = 80'

SITE PLAN

REVISIONS	REV. BY	DATE

APPROVED, DESIGN ENGINEER
JESSE ALLEN WILLIAMS CPE 64742

REGISTERED PROFESSIONAL ENGINEER
No. 64742
Exp. 6/30/23
CIVIL
STATE OF CALIFORNIA

AWEngineering
810 W. ACEQUIA AVE.
VISALIA, CA. 93291
PHONE: (559) 713-6139

EL MONTE WAY AND CRAWFORD AVE
APN#: 013-090-037
DINUBA, CA 93618

SCALE: 1"= 80'
JOB #: 23003
FLOOD ZONE: A
DRAWN BY: RER
SHEET C1

PROJECT TRIP GENERATION AND DESIGN HOUR VOLUMES

The trip generation and design hour volumes for the residential and medical development were calculated using the Institute of Transportation Engineers (ITE) Trip Generation, 11th Edition. The ADT, AM and PM peak hour rate equations, and peak hour directional splits for ITE Land Use Codes 210 (Single-Family Detached Housing) and 822 (Strip Retail Plaza <40k) were used to estimate the project traffic.

Table 1
Project Trip Generation

General Information			Daily Trips		AM Peak Hour Trips			PM Peak Hour Trips		
ITE Code	Development Type	Variable	ADT RATE	ADT	Rate	In % Split/ Trips	Out % Split/ Trips	Rate	In % Split/ Trips	Out % Split/ Trips
210	Single-Family detached Housing	96 Dwelling Units	eq	972	eq	25% 18	75% 54	eq	63% 60	37% 36
822	Strip Retail Plaza (<40k)	27.11 1000 sq ft GLA	eq	1374	eq	60% 33	40% 23	eq	50% 79	50% 79
822	Strip Retail Plaza (<40k)	26.19 1000 sq ft GLA	eq	1335	eq	60% 33	40% 21	eq	50% 77	50% 77
822	Strip Retail Plaza (<40k)	29.3 1000 sq ft GLA	eq	1466	eq	60% 35	40% 24	eq	50% 84	50% 83
sub-total				5,147		119	122		300	275
Adjustments										
Capture		5%		257		5	3		12	12
Pass-by		15%		772		15	10		36	36
Total				4,118		99	108		252	227

TRIP DISTRIBUTION AND ASSIGNMENT

The project trip distribution in Table 2 represents the most likely travel routes for traffic accessing the project. Project traffic distribution was estimated based on a review of the potential draw from population centers within the region and the types of land uses involved.

Table 2
Project Trip Distribution

Direction	Percent
North	20
East	5
South	20
West	55

El Monte Way Project Custom Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	El Monte Way Project
Construction Start Date	10/2/2023
Operational Year	2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.90
Precipitation (days)	31.4
Location	36.547517, -119.374733
County	Tulare
City	Dinuba
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2776
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.14

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

Single Family Housing	96.0	Dwelling Unit	22.6	187,200	1,124,434	—	324	—
Strip Mall	82.6	1000sqft	1.90	82,604	14,640	—	—	—
Other Non-Asphalt Surfaces	0.81	Acre	0.81	0.00	0.00	—	—	—
City Park	1.11	Acre	1.11	0.00	1.11	1.11	—	—
Parking Lot	1.46	Acre	1.46	0.00	6,380	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.85	1.58	12.2	16.6	0.03	0.50	0.64	1.14	0.47	0.13	0.60	—	3,299	3,299	0.13	0.12	2.93	3,340
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	6.70	5.66	52.9	52.5	0.10	2.37	8.58	10.9	2.18	4.11	6.29	—	11,024	11,024	0.44	0.34	0.16	11,137
2024	2.90	2.56	20.3	26.6	0.04	0.89	0.90	1.79	0.82	0.17	1.00	—	4,899	4,899	0.21	0.14	0.09	4,946
2025	1.90	46.8	12.5	17.2	0.03	0.47	0.88	1.35	0.43	0.17	0.60	—	3,466	3,466	0.15	0.12	0.08	3,506
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	1.12	0.95	8.98	8.55	0.02	0.38	1.04	1.43	0.35	0.43	0.78	—	1,762	1,762	0.07	0.05	0.38	1,779
2024	1.40	1.20	9.52	12.4	0.02	0.40	0.47	0.87	0.37	0.10	0.46	—	2,492	2,492	0.10	0.08	0.92	2,521

2025	0.17	4.48	1.12	1.57	< 0.005	0.04	0.08	0.12	0.04	0.01	0.05	—	315	315	0.01	0.01	0.12	318
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.21	0.17	1.64	1.56	< 0.005	0.07	0.19	0.26	0.06	0.08	0.14	—	292	292	0.01	0.01	0.06	295
2024	0.26	0.22	1.74	2.27	< 0.005	0.07	0.09	0.16	0.07	0.02	0.08	—	413	413	0.02	0.01	0.15	417
2025	0.03	0.82	0.21	0.29	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	—	52.1	52.1	< 0.005	< 0.005	0.02	52.7

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	24.2	22.9	16.1	134	0.23	0.22	18.3	18.6	0.21	4.66	4.86	—	23,833	23,833	1.41	1.34	96.4	24,364
Area	1.26	7.35	0.88	9.36	0.01	0.07	—	0.07	0.07	—	0.07	0.00	1,040	1,040	0.02	< 0.005	—	1,041
Energy	0.13	0.07	1.16	0.58	0.01	0.09	—	0.09	0.09	—	0.09	—	2,477	2,477	0.29	0.02	—	2,491
Water	—	—	—	—	—	—	—	—	—	—	—	19.6	49.7	69.3	2.01	0.05	—	134
Waste	—	—	—	—	—	—	—	—	—	—	—	98.9	0.00	98.9	9.89	0.00	—	346
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.86	1.86
Total	25.6	30.3	18.1	144	0.25	0.39	18.3	18.7	0.37	4.66	5.03	118	27,399	27,518	13.6	1.41	98.3	28,378
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	21.2	19.8	18.5	120	0.21	0.22	18.3	18.6	0.21	4.66	4.87	—	21,801	21,801	1.69	1.45	2.50	22,279
Area	0.09	6.26	0.80	0.34	0.01	0.06	—	0.06	0.06	—	0.06	0.00	1,011	1,011	0.02	< 0.005	—	1,012
Energy	0.13	0.07	1.16	0.58	0.01	0.09	—	0.09	0.09	—	0.09	—	2,477	2,477	0.29	0.02	—	2,491
Water	—	—	—	—	—	—	—	—	—	—	—	19.6	49.7	69.3	2.01	0.05	—	134
Waste	—	—	—	—	—	—	—	—	—	—	—	98.9	0.00	98.9	9.89	0.00	—	346
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.86	1.86
Total	21.4	26.1	20.5	121	0.23	0.38	18.3	18.7	0.36	4.66	5.02	118	25,338	25,457	13.9	1.53	4.36	26,264

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	21.6	20.3	17.4	118	0.22	0.22	18.3	18.5	0.21	4.66	4.86	—	22,373	22,373	1.54	1.39	41.6	22,868
Area	0.59	6.76	0.22	4.52	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	242	242	< 0.005	< 0.005	—	242
Energy	0.13	0.07	1.16	0.58	0.01	0.09	—	0.09	0.09	—	0.09	—	2,477	2,477	0.29	0.02	—	2,491
Water	—	—	—	—	—	—	—	—	—	—	—	19.6	49.7	69.3	2.01	0.05	—	134
Waste	—	—	—	—	—	—	—	—	—	—	—	98.9	0.00	98.9	9.89	0.00	—	346
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.86	1.86
Total	22.3	27.1	18.7	123	0.23	0.33	18.3	18.7	0.32	4.66	4.97	118	25,140	25,259	13.7	1.46	43.5	26,082
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.94	3.70	3.17	21.5	0.04	0.04	3.34	3.38	0.04	0.85	0.89	—	3,704	3,704	0.26	0.23	6.89	3,786
Area	0.11	1.23	0.04	0.83	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	40.0	40.0	< 0.005	< 0.005	—	40.0
Energy	0.02	0.01	0.21	0.11	< 0.005	0.02	—	0.02	0.02	—	0.02	—	410	410	0.05	< 0.005	—	412
Water	—	—	—	—	—	—	—	—	—	—	—	3.24	8.23	11.5	0.33	0.01	—	22.2
Waste	—	—	—	—	—	—	—	—	—	—	—	16.4	0.00	16.4	1.64	0.00	—	57.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.31	0.31
Total	4.07	4.94	3.42	22.5	0.04	0.06	3.34	3.40	0.06	0.85	0.91	19.6	4,162	4,182	2.27	0.24	7.20	4,318

3. Construction Emissions Details

3.1. Site Preparation (2023) - Unmitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.70	3.95	39.7	35.5	0.05	1.81	—	1.81	1.66	—	1.66	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.17	0.17	< 0.005	0.02	0.02	—	5.56	5.56	< 0.005	< 0.005	< 0.005	5.84
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	2.18	1.94	< 0.005	0.10	—	0.10	0.09	—	0.09	—	290	290	0.01	< 0.005	—	291
Dust From Material Movement	—	—	—	—	—	—	0.42	0.42	—	0.22	0.22	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.30	0.30	< 0.005	< 0.005	< 0.005	0.32
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.40	0.35	< 0.005	0.02	—	0.02	0.02	—	0.02	—	48.0	48.0	< 0.005	< 0.005	—	48.2
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.08	0.78	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	97.4	97.4	0.01	< 0.005	0.01	99.1
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	44.4	44.4	< 0.005	0.01	< 0.005	46.4
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.54	5.54	< 0.005	< 0.005	0.01	5.63
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.43	2.43	< 0.005	< 0.005	< 0.005	2.54
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.92	0.92	< 0.005	< 0.005	< 0.005	0.93
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.40	0.40	< 0.005	< 0.005	< 0.005	0.42
Hauling	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

3.3. Grading (2023) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.43	3.72	37.3	31.4	0.06	1.59	—	1.59	1.47	—	1.47	—	6,598	6,598	0.27	0.05	—	6,621

Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.43	1.43	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.17	0.17	< 0.005	0.02	0.02	—	5.56	5.56	< 0.005	< 0.005	< 0.005	5.84
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.55	0.46	4.60	3.87	0.01	0.20	—	0.20	0.18	—	0.18	—	813	813	0.03	0.01	—	816
Dust From Material Movement	—	—	—	—	—	—	0.44	0.44	—	0.18	0.18	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.68	0.68	< 0.005	< 0.005	< 0.005	0.72
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.84	0.71	< 0.005	0.04	—	0.04	0.03	—	0.03	—	135	135	0.01	< 0.005	—	135
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.11	0.11	< 0.005	< 0.005	< 0.005	0.12
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.09	0.89	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	111	111	0.01	0.01	0.01	113
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.2	22.2	< 0.005	< 0.005	< 0.005	23.2
Hauling	0.04	0.02	1.41	0.32	0.01	0.02	0.26	0.28	0.02	0.07	0.09	—	1,016	1,016	0.02	0.16	0.06	1,065

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.2	14.2	< 0.005	< 0.005	0.03	14.5
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.73	2.73	< 0.005	< 0.005	< 0.005	2.86
Hauling	0.01	< 0.005	0.17	0.04	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	125	125	< 0.005	0.02	0.13	131
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.36	2.36	< 0.005	< 0.005	< 0.005	2.40
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.45	0.45	< 0.005	< 0.005	< 0.005	0.47
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	20.7	20.7	< 0.005	< 0.005	0.02	21.8

3.5. Building Construction (2023) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.50	1.26	11.8	13.2	0.02	0.55	—	0.55	0.51	—	0.51	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.17	0.17	< 0.005	0.02	0.02	—	5.56	5.56	< 0.005	< 0.005	< 0.005	5.84
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.19	1.80	2.01	< 0.005	0.08	—	0.08	0.08	—	0.08	—	366	366	0.01	< 0.005	—	367
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.84	0.84	< 0.005	< 0.005	< 0.005	0.89
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.04	0.04	0.33	0.37	< 0.005	0.02	—	0.02	0.01	—	0.01	—	60.6	60.6	< 0.005	< 0.005	—	60.8
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.15
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.35	0.33	0.28	2.72	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	340	340	0.03	0.02	0.04	345
Vendor	0.04	0.02	0.84	0.30	< 0.005	0.01	0.14	0.14	0.01	0.04	0.04	—	528	528	0.01	0.08	0.04	552
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.43	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	53.8	53.8	< 0.005	< 0.005	0.11	54.7
Vendor	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	80.6	80.6	< 0.005	0.01	0.09	84.3
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.90	8.90	< 0.005	< 0.005	0.02	9.06
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.3	13.3	< 0.005	< 0.005	0.02	14.0
Hauling	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

3.7. Building Construction (2024) - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.17	0.17	< 0.005	0.02	0.02	—	5.39	5.39	< 0.005	< 0.005	< 0.005	5.66
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.17	0.17	< 0.005	0.02	0.02	—	5.46	5.46	< 0.005	< 0.005	< 0.005	5.73
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	0.86	8.04	9.39	0.02	0.36	—	0.36	0.33	—	0.33	—	1,717	1,717	0.07	0.01	—	1,723
Onsite truck	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.12	0.12	< 0.005	0.01	0.01	—	3.88	3.88	< 0.005	< 0.005	< 0.005	4.07
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.47	1.71	< 0.005	0.07	—	0.07	0.06	—	0.06	—	284	284	0.01	< 0.005	—	285
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.64	0.64	< 0.005	< 0.005	< 0.005	0.67
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.35	0.20	3.17	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	376	376	0.02	0.02	1.54	383
Vendor	0.04	0.02	0.75	0.28	< 0.005	0.01	0.14	0.14	0.01	0.04	0.04	—	520	520	0.01	0.08	1.39	546
Hauling	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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.30	0.25	2.48	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	333	333	0.03	0.02	0.04	338
Vendor	0.03	0.02	0.80	0.29	< 0.005	0.01	0.14	0.14	0.01	0.04	0.04	—	521	521	0.01	0.08	0.04	545
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.22	0.16	1.84	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	247	247	0.02	0.01	0.48	251
Vendor	0.02	0.02	0.56	0.20	< 0.005	0.01	0.10	0.10	0.01	0.03	0.03	—	373	373	0.01	0.06	0.43	390
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.34	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	40.9	40.9	< 0.005	< 0.005	0.08	41.6
Vendor	< 0.005	< 0.005	0.10	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	61.7	61.7	< 0.005	0.01	0.07	64.6
Hauling	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

3.9. Building Construction (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.17	0.17	< 0.005	0.02	0.02	—	5.36	5.36	< 0.005	< 0.005	< 0.005	5.63

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.94	1.17	< 0.005	0.04	—	0.04	0.04	—	0.04	—	216	216	0.01	< 0.005	—	217
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.48	0.48	< 0.005	< 0.005	< 0.005	0.50
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.17	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	—	35.7	35.7	< 0.005	< 0.005	—	35.9
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.08	0.08	< 0.005	< 0.005	< 0.005	0.08
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.30	0.28	0.23	2.28	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	326	326	0.03	0.02	0.04	331
Vendor	0.03	0.02	0.77	0.27	< 0.005	0.01	0.14	0.14	0.01	0.04	0.04	—	512	512	0.01	0.08	0.04	535
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.21	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	30.4	30.4	< 0.005	< 0.005	0.05	30.9
Vendor	< 0.005	< 0.005	0.07	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	46.1	46.1	< 0.005	0.01	0.05	48.2
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.03	5.03	< 0.005	< 0.005	0.01	5.12
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.63	7.63	< 0.005	< 0.005	0.01	7.97
Hauling	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

3.11. Paving (2023) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.04	0.88	8.06	10.0	0.01	0.41	—	0.41	0.38	—	0.38	—	1,512	1,512	0.06	0.01	—	1,517
Paving	—	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.17	0.17	< 0.005	0.02	0.02	—	5.56	5.56	< 0.005	< 0.005	< 0.005	5.84
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.92	5.92	< 0.005	< 0.005	—	5.94
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.98	0.98	< 0.005	< 0.005	—	0.98
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.07	0.67	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	83.5	83.5	0.01	< 0.005	0.01	85.0
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	44.4	44.4	< 0.005	0.01	< 0.005	46.4
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.34	0.34	< 0.005	< 0.005	< 0.005	0.34
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Hauling	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

3.13. Paving (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.81	10.0	0.01	0.39	—	0.39	0.36	—	0.36	—	1,512	1,512	0.06	0.01	—	1,517
Paving	—	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.17	0.17	< 0.005	0.02	0.02	—	5.46	5.46	< 0.005	< 0.005	< 0.005	5.73
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.72	0.92	< 0.005	0.04	—	0.04	0.03	—	0.03	—	139	139	0.01	< 0.005	—	140
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.50	0.50	< 0.005	< 0.005	< 0.005	0.52
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.13	0.17	< 0.005	0.01	—	0.01	0.01	—	0.01	—	23.0	23.0	< 0.005	< 0.005	—	23.1
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.08	0.08	< 0.005	< 0.005	< 0.005	0.09
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.06	0.61	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	81.8	81.8	0.01	< 0.005	0.01	83.1
Vendor	< 0.005	< 0.005	0.07	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	43.8	43.8	< 0.005	0.01	< 0.005	45.8
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.81	7.81	< 0.005	< 0.005	0.02	7.94
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.02	4.02	< 0.005	< 0.005	< 0.005	4.21
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.29	1.29	< 0.005	< 0.005	< 0.005	1.31

Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.67	0.67	< 0.005	< 0.005	< 0.005	0.70
Hauling	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

3.15. Architectural Coating (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	45.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.17	0.17	< 0.005	0.02	0.02	—	5.36	5.36	< 0.005	< 0.005	< 0.005	5.63
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.8	12.8	< 0.005	< 0.005	—	12.8
Architectural Coatings	—	4.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.51	0.51	< 0.005	< 0.005	< 0.005	0.54
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.12	2.12	< 0.005	< 0.005	—	2.13

Architect Coatings	—	0.79	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.08	0.08	< 0.005	< 0.005	< 0.005	0.09
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.46	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	65.1	65.1	0.01	< 0.005	0.01	66.2
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.5	21.5	< 0.005	< 0.005	< 0.005	22.5
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.48	6.48	< 0.005	< 0.005	0.01	6.59
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.06	2.06	< 0.005	< 0.005	< 0.005	2.16
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.07	1.07	< 0.005	< 0.005	< 0.005	1.09
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.34	0.34	< 0.005	< 0.005	< 0.005	0.36
Hauling	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

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	4.24	4.01	2.42	24.7	0.04	0.03	3.10	3.13	0.03	0.78	0.81	—	3,819	3,819	0.27	0.22	14.8	3,908
Strip Mall	19.9	18.9	13.7	109	0.20	0.19	15.2	15.4	0.18	3.87	4.05	—	20,000	20,000	1.15	1.12	81.6	20,442
Other Non-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
City Park	0.01	0.01	0.01	0.07	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	13.6	13.6	< 0.005	< 0.005	0.06	13.9
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	0.00	0.00	0.00
Total	24.2	22.9	16.1	134	0.23	0.22	18.3	18.6	0.21	4.66	4.86	—	23,833	23,833	1.41	1.34	96.4	24,364
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	3.67	3.43	2.83	21.9	0.03	0.03	3.10	3.13	0.03	0.78	0.81	—	3,451	3,451	0.32	0.25	0.38	3,532
Strip Mall	17.5	16.4	15.7	98.2	0.18	0.19	15.2	15.4	0.18	3.87	4.05	—	18,338	18,338	1.37	1.21	2.11	18,734
Other Non-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
City Park	0.01	0.01	0.01	0.06	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	12.4	12.4	< 0.005	< 0.005	< 0.005	12.7
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	0.00	0.00	0.00
Total	21.2	19.8	18.5	120	0.21	0.22	18.3	18.6	0.21	4.66	4.87	—	21,801	21,801	1.69	1.45	2.50	22,279
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.68	0.64	0.48	3.92	0.01	0.01	0.57	0.57	< 0.005	0.14	0.15	—	589	589	0.05	0.04	1.06	602

Strip Mall	3.25	3.05	2.69	17.6	0.03	0.04	2.78	2.81	0.03	0.71	0.74	—	3,114	3,114	0.21	0.19	5.83	3,182
Other Non-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
City Park	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.11	1.11	< 0.005	< 0.005	< 0.005	1.13
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	0.00	0.00	0.00
Total	3.94	3.70	3.17	21.5	0.04	0.04	3.34	3.38	0.04	0.85	0.89	—	3,704	3,704	0.26	0.23	6.89	3,786

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	501	501	0.08	0.01	—	506
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	487	487	0.08	0.01	—	492
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	31.2	31.2	0.01	< 0.005	—	31.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,020	1,020	0.17	0.02	—	1,030
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	501	501	0.08	0.01	—	506
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	487	487	0.08	0.01	—	492
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	31.2	31.2	0.01	< 0.005	—	31.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,020	1,020	0.17	0.02	—	1,030
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	83.0	83.0	0.01	< 0.005	—	83.8
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	80.7	80.7	0.01	< 0.005	—	81.5
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	5.17	5.17	< 0.005	< 0.005	—	5.22
Total	—	—	—	—	—	—	—	—	—	—	—	—	169	169	0.03	< 0.005	—	171

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	0.11	0.06	0.94	0.40	0.01	0.08	—	0.08	0.08	—	0.08	—	1,197	1,197	0.11	< 0.005	—	1,201
Strip Mall	0.02	0.01	0.22	0.18	< 0.005	0.02	—	0.02	0.02	—	0.02	—	259	259	0.02	< 0.005	—	260
Other Non-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
City Park	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
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
Total	0.13	0.07	1.16	0.58	0.01	0.09	—	0.09	0.09	—	0.09	—	1,456	1,456	0.13	< 0.005	—	1,460
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.11	0.06	0.94	0.40	0.01	0.08	—	0.08	0.08	—	0.08	—	1,197	1,197	0.11	< 0.005	—	1,201
Strip Mall	0.02	0.01	0.22	0.18	< 0.005	0.02	—	0.02	0.02	—	0.02	—	259	259	0.02	< 0.005	—	260
Other Non-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
City Park	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
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
Total	0.13	0.07	1.16	0.58	0.01	0.09	—	0.09	0.09	—	0.09	—	1,456	1,456	0.13	< 0.005	—	1,460
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.02	0.01	0.17	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	198	198	0.02	< 0.005	—	199
Strip Mall	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	42.9	42.9	< 0.005	< 0.005	—	43.0
Other Non-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

City Park	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
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
Total	0.02	0.01	0.21	0.11	< 0.005	0.02	—	0.02	0.02	—	0.02	—	241	241	0.02	< 0.005	—	242

4.3. Area Emissions by Source

4.3.2. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.09	0.05	0.80	0.34	0.01	0.06	—	0.06	0.06	—	0.06	0.00	1,011	1,011	0.02	< 0.005	—	1,012
Consumer Products	—	5.78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.16	1.09	0.08	9.02	< 0.005	0.01	—	0.01	0.01	—	0.01	—	29.3	29.3	< 0.005	< 0.005	—	29.4
Total	1.26	7.35	0.88	9.36	0.01	0.07	—	0.07	0.07	—	0.07	0.00	1,040	1,040	0.02	< 0.005	—	1,041
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.09	0.05	0.80	0.34	0.01	0.06	—	0.06	0.06	—	0.06	0.00	1,011	1,011	0.02	< 0.005	—	1,012
Consumer Products	—	5.78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	—	0.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.09	6.26	0.80	0.34	0.01	0.06	—	0.06	0.06	—	0.06	0.00	1,011	1,011	0.02	< 0.005	—	1,012
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	37.6	37.6	< 0.005	< 0.005	—	37.6
Consumer Products	—	1.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.10	0.10	0.01	0.81	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.40	2.40	< 0.005	< 0.005	—	2.40
Total	0.11	1.23	0.04	0.83	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	40.0	40.0	< 0.005	< 0.005	—	40.0

4.4. Water Emissions by Land Use

4.4.2. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	7.83	35.8	43.6	0.81	0.02	—	69.8
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	11.7	13.8	25.5	1.20	0.03	—	64.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.12	0.12	< 0.005	< 0.005	—	0.13
Total	—	—	—	—	—	—	—	—	—	—	—	19.6	49.7	69.3	2.01	0.05	—	134
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	7.83	35.8	43.6	0.81	0.02	—	69.8
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	11.7	13.8	25.5	1.20	0.03	—	64.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.12	0.12	< 0.005	< 0.005	—	0.13
Total	—	—	—	—	—	—	—	—	—	—	—	19.6	49.7	69.3	2.01	0.05	—	134
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	1.30	5.93	7.23	0.13	< 0.005	—	11.5
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	1.94	2.28	4.22	0.20	< 0.005	—	10.6
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.02	0.02	< 0.005	< 0.005	—	0.02
Total	—	—	—	—	—	—	—	—	—	—	—	3.24	8.23	11.5	0.33	0.01	—	22.2

4.5. Waste Emissions by Land Use

4.5.2. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	52.1	0.00	52.1	5.21	0.00	—	182
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	46.7	0.00	46.7	4.67	0.00	—	164
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.05	0.00	0.05	0.01	0.00	—	0.18
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	98.9	0.00	98.9	9.89	0.00	—	346
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	52.1	0.00	52.1	5.21	0.00	—	182
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	46.7	0.00	46.7	4.67	0.00	—	164
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.05	0.00	0.05	0.01	0.00	—	0.18
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	98.9	0.00	98.9	9.89	0.00	—	346
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	8.63	0.00	8.63	0.86	0.00	—	30.2
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	7.74	0.00	7.74	0.77	0.00	—	27.1
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.01	0.00	0.01	< 0.005	0.00	—	0.03
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	16.4	0.00	16.4	1.64	0.00	—	57.3

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.34	1.34
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.51	0.51
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.86	1.86
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.34	1.34

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.51	0.51
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.86	1.86
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.22	0.22
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.09	0.09
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.31	0.31

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

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	10/2/2023	10/27/2023	5.00	20.0	—
Grading	Grading	10/28/2023	12/29/2023	5.00	45.0	—
Building Construction	Building Construction	10/15/2023	2/15/2025	5.00	350	—
Paving	Paving	12/30/2023	2/16/2024	5.00	35.0	—
Architectural Coating	Architectural Coating	1/11/2025	2/28/2025	5.00	35.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40

Site Preparation	Tractors/Loaders/Backh	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	7.70	LDA,LDT1,LDT2
Site Preparation	Vendor	2.00	6.80	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	2.00	0.25	HHDT
Grading	—	—	—	—

Grading	Worker	20.0	7.70	LDA,LDT1,LDT2
Grading	Vendor	1.00	6.80	HHDT,MHDT
Grading	Hauling	13.9	20.0	HHDT
Grading	Onsite truck	2.00	0.25	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	61.0	7.70	LDA,LDT1,LDT2
Building Construction	Vendor	23.8	6.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	2.00	0.25	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	7.70	LDA,LDT1,LDT2
Paving	Vendor	2.00	6.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	2.00	0.25	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	12.2	7.70	LDA,LDT1,LDT2
Architectural Coating	Vendor	1.00	6.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	2.00	0.25	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	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)
Architectural Coating	379,080	126,360	123,906	41,302	5,942

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	30.0	0.00	—
Grading	2,500	2,500	135	0.00	—
Paving	0.00	0.00	0.00	0.00	3.33

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Single Family Housing	1.06	0%
Strip Mall	0.00	0%
Other Non-Asphalt Surfaces	0.81	0%
City Park	0.00	0%
Parking Lot	1.46	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2023	0.00	204	0.03	< 0.005
2024	0.00	204	0.03	< 0.005
2025	0.00	204	0.03	< 0.005

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
Single Family Housing	972	972	972	354,780	4,395	4,395	4,395	1,604,091
Strip Mall	4,175	4,175	4,175	1,523,875	21,391	21,391	21,391	7,807,837
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.87	2.18	2.43	466	5.20	13.1	14.6	2,800
Parking Lot	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

Hearth Type	Unmitigated (number)
Single Family Housing	—
Wood Fireplaces	0
Gas Fireplaces	48

Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	48
Conventional Wood Stoves	0
Catalytic Wood Stoves	5
Non-Catalytic Wood Stoves	5
Pellet Wood Stoves	0

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)
379080	126,360	123,906	41,302	5,942

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)
Single Family Housing	897,272	204	0.0330	0.0040	3,735,583
Strip Mall	872,305	204	0.0330	0.0040	808,887
Other Non-Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00
City Park	0.00	204	0.0330	0.0040	0.00

Parking Lot	55,852	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	4,086,014	19,834,018
Strip Mall	6,118,687	211,284
Other Non-Asphalt Surfaces	0.00	0.00
City Park	0.00	35.6
Parking Lot	0.00	92,076

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	96.7	—
Strip Mall	86.7	—
Other Non-Asphalt Surfaces	0.00	—
City Park	0.10	—
Parking Lot	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

Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

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
Land Use	Land uses based on project description, traffic impact study, and site plan
Construction: Construction Phases	Adjusted construction schedule based on project-specific estimates

Operations: Vehicle Data	Project-specific trip generation and purpose percentages, consistent with the traffic analysis prepared for the El Monte Way & Crawford Ave Mixed Use Project by Ruettgers & Schuler Civil Engineers
Operations: Fleet Mix	SJVAPCD-approved residential fleet mix for the 2024 operational year applied to single-family homes.
Operations: Hearths	SJVAPCD Rule 4901 Woodburning No woodburning fireplaces or wood stoves

El Monte Construction and Project Operations (Unmitigated) - Localized Analysis Custom Report

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5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	El Monte Construction and Project Operations (Unmitigated) - Localized Analysis
Construction Start Date	10/2/2023
Operational Year	2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.90
Precipitation (days)	31.4
Location	36.547517, -119.374733
County	Tulare
City	Dinuba
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2776
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.14

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

Single Family Housing	96.0	Dwelling Unit	22.6	187,200	1,124,434	—	324	—
Strip Mall	82.6	1000sqft	1.90	82,604	14,640	—	—	—
Other Non-Asphalt Surfaces	0.81	Acre	0.81	0.00	0.00	—	—	—
City Park	1.11	Acre	1.11	0.00	1.11	1.11	—	—
Parking Lot	1.46	Acre	1.46	0.00	6,380	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.79	1.54	11.6	14.1	0.02	0.50	0.20	0.70	0.46	0.02	0.48	—	2,501	2,501	0.12	0.04	0.21	2,515
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	6.61	5.60	52.1	50.4	0.09	2.36	8.04	10.4	2.17	3.98	6.15	—	9,170	9,170	0.40	0.10	0.01	9,211
2024	2.82	2.52	19.5	24.7	0.04	0.89	0.38	1.26	0.82	0.04	0.86	—	4,030	4,030	0.19	0.05	0.01	4,050
2025	1.84	46.8	11.8	15.6	0.03	0.46	0.38	0.84	0.42	0.04	0.47	—	2,646	2,646	0.13	0.04	0.01	2,661
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	1.11	0.94	8.72	8.13	0.01	0.38	0.93	1.31	0.35	0.40	0.75	—	1,501	1,501	0.06	0.02	0.02	1,508
2024	1.35	1.17	9.05	11.1	0.02	0.39	0.16	0.55	0.36	0.02	0.38	—	1,931	1,931	0.09	0.03	0.07	1,942

2025	0.17	4.48	1.07	1.39	< 0.005	0.04	0.03	0.08	0.04	< 0.005	0.04	—	239	239	0.01	< 0.005	0.01	240
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.20	0.17	1.59	1.48	< 0.005	0.07	0.17	0.24	0.06	0.07	0.14	—	249	249	0.01	< 0.005	< 0.005	250
2024	0.25	0.21	1.65	2.03	< 0.005	0.07	0.03	0.10	0.07	< 0.005	0.07	—	320	320	0.02	< 0.005	0.01	321
2025	0.03	0.82	0.19	0.25	< 0.005	0.01	0.01	0.01	0.01	< 0.005	0.01	—	39.6	39.6	< 0.005	< 0.005	< 0.005	39.8

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	21.1	20.6	6.39	46.8	0.03	0.05	1.83	1.87	0.04	0.46	0.51	—	3,318	3,318	0.92	0.51	9.60	3,503
Area	1.26	7.35	0.88	9.36	0.01	0.07	—	0.07	0.07	—	0.07	0.00	1,040	1,040	0.02	< 0.005	—	1,041
Energy	0.13	0.07	1.16	0.58	0.01	0.09	—	0.09	0.09	—	0.09	—	2,477	2,477	0.29	0.02	—	2,491
Water	—	—	—	—	—	—	—	—	—	—	—	19.6	49.7	69.3	2.01	0.05	—	134
Waste	—	—	—	—	—	—	—	—	—	—	—	98.9	0.00	98.9	9.89	0.00	—	346
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.86	1.86
Total	22.5	28.0	8.43	56.7	0.05	0.21	1.83	2.04	0.21	0.46	0.67	118	6,885	7,003	13.1	0.58	11.5	7,517
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	18.1	17.5	7.25	60.0	0.03	0.05	1.83	1.87	0.04	0.46	0.51	—	3,146	3,146	1.22	0.56	0.25	3,343
Area	0.09	6.26	0.80	0.34	0.01	0.06	—	0.06	0.06	—	0.06	0.00	1,011	1,011	0.02	< 0.005	—	1,012
Energy	0.13	0.07	1.16	0.58	0.01	0.09	—	0.09	0.09	—	0.09	—	2,477	2,477	0.29	0.02	—	2,491
Water	—	—	—	—	—	—	—	—	—	—	—	19.6	49.7	69.3	2.01	0.05	—	134
Waste	—	—	—	—	—	—	—	—	—	—	—	98.9	0.00	98.9	9.89	0.00	—	346
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.86	1.86
Total	18.4	23.8	9.21	60.9	0.04	0.20	1.83	2.03	0.20	0.46	0.66	118	6,683	6,802	13.4	0.63	2.10	7,328

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	18.5	17.9	6.74	51.3	0.03	0.05	1.83	1.87	0.04	0.46	0.51	—	3,186	3,186	1.06	0.53	4.15	3,374
Area	0.59	6.76	0.22	4.52	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	242	242	< 0.005	< 0.005	—	242
Energy	0.13	0.07	1.16	0.58	0.01	0.09	—	0.09	0.09	—	0.09	—	2,477	2,477	0.29	0.02	—	2,491
Water	—	—	—	—	—	—	—	—	—	—	—	19.6	49.7	69.3	2.01	0.05	—	134
Waste	—	—	—	—	—	—	—	—	—	—	—	98.9	0.00	98.9	9.89	0.00	—	346
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.86	1.86
Total	19.3	24.8	8.13	56.4	0.04	0.16	1.83	1.99	0.15	0.46	0.62	118	5,954	6,072	13.3	0.60	6.00	6,588
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.38	3.28	1.23	9.37	0.01	0.01	0.33	0.34	0.01	0.08	0.09	—	527	527	0.18	0.09	0.69	559
Area	0.11	1.23	0.04	0.83	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	40.0	40.0	< 0.005	< 0.005	—	40.0
Energy	0.02	0.01	0.21	0.11	< 0.005	0.02	—	0.02	0.02	—	0.02	—	410	410	0.05	< 0.005	—	412
Water	—	—	—	—	—	—	—	—	—	—	—	3.24	8.23	11.5	0.33	0.01	—	22.2
Waste	—	—	—	—	—	—	—	—	—	—	—	16.4	0.00	16.4	1.64	0.00	—	57.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.31	0.31
Total	3.51	4.52	1.48	10.3	0.01	0.03	0.33	0.36	0.03	0.08	0.11	19.6	986	1,005	2.20	0.10	0.99	1,091

3. Construction Emissions Details

3.1. Site Preparation (2023) - Unmitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.70	3.95	39.7	35.5	0.05	1.81	—	1.81	1.66	—	1.66	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.17	0.17	< 0.005	0.02	0.02	—	5.56	5.56	< 0.005	< 0.005	< 0.005	5.84
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	2.18	1.94	< 0.005	0.10	—	0.10	0.09	—	0.09	—	290	290	0.01	< 0.005	—	291
Dust From Material Movement	—	—	—	—	—	—	0.42	0.42	—	0.22	0.22	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.30	0.30	< 0.005	< 0.005	< 0.005	0.32
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.40	0.35	< 0.005	0.02	—	0.02	0.02	—	0.02	—	48.0	48.0	< 0.005	< 0.005	—	48.2
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.02	0.33	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.64	9.64	0.01	< 0.005	< 0.005	10.4
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.44	5.44	< 0.005	< 0.005	< 0.005	5.70
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.54	0.54	< 0.005	< 0.005	< 0.005	0.57
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.30	0.30	< 0.005	< 0.005	< 0.005	0.31
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Hauling	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

3.3. Grading (2023) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.43	3.72	37.3	31.4	0.06	1.59	—	1.59	1.47	—	1.47	—	6,598	6,598	0.27	0.05	—	6,621

Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.43	1.43	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.17	0.17	< 0.005	0.02	0.02	—	5.56	5.56	< 0.005	< 0.005	< 0.005	5.84
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.55	0.46	4.60	3.87	0.01	0.20	—	0.20	0.18	—	0.18	—	813	813	0.03	0.01	—	816
Dust From Material Movement	—	—	—	—	—	—	0.44	0.44	—	0.18	0.18	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.68	0.68	< 0.005	< 0.005	< 0.005	0.72
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.84	0.71	< 0.005	0.04	—	0.04	0.03	—	0.03	—	135	135	0.01	< 0.005	—	135
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.11	0.11	< 0.005	< 0.005	< 0.005	0.12
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.03	0.37	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.0	11.0	0.01	< 0.005	< 0.005	11.9
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.72	2.72	< 0.005	< 0.005	< 0.005	2.85
Hauling	0.01	0.01	0.26	0.16	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	51.0	51.0	< 0.005	0.01	< 0.005	53.5

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.38	1.38	< 0.005	< 0.005	< 0.005	1.47
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.33	0.33	< 0.005	< 0.005	< 0.005	0.35
Hauling	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.25	6.25	< 0.005	< 0.005	< 0.005	6.57
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.23	0.23	< 0.005	< 0.005	< 0.005	0.24
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.03	1.03	< 0.005	< 0.005	< 0.005	1.09

3.5. Building Construction (2023) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.50	1.26	11.8	13.2	0.02	0.55	—	0.55	0.51	—	0.51	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.17	0.17	< 0.005	0.02	0.02	—	5.56	5.56	< 0.005	< 0.005	< 0.005	5.84
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.19	1.80	2.01	< 0.005	0.08	—	0.08	0.08	—	0.08	—	366	366	0.01	< 0.005	—	367
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.84	0.84	< 0.005	< 0.005	< 0.005	0.89
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.04	0.04	0.33	0.37	< 0.005	0.02	—	0.02	0.01	—	0.01	—	60.6	60.6	< 0.005	< 0.005	—	60.8
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.15
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.30	0.29	0.08	1.14	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	33.6	33.6	0.02	0.01	< 0.005	36.3
Vendor	0.02	0.01	0.31	0.19	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	64.8	64.8	< 0.005	0.01	< 0.005	67.8
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.01	0.15	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	5.20	5.20	< 0.005	< 0.005	0.01	5.55
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.85	9.85	< 0.005	< 0.005	0.01	10.3
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.86	0.86	< 0.005	< 0.005	< 0.005	0.92
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.63	1.63	< 0.005	< 0.005	< 0.005	1.71
Hauling	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

3.7. Building Construction (2024) - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.17	0.17	< 0.005	0.02	0.02	—	5.39	5.39	< 0.005	< 0.005	< 0.005	5.66
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.17	0.17	< 0.005	0.02	0.02	—	5.46	5.46	< 0.005	< 0.005	< 0.005	5.73
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	0.86	8.04	9.39	0.02	0.36	—	0.36	0.33	—	0.33	—	1,717	1,717	0.07	0.01	—	1,723
Onsite truck	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.12	0.12	< 0.005	0.01	0.01	—	3.88	3.88	< 0.005	< 0.005	< 0.005	4.07
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.47	1.71	< 0.005	0.07	—	0.07	0.06	—	0.06	—	284	284	0.01	< 0.005	—	285
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.64	0.64	< 0.005	< 0.005	< 0.005	0.67
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.32	0.06	0.81	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	35.1	35.1	0.01	0.01	0.10	37.4
Vendor	0.02	0.01	0.29	0.18	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	63.4	63.4	< 0.005	0.01	0.10	66.5
Hauling	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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.27	0.08	1.05	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	32.8	32.8	0.02	0.01	< 0.005	35.1
Vendor	0.02	0.01	0.31	0.19	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	63.9	63.9	< 0.005	0.01	< 0.005	66.9
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.20	0.05	0.64	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	23.9	23.9	0.01	< 0.005	0.03	25.5
Vendor	0.01	0.01	0.21	0.13	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	45.5	45.5	< 0.005	0.01	0.03	47.7
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.01	0.12	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.95	3.95	< 0.005	< 0.005	0.01	4.22
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.54	7.54	< 0.005	< 0.005	0.01	7.90
Hauling	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

3.9. Building Construction (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.17	0.17	< 0.005	0.02	0.02	—	5.36	5.36	< 0.005	< 0.005	< 0.005	5.63

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.94	1.17	< 0.005	0.04	—	0.04	0.04	—	0.04	—	216	216	0.01	< 0.005	—	217
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.48	0.48	< 0.005	< 0.005	< 0.005	0.50
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.17	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	—	35.7	35.7	< 0.005	< 0.005	—	35.9
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.08	0.08	< 0.005	< 0.005	< 0.005	0.08
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.25	0.07	0.97	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	32.1	32.1	0.02	0.01	< 0.005	34.3
Vendor	0.02	0.01	0.30	0.19	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	62.8	62.8	< 0.005	0.01	< 0.005	65.7
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.07	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.93	2.93	< 0.005	< 0.005	< 0.005	3.13
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.62	5.62	< 0.005	< 0.005	< 0.005	5.89
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.49	0.49	< 0.005	< 0.005	< 0.005	0.52
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.93	0.93	< 0.005	< 0.005	< 0.005	0.98
Hauling	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

3.11. Paving (2023) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.04	0.88	8.06	10.0	0.01	0.41	—	0.41	0.38	—	0.38	—	1,512	1,512	0.06	0.01	—	1,517
Paving	—	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.17	0.17	< 0.005	0.02	0.02	—	5.56	5.56	< 0.005	< 0.005	< 0.005	5.84
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.92	5.92	< 0.005	< 0.005	—	5.94
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.98	0.98	< 0.005	< 0.005	—	0.98
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.02	0.28	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.26	8.26	0.01	< 0.005	< 0.005	8.93
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.44	5.44	< 0.005	< 0.005	< 0.005	5.70
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.04
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Hauling	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

3.13. Paving (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.81	10.0	0.01	0.39	—	0.39	0.36	—	0.36	—	1,512	1,512	0.06	0.01	—	1,517
Paving	—	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.17	0.17	< 0.005	0.02	0.02	—	5.46	5.46	< 0.005	< 0.005	< 0.005	5.73
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.72	0.92	< 0.005	0.04	—	0.04	0.03	—	0.03	—	139	139	0.01	< 0.005	—	140
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.50	0.50	< 0.005	< 0.005	< 0.005	0.52
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.13	0.17	< 0.005	0.01	—	0.01	0.01	—	0.01	—	23.0	23.0	< 0.005	< 0.005	—	23.1
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.08	0.08	< 0.005	< 0.005	< 0.005	0.09
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.02	0.26	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.07	8.07	< 0.005	< 0.005	< 0.005	8.64
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.37	5.37	< 0.005	< 0.005	< 0.005	5.62
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.75	0.75	< 0.005	< 0.005	< 0.005	0.81
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.49	0.49	< 0.005	< 0.005	< 0.005	0.51
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.12	0.12	< 0.005	< 0.005	< 0.005	0.13

Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.08	0.08	< 0.005	< 0.005	< 0.005	0.09
Hauling	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

3.15. Architectural Coating (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	45.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.17	0.17	< 0.005	0.02	0.02	—	5.36	5.36	< 0.005	< 0.005	< 0.005	5.63
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.8	12.8	< 0.005	< 0.005	—	12.8
Architectural Coatings	—	4.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.51	0.51	< 0.005	< 0.005	< 0.005	0.54
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.12	2.12	< 0.005	< 0.005	—	2.13

Architect Coatings	—	0.79	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.08	0.08	< 0.005	< 0.005	< 0.005	0.09
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.01	0.19	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	6.41	6.41	< 0.005	< 0.005	< 0.005	6.87
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.64	2.64	< 0.005	< 0.005	< 0.005	2.76
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.62	0.62	< 0.005	< 0.005	< 0.005	0.67
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.25	0.25	< 0.005	< 0.005	< 0.005	0.26
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.11
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.04
Hauling	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

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	3.90	3.80	1.21	9.67	0.01	0.01	0.34	0.35	0.01	0.09	0.09	—	604	604	0.18	0.10	1.64	639
Strip Mall	17.2	16.8	5.18	37.1	0.03	0.04	1.49	1.52	0.03	0.38	0.41	—	2,713	2,713	0.74	0.41	7.96	2,863
Other Non-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
City Park	0.01	0.01	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.58	1.58	< 0.005	< 0.005	< 0.005	1.67
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	0.00	0.00	0.00
Total	21.1	20.6	6.39	46.8	0.03	0.05	1.83	1.87	0.04	0.46	0.51	—	3,318	3,318	0.92	0.51	9.60	3,503
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	3.36	3.23	1.37	12.5	0.01	0.01	0.34	0.35	0.01	0.09	0.09	—	570	570	0.24	0.11	0.04	608
Strip Mall	14.8	14.2	5.88	47.4	0.03	0.04	1.49	1.52	0.03	0.38	0.41	—	2,575	2,575	0.97	0.45	0.21	2,734
Other Non-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
City Park	0.01	0.01	< 0.005	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.50	1.50	< 0.005	< 0.005	< 0.005	1.59
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	0.00	0.00	0.00
Total	18.1	17.5	7.25	60.0	0.03	0.05	1.83	1.87	0.04	0.46	0.51	—	3,146	3,146	1.22	0.56	0.25	3,343
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.63	0.61	0.23	1.94	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	95.6	95.6	0.03	0.02	0.12	102

Strip Mall	2.75	2.67	1.00	7.42	< 0.005	0.01	0.27	0.28	0.01	0.07	0.08	—	432	432	0.14	0.07	0.57	457
Other Non-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
City Park	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.13	0.13	< 0.005	< 0.005	< 0.005	0.14
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	0.00	0.00	0.00
Total	3.38	3.28	1.23	9.37	0.01	0.01	0.33	0.34	0.01	0.08	0.09	—	527	527	0.18	0.09	0.69	559

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	501	501	0.08	0.01	—	506
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	487	487	0.08	0.01	—	492
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	31.2	31.2	0.01	< 0.005	—	31.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,020	1,020	0.17	0.02	—	1,030
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	501	501	0.08	0.01	—	506
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	487	487	0.08	0.01	—	492
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	31.2	31.2	0.01	< 0.005	—	31.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,020	1,020	0.17	0.02	—	1,030
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	83.0	83.0	0.01	< 0.005	—	83.8
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	80.7	80.7	0.01	< 0.005	—	81.5
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	5.17	5.17	< 0.005	< 0.005	—	5.22
Total	—	—	—	—	—	—	—	—	—	—	—	—	169	169	0.03	< 0.005	—	171

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	0.11	0.06	0.94	0.40	0.01	0.08	—	0.08	0.08	—	0.08	—	1,197	1,197	0.11	< 0.005	—	1,201
Strip Mall	0.02	0.01	0.22	0.18	< 0.005	0.02	—	0.02	0.02	—	0.02	—	259	259	0.02	< 0.005	—	260
Other Non-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
City Park	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
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
Total	0.13	0.07	1.16	0.58	0.01	0.09	—	0.09	0.09	—	0.09	—	1,456	1,456	0.13	< 0.005	—	1,460
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.11	0.06	0.94	0.40	0.01	0.08	—	0.08	0.08	—	0.08	—	1,197	1,197	0.11	< 0.005	—	1,201
Strip Mall	0.02	0.01	0.22	0.18	< 0.005	0.02	—	0.02	0.02	—	0.02	—	259	259	0.02	< 0.005	—	260
Other Non-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
City Park	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
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
Total	0.13	0.07	1.16	0.58	0.01	0.09	—	0.09	0.09	—	0.09	—	1,456	1,456	0.13	< 0.005	—	1,460
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.02	0.01	0.17	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	198	198	0.02	< 0.005	—	199
Strip Mall	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	42.9	42.9	< 0.005	< 0.005	—	43.0
Other Non-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

City Park	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
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
Total	0.02	0.01	0.21	0.11	< 0.005	0.02	—	0.02	0.02	—	0.02	—	241	241	0.02	< 0.005	—	242

4.3. Area Emissions by Source

4.3.2. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.09	0.05	0.80	0.34	0.01	0.06	—	0.06	0.06	—	0.06	0.00	1,011	1,011	0.02	< 0.005	—	1,012
Consumer Products	—	5.78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.16	1.09	0.08	9.02	< 0.005	0.01	—	0.01	0.01	—	0.01	—	29.3	29.3	< 0.005	< 0.005	—	29.4
Total	1.26	7.35	0.88	9.36	0.01	0.07	—	0.07	0.07	—	0.07	0.00	1,040	1,040	0.02	< 0.005	—	1,041
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.09	0.05	0.80	0.34	0.01	0.06	—	0.06	0.06	—	0.06	0.00	1,011	1,011	0.02	< 0.005	—	1,012
Consumer Products	—	5.78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	—	0.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.09	6.26	0.80	0.34	0.01	0.06	—	0.06	0.06	—	0.06	0.00	1,011	1,011	0.02	< 0.005	—	1,012
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	37.6	37.6	< 0.005	< 0.005	—	37.6
Consumer Products	—	1.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.10	0.10	0.01	0.81	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.40	2.40	< 0.005	< 0.005	—	2.40
Total	0.11	1.23	0.04	0.83	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	40.0	40.0	< 0.005	< 0.005	—	40.0

4.4. Water Emissions by Land Use

4.4.2. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	7.83	35.8	43.6	0.81	0.02	—	69.8
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	11.7	13.8	25.5	1.20	0.03	—	64.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.12	0.12	< 0.005	< 0.005	—	0.13
Total	—	—	—	—	—	—	—	—	—	—	—	19.6	49.7	69.3	2.01	0.05	—	134
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	7.83	35.8	43.6	0.81	0.02	—	69.8
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	11.7	13.8	25.5	1.20	0.03	—	64.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.12	0.12	< 0.005	< 0.005	—	0.13
Total	—	—	—	—	—	—	—	—	—	—	—	19.6	49.7	69.3	2.01	0.05	—	134
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	1.30	5.93	7.23	0.13	< 0.005	—	11.5
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	1.94	2.28	4.22	0.20	< 0.005	—	10.6
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.02	0.02	< 0.005	< 0.005	—	0.02
Total	—	—	—	—	—	—	—	—	—	—	—	3.24	8.23	11.5	0.33	0.01	—	22.2

4.5. Waste Emissions by Land Use

4.5.2. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	52.1	0.00	52.1	5.21	0.00	—	182
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	46.7	0.00	46.7	4.67	0.00	—	164
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.05	0.00	0.05	0.01	0.00	—	0.18
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	98.9	0.00	98.9	9.89	0.00	—	346
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	52.1	0.00	52.1	5.21	0.00	—	182
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	46.7	0.00	46.7	4.67	0.00	—	164
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.05	0.00	0.05	0.01	0.00	—	0.18
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	98.9	0.00	98.9	9.89	0.00	—	346
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	8.63	0.00	8.63	0.86	0.00	—	30.2
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	7.74	0.00	7.74	0.77	0.00	—	27.1
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.01	0.00	0.01	< 0.005	0.00	—	0.03
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	16.4	0.00	16.4	1.64	0.00	—	57.3

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.34	1.34
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.51	0.51
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.86	1.86
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.34	1.34

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.51	0.51
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.86	1.86
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.22	0.22
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.09	0.09
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.31	0.31

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

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	10/2/2023	10/27/2023	5.00	20.0	—
Grading	Grading	10/28/2023	12/29/2023	5.00	45.0	—
Building Construction	Building Construction	10/15/2023	2/15/2025	5.00	350	—
Paving	Paving	12/30/2023	2/16/2024	5.00	35.0	—
Architectural Coating	Architectural Coating	1/11/2025	2/28/2025	5.00	35.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40

Site Preparation	Tractors/Loaders/Backh	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	0.50	LDA,LDT1,LDT2
Site Preparation	Vendor	2.00	0.50	HHDT,MHDT
Site Preparation	Hauling	0.00	0.50	HHDT
Site Preparation	Onsite truck	2.00	0.25	HHDT
Grading	—	—	—	—

Grading	Worker	20.0	0.50	LDA,LDT1,LDT2
Grading	Vendor	1.00	0.50	HHDT,MHDT
Grading	Hauling	13.9	0.50	HHDT
Grading	Onsite truck	2.00	0.25	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	61.0	0.50	LDA,LDT1,LDT2
Building Construction	Vendor	23.8	0.50	HHDT,MHDT
Building Construction	Hauling	0.00	0.50	HHDT
Building Construction	Onsite truck	2.00	0.25	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	0.50	LDA,LDT1,LDT2
Paving	Vendor	2.00	0.50	HHDT,MHDT
Paving	Hauling	0.00	0.50	HHDT
Paving	Onsite truck	2.00	0.25	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	12.2	0.50	LDA,LDT1,LDT2
Architectural Coating	Vendor	1.00	0.50	HHDT,MHDT
Architectural Coating	Hauling	0.00	0.50	HHDT
Architectural Coating	Onsite truck	2.00	0.25	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	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)
Architectural Coating	379,080	126,360	123,906	41,302	5,942

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	30.0	0.00	—
Grading	2,500	2,500	135	0.00	—
Paving	0.00	0.00	0.00	0.00	3.33

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Single Family Housing	1.06	0%
Strip Mall	0.00	0%
Other Non-Asphalt Surfaces	0.81	0%
City Park	0.00	0%
Parking Lot	1.46	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2023	0.00	204	0.03	< 0.005
2024	0.00	204	0.03	< 0.005
2025	0.00	204	0.03	< 0.005

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
Single Family Housing	972	972	972	354,780	486	486	486	177,390
Strip Mall	4,175	4,175	4,175	1,523,875	2,087	2,087	2,087	761,937
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.87	2.18	2.43	466	0.43	1.09	1.22	233
Parking Lot	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

Hearth Type	Unmitigated (number)
Single Family Housing	—
Wood Fireplaces	0
Gas Fireplaces	48

Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	48
Conventional Wood Stoves	0
Catalytic Wood Stoves	5
Non-Catalytic Wood Stoves	5
Pellet Wood Stoves	0

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)
379080	126,360	123,906	41,302	5,942

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)
Single Family Housing	897,272	204	0.0330	0.0040	3,735,583
Strip Mall	872,305	204	0.0330	0.0040	808,887
Other Non-Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00
City Park	0.00	204	0.0330	0.0040	0.00

Parking Lot	55,852	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	4,086,014	19,834,018
Strip Mall	6,118,687	211,284
Other Non-Asphalt Surfaces	0.00	0.00
City Park	0.00	35.6
Parking Lot	0.00	92,076

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	96.7	—
Strip Mall	86.7	—
Other Non-Asphalt Surfaces	0.00	—
City Park	0.10	—
Parking Lot	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

Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

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
Land Use	Land uses based on project description, traffic impact study, and site plan
Construction: Construction Phases	Adjusted construction schedule based on project-specific estimates

Operations: Vehicle Data	Project-specific trip generation, consistent with the traffic analysis prepared for the El Monte Way & Crawford Ave Mixed Use Project by Ruettgers & Schuler Civil Engineers Operational trip lengths updated to 0.5 mile to account for on-site and localized emissions from on-road vehicles.
Operations: Fleet Mix	SJVAPCD-approved residential fleet mix for the 2024 operational year applied to single-family homes.
Operations: Hearths	SJVAPCD Rule 4901 Woodburning No woodburning fireplaces or wood stoves
Construction: Trips and VMT	Trip lengths updated to 0.5 mile to account for on-site and localized emissions from construction vehicles.

ATTACHMENT B

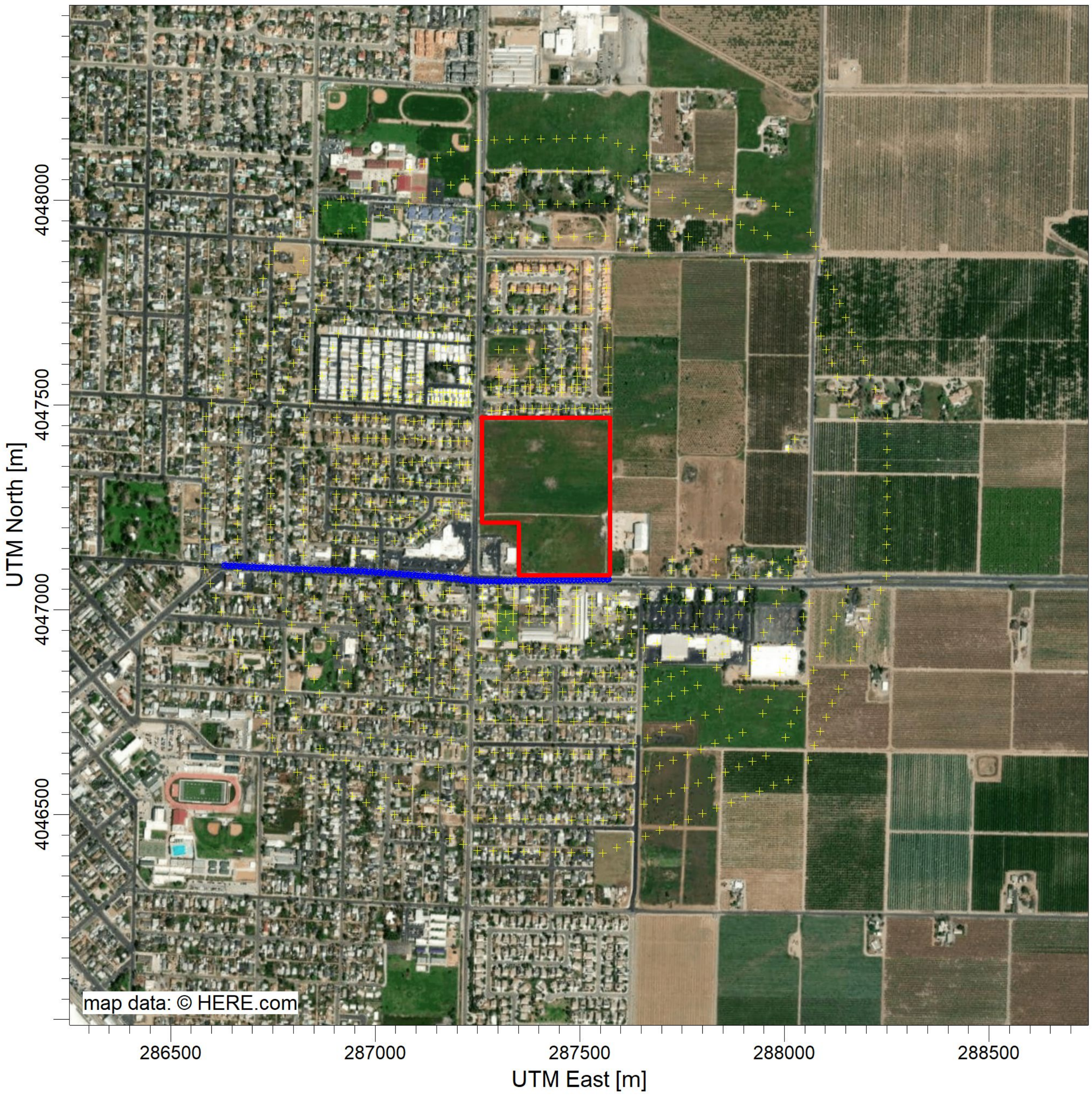
Construction Health Risk Assessment and Operational Health Risk Screening

Health Risk Assessment

General Parameters

PROJECT TITLE:

Graphical Representation of AERMOD Inputs (Construction)



COMMENTS:	SOURCES: **2**	COMPANY NAME:	
	RECEPTORS: **927**	MODELER:	
		SCALE: 1:15,659 0 ——— 0.5 km	
		DATE: **7/25/2023**	PROJECT NO.:

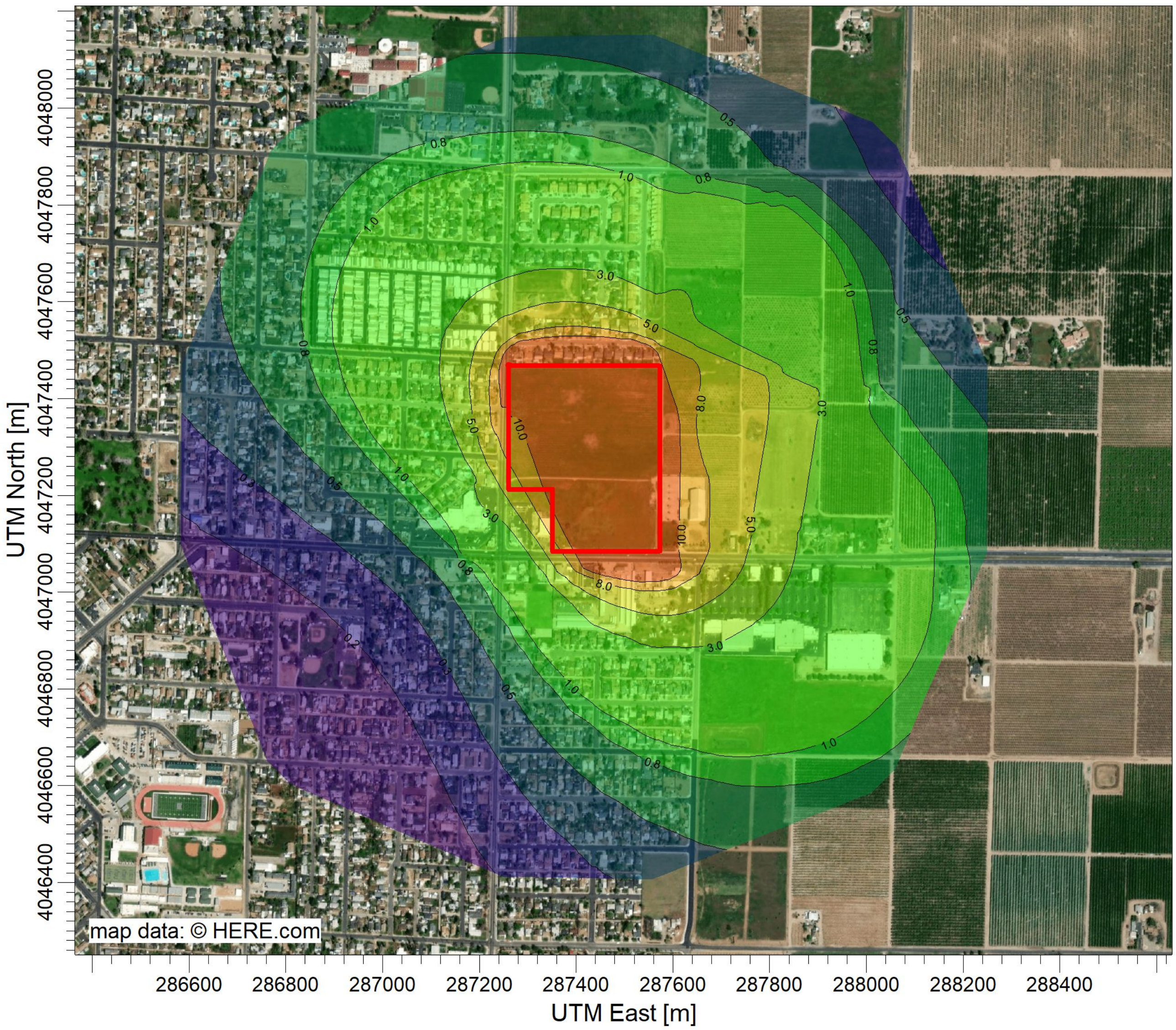
PROJECT TITLE:

Graphical Representation of AERMOD Inputs (Construction)
Zoomed In Near Project Site

COMMENTS:	SOURCES: **2**	COMPANY NAME:	
	RECEPTORS: **927**	MODELER:	
		SCALE: 1:5,020 0 ▬ 0.1 km	
		DATE: **7/25/2023**	PROJECT NO.:

PROJECT TITLE:

Air Dispersion Trend (Construction Site – Unit Emissions)



PLOT FILE OF ANNUAL VALUES AVERAGED ACROSS 4 YEARS FOR SOURCE GROUP: AREA ug/m^3

Max: 17.3 [ug/m^3] at (287447.09, 4047489.70)

0.0 0.2 0.3 0.5 0.8 1.0 3.0 5.0 8.0 10.0 17.3

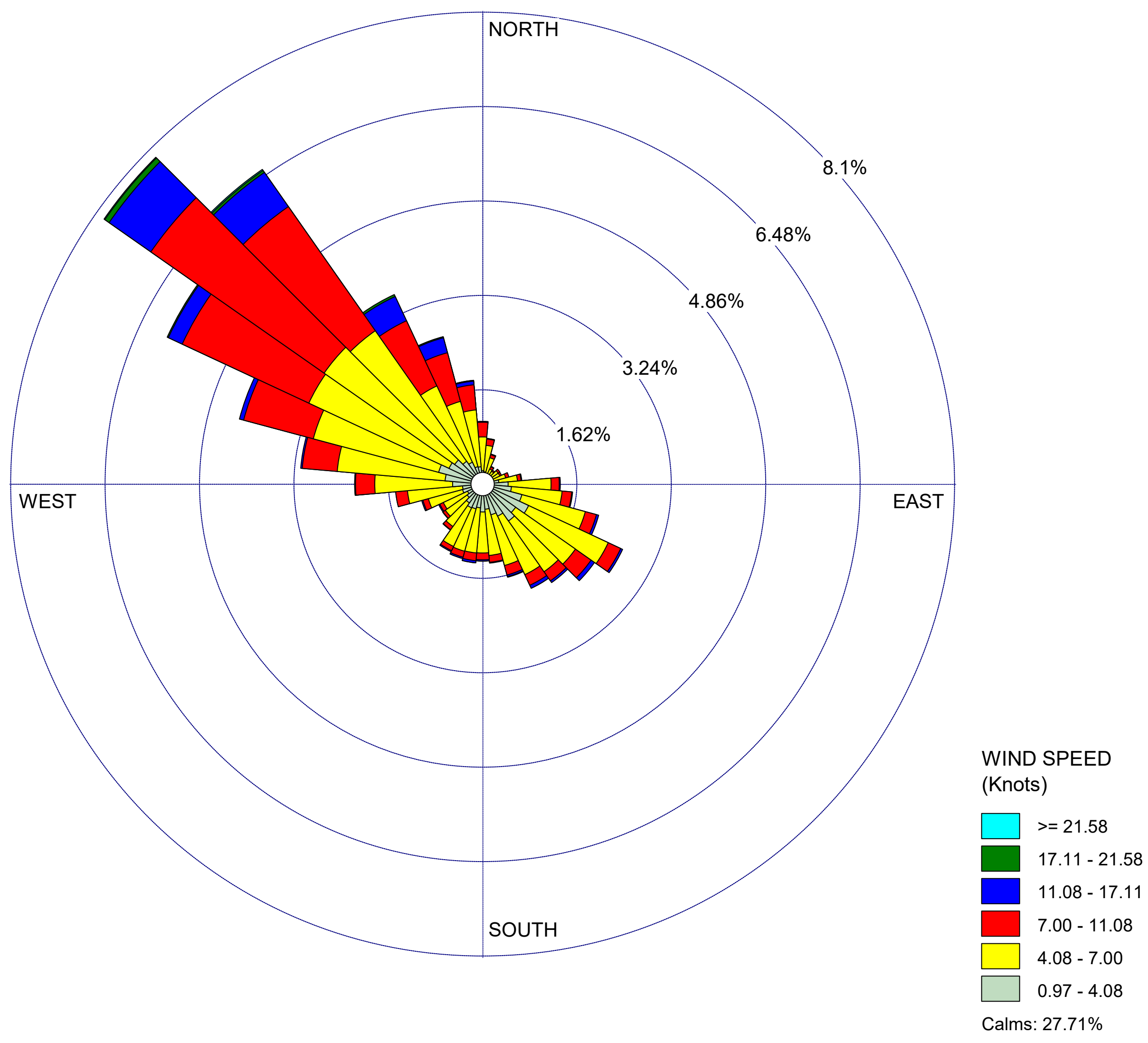
COMMENTS:	SOURCES: **2**	COMPANY NAME:	
	RECEPTORS: **927**	MODELER:	
	OUTPUT TYPE: **Concentration**	SCALE: 1:14,261 0 — 0.5 km	
	MAX: **17.3 ug/m^3**	DATE: **7/25/2023**	PROJECT NO.:

WIND ROSE PLOT:

Wind Rose - Visalia Station (#93144) – Blowing From

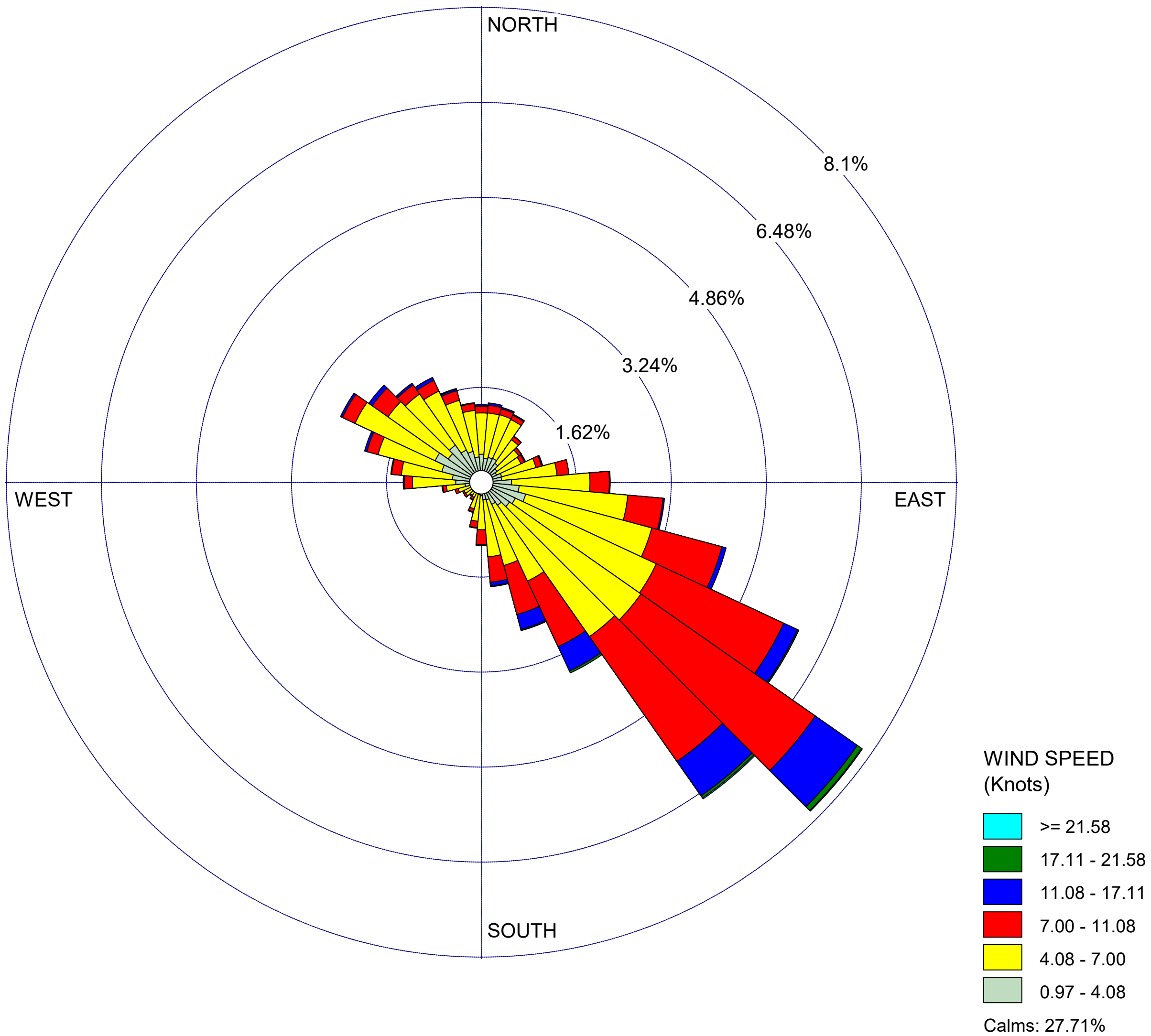
DISPLAY:

Wind Speed
Direction (blowing from)



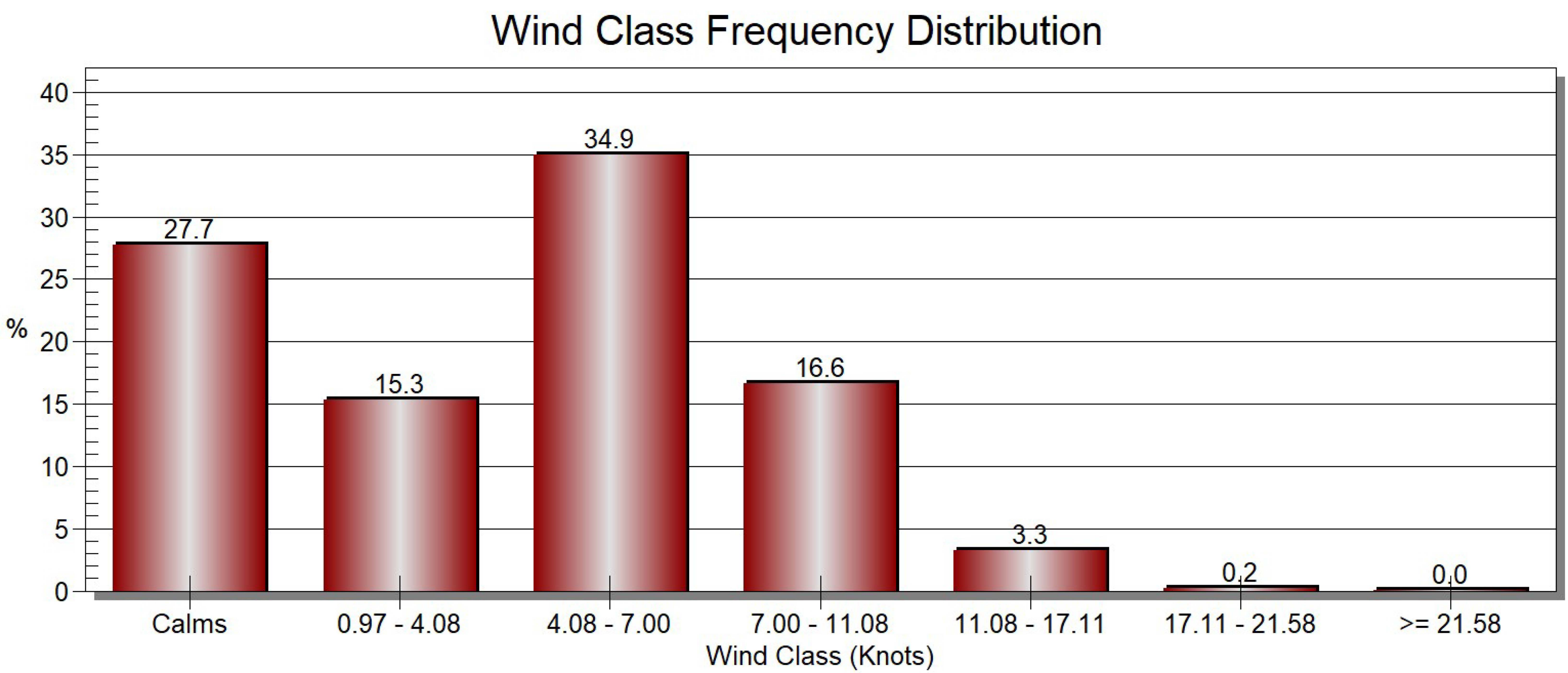
COMMENTS:	DATA PERIOD: **Start Date: 1/1/2007 - 00:00** **End Date: 12/31/2010 - 23:59**	COMPANY NAME:	
		MODELER:	
	CALM WINDS: **27.71%**	TOTAL COUNT: **34417 hrs.**	
	AVG. WIND SPEED: **4.39 Knots**	DATE: **5/28/2023**	PROJECT NO.:

WIND ROSE PLOT:	DISPLAY:
Wind Rose - Visalia Station (#93144) – Blowing To	**Wind Speed** **Flow Vector (blowing to)**



COMMENTS:	DATA PERIOD:	COMPANY NAME:	
	Start Date: 1/1/2007 - 00:00 **End Date: 12/31/2010 - 23:59**	MODELER:	
	CALM WINDS: **27.71%**	TOTAL COUNT: **34417 hrs.**	
	AVG. WIND SPEED: **4.39 Knots**	DATE: **5/28/2023**	PROJECT NO.:

WRPLOT View - Lakes Environmental Software



Wind Class Frequency Distribution
40
35
30
25
20
15
10
5
0
%
27.7
15.3
34.9
16.6
3.3
0.2
0.0
Calms
0.97 - 4.08
4.08 - 7.00
7.00 - 11.08
11.08 - 17.11
17.11 - 21.58
>= 21.58
Wind Class (Knots)

Health Risk Assessment

Unmitigated Construction

El Monte Way & Crawford Ave Mixed-Use Project

Estimation of Annual Onsite Construction Emissions

Start of Construction	10/2/2023	
End of Construction	2/28/2025	**Total**
Number of Days	515	515
Number of Hours	12,360	12,360

Size of the construction area source: **108,420.0** **sq-meters**

Run	**Year**	**On-site Construction Activity**	**Unmitigated On-site DPM (pounds)**
Project Construction	2023	Building Construction	30.7978
Project Construction	2023	Site Preparation	36.1015
Project Construction	2023	Grading	71.7443
Project Construction	2023	Paving	0.5891
Project Construction	2024	Building Construction	130.1294
Project Construction	2024	Paving	13.0662
Project Construction	2025	Architectural Coating	0.9599
Project Construction	2025	Building Construction	14.1891

Total Unmitigated DPM (On-site) 2.976E+02 pounds

Factor in AERMOD to Account for 5 days per week/8 hours per day: 4.2

Average Emission for AREA1	1.351E+05	grams
	3.036E-03	grams/sec
	2.800E-08	grams/m2-sec

Pounds/Construction Period	2.976E+02
Pounds/Day	5.778E-01
Pounds/Hour	2.408E-02
Pounds/Year	2.109E+02
Years	1.41096

El Monte Way & Crawford Ave Mixed-Use Project

Estimation of Annual Offsite Construction DPM Emissions (Unmitigated)

Start of Construction		10/2/2023							
End of Construction		2/28/2025							**Total**
Number of Days		515							515
Number of Hours		12,360							12,360
	2023	2023	2023	2024	2025	2023	20224	2025	
Construction Trip Type	Site Preparation	Grading	Building Construction	Building Construction	Building Construction	Paving	Paving	Architectural Coating	**Total (pounds)**
Total (pounds)	0.01265	0.84171	0.39944	1.87427	0.23556	0.00090	0.02124	0.01165	**3.39744**

	Haul Truck	**Vendor Truck**	**Worker**	**Total**
Site Preparation	350.00	40.00	0.00	390.00
Grading	900.00	45.00	625.00	1570.00
Building Construction (2023)	3354.63	1309.07	0.00	4663.70
Building Construction (2024)	15980.24	6235.91	0.00	22216.15
Building Construction (2025)	2012.78	785.44	0.00	2798.22
Paving (2023)	0.00	0.00	0.00	0.00
Paving (2024)	525.00	70.00	0.00	595.00
Architectural Coating (2025)	426.95	35.00	0.00	461.95
Total	**23,549.60**	**8,520.42**	**625.00**	**32,695.02**

	Haul Truck (pounds)	**Vendor Truck (pounds)**	**Worker (pounds)**	**Total (pounds)**	
Total DPM	2.447E+00	8.854E-01	6.495E-02	3.397E+00	
Average Emissions					
Grams	1.111E+03	4.020E+02	2.949E+01		
Grams/sec	2.497E-05	9.034E-06	6.627E-07		
Default Distance	20	6.8	7.7	Default Vehicle Travel Distance in CalEEMod	
Vehicle Travel Distances in the Construction HRA (miles)					
Off-site (mi)	0.59	0.59	0.59	miles	
Trip Distribution (percent)					
Off-site Road Segment	100.0%	100.0%	100.0%	off-site	
Total Average Offsite Vehicle Emissions Along Travel Distance (g/sec)				**Total**	
Off-site Road Segment	7.319E-07	7.788E-07	5.045E-08	1.561E-06	
	Grams/sec	Pounds/Hour	Pounds/Day	Pounds/year	Tons/year
Off-site Road Segment	1.561E-06	1.239E-05	2.974E-04	1.085E-01	5.427E-05

Health Risk Summary - Unmitigated Construction (Summary of HARP2 Results)
El Monte Way & Crawford Ave Mixed-Use Project (Unmitigated Construction)

	RISK_SUM	Cancer Risk/million	MAXHI NonCancer Chronic	MAXHI Acute
Maximum Risk	1.2887E-05	12.89	1.0512E-02	0.00E+00

	X	Y
MEI UTM	287447.09	4047489.70
Lat/Long	36°32'57.1"N 119°22'29.0"W	
Receptor # 537		

*HARP - HRACalc v22118 7/25/2023 1:56:41 PM - Cancer Risk - Input File: F:\Move\0014-036\Construction\HARP\EL MONTE â€“ UNMIT CON\hra\EMW Unmit ConHRAInput.hra
*HARP - HRACalc v22118 7/25/2023 1:56:41 PM - Chronic Risk - Input File: F:\Move\0014-036\Construction\HARP\EL MONTE â€“ UNMIT CON\hra\EMW Unmit ConHRAInput.hra
*HARP - HRACalc v22118 7/25/2023 1:56:41 PM - Acute Risk - Input File: F:\Move\0014-036\Construction\HARP\EL MONTE â€“ UNMIT CON\hra\EMW Unmit ConHRAInput.hra

REC	GRP	X	Y	RISK_SUM	SCENARIO	MAXHI NonCancerChronic	MAXHI Acute
1	ALL	287491.93	4047047.54	1.0194E-05	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.3150E-03	0.00E+00
2	ALL	287453.65	4047048.32	9.1843E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.4916E-03	0.00E+00
3	ALL	287415.36	4047049.10	7.4571E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.0828E-03	0.00E+00
4	ALL	287377.08	4047049.88	4.9219E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.0149E-03	0.00E+00
5	ALL	287338.80	4047050.67	2.6638E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.1729E-03	0.00E+00
6	ALL	287300.52	4047051.45	1.6951E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.3827E-03	0.00E+00
7	ALL	287262.23	4047052.23	1.1864E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.6772E-04	0.00E+00
8	ALL	287589.64	4047034.49	8.1898E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.6804E-03	0.00E+00
9	ALL	287568.09	4047025.98	7.8007E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.3631E-03	0.00E+00
10	ALL	287529.80	4047026.76	7.9582E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.4916E-03	0.00E+00
11	ALL	287491.52	4047027.54	7.5186E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.1330E-03	0.00E+00
12	ALL	287453.24	4047028.33	6.6172E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.3977E-03	0.00E+00
13	ALL	287414.96	4047029.11	5.2764E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.3040E-03	0.00E+00
14	ALL	287376.67	4047029.89	3.5873E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.9262E-03	0.00E+00
15	ALL	287338.39	4047030.67	2.1898E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.7862E-03	0.00E+00
16	ALL	287300.11	4047031.45	1.4447E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.1784E-03	0.00E+00
17	ALL	287261.83	4047032.23	1.0281E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.3862E-04	0.00E+00
18	ALL	287596.41	4047017.33	6.6208E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.4006E-03	0.00E+00
19	ALL	287567.68	4047005.99	6.1716E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.0342E-03	0.00E+00
20	ALL	287529.40	4047006.77	6.1798E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.0409E-03	0.00E+00
21	ALL	287491.11	4047007.55	5.7433E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.6849E-03	0.00E+00
22	ALL	287452.83	4047008.33	4.9776E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.0602E-03	0.00E+00
23	ALL	287414.55	4047009.11	3.9436E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.2168E-03	0.00E+00
24	ALL	287376.27	4047009.89	2.7783E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.2663E-03	0.00E+00
25	ALL	287337.98	4047010.67	1.8332E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.4954E-03	0.00E+00
26	ALL	287299.70	4047011.46	1.2544E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0232E-03	0.00E+00
27	ALL	287261.42	4047012.24	9.0788E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.4056E-04	0.00E+00
28	ALL	287591.21	4046995.45	5.3746E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.3841E-03	0.00E+00
29	ALL	287615.16	4047004.90	5.5387E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.5179E-03	0.00E+00
30	ALL	287649.17	4047038.05	6.1087E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.9829E-03	0.00E+00
31	ALL	287567.27	4046985.99	4.9976E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.0766E-03	0.00E+00
32	ALL	287528.99	4046986.77	4.9181E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.0117E-03	0.00E+00
33	ALL	287490.70	4046987.55	4.5172E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.6847E-03	0.00E+00
34	ALL	287452.42	4046988.33	3.8863E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.1701E-03	0.00E+00
35	ALL	287414.14	4046989.12	3.0843E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.5158E-03	0.00E+00
36	ALL	287375.86	4046989.90	2.2451E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.8313E-03	0.00E+00
37	ALL	287337.57	4046990.68	1.5615E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.2737E-03	0.00E+00
38	ALL	287299.29	4046991.46	1.1030E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.9968E-04	0.00E+00
39	ALL	287261.01	4046992.24	8.1325E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.6337E-04	0.00E+00
40	ALL	287595.59	4046977.34	4.5108E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.6795E-03	0.00E+00
41	ALL	287624.33	4046988.69	4.6969E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.8313E-03	0.00E+00
42	ALL	287665.14	4047028.46	5.2464E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.2795E-03	0.00E+00
43	ALL	287566.86	4046965.99	4.1259E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.3655E-03	0.00E+00
44	ALL	287528.58	4046966.78	3.9963E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.2598E-03	0.00E+00
45	ALL	287490.30	4046967.56	3.6389E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.9683E-03	0.00E+00
46	ALL	287452.01	4046968.34	3.1183E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.5436E-03	0.00E+00
47	ALL	287413.73	4046969.12	2.4945E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.0347E-03	0.00E+00
48	ALL	287375.45	4046969.90	1.8670E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.5229E-03	0.00E+00
49	ALL	287337.17	4046970.68	1.3492E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.1005E-03	0.00E+00
50	ALL	287298.88	4046971.46	9.7913E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.9868E-04	0.00E+00
51	ALL	287260.60	4046972.24	7.3314E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.9803E-04	0.00E+00
52	ALL	287596.05	4046929.92	3.0432E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.4824E-03	0.00E+00
53	ALL	287626.22	4046941.83	3.2627E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.6614E-03	0.00E+00
54	ALL	287656.39	4046953.74	3.3592E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.7401E-03	0.00E+00
55	ALL	287699.25	4046995.51	3.7252E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.0386E-03	0.00E+00
56	ALL	287711.94	4047025.36	4.0183E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.2777E-03	0.00E+00
57	ALL	287724.62	4047055.21	4.1558E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.3899E-03	0.00E+00
58	ALL	287565.88	4046918.00	2.7391E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.2343E-03	0.00E+00
59	ALL	287527.60	4046918.79	2.5894E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.1122E-03	0.00E+00
60	ALL	287491.32	4046902.52	2.0507E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.6728E-03	0.00E+00
61	ALL	287453.04	4046903.30	1.7755E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.4483E-03	0.00E+00
62	ALL	287414.76	4046904.08	1.4693E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.1985E-03	0.00E+00
63	ALL	287376.48	4046904.86	1.1730E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.5683E-04	0.00E+00
64	ALL	287336.19	4046922.69	9.9284E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.0986E-04	0.00E+00
65	ALL	287297.90	4046923.47	7.6037E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.2023E-04	0.00E+00
66	ALL	287259.62	4046924.25	5.8606E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.7805E-04	0.00E+00
67	ALL	287595.93	4046882.27	2.1588E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.7609E-03	0.00E+00
68	ALL	287626.97	4046894.52	2.3507E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.9175E-03	0.00E+00
69	ALL	287658.00	4046906.77	2.4825E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.0250E-03	0.00E+00
70	ALL	287689.03	4046919.03	2.5390E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.0711E-03	0.00E+00
71	ALL	287733.11	4046961.98	2.7903E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.2761E-03	0.00E+00
72	ALL	287746.16	4046992.69	3.0116E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.4566E-03	0.00E+00
73	ALL	287759.21	4047023.40	3.1509E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.5702E-03	0.00E+00
74	ALL	287772.26	4047054.10	3.1927E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.6043E-03	0.00E+00
75	ALL	287557.18	4046846.08	1.6217E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.3228E-03	0.00E+00
76	ALL	287538.65	4046845.06	1.5529E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.2667E-03	0.00E+00
77	ALL	287500.37	4046845.84	1.4173E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.1561E-03	0.00E+00
78	ALL	287462.09	4046846.62	1.2494E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0191E-03	0.00E+00
79	ALL	287406.76	4046847.74	9.8660E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.0478E-04	0.00E+00
80	ALL	287368.48	4046848.52	8.1355E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.6361E-04	0.00E+00
81	ALL	287332.49	4046889.40	8.1030E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.6096E-04	0.00E+00
82	ALL	287296.93	4046875.48	6.0758E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.9560E-04	0.00E+00
83	ALL	287258.64	4046876.26	4.8166E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.9289E-04	0.00E+00
84	ALL	287595.53	4046834.50	1.5899E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.2969E-03	0.00E+00
85	ALL	287627.14	4046846.98	1.7459E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.4242E-03	0.00E+00
86	ALL	287658.74	4046859.46	1.8732E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.5280E-03	0.00E+00
87	ALL	287690.35	4046871.94	1.9575E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.5967E-03	0.00E+00

88	ALL	287721.96	4046884.42	1.9908E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.6239E-03	0.00E+00
89	ALL	287766.85	4046928.18	2.1745E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.7737E-03	0.00E+00
90	ALL	287780.14	4046959.45	2.3435E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.9116E-03	0.00E+00
91	ALL	287793.44	4046990.73	2.4635E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.0095E-03	0.00E+00
92	ALL	287806.73	4047022.00	2.5215E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.0568E-03	0.00E+00
93	ALL	287820.02	4047053.27	2.5148E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.0513E-03	0.00E+00
94	ALL	287574.10	4046846.55	1.6709E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.3630E-03	0.00E+00
95	ALL	287525.64	4046822.81	1.3105E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0690E-03	0.00E+00
96	ALL	287487.36	4046823.59	1.1850E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.6663E-04	0.00E+00
97	ALL	287421.32	4046847.96	1.0591E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.6390E-04	0.00E+00
98	ALL	287410.79	4046825.15	8.8719E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.2368E-04	0.00E+00
99	ALL	287372.51	4046825.93	7.4220E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.0542E-04	0.00E+00
100	ALL	287348.38	4046845.76	7.2024E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.8750E-04	0.00E+00
101	ALL	287295.95	4046827.49	4.9719E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.0556E-04	0.00E+00
102	ALL	287257.66	4046828.27	4.0314E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.2884E-04	0.00E+00
103	ALL	287594.96	4046786.68	1.2070E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.8451E-04	0.00E+00
104	ALL	287626.98	4046799.32	1.3313E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0859E-03	0.00E+00
105	ALL	287659.00	4046811.96	1.4421E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.1763E-03	0.00E+00
106	ALL	287691.01	4046824.60	1.5287E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.2470E-03	0.00E+00
107	ALL	287723.03	4046837.24	1.5835E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.2917E-03	0.00E+00
108	ALL	287755.05	4046849.88	1.6047E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.3090E-03	0.00E+00
109	ALL	287800.53	4046894.21	1.7440E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.4226E-03	0.00E+00
110	ALL	287813.99	4046925.89	1.8739E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.5286E-03	0.00E+00
111	ALL	287827.45	4046957.57	1.9737E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.6100E-03	0.00E+00
112	ALL	287840.92	4046989.25	2.0333E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.6586E-03	0.00E+00
113	ALL	287854.38	4047020.93	2.0480E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.6705E-03	0.00E+00
114	ALL	287867.84	4047052.61	2.0186E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.6466E-03	0.00E+00
115	ALL	287573.12	4046798.09	1.2468E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0170E-03	0.00E+00
116	ALL	287534.84	4046798.88	1.1634E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.4901E-04	0.00E+00
117	ALL	287496.56	4046799.66	1.0601E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.6474E-04	0.00E+00
118	ALL	287458.28	4046800.44	9.4008E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.6683E-04	0.00E+00
119	ALL	287419.07	4046797.98	7.9744E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.5048E-04	0.00E+00
120	ALL	287358.47	4046799.17	6.1198E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.9920E-04	0.00E+00
121	ALL	287322.36	4046800.49	5.1399E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.1926E-04	0.00E+00
122	ALL	287294.97	4046779.50	4.1406E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.3775E-04	0.00E+00
123	ALL	287256.68	4046780.28	3.4264E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.7949E-04	0.00E+00
124	ALL	287594.29	4046738.81	9.4103E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.6760E-04	0.00E+00
125	ALL	287626.61	4046751.57	1.0406E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.4883E-04	0.00E+00
126	ALL	287658.94	4046764.33	1.1313E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.2278E-04	0.00E+00
127	ALL	287691.27	4046777.10	1.2106E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.8746E-04	0.00E+00
128	ALL	287723.59	4046789.86	1.2703E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0362E-03	0.00E+00
129	ALL	287755.92	4046802.62	1.3079E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0669E-03	0.00E+00
130	ALL	287788.24	4046815.39	1.3237E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0797E-03	0.00E+00
131	ALL	287834.16	4046860.14	1.4296E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.1661E-03	0.00E+00
132	ALL	287847.75	4046892.12	1.5295E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.2477E-03	0.00E+00
133	ALL	287861.34	4046924.11	1.6127E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.3155E-03	0.00E+00
134	ALL	287874.94	4046956.09	1.6672E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.3599E-03	0.00E+00
135	ALL	287888.53	4046988.08	1.6930E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.3810E-03	0.00E+00
136	ALL	287902.12	4047020.06	1.6845E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.3741E-03	0.00E+00
137	ALL	287915.71	4047052.05	1.6454E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.3422E-03	0.00E+00
138	ALL	287561.96	4046726.04	8.3820E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.8373E-04	0.00E+00
139	ALL	287523.68	4046726.83	7.7836E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.3491E-04	0.00E+00
140	ALL	287485.40	4046727.61	7.0760E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.7719E-04	0.00E+00
141	ALL	287447.12	4046728.39	6.3215E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.1565E-04	0.00E+00
142	ALL	287408.83	4046729.17	5.5555E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.5317E-04	0.00E+00
143	ALL	287370.55	4046729.95	4.8257E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.9363E-04	0.00E+00
144	ALL	287332.27	4046730.73	4.1312E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.3698E-04	0.00E+00
145	ALL	287293.99	4046731.51	3.5009E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.8557E-04	0.00E+00
146	ALL	287255.70	4046732.29	2.9487E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.4053E-04	0.00E+00
147	ALL	287595.45	4046659.93	6.5692E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.3586E-04	0.00E+00
148	ALL	287630.57	4046673.79	7.2929E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.9488E-04	0.00E+00
149	ALL	287665.69	4046687.66	7.9857E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.5140E-04	0.00E+00
150	ALL	287700.81	4046701.53	8.6307E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.0401E-04	0.00E+00
151	ALL	287735.93	4046715.39	9.1811E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.4890E-04	0.00E+00
152	ALL	287771.04	4046729.26	9.5849E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.8184E-04	0.00E+00
153	ALL	287806.16	4046743.13	9.8561E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.0397E-04	0.00E+00
154	ALL	287841.28	4046756.99	9.9583E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.1230E-04	0.00E+00
155	ALL	287891.17	4046805.61	1.0708E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.7346E-04	0.00E+00
156	ALL	287905.93	4046840.36	1.1439E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.3312E-04	0.00E+00
157	ALL	287920.70	4046875.11	1.2048E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.8277E-04	0.00E+00
158	ALL	287935.47	4046909.86	1.2487E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0186E-03	0.00E+00
159	ALL	287950.24	4046944.60	1.2716E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0372E-03	0.00E+00
160	ALL	287965.00	4046979.35	1.2715E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0372E-03	0.00E+00
161	ALL	287979.77	4047014.10	1.2489E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0187E-03	0.00E+00
162	ALL	287994.54	4047048.85	1.2059E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.8366E-04	0.00E+00
163	ALL	287560.33	4046646.06	5.8427E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.7659E-04	0.00E+00
164	ALL	287522.05	4046646.84	5.4365E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.4346E-04	0.00E+00
165	ALL	287483.77	4046647.62	4.9774E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.0601E-04	0.00E+00
166	ALL	287445.49	4046648.41	4.5005E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.6711E-04	0.00E+00
167	ALL	287407.20	4046649.19	4.0228E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.2814E-04	0.00E+00
168	ALL	287368.92	4046649.97	3.5671E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.9097E-04	0.00E+00
169	ALL	287330.64	4046650.75	3.1274E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.5510E-04	0.00E+00
170	ALL	287292.36	4046651.53	2.7180E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.2171E-04	0.00E+00
171	ALL	287254.07	4046652.31	2.3471E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.9145E-04	0.00E+00
172	ALL	287592.66	4046579.49	4.7557E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.8793E-04	0.00E+00
173	ALL	287626.62	4046592.89	5.2433E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.2770E-04	0.00E+00
174	ALL	287660.57	4046606.30	5.7250E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.6699E-04	0.00E+00
175	ALL	287694.53	4046619.71	6.1883E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.0478E-04	0.00E+00
176	ALL	287728.49	4046633.12	6.6289E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.4072E-04	0.00E+00
177	ALL	287762.45	4046646.53	7.0108E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.7187E-04	0.00E+00
178	ALL	287796.40	4046659.93	7.3321E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.9809E-04	0.00E+00
179	ALL	287830.36	4046673.34	7.5748E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.1788E-04	0.00E+00
180	ALL	287864.32	4046686.75	7.7233E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.2999E-04	0.00E+00
181	ALL	287898.28	4046700.16	7.7668E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.3354E-04	0.00E+00
182	ALL	287946.51	4046747.16	8.2716E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.7472E-04	0.00E+00
183	ALL	287960.79	4046780.77	8.7670E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.1512E-04	0.00E+00
184	ALL	287975.07	4046814.37	9.1978E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.5027E-04	0.00E+00
185	ALL	287989.35	4046847.97	9.5486E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.7888E-04	0.00E+00
186	ALL	288003.63	4046881.57	9.7940E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.9890E-04	0.00E+00
187	ALL	288017.91	4046915.17	9.9129E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.0860E-04	0.00E+00
188	ALL	288032.19	4046948.77	9.9074E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.0815E-04	0.00E+00
189	ALL	288046.47	4046982.37	9.7586E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.9601E-04	0.00E+00
190	ALL	288060.74	4047015.97	9.4807E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.7334E-04	0.00E+00
191	ALL	287558.70	4046566.08	4.2793E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.4907E-04	0.00E+00
192	ALL	287520.42	4046566.86	3.9941E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.2580E-04	0.00E+00
193	ALL	287482.14	4046567.64	3.6805E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.0022E-04	0.00E+00
194	ALL	287443.85	4046568.42	3.3595E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.7403E-04	0.00E+00

195	ALL	287405.57	4046569.20	3.0417E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.4811E-04	0.00E+00
196	ALL	287367.29	4046569.98	2.7386E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.2339E-04	0.00E+00
197	ALL	287329.01	4046570.77	2.4448E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.9942E-04	0.00E+00
198	ALL	287290.72	4046571.55	2.1672E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.7678E-04	0.00E+00
199	ALL	287252.44	4046572.33	1.9101E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.5581E-04	0.00E+00
200	ALL	287590.22	4046499.19	3.5851E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.9244E-04	0.00E+00
201	ALL	287623.38	4046512.28	3.9232E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.2002E-04	0.00E+00
202	ALL	287656.53	4046525.37	4.2649E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.4789E-04	0.00E+00
203	ALL	287689.68	4046538.46	4.5981E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.7507E-04	0.00E+00
204	ALL	287722.84	4046551.55	4.9304E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.0217E-04	0.00E+00
205	ALL	287755.99	4046564.64	5.2456E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.2789E-04	0.00E+00
206	ALL	287789.15	4046577.73	5.5276E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.5089E-04	0.00E+00
207	ALL	287822.30	4046590.82	5.7753E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.7109E-04	0.00E+00
208	ALL	287855.45	4046603.91	5.9791E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.8772E-04	0.00E+00
209	ALL	287888.61	4046617.00	6.1184E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.9908E-04	0.00E+00
210	ALL	287921.76	4046630.09	6.2072E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.0632E-04	0.00E+00
211	ALL	287954.91	4046643.18	6.2351E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.0860E-04	0.00E+00
212	ALL	288002.01	4046689.08	6.5770E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.3649E-04	0.00E+00
213	ALL	288015.95	4046721.88	6.9318E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.6543E-04	0.00E+00
214	ALL	288029.89	4046754.69	7.2523E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.9157E-04	0.00E+00
215	ALL	288043.83	4046787.49	7.5266E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.1395E-04	0.00E+00
216	ALL	288057.77	4046820.30	7.7422E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.3154E-04	0.00E+00
217	ALL	288071.71	4046853.10	7.8866E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.4332E-04	0.00E+00
218	ALL	288085.66	4046885.91	7.9498E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.4847E-04	0.00E+00
219	ALL	288099.60	4046918.71	7.9261E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.4653E-04	0.00E+00
220	ALL	288113.54	4046951.52	7.8149E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.3747E-04	0.00E+00
221	ALL	288127.48	4046984.32	7.6330E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.2263E-04	0.00E+00
222	ALL	288141.42	4047017.13	7.3673E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.0096E-04	0.00E+00
223	ALL	288155.36	4047049.94	7.0391E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.7418E-04	0.00E+00
224	ALL	287557.07	4046486.09	3.2631E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.6617E-04	0.00E+00
225	ALL	287518.79	4046486.88	3.0512E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.4889E-04	0.00E+00
226	ALL	287480.50	4046487.66	2.8277E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.3066E-04	0.00E+00
227	ALL	287442.22	4046488.44	2.6012E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.1218E-04	0.00E+00
228	ALL	287403.94	4046489.22	2.3786E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.9403E-04	0.00E+00
229	ALL	287365.66	4046490.00	2.1666E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.7673E-04	0.00E+00
230	ALL	287327.37	4046490.78	1.9611E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.5997E-04	0.00E+00
231	ALL	287289.09	4046491.56	1.7659E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.4404E-04	0.00E+00
232	ALL	287250.81	4046492.34	1.5827E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.2910E-04	0.00E+00
233	ALL	287590.33	4046419.89	2.8095E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.2917E-04	0.00E+00
234	ALL	287625.22	4046433.66	3.0698E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.5040E-04	0.00E+00
235	ALL	287660.11	4046447.44	3.3360E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.7212E-04	0.00E+00
236	ALL	287695.00	4046461.22	3.6007E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.9371E-04	0.00E+00
237	ALL	287729.89	4046474.99	3.8628E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.1509E-04	0.00E+00
238	ALL	287764.78	4046488.77	4.1206E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.3612E-04	0.00E+00
239	ALL	287799.67	4046502.54	4.3642E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.5599E-04	0.00E+00
240	ALL	287834.56	4046516.32	4.5786E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.7348E-04	0.00E+00
241	ALL	287869.45	4046530.10	4.7712E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.8919E-04	0.00E+00
242	ALL	287904.34	4046543.87	4.9227E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.0155E-04	0.00E+00
243	ALL	287939.23	4046557.65	5.0328E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.1053E-04	0.00E+00
244	ALL	287974.12	4046571.43	5.1002E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.1603E-04	0.00E+00
245	ALL	288009.01	4046585.20	5.1170E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.1740E-04	0.00E+00
246	ALL	288058.57	4046633.50	5.3858E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.3932E-04	0.00E+00
247	ALL	288073.25	4046668.03	5.6625E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.6189E-04	0.00E+00
248	ALL	288087.92	4046702.55	5.9142E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.8242E-04	0.00E+00
249	ALL	288102.59	4046737.07	6.1332E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.0029E-04	0.00E+00
250	ALL	288117.26	4046771.60	6.3108E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.1478E-04	0.00E+00
251	ALL	288131.93	4046806.12	6.4379E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.2514E-04	0.00E+00
252	ALL	288146.60	4046840.64	6.5059E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.3069E-04	0.00E+00
253	ALL	288161.27	4046875.17	6.5087E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.3092E-04	0.00E+00
254	ALL	288175.94	4046909.69	6.4436E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.2561E-04	0.00E+00
255	ALL	288190.62	4046944.22	6.3121E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.1488E-04	0.00E+00
256	ALL	288205.29	4046978.74	6.1198E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.9919E-04	0.00E+00
257	ALL	288219.96	4047013.26	5.8750E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.7923E-04	0.00E+00
258	ALL	288234.63	4047047.79	5.5927E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.5620E-04	0.00E+00
259	ALL	287555.44	4046406.11	2.5638E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.0913E-04	0.00E+00
260	ALL	287517.15	4046406.89	2.4046E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.9615E-04	0.00E+00
261	ALL	287478.87	4046407.67	2.2398E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.8270E-04	0.00E+00
262	ALL	287440.59	4046408.46	2.0736E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.6915E-04	0.00E+00
263	ALL	287402.31	4046409.24	1.9112E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.5590E-04	0.00E+00
264	ALL	287364.02	4046410.02	1.7566E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.4329E-04	0.00E+00
265	ALL	287325.74	4046410.80	1.6074E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.3112E-04	0.00E+00
266	ALL	287287.46	4046411.58	1.4654E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.1953E-04	0.00E+00
267	ALL	287249.18	4046412.36	1.3316E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0862E-04	0.00E+00
268	ALL	287220.29	4047230.78	3.0007E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.4477E-03	0.00E+00
269	ALL	287212.59	4047261.16	3.4634E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.8251E-03	0.00E+00
270	ALL	287224.93	4047316.94	5.5772E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.5493E-03	0.00E+00
271	ALL	287225.24	4047354.33	6.0836E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.9625E-03	0.00E+00
272	ALL	287223.12	4047412.22	6.1637E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.0278E-03	0.00E+00
273	ALL	287223.82	4047454.73	6.0708E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.9520E-03	0.00E+00
274	ALL	287204.30	4047233.62	2.4707E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.0154E-03	0.00E+00
275	ALL	287180.23	4047263.00	2.2923E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.8698E-03	0.00E+00
276	ALL	287196.24	4047308.42	3.5590E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.9031E-03	0.00E+00
277	ALL	287205.24	4047354.50	4.5858E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.7406E-03	0.00E+00
278	ALL	287203.12	4047412.39	4.7728E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.8932E-03	0.00E+00
279	ALL	287203.82	4047454.90	4.7691E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.8902E-03	0.00E+00
280	ALL	287184.30	4047242.48	2.0872E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.7026E-03	0.00E+00
281	ALL	287160.23	4047263.17	1.8631E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.5197E-03	0.00E+00
282	ALL	287176.24	4047308.58	2.7928E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.2781E-03	0.00E+00
283	ALL	287178.56	4047358.34	3.3689E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.7480E-03	0.00E+00
284	ALL	287183.12	4047412.56	3.8371E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.1299E-03	0.00E+00
285	ALL	287183.82	4047455.07	3.8740E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.1600E-03	0.00E+00
286	ALL	287181.90	4047046.04	6.0463E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.9320E-04	0.00E+00
287	ALL	287215.12	4046997.95	5.9877E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.8842E-04	0.00E+00
288	ALL	287149.29	4047219.28	1.2915E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0534E-03	0.00E+00
289	ALL	287164.31	4047242.64	1.7054E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.3911E-03	0.00E+00
290	ALL	287038.65	4047221.23	6.4732E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.2802E-04	0.00E+00
291	ALL	287156.24	4047308.75	2.2647E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.8474E-03	0.00E+00
292	ALL	287158.56	4047358.51	2.7470E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.2407E-03	0.00E+00
293	ALL	287163.12	4047412.73	3.1604E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.5780E-03	0.00E+00
294	ALL	287163.82	4047455.23	3.2231E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.6291E-03	0.00E+00
295	ALL	287154.36	4047065.02	5.6507E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.6093E-04	0.00E+00
296	ALL	287165.67	4047036.81	5.1777E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.2235E-04	0.00E+00
297	ALL	287195.77	4046997.05	5.2304E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.2665E-04	0.00E+00
298	ALL	287143.99	4047205.42	1.1381E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.2837E-04	0.00E+00
299	ALL	287120.25	4047195.37	9.0618E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.3917E-04	0.00E+00
300	ALL	287121.23	4047263.17	1.3370E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0906E-03	0.00E+00
301	ALL	287136.24	4047308.92	1.8836E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.5365E-03	0.00E+00

302	ALL	287138.56	4047358.68	2.2870E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.8655E-03	0.00E+00
303	ALL	287135.10	4047410.89	2.4722E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.0166E-03	0.00E+00
304	ALL	287143.83	4047455.40	2.7306E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.2274E-03	0.00E+00
305	ALL	287106.93	4047064.01	4.3161E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.5206E-04	0.00E+00
306	ALL	287118.81	4047034.39	3.9118E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.1909E-04	0.00E+00
307	ALL	287130.68	4047004.77	3.6557E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.9820E-04	0.00E+00
308	ALL	287168.70	4046952.48	3.7199E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.0344E-04	0.00E+00
309	ALL	287201.09	4046949.70	4.4584E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.6367E-04	0.00E+00
310	ALL	287208.48	4046930.44	4.3369E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.5376E-04	0.00E+00
311	ALL	287086.99	4047175.44	6.6290E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.4073E-04	0.00E+00
312	ALL	287105.68	4047186.10	7.8355E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.3915E-04	0.00E+00
313	ALL	287083.94	4047225.17	8.4870E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.9229E-04	0.00E+00
314	ALL	287094.28	4047265.58	1.1165E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.1077E-04	0.00E+00
315	ALL	287085.57	4047313.33	1.3010E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0612E-03	0.00E+00
316	ALL	287089.90	4047360.42	1.5704E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.2810E-03	0.00E+00
317	ALL	287097.20	4047418.50	1.8756E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.5300E-03	0.00E+00
318	ALL	287094.25	4047460.52	1.9108E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.5587E-03	0.00E+00
319	ALL	287059.27	4047063.56	3.4664E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.8275E-04	0.00E+00
320	ALL	287071.49	4047033.10	3.1177E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.5431E-04	0.00E+00
321	ALL	287083.70	4047002.63	2.8852E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.3535E-04	0.00E+00
322	ALL	287095.92	4046972.16	2.7249E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.2227E-04	0.00E+00
323	ALL	287167.50	4046928.90	3.4071E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.7792E-04	0.00E+00
324	ALL	287168.34	4046915.52	3.2753E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.6717E-04	0.00E+00
325	ALL	287198.44	4046902.44	3.7071E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.0239E-04	0.00E+00
326	ALL	287228.54	4046889.35	4.2175E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.4402E-04	0.00E+00
327	ALL	287047.68	4047168.82	5.2350E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.2703E-04	0.00E+00
328	ALL	287059.69	4047222.93	7.2970E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.9522E-04	0.00E+00
329	ALL	287067.69	4047266.67	9.4627E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.7188E-04	0.00E+00
330	ALL	287036.59	4047262.64	7.7745E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.3417E-04	0.00E+00
331	ALL	287067.65	4047321.42	1.1918E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.7216E-04	0.00E+00
332	ALL	287067.96	4047358.81	1.3493E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.1007E-03	0.00E+00
333	ALL	287070.26	4047416.23	1.5597E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.2723E-03	0.00E+00
334	ALL	287074.17	4047462.89	1.6814E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.3716E-03	0.00E+00
335	ALL	287011.50	4047063.40	2.8847E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.3530E-04	0.00E+00
336	ALL	287023.94	4047032.37	2.5864E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.1098E-04	0.00E+00
337	ALL	287036.38	4047001.34	2.3771E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.9390E-04	0.00E+00
338	ALL	287048.82	4046970.31	2.2240E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.8141E-04	0.00E+00
339	ALL	287061.27	4046939.28	2.1141E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.7245E-04	0.00E+00
340	ALL	287104.37	4046894.92	2.2392E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.8265E-04	0.00E+00
341	ALL	287135.03	4046881.59	2.4911E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.0320E-04	0.00E+00
342	ALL	287165.69	4046868.26	2.7917E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.2772E-04	0.00E+00
343	ALL	287196.34	4046854.93	3.1452E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.5656E-04	0.00E+00
344	ALL	287227.00	4046841.60	3.5587E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.9029E-04	0.00E+00
345	ALL	286999.37	4047131.83	3.6201E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.9530E-04	0.00E+00
346	ALL	286999.69	4047169.22	4.2358E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.4551E-04	0.00E+00
347	ALL	287000.00	4047206.62	5.0254E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.0993E-04	0.00E+00
348	ALL	287000.31	4047244.02	5.9549E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.8574E-04	0.00E+00
349	ALL	286988.60	4047263.04	6.1140E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.9872E-04	0.00E+00
350	ALL	287000.94	4047318.81	8.0652E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.5788E-04	0.00E+00
351	ALL	287001.25	4047356.21	9.1046E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.4267E-04	0.00E+00
352	ALL	286980.18	4047419.00	9.4665E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.7218E-04	0.00E+00
353	ALL	287001.21	4047419.31	1.0537E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.5954E-04	0.00E+00
354	ALL	287002.19	4047468.40	1.1278E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.1997E-04	0.00E+00
355	ALL	286963.66	4047063.40	2.4597E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.0064E-04	0.00E+00
356	ALL	286976.27	4047031.97	2.2047E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.7984E-04	0.00E+00
357	ALL	286988.87	4047000.53	2.0203E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.6480E-04	0.00E+00
358	ALL	287001.47	4046969.10	1.8785E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.5323E-04	0.00E+00
359	ALL	287014.08	4046937.67	1.7713E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.4448E-04	0.00E+00
360	ALL	287026.68	4046906.23	1.6907E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.3791E-04	0.00E+00
361	ALL	287070.34	4046861.30	1.7731E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.4464E-04	0.00E+00
362	ALL	287101.40	4046847.80	1.9510E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.5914E-04	0.00E+00
363	ALL	287132.45	4046834.29	2.1650E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.7660E-04	0.00E+00
364	ALL	287163.51	4046820.79	2.4178E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.9722E-04	0.00E+00
365	ALL	287194.57	4046807.29	2.7128E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.2129E-04	0.00E+00
366	ALL	287225.63	4046793.79	3.0511E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.4888E-04	0.00E+00
367	ALL	286951.37	4047132.23	3.0590E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.4952E-04	0.00E+00
368	ALL	286951.69	4047169.63	3.5210E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.8721E-04	0.00E+00
369	ALL	286952.00	4047207.02	4.1202E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.3609E-04	0.00E+00
370	ALL	286952.31	4047244.42	4.8223E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.9336E-04	0.00E+00
371	ALL	286952.63	4047281.82	5.6006E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.5684E-04	0.00E+00
372	ALL	286952.94	4047319.21	6.4144E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.2323E-04	0.00E+00
373	ALL	286953.25	4047356.61	7.2110E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.8820E-04	0.00E+00
374	ALL	286983.64	4047369.28	8.6325E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.0415E-04	0.00E+00
375	ALL	286953.21	4047419.71	8.3339E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.7980E-04	0.00E+00
376	ALL	286954.19	4047468.80	8.9655E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.3132E-04	0.00E+00
377	ALL	286915.79	4047063.50	2.1380E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.7440E-04	0.00E+00
378	ALL	286928.51	4047031.76	1.9151E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.5622E-04	0.00E+00
379	ALL	286941.24	4047000.03	1.7541E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.4308E-04	0.00E+00
380	ALL	286953.96	4046968.29	1.6264E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.3267E-04	0.00E+00
381	ALL	286966.68	4046936.56	1.5256E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.2444E-04	0.00E+00
382	ALL	286979.41	4046904.82	1.4469E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.1802E-04	0.00E+00
383	ALL	286992.13	4046873.09	1.3851E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.1299E-04	0.00E+00
384	ALL	287036.21	4046827.72	1.4383E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.1732E-04	0.00E+00
385	ALL	287067.57	4046814.09	1.5656E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.2771E-04	0.00E+00
386	ALL	287098.92	4046800.45	1.7208E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.4036E-04	0.00E+00
387	ALL	287130.28	4046786.82	1.9057E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.5545E-04	0.00E+00
388	ALL	287161.64	4046773.19	2.1220E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.7309E-04	0.00E+00
389	ALL	287192.99	4046759.56	2.3706E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.9337E-04	0.00E+00
390	ALL	287224.35	4046745.93	2.6489E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.1607E-04	0.00E+00
391	ALL	286903.06	4047095.23	2.3961E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.9545E-04	0.00E+00
392	ALL	286903.38	4047132.63	2.6338E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.1484E-04	0.00E+00
393	ALL	286903.69	4047170.03	2.9883E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.4376E-04	0.00E+00
394	ALL	286904.00	4047207.42	3.4556E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.8188E-04	0.00E+00
395	ALL	286904.31	4047244.82	4.0019E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.2644E-04	0.00E+00
396	ALL	286904.63	4047282.22	4.6060E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.7571E-04	0.00E+00
397	ALL	286904.94	4047319.61	5.2383E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.2729E-04	0.00E+00
398	ALL	286905.25	4047357.01	5.8609E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.7808E-04	0.00E+00
399	ALL	286905.57	4047394.41	6.4326E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.2471E-04	0.00E+00
400	ALL	286905.88	4047431.81	6.9191E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.6440E-04	0.00E+00
401	ALL	286906.19	4047469.20	7.2977E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.9528E-04	0.00E+00
402	ALL	286836.89	4047061.42	1.7258E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.4078E-04	0.00E+00
403	ALL	286850.71	4047026.95	1.5376E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.2542E-04	0.00E+00
404	ALL	286864.54	4046992.47	1.4036E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.1449E-04	0.00E+00
405	ALL	286878.36	4046957.99	1.2972E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0581E-04	0.00E+00
406	ALL	286892.18	4046923.51	1.2110E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.8781E-05	0.00E+00
407	ALL	286906.01	4046889.04	1.1417E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.3129E-05	0.00E+00
408	ALL	286919.83	4046854.56	1.0853E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.8526E-05	0.00E+00

409	ALL	286933.66	4046820.08	1.0384E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.4701E-05	0.00E+00
410	ALL	286981.55	4046770.79	1.0645E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.6830E-05	0.00E+00
411	ALL	287015.61	4046755.98	1.1476E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.3610E-05	0.00E+00
412	ALL	287049.68	4046741.17	1.2517E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0210E-04	0.00E+00
413	ALL	287083.74	4046726.36	1.3794E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.1252E-04	0.00E+00
414	ALL	287117.81	4046711.55	1.5318E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.2495E-04	0.00E+00
415	ALL	287151.87	4046696.74	1.7085E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.3936E-04	0.00E+00
416	ALL	287185.94	4046681.93	1.9074E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.5559E-04	0.00E+00
417	ALL	287220.01	4046667.12	2.1232E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.7319E-04	0.00E+00
418	ALL	286823.07	4047095.90	1.9672E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.6046E-04	0.00E+00
419	ALL	286823.38	4047133.30	2.1240E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.7325E-04	0.00E+00
420	ALL	286823.69	4047170.70	2.3574E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.9229E-04	0.00E+00
421	ALL	286824.00	4047208.09	2.6799E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.1860E-04	0.00E+00
422	ALL	286824.32	4047245.49	3.0567E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.4934E-04	0.00E+00
423	ALL	286824.63	4047282.89	3.4711E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.8314E-04	0.00E+00
424	ALL	286824.94	4047320.28	3.9058E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.1860E-04	0.00E+00
425	ALL	286825.26	4047357.68	4.3371E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.5378E-04	0.00E+00
426	ALL	286825.57	4047395.08	4.7418E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.8679E-04	0.00E+00
427	ALL	286825.88	4047432.48	5.0999E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.1600E-04	0.00E+00
428	ALL	286826.20	4047469.87	5.3967E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.4021E-04	0.00E+00
429	ALL	286756.43	4047063.23	1.4506E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.1832E-04	0.00E+00
430	ALL	286769.80	4047029.90	1.2943E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0558E-04	0.00E+00
431	ALL	286783.17	4046996.56	1.1851E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.6672E-05	0.00E+00
432	ALL	286796.54	4046963.22	1.0982E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.9583E-05	0.00E+00
433	ALL	286809.90	4046929.88	1.0269E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.3765E-05	0.00E+00
434	ALL	286823.27	4046896.54	9.6776E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.8941E-05	0.00E+00
435	ALL	286836.64	4046863.21	9.1835E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.4910E-05	0.00E+00
436	ALL	286850.00	4046829.87	8.7627E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.1478E-05	0.00E+00
437	ALL	286863.37	4046796.53	8.3955E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.8482E-05	0.00E+00
438	ALL	286876.74	4046763.19	8.0684E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.5814E-05	0.00E+00
439	ALL	286923.04	4046715.53	8.1614E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.6573E-05	0.00E+00
440	ALL	286955.98	4046701.21	8.6416E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.0490E-05	0.00E+00
441	ALL	286988.92	4046686.89	9.2466E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.5425E-05	0.00E+00
442	ALL	287021.86	4046672.57	9.9987E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.1560E-05	0.00E+00
443	ALL	287054.80	4046658.25	1.0913E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.9017E-05	0.00E+00
444	ALL	287087.74	4046643.93	1.1993E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.7831E-05	0.00E+00
445	ALL	287120.68	4046629.61	1.3231E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0793E-04	0.00E+00
446	ALL	287153.62	4046615.29	1.4604E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.1912E-04	0.00E+00
447	ALL	287186.56	4046600.97	1.6071E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.3109E-04	0.00E+00
448	ALL	287219.50	4046586.65	1.7587E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.4346E-04	0.00E+00
449	ALL	286743.07	4047096.57	1.6579E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.3524E-04	0.00E+00
450	ALL	286743.38	4047133.97	1.7729E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.4462E-04	0.00E+00
451	ALL	286743.69	4047171.37	1.9265E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.5714E-04	0.00E+00
452	ALL	286744.01	4047208.76	2.1579E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.7602E-04	0.00E+00
453	ALL	286744.32	4047246.16	2.4286E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.9810E-04	0.00E+00
454	ALL	286744.63	4047283.56	2.7244E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.2223E-04	0.00E+00
455	ALL	286744.95	4047320.95	3.0341E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.4749E-04	0.00E+00
456	ALL	286745.26	4047358.35	3.3448E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.7284E-04	0.00E+00
457	ALL	286745.57	4047395.75	3.6436E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.9721E-04	0.00E+00
458	ALL	286745.89	4047433.15	3.9175E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.1955E-04	0.00E+00
459	ALL	286746.20	4047470.54	4.1547E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.3890E-04	0.00E+00
460	ALL	286676.12	4047064.69	1.2226E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.9732E-05	0.00E+00
461	ALL	286689.17	4047032.14	1.1015E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.9851E-05	0.00E+00
462	ALL	286702.22	4046999.59	1.0142E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.2725E-05	0.00E+00
463	ALL	286715.27	4046967.05	9.4314E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.6932E-05	0.00E+00
464	ALL	286728.32	4046934.50	8.8387E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.2098E-05	0.00E+00
465	ALL	286741.37	4046901.95	8.3426E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.8051E-05	0.00E+00
466	ALL	286754.42	4046869.40	7.9250E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.4645E-05	0.00E+00
467	ALL	286767.47	4046836.85	7.5679E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.1731E-05	0.00E+00
468	ALL	286780.52	4046804.30	7.2561E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.9188E-05	0.00E+00
469	ALL	286793.57	4046771.75	6.9747E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.6893E-05	0.00E+00
470	ALL	286806.63	4046739.20	6.7155E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.4779E-05	0.00E+00
471	ALL	286819.68	4046706.65	6.4737E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.2807E-05	0.00E+00
472	ALL	286864.89	4046660.12	6.4855E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.2902E-05	0.00E+00
473	ALL	286897.05	4046646.14	6.7760E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.5272E-05	0.00E+00
474	ALL	286929.21	4046632.16	7.1407E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.8247E-05	0.00E+00
475	ALL	286961.37	4046618.18	7.6005E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.1997E-05	0.00E+00
476	ALL	286993.53	4046604.20	8.1672E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.6620E-05	0.00E+00
477	ALL	287025.69	4046590.21	8.8528E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.2213E-05	0.00E+00
478	ALL	287057.85	4046576.23	9.6552E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.8758E-05	0.00E+00
479	ALL	287090.01	4046562.25	1.0564E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.6169E-05	0.00E+00
480	ALL	287122.17	4046548.27	1.1560E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.4296E-05	0.00E+00
481	ALL	287154.33	4046534.29	1.2617E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0291E-04	0.00E+00
482	ALL	287186.49	4046520.31	1.3701E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.1176E-04	0.00E+00
483	ALL	287218.65	4046506.33	1.4781E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.2057E-04	0.00E+00
484	ALL	286663.07	4047097.24	1.4817E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.2086E-04	0.00E+00
485	ALL	286663.38	4047134.64	1.5088E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.2308E-04	0.00E+00
486	ALL	286663.70	4047172.04	1.6117E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.3147E-04	0.00E+00
487	ALL	286664.01	4047209.43	1.7844E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.4556E-04	0.00E+00
488	ALL	286664.32	4047246.83	1.9853E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.6194E-04	0.00E+00
489	ALL	286664.64	4047284.23	2.2036E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.7975E-04	0.00E+00
490	ALL	286664.95	4047321.62	2.4321E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.9839E-04	0.00E+00
491	ALL	286665.26	4047359.02	2.6636E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.1727E-04	0.00E+00
492	ALL	286665.58	4047396.42	2.8904E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.3577E-04	0.00E+00
493	ALL	286665.89	4047433.81	3.1035E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.5316E-04	0.00E+00
494	ALL	286666.20	4047471.21	3.2966E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.6891E-04	0.00E+00
495	ALL	286596.81	4047063.66	1.0106E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.2438E-05	0.00E+00
496	ALL	286610.54	4047029.40	9.3422E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.6205E-05	0.00E+00
497	ALL	286624.28	4046995.15	8.6597E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.0637E-05	0.00E+00
498	ALL	286638.01	4046960.90	8.0633E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.5773E-05	0.00E+00
499	ALL	286651.74	4046926.64	7.5540E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.1618E-05	0.00E+00
500	ALL	286665.48	4046892.39	7.1261E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.8128E-05	0.00E+00
501	ALL	286679.21	4046858.13	6.7681E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.5208E-05	0.00E+00
502	ALL	286692.95	4046823.88	6.4668E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.2750E-05	0.00E+00
503	ALL	286706.68	4046789.62	6.2047E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.0612E-05	0.00E+00
504	ALL	286720.41	4046755.37	5.9693E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.8692E-05	0.00E+00
505	ALL	286734.15	4046721.12	5.7504E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.6906E-05	0.00E+00
506	ALL	286747.88	4046686.86	5.5416E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.5203E-05	0.00E+00
507	ALL	286761.62	4046652.61	5.3421E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.3576E-05	0.00E+00
508	ALL	286809.19	4046603.64	5.3133E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.3341E-05	0.00E+00
509	ALL	286843.04	4046588.93	5.5118E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.4960E-05	0.00E+00
510	ALL	286876.88	4046574.21	5.7651E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.7026E-05	0.00E+00
511	ALL	286910.73	4046559.50	6.0920E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.9693E-05	0.00E+00
512	ALL	286944.57	4046544.79	6.5066E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.3075E-05	0.00E+00
513	ALL	286978.42	4046530.07	7.0200E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.7262E-05	0.00E+00
514	ALL	287012.26	4046515.36	7.6330E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.2262E-05	0.00E+00
515	ALL	287046.11	4046500.64	8.3396E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.8026E-05	0.00E+00

516	ALL	287079.95	4046485.93	9.1220E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.4409E-05	0.00E+00
517	ALL	287113.80	4046471.22	9.9579E-08	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.1227E-05	0.00E+00
518	ALL	287147.64	4046456.50	1.0821E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.8270E-05	0.00E+00
519	ALL	287181.49	4046441.79	1.1682E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.5293E-05	0.00E+00
520	ALL	287215.33	4046427.08	1.2519E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0212E-04	0.00E+00
521	ALL	286583.07	4047097.91	1.0930E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.9156E-05	0.00E+00
522	ALL	286583.39	4047135.31	1.2230E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.9761E-05	0.00E+00
523	ALL	286583.70	4047172.71	1.3568E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.1067E-04	0.00E+00
524	ALL	286584.01	4047210.10	1.5013E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.2246E-04	0.00E+00
525	ALL	286584.33	4047247.50	1.6581E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.3525E-04	0.00E+00
526	ALL	286584.64	4047284.90	1.8252E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.4888E-04	0.00E+00
527	ALL	286584.95	4047322.29	1.9991E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.6307E-04	0.00E+00
528	ALL	286585.26	4047359.69	2.1756E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.7747E-04	0.00E+00
529	ALL	286585.58	4047397.09	2.3510E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.9177E-04	0.00E+00
530	ALL	286585.89	4047434.48	2.5209E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.0563E-04	0.00E+00
531	ALL	286586.20	4047471.88	2.6798E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.1859E-04	0.00E+00
532	ALL	287283.86	4047485.01	1.0840E-05	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.8424E-03	0.00E+00
533	ALL	287303.92	4047486.97	1.1741E-05	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.5775E-03	0.00E+00
534	ALL	287342.07	4047487.75	1.2867E-05	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0496E-02	0.00E+00
535	ALL	287384.16	4047490.89	1.2804E-05	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0444E-02	0.00E+00
536	ALL	287425.45	4047491.67	1.2674E-05	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0339E-02	0.00E+00
537	ALL	287447.09	4047489.70	1.2887E-05	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0512E-02	0.00E+00
538	ALL	287487.99	4047490.87	1.1889E-05	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.6981E-03	0.00E+00
539	ALL	287532.83	4047491.65	1.0107E-05	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.2446E-03	0.00E+00
540	ALL	287570.98	4047492.44	7.3614E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.0047E-03	0.00E+00
541	ALL	287322.78	4047489.27	1.2075E-05	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.8497E-03	0.00E+00
542	ALL	287303.10	4047526.96	6.7494E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.5055E-03	0.00E+00
543	ALL	287341.25	4047527.74	7.3222E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.9727E-03	0.00E+00
544	ALL	287379.41	4047528.52	7.5182E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.1326E-03	0.00E+00
545	ALL	287417.56	4047529.30	7.4291E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.0600E-03	0.00E+00
546	ALL	287455.71	4047530.08	7.0829E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.7776E-03	0.00E+00
547	ALL	287493.86	4047530.86	6.4326E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.2471E-03	0.00E+00
548	ALL	287570.16	4047532.43	4.3366E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.5374E-03	0.00E+00
549	ALL	287228.67	4047530.89	4.3510E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.5491E-03	0.00E+00
550	ALL	287302.69	4047546.95	5.4140E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.4162E-03	0.00E+00
551	ALL	287340.84	4047547.74	5.8314E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.7567E-03	0.00E+00
552	ALL	287379.00	4047548.52	5.9733E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.8725E-03	0.00E+00
553	ALL	287417.15	4047549.30	5.8852E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.8006E-03	0.00E+00
554	ALL	287455.30	4047550.08	5.5884E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.5585E-03	0.00E+00
555	ALL	287493.45	4047550.86	5.0797E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.1435E-03	0.00E+00
556	ALL	287569.75	4047552.42	3.5460E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.8925E-03	0.00E+00
557	ALL	287229.59	4047551.32	3.7951E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.0957E-03	0.00E+00
558	ALL	287302.28	4047566.95	4.4642E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.6414E-03	0.00E+00
559	ALL	287340.44	4047567.73	4.7688E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.8899E-03	0.00E+00
560	ALL	287378.59	4047568.51	4.8693E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.9719E-03	0.00E+00
561	ALL	287416.74	4047569.29	4.7853E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.9034E-03	0.00E+00
562	ALL	287454.89	4047570.08	4.5334E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.6979E-03	0.00E+00
563	ALL	287493.04	4047570.86	4.1285E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.3676E-03	0.00E+00
564	ALL	287516.13	4047570.13	3.8577E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.1467E-03	0.00E+00
565	ALL	287569.34	4047572.42	2.9766E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.4281E-03	0.00E+00
566	ALL	287236.09	4047574.29	3.3419E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.7260E-03	0.00E+00
567	ALL	287208.45	4047562.41	3.1667E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.5831E-03	0.00E+00
568	ALL	287213.58	4047528.71	3.9738E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.2415E-03	0.00E+00
569	ALL	287301.87	4047586.95	3.7558E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.0637E-03	0.00E+00
570	ALL	287340.03	4047587.73	3.9774E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.2444E-03	0.00E+00
571	ALL	287378.18	4047588.51	4.0463E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.3006E-03	0.00E+00
572	ALL	287416.33	4047589.29	3.9686E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.2372E-03	0.00E+00
573	ALL	287454.48	4047590.07	3.7581E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.0655E-03	0.00E+00
574	ALL	287492.63	4047590.85	3.4330E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.8003E-03	0.00E+00
575	ALL	287515.72	4047590.13	3.2243E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.6301E-03	0.00E+00
576	ALL	287568.93	4047592.41	2.5488E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.0790E-03	0.00E+00
577	ALL	287233.72	4047621.68	2.4606E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.0071E-03	0.00E+00
578	ALL	287204.70	4047609.21	2.4086E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.9647E-03	0.00E+00
579	ALL	287175.69	4047596.74	2.2891E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.8673E-03	0.00E+00
580	ALL	287182.27	4047530.38	3.1702E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.5859E-03	0.00E+00
581	ALL	287198.83	4047529.34	3.5698E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.9119E-03	0.00E+00
582	ALL	287300.89	4047634.94	2.6242E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.1405E-03	0.00E+00
583	ALL	287339.04	4047635.72	2.7263E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.2238E-03	0.00E+00
584	ALL	287377.19	4047636.50	2.7483E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.2418E-03	0.00E+00
585	ALL	287415.35	4047637.28	2.6885E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.1930E-03	0.00E+00
586	ALL	287453.50	4047638.06	2.5545E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.0838E-03	0.00E+00
587	ALL	287491.65	4047638.84	2.3602E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.9252E-03	0.00E+00
588	ALL	287514.73	4047638.12	2.2386E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.8260E-03	0.00E+00
589	ALL	287567.95	4047640.40	1.8582E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.5158E-03	0.00E+00
590	ALL	287231.91	4047669.32	1.8811E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.5344E-03	0.00E+00
591	ALL	287202.06	4047656.49	1.8794E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.5330E-03	0.00E+00
592	ALL	287172.22	4047643.66	1.8344E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.4963E-03	0.00E+00
593	ALL	287142.37	4047630.83	1.7506E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.4279E-03	0.00E+00
594	ALL	287108.99	4047573.27	1.8298E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.4926E-03	0.00E+00
595	ALL	287087.59	4047558.00	1.6993E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.3861E-03	0.00E+00
596	ALL	287087.19	4047527.03	1.7774E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.4498E-03	0.00E+00
597	ALL	287299.91	4047682.93	1.9343E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.5778E-03	0.00E+00
598	ALL	287338.06	4047683.71	1.9798E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.6149E-03	0.00E+00
599	ALL	287376.21	4047684.49	1.9750E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.6110E-03	0.00E+00
600	ALL	287414.36	4047685.27	1.9359E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.5791E-03	0.00E+00
601	ALL	287452.51	4047686.05	1.8516E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.5104E-03	0.00E+00
602	ALL	287490.67	4047686.83	1.7315E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.4124E-03	0.00E+00
603	ALL	287513.75	4047686.11	1.6570E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.3516E-03	0.00E+00
604	ALL	287566.97	4047688.39	1.4218E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.1598E-03	0.00E+00
605	ALL	287230.38	4047717.07	1.4767E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.2046E-03	0.00E+00
606	ALL	287199.98	4047704.00	1.4962E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.2204E-03	0.00E+00
607	ALL	287169.58	4047690.93	1.4872E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.2131E-03	0.00E+00
608	ALL	287139.18	4047677.87	1.4518E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.1843E-03	0.00E+00
609	ALL	287108.78	4047664.80	1.3911E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.1347E-03	0.00E+00
610	ALL	287065.68	4047621.18	1.3509E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.1019E-03	0.00E+00
611	ALL	287052.98	4047590.62	1.3629E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.1117E-03	0.00E+00
612	ALL	287040.28	4047560.07	1.3447E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0969E-03	0.00E+00
613	ALL	287027.59	4047529.51	1.2964E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0575E-03	0.00E+00
614	ALL	287024.71	4047465.54	1.2647E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0316E-03	0.00E+00
615	ALL	287298.93	4047730.92	1.4802E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.2074E-03	0.00E+00
616	ALL	287337.08	4047731.70	1.4989E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.2227E-03	0.00E+00
617	ALL	287375.23	4047732.48	1.4881E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.2138E-03	0.00E+00
618	ALL	287413.38	4047733.26	1.4561E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.1877E-03	0.00E+00
619	ALL	287451.53	4047734.04	1.4018E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.1435E-03	0.00E+00
620	ALL	287489.68	4047734.82	1.3268E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0823E-03	0.00E+00
621	ALL	287527.83	4047735.60	1.2324E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0052E-03	0.00E+00
622	ALL	287565.99	4047736.38	1.1256E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.1818E-04	0.00E+00

623	ALL	287229.00	4047764.89	1.1840E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.6580E-04	0.00E+00
624	ALL	287198.20	4047751.65	1.2113E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.8803E-04	0.00E+00
625	ALL	287167.41	4047738.41	1.2200E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.9513E-04	0.00E+00
626	ALL	287136.61	4047725.18	1.2107E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.8757E-04	0.00E+00
627	ALL	287105.82	4047711.94	1.1830E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.6501E-04	0.00E+00
628	ALL	287075.03	4047698.70	1.1392E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.2921E-04	0.00E+00
629	ALL	287031.37	4047654.52	1.1081E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.0385E-04	0.00E+00
630	ALL	287018.51	4047623.56	1.1202E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.1377E-04	0.00E+00
631	ALL	287005.64	4047592.61	1.1124E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.0737E-04	0.00E+00
632	ALL	286992.78	4047561.66	1.0839E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.8414E-04	0.00E+00
633	ALL	286979.92	4047530.71	1.0364E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.4543E-04	0.00E+00
634	ALL	286977.19	4047516.90	1.0239E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.3516E-04	0.00E+00
635	ALL	287297.94	4047778.91	1.1662E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.5126E-04	0.00E+00
636	ALL	287336.09	4047779.69	1.1723E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.5629E-04	0.00E+00
637	ALL	287374.25	4047780.47	1.1606E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.4668E-04	0.00E+00
638	ALL	287412.40	4047781.25	1.1368E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.2729E-04	0.00E+00
639	ALL	287450.55	4047782.03	1.0985E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.9604E-04	0.00E+00
640	ALL	287488.70	4047782.81	1.0477E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.5465E-04	0.00E+00
641	ALL	287526.85	4047783.59	9.8498E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.0346E-04	0.00E+00
642	ALL	287565.00	4047784.37	9.1392E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.4549E-04	0.00E+00
643	ALL	287227.72	4047812.75	9.6673E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.8857E-04	0.00E+00
644	ALL	287196.63	4047799.39	9.9536E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.1192E-04	0.00E+00
645	ALL	287165.54	4047786.02	1.0120E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.2551E-04	0.00E+00
646	ALL	287134.45	4047772.66	1.0167E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.2932E-04	0.00E+00
647	ALL	287103.36	4047759.29	1.0085E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.2261E-04	0.00E+00
648	ALL	287072.27	4047745.93	9.8727E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.0532E-04	0.00E+00
649	ALL	287041.18	4047732.57	9.5135E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.7602E-04	0.00E+00
650	ALL	286997.10	4047687.95	9.2782E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.5682E-04	0.00E+00
651	ALL	286984.11	4047656.70	9.3911E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.6604E-04	0.00E+00
652	ALL	286971.13	4047625.45	9.3745E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.6468E-04	0.00E+00
653	ALL	286958.14	4047594.20	9.2128E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.5149E-04	0.00E+00
654	ALL	286945.15	4047562.95	8.9019E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.2613E-04	0.00E+00
655	ALL	286926.15	4047536.05	8.2637E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.7407E-04	0.00E+00
656	ALL	286923.86	4047519.50	8.1509E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.6487E-04	0.00E+00
657	ALL	287296.96	4047826.90	9.4110E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.6766E-04	0.00E+00
658	ALL	287335.11	4047827.68	9.4161E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.6808E-04	0.00E+00
659	ALL	287373.26	4047828.46	9.3072E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.5919E-04	0.00E+00
660	ALL	287411.41	4047829.24	9.1279E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.4457E-04	0.00E+00
661	ALL	287449.57	4047830.02	8.8561E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.2239E-04	0.00E+00
662	ALL	287487.72	4047830.80	8.4959E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.9301E-04	0.00E+00
663	ALL	287525.87	4047831.58	8.0559E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.5712E-04	0.00E+00
664	ALL	287564.02	4047832.36	7.5499E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.1585E-04	0.00E+00
665	ALL	287223.39	4047891.58	7.1586E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.8393E-04	0.00E+00
666	ALL	287189.62	4047877.06	7.4250E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.0566E-04	0.00E+00
667	ALL	287155.84	4047862.54	7.6267E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.2212E-04	0.00E+00
668	ALL	287122.06	4047848.02	7.7573E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.3277E-04	0.00E+00
669	ALL	287088.28	4047833.50	7.8106E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.3711E-04	0.00E+00
670	ALL	287054.51	4047818.98	7.7581E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.3283E-04	0.00E+00
671	ALL	287020.73	4047804.47	7.5967E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.1966E-04	0.00E+00
672	ALL	286986.95	4047789.95	7.3370E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.9848E-04	0.00E+00
673	ALL	286939.07	4047741.48	7.1700E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.8486E-04	0.00E+00
674	ALL	286924.96	4047707.53	7.2573E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.9198E-04	0.00E+00
675	ALL	286910.85	4047673.58	7.2538E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.9169E-04	0.00E+00
676	ALL	286896.74	4047639.63	7.1586E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.8393E-04	0.00E+00
677	ALL	286882.63	4047605.68	6.9705E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.6858E-04	0.00E+00
678	ALL	286868.52	4047571.72	6.6858E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.4537E-04	0.00E+00
679	ALL	286854.41	4047537.77	6.3166E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.1525E-04	0.00E+00
680	ALL	286840.30	4047503.82	5.8798E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.7962E-04	0.00E+00
681	ALL	287295.32	4047906.88	6.8791E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.6113E-04	0.00E+00
682	ALL	287333.47	4047907.66	6.8527E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.5898E-04	0.00E+00
683	ALL	287371.63	4047908.44	6.7667E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.5196E-04	0.00E+00
684	ALL	287409.78	4047909.22	6.6489E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.4236E-04	0.00E+00
685	ALL	287447.93	4047910.00	6.4834E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.2885E-04	0.00E+00
686	ALL	287486.08	4047910.79	6.2704E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.1148E-04	0.00E+00
687	ALL	287524.23	4047911.57	6.0128E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.9047E-04	0.00E+00
688	ALL	287562.38	4047912.35	5.7054E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.6539E-04	0.00E+00
689	ALL	287222.87	4047972.04	5.4819E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.4716E-04	0.00E+00
690	ALL	287190.21	4047958.00	5.6901E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.6414E-04	0.00E+00
691	ALL	287157.55	4047943.96	5.8717E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.7896E-04	0.00E+00
692	ALL	287124.89	4047929.93	6.0242E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.9140E-04	0.00E+00
693	ALL	287092.23	4047915.89	6.1376E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.0065E-04	0.00E+00
694	ALL	287059.57	4047901.85	6.2081E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.0640E-04	0.00E+00
695	ALL	287026.91	4047887.81	6.2159E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.0704E-04	0.00E+00
696	ALL	286994.25	4047873.77	6.1551E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.0207E-04	0.00E+00
697	ALL	286961.59	4047859.73	6.0279E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.9170E-04	0.00E+00
698	ALL	286928.93	4047845.69	5.8441E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.7671E-04	0.00E+00
699	ALL	286882.62	4047798.82	5.7219E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.6674E-04	0.00E+00
700	ALL	286868.98	4047766.00	5.7858E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.7195E-04	0.00E+00
701	ALL	286855.34	4047733.17	5.8037E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.7341E-04	0.00E+00
702	ALL	286841.70	4047700.34	5.7742E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.7101E-04	0.00E+00
703	ALL	286828.05	4047667.51	5.6924E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.6433E-04	0.00E+00
704	ALL	286814.41	4047634.68	5.5571E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.5329E-04	0.00E+00
705	ALL	286800.77	4047601.86	5.3667E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.3776E-04	0.00E+00
706	ALL	286787.13	4047569.03	5.1235E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.1792E-04	0.00E+00
707	ALL	286773.48	4047536.20	4.8336E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.9427E-04	0.00E+00
708	ALL	286759.84	4047503.37	4.5068E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.6762E-04	0.00E+00
709	ALL	287255.53	4047986.08	5.2674E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.2967E-04	0.00E+00
710	ALL	287293.69	4047986.86	5.2585E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.2893E-04	0.00E+00
711	ALL	287331.84	4047987.64	5.2229E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.2603E-04	0.00E+00
712	ALL	287369.99	4047988.42	5.1611E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.2099E-04	0.00E+00
713	ALL	287408.14	4047989.21	5.0790E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.1429E-04	0.00E+00
714	ALL	287446.29	4047989.99	4.9701E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.0541E-04	0.00E+00
715	ALL	287484.44	4047990.77	4.8342E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.9433E-04	0.00E+00
716	ALL	287522.59	4047991.55	4.6648E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.8051E-04	0.00E+00
717	ALL	287560.74	4047992.33	4.4760E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.6511E-04	0.00E+00
718	ALL	287219.35	4048051.22	4.3493E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.5477E-04	0.00E+00
719	ALL	287184.81	4048036.37	4.5168E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.6844E-04	0.00E+00
720	ALL	287150.26	4048021.52	4.6767E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.8148E-04	0.00E+00
721	ALL	287115.72	4048006.67	4.8193E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.9311E-04	0.00E+00
722	ALL	287081.17	4047991.82	4.9402E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.0297E-04	0.00E+00
723	ALL	287046.63	4047976.97	5.0316E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.1043E-04	0.00E+00
724	ALL	287012.08	4047962.12	5.0900E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.1519E-04	0.00E+00
725	ALL	286977.54	4047947.27	5.0945E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.1556E-04	0.00E+00
726	ALL	286942.99	4047932.42	5.0467E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.1166E-04	0.00E+00
727	ALL	286908.45	4047917.58	4.9460E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.0344E-04	0.00E+00
728	ALL	286873.90	4047902.73	4.8039E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.9185E-04	0.00E+00
729	ALL	286824.93	4047853.16	4.6978E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.8320E-04	0.00E+00

730	ALL	286810.50	4047818.43	4.7465E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.8717E-04	0.00E+00
731	ALL	286796.07	4047783.71	4.7612E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.8837E-04	0.00E+00
732	ALL	286781.64	4047748.99	4.7441E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.8698E-04	0.00E+00
733	ALL	286767.21	4047714.27	4.6941E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.8290E-04	0.00E+00
734	ALL	286752.78	4047679.54	4.6077E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.7586E-04	0.00E+00
735	ALL	286738.35	4047644.82	4.4814E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.6555E-04	0.00E+00
736	ALL	286723.92	4047610.10	4.3132E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.5183E-04	0.00E+00
737	ALL	286709.49	4047575.38	4.1044E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.3480E-04	0.00E+00
738	ALL	286695.06	4047540.66	3.8597E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.1483E-04	0.00E+00
739	ALL	286680.63	4047505.93	3.5873E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.9262E-04	0.00E+00
740	ALL	287253.90	4048066.06	4.1814E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.4108E-04	0.00E+00
741	ALL	287292.05	4048066.85	4.1652E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.3976E-04	0.00E+00
742	ALL	287330.20	4048067.63	4.1334E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.3716E-04	0.00E+00
743	ALL	287368.35	4048068.41	4.0847E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.3319E-04	0.00E+00
744	ALL	287406.50	4048069.19	4.0251E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.2833E-04	0.00E+00
745	ALL	287444.65	4048069.97	3.9492E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.2214E-04	0.00E+00
746	ALL	287482.80	4048070.75	3.8568E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.1460E-04	0.00E+00
747	ALL	287520.95	4048071.53	3.7479E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.0572E-04	0.00E+00
748	ALL	287559.11	4048072.31	3.6233E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.9555E-04	0.00E+00
749	ALL	287218.70	4048131.62	3.5368E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.8850E-04	0.00E+00
750	ALL	287185.14	4048117.20	3.6609E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.9862E-04	0.00E+00
751	ALL	287151.58	4048102.77	3.7868E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.0889E-04	0.00E+00
752	ALL	287118.03	4048088.35	3.9042E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.1846E-04	0.00E+00
753	ALL	287084.47	4048073.92	4.0137E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.2740E-04	0.00E+00
754	ALL	287050.91	4048059.50	4.1106E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.3531E-04	0.00E+00
755	ALL	287017.35	4048045.08	4.1900E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.4178E-04	0.00E+00
756	ALL	286983.79	4048030.65	4.2503E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.4670E-04	0.00E+00
757	ALL	286950.24	4048016.23	4.2751E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.4872E-04	0.00E+00
758	ALL	286916.68	4048001.80	4.2651E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.4791E-04	0.00E+00
759	ALL	286883.12	4047987.38	4.2180E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.4406E-04	0.00E+00
760	ALL	286849.56	4047972.95	4.1386E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.3759E-04	0.00E+00
761	ALL	286816.00	4047958.53	4.0245E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.2828E-04	0.00E+00
762	ALL	286768.43	4047910.37	3.9398E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.2137E-04	0.00E+00
763	ALL	286754.41	4047876.64	3.9747E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.2422E-04	0.00E+00
764	ALL	286740.39	4047842.91	3.9888E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.2537E-04	0.00E+00
765	ALL	286726.38	4047809.18	3.9846E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.2503E-04	0.00E+00
766	ALL	286712.36	4047775.45	3.9624E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.2321E-04	0.00E+00
767	ALL	286698.34	4047741.72	3.9206E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.1981E-04	0.00E+00
768	ALL	286684.32	4047707.99	3.8563E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.1456E-04	0.00E+00
769	ALL	286670.31	4047674.26	3.7659E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.0719E-04	0.00E+00
770	ALL	286656.29	4047640.53	3.6465E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.9745E-04	0.00E+00
771	ALL	286642.27	4047606.80	3.4978E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.8532E-04	0.00E+00
772	ALL	286628.26	4047573.07	3.3216E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.7095E-04	0.00E+00
773	ALL	286614.24	4047539.34	3.1218E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.5464E-04	0.00E+00
774	ALL	286600.22	4047505.61	2.9048E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.3695E-04	0.00E+00
775	ALL	287252.26	4048146.05	3.4128E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.7839E-04	0.00E+00
776	ALL	287290.41	4048146.83	3.3954E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.7696E-04	0.00E+00
777	ALL	287328.56	4048147.61	3.3698E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.7488E-04	0.00E+00
778	ALL	287366.71	4048148.39	3.3293E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.7157E-04	0.00E+00
779	ALL	287404.86	4048149.17	3.2844E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.6791E-04	0.00E+00
780	ALL	287443.01	4048149.95	3.2292E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.6340E-04	0.00E+00
781	ALL	287481.17	4048150.73	3.1632E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.5803E-04	0.00E+00
782	ALL	287519.32	4048151.52	3.0865E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.5177E-04	0.00E+00
783	ALL	287557.47	4048152.30	2.9996E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.4468E-04	0.00E+00
784	ALL	287726.12	4047123.71	4.7411E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.8674E-03	0.00E+00
785	ALL	287723.16	4047095.68	4.6325E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.7787E-03	0.00E+00
786	ALL	287770.58	4047139.17	3.5985E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.9353E-03	0.00E+00
787	ALL	287760.16	4047098.95	3.6971E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.0157E-03	0.00E+00
788	ALL	287833.51	4047123.20	2.5048E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.0431E-03	0.00E+00
789	ALL	287833.31	4047084.55	2.4496E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.9982E-03	0.00E+00
790	ALL	287882.52	4047126.95	1.9604E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.5991E-03	0.00E+00
791	ALL	287881.31	4047084.29	1.9502E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.5908E-03	0.00E+00
792	ALL	287918.49	4047130.03	1.6545E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.3496E-03	0.00E+00
793	ALL	287929.30	4047084.03	1.5798E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.2886E-03	0.00E+00
794	ALL	287668.31	4047870.20	5.3854E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.3929E-04	0.00E+00
795	ALL	287633.00	4047884.25	5.5598E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.5352E-04	0.00E+00
796	ALL	287597.69	4047898.30	5.6648E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.6208E-04	0.00E+00
797	ALL	288024.77	4047416.74	6.1339E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.0034E-04	0.00E+00
798	ALL	288010.97	4047392.78	6.9010E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.6292E-04	0.00E+00
799	ALL	288009.51	4047122.25	1.1324E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.2372E-04	0.00E+00
800	ALL	288009.30	4047083.60	1.1460E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.3476E-04	0.00E+00
801	ALL	287902.16	4047856.48	2.9848E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.4347E-04	0.00E+00
802	ALL	287868.02	4047870.07	3.2116E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.6197E-04	0.00E+00
803	ALL	287833.88	4047883.65	3.4377E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.8042E-04	0.00E+00
804	ALL	287799.73	4047897.24	3.6649E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.9895E-04	0.00E+00
805	ALL	287765.59	4047910.82	3.8756E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.1613E-04	0.00E+00
806	ALL	287731.45	4047924.41	4.0604E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.3121E-04	0.00E+00
807	ALL	287697.31	4047937.99	4.2149E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.4381E-04	0.00E+00
808	ALL	287663.17	4047951.58	4.3348E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.5359E-04	0.00E+00
809	ALL	287629.03	4047965.16	4.4181E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.6039E-04	0.00E+00
810	ALL	287594.89	4047978.75	4.4645E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.6417E-04	0.00E+00
811	ALL	288157.62	4047502.34	3.3145E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.7037E-04	0.00E+00
812	ALL	288143.85	4047535.47	3.1532E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.5721E-04	0.00E+00
813	ALL	288130.09	4047568.60	2.9967E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.4444E-04	0.00E+00
814	ALL	288116.32	4047601.73	2.8473E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.3226E-04	0.00E+00
815	ALL	288102.56	4047634.86	2.7091E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.2098E-04	0.00E+00
816	ALL	288088.79	4047667.99	2.5867E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.1100E-04	0.00E+00
817	ALL	288075.03	4047701.12	2.4816E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.0243E-04	0.00E+00
818	ALL	288006.21	4047866.76	2.2273E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.8168E-04	0.00E+00
819	ALL	287959.11	4047913.16	2.3674E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.9311E-04	0.00E+00
820	ALL	287925.77	4047926.42	2.5292E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.0631E-04	0.00E+00
821	ALL	287892.44	4047939.68	2.6930E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.1967E-04	0.00E+00
822	ALL	287859.11	4047952.95	2.8606E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.3334E-04	0.00E+00
823	ALL	287825.77	4047966.21	3.0195E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.4630E-04	0.00E+00
824	ALL	287792.44	4047979.47	3.1656E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.5822E-04	0.00E+00
825	ALL	287759.11	4047992.74	3.2948E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.6876E-04	0.00E+00
826	ALL	287725.77	4048006.00	3.4069E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.7790E-04	0.00E+00
827	ALL	287692.44	4048019.26	3.4958E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.8515E-04	0.00E+00
828	ALL	287659.11	4048032.52	3.5603E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.9041E-04	0.00E+00
829	ALL	287625.77	4048045.79	3.6009E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.9373E-04	0.00E+00
830	ALL	287592.44	4048059.05	3.6233E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.9555E-04	0.00E+00
831	ALL	288171.38	4047469.21	3.4739E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.8336E-04	0.00E+00
832	ALL	288236.89	4047503.65	2.7467E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.2405E-04	0.00E+00
833	ALL	288222.41	4047538.51	2.6203E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.1374E-04	0.00E+00
834	ALL	288207.92	4047573.37	2.4946E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.0349E-04	0.00E+00
835	ALL	288193.44	4047608.24	2.3728E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.9355E-04	0.00E+00
836	ALL	288178.95	4047643.10	2.2581E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.8420E-04	0.00E+00

837	ALL	288164.47	4047677.97	2.1533E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.7565E-04	0.00E+00
838	ALL	288149.98	4047712.83	2.0613E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.6814E-04	0.00E+00
839	ALL	288135.49	4047747.70	1.9841E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.6184E-04	0.00E+00
840	ALL	288121.01	4047782.56	1.9236E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.5691E-04	0.00E+00
841	ALL	288106.52	4047817.43	1.8778E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.5317E-04	0.00E+00
842	ALL	288092.04	4047852.29	1.8481E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.5075E-04	0.00E+00
843	ALL	288077.55	4047887.16	1.8284E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.4914E-04	0.00E+00
844	ALL	288063.07	4047922.02	1.8183E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.4832E-04	0.00E+00
845	ALL	288013.50	4047970.85	1.9358E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.5791E-04	0.00E+00
846	ALL	287978.42	4047984.80	2.0682E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.6870E-04	0.00E+00
847	ALL	287943.34	4047998.76	2.2010E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.7954E-04	0.00E+00
848	ALL	287908.26	4048012.72	2.3364E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.9058E-04	0.00E+00
849	ALL	287873.18	4048026.68	2.4661E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.0116E-04	0.00E+00
850	ALL	287838.10	4048040.63	2.5867E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.1099E-04	0.00E+00
851	ALL	287803.02	4048054.59	2.6947E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.1981E-04	0.00E+00
852	ALL	287767.94	4048068.55	2.7877E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.2740E-04	0.00E+00
853	ALL	287732.87	4048082.51	2.8676E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.3391E-04	0.00E+00
854	ALL	287697.79	4048096.47	2.9255E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.3864E-04	0.00E+00
855	ALL	287662.71	4048110.42	2.9688E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.4217E-04	0.00E+00
856	ALL	287627.63	4048124.38	2.9944E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.4426E-04	0.00E+00
857	ALL	287592.55	4048138.34	3.0062E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.4522E-04	0.00E+00
858	ALL	288251.38	4047468.78	2.8705E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.3415E-04	0.00E+00
859	ALL	288251.17	4047430.13	3.1186E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.5438E-04	0.00E+00
860	ALL	288250.96	4047391.49	3.3810E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.7579E-04	0.00E+00
861	ALL	288250.76	4047352.84	3.6471E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.9750E-04	0.00E+00
862	ALL	288250.55	4047314.19	3.9166E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.1948E-04	0.00E+00
863	ALL	288250.34	4047275.55	4.1880E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.4162E-04	0.00E+00
864	ALL	288250.13	4047236.90	4.4536E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.6328E-04	0.00E+00
865	ALL	288249.92	4047198.25	4.7000E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.8338E-04	0.00E+00
866	ALL	288249.72	4047159.60	4.9233E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.0160E-04	0.00E+00
867	ALL	288249.51	4047120.96	5.1160E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.1731E-04	0.00E+00
868	ALL	288249.30	4047082.31	5.2700E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.2988E-04	0.00E+00
869	ALL	287961.20	4047086.61	1.3838E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.1287E-03	0.00E+00
870	ALL	287970.85	4047116.78	1.3246E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0804E-03	0.00E+00
871	ALL	287989.19	4047097.71	1.2359E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0081E-03	0.00E+00
872	ALL	288033.60	4047117.02	1.0356E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.4476E-04	0.00E+00
873	ALL	288051.70	4047117.74	9.6823E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.8979E-04	0.00E+00
874	ALL	288039.15	4047144.77	9.9626E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.1265E-04	0.00E+00
875	ALL	287027.06	4047362.52	1.0666E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.7001E-04	0.00E+00
876	ALL	287024.38	4047323.09	9.2697E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.5613E-04	0.00E+00
877	ALL	287113.93	4047362.18	1.8853E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.5379E-03	0.00E+00
878	ALL	287108.92	4047310.39	1.5191E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.2391E-03	0.00E+00
879	ALL	287166.91	4047531.60	2.8490E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.3239E-03	0.00E+00
880	ALL	287152.08	4047530.38	2.5981E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.1193E-03	0.00E+00
881	ALL	287138.13	4047532.83	2.3663E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.9302E-03	0.00E+00
882	ALL	287228.70	4047508.00	5.1119E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.1698E-03	0.00E+00
883	ALL	287213.61	4047505.83	4.5189E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.6861E-03	0.00E+00
884	ALL	287182.30	4047507.50	3.4464E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.8112E-03	0.00E+00
885	ALL	287198.87	4047506.45	3.9621E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.2319E-03	0.00E+00
886	ALL	287166.94	4047508.72	3.0528E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.4902E-03	0.00E+00
887	ALL	287152.11	4047507.50	2.7488E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.2422E-03	0.00E+00
888	ALL	287138.16	4047509.94	2.4846E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	2.0267E-03	0.00E+00
889	ALL	287110.99	4047525.77	2.0424E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.6660E-03	0.00E+00
890	ALL	287110.50	4047556.19	1.9202E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.5663E-03	0.00E+00
891	ALL	287109.06	4047511.04	2.0612E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.6813E-03	0.00E+00
892	ALL	287087.57	4047572.85	1.6508E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.3466E-03	0.00E+00
893	ALL	287084.43	4047511.52	1.7769E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.4494E-03	0.00E+00
894	ALL	287055.94	4047512.73	1.5128E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.2340E-03	0.00E+00
895	ALL	287031.79	4047514.90	1.3309E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0856E-03	0.00E+00
896	ALL	287000.41	4047519.25	1.1398E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.2971E-04	0.00E+00
897	ALL	286944.88	4047520.70	8.8977E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.2579E-04	0.00E+00
898	ALL	286976.99	4047469.27	9.9757E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.1372E-04	0.00E+00
899	ALL	287054.73	4047529.15	1.4880E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.2138E-03	0.00E+00
900	ALL	287054.73	4047542.91	1.4697E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.1988E-03	0.00E+00
901	ALL	287035.42	4047544.12	1.3345E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0885E-03	0.00E+00
902	ALL	286998.72	4047533.49	1.1277E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.1991E-04	0.00E+00
903	ALL	286948.65	4047535.87	9.0623E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.3922E-04	0.00E+00
904	ALL	287113.06	4047461.68	2.1729E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.7725E-03	0.00E+00
905	ALL	287114.40	4047415.23	2.1150E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.7252E-03	0.00E+00
906	ALL	287025.17	4047418.24	1.1964E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.7592E-04	0.00E+00
907	ALL	287362.57	4047491.93	1.2406E-05	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0119E-02	0.00E+00
908	ALL	287405.82	4047491.14	1.2821E-05	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0458E-02	0.00E+00
909	ALL	287466.37	4047491.54	1.2198E-05	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	9.9501E-03	0.00E+00
910	ALL	287504.90	4047493.11	1.0988E-05	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.9631E-03	0.00E+00
911	ALL	287550.90	4047490.75	9.1573E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	7.4696E-03	0.00E+00
912	ALL	287323.23	4047544.12	5.8755E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.7926E-03	0.00E+00
913	ALL	287365.84	4047544.69	6.1869E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.0467E-03	0.00E+00
914	ALL	287402.48	4047544.12	6.2734E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.1173E-03	0.00E+00
915	ALL	287440.55	4047545.25	6.0260E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.9154E-03	0.00E+00
916	ALL	287479.76	4047543.27	5.7470E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.6879E-03	0.00E+00
917	ALL	287514.41	4047543.83	5.1198E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.1763E-03	0.00E+00
918	ALL	287282.32	4047543.55	5.2175E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	4.2560E-03	0.00E+00
919	ALL	287168.78	4046994.26	4.3550E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.5524E-04	0.00E+00
920	ALL	287149.46	4046996.81	3.9291E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	3.2050E-04	0.00E+00
921	ALL	287278.45	4046957.04	7.7519E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.3232E-04	0.00E+00
922	ALL	287360.54	4046910.05	1.0914E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.9023E-04	0.00E+00
923	ALL	287466.84	4046904.03	1.8962E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.5468E-03	0.00E+00
924	ALL	287318.06	4046990.09	1.2938E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	1.0554E-03	0.00E+00
925	ALL	287319.24	4046949.19	1.0173E-06	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	8.2979E-04	0.00E+00
926	ALL	287277.56	4046974.36	8.4033E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	6.8546E-04	0.00E+00
927	ALL	287324.74	4046864.05	6.8477E-07	1.41YrCancerHighEnd_InhSoilDermMMilkCrops	5.5857E-04	0.00E+00

HARP2 - HRACalc (dated 22118) 7/25/2023 1:56:41 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: 1.41

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 1.41
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
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: True

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

****
HOMEGROWN CROP PATHWAY SETTINGS

Household type: HouseholdsthatGarden
Fraction leafy: 0.137
Fraction exposed: 0.137
Fraction protected: 0.137
Fraction root: 0.137

****
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\0014-036\Construction\HARP\EL MONTE – UNMIT CON\hra\EMW Unmit ConCancerRisk.csv
Cancer risk total by receptor saved to: F:\Move\0014-036\Construction\HARP\EL MONTE – UNMIT CON\hra\EMW Unmit ConCancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: F:\Move\0014-036\Construction\HARP\EL MONTE – UNMIT CON\hra\EMW Unmit ConNCChronicRisk.csv
Chronic risk total by receptor saved to: F:\Move\0014-036\Construction\HARP\EL MONTE – UNMIT CON\hra\EMW Unmit ConNCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: F:\Move\0014-036\Construction\HARP\EL MONTE – UNMIT CON\hra\EMW Unmit ConNCAcuteRisk.csv
Acute risk total by receptor saved to: F:\Move\0014-036\Construction\HARP\EL MONTE – UNMIT CON\hra\EMW Unmit ConNCAcuteRiskSumByRec.csv
HRA ran successfully

Health Risk Screening

Operational Screening Calculations and Prioritization

Diesel PM Screening — Prioritization Calculator

Applicability	Use to provide a Prioritization score based on the emission potency method. Entries required in yellow areas, output in grey areas.
Author (Prioritization Calculator)	Matthew Cegielski *Last Update* October 13, 2016
Date Updated with Project Emissions	July 25, 2023
Facility:	**El Monte Mixed-Use Project (Operational Diesel PM Screening Analysis)**
ID#:	**—**
Project #:	**Truck Run and Idle Emissions**
Unit and Process#	**Mobile Source Diesel (Trucks Visiting the Mixed-Use Project)**

Operating Hours hr/yr	23,386.47	**(operating hours assumed based on idle hours)**		
Receptor Proximity and Proximity Factors	**Cancer Score**	**Chronic Score**	**Acute Score**	**Max Score**
0< R<100 1.000	1.10E+01	6.09E-03	0.00E+00	1.10E+01
100≤R<250 0.250	2.74E+00	1.52E-03	0.00E+00	2.74E+00
250≤R<500 0.040	4.38E-01	2.43E-04	0.00E+00	4.38E-01
500≤R<1000 0.011	1.21E-01	6.69E-05	0.00E+00	1.21E-01
1000≤R<1500 0.003	3.29E-02	1.83E-05	0.00E+00	3.29E-02
1500≤R<2000 0.002	2.19E-02	1.22E-05	0.00E+00	2.19E-02
2000<R 0.001	1.10E-02	6.09E-06	0.00E+00	1.10E-02

Receptor proximity is in meters. Priortization scores are calculated by multiplying the total scores summed below by the proximity factors. Record the Max score for your receptor distance. If the substance list for the unit is longer than the number of rows here or if there are multiple processes use additional worksheets and sum the totals of the Max Scores.

Mobile Source Diesel (Trucks Visiting the Mixed-Use Project)

Enter the unit's CAS# of the substances emitted and their amounts.

Prioritzation score for each substance generated below. Totals on last row.

Substance	**CAS#**	**Annual Emissions (lbs/yr)**	**Maximum Hourly (lbs/hr)**	**Average Hourly (lbs/hr)**	**Cancer**	**Chronic**	**Acute**
Diesel engine exhaust, particulate matter (Diesel PM)	**9901**	4.74E+00	4.29E-03	2.03E-04	1.10E+01	6.09E-03	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				Totals	**1.10E+01**	**6.09E-03**	**0.00E+00**

Health Risk Summary - Project Operations (Summary of HARP2 Results)
El Monte Way & Crawford Ave Mixed-Use Project (Operations)

	RISK_SUM	Cancer Risk/million	MAXHI NonCancer Chronic	MAXHI Acute
Maximum Risk	4.5668E-06	4.57	8.7023E-04	0.00E+00

	X	Y
MEI UTM	286663.07	4047097.24
Lat/Long	36°32'43.8"N 119°23'00.2"W	
Receptor # 484		

*HARP - HRACalc v22118 7/26/2023 6:53:01 PM - Cancer Risk - Input File: F:\Move\0014-036\Ops\EL MONTE â€“ Ops\hra\EMW OpsHRAInput.hra
*HARP - HRACalc v22118 7/26/2023 6:53:01 PM - Chronic Risk - Input File: F:\Move\0014-036\Ops\EL MONTE â€“ Ops\hra\EMW OpsHRAInput.hra
*HARP - HRACalc v22118 7/26/2023 6:53:01 PM - Acute Risk - Input File: F:\Move\0014-036\Ops\EL MONTE â€“ Ops\hra\EMW OpsHRAInput.hra

REC	GRP	X	Y	RISK_SUM	SCENARIO	MAXHI NonCancerChronic	MAXHI Acute
1	ALL	287491.93	4047047.54	4.09160E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.7968E-04	0.00E+00
2	ALL	287453.65	4047048.32	4.16360E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.9339E-04	0.00E+00
3	ALL	287415.36	4047049.10	4.16150E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.9299E-04	0.00E+00
4	ALL	287377.08	4047049.88	4.12150E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.8538E-04	0.00E+00
5	ALL	287338.80	4047050.67	4.07170E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.7588E-04	0.00E+00
6	ALL	287300.52	4047051.45	4.11150E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.8348E-04	0.00E+00
7	ALL	287262.23	4047052.23	4.14670E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.9019E-04	0.00E+00
8	ALL	287589.64	4047034.49	2.06180E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.9288E-04	0.00E+00
9	ALL	287568.09	4047025.98	2.14610E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.0895E-04	0.00E+00
10	ALL	287529.80	4047026.76	2.45840E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.6847E-04	0.00E+00
11	ALL	287491.52	4047027.54	2.55740E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.8733E-04	0.00E+00
12	ALL	287453.24	4047028.33	2.56350E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.8849E-04	0.00E+00
13	ALL	287414.96	4047029.11	2.52540E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.8123E-04	0.00E+00
14	ALL	287376.67	4047029.89	2.44840E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.6656E-04	0.00E+00
15	ALL	287338.39	4047030.67	2.38400E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.5428E-04	0.00E+00
16	ALL	287300.11	4047031.45	2.35980E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.4967E-04	0.00E+00
17	ALL	287261.83	4047032.23	2.31750E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.4162E-04	0.00E+00
18	ALL	287596.41	4047017.33	1.54530E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.9446E-04	0.00E+00
19	ALL	287567.68	4047005.99	1.57460E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.0006E-04	0.00E+00
20	ALL	287529.40	4047006.77	1.74440E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.3241E-04	0.00E+00
21	ALL	287491.11	4047007.55	1.79030E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.4115E-04	0.00E+00
22	ALL	287452.83	4047008.33	1.77710E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.3864E-04	0.00E+00
23	ALL	287414.55	4047009.11	1.73160E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.2997E-04	0.00E+00
24	ALL	287376.27	4047009.89	1.66240E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.1678E-04	0.00E+00
25	ALL	287337.98	4047010.67	1.60490E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.0583E-04	0.00E+00
26	ALL	287299.70	4047011.46	1.56670E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.9855E-04	0.00E+00
27	ALL	287261.42	4047012.24	1.51970E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.8959E-04	0.00E+00
28	ALL	287591.21	4046995.45	1.24390E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.3703E-04	0.00E+00
29	ALL	287615.16	4047004.90	1.17780E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.2445E-04	0.00E+00
30	ALL	287649.17	4047038.05	1.05980E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.0195E-04	0.00E+00
31	ALL	287567.27	4046985.99	1.22390E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.3322E-04	0.00E+00
32	ALL	287528.99	4046986.77	1.32230E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.5197E-04	0.00E+00
33	ALL	287490.70	4046987.55	1.34410E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.5613E-04	0.00E+00
34	ALL	287452.42	4046988.33	1.32730E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.5293E-04	0.00E+00
35	ALL	287414.14	4046989.12	1.28440E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.4474E-04	0.00E+00
36	ALL	287375.86	4046989.90	1.22890E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.3417E-04	0.00E+00
37	ALL	287337.57	4046990.68	1.18070E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.2500E-04	0.00E+00
38	ALL	287299.29	4046991.46	1.14190E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.1760E-04	0.00E+00
39	ALL	287261.01	4046992.24	1.10490E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.1055E-04	0.00E+00
40	ALL	287595.59	4046977.34	1.01420E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.9327E-04	0.00E+00
41	ALL	287624.33	4046988.69	9.69750E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.8479E-04	0.00E+00
42	ALL	287665.14	4047028.46	8.88010E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.6922E-04	0.00E+00
43	ALL	287566.86	4046965.99	9.88830E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.8843E-04	0.00E+00
44	ALL	287528.58	4046966.78	1.04740E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.9959E-04	0.00E+00
45	ALL	287490.30	4046967.56	1.05680E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.0137E-04	0.00E+00
46	ALL	287452.01	4046968.34	1.03840E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.9788E-04	0.00E+00
47	ALL	287413.73	4046969.12	1.00230E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.9099E-04	0.00E+00
48	ALL	287375.45	4046969.90	9.58410E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.8263E-04	0.00E+00
49	ALL	287337.17	4046970.68	9.18400E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7501E-04	0.00E+00
50	ALL	287298.88	4046971.46	8.83390E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.6834E-04	0.00E+00
51	ALL	287260.60	4046972.24	8.52610E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.6247E-04	0.00E+00
52	ALL	287596.05	4046929.92	6.77300E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2906E-04	0.00E+00
53	ALL	287626.22	4046941.83	6.80040E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2959E-04	0.00E+00
54	ALL	287656.39	4046953.74	6.51320E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2411E-04	0.00E+00
55	ALL	287699.25	4046995.51	6.24530E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1901E-04	0.00E+00
56	ALL	287711.94	4047025.36	6.21240E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1838E-04	0.00E+00
57	ALL	287724.62	4047055.21	5.93550E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1311E-04	0.00E+00
58	ALL	287565.88	4046918.00	6.48950E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2366E-04	0.00E+00
59	ALL	287527.60	4046918.79	6.67890E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2727E-04	0.00E+00
60	ALL	287491.32	4046902.52	5.81920E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1089E-04	0.00E+00

61	ALL	287453.04	4046903.30	5.69430E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0851E-04	0.00E+00
62	ALL	287414.76	4046904.08	5.48720E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0456E-04	0.00E+00
63	ALL	287376.48	4046904.86	5.25490E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0014E-04	0.00E+00
64	ALL	287336.19	4046922.69	5.74640E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0950E-04	0.00E+00
65	ALL	287297.90	4046923.47	5.51960E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0518E-04	0.00E+00
66	ALL	287259.62	4046924.25	5.29620E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0092E-04	0.00E+00
67	ALL	287595.93	4046882.27	4.86480E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.2701E-05	0.00E+00
68	ALL	287626.97	4046894.52	4.98740E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.5037E-05	0.00E+00
69	ALL	287658.00	4046906.77	4.95910E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.4499E-05	0.00E+00
70	ALL	287689.03	4046919.03	4.76990E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.0894E-05	0.00E+00
71	ALL	287733.11	4046961.98	4.66630E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.8919E-05	0.00E+00
72	ALL	287746.16	4046992.69	4.72690E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.0074E-05	0.00E+00
73	ALL	287759.21	4047023.40	4.63320E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.8288E-05	0.00E+00
74	ALL	287772.26	4047054.10	4.42620E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.4344E-05	0.00E+00
75	ALL	287557.18	4046846.08	3.98900E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.6013E-05	0.00E+00
76	ALL	287538.65	4046845.06	3.97070E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.5665E-05	0.00E+00
77	ALL	287500.37	4046845.84	3.95970E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.5454E-05	0.00E+00
78	ALL	287462.09	4046846.62	3.87750E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.3888E-05	0.00E+00
79	ALL	287406.76	4046847.74	3.68840E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.0284E-05	0.00E+00
80	ALL	287368.48	4046848.52	3.54150E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.7485E-05	0.00E+00
81	ALL	287332.49	4046889.40	4.42820E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.4383E-05	0.00E+00
82	ALL	287296.93	4046875.48	3.85100E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.3383E-05	0.00E+00
83	ALL	287258.64	4046876.26	3.69870E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.0481E-05	0.00E+00
84	ALL	287595.53	4046834.50	3.66110E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.9765E-05	0.00E+00
85	ALL	287627.14	4046846.98	3.79310E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.2280E-05	0.00E+00
86	ALL	287658.74	4046859.46	3.84960E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.3357E-05	0.00E+00
87	ALL	287690.35	4046871.94	3.81120E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.2625E-05	0.00E+00
88	ALL	287721.96	4046884.42	3.67700E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.0068E-05	0.00E+00
89	ALL	287766.85	4046928.18	3.64120E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.9385E-05	0.00E+00
90	ALL	287780.14	4046959.45	3.72410E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.0966E-05	0.00E+00
91	ALL	287793.44	4046990.73	3.70630E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.0627E-05	0.00E+00
92	ALL	287806.73	4047022.00	3.60080E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.8616E-05	0.00E+00
93	ALL	287820.02	4047053.27	3.43190E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.5398E-05	0.00E+00
94	ALL	287574.10	4046846.55	3.97680E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.5780E-05	0.00E+00
95	ALL	287525.64	4046822.81	3.47430E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.6205E-05	0.00E+00
96	ALL	287487.36	4046823.59	3.43940E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.5540E-05	0.00E+00
97	ALL	287421.32	4046847.96	3.75520E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.1558E-05	0.00E+00
98	ALL	287410.79	4046825.15	3.23880E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.1717E-05	0.00E+00
99	ALL	287372.51	4046825.93	3.11540E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.9366E-05	0.00E+00
100	ALL	287348.38	4046845.76	3.40210E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.4828E-05	0.00E+00
101	ALL	287295.95	4046827.49	2.86690E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.4631E-05	0.00E+00
102	ALL	287257.66	4046828.27	2.74640E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.2335E-05	0.00E+00
103	ALL	287594.96	4046786.68	2.84800E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.4271E-05	0.00E+00
104	ALL	287626.98	4046799.32	2.96870E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.6570E-05	0.00E+00
105	ALL	287659.00	4046811.96	3.04900E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.8101E-05	0.00E+00
106	ALL	287691.01	4046824.60	3.07330E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.8564E-05	0.00E+00
107	ALL	287723.03	4046837.24	3.03390E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.7812E-05	0.00E+00
108	ALL	287755.05	4046849.88	2.93620E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.5951E-05	0.00E+00
109	ALL	287800.53	4046894.21	2.93060E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.5845E-05	0.00E+00
110	ALL	287813.99	4046925.89	3.01130E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.7383E-05	0.00E+00
111	ALL	287827.45	4046957.57	3.02670E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.7676E-05	0.00E+00
112	ALL	287840.92	4046989.25	2.97720E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.6732E-05	0.00E+00
113	ALL	287854.38	4047020.93	2.87500E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.4785E-05	0.00E+00
114	ALL	287867.84	4047052.61	2.73370E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.2092E-05	0.00E+00
115	ALL	287573.12	4046798.09	3.03800E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.7892E-05	0.00E+00
116	ALL	287534.84	4046798.88	3.05020E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.8124E-05	0.00E+00
117	ALL	287496.56	4046799.66	3.02380E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.7620E-05	0.00E+00
118	ALL	287458.28	4046800.44	2.95650E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.6338E-05	0.00E+00
119	ALL	287419.07	4046797.98	2.81120E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.3569E-05	0.00E+00
120	ALL	287358.47	4046799.17	2.64710E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.0442E-05	0.00E+00
121	ALL	287322.36	4046800.49	2.54970E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.8586E-05	0.00E+00
122	ALL	287294.97	4046779.50	2.21780E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.2261E-05	0.00E+00
123	ALL	287256.68	4046780.28	2.12490E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.0491E-05	0.00E+00
124	ALL	287594.29	4046738.81	2.27420E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.3336E-05	0.00E+00
125	ALL	287626.61	4046751.57	2.38090E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.5369E-05	0.00E+00
126	ALL	287658.94	4046764.33	2.45930E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.6864E-05	0.00E+00
127	ALL	287691.27	4046777.10	2.50760E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.7784E-05	0.00E+00
128	ALL	287723.59	4046789.86	2.51440E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.7914E-05	0.00E+00
129	ALL	287755.92	4046802.62	2.47970E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.7251E-05	0.00E+00
130	ALL	287788.24	4046815.39	2.40920E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.5908E-05	0.00E+00
131	ALL	287834.16	4046860.14	2.41400E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.6000E-05	0.00E+00
132	ALL	287847.75	4046892.12	2.48390E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.7333E-05	0.00E+00
133	ALL	287861.34	4046924.11	2.51420E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.7910E-05	0.00E+00
134	ALL	287874.94	4046956.09	2.49440E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.7532E-05	0.00E+00
135	ALL	287888.53	4046988.08	2.43630E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.6425E-05	0.00E+00
136	ALL	287902.12	4047020.06	2.34220E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.4632E-05	0.00E+00
137	ALL	287915.71	4047052.05	2.22240E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.2349E-05	0.00E+00
138	ALL	287561.96	4046726.04	2.14770E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.0926E-05	0.00E+00
139	ALL	287523.68	4046726.83	2.13680E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.0718E-05	0.00E+00
140	ALL	287485.40	4046727.61	2.10080E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.0031E-05	0.00E+00

141	ALL	287447.12	4046728.39	2.04860E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.9038E-05	0.00E+00
142	ALL	287408.83	4046729.17	1.98410E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.7808E-05	0.00E+00
143	ALL	287370.55	4046729.95	1.91600E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.6510E-05	0.00E+00
144	ALL	287332.27	4046730.73	1.84120E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.5085E-05	0.00E+00
145	ALL	287293.99	4046731.51	1.76630E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.3658E-05	0.00E+00
146	ALL	287255.70	4046732.29	1.68990E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.2201E-05	0.00E+00
147	ALL	287595.45	4046659.93	1.63810E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.1215E-05	0.00E+00
148	ALL	287630.57	4046673.79	1.72320E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.2836E-05	0.00E+00
149	ALL	287665.69	4046687.66	1.79350E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.4176E-05	0.00E+00
150	ALL	287700.81	4046701.53	1.84750E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.5206E-05	0.00E+00
151	ALL	287735.93	4046715.39	1.87870E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.5800E-05	0.00E+00
152	ALL	287771.04	4046729.26	1.88070E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.5838E-05	0.00E+00
153	ALL	287806.16	4046743.13	1.85890E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.5422E-05	0.00E+00
154	ALL	287841.28	4046756.99	1.81070E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.4504E-05	0.00E+00
155	ALL	287891.17	4046805.61	1.82090E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.4698E-05	0.00E+00
156	ALL	287905.93	4046840.36	1.87870E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.5799E-05	0.00E+00
157	ALL	287920.70	4046875.11	1.90850E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.6368E-05	0.00E+00
158	ALL	287935.47	4046909.86	1.90660E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.6332E-05	0.00E+00
159	ALL	287950.24	4046944.60	1.87340E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.5698E-05	0.00E+00
160	ALL	287965.00	4046979.35	1.81340E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.4556E-05	0.00E+00
161	ALL	287979.77	4047014.10	1.73230E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.3011E-05	0.00E+00
162	ALL	287994.54	4047048.85	1.63490E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.1155E-05	0.00E+00
163	ALL	287560.33	4046646.06	1.54250E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.9392E-05	0.00E+00
164	ALL	287522.05	4046646.84	1.52660E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.9091E-05	0.00E+00
165	ALL	287483.77	4046647.62	1.49710E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.8529E-05	0.00E+00
166	ALL	287445.49	4046648.41	1.45940E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.7810E-05	0.00E+00
167	ALL	287407.20	4046649.19	1.41510E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.6966E-05	0.00E+00
168	ALL	287368.92	4046649.97	1.36850E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.6077E-05	0.00E+00
169	ALL	287330.64	4046650.75	1.31680E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.5093E-05	0.00E+00
170	ALL	287292.36	4046651.53	1.26360E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.4079E-05	0.00E+00
171	ALL	287254.07	4046652.31	1.20790E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.3017E-05	0.00E+00
172	ALL	287592.66	4046579.49	1.22220E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.3290E-05	0.00E+00
173	ALL	287626.62	4046592.89	1.28540E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.4494E-05	0.00E+00
174	ALL	287660.57	4046606.30	1.34170E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.5567E-05	0.00E+00
175	ALL	287694.53	4046619.71	1.38940E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.6476E-05	0.00E+00
176	ALL	287728.49	4046633.12	1.42840E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.7220E-05	0.00E+00
177	ALL	287762.45	4046646.53	1.45330E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.7694E-05	0.00E+00
178	ALL	287796.40	4046659.93	1.46520E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.7921E-05	0.00E+00
179	ALL	287830.36	4046673.34	1.46250E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.7868E-05	0.00E+00
180	ALL	287864.32	4046686.75	1.44410E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.7518E-05	0.00E+00
181	ALL	287898.28	4046700.16	1.41020E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.6872E-05	0.00E+00
182	ALL	287946.51	4046747.16	1.42230E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.7102E-05	0.00E+00
183	ALL	287960.79	4046780.77	1.46560E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.7929E-05	0.00E+00
184	ALL	287975.07	4046814.37	1.49390E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.8466E-05	0.00E+00
185	ALL	287989.35	4046847.97	1.50540E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.8685E-05	0.00E+00
186	ALL	288003.63	4046881.57	1.49840E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.8552E-05	0.00E+00
187	ALL	288017.91	4046915.17	1.47300E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.8069E-05	0.00E+00
188	ALL	288032.19	4046948.77	1.43320E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.7311E-05	0.00E+00
189	ALL	288046.47	4046982.37	1.37920E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.6281E-05	0.00E+00
190	ALL	288060.74	4047015.97	1.31420E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.5043E-05	0.00E+00
191	ALL	287558.70	4046566.08	1.15510E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.2011E-05	0.00E+00
192	ALL	287520.42	4046566.86	1.13910E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.1706E-05	0.00E+00
193	ALL	287482.14	4046567.64	1.11490E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.1245E-05	0.00E+00
194	ALL	287443.85	4046568.42	1.08590E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.0693E-05	0.00E+00
195	ALL	287405.57	4046569.20	1.05340E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.0073E-05	0.00E+00
196	ALL	287367.29	4046569.98	1.01930E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.9423E-05	0.00E+00
197	ALL	287329.01	4046570.77	9.81760E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.8708E-05	0.00E+00
198	ALL	287290.72	4046571.55	9.42500E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7960E-05	0.00E+00
199	ALL	287252.44	4046572.33	9.00660E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7163E-05	0.00E+00
200	ALL	287590.22	4046499.19	9.41880E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7948E-05	0.00E+00
201	ALL	287623.38	4046512.28	9.89140E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.8849E-05	0.00E+00
202	ALL	287656.53	4046525.37	1.03330E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.9690E-05	0.00E+00
203	ALL	287689.68	4046538.46	1.07230E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.0432E-05	0.00E+00
204	ALL	287722.84	4046551.55	1.10780E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.1111E-05	0.00E+00
205	ALL	287755.99	4046564.64	1.13740E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.1673E-05	0.00E+00
206	ALL	287789.15	4046577.73	1.15840E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.2074E-05	0.00E+00
207	ALL	287822.30	4046590.82	1.17170E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.2328E-05	0.00E+00
208	ALL	287855.45	4046603.91	1.17650E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.2419E-05	0.00E+00
209	ALL	287888.61	4046617.00	1.17010E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.2297E-05	0.00E+00
210	ALL	287921.76	4046630.09	1.15590E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.2026E-05	0.00E+00
211	ALL	287954.91	4046643.18	1.13300E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.1590E-05	0.00E+00
212	ALL	288002.01	4046689.08	1.14240E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.1769E-05	0.00E+00
213	ALL	288015.95	4046721.88	1.17620E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.2413E-05	0.00E+00
214	ALL	288029.89	4046754.69	1.20150E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.2895E-05	0.00E+00
215	ALL	288043.83	4046787.49	1.21660E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.3183E-05	0.00E+00
216	ALL	288057.77	4046820.30	1.22030E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.3254E-05	0.00E+00
217	ALL	288071.71	4046853.10	1.21210E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.3097E-05	0.00E+00
218	ALL	288085.66	4046885.91	1.19210E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.2717E-05	0.00E+00
219	ALL	288099.60	4046918.71	1.16180E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.2139E-05	0.00E+00
220	ALL	288113.54	4046951.52	1.12270E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.1395E-05	0.00E+00

221	ALL	288127.48	4046984.32	1.07820E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.0546E-05	0.00E+00
222	ALL	288141.42	4047017.13	1.02640E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.9559E-05	0.00E+00
223	ALL	288155.36	4047049.94	9.69970E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.8483E-05	0.00E+00
224	ALL	287557.07	4046486.09	8.94060E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7037E-05	0.00E+00
225	ALL	287518.79	4046486.88	8.78160E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.6734E-05	0.00E+00
226	ALL	287480.50	4046487.66	8.58070E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.6351E-05	0.00E+00
227	ALL	287442.22	4046488.44	8.35020E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.5912E-05	0.00E+00
228	ALL	287403.94	4046489.22	8.09890E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.5433E-05	0.00E+00
229	ALL	287365.66	4046490.00	7.83670E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.4933E-05	0.00E+00
230	ALL	287327.37	4046490.78	7.55240E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.4392E-05	0.00E+00
231	ALL	287289.09	4046491.56	7.25290E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.3821E-05	0.00E+00
232	ALL	287250.81	4046492.34	6.93350E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.3212E-05	0.00E+00
233	ALL	287590.33	4046419.89	7.47490E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.4244E-05	0.00E+00
234	ALL	287625.22	4046433.66	7.86030E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.4978E-05	0.00E+00
235	ALL	287660.11	4046447.44	8.22800E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.5679E-05	0.00E+00
236	ALL	287695.00	4046461.22	8.56460E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.6320E-05	0.00E+00
237	ALL	287729.89	4046474.99	8.86970E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.6902E-05	0.00E+00
238	ALL	287764.78	4046488.77	9.14260E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7422E-05	0.00E+00
239	ALL	287799.67	4046502.54	9.36750E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7850E-05	0.00E+00
240	ALL	287834.56	4046516.32	9.52250E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.8146E-05	0.00E+00
241	ALL	287869.45	4046530.10	9.62800E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.8347E-05	0.00E+00
242	ALL	287904.34	4046543.87	9.65680E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.8402E-05	0.00E+00
243	ALL	287939.23	4046557.65	9.61540E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.8323E-05	0.00E+00
244	ALL	287974.12	4046571.43	9.50870E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.8119E-05	0.00E+00
245	ALL	288009.01	4046585.20	9.33040E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7780E-05	0.00E+00
246	ALL	288058.57	4046633.50	9.42580E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7962E-05	0.00E+00
247	ALL	288073.25	4046668.03	9.70250E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.8489E-05	0.00E+00
248	ALL	288087.92	4046702.55	9.91680E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.8897E-05	0.00E+00
249	ALL	288102.59	4046737.07	1.00570E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.9164E-05	0.00E+00
250	ALL	288117.26	4046771.60	1.01130E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.9271E-05	0.00E+00
251	ALL	288131.93	4046806.12	1.00780E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.9205E-05	0.00E+00
252	ALL	288146.60	4046840.64	9.95160E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.8963E-05	0.00E+00
253	ALL	288161.27	4046875.17	9.73930E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.8559E-05	0.00E+00
254	ALL	288175.94	4046909.69	9.45200E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.8011E-05	0.00E+00
255	ALL	288190.62	4046944.22	9.10250E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7345E-05	0.00E+00
256	ALL	288205.29	4046978.74	8.70320E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.6585E-05	0.00E+00
257	ALL	288219.96	4047013.26	8.26420E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.5748E-05	0.00E+00
258	ALL	288234.63	4047047.79	7.80120E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.4866E-05	0.00E+00
259	ALL	287555.44	4046406.11	7.09060E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.3512E-05	0.00E+00
260	ALL	287517.15	4046406.89	6.94740E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.3239E-05	0.00E+00
261	ALL	287478.87	4046407.67	6.77880E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2917E-05	0.00E+00
262	ALL	287440.59	4046408.46	6.59030E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2558E-05	0.00E+00
263	ALL	287402.31	4046409.24	6.38860E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2174E-05	0.00E+00
264	ALL	287364.02	4046410.02	6.17980E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1776E-05	0.00E+00
265	ALL	287325.74	4046410.80	5.95670E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1351E-05	0.00E+00
266	ALL	287287.46	4046411.58	5.72240E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0904E-05	0.00E+00
267	ALL	287249.18	4046412.36	5.47550E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0434E-05	0.00E+00
268	ALL	287220.29	4047230.78	7.01240E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.3363E-04	0.00E+00
269	ALL	287212.59	4047261.16	6.58230E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2543E-04	0.00E+00
270	ALL	287224.93	4047316.94	7.56870E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.4423E-04	0.00E+00
271	ALL	287225.24	4047354.33	7.62270E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.4526E-04	0.00E+00
272	ALL	287223.12	4047412.22	7.24390E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.3804E-04	0.00E+00
273	ALL	287223.82	4047454.73	6.92040E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.3187E-04	0.00E+00
274	ALL	287204.30	4047233.62	6.44770E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2287E-04	0.00E+00
275	ALL	287180.23	4047263.00	5.47790E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0438E-04	0.00E+00
276	ALL	287196.24	4047308.42	5.79710E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1047E-04	0.00E+00
277	ALL	287205.24	4047354.50	6.20750E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1829E-04	0.00E+00
278	ALL	287203.12	4047412.39	5.92460E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1290E-04	0.00E+00
279	ALL	287203.82	4047454.90	5.68450E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0832E-04	0.00E+00
280	ALL	287184.30	4047242.48	5.84000E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1128E-04	0.00E+00
281	ALL	287160.23	4047263.17	5.10110E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.7204E-05	0.00E+00
282	ALL	287176.24	4047308.58	5.08660E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.6928E-05	0.00E+00
283	ALL	287178.56	4047358.34	5.03100E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.5869E-05	0.00E+00
284	ALL	287183.12	4047412.56	5.04370E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.6111E-05	0.00E+00
285	ALL	287183.82	4047455.07	4.83880E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.2206E-05	0.00E+00
286	ALL	287181.90	4047046.04	2.71020E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.1644E-04	0.00E+00
287	ALL	287215.12	4046997.95	1.11760E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.1296E-04	0.00E+00
288	ALL	287149.29	4047219.28	6.06120E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1550E-04	0.00E+00
289	ALL	287164.31	4047242.64	5.51930E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0517E-04	0.00E+00
290	ALL	287038.65	4047221.23	5.70600E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0873E-04	0.00E+00
291	ALL	287156.24	4047308.75	4.60360E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.7725E-05	0.00E+00
292	ALL	287158.56	4047358.51	4.45270E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.4849E-05	0.00E+00
293	ALL	287163.12	4047412.73	4.41040E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.4043E-05	0.00E+00
294	ALL	287163.82	4047455.23	4.22720E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.0551E-05	0.00E+00
295	ALL	287154.36	4047065.02	4.54620E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.6631E-04	0.00E+00
296	ALL	287165.67	4047036.81	2.07650E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.9570E-04	0.00E+00
297	ALL	287195.77	4046997.05	1.06930E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.0377E-04	0.00E+00
298	ALL	287143.99	4047205.42	6.64050E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2654E-04	0.00E+00
299	ALL	287120.25	4047195.37	7.16490E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.3653E-04	0.00E+00
300	ALL	287121.23	4047263.17	4.67730E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.9129E-05	0.00E+00

301	ALL	287136.24	4047308.92	4.26090E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.1193E-05	0.00E+00
302	ALL	287138.56	4047358.68	4.02820E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.6760E-05	0.00E+00
303	ALL	287135.10	4047410.89	3.78310E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.2089E-05	0.00E+00
304	ALL	287143.83	4047455.40	3.76730E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.1788E-05	0.00E+00
305	ALL	287106.93	4047064.01	3.88310E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.3994E-04	0.00E+00
306	ALL	287118.81	4047034.39	1.80790E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.4452E-04	0.00E+00
307	ALL	287130.68	4047004.77	1.09180E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.0805E-04	0.00E+00
308	ALL	287168.70	4046952.48	6.14960E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1718E-04	0.00E+00
309	ALL	287201.09	4046949.70	6.19620E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1807E-04	0.00E+00
310	ALL	287208.48	4046930.44	5.24210E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.9892E-05	0.00E+00
311	ALL	287086.99	4047175.44	8.88140E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.6924E-04	0.00E+00
312	ALL	287105.68	4047186.10	7.84290E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.4945E-04	0.00E+00
313	ALL	287083.94	4047225.17	5.58290E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0639E-04	0.00E+00
314	ALL	287094.28	4047265.58	4.45630E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.4917E-05	0.00E+00
315	ALL	287085.57	4047313.33	3.69720E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.0453E-05	0.00E+00
316	ALL	287089.90	4047360.42	3.36320E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.4088E-05	0.00E+00
317	ALL	287097.20	4047418.50	3.18470E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.0686E-05	0.00E+00
318	ALL	287094.25	4047460.52	2.98410E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.6864E-05	0.00E+00
319	ALL	287059.27	4047063.56	3.39700E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.4731E-04	0.00E+00
320	ALL	287071.49	4047033.10	1.62300E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.0928E-04	0.00E+00
321	ALL	287083.70	4047002.63	9.94970E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.8960E-04	0.00E+00
322	ALL	287095.92	4046972.16	6.92360E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.3193E-04	0.00E+00
323	ALL	287167.50	4046928.90	4.95120E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.4348E-05	0.00E+00
324	ALL	287168.34	4046915.52	4.43830E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.4574E-05	0.00E+00
325	ALL	287198.44	4046902.44	4.14970E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.9075E-05	0.00E+00
326	ALL	287228.54	4046889.35	3.90790E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.4468E-05	0.00E+00
327	ALL	287047.68	4047168.82	9.90930E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.8883E-04	0.00E+00
328	ALL	287059.69	4047222.93	5.64000E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0747E-04	0.00E+00
329	ALL	287067.69	4047266.67	4.30760E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.2084E-05	0.00E+00
330	ALL	287036.59	4047262.64	4.30220E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.1981E-05	0.00E+00
331	ALL	287067.65	4047321.42	3.49050E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.6514E-05	0.00E+00
332	ALL	287067.96	4047358.81	3.18480E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.0688E-05	0.00E+00
333	ALL	287070.26	4047416.23	2.91050E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.5462E-05	0.00E+00
334	ALL	287074.17	4047462.89	2.76130E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.2618E-05	0.00E+00
335	ALL	287011.50	4047063.40	3.03100E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.7758E-04	0.00E+00
336	ALL	287023.94	4047032.37	1.49030E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.8399E-04	0.00E+00
337	ALL	287036.38	4047001.34	9.23630E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7600E-04	0.00E+00
338	ALL	287048.82	4046970.31	6.45690E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2304E-04	0.00E+00
339	ALL	287061.27	4046939.28	4.82940E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.2027E-05	0.00E+00
340	ALL	287104.37	4046894.92	3.53500E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.7362E-05	0.00E+00
341	ALL	287135.03	4046881.59	3.32590E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.3377E-05	0.00E+00
342	ALL	287165.69	4046868.26	3.14710E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.9970E-05	0.00E+00
343	ALL	287196.34	4046854.93	2.99320E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.7038E-05	0.00E+00
344	ALL	287227.00	4046841.60	2.86060E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.4511E-05	0.00E+00
345	ALL	286999.37	4047131.83	2.03180E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.8718E-04	0.00E+00
346	ALL	286999.69	4047169.22	1.01400E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.9322E-04	0.00E+00
347	ALL	287000.00	4047206.62	6.51650E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2418E-04	0.00E+00
348	ALL	287000.31	4047244.02	4.77460E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.0983E-05	0.00E+00
349	ALL	286988.60	4047263.04	4.19360E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.9912E-05	0.00E+00
350	ALL	287000.94	4047318.81	3.21110E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.1190E-05	0.00E+00
351	ALL	287001.25	4047356.21	2.82890E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.3907E-05	0.00E+00
352	ALL	286980.18	4047419.00	2.33590E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.4513E-05	0.00E+00
353	ALL	287001.21	4047419.31	2.43240E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.6351E-05	0.00E+00
354	ALL	287002.19	4047468.40	2.22600E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.2417E-05	0.00E+00
355	ALL	286963.66	4047063.40	2.76410E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.2671E-04	0.00E+00
356	ALL	286976.27	4047031.97	1.38710E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.6433E-04	0.00E+00
357	ALL	286988.87	4047000.53	8.64560E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.6475E-04	0.00E+00
358	ALL	287001.47	4046969.10	6.04490E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1519E-04	0.00E+00
359	ALL	287014.08	4046937.67	4.51930E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.6118E-05	0.00E+00
360	ALL	287026.68	4046906.23	3.52800E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.7229E-05	0.00E+00
361	ALL	287070.34	4046861.30	2.69910E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.1432E-05	0.00E+00
362	ALL	287101.40	4046847.80	2.56980E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.8970E-05	0.00E+00
363	ALL	287132.45	4046834.29	2.45570E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.6796E-05	0.00E+00
364	ALL	287163.51	4046820.79	2.35440E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.4865E-05	0.00E+00
365	ALL	287194.57	4046807.29	2.26530E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.3167E-05	0.00E+00
366	ALL	287225.63	4046793.79	2.19040E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.1740E-05	0.00E+00
367	ALL	286951.37	4047132.23	2.14450E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.0864E-04	0.00E+00
368	ALL	286951.69	4047169.63	1.03700E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.9760E-04	0.00E+00
369	ALL	286952.00	4047207.02	6.52180E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2428E-04	0.00E+00
370	ALL	286952.31	4047244.42	4.70370E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.9633E-05	0.00E+00
371	ALL	286952.63	4047281.82	3.68790E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.0275E-05	0.00E+00
372	ALL	286952.94	4047319.21	3.06570E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.8419E-05	0.00E+00
373	ALL	286953.25	4047356.61	2.65890E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.0667E-05	0.00E+00
374	ALL	286983.64	4047369.28	2.65630E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.0618E-05	0.00E+00
375	ALL	286953.21	4047419.71	2.22490E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.2396E-05	0.00E+00
376	ALL	286954.19	4047468.80	2.00700E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.8245E-05	0.00E+00
377	ALL	286915.79	4047063.50	2.61260E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.9785E-04	0.00E+00
378	ALL	286928.51	4047031.76	1.31340E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.5027E-04	0.00E+00
379	ALL	286941.24	4047000.03	8.19170E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.5610E-04	0.00E+00
380	ALL	286953.96	4046968.29	5.70330E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0868E-04	0.00E+00

381	ALL	286966.68	4046936.56	4.24070E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.0808E-05	0.00E+00
382	ALL	286979.41	4046904.82	3.29860E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.2856E-05	0.00E+00
383	ALL	286992.13	4046873.09	2.65040E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.0505E-05	0.00E+00
384	ALL	287036.21	4046827.72	2.09500E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.9922E-05	0.00E+00
385	ALL	287067.57	4046814.09	2.01450E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.8388E-05	0.00E+00
386	ALL	287098.92	4046800.45	1.94360E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.7037E-05	0.00E+00
387	ALL	287130.28	4046786.82	1.88000E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.5824E-05	0.00E+00
388	ALL	287161.64	4046773.19	1.82320E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.4743E-05	0.00E+00
389	ALL	287192.99	4046759.56	1.77310E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.3788E-05	0.00E+00
390	ALL	287224.35	4046745.93	1.72900E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.2948E-05	0.00E+00
391	ALL	286903.06	4047095.23	4.21910E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.0397E-04	0.00E+00
392	ALL	286903.38	4047132.63	2.20440E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.2007E-04	0.00E+00
393	ALL	286903.69	4047170.03	1.04340E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.9883E-04	0.00E+00
394	ALL	286904.00	4047207.42	6.50410E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2394E-04	0.00E+00
395	ALL	286904.31	4047244.82	4.63820E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.8385E-05	0.00E+00
396	ALL	286904.63	4047282.22	3.59360E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.8478E-05	0.00E+00
397	ALL	286904.94	4047319.61	2.94400E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.6101E-05	0.00E+00
398	ALL	286905.25	4047357.01	2.52030E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.8025E-05	0.00E+00
399	ALL	286905.57	4047394.41	2.22500E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.2398E-05	0.00E+00
400	ALL	286905.88	4047431.81	2.00800E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.8264E-05	0.00E+00
401	ALL	286906.19	4047469.20	1.84110E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.5084E-05	0.00E+00
402	ALL	286836.89	4047061.42	2.25720E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.3012E-04	0.00E+00
403	ALL	286850.71	4047026.95	1.10560E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.1067E-04	0.00E+00
404	ALL	286864.54	4046992.47	6.74820E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2859E-04	0.00E+00
405	ALL	286878.36	4046957.99	4.60650E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.7779E-05	0.00E+00
406	ALL	286892.18	4046923.51	3.38140E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.4435E-05	0.00E+00
407	ALL	286906.01	4046889.04	2.60120E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.9567E-05	0.00E+00
408	ALL	286919.83	4046854.56	2.07250E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.9494E-05	0.00E+00
409	ALL	286933.66	4046820.08	1.70020E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.2399E-05	0.00E+00
410	ALL	286981.55	4046770.79	1.39560E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.6594E-05	0.00E+00
411	ALL	287015.61	4046755.98	1.36720E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.6053E-05	0.00E+00
412	ALL	287049.68	4046741.17	1.33900E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.5515E-05	0.00E+00
413	ALL	287083.74	4046726.36	1.31190E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.4999E-05	0.00E+00
414	ALL	287117.81	4046711.55	1.28660E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.4516E-05	0.00E+00
415	ALL	287151.87	4046696.74	1.26340E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.4075E-05	0.00E+00
416	ALL	287185.94	4046681.93	1.24270E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.3680E-05	0.00E+00
417	ALL	287220.01	4046667.12	1.22460E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.3336E-05	0.00E+00
418	ALL	286823.07	4047095.90	4.08690E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.7878E-04	0.00E+00
419	ALL	286823.38	4047133.30	2.27060E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.3267E-04	0.00E+00
420	ALL	286823.69	4047170.70	1.04190E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.9854E-04	0.00E+00
421	ALL	286824.00	4047208.09	6.36810E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2135E-04	0.00E+00
422	ALL	286824.32	4047245.49	4.46960E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.5171E-05	0.00E+00
423	ALL	286824.63	4047282.89	3.41090E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.4997E-05	0.00E+00
424	ALL	286824.94	4047320.28	2.75270E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.2455E-05	0.00E+00
425	ALL	286825.26	4047357.68	2.31790E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.4168E-05	0.00E+00
426	ALL	286825.57	4047395.08	2.01270E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.8353E-05	0.00E+00
427	ALL	286825.88	4047432.48	1.79030E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.4116E-05	0.00E+00
428	ALL	286826.20	4047469.87	1.62120E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.0893E-05	0.00E+00
429	ALL	286756.43	4047063.23	2.04910E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.9048E-04	0.00E+00
430	ALL	286769.80	4047029.90	9.90050E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.8866E-04	0.00E+00
431	ALL	286783.17	4046996.56	5.94460E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1328E-04	0.00E+00
432	ALL	286796.54	4046963.22	4.03820E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.6950E-05	0.00E+00
433	ALL	286809.90	4046929.88	2.94710E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.6159E-05	0.00E+00
434	ALL	286823.27	4046896.54	2.27020E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.3260E-05	0.00E+00
435	ALL	286836.64	4046863.21	1.81670E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.4618E-05	0.00E+00
436	ALL	286850.00	4046829.87	1.49510E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.8490E-05	0.00E+00
437	ALL	286863.37	4046796.53	1.25900E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.3990E-05	0.00E+00
438	ALL	286876.74	4046763.19	1.07850E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.0551E-05	0.00E+00
439	ALL	286923.04	4046715.53	9.41720E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7945E-05	0.00E+00
440	ALL	286955.98	4046701.21	9.40650E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7925E-05	0.00E+00
441	ALL	286988.92	4046686.89	9.38420E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7882E-05	0.00E+00
442	ALL	287021.86	4046672.57	9.34700E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7811E-05	0.00E+00
443	ALL	287054.80	4046658.25	9.30110E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7724E-05	0.00E+00
444	ALL	287087.74	4046643.93	9.25250E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7631E-05	0.00E+00
445	ALL	287120.68	4046629.61	9.20470E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7540E-05	0.00E+00
446	ALL	287153.62	4046615.29	9.15910E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7453E-05	0.00E+00
447	ALL	287186.56	4046600.97	9.10900E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7358E-05	0.00E+00
448	ALL	287219.50	4046586.65	9.06010E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7265E-05	0.00E+00
449	ALL	286743.07	4047096.57	3.83120E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.3007E-04	0.00E+00
450	ALL	286743.38	4047133.97	2.33650E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.4524E-04	0.00E+00
451	ALL	286743.69	4047171.37	1.01750E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.9390E-04	0.00E+00
452	ALL	286744.01	4047208.76	6.03420E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1499E-04	0.00E+00
453	ALL	286744.32	4047246.16	4.15350E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.9147E-05	0.00E+00
454	ALL	286744.63	4047283.56	3.12810E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.9609E-05	0.00E+00
455	ALL	286744.95	4047320.95	2.50000E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.7640E-05	0.00E+00
456	ALL	286745.26	4047358.35	2.08620E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.9753E-05	0.00E+00
457	ALL	286745.57	4047395.75	1.79740E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.4250E-05	0.00E+00
458	ALL	286745.89	4047433.15	1.58830E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.0267E-05	0.00E+00
459	ALL	286746.20	4047470.54	1.43190E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.7287E-05	0.00E+00
460	ALL	286676.12	4047064.69	1.41180E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.6902E-04	0.00E+00

461	ALL	286689.17	4047032.14	6.83530E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.3025E-04	0.00E+00
462	ALL	286702.22	4046999.59	4.20540E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.0136E-05	0.00E+00
463	ALL	286715.27	4046967.05	2.93520E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.5933E-05	0.00E+00
464	ALL	286728.32	4046934.50	2.20790E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.2073E-05	0.00E+00
465	ALL	286741.37	4046901.95	1.74490E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.3249E-05	0.00E+00
466	ALL	286754.42	4046869.40	1.42790E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.7210E-05	0.00E+00
467	ALL	286767.47	4046836.85	1.19920E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.2852E-05	0.00E+00
468	ALL	286780.52	4046804.30	1.02730E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.9576E-05	0.00E+00
469	ALL	286793.57	4046771.75	8.93890E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7034E-05	0.00E+00
470	ALL	286806.63	4046739.20	7.87610E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.5008E-05	0.00E+00
471	ALL	286819.68	4046706.65	7.01100E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.3360E-05	0.00E+00
472	ALL	286864.89	4046660.12	6.42360E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2241E-05	0.00E+00
473	ALL	286897.05	4046646.14	6.53260E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2448E-05	0.00E+00
474	ALL	286929.21	4046632.16	6.61970E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2614E-05	0.00E+00
475	ALL	286961.37	4046618.18	6.68790E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2744E-05	0.00E+00
476	ALL	286993.53	4046604.20	6.73400E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2832E-05	0.00E+00
477	ALL	287025.69	4046590.21	6.78060E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2921E-05	0.00E+00
478	ALL	287057.85	4046576.23	6.82110E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2998E-05	0.00E+00
479	ALL	287090.01	4046562.25	6.85670E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.3066E-05	0.00E+00
480	ALL	287122.17	4046548.27	6.88800E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.3126E-05	0.00E+00
481	ALL	287154.33	4046534.29	6.91390E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.3175E-05	0.00E+00
482	ALL	287186.49	4046520.31	6.93250E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.3210E-05	0.00E+00
483	ALL	287218.65	4046506.33	6.94130E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.3227E-05	0.00E+00
484	ALL	286663.07	4047097.24	4.56680E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.7023E-04	0.00E+00
485	ALL	286663.38	4047134.64	2.19760E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.1876E-04	0.00E+00
486	ALL	286663.70	4047172.04	8.67940E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.6539E-04	0.00E+00
487	ALL	286664.01	4047209.43	5.02400E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.5735E-05	0.00E+00
488	ALL	286664.32	4047246.83	3.46640E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.6055E-05	0.00E+00
489	ALL	286664.64	4047284.23	2.63390E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.0191E-05	0.00E+00
490	ALL	286664.95	4047321.62	2.12580E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.0509E-05	0.00E+00
491	ALL	286665.26	4047359.02	1.78900E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.4091E-05	0.00E+00
492	ALL	286665.58	4047396.42	1.55240E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.9582E-05	0.00E+00
493	ALL	286665.89	4047433.81	1.38000E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.6297E-05	0.00E+00
494	ALL	286666.20	4047471.21	1.24850E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.3791E-05	0.00E+00
495	ALL	286596.81	4047063.66	2.85070E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.4321E-05	0.00E+00
496	ALL	286610.54	4047029.40	2.29650E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.3762E-05	0.00E+00
497	ALL	286624.28	4046995.15	1.84850E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.5224E-05	0.00E+00
498	ALL	286638.01	4046960.90	1.51130E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.8800E-05	0.00E+00
499	ALL	286651.74	4046926.64	1.26000E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.4010E-05	0.00E+00
500	ALL	286665.48	4046892.39	1.07010E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.0392E-05	0.00E+00
501	ALL	286679.21	4046858.13	9.23850E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7604E-05	0.00E+00
502	ALL	286692.95	4046823.88	8.07870E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.5395E-05	0.00E+00
503	ALL	286706.68	4046789.62	7.15450E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.3633E-05	0.00E+00
504	ALL	286720.41	4046755.37	6.38540E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2168E-05	0.00E+00
505	ALL	286734.15	4046721.12	5.74990E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0957E-05	0.00E+00
506	ALL	286747.88	4046686.86	5.21190E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.9316E-06	0.00E+00
507	ALL	286761.62	4046652.61	4.75160E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.0544E-06	0.00E+00
508	ALL	286809.19	4046603.64	4.50710E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.5886E-06	0.00E+00
509	ALL	286843.04	4046588.93	4.64150E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.8446E-06	0.00E+00
510	ALL	286876.88	4046574.21	4.75340E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.0578E-06	0.00E+00
511	ALL	286910.73	4046559.50	4.85890E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.2589E-06	0.00E+00
512	ALL	286944.57	4046544.79	4.95330E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.4389E-06	0.00E+00
513	ALL	286978.42	4046530.07	5.03950E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.6031E-06	0.00E+00
514	ALL	287012.26	4046515.36	5.11960E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.7557E-06	0.00E+00
515	ALL	287046.11	4046500.64	5.19450E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.8984E-06	0.00E+00
516	ALL	287079.95	4046485.93	5.26300E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0029E-05	0.00E+00
517	ALL	287113.80	4046471.22	5.32290E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0143E-05	0.00E+00
518	ALL	287147.64	4046456.50	5.37860E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0249E-05	0.00E+00
519	ALL	287181.49	4046441.79	5.42400E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0336E-05	0.00E+00
520	ALL	287215.33	4046427.08	5.45680E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0398E-05	0.00E+00
521	ALL	286583.07	4047097.91	3.36530E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.4128E-05	0.00E+00
522	ALL	286583.39	4047135.31	4.47620E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.5297E-05	0.00E+00
523	ALL	286583.70	4047172.71	3.85310E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.3424E-05	0.00E+00
524	ALL	286584.01	4047210.10	2.98870E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.6952E-05	0.00E+00
525	ALL	286584.33	4047247.50	2.37740E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.5303E-05	0.00E+00
526	ALL	286584.64	4047284.90	1.95830E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.7317E-05	0.00E+00
527	ALL	286584.95	4047322.29	1.66370E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.1704E-05	0.00E+00
528	ALL	286585.26	4047359.69	1.45080E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.7646E-05	0.00E+00
529	ALL	286585.58	4047397.09	1.29080E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.4597E-05	0.00E+00
530	ALL	286585.89	4047434.48	1.16670E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.2233E-05	0.00E+00
531	ALL	286586.20	4047471.88	1.06870E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.0365E-05	0.00E+00
532	ALL	287283.86	4047485.01	1.13250E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.1580E-04	0.00E+00
533	ALL	287303.92	4047486.97	1.21640E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.3180E-04	0.00E+00
534	ALL	287342.07	4047487.75	1.32050E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.5163E-04	0.00E+00
535	ALL	287384.16	4047490.89	1.30860E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.4937E-04	0.00E+00
536	ALL	287425.45	4047491.67	1.29110E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.4604E-04	0.00E+00
537	ALL	287447.09	4047489.70	1.30950E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.4954E-04	0.00E+00
538	ALL	287487.99	4047490.87	1.20800E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.3020E-04	0.00E+00
539	ALL	287532.83	4047491.65	1.03070E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.9641E-04	0.00E+00
540	ALL	287570.98	4047492.44	7.61470E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.4510E-04	0.00E+00

541	ALL	287322.78	4047489.27	1.24580E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.3739E-04	0.00E+00
542	ALL	287303.10	4047526.96	7.23200E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.3781E-04	0.00E+00
543	ALL	287341.25	4047527.74	7.74740E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.4763E-04	0.00E+00
544	ALL	287379.41	4047528.52	7.89870E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.5051E-04	0.00E+00
545	ALL	287417.56	4047529.30	7.77450E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.4815E-04	0.00E+00
546	ALL	287455.71	4047530.08	7.40200E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.4105E-04	0.00E+00
547	ALL	287493.86	4047530.86	6.73540E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2835E-04	0.00E+00
548	ALL	287570.16	4047532.43	4.63830E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.8386E-05	0.00E+00
549	ALL	287228.67	4047530.89	4.97290E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.4761E-05	0.00E+00
550	ALL	287302.69	4047546.95	5.89390E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1231E-04	0.00E+00
551	ALL	287340.84	4047547.74	6.26280E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1934E-04	0.00E+00
552	ALL	287379.00	4047548.52	6.36540E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2130E-04	0.00E+00
553	ALL	287417.15	4047549.30	6.24570E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1901E-04	0.00E+00
554	ALL	287455.30	4047550.08	5.92440E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1289E-04	0.00E+00
555	ALL	287493.45	4047550.86	5.39860E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0287E-04	0.00E+00
556	ALL	287569.75	4047552.42	3.84980E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.3361E-05	0.00E+00
557	ALL	287229.59	4047551.32	4.37950E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.3454E-05	0.00E+00
558	ALL	287302.28	4047566.95	4.93250E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.3992E-05	0.00E+00
559	ALL	287340.44	4047567.73	5.19570E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.9008E-05	0.00E+00
560	ALL	287378.59	4047568.51	5.26150E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0026E-04	0.00E+00
561	ALL	287416.74	4047569.29	5.14880E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.8114E-05	0.00E+00
562	ALL	287454.89	4047570.08	4.87400E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.2878E-05	0.00E+00
563	ALL	287493.04	4047570.86	4.45170E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.4829E-05	0.00E+00
564	ALL	287516.13	4047570.13	4.17260E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.9512E-05	0.00E+00
565	ALL	287569.34	4047572.42	3.27700E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.2446E-05	0.00E+00
566	ALL	287236.09	4047574.29	3.88080E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.3951E-05	0.00E+00
567	ALL	287208.45	4047562.41	3.75920E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.1633E-05	0.00E+00
568	ALL	287213.58	4047528.71	4.62720E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.8173E-05	0.00E+00
569	ALL	287301.87	4047586.95	4.20860E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.0198E-05	0.00E+00
570	ALL	287340.03	4047587.73	4.39440E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.3739E-05	0.00E+00
571	ALL	287378.18	4047588.51	4.43240E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.4462E-05	0.00E+00
572	ALL	287416.33	4047589.29	4.32860E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.2483E-05	0.00E+00
573	ALL	287454.48	4047590.07	4.09650E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.8062E-05	0.00E+00
574	ALL	287492.63	4047590.85	3.75390E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.1533E-05	0.00E+00
575	ALL	287515.72	4047590.13	3.53660E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.7391E-05	0.00E+00
576	ALL	287568.93	4047592.41	2.84290E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.4173E-05	0.00E+00
577	ALL	287233.72	4047621.68	2.93540E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.5936E-05	0.00E+00
578	ALL	287204.70	4047609.21	2.92520E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.5741E-05	0.00E+00
579	ALL	287175.69	4047596.74	2.85110E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.4329E-05	0.00E+00
580	ALL	287182.27	4047530.38	3.86920E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.3730E-05	0.00E+00
581	ALL	287198.83	4047529.34	4.24640E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.0918E-05	0.00E+00
582	ALL	287300.89	4047634.94	3.03460E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.7826E-05	0.00E+00
583	ALL	287339.04	4047635.72	3.11060E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.9274E-05	0.00E+00
584	ALL	287377.19	4047636.50	3.10880E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.9240E-05	0.00E+00
585	ALL	287415.35	4047637.28	3.02770E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.7695E-05	0.00E+00
586	ALL	287453.50	4047638.06	2.87490E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.4783E-05	0.00E+00
587	ALL	287491.65	4047638.84	2.66390E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.0761E-05	0.00E+00
588	ALL	287514.73	4047638.12	2.53350E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.8277E-05	0.00E+00
589	ALL	287567.95	4047640.40	2.13280E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.0642E-05	0.00E+00
590	ALL	287231.91	4047669.32	2.30050E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.3837E-05	0.00E+00
591	ALL	287202.06	4047656.49	2.33200E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.4438E-05	0.00E+00
592	ALL	287172.22	4047643.66	2.32260E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.4259E-05	0.00E+00
593	ALL	287142.37	4047630.83	2.27720E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.3393E-05	0.00E+00
594	ALL	287108.99	4047573.27	2.49610E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.7564E-05	0.00E+00
595	ALL	287087.59	4047558.00	2.41970E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.6109E-05	0.00E+00
596	ALL	287087.19	4047527.03	2.59000E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.9354E-05	0.00E+00
597	ALL	287299.91	4047682.93	2.30360E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.3897E-05	0.00E+00
598	ALL	287338.06	4047683.71	2.32910E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.4383E-05	0.00E+00
599	ALL	287376.21	4047684.49	2.30490E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.3921E-05	0.00E+00
600	ALL	287414.36	4047685.27	2.24860E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.2848E-05	0.00E+00
601	ALL	287452.51	4047686.05	2.14800E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.0932E-05	0.00E+00
602	ALL	287490.67	4047686.83	2.01280E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.8355E-05	0.00E+00
603	ALL	287513.75	4047686.11	1.93010E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.6780E-05	0.00E+00
604	ALL	287566.97	4047688.39	1.67540E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.1926E-05	0.00E+00
605	ALL	287230.38	4047717.07	1.84910E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.5235E-05	0.00E+00
606	ALL	287199.98	4047704.00	1.89530E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.6117E-05	0.00E+00
607	ALL	287169.58	4047690.93	1.91480E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.6488E-05	0.00E+00
608	ALL	287139.18	4047677.87	1.91000E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.6397E-05	0.00E+00
609	ALL	287108.78	4047664.80	1.88170E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.5858E-05	0.00E+00
610	ALL	287065.68	4047621.18	1.93740E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.6918E-05	0.00E+00
611	ALL	287052.98	4047590.62	2.02090E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.8510E-05	0.00E+00
612	ALL	287040.28	4047560.07	2.08660E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.9762E-05	0.00E+00
613	ALL	287027.59	4047529.51	2.13710E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.0723E-05	0.00E+00
614	ALL	287024.71	4047465.54	2.36490E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.5064E-05	0.00E+00
615	ALL	287298.93	4047730.92	1.81260E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.4540E-05	0.00E+00
616	ALL	287337.08	4047731.70	1.81550E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.4595E-05	0.00E+00
617	ALL	287375.23	4047732.48	1.78880E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.4088E-05	0.00E+00
618	ALL	287413.38	4047733.26	1.74210E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.3197E-05	0.00E+00
619	ALL	287451.53	4047734.04	1.67410E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.1900E-05	0.00E+00
620	ALL	287489.68	4047734.82	1.58580E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.0218E-05	0.00E+00

621	ALL	287527.83	4047735.60	1.47860E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.8175E-05	0.00E+00
622	ALL	287565.99	4047736.38	1.35960E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.5907E-05	0.00E+00
623	ALL	287229.00	4047764.89	1.51650E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.8898E-05	0.00E+00
624	ALL	287198.20	4047751.65	1.56560E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.9834E-05	0.00E+00
625	ALL	287167.41	4047738.41	1.59740E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.0439E-05	0.00E+00
626	ALL	287136.61	4047725.18	1.61280E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.0732E-05	0.00E+00
627	ALL	287105.82	4047711.94	1.61140E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.0706E-05	0.00E+00
628	ALL	287075.03	4047698.70	1.59560E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.0405E-05	0.00E+00
629	ALL	287031.37	4047654.52	1.64600E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.1366E-05	0.00E+00
630	ALL	287018.51	4047623.56	1.71990E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.2774E-05	0.00E+00
631	ALL	287005.64	4047592.61	1.78390E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.3993E-05	0.00E+00
632	ALL	286992.78	4047561.66	1.83920E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.5046E-05	0.00E+00
633	ALL	286979.92	4047530.71	1.89060E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.6026E-05	0.00E+00
634	ALL	286977.19	4047516.90	1.92720E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.6724E-05	0.00E+00
635	ALL	287297.94	4047778.91	1.46620E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.7938E-05	0.00E+00
636	ALL	287336.09	4047779.69	1.45950E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.7813E-05	0.00E+00
637	ALL	287374.25	4047780.47	1.43470E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.7339E-05	0.00E+00
638	ALL	287412.40	4047781.25	1.39860E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.6651E-05	0.00E+00
639	ALL	287450.55	4047782.03	1.34820E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.5692E-05	0.00E+00
640	ALL	287488.70	4047782.81	1.28590E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.4504E-05	0.00E+00
641	ALL	287526.85	4047783.59	1.21190E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.3094E-05	0.00E+00
642	ALL	287565.00	4047784.37	1.13010E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.1534E-05	0.00E+00
643	ALL	287227.72	4047812.75	1.26540E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.4113E-05	0.00E+00
644	ALL	287196.63	4047799.39	1.31210E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.5002E-05	0.00E+00
645	ALL	287165.54	4047786.02	1.34760E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.5679E-05	0.00E+00
646	ALL	287134.45	4047772.66	1.37230E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.6151E-05	0.00E+00
647	ALL	287103.36	4047759.29	1.38550E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.6402E-05	0.00E+00
648	ALL	287072.27	4047745.93	1.38710E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.6432E-05	0.00E+00
649	ALL	287041.18	4047732.57	1.37430E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.6188E-05	0.00E+00
650	ALL	286997.10	4047687.95	1.42060E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.7070E-05	0.00E+00
651	ALL	286984.11	4047656.70	1.48520E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.8302E-05	0.00E+00
652	ALL	286971.13	4047625.45	1.54540E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.9449E-05	0.00E+00
653	ALL	286958.14	4047594.20	1.60080E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.0503E-05	0.00E+00
654	ALL	286945.15	4047562.95	1.65240E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.1487E-05	0.00E+00
655	ALL	286926.15	4047536.05	1.67120E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.1845E-05	0.00E+00
656	ALL	286923.86	4047519.50	1.71650E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.2709E-05	0.00E+00
657	ALL	287296.96	4047826.90	1.21290E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.3113E-05	0.00E+00
658	ALL	287335.11	4047827.68	1.20290E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.2923E-05	0.00E+00
659	ALL	287373.26	4047828.46	1.18110E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.2507E-05	0.00E+00
660	ALL	287411.41	4047829.24	1.15280E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.1966E-05	0.00E+00
661	ALL	287449.57	4047830.02	1.11530E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.1252E-05	0.00E+00
662	ALL	287487.72	4047830.80	1.06910E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.0373E-05	0.00E+00
663	ALL	287525.87	4047831.58	1.01520E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.9346E-05	0.00E+00
664	ALL	287564.02	4047832.36	9.54950E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.8197E-05	0.00E+00
665	ALL	287223.39	4047891.58	9.69710E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.8478E-05	0.00E+00
666	ALL	287189.62	4047877.06	1.01080E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.9261E-05	0.00E+00
667	ALL	287155.84	4047862.54	1.04590E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.9931E-05	0.00E+00
668	ALL	287122.06	4047848.02	1.07490E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.0482E-05	0.00E+00
669	ALL	287088.28	4047833.50	1.09720E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.0909E-05	0.00E+00
670	ALL	287054.51	4047818.98	1.10970E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.1145E-05	0.00E+00
671	ALL	287020.73	4047804.47	1.11160E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.1183E-05	0.00E+00
672	ALL	286986.95	4047789.95	1.10410E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.1040E-05	0.00E+00
673	ALL	286939.07	4047741.48	1.14580E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.1834E-05	0.00E+00
674	ALL	286924.96	4047707.53	1.19990E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.2866E-05	0.00E+00
675	ALL	286910.85	4047673.58	1.25140E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.3847E-05	0.00E+00
676	ALL	286896.74	4047639.63	1.30160E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.4803E-05	0.00E+00
677	ALL	286882.63	4047605.68	1.35260E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.5774E-05	0.00E+00
678	ALL	286868.52	4047571.72	1.40550E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.6782E-05	0.00E+00
679	ALL	286854.41	4047537.77	1.46370E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.7892E-05	0.00E+00
680	ALL	286840.30	4047503.82	1.53320E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.9215E-05	0.00E+00
681	ALL	287295.32	4047906.88	9.20770E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7546E-05	0.00E+00
682	ALL	287333.47	4047907.66	9.10330E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7347E-05	0.00E+00
683	ALL	287371.63	4047908.44	8.93510E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7026E-05	0.00E+00
684	ALL	287409.78	4047909.22	8.73750E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.6650E-05	0.00E+00
685	ALL	287447.93	4047910.00	8.49220E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.6182E-05	0.00E+00
686	ALL	287486.08	4047910.79	8.19980E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.5625E-05	0.00E+00
687	ALL	287524.23	4047911.57	7.86340E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.4984E-05	0.00E+00
688	ALL	287562.38	4047912.35	7.47620E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.4246E-05	0.00E+00
689	ALL	287222.87	4047972.04	7.65610E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.4589E-05	0.00E+00
690	ALL	287190.21	4047958.00	7.96940E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.5186E-05	0.00E+00
691	ALL	287157.55	4047943.96	8.25840E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.5737E-05	0.00E+00
692	ALL	287124.89	4047929.93	8.52320E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.6242E-05	0.00E+00
693	ALL	287092.23	4047915.89	8.75400E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.6681E-05	0.00E+00
694	ALL	287059.57	4047901.85	8.94950E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7054E-05	0.00E+00
695	ALL	287026.91	4047887.81	9.08560E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7313E-05	0.00E+00
696	ALL	286994.25	4047873.77	9.15520E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7446E-05	0.00E+00
697	ALL	286961.59	4047859.73	9.16050E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7456E-05	0.00E+00
698	ALL	286928.93	4047845.69	9.11130E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7362E-05	0.00E+00
699	ALL	286882.62	4047798.82	9.42000E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7950E-05	0.00E+00
700	ALL	286868.98	4047766.00	9.81780E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.8708E-05	0.00E+00

701	ALL	286855.34	4047733.17	1.02110E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.9459E-05	0.00E+00
702	ALL	286841.70	4047700.34	1.06110E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.0219E-05	0.00E+00
703	ALL	286828.05	4047667.51	1.10080E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.0976E-05	0.00E+00
704	ALL	286814.41	4047634.68	1.14160E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.1754E-05	0.00E+00
705	ALL	286800.77	4047601.86	1.18470E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.2575E-05	0.00E+00
706	ALL	286787.13	4047569.03	1.23190E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.3475E-05	0.00E+00
707	ALL	286773.48	4047536.20	1.28610E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.4507E-05	0.00E+00
708	ALL	286759.84	4047503.37	1.35140E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.5752E-05	0.00E+00
709	ALL	287255.53	4047986.08	7.34230E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.3991E-05	0.00E+00
710	ALL	287293.69	4047986.86	7.27680E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.3866E-05	0.00E+00
711	ALL	287331.84	4047987.64	7.18110E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.3684E-05	0.00E+00
712	ALL	287369.99	4047988.42	7.05740E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.3448E-05	0.00E+00
713	ALL	287408.14	4047989.21	6.91350E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.3174E-05	0.00E+00
714	ALL	287446.29	4047989.99	6.74240E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2848E-05	0.00E+00
715	ALL	287484.44	4047990.77	6.54380E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2470E-05	0.00E+00
716	ALL	287522.59	4047991.55	6.31010E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2024E-05	0.00E+00
717	ALL	287560.74	4047992.33	6.05810E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1544E-05	0.00E+00
718	ALL	287219.35	4048051.22	6.24220E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1895E-05	0.00E+00
719	ALL	287184.81	4048036.37	6.49530E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2377E-05	0.00E+00
720	ALL	287150.26	4048021.52	6.74390E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2851E-05	0.00E+00
721	ALL	287115.72	4048006.67	6.97720E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.3296E-05	0.00E+00
722	ALL	287081.17	4047991.82	7.19240E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.3706E-05	0.00E+00
723	ALL	287046.63	4047976.97	7.38200E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.4067E-05	0.00E+00
724	ALL	287012.08	4047962.12	7.54470E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.4377E-05	0.00E+00
725	ALL	286977.54	4047947.27	7.65360E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.4584E-05	0.00E+00
726	ALL	286942.99	4047932.42	7.71200E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.4696E-05	0.00E+00
727	ALL	286908.45	4047917.58	7.71790E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.4707E-05	0.00E+00
728	ALL	286873.90	4047902.73	7.68470E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.4644E-05	0.00E+00
729	ALL	286824.93	4047853.16	7.92930E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.5110E-05	0.00E+00
730	ALL	286810.50	4047818.43	8.25550E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.5731E-05	0.00E+00
731	ALL	286796.07	4047783.71	8.58100E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.6352E-05	0.00E+00
732	ALL	286781.64	4047748.99	8.90710E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.6973E-05	0.00E+00
733	ALL	286767.21	4047714.27	9.24090E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7609E-05	0.00E+00
734	ALL	286752.78	4047679.54	9.58540E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.8266E-05	0.00E+00
735	ALL	286738.35	4047644.82	9.94490E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.8951E-05	0.00E+00
736	ALL	286723.92	4047610.10	1.03280E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.9680E-05	0.00E+00
737	ALL	286709.49	4047575.38	1.07540E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.0492E-05	0.00E+00
738	ALL	286695.06	4047540.66	1.12350E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.1410E-05	0.00E+00
739	ALL	286680.63	4047505.93	1.17970E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.2480E-05	0.00E+00
740	ALL	287253.90	4048066.06	5.99300E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1420E-05	0.00E+00
741	ALL	287292.05	4048066.85	5.93350E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1307E-05	0.00E+00
742	ALL	287330.20	4048067.63	5.85580E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1159E-05	0.00E+00
743	ALL	287368.35	4048068.41	5.75900E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0974E-05	0.00E+00
744	ALL	287406.50	4048069.19	5.65140E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0769E-05	0.00E+00
745	ALL	287444.65	4048069.97	5.52650E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0531E-05	0.00E+00
746	ALL	287482.80	4048070.75	5.38420E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0260E-05	0.00E+00
747	ALL	287520.95	4048071.53	5.22490E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.9564E-06	0.00E+00
748	ALL	287559.11	4048072.31	5.04960E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.6223E-06	0.00E+00
749	ALL	287218.70	4048131.62	5.19770E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.9046E-06	0.00E+00
750	ALL	287185.14	4048117.20	5.38670E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0265E-05	0.00E+00
751	ALL	287151.58	4048102.77	5.58060E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0634E-05	0.00E+00
752	ALL	287118.03	4048088.35	5.76650E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0988E-05	0.00E+00
753	ALL	287084.47	4048073.92	5.94630E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1331E-05	0.00E+00
754	ALL	287050.91	4048059.50	6.11580E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1654E-05	0.00E+00
755	ALL	287017.35	4048045.08	6.27030E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1948E-05	0.00E+00
756	ALL	286983.79	4048030.65	6.41000E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2215E-05	0.00E+00
757	ALL	286950.24	4048016.23	6.51370E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2412E-05	0.00E+00
758	ALL	286916.68	4048001.80	6.58410E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2546E-05	0.00E+00
759	ALL	286883.12	4047987.38	6.61740E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2610E-05	0.00E+00
760	ALL	286849.56	4047972.95	6.62020E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2615E-05	0.00E+00
761	ALL	286816.00	4047958.53	6.58480E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2548E-05	0.00E+00
762	ALL	286768.43	4047910.37	6.76560E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2892E-05	0.00E+00
763	ALL	286754.41	4047876.64	7.01170E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.3361E-05	0.00E+00
764	ALL	286740.39	4047842.91	7.25490E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.3825E-05	0.00E+00
765	ALL	286726.38	4047809.18	7.50080E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.4293E-05	0.00E+00
766	ALL	286712.36	4047775.45	7.75260E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.4773E-05	0.00E+00
767	ALL	286698.34	4047741.72	8.01150E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.5266E-05	0.00E+00
768	ALL	286684.32	4047707.99	8.27800E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.5774E-05	0.00E+00
769	ALL	286670.31	4047674.26	8.55650E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.6305E-05	0.00E+00
770	ALL	286656.29	4047640.53	8.84400E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.6853E-05	0.00E+00
771	ALL	286642.27	4047606.80	9.14440E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7425E-05	0.00E+00
772	ALL	286628.26	4047573.07	9.46750E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.8041E-05	0.00E+00
773	ALL	286614.24	4047539.34	9.82570E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.8724E-05	0.00E+00
774	ALL	286600.22	4047505.61	1.02320E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.9498E-05	0.00E+00
775	ALL	287252.26	4048146.05	5.01100E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.5488E-06	0.00E+00
776	ALL	287290.41	4048146.83	4.96030E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.4521E-06	0.00E+00
777	ALL	287328.56	4048147.61	4.89960E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.3365E-06	0.00E+00
778	ALL	287366.71	4048148.39	4.82100E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.1867E-06	0.00E+00
779	ALL	287404.86	4048149.17	4.73840E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.0293E-06	0.00E+00
780	ALL	287443.01	4048149.95	4.64430E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.8499E-06	0.00E+00

781	ALL	287481.17	4048150.73	4.53860E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.6485E-06	0.00E+00
782	ALL	287519.32	4048151.52	4.42120E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.4248E-06	0.00E+00
783	ALL	287557.47	4048152.30	4.29290E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.1804E-06	0.00E+00
784	ALL	287726.12	4047123.71	5.93980E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1319E-04	0.00E+00
785	ALL	287723.16	4047095.68	6.09860E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1621E-04	0.00E+00
786	ALL	287770.58	4047139.17	4.43720E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.4553E-05	0.00E+00
787	ALL	287760.16	4047098.95	4.80140E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.1494E-05	0.00E+00
788	ALL	287833.51	4047123.20	3.16790E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.0366E-05	0.00E+00
789	ALL	287833.31	4047084.55	3.21940E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.1348E-05	0.00E+00
790	ALL	287882.52	4047126.95	2.49110E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.7469E-05	0.00E+00
791	ALL	287881.31	4047084.29	2.56360E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.8851E-05	0.00E+00
792	ALL	287918.49	4047130.03	2.11250E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.0254E-05	0.00E+00
793	ALL	287929.30	4047084.03	2.08320E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.9697E-05	0.00E+00
794	ALL	287668.31	4047870.20	7.04410E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.3423E-05	0.00E+00
795	ALL	287633.00	4047884.25	7.25960E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.3834E-05	0.00E+00
796	ALL	287597.69	4047898.30	7.40180E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.4105E-05	0.00E+00
797	ALL	288024.77	4047416.74	7.84940E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.4958E-05	0.00E+00
798	ALL	288010.97	4047392.78	8.73940E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.6653E-05	0.00E+00
799	ALL	288009.51	4047122.25	1.47900E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.8183E-05	0.00E+00
800	ALL	288009.30	4047083.60	1.52530E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.9066E-05	0.00E+00
801	ALL	287902.16	4047856.48	4.20240E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.0080E-06	0.00E+00
802	ALL	287868.02	4047870.07	4.47390E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.5253E-06	0.00E+00
803	ALL	287833.88	4047883.65	4.74240E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.0369E-06	0.00E+00
804	ALL	287799.73	4047897.24	5.01180E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.5504E-06	0.00E+00
805	ALL	287765.59	4047910.82	5.26260E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0028E-05	0.00E+00
806	ALL	287731.45	4047924.41	5.48520E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0452E-05	0.00E+00
807	ALL	287697.31	4047937.99	5.67570E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0815E-05	0.00E+00
808	ALL	287663.17	4047951.58	5.82950E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1109E-05	0.00E+00
809	ALL	287629.03	4047965.16	5.94460E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1328E-05	0.00E+00
810	ALL	287594.89	4047978.75	6.02020E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1472E-05	0.00E+00
811	ALL	288157.62	4047502.34	4.52930E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.6309E-06	0.00E+00
812	ALL	288143.85	4047535.47	4.33550E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.2616E-06	0.00E+00
813	ALL	288130.09	4047568.60	4.15140E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.9108E-06	0.00E+00
814	ALL	288116.32	4047601.73	3.97880E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.5819E-06	0.00E+00
815	ALL	288102.56	4047634.86	3.82100E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.2812E-06	0.00E+00
816	ALL	288088.79	4047667.99	3.68240E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.0171E-06	0.00E+00
817	ALL	288075.03	4047701.12	3.56340E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.7903E-06	0.00E+00
818	ALL	288006.21	4047866.76	3.25820E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.2087E-06	0.00E+00
819	ALL	287959.11	4047913.16	3.42740E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.5312E-06	0.00E+00
820	ALL	287925.77	4047926.42	3.62630E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.9102E-06	0.00E+00
821	ALL	287892.44	4047939.68	3.82630E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.2913E-06	0.00E+00
822	ALL	287859.11	4047952.95	4.03040E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.6803E-06	0.00E+00
823	ALL	287825.77	4047966.21	4.22430E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.0496E-06	0.00E+00
824	ALL	287792.44	4047979.47	4.40360E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.3914E-06	0.00E+00
825	ALL	287759.11	4047992.74	4.56460E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.6982E-06	0.00E+00
826	ALL	287725.77	4048006.00	4.70770E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.9709E-06	0.00E+00
827	ALL	287692.44	4048019.26	4.82580E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.1958E-06	0.00E+00
828	ALL	287659.11	4048032.52	4.91740E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.3704E-06	0.00E+00
829	ALL	287625.77	4048045.79	4.98280E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.4951E-06	0.00E+00
830	ALL	287592.44	4048059.05	5.02880E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.5827E-06	0.00E+00
831	ALL	288171.38	4047469.21	4.72560E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.0050E-06	0.00E+00
832	ALL	288236.89	4047503.65	3.83640E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.3105E-06	0.00E+00
833	ALL	288222.41	4047538.51	3.67830E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.0093E-06	0.00E+00
834	ALL	288207.92	4047573.37	3.52480E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.7167E-06	0.00E+00
835	ALL	288193.44	4047608.24	3.37900E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.4389E-06	0.00E+00
836	ALL	288178.95	4047643.10	3.24420E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.1819E-06	0.00E+00
837	ALL	288164.47	4047677.97	3.12250E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.9501E-06	0.00E+00
838	ALL	288149.98	4047712.83	3.01650E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.7481E-06	0.00E+00
839	ALL	288135.49	4047747.70	2.92740E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.5783E-06	0.00E+00
840	ALL	288121.01	4047782.56	2.85700E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.4442E-06	0.00E+00
841	ALL	288106.52	4047817.43	2.80240E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.3402E-06	0.00E+00
842	ALL	288092.04	4047852.29	2.76570E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.2702E-06	0.00E+00
843	ALL	288077.55	4047887.16	2.73900E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.2193E-06	0.00E+00
844	ALL	288063.07	4047922.02	2.72290E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.1886E-06	0.00E+00
845	ALL	288013.50	4047970.85	2.86820E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.4655E-06	0.00E+00
846	ALL	287978.42	4047984.80	3.03770E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.7885E-06	0.00E+00
847	ALL	287943.34	4047998.76	3.20170E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.1010E-06	0.00E+00
848	ALL	287908.26	4048012.72	3.37290E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.4272E-06	0.00E+00
849	ALL	287873.18	4048026.68	3.53480E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.7358E-06	0.00E+00
850	ALL	287838.10	4048040.63	3.68640E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.0246E-06	0.00E+00
851	ALL	287803.02	4048054.59	3.82410E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.2871E-06	0.00E+00
852	ALL	287767.94	4048068.55	3.94540E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.5181E-06	0.00E+00
853	ALL	287732.87	4048082.51	4.05290E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.7231E-06	0.00E+00
854	ALL	287697.79	4048096.47	4.13600E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.8813E-06	0.00E+00
855	ALL	287662.71	4048110.42	4.20330E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.0096E-06	0.00E+00
856	ALL	287627.63	4048124.38	4.25070E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.1000E-06	0.00E+00
857	ALL	287592.55	4048138.34	4.28270E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.1610E-06	0.00E+00
858	ALL	288251.38	4047468.78	3.99470E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.6122E-06	0.00E+00
859	ALL	288251.17	4047430.13	4.30860E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.2104E-06	0.00E+00
860	ALL	288250.96	4047391.49	4.64440E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.8502E-06	0.00E+00

861	ALL	288250.76	4047352.84	4.98630E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.5018E-06	0.00E+00
862	ALL	288250.55	4047314.19	5.33640E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0169E-05	0.00E+00
863	ALL	288250.34	4047275.55	5.69490E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0852E-05	0.00E+00
864	ALL	288250.13	4047236.90	6.05460E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1537E-05	0.00E+00
865	ALL	288249.92	4047198.25	6.40110E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2198E-05	0.00E+00
866	ALL	288249.72	4047159.60	6.73180E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2828E-05	0.00E+00
867	ALL	288249.51	4047120.96	7.03750E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.3410E-05	0.00E+00
868	ALL	288249.30	4047082.31	7.30640E-08	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.3923E-05	0.00E+00
869	ALL	287961.20	4047086.61	1.82750E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.4824E-05	0.00E+00
870	ALL	287970.85	4047116.78	1.72140E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.2803E-05	0.00E+00
871	ALL	287989.19	4047097.71	1.62790E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.1021E-05	0.00E+00
872	ALL	288033.60	4047117.02	1.36230E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.5960E-05	0.00E+00
873	ALL	288051.70	4047117.74	1.27800E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.4354E-05	0.00E+00
874	ALL	288039.15	4047144.77	1.29810E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.4736E-05	0.00E+00
875	ALL	287027.06	4047362.52	2.90200E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.5300E-05	0.00E+00
876	ALL	287024.38	4047323.09	3.24560E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.1847E-05	0.00E+00
877	ALL	287113.93	4047362.18	3.62940E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.9161E-05	0.00E+00
878	ALL	287108.92	4047310.39	3.92280E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.4751E-05	0.00E+00
879	ALL	287166.91	4047531.60	3.56550E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.7943E-05	0.00E+00
880	ALL	287152.08	4047530.38	3.33640E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.3577E-05	0.00E+00
881	ALL	287138.13	4047532.83	3.11320E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.9323E-05	0.00E+00
882	ALL	287228.70	4047508.00	5.77840E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1011E-04	0.00E+00
883	ALL	287213.61	4047505.83	5.22660E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	9.9597E-05	0.00E+00
884	ALL	287182.30	4047507.50	4.21090E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.0241E-05	0.00E+00
885	ALL	287198.87	4047506.45	4.69940E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	8.9550E-05	0.00E+00
886	ALL	287166.94	4047508.72	3.83780E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.3131E-05	0.00E+00
887	ALL	287152.11	4047507.50	3.55860E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.7811E-05	0.00E+00
888	ALL	287138.16	4047509.94	3.30370E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.2954E-05	0.00E+00
889	ALL	287110.99	4047525.77	2.83910E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.4100E-05	0.00E+00
890	ALL	287110.50	4047556.19	2.62850E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.0088E-05	0.00E+00
891	ALL	287109.06	4047511.04	2.90910E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.5435E-05	0.00E+00
892	ALL	287087.57	4047572.85	2.33270E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.4451E-05	0.00E+00
893	ALL	287084.43	4047511.52	2.64450E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	5.0393E-05	0.00E+00
894	ALL	287055.94	4047512.73	2.39620E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.5662E-05	0.00E+00
895	ALL	287031.79	4047514.90	2.22010E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.2306E-05	0.00E+00
896	ALL	287000.41	4047519.25	2.02700E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.8626E-05	0.00E+00
897	ALL	286944.88	4047520.70	1.78570E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.4027E-05	0.00E+00
898	ALL	286976.99	4047469.27	2.10100E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.0036E-05	0.00E+00
899	ALL	287054.73	4047529.15	2.31570E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.4127E-05	0.00E+00
900	ALL	287054.73	4047542.91	2.25390E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.2950E-05	0.00E+00
901	ALL	287035.42	4047544.12	2.12510E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.0495E-05	0.00E+00
902	ALL	286998.72	4047533.49	1.96670E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.7476E-05	0.00E+00
903	ALL	286948.65	4047535.87	1.75010E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	3.3349E-05	0.00E+00
904	ALL	287113.06	4047461.68	3.22040E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.1367E-05	0.00E+00
905	ALL	287114.40	4047415.23	3.42540E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	6.5273E-05	0.00E+00
906	ALL	287025.17	4047418.24	2.56880E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	4.8951E-05	0.00E+00
907	ALL	287362.57	4047491.93	1.27240E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.4246E-04	0.00E+00
908	ALL	287405.82	4047491.14	1.30770E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.4919E-04	0.00E+00
909	ALL	287466.37	4047491.54	1.24030E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.3634E-04	0.00E+00
910	ALL	287504.90	4047493.11	1.11870E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.1317E-04	0.00E+00
911	ALL	287550.90	4047490.75	9.37190E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.7859E-04	0.00E+00
912	ALL	287323.23	4047544.12	6.32850E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2059E-04	0.00E+00
913	ALL	287365.84	4047544.69	6.59090E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2559E-04	0.00E+00
914	ALL	287402.48	4047544.12	6.64330E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2659E-04	0.00E+00
915	ALL	287440.55	4047545.25	6.36830E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.2135E-04	0.00E+00
916	ALL	287479.76	4047543.27	6.06700E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1561E-04	0.00E+00
917	ALL	287514.41	4047543.83	5.42890E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0345E-04	0.00E+00
918	ALL	287282.32	4047543.55	5.72940E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0918E-04	0.00E+00
919	ALL	287168.78	4046994.26	9.88420E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.8835E-04	0.00E+00
920	ALL	287149.46	4046996.81	9.99330E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.9043E-04	0.00E+00
921	ALL	287278.45	4046957.04	7.35410E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.4014E-04	0.00E+00
922	ALL	287360.54	4046910.05	5.35690E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.0208E-04	0.00E+00
923	ALL	287466.84	4046904.03	5.80040E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.1053E-04	0.00E+00
924	ALL	287318.06	4046990.09	1.14470E-06	70YrCancerHighEnd_InhSoilDermMMilkCrops	2.1813E-04	0.00E+00
925	ALL	287319.24	4046949.19	7.14440E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.3614E-04	0.00E+00
926	ALL	287277.56	4046974.36	8.91710E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	1.6992E-04	0.00E+00
927	ALL	287324.74	4046864.05	3.70100E-07	70YrCancerHighEnd_InhSoilDermMMilkCrops	7.0525E-05	0.00E+00

```
HARP2 - HRACalc (dated 22118) 7/26/2023 6:53:01 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: True
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

****
HOMEGROWN CROP PATHWAY SETTINGS

Household type: HouseholdsthatGarden
Fraction leafy: 0.137
Fraction exposed: 0.137
Fraction protected: 0.137
Fraction root: 0.137

```
*********************************
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\0014-036\Ops\EL MONTE – Ops\hra\EMW
OpsCancerRisk.csv
Cancer risk total by receptor saved to: F:\Move\0014-036\Ops\EL MONTE – Ops\hra\EMW OpsCancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: F:\Move\0014-036\Ops\EL MONTE – Ops\hra\EMW
OpsNCChronicRisk.csv
Chronic risk total by receptor saved to: F:\Move\0014-036\Ops\EL MONTE – Ops\hra\EMW OpsNCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: F:\Move\0014-036\Ops\EL MONTE – Ops\hra\EMW
OpsNCAcuteRisk.csv
Acute risk total by receptor saved to: F:\Move\0014-036\Ops\EL MONTE – Ops\hra\EMW OpsNCAcuteRiskSumByRec.csv
HRA ran successfully
```

Health Risk Assessment Results

Project Operations and Combined Health Risks from Construction and Operations

Impact Source	Cancer Risk Score	Chronic Risk Score	Acute Risk Score
Values at the Construction MER (Receptor #537)			
Project Operations	1.31	0.0002	0.0000
Project Construction	12.89	0.0105	0.0000
Combined	14.20	0.0107	0.0000
Values at the Operational MER (Receptor # 484)			
Project Operations	4.57	0.0009	0.0000
Project Construction	0.15	0.0001	0.0000
Combined	4.72	0.001	0.0000
Risks and Hazards at the MER (Highest of Any Scenario)			
Combined at Receptor #537	14.20	0.01	0.00

El Monte Way & Crawford Ave Mixed-Use Project Unmitigated Construction MER: Receptor #537 (36°32'57.1"N 119°22'29.0"W)

El Monte Way & Crawford Ave Mixed-Use Project Operational MER: Receptor #484 (36°32'43.8"N 119°23'00.2"W)

ATTACHMENT C

Energy Consumption Calculations

El Monte Way & Crawford Ave Mixed-Use Project—Energy Consumption Summary

Date of Last Revision: July 24, 2023

Summary of Energy Use During Construction		(Annually)
Construction vehicle fuel	15,641	gallons (gasoline, diesel)
Construction equipment fuel	29,264	gallons (diesel)
Construction office trailer electricity	19,605	kilowatt hours

Summary of Energy Use During Proposed Operations		(Annually)
Operational vehicle fuel consumption	414,899	gallons (gasoline, diesel)
Operational natural gas consumption	4,544,470	kilo-British Thermal Units
Operational electricity consumption	1,825,429	kilowatt hours

Construction Vehicle Fuel Calculations (Page 1 of 2)

California Air Resource Board (CARB). 2022. EMFAC2021 Web Database. Website: https://arb.ca.gov/emfac/emissions-inventory. Accessed June 2023.

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: County
Region: Tulare
Calendar Year: 2023
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

VMT = Vehicle Miles Traveled
FE = Fuel Economy

Given										*Calculations*	
Region	Calendar Year	Vehicle Class	Model Year	Speed		Population	VMT (mi/day)	Fuel Consumption (1000 gallons/day)		FE (mi/gallon)	VMT*FE
Tulare	2023	HHDT	Aggregate	Aggregate	Gasoline	1.549706545	46.29335	0.014304312		3.23632114	149.820138
Tulare	2023	HHDT	Aggregate	Aggregate	Diesel	5221.841851	738312.9	125.5857963		5.8789524	4340506.5
Tulare	2023	LDA	Aggregate	Aggregate	Gasoline	158118.5856	6491689	219.6650576		29.5526718	191846765
Tulare	2023	LDA	Aggregate	Aggregate	Diesel	384.1498923	12142.55	0.280343597		43.3131127	525931.801
Tulare	2023	LDT1	Aggregate	Aggregate	Gasoline	15857.34961	513272.5	21.34216622		24.0496889	12344042.9
Tulare	2023	LDT1	Aggregate	Aggregate	Diesel	10.65169612	178.9854	0.007008468		25.5384492	4571.00969
Tulare	2023	LDT2	Aggregate	Aggregate	Gasoline	67885.93744	2693221	113.8810344		23.6494272	63693139.5
Tulare	2023	LDT2	Aggregate	Aggregate	Diesel	166.1984147	7236.236	0.219675726		32.9405336	238365.463
Tulare	2023	LHDT1	Aggregate	Aggregate	Gasoline	7343.520045	256425.3	28.05468024		9.14019686	2343777.72
Tulare	2023	LHDT1	Aggregate	Aggregate	Diesel	8303.000876	296659.9	18.79451052		15.7843924	4682596.73
Tulare	2023	LHDT2	Aggregate	Aggregate	Gasoline	1118.532738	38674.93	4.763202236		8.11952387	314022.052
Tulare	2023	LHDT2	Aggregate	Aggregate	Diesel	2789.634453	102156.2	7.87710403		12.9687539	1324838.93
Tulare	2023	MDV	Aggregate	Aggregate	Gasoline	78873.28042	2872063	151.1282564		19.0041417	54581088.5
Tulare	2023	MDV	Aggregate	Aggregate	Diesel	1210.67366	48889.9	2.023324036		24.1631567	1181334.21
Tulare	2023	MHDT	Aggregate	Aggregate	Gasoline	405.111362	18171.8	3.924545838		4.6302926	84140.7304
Tulare	2023	MHDT	Aggregate	Aggregate	Diesel	3939.626747	186485.7	21.5511825		8.65315289	1613689.08

Construction Vehicle Fuel Calculations (Page 2 of 2)

Construction Schedule
Source: CalEEMod Output
El Monte Way & Crawford Ave Mixed-Use Project

CalEEMod Run	Phase Name	Start Date	End Date	Num Days Week	Num Days
Project Construction	Site Preparation	10/2/2023	10/27/2023	5	20
Project Construction	Grading	10/28/2023	12/29/2023	5	45
Project Construction	Building Construction	10/15/2023	2/15/2025	5	350
Project Construction	Paving	12/30/2023	2/16/2024	5	35
Project Construction	Architectural Coating	1/11/2025	2/28/2025	5	35

Construction Trips and VMT

	Trips per Day			Construction Trip Length in Miles				Trips per Phase			VMT per Phase			Fuel Consumption (gallons)		
Phase Name	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Number of Days per Phase	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trips	Vendor Trips	Hauling Trips	Worker Trips	Vendor Trips	Hauling Trips
Site Preparation	17.50	2.00	0.00	7.7	6.8	20	20	350	40	0	2,695	272	0	104.99	30.28	0.00
Grading	20.00	1.00	13.89	7.7	6.8	20	45	900	45	625	6,930	306	12,500	269.98	34.07	2,126.29
Building Construction	60.99	23.80	0.00	7.7	6.8	20	350	21,348	8,330	0	164,377	56,647	0	6,403.86	6,306.37	0.00
Paving	15.00	2.00	0.00	7.7	6.8	20	35	525	70	0	4,043	476	0	157.49	52.99	0.00
Architectural Coating	12.20	1.00	0.00	7.7	6.8	20	35	427	35	0	3,288	238	0	128.08	26.50	0.00

Total Project Construction VMT (miles)
251,771

Total Project Fuel Consumption (gallons)
15,641

Construction Equipment Fuel Calculation (Page 1 of 2)

Source: CalEEMod Output
El Monte Way & Crawford Ave Mixed-Use Project
Construction Schedule

Construction Area	Phase Type	Start Date	End Date	Num Days Week	Num Days
Project Site	Site Preparation	10/2/2023	10/27/2023	5	20
Project Site	Grading	10/28/2023	12/29/2023	5	45
Project Site	Building Construction	10/15/2023	2/15/2025	5	350
Project Site	Paving	12/30/2023	2/16/2024	5	35
Project Site	Architectural Coating	1/11/2025	2/28/2025	5	35

Construction Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	Number of Days	HP Hours	Fuel (gallons/HP-hour)	Diesel Fuel Usage
Site Preparation	Rubber Tired Dozers	3	8	367	0.40	20	70,464.00	0.02051	1,445.45
Site Preparation	Tractors/Loaders/Backhoes	4	8	84	0.37	20	19,891.20	0.01903	378.46
Grading	Excavators	1	8	148	0.41	45	21,844.80	0.01976	431.59
Grading	Graders	2	8	36	0.38	45	9,849.60	0.02121	208.96
Grading	Rubber Tired Dozers	2	8	84	0.37	45	22,377.60	0.02051	459.04
Grading	Scrapers	2	8	423	0.48	45	146,188.80	0.02489	3,638.16
Grading	Tractors/Loaders/Backhoes	1	8	367	0.40	45	52,848.00	0.01903	1,005.52
Building Construction	Cranes	3	8	82	0.20	350	137,760.00	0.01488	2,050.54
Building Construction	Forklifts	1	8	14	0.74	350	29,008.00	0.02080	603.50
Building Construction	Generator Sets	1	7	367	0.29	350	260,753.50	0.04236	11,044.89
Building Construction	Tractors/Loaders/Backhoes	1	8	46	0.45	350	57,960.00	0.01903	1,102.78
Building Construction	Welders	3	7	84	0.37	350	228,438.00	0.02585	5,904.18
Paving	Pavers	2	8	81	0.42	35	19,051.20	0.02153	410.12
Paving	Paving Equipment	2	8	89	0.36	35	17,942.40	0.01833	328.93
Paving	Rollers	2	8	36	0.38	35	7,660.80	0.01940	148.65
Architectural Coating	Air Compressors	1	6	37	0.48	35	3,729.60	0.02755	102.77
				Total Construction Equipment Fuel Consumption (gallons)					**29,263.54**

Notes:
Equipment assumptions are provided in the CalEEMod output files.
Source of usage estimates: California Air Resource Board (CARB). 2022. OFFROAD2017 (v1.0.1) Emissions Inventory

Construction Equipment Fuel Calculation (Page 2 of 2)

OFFROAD2017 (v1.0.1) Emissions Inventory
Region Type: County
Region: Tulare
Scenario: All Adopted Rules - Exhaust
Vehicle Classification: OFFROAD2017 Equipment Types
Units: Emissions: tons/day, Fuel Consumption: gallons/year, Activity: hours/year, HP-Hours: HP-hours/year

Region	Vehicle Class	Model Year	HP_Bin	Fuel	Fuel (gallons/year)	Horsepower Hours (HP-hours/year)	Fuel (gallons/HP-hour)
Tulare	Construction and Mining - Cranes	Aggregated	300	Diesel	52657.02	3537623.55	0.014884857
Tulare	Construction and Mining - Excavators	Aggregated	175	Diesel	156561.57	7924249.90	0.019757273
Tulare	Construction and Mining - Graders	Aggregated	175	Diesel	95622.49	4507357.53	0.021214755
Tulare	Construction and Mining - Misc - Cement And Mortar Mixers	Aggregated	25	Diesel	518.30	16275.35	0.031845705
Tulare	Construction and Mining - Misc - Concrete/Industrial Saws	Aggregated	50	Diesel	266.45	6383.85	0.041738136
Tulare	Construction and Mining - Pavers	Aggregated	175	Diesel	20697.10	961439.23	0.021527205
Tulare	Construction and Mining - Paving Equipment	Aggregated	175	Diesel	8797.73	479896.07	0.018332574
Tulare	Construction and Mining - Rollers	Aggregated	100	Diesel	49945.72	2573962.80	0.019404212
Tulare	Construction and Mining - Rough Terrain Forklifts	Aggregated	100	Diesel	128035.04	6154134.12	0.020804721
Tulare	Construction and Mining - Rubber Tired Dozers	Aggregated	300	Diesel	6934.53	338050.60	0.020513278
Tulare	Construction and Mining - Scrapers	Aggregated	300	Diesel	57538.00	2311993.76	0.024886746
Tulare	Construction and Mining - Tractors/Loaders/Backhoes	Aggregated	300	Diesel	84418.90	4436891.50	0.019026586
Tulare	Light Commercial - Misc - Air Compressors	Aggregated	50	Diesel	8584.80	311560.35	0.027554212
Tulare	Light Commercial - Misc - Generator Sets	Aggregated	50	Diesel	23662.95	558647.10	0.042357599
Tulare	Light Commercial - Misc - Welders	Aggregated	50	Diesel	39441.90	1526043.10	0.025845862

Construction Office Electricity Calculation

Energy Appendix: CalEEMod Typical Construction Trailer
Typical Construction Trailer - Tulare County, Annual

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	13,895	453	0.0330	0.0040	26,460

kWh/yr = kilowatt hours per year

Energy by Land Use - Electricity		
Annual	13,895	kWh/yr
Total Over Construction	**19,605**	**kWh**

Total Construction Schedule	
Start	10/2/2023
End	2/28/2025
Total Calendar Days	515
Years	1.41

El Monte Way & Crawford Ave Mixed-Use Project Operational Fuel Calculation—Project-generated Operational Trips

California Air Resource Board (CARB). EMFAC2021. Website: https://arb.ca.gov/emfac/emissions-inventory/. Accessed June 2023.

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: County
Region: Tulare
Calendar Year: 2024
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

VMT = Vehicle Miles Traveled
FE = Fuel Economy

				Given					*Calculations*	
Region	Calendar Year	Vehicle Class	Model Year	Speed	Fuel	Population	VMT	Fuel Consumption	FE	VMT*FE
Tulare	2024	LDA	Aggregate	Aggregate	Gasoline	158223.9536	6564398.587	217.9503163	30.1187844	197711705.8
Tulare	2024	LDA	Aggregate	Aggregate	Diesel	359.7791844	11427.49529	0.260720464	43.83045018	500872.263
									Total VMT	**6575826.082**
									Weighted Average Fuel Economy	**30.14261259**
Tulare	2024	LDT1	Aggregate	Aggregate	Gasoline	15208.02808	501766.3752	20.47746002	24.50335025	12294957.24
Tulare	2024	LDT1	Aggregate	Aggregate	Diesel	9.512365454	157.9270553	0.006179901	25.55495069	4035.818112
Tulare	2024	LDT2	Aggregate	Aggregate	Gasoline	69118.42037	2784413.872	114.7335565	24.26852227	67573610.07
Tulare	2024	LDT2	Aggregate	Aggregate	Diesel	177.9591413	7851.285313	0.232582017	33.75706086	265036.3162
Tulare	2024	MDV	Aggregate	Aggregate	Gasoline	76757.45305	2813740.835	145.4498692	19.34509017	54432070.16
Tulare	2024	MDV	Aggregate	Aggregate	Diesel	1201.269385	47857.95304	1.963622376	24.37227932	1166407.399
									Total VMT	**6155788.247**
									Weighted Average Fuel Economy	**22.0501602**
Tulare	2024	LHDT1	Aggregate	Aggregate	Gasoline	7112.717281	252436.4523	27.13505655	9.302963929	2348407.21
Tulare	2024	LHDT1	Aggregate	Aggregate	Diesel	8035.272749	285635.962	18.07147636	15.80590076	4514733.669
Tulare	2024	LHDT2	Aggregate	Aggregate	Gasoline	1081.046628	37535.93128	4.566392691	8.220040154	308546.8623
Tulare	2024	LHDT2	Aggregate	Aggregate	Diesel	2738.705526	99889.5275	7.66820855	13.02644899	1301205.835
Tulare	2024	MHDT	Aggregate	Aggregate	Gasoline	386.2093164	18095.21028	3.850685638	4.699217744	85033.33323
Tulare	2024	MHDT	Aggregate	Aggregate	Diesel	4025.767481	189979.3326	21.84238522	8.69773748	1652390.362
									Total VMT	**883572.416**
									Weighted Average Fuel Economy	**11.55572207**
Tulare	2024	HHDT	Aggregate	Aggregate	Gasoline	0.77933665	37.07212461	0.010342608	3.584407622	132.881606
Tulare	2024	HHDT	Aggregate	Aggregate	Diesel	5376.747763	746360.1636	125.2227059	5.960262225	4448502.289
									Total VMT	**746397.2357**
									Weighted Average Fuel Economy	**5.960144221**
Tulare	2024	OBUS	Aggregate	Aggregate	Gasoline	134.1612066	5486.442751	1.15917748	4.733048085	25967.59736
Tulare	2024	OBUS	Aggregate	Aggregate	Diesel	100.3266669	7162.520336	1.021405443	7.012416457	50226.57548
Tulare	2024	SBUS	Aggregate	Aggregate	Gasoline	136.7095355	7273.094092	0.75738058	9.602958249	69843.21891
Tulare	2024	SBUS	Aggregate	Aggregate	Diesel	492.9532926	10878.8317	1.316028746	8.266408871	89928.87085
Tulare	2024	UBUS	Aggregate	Aggregate	Gasoline	59.93560536	4217.171783	0.849811282	4.962480346	20927.63209
Tulare	2024	UBUS	Aggregate	Aggregate	Diesel	14.35384626	1344.175169	0.100836322	13.33026779	17918.21497
									Total VMT	**36362.23583**
									Weighted Average Fuel Economy	**7.557624095**
Tulare	2024	MCY	Aggregate	Aggregate	Gasoline	8231.591618	45554.38643	1.090806636	41.76210973	1902447.285
									Total VMT	**45554.38643**
									Weighted Average Fuel Economy	**41.76210973**

Operational Fuel Calculation—Project-generated Operational Trips
Total Operational VMT
El Monte Way & Crawford Ave Mixed-Use Project

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
Single Family Housing	972	972	972	354,780	4,395	4,395	4,395	1,604,091
Strip Mall	4,175	4,175	4,175	1,523,875	21,391	21,391	21,391	7,807,837
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.87	2.18	2.43	466	5.20	13.1	14.6	2,800
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	Annual VMT (miles)		Annual VMT (miles)
Total VMT for Residential Uses	**1,604,091**	**Total VMT for Project**	**9,414,728**

By Vehicle Type (Average Fleet Mix for the 2024 Operational Year for Residential Uses)

	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Residential	52.770000	20.900000	16.750000	5.560000	0.090000	0.090000	0.800000	2.140000	0.000000	0.430000	0.250000	0.020000	0.200000

	Fraction of 1	Percent of Vehicle Trips	Annual VMT	Daily VMT	Average Fuel Economy (miles/gallon)	Total Daily Fuel Consumption (gallons)	Total Annual Fuel Consumption (gallons)
Passenger Cars (LDA)	0.5277	52.77	846,479	2,319	30.14	76.9	28,082
Light Trucks and Medium Vehicles (LDT1, LDT2, and MDV)	0.4321	43.21	693,128	1,899	22.05	86.1	31,434
LHDT1, LHDT2, and MHDT	0.0098	0.98	15,720	43	11.56	3.7	1,360
HHDT	0.0214	2.14	34,328	94	5.96	15.8	5,760
MCY	0.0025	0.25	4,010	11	41.76	0.3	96
Buses/Other	0.0065	0.65	10,427	29	7.56	3.8	1,380
Total	—	100.0	1,604,091	4,395		186.6	68,112

	Annual VMT (miles)		Annual VMT (miles)
Total VMT for Non-Residential Uses	**7,810,637**	**Total VMT for Project**	**9,414,728**

By Vehicle Type (Average Fleet Mix for the 2024 Operational Year for Non-Residential Uses)

	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Non-Residential	45.221356	4.096872	18.833631	21.149014	4.073354	1.027172	1.196890	1.491571	0.063754	0.045171	2.211404	0.192333	0.397480

	Fraction of 1	Percent of Vehicle Trips	Annual VMT	Daily VMT	Average Fuel Economy (miles/gallon)	Total Daily Fuel Consumption (gallons)	Total Annual Fuel Consumption (gallons)
Passenger Cars (LDA)	0.4522	45.22	3,532,076	9,677	30.14	321.0	117,179
Light Trucks and Medium Vehicles (LDT1, LDT2, and MDV)	0.4408	44.08	3,442,891	9,433	22.05	427.8	156,139
LHDT1, LHDT2, and MHDT	0.0630	6.30	491,868	1,348	11.56	116.6	42,565
HHDT	0.0149	1.49	116,501	319	5.96	53.6	19,547
MCY	0.0221	2.21	172,725	473	41.76	11.3	4,136
Buses/Other	0.0070	0.70	54,576	150	7.56	19.8	7,221
Total	—	100.0	7,810,637	21,399		950.1	346,787

Total Project (Non-Residential + Residential)

	Annual VMT (miles)
Total VMT for Project	**9,414,728**

	Annual VMT	Daily VMT	Average Fuel Economy (miles/gallon)	Total Daily Fuel Consumption (gallons)	Total Annual Fuel Consumption (gallons)
Passenger Cars (LDA)	4,378,555	11,996	30.14	398.0	145,261
Light Trucks and Medium Vehicles (LDT1, LDT2, and MDV)	4,136,019	11,332	22.05	513.9	187,573
LHDT1, LHDT2, and MHDT	507,588	1,391	11.56	120.3	43,925
HHDT	150,829	413	5.96	69.3	25,306
MCY	176,735	484	41.76	11.6	4,232
Buses/Other	65,003	178	7.56	23.6	8,601
Total	9,414,728	25,794		1,136.7	414,899

Project Operations Natural Gas Use

Source: CalEEMod Output

El Monte Way & Crawford Ave Mixed-Use Project - Buildout Year Operations

kBTU/yr = kilo-British Thermal Units/year

CalEEMod Land Use	Natural Gas Use (kBTU/yr)	
Single Family Housing	3,735,583	
Strip Mall	808,887	
Other Asphalt Surfaces	0	
City Park	0	
Parking Lot	0	
Total	**4,544,470**	**kBTU/yr**

Project Operations Electricity Use

Source: CalEEMod Output

El Monte Way & Crawford Ave Mixed-Use Project - Buildout Year Operations

kWh/yr = kilowatt hours per year

CalEEMod Land Use	Electricity Use (kWh/yr)	
Single Family Housing	897,272	
Strip Mall	872,305	
Other Asphalt Surfaces	0	
City Park	0	
Parking Lot	55,852	
Total	**1,825,429**	**kWh/yr**

*The estimates above account for total consumption and not demand after incorporation of renewable energy.

Construction Trailer Custom Report

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5. Activity Data

5.11. Operational Energy Consumption

5.11.1. Unmitigated

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Construction Trailer
Operational Year	2023
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.90
Precipitation (days)	24.4
Location	36.300103, -119.218111
County	Tulare
City	Farmersville
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2757
EDFZ	9
Electric Utility	Eastside Power Authority
Gas Utility	Southern California Gas
App Version	2022.1.1.14

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	0.72	1000sqft	0.02	720	0.00	—	—	—

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	0.05	0.04	0.06	0.45	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	91.9	91.9	< 0.005	< 0.005	0.41	93.7
Area	0.01	0.02	< 0.005	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.13	0.13	< 0.005	< 0.005	—	0.13
Energy	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.7	25.7	< 0.005	< 0.005	—	25.8
Water	—	—	—	—	—	—	—	—	—	—	—	0.25	0.63	0.87	0.03	< 0.005	—	1.68
Waste	—	—	—	—	—	—	—	—	—	—	—	0.36	0.00	0.36	0.04	0.00	—	1.26
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	0.05	0.06	0.06	0.49	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	0.61	118	119	0.07	0.01	0.41	123
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.04	0.04	0.06	0.36	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	84.0	84.0	< 0.005	< 0.005	0.01	85.5
Area	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.7	25.7	< 0.005	< 0.005	—	25.8
Water	—	—	—	—	—	—	—	—	—	—	—	0.25	0.63	0.87	0.03	< 0.005	—	1.68
Waste	—	—	—	—	—	—	—	—	—	—	—	0.36	0.00	0.36	0.04	0.00	—	1.26
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	0.04	0.05	0.07	0.36	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	0.61	110	111	0.07	0.01	0.01	114
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.03	0.03	0.05	0.28	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	65.3	65.3	< 0.005	< 0.005	0.13	66.5
Area	< 0.005	0.02	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.06	0.06	< 0.005	< 0.005	—	0.06

Energy	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.7	25.7	< 0.005	< 0.005	—	25.8
Water	—	—	—	—	—	—	—	—	—	—	—	0.25	0.63	0.87	0.03	< 0.005	—	1.68
Waste	—	—	—	—	—	—	—	—	—	—	—	0.36	0.00	0.36	0.04	0.00	—	1.26
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	0.03	0.05	0.05	0.30	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	0.61	91.7	92.3	0.07	< 0.005	0.13	95.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.05	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	10.8	10.8	< 0.005	< 0.005	0.02	11.0
Area	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.01	0.01	< 0.005	< 0.005	—	0.01
Energy	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.26	4.26	< 0.005	< 0.005	—	4.28
Water	—	—	—	—	—	—	—	—	—	—	—	0.04	0.10	0.14	< 0.005	< 0.005	—	0.28
Waste	—	—	—	—	—	—	—	—	—	—	—	0.06	0.00	0.06	0.01	0.00	—	0.21
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	0.01	0.01	0.01	0.06	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	0.10	15.2	15.3	0.01	< 0.005	0.02	15.8

4. Operations Emissions Details

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	—	—	—	—	—	—	—	—	—	—	—	—	17.3	17.3	< 0.005	< 0.005	—	17.3
Total	—	—	—	—	—	—	—	—	—	—	—	—	17.3	17.3	< 0.005	< 0.005	—	17.3

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	17.3	17.3	< 0.005	< 0.005	—	17.3
Total	—	—	—	—	—	—	—	—	—	—	—	—	17.3	17.3	< 0.005	< 0.005	—	17.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	2.86	2.86	< 0.005	< 0.005	—	2.87
Total	—	—	—	—	—	—	—	—	—	—	—	—	2.86	2.86	< 0.005	< 0.005	—	2.87

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	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.48	8.48	< 0.005	< 0.005	—	8.50
Total	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.48	8.48	< 0.005	< 0.005	—	8.50
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.48	8.48	< 0.005	< 0.005	—	8.50
Total	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.48	8.48	< 0.005	< 0.005	—	8.50
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.40	1.40	< 0.005	< 0.005	—	1.41
Total	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.40	1.40	< 0.005	< 0.005	—	1.41

5. Activity Data

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	13,895	453	0.0330	0.0040	26,460

8. User Changes to Default Data

Appendix B - Biological Evaluation

BIOLOGICAL RESOURCE EVALUATION

July 2023

DINUBA RESIDENTIAL DEVELOPMENT PROJECT
TULARE COUNTY, CALIFORNIA

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Executive Summary

The project applicant proposes to construct 99 residential units, a park, a ponding basin, and 4.74 acres of commercial development in Dinuba, Tulare County, California. The proposed residential development project (Project) will involve construction on an approximately 27-acre parcel that currently supports inactive agricultural land.

To evaluate whether the Project may affect biological resources under California Environmental Quality Act (CEQA) purview, we (1) obtained lists of special-status species from the United States Fish and Wildlife Service, the California Department of Fish and Wildlife, and the California Native Plant Society; (2) reviewed other relevant background information such as satellite imagery and topographic maps; and (3) conducted a field reconnaissance survey at the Project site.

This biological resource evaluation summarizes (1) existing biological conditions on the Project site, (2) the potential for special-status species and regulated habitats to occur on or near the Project site, (3) the potential impacts of the proposed Project on biological resources and regulated habitats, and (4) measures to reduce those potential impacts to less-than-significant levels under CEQA.

We concluded that no special-status wildlife species could occur on or near the Project site. Nesting migratory birds could be impacted by the Project, but any impacts can be reduced to less-than-significant levels with mitigation.

Abbreviations

Abbreviation	Definition
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
FE	Federally listed as Endangered
FESA	Federal Endangered Species Act
FT	Federally listed as Threatened
MBTA	Migratory Bird Treaty Act
NRCS	Natural Resources Conservation Service
SE	State listed as Endangered
SSSC	State Species of Special Concern
ST	State listed as Threatened
SWRCB	State Water Resources Control Board
USACE	United States Army Corps of Engineers
USC	United States Code
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

1.0 Introduction

1.1 Background

The project applicant proposes to construct a residential development project (the Project) on two parcels totaling approximately 27 acres in Dinuba, Tulare County, California. The property comprises Tulare County Assessor's Parcel Numbers 013-090-005 and 013-090-037. The property currently supports recently disked inactive agricultural land.

The purpose of this biological resource evaluation is to assess whether the Project will affect protected biological resources pursuant to California Environmental Quality Act (CEQA) guidelines. Such resources include species of plants or animals listed or proposed for listing under the Federal Endangered Species Act (FESA) or the California Endangered Species Act (CESA) as well as those covered under the Migratory Bird Treaty Act (MBTA), the California Native Plant Protection Act, and various other sections of California Fish and Game Code (CFGC). This biological resource evaluation also addresses Project-related impacts to regulated habitats, which are those under the jurisdiction of the United States Army Corps of Engineers (USACE), State Water Resources Control Board (SWRCB), or California Department of Fish and Wildlife (CDFW).

1.2 Project Description

The Project will involve constructing 99 residential units, a park, a ponding basin, and 4.74 acres of commercial development.

1.3 Project Location

The approximately 27-acre Project site is in the City of Dinuba, Tulare County, California (Figure 1). The Project site is east of Road 88, north of Avenue 416/East El Monte Way, and south of East Lauren Avenue (Figure 2).

Figure 1. Project site vicinity map.

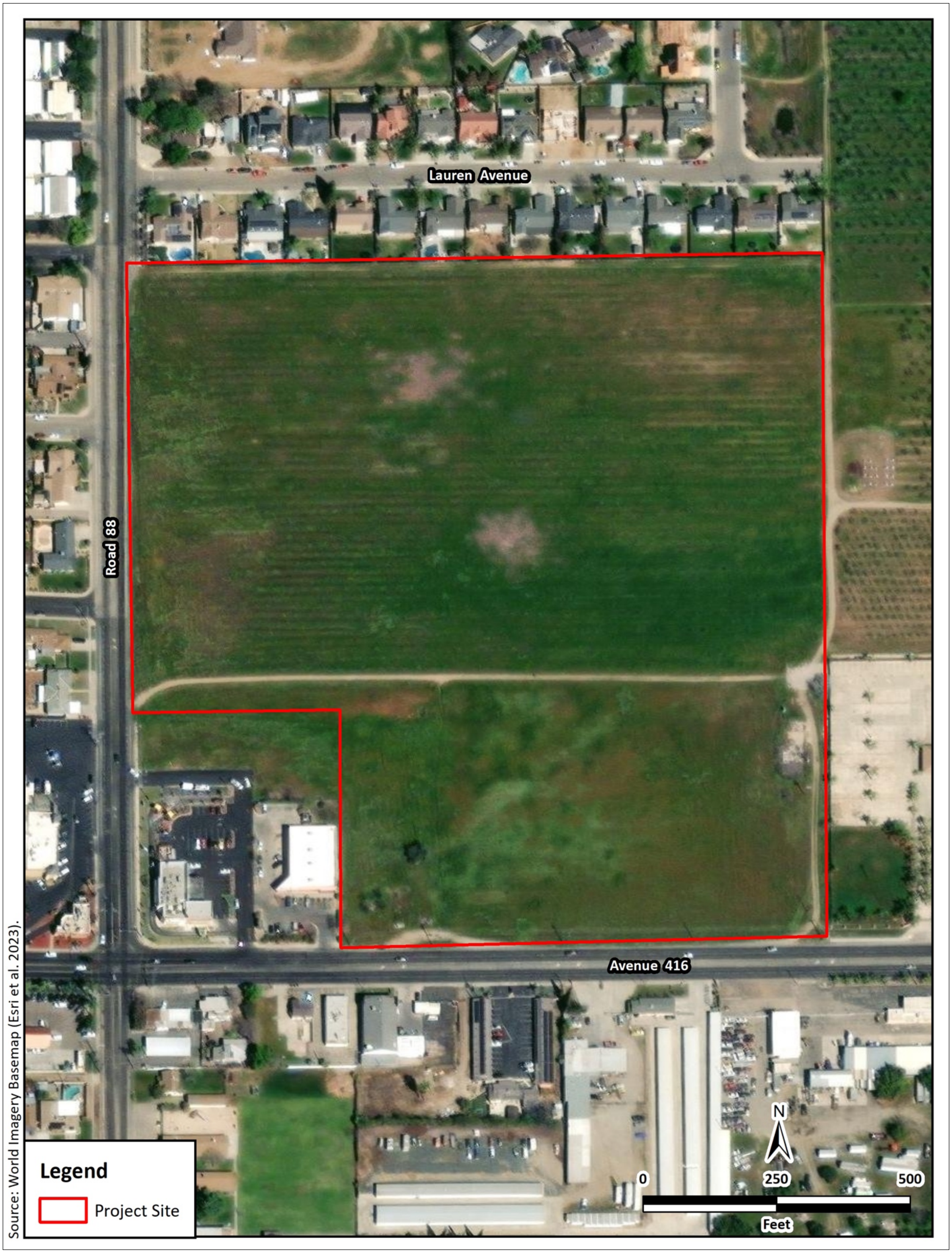

Figure 2. Project site map.

1.4 Purpose and Need of Proposed Project

The purpose of the Project is to develop single-family residential units, a recreational park, stormwater basin, and commercial buildings. The Project is needed to meet growing needs for housing, recreation, stormwater control, and commerce in Dinuba and Tulare County.

1.5 Regulatory Framework

The relevant state and federal regulatory requirements and policies that guide the impact analysis of the Project are summarized below.

1.5.1 State Requirements

California Department of Fish and Wildlife Jurisdiction. The California Department of Fish and Wildlife (CDFW) has regulatory jurisdiction over lakes and streams in California. Activities that divert or obstruct the natural flow of a stream; substantially change its bed, channel, or bank; or use any materials (including vegetation) from the streambed, may require that the project applicant enter into a Lake and Streambed Alteration Agreement with the CDFW in accordance with California Fish and Game Code (CFGC) Section 1602.

California Endangered Species Act. The California Endangered Species Act (CESA) of 1970 (Fish and Game Code § 2050 et seq., and California Code of Regulations (CCR) Title 14, Subsection 670.2, 670.51) prohibits the take of species listed under CESA (14 CCR Subsection 670.2, 670.5). Take is defined as hunt, pursue, catch, capture, or kill or attempt to hunt, pursue, catch, capture, or kill. Under CESA, state agencies are required to consult with the CDFW when preparing CEQA documents. Consultation ensures that proposed projects or actions do not have a negative effect on state listed species. During consultation, CDFW determines whether take would occur and identifies "reasonable and prudent alternatives" for the project and conservation of special-status species. CDFW can authorize take of state listed species under Sections 2080.1 and 2081(b) of the CFGC in those cases where it is demonstrated that the impacts are minimized and mitigated. Take authorized under section 2081(b) must be minimized and fully mitigated. A CESA permit must be obtained if a project will result in take of listed species, either during construction or over the life of the project. Under CESA, CDFW is responsible for maintaining a list of threatened and endangered species designated under state law (Fish and Game Code § 2070). CDFW also maintains lists of species of special concern, which serve as "watch lists." Pursuant to the requirements of CESA, a state or local agency reviewing a proposed project within its jurisdiction must determine whether the proposed project will have a potentially significant impact upon such species. Project-related impacts to species on the CESA list would be considered significant and would require mitigation. Impacts to species of concern or fully protected species would be considered significant under certain circumstances.

California Environmental Quality Act. The California Environmental Quality Act (CEQA) of 1970 (Subsections 21000–21178) requires that CDFW be consulted during the CEQA review process regarding impacts of proposed projects on special-status species. Special-status species are defined under CEQA Guidelines subsection 15380(b) and (d) as those listed under FESA and CESA and species that are not currently protected by statute or regulation but would be considered rare, threatened, or endangered under these criteria or by the scientific community. Therefore, species considered rare or endangered are addressed in this biological resource evaluation regardless of whether they are afforded protection through any other statute or regulation. The California Native Plant Society (CNPS) inventories the native flora of California and ranks species according to rarity (CNPS 2023). Plants with Rare Plant Ranks 1A, 1B, 2A, or 2B are considered special-status species under CEQA.

Although threatened and endangered species are protected by specific federal and state statutes, CEQA Guidelines Section 15380(d) provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if it can be shown to meet certain specified criteria. These criteria have been modeled after the definition in the FESA and the section of the CFGC dealing with rare and endangered plants and animals. Section 15380(d) allows a public agency to undertake a review to determine if a significant effect on species that have not yet been listed by either the United States Fish and Wildlife Service (USFW) or CDFW (i.e., candidate species) would occur. Thus, CEQA provides an agency with the ability to protect a species from the potential impacts of a project until the respective government agency has an opportunity to designate the species as protected, if warranted.

California Native Plant Protection Act. The California Native Plant Protection Act of 1977 (CFGC §§ 1900–1913) requires all state agencies to use their authority to carry out programs to conserve endangered and otherwise rare species of native plants. Provisions of the act prohibit the taking of listed plants from the wild and require the project proponent to notify CDFW at least 10 days in advance of any change in land use, which allows CDFW to salvage listed plants that would otherwise be destroyed.

Nesting birds. CFGC Sections 3503, 3503.5, and 3800 prohibit the possession, incidental take, or needless destruction of birds, their nests, and eggs. CFGC Section 3511 lists birds that are "Fully Protected" as those that may not be taken or possessed except under specific permit.

***Porter-Cologne Water Quality Control Act*.** The Porter-Cologne Water Quality Control Act (California Water Code § 13000 et. sec.) was established in 1969 and entrusts the State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (collectively Water Boards) with the responsibility to preserve and enhance all beneficial uses of California's diverse waters. The Act grants the Water Boards authority to establish water quality objectives and regulate point- and nonpoint-source pollution discharge to the state's surface and ground waters. Under the auspices of the United States Environmental Protection Agency, the Water Boards are responsible for certifying, under Section 401 of the federal Clean Water Act, that activities affecting waters of the United States comply California water quality standards. The Porter-Cologne Water Quality Control Act addresses all "waters of the State," which are more broadly defined than waters of the Unites States. Waters of the State include any surface water or groundwater, including saline waters, within the boundaries of the state. They include artificial as well as natural water bodies and federally jurisdictional and federally non-jurisdictional waters. The Water Boards may issue a Waste Discharge Requirement permit for projects that will affect only federally non-jurisdictional waters of the State.

1.5.2 Federal Requirements

Federal Endangered Species Act. The United States Fish and Wildlife Service (USFWS) and the National Oceanographic and Atmospheric Association and National Marine Fisheries Service enforce the provisions stipulated in the FESA of 1973 (FESA, 16 United States Code [USC] § 1531 et seq.). Threatened and endangered species on the federal list (50 Code of Federal Regulations [CFR] 17.11 and 17.12) are protected from take unless a Section 10 permit is granted to an entity other than a federal agency or a Biological Opinion with incidental take provisions is rendered to a federal lead agency via a Section 7 consultation. Take is defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct. Pursuant to the requirements of the FESA, an agency reviewing a proposed action within its jurisdiction must determine whether any federally listed species may be present in the proposed action area and determine whether the proposed action may affect such species. Under the FESA, habitat loss is considered an effect to a species. In addition, the agency is required to determine whether the proposed action is likely to jeopardize the continued existence of any species that is listed or proposed for listing under the FESA (16 USC § 1536[3], [4]). Therefore, proposed action-related effects to these species or their habitats would be considered significant and would require mitigation.

Migratory Bird Treaty Act. The Migratory Bird Treaty Act (MBTA; 16 USC § 703, Supp. I, 1989) prohibits killing, possessing, trading, or other forms of take of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. “Take” is defined as the pursuing, hunting, shooting, capturing, collecting, or killing of birds, their nests, eggs, or young (16 USC § 703 and § 715n). This act encompasses whole birds, parts of birds, and bird nests and eggs. The MBTA specifically protects migratory bird nests from possession, sale, purchase, barter transport, import, and export, and take. For nests, the definition of take per 50 CFR 10.12 is to collect. The MBTA does not include a definition of an “active nest.” However, the “Migratory Bird Permit Memorandum” issued by the USFWS in 2003 and updated in 2018 clarifies the MBTA in that regard and states that the removal of nests, without eggs or birds, is legal under the MBTA, provided no possession (which is interpreted as holding the nest with the intent of retaining it) occurs during the destruction (USFWS 2018).

United States Army Corps of Engineers Jurisdiction. Areas meeting the regulatory definition of “waters of the United States” (jurisdictional waters) are subject to the jurisdiction of the USACE under provisions of Section 404 of the Clean Water Act (1972) and Section 10 of the Rivers and Harbors Act (1899). These waters may include all waters used, or potentially used, for interstate commerce, including all waters subject to the ebb and flow of the tide, all interstate waters, all other waters (intrastate lakes, rivers, streams, mudflats, sandflats, playa lakes, natural ponds, etc.), all impoundments of waters otherwise defined as waters of the United States, tributaries of waters otherwise defined as waters of the United States, the territorial seas, and wetlands adjacent to waters of the United States (33 CFR part 328.3). Wetlands on non-agricultural lands are identified using the *Corps of Engineers Wetlands Delineation Manual* and related Regional Supplement (USACE 1987 and 2008). Construction activities, including direct removal, filling, hydrologic disruption, or other means in jurisdictional waters are regulated by the USACE. The placement of dredged or fill material into such waters must comply with permit requirements of the USACE. No USACE permit will be effective in the absence of state water quality certification pursuant to Section 401 of the Clean Water Act. The SWRCB is the state agency (together with the Regional Water Quality Control Boards) charged with implementing water quality certification in California.

2.0 Methods

2.1 Desktop Review

As a framework for the evaluation and reconnaissance survey, we obtained an official USFWS species list for the Project (USFWS 2023a, Appendix A). In addition, we searched the California Natural Diversity Database (CNDDB, CDFW 2023, Appendix B) and the CNPS Inventory of Rare and Endangered Plants (CNPS 2023, Appendix C) for records of special-status plant and animal species from the vicinity of the Project site. Regional lists of special-status species were compiled using USFWS, CNDDB, and CNPS database searches confined to the Reedley and Orange Cove South 7.5-minute United States Geological Survey (USGS) topographic quadrangles, which encompass the Project site, and the seven quadrangles (Sanger, Whatoke, Orange Cove North, Monson, Traver, Burris Park, and Selma) that surround the Reedley quadrangle. A local list of special-status species was compiled using CNDDB records from within 5 miles of the Project site. Species that lack a CEQA-recognized special-status designation by state or federal regulatory agencies or public interest groups were omitted from the final list. Species for which the Project site does not provide habitat were eliminated from further consideration. We also reviewed satellite imagery from Google Earth (Google 2023) and other sources, USGS topographic maps, the Web Soil Survey (NRCS 2023), the National Wetlands Inventory (USFWS 2023b), and relevant literature.

2.2 Reconnaissance Survey

Colibri Senior Scientist Ryan Slezak conducted a field reconnaissance survey of the Project site on 3 July 2023. The Project site and a 50-foot buffer surrounding the Project site (Figure 3) were walked and thoroughly inspected to evaluate and document the potential for the area to support state- or federally protected resources. All plants except those under cultivation or planted in residential areas and all vertebrate wildlife species observed within the survey area were identified and documented. The survey area was evaluated for the presence of regulated habitats, including lakes, streams, and other waters using methods described in the *Wetlands Delineation Manual* and regional supplement (USACE 1987, 2008) and as defined by the CDFW (https://www.wildlife.ca.gov/conservation/lsa) or under the Porter-Cologne Water quality Control Act. An additional buffer of 0.5 miles around the Project site was inspected for potential nesting sites for special-status raptors. The 0.5-mile buffer was surveyed by driving public roads and identifying the presence of large trees or other potentially suitable substrates for nesting raptors.

2.3 Significance Criteria

CEQA defines “significant effect on the environment” as “a substantial, or potentially substantial, adverse change in the environment” (California Public Resource Code § 21068). Under CEQA

Guidelines Section 15065, a Project's effects on biological resources are deemed significant where the Project would do the following:

a) Substantially reduce the habitat of a fish or wildlife species,
b) Cause a fish or wildlife population to drop below self-sustaining levels,
c) Threaten to eliminate a plant or animal community, or
d) Substantially reduce the number or restrict the range of a rare or endangered plant or animal.

In addition to the Section 15065 criteria, Appendix G within the CEQA Guidelines includes six additional impacts to consider when analyzing the effects of a project. Under Appendix G, a project's effects on biological resources are deemed significant where the project would do any of the following:

e) 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 CDFW or USFWS;

f) 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 CDFW or USFWS;

g) 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;

h) 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;

i) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

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

These criteria were used to determine whether the potential effects of the Project on biological resources qualify as significant.

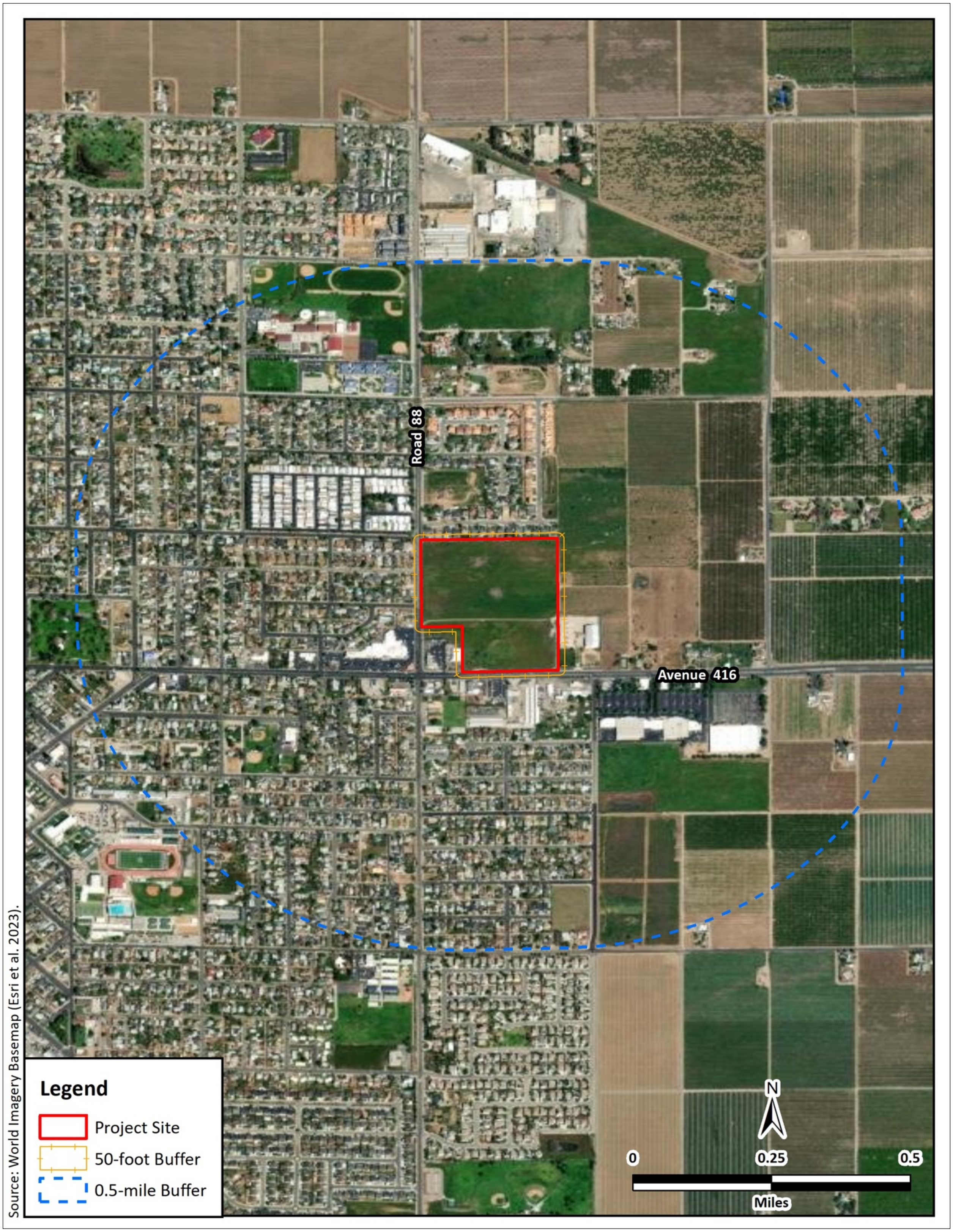

Figure 3. Reconnaissance survey area map.

3.0 Results

3.1 Desktop Review

The USFWS species list for the Project included nine species listed as threatened, endangered, or candidate under the FESA (USFWS 2023a, Table 1, Appendix A). Of those nine species, none are expected to occur on or near the Project site due to either (1) the lack of habitat, (2) the Project site being outside the current range of the species, or (3) the presence of development that would otherwise preclude occurrence (Table 1). As identified in the species list, the Project site does not occur in USFWS-designated or proposed critical habitat for any species (USFWS 2023a, Appendix A).

Searching the CNDDB for records of special-status species from the Reedley and Orange Cove South 7.5-minute USGS topographic quads and the seven surrounding quads produced 169 records of 41 species (Table 1, Appendix B). Of those 41 species, three are not given further consideration because they are not recognized as special-status species by CEQA or are considered extirpated in California (Appendix B). Of the remaining 33 species, 5 are known from within 5 miles of the Project site (Table 1, Figure 4). Of those species, none could occur on or near the Project site (Table 1).

Searching the CNPS inventory of rare and endangered plants of California yielded 16 species (CNPS 2023, Appendix C) which have a CRPR of 1 or 2 (Table 1). None of those species are expected to occur on or near the Project site due to lack of habitat (Table 1).

The Project site is underlain by Exeter loam with 0 to 2% slopes (NCRS 2023). The Project site is at an elevation of 345–347 feet above mean sea level (Google 2023).

Table 1. Special-status species, their listing status, habitats, and potential to occur on or near the Project site.

Species	Status[1]	Habitat	Potential to Occur[2]
Federally and State-Listed Endangered or Threatened Species			
Greene's tuctoria (*Tuctoria greenei*)	FE, SR, 1B.1	Vernal pools below 3500 feet elevation.	**None.** Habitat lacking; the Project site lacked vernal pools.
Hoover's spurge (*Euphorbia hooveri*)	FT, 1B.2	Vernal pools below 820 feet elevation.	**None.** Habitat lacking; the Project site lacked vernal pools.
Keck's checkerbloom (*Sidalcea keckii*)	FE, 1B.1	Grassy slopes at 245–2200 feet elevation.	**None.** Habitat lacking; the Project site lacked grassy slopes.
San Joaquin adobe sunburst[3] (*Pseudobahia peirsonii*)	FT, SE, 1B.1	Grassland with bare dark clay at 300–3000 feet elevation.	**None.** Habitat lacking; the Project site lacked clay soils.
San Joaquin Valley Orcutt grass (*Orcuttia inaequalis*)	FT, SE, 1B.1	Vernal pools at or below 2700 feet elevation.	**None.** Habitat lacking; the Project site lacked vernal pools.
Succulent owl's clover (*Castilleja campestris* subsp. *succulenta*)	FT, SE, 1B.2	Vernal pools with heavy clay soils below 2500 feet elevation.	**None.** Habitat lacking; the Project site lacked vernal pools and clay soils.
Crotch bumble bee (*Bombus crotchii*)	SC	Open grassland and scrub habitats with *Antirrhinum*, *Phacelia*, *Clarkia*, *Dendromecon*, *Eschscholzia*, and *Eriogonum* as food plants.	**None.** Habitat lacking; the Project site lacked *Antirrhinum*, *Phacelia*, *Clarkia*, *Dendromecon*, *Eschscholzia*, or *Eriogonum*.
Monarch California overwintering population (*Danaus plexippus*)	FC	Groves of trees within 1.5 miles of the ocean that produce suitable micro-climates for overwintering such as high humidity, dappled sunlight, access to water and nectar, and protection from wind.	**None.** Habitat lacking; the Project site is not within 1.5 miles of the ocean.

Species	Status[1]	Habitat	Potential to Occur[2]
Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)	FT	Elderberry (*Sambucus* sp.) plants with stems > 1-inch diameter at ground level.	**None.** Habitat lacking; the Project site is outside the currently recognized range of this species, and no elderberry plants were found in the survey area.
Vernal pool fairy shrimp (*Branchinecta lynchi*)	FT	Vernal pools and ponds.	**None.** Habitat lacking; the Project site lacked vernal pools or ponds
Vernal pool tadpole shrimp (*Lepidurus packardi*)	FE	Vernal pools, clay flats, alkaline pools, and ephemeral stock tanks.	**None.** Habitat lacking; the Project site lacked vernal pools or other potentially suitable aquatic features.
California tiger salamander - Central California DPS (*Ambystoma californiense*)	FT, ST	Vernal pools or seasonal ponds for breeding; small mammal burrows for upland refugia in natural grasslands.	**None.** Habitat lacking; no grasslands, vernal pools, seasonal ponds, or small mammal burrows on or near Project site.
Foothill yellow-legged frog - south Sierra DPS (*Rana boylii*)	SE, SSSC	Perennial streams and rivers with rocky substrates, and with open, sunny banks may be in forests, chaparral, or woodlands.	**None.** Habitat lacking; the Project site lacked the aquatic habitat this species requires.
California condor (*Gymnogyps californianus*)	FE, SE	Mountain and foothill rangeland with cliffs for nesting and grassland and open woodland for foraging.	**None.** Habitat lacking; the Project site is about 6 miles southwest of potential foothill habitat.
Swainson's hawk (*Buteo swainsoni*)	ST	Large trees for nesting with adjacent grasslands, alfalfa fields, or grain fields.	**None.** Habitat lacking; the Project site was surrounded by urban development and orchards; no records from within 5 miles of the Project site.

Species	Status[1]	Habitat	Potential to Occur[2]
Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)	FT, SE	Open woodlands with dense, low vegetation along waterways, orchards, and dense leafy groves and thickets.	**None.** Habitat lacking; the Project site is outside the current known range of this species.
Fresno kangaroo rat (*Dipodomys nitratoides exilis*)	FE, SE	Sandy, alkaline, saline, and clay soils in upland scrub and grassland.	**None.** Habitat lacking; the Project site lacked upland scrub and grassland.
San Joaquin kit fox (*Vulpes macrotis mutica*)	FE, ST	Grassland or upland scrub and fallowed agricultural lands adjacent to natural grassland or upland scrub with mammal burrows.	**None.** The Project site contained inactive agricultural lands but lacked mammal burrows and proximity to natural grasslands or upland scrub.
State Species of Special Concern			
Northern leopard frog (*Lithobates pipiens*)	SSSC	Wet meadows, canals, bogs, marshes, and reservoirs in grassland, forest, and woodland.	**None.** Habitat lacking; the Project site is outside the current known range of this species.
Western spadefoot (*Spea hammondii*)	SSSC	Rain pools for breeding and small mammal burrows or other suitable refugia for nonbreeding upland cover.	**None.** Habitat lacking; the Project site lacked rain pools and small mammal burrows.
Northwestern pond turtle (*Actinemys marmorata*)	SSSC	Ponds, rivers, marshes, streams, and irrigation ditches, usually with aquatic vegetation and woody debris for basking and adjacent natural upland areas for egg laying.	**None.** Habitat lacking; the survey area lacked ponds, rivers, marshes, streams, and irrigation ditches.

Species	Status[1]	Habitat	Potential to Occur[2]
Burrowing owl[3] (*Athene cunicularia*)	SSSC	Grassland and upland scrub with friable soil; agricultural or other developed and disturbed upland areas with ground squirrel burrows.	**None.** Habitat lacking; the Project site supported disturbed, inactive agricultural fields that lacked ground squirrel burrows.
Loggerhead shrike (*Lanius ludovicianus*)	SSSC	Open areas with short vegetation and well-spaced shrubs or low trees for nesting.	**None.** Habitat lacking; the Project site lacked well-spaced shrubs or low trees.
Pallid bat (*Antrozous pallidus*)	SSSC	Arid or semi-arid locations in rocky areas and sparsely vegetated grassland near water. Rock crevices, caves, mine shafts, bridges, building, and tree hollows for roosting.	**None.** Habitat lacking; the Project site did not contain rock crevices, caves, mine shafts, bridges, buildings, or tree hollows suitable for roosting.
Western mastiff bat (*Eumops perotis californicus*)	SSSC	Roosts in crevices in cliff faces, tall buildings, trees, and tunnels in open semi-arid habitats.	**None.** Habitat lacking; the Project site did not contain crevices in cliff faces, tall buildings, tunnels, or trees suitable for roosting.
California Rare Plants			
Alkali-sink goldfields (*Lasthenia chrysantha*)	1B.1	Vernal pools and wet saline flats below 320 feet elevation.	**None.** Habitat lacking; the Project site lacked saline flats and is above the known elevational range of this species.
Arizona pholistoma (*Pholistoma auritum* var. *arizonicum*)	2B.3	Desert scrub at 980–2300 feet elevation.	**None.** Habitat lacking; the Project site is outside of the known elevational range of this species.
Bristly sedge (*Carex comosa*)	2B.1	Wet soils below 1312 feet elevation.	**None.** Habitat lacking; the project site lacked wet soils.

Species	Status[1]	Habitat	Potential to Occur[2]
Brittlescale[3] (*Atriplex depressa*)	1B.2	Alkaline or clay soils below 1050 feet elevation.	**None.** Habitat lacking; the Project site lacked alkaline or clay soils.
California alkali grass (*Puccinellia simplex*)	1B.2	Scrub, meadows, seeps, grassland, vernal pools with saline soils, saline flats, and mineral springs below 3000 feet elevation.	**None.** Habitat lacking; the Project site lacked scrub, meadows, seeps, grassland, or vernal pools with saline soils, saline flats, and mineral springs.
California satintail[3] (*Imperata brevifolia*)	2B.1	Mesic areas in chaparral or riparian scrub below 3985 feet elevation.	**None.** Habitat lacking; the Project site lacked chaparral or riparian scrub.
Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*)	1B.1	Saltmarsh, playas, and vernal pools below 4000 feet elevation.	**None.** Habitat lacking; the Project site lacked saltmarsh, playas, and vernal pools.
Earlimart orache (*Atriplex cordulata* var. *erecticaulis*)	1B.2	Saline or alkaline soils below 328 feet elevation.	**None.** Habitat lacking; the Project site lacked saline or alkaline soils and is above the known elevational range of this species.
Forked hare-leaf (*Lagophylla dichotoma*)	1B.1	Grasslands and openings in woodland at 150–1200 feet elevation.	**None.** Habitat lacking; the Project site supported highly disturbed inactive agricultural fields.
Grassland suncup *(Camissonia lacustris)*	1B.2	Open grasslands at 650–4000 feet elevation.	**None.** Habitat lacking; the Project site is below the known elevational range of this species.
Heartscale (*Atriplex cordulata* var. *cordulata*)	1B.2	Saline or alkaline soils in Central Valley and foothill grassland below 230 feet elevation.	**None.** Habitat lacking; the Project site is above the known elevational range of this species.
Kings River Buckwheat (*Eriogonum nudum*	1B.2	Gravel soils at 655–1970 feet elevation.	**None.** Habitat lacking; the Project site is

Species	Status[1]	Habitat	Potential to Occur[2]
var. *regirivum*)			below the known elevational range of this species.
Lesser saltscale (*Atriplex minuscula*)	1B.1	Sandy alkaline soils in chenopod scrub, playa, and grassland in the San Joaquin Valley below 328 feet elevation.	**None.** Habitat lacking; the Project site lacked chenopod scrub, playa, and grassland with sandy alkaline soils; the Project site is above the known elevational range of this species.
Madera leptosiphon (*Leptosiphon serrulatus*)	1B.2	Openings in chaparral, cismontane woodland, and low elevation conifer forest at 980–4300 feet elevation.	**None.** Habitat lacking; the Project site lacked chaparral, cismontane woodland, and low elevation conifer forest; the Project site is below the known elevational range of this species.
Recurved larkspur (*Delphinium recurvatum*)	1B.2	Poorly drained, fine, alkaline soils in chenopod scrub, cismontane woodland, and valley and foothill grassland at 10–2800 feet elevation.	**None.** Habitat lacking; the Project site was supported routinely disturbed inactive agricultural fields and lacked alkaline soils.
Sanford's arrowhead[3] (*Sagittaria sanfordii*)	1B.2	Ponds, sloughs, and ditches at sea level to 650 feet elevation.	**None.** Habitat lacking; the Project site lacked ponds, sloughs, and ditches.
Spiny-sepaled button-celery (*Eryngium spinosepalum*)	1B.2	Vernal pools and swales in valley and foothill grassland at 330–4200 feet elevation.	**None.** Habitat lacking; the Project site lacked vernal pools and swales.

Species	Status[1]	Habitat	Potential to Occur[2]
Subtle orache (*Atriplex subtilis*)	1B.2	Saline depressions below 230 feet elevation.	**None.** Habitat lacking; the Project site lacked saline depressions and is above the known elevational range of this species.
Winter's sunflower[3] (*Helianthus winteri*)	1B.2	Steep, south-facing grassy slopes, rock outcrops, and road cuts at 590–1509 feet elevation.	**None.** Habitat lacking; the Project site is below the known elevational range of this species.

CDFW (2023), CNPS (2023), USFWS (2023).

Status[1]	**Potential to Occur[2]**	
FE = Federally listed Endangered	None:	Species or sign not observed; conditions unsuitable for occurrence.
FT = Federally listed Threatened	Low:	Neither species nor sign observed; conditions marginal for occurrence.
FP = State Fully Protected	Moderate:	Neither species nor sign observed; conditions suitable for occurrence.
FC = Federal Candidate for listing under the FESA	High:	Neither species nor sign observed; conditions highly suitable for occurrence.
SE = State listed Endangered	Present:	Species or sign observed; conditions suitable for occurrence.
SC = State Candidate for listing under the CESA		
ST = State listed Threatened		
SSSC = State Species of Special Concern		

CNPS California Rare Plant Rank[1]:	**Threat Ranks[1]:**
1B – plants rare, threatened, or endangered in California and elsewhere.	0.1 – seriously threatened in California (> 80% of occurrences).
2B – plants rare, threatened, or endangered in California but more common elsewhere.	0.2 – moderately threatened in California (20-80% of occurrences).
3 – plants about which more information is needed.	0.3 – not very threatened in California (<20% of occurrences).
4 – plants have limited distribution in California.	

[3]Record from within 5 miles of the Project site.

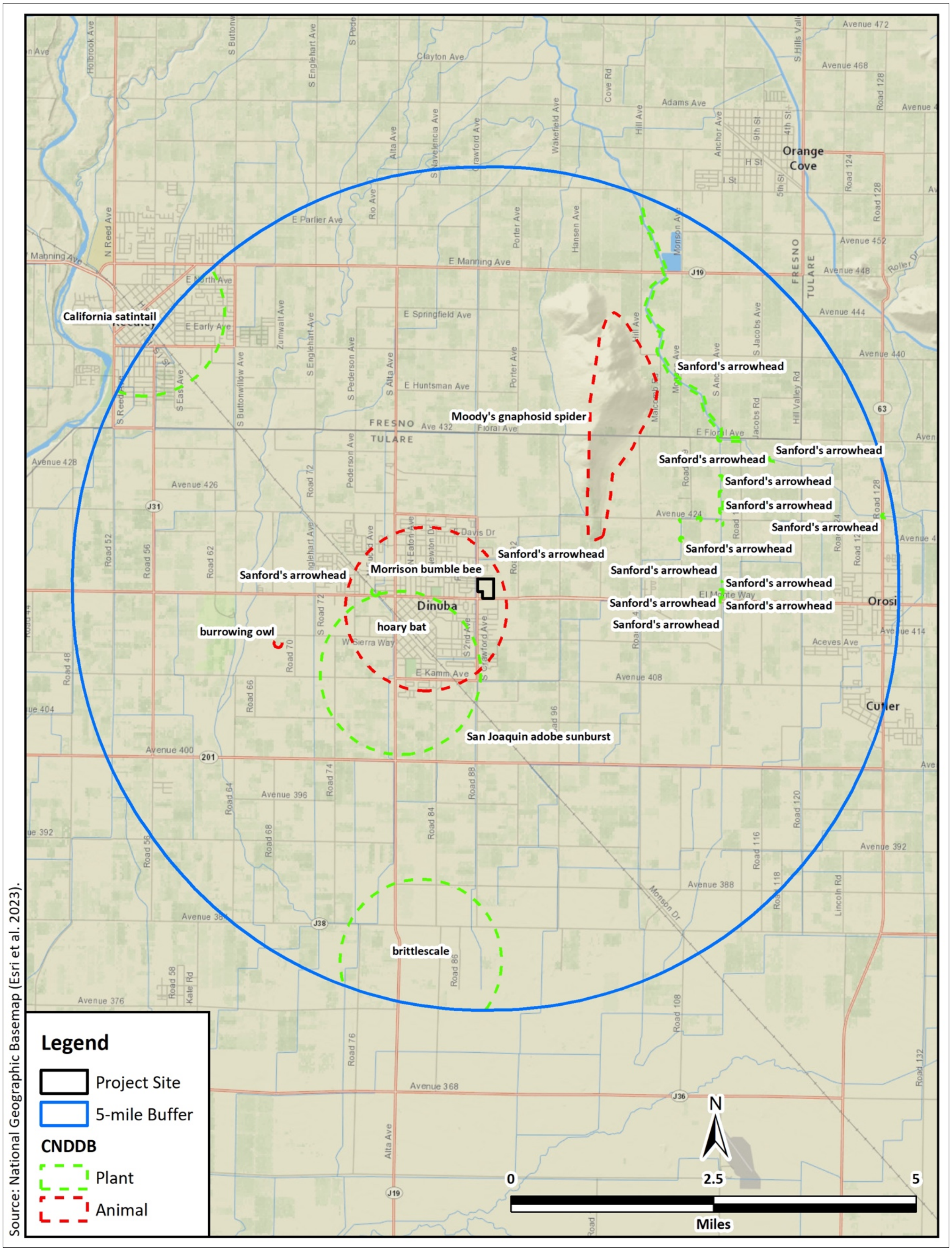

Figure 4. CNDDB occurrence map.

3.2 Reconnaissance Survey

3.2.1 Land Use and Habitats

The Project site supported inactive agricultural fields dominated by ruderal forbs and nonnative grasses (Figures 5 and 6). The Project site was bordered by commercial development to the south, residential development to the north and east, and inactive agriculture, commercial development, and a peach orchard to the east. An old concrete foundation was present on the eastern border of the Project site (Figure 7). Satellite imagery indicates this was formerly a rural residence, demolished between 2010 and 2011 (Google 2023). The entire Project site had been recently disked. A fenced, isolated detention basin was immediately west of the Project site, adjacent to commercial development (Figure 8). Trash and debris were scattered throughout the Project site (Figure 9).

Figure 5. Photograph of the Project site, looking southwest, showing inactive agricultural fields bordered by residential development.

Figure 6. Photograph of the Project site, looking northeast from Road 88, showing inactive agricultural fields.

Figure 7. Photograph of the Project site, looking southwest, showing an old concrete foundation.

Figure 8. Photograph of the detention basin adjacent to the Project site, looking southwest.

Figure 9. Photograph of the Project site, looking northeast from El Monte Way, showing trash and debris.

3.2.2 Plant and Animal Species Observed

A total of 38 plant species (nine native and 29 nonnative) and nine bird species were observed during the survey (Table 2).

Table 2. Plant and animal species observed during the reconnaissance survey.

Common Name	Scientific Name	Status
Plants		
Family Amaranthaceae		
Pigweed amaranth	*Amaranthus albus*	Nonnative
Prostrate pigweed	*Amaranthus blitoides*	Native
Family Anacardiaceae		
Chinese pistache	*Pistacia chinensis*	Nonnative
Family Asteraceae		
Common spikeweed	*Centromadia pungens*	Native
Common sunflower	*Helianthus annuus*	Native
Common yarrow	*Achillea millefolium*	Native
Flax-leaved horseweed	*Erigeron bonariensis*	Nonnative
Prickly lettuce	*Lactuca serriola*	Nonnative
Rough cockleburr	*Xanthium strumarium*	Native
Telegraph weed	*Heterotheca grandiflora*	Native
Yellow cosmos	*Cosmos sulphureus*	Nonnative
Yellow star thistle	*Centaurea solstitialis*	Nonnative
Family Boraginaceae		
Common fiddleneck	*Amsinckia intermedia*	Native
Family Brassicaceae		
Short-podded mustard	*Hirschfeldia incana*	Nonnative
Family Chenopodiaceae		
Lamb's quarters	*Chenopodium album*	Nonnative
Russian thistle	*Salsola tragus*	Nonnative
Family Convolvulaceae		
Field bindweed	*Convolvulus arvensis*	Nonnative
Family Fabaceae		
California burclover	*Medicago polymorph*	Nonnative
Hairy vetch	*Vicia villosa*	Nonnative

Family Fagaceae		
Valley oak	*Quercus lobata*	Native
Family Geraniaceae		
Longbeak stork's bill	*Erodium botrys*	Nonnative
Family Montiaceae		
Chinaberry	*Melia azedarach*	Nonnative
Family Moraceae		
Common fig	*Ficus carica*	Nonnative
Paper mulberry	*Broussonetia papyrifera*	Nonnative
Family Oleaceae		
Olive tree	*Olea europaea*	Nonnative
Family Poaceae		
Bermuda grass	*Cynodon dactylon*	Nonnative
Foxtail brome	*Bromus madritensis*	Nonnative
Italian rye grass	*Festuca perennis*	Nonnative
Johnsongrass	*Sorghum halepense*	Nonnative
Rattail sixweeks grass	*Festuca myuros*	Nonnative
Ripgut brome	*Bromus diandrus*	Nonnative
Saltgrass	*Distichlis spicata*	Native
Soft brome	*Bromus hordeaceus*	Nonnative
Wild oat	*Avena fatua*	Nonnative
Family Polygonaceae		
Curly dock	*Rumex crispus*	Nonnative
Prostrate knotweed	*Polygonum aviculare*	Nonnative
Family Rosaceae		
Callery pear	*Pyrus calleryana*	Nonnative
Family Ulmaceae		
Chinese elm	*Ulmus parvifolia*	Nonnative
Birds		
Family Columbidae		
Eurasian collared-dove	*Streptopelia decaocto*	--
Mourning dove	*Zenaida macroura*	MBTA, CFGC
Rock pigeon	*Columba livia*	--
Family Corvidae		
California scrub-jay	*Aphelocoma californica*	MBTA, CFGC
Family Fringillidae		
Lesser goldfinch	*Spinus psaltria*	MBTA, CFGC

Family Hirundinidae		
Cliff swallow	*Petrochelidon pyrrhonota*	MBTA, CFGC
Family Mimidae		
Northern mockingbird	*Mimus polyglottos*	MBTA, CFGC
Family Passeridae		
House sparrow	*Passer domesticus*	MBTA, CFGC
Family Tyrannidae		
Western kingbird	*Tyrannus verticalis*	MBTA, CFGC

MBTA = Protected under the Migratory Bird Treaty Act (16 USC § 703 et seq.); CFGC = Protected under the California Fish and Game Code (FGC §§ 3503 and 3513).

3.2.3 Nesting Birds

Migratory birds could nest on or near the Project site. Bird species that may nest on or near the property include, but are not limited to, house finch (*Haemorhous mexicanus*) and northern mockingbird (*Mimus polyglottos*).

3.2.4 Regulated Habitats

No habitats potentially regulated under the jurisdiction of the CDFW, SWRCB, or USACE were present in the survey area.

4.0 Environmental Impacts

4.1 Significance Determinations

This Project, which will result in temporary and permanent impacts to agricultural land cover, will not: (1) substantially reduce the habitat of a fish or wildlife species (criterion a) as no such habitat is present on the Project site; (2) cause a fish or wildlife population to drop below self-sustaining levels (criterion b) as no such potentially vulnerable population is known from the area; (3) threaten to eliminate a plant or animal community (criterion c) as no such potentially vulnerable communities are known from the area; (4) substantially reduce the number or restrict the range of a rare or endangered plant or animal (criterion d) as no such potentially vulnerable species are known from the area; (5) 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 CDFW or USFWS (significance criterion e) as no such species are expected to occur on or near the Project site; (6) 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 CDFW or USFWS (criterion f) as no riparian habitat or other sensitive natural community was present in the survey area; (7) 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 (criterion g) as no impacts to wetlands will occur; (8) conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (criterion i) as no trees or biologically sensitive areas will be impacted; or (9) conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or state habitat conservation plan (criterion j) as no such plan has been adopted. Thus, these significance criteria are not analyzed further.

The remaining statutorily defined criterion provided the framework for Criterion BIO1 below. This criterion is used to assess the impacts to biological resources stemming from the Project and provides the basis for determinations of significance:

- Criterion BIO1: 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 (significance criterion h).

4.1.1 Direct and Indirect Impacts

4.1.1.1 Potential Impact: Interfere Substantially with Native Wildlife Movements, Corridors, or Nursery Sites (Criterion BIO1)

The Project could impede the use of nursery sites for native birds protected under the MBTA and CFGC. Migratory birds are expected to nest on and near the Project site. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. Disturbance that causes nest abandonment or loss of reproductive effort can be considered take under the MBTA and CFGC. Loss of fertile eggs or nesting birds, or any activities resulting in nest abandonment, could constitute a significant effect if the species is particularly rare in the region. Construction activities such as excavating, trenching, and grading that disturb a nesting bird on the Project site or immediately adjacent to the construction zone could constitute a significant impact. We recommend that Mitigation Measure BIO1 (below) be included in the conditions of approval to reduce the potential effect to a less-than-significant level.

Mitigation Measure BIO1. Protect nesting birds.

1. To the extent practicable, construction shall be scheduled to avoid the nesting season, which extends from February through August.
2. If it is not possible to schedule construction between September and January, pre-construction surveys for nesting birds shall be conducted by a qualified biologist to ensure that no active nests will be disturbed during the implementation of the Project. A pre-construction survey shall be conducted no more than 14 days prior to the initiation of construction activities. During this survey, the qualified biologist shall inspect all potential nest substrates in and immediately adjacent to the impact areas. If an active nest is found close enough to the construction area to be disturbed by these activities, the qualified biologist shall determine the extent of a construction-free buffer to be established around the nest. If work cannot proceed without disturbing the nesting birds, work may need to be halted or redirected to other areas until nesting and fledging are completed or the nest has otherwise failed for non-construction related reasons.

4.1.2 Cumulative Effects

The Project will involve developing a 27-acre property that currently supports inactive agricultural fields into 99 residential units, a park, a ponding basin, and 4.74 acres of commercial development. Nesting habitat for migratory birds is present on the Project site. However, implementing Mitigation Measure BIO1 would reduce any contribution to cumulative impacts on biological resources to a less-than-significant level.

4.1.3 Unavoidable Significant Adverse Effects

No unavoidable significant adverse effects on biological resources would occur from implementing the Project.

5.0 Literature Cited

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Appendix A. USFWS list of threatened and endangered species.

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Tulare County, California

Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Fresno Kangaroo Rat Dipodomys nitratoides exilis Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/5150	Endangered
San Joaquin Kit Fox Vulpes macrotis mutica Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2873	Endangered

Birds

NAME	STATUS
California Condor Gymnogyps californianus There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8193	Endangered

Amphibians

NAME	STATUS
California Tiger Salamander Ambystoma californiense There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/2076	Threatened

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Crustaceans

NAME	STATUS
Vernal Pool Fairy Shrimp Branchinecta lynchi Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp Lepidurus packardi Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/2246	Endangered

Flowering Plants

NAME	STATUS
San Joaquin Adobe Sunburst Pseudobahia peirsonii Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2931	Threatened
San Joaquin Valley Orcutt Grass Orcuttia inaequalis Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/5506	Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

There are no documented cases of eagles being present at this location. However, if you believe eagles may be using your site, please reach out to the local Fish and Wildlife Service office.

Additional information can be found using the following links:

- Eagle Managment https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply). To see a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern https://www.fws.gov/program/migratory-birds/species
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Belding's Savannah Sparrow Passerculus sandwichensis beldingi This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8	Breeds Apr 1 to Aug 15
Clark's Grebe Aechmophorus clarkii This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jun 1 to Aug 31
Nuttall's Woodpecker Picoides nuttallii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9410	Breeds Apr 1 to Jul 20

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12

(0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

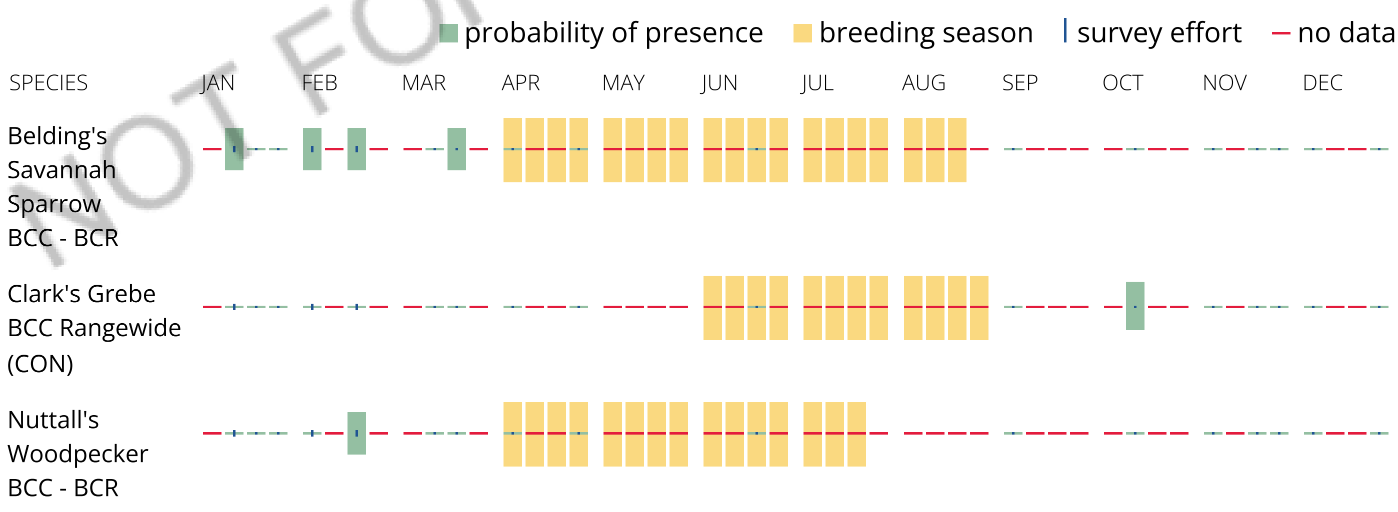
Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures] describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure.

To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in

offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

This location did not intersect any wetlands mapped by NWI.

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Appendix B. CNDDB occurrence records.

CALIFORNIA DEPARTMENT OF FISH and WILDLIFE RareFind

Query Summary:
Quad IS (Wahtoke (3611964) OR Reedley (3611954) OR Selma (3611955) OR Traver (3611944) OR Orange Cove South (3611953) OR Sanger (3611965) OR Burris Park (3611945) OR Monson (3611943))

Print Close

CNDDB Element Query Results

Scientific Name	Common Name	Taxonomic Group	Element Code	Total Occs	Returned Occs	Federal Status	State Status	Global Rank	State Rank	CA Rare Plant Rank	Other Status	Habitats
Ambystoma californiense pop. 1	California tiger salamander - central California DPS	Amphibians	AAAAA01181	1271	9	Threatened	Threatened	G2G3T3	S3	null	CDFW_WL-Watch List, IUCN_VU-Vulnerable	Cismontane woodland, Meadow & seep, Riparian woodland, Valley & foothill grassland, Vernal pool, Wetland
Antrozous pallidus	pallid bat	Mammals	AMACC10010	420	1	None	None	G4	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive	Chaparral, Coastal scrub, Desert wash, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Riparian woodland, Sonoran desert scrub, Upper montane coniferous forest, Valley & foothill grassland
Athene cunicularia	burrowing owl	Birds	ABNSB10010	2011	12	None	None	G4	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern	Coastal prairie, Coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, Valley & foothill grassland
Atriplex cordulata var. erecticaulis	Earlimart orache	Dicots	PDCHE042V0	23	2	None	None	G3T1	S1	1B.2	null	Valley & foothill grassland
Atriplex depressa	brittlescale	Dicots	PDCHE042L0	60	1	None	None	G2	S2	1B.2	null	Alkali playa, Chenopod scrub, Meadow & seep, Valley & foothill grassland, Vernal pool, Wetland
Atriplex minuscula	lesser saltscale	Dicots	PDCHE042M0	52	6	None	None	G2	S2	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Alkali playa, Chenopod scrub, Valley & foothill grassland
Bombus crotchii	Crotch bumble bee	Insects	IIHYM24480	437	1	None	Candidate Endangered	G2	S2	null	IUCN_EN-Endangered	null
Bombus morrisoni	Morrison bumble bee	Insects	IIHYM24460	86	1	None	None	G3	S1S2	null	IUCN_VU-Vulnerable	null
Branchinecta lynchi	vernal pool fairy shrimp	Crustaceans	ICBRA03030	796	16	Threatened	None	G3	S3	null	IUCN_VU-Vulnerable	Valley & foothill grassland, Vernal pool, Wetland
Buteo swainsoni	Swainson's hawk	Birds	ABNKC19070	2561	7	None	Threatened	G5	S4	null	BLM_S-Sensitive, IUCN_LC-Least Concern	Great Basin grassland, Riparian forest, Riparian woodland,

												Valley & foothill grassland
Carex comosa	bristly sedge	Monocots	PMCYP032Y0	31	1	None	None	G5	S2	2B.1	IUCN_LC-Least Concern	Coastal prairie, Freshwater marsh, Marsh & swamp, Valley & foothill grassland, Wetland
Coccyzus americanus occidentalis	western yellow-billed cuckoo	Birds	ABNRB02022	165	2	Threatened	Endangered	G5T2T3	S1	null	BLM_S-Sensitive, USFS_S-Sensitive	Riparian forest
Delphinium recurvatum	recurved larkspur	Dicots	PDRAN0B1J0	119	1	None	None	G2?	S2?	1B.2	BLM_S-Sensitive, SB_SBBG-Santa Barbara Botanic Garden	Chenopod scrub, Cismontane woodland, Valley & foothill grassland
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	Insects	IICOL48011	271	13	Threatened	None	G3T2T3	S3	null	null	Riparian scrub
Emys marmorata	western pond turtle	Reptiles	ARAAD02030	1427	1	None	None	G3G4	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable, USFS_S-Sensitive	Aquatic, Artificial flowing waters, Klamath/North coast flowing waters, Klamath/North coast standing waters, Marsh & swamp, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing waters, South coast standing waters, Wetland
Eryngium spinosepalum	spiny-sepaled button-celery	Dicots	PDAPI0Z0Y0	108	4	None	None	G2	S2	1B.2	BLM_S-Sensitive, SB_SBBG-Santa Barbara Botanic Garden	Valley & foothill grassland, Vernal pool, Wetland
Eumops perotis californicus	western mastiff bat	Mammals	AMACD02011	296	1	None	None	G4G5T4	S3S4	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern	Chaparral, Cismontane woodland, Coastal scrub, Valley & foothill grassland
Euphorbia hooveri	Hoover's spurge	Dicots	PDEUP0D150	29	3	Threatened	None	G1	S1	1B.2	null	Vernal pool, Wetland
Great Valley Mixed Riparian Forest	Great Valley Mixed Riparian Forest	Riparian	CTT61420CA	68	2	None	None	G2	S2.2	null	null	Riparian forest
Helianthus winteri	Winter's sunflower	Dicots	PDAST4N260	55	2	None	None	G2?	S2?	1B.2	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Cismontane woodland, Valley & foothill grassland
Imperata brevifolia	California satintail	Monocots	PMPOA3D020	32	2	None	None	G3	S3	2B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden, USFS_S-Sensitive	Chaparral, Coastal scrub, Meadow & seep, Mojavean desert scrub, Riparian scrub, Wetland
Lanius ludovicianus	loggerhead shrike	Birds	ABPBR01030	110	1	None	None	G4	S4	null	CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened	Broadleaved upland forest, Desert wash, Joshua tree woodland, Mojavean desert scrub, Pinon & juniper woodlands, Riparian woodland,

												Sonoran desert scrub
Lasiurus cinereus	hoary bat	Mammals	AMACC05032	238	1	None	None	G3G4	S4	null	IUCN_LC-Least Concern	Broadleaved upland forest, Cismontane woodland, Lower montane coniferous forest, North coast coniferous forest
Lasthenia chrysantha	alkali-sink goldfields	Dicots	PDAST5L030	55	2	None	None	G2	S2	1B.1	null	Vernal pool
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Dicots	PDAST5L0A1	111	1	None	None	G4T2	S2	1B.1	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden	Alkali playa, Marsh & swamp, Salt marsh, Vernal pool, Wetland
Lepidurus packardi	vernal pool tadpole shrimp	Crustaceans	ICBRA10010	330	10	Endangered	None	G4	S3	null	IUCN_EN-Endangered	Valley & foothill grassland, Vernal pool, Wetland
Linderiella occidentalis	California linderiella	Crustaceans	ICBRA06010	508	5	None	None	G2G3	S2S3	null	IUCN_NT-Near Threatened	Vernal pool
Lithobates pipiens	northern leopard frog	Amphibians	AAABH01170	19	2	None	None	G5	S2	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Freshwater marsh, Great Basin flowing waters, Great Basin standing waters, Marsh & swamp, Wetland
Lytta molesta	molestan blister beetle	Insects	IICOL4C030	17	1	None	None	G2	S2	null	null	Vernal pool, Wetland
Northern Claypan Vernal Pool	Northern Claypan Vernal Pool	Herbaceous	CTT44120CA	21	1	None	None	G1	S1.1	null	null	Vernal pool, Wetland
Northern Hardpan Vernal Pool	Northern Hardpan Vernal Pool	Herbaceous	CTT44110CA	126	3	None	None	G3	S3.1	null	null	Vernal pool, Wetland
Orcuttia inaequalis	San Joaquin Valley Orcutt grass	Monocots	PMPOA4G060	47	2	Threatened	Endangered	G1	S1	1B.1	null	Vernal pool, Wetland
Pseudobahia peirsonii	San Joaquin adobe sunburst	Dicots	PDAST7P030	51	3	Threatened	Endangered	G1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Cismontane woodland, Valley & foothill grassland
Puccinellia simplex	California alkali grass	Monocots	PMPOA53110	80	3	None	None	G2	S2	1B.2	BLM_S-Sensitive	Chenopod scrub, Meadow & seep, Valley & foothill grassland, Vernal pool
Rana boylii pop. 5	foothill yellow-legged frog - south Sierra DPS	Amphibians	AAABH01055	272	1	Proposed Endangered	Endangered	G3T2	S2	null	BLM_S-Sensitive, USFS_S-Sensitive	Aquatic, Riparian forest, Riparian scrub, Riparian woodland, Sacramento/San Joaquin flowing waters
Sagittaria sanfordii	Sanford's arrowhead	Monocots	PMALI040Q0	143	18	None	None	G3	S3	1B.2	BLM_S-Sensitive	Marsh & swamp, Wetland
Spea hammondii	western spadefoot	Amphibians	AAABF02020	1430	19	None	None	G2G3	S3S4	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened	Cismontane woodland, Coastal scrub, Valley & foothill grassland, Vernal pool, Wetland
Talanites moodyae	Moody's gnaphosid spider	Arachnids	ILARA98020	6	1	None	None	G2G3	S2S3	null	null	Ultramafic
Tuctoria greenei	Greene's tuctoria	Monocots	PMPOA6N010	50	1	Endangered	Rare	G1	S1	1B.1	null	Vernal pool, Wetland

Valley Sacaton Grassland	Valley Sacaton Grassland	Herbaceous	CTT42120CA	9	1	None	None	G1	S1.1	null	null	Valley & foothill grassland
Vulpes macrotis mutica	San Joaquin kit fox	Mammals	AMAJA03041	1020	5	Endangered	Threatened	G4T2	S3	null	null	Chenopod scrub, Valley & foothill grassland

Appendix C. CNPS plant list.

CNPS Rare Plant Inventory

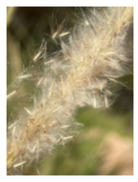
CALIFORNIA NATIVE PLANT SOCIETY

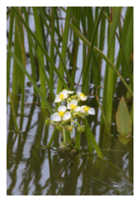
Search Results

23 matches found. Click on scientific name for details

Search Criteria: 9-Quad include [3611963:3611964:3611965:3611943:3611953:3611945:3611954:3611944:3611955]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
Amaranthus watsonii	Watson's amaranth	Amaranthaceae	annual herb	Apr-Sep	None	None	G5?	S3	4.3		2001-01-01	 © 2003 Debra Valov
Atriplex cordulata var. cordulata	heartscale	Chenopodiaceae	annual herb	Apr-Oct	None	None	G3T2	S2	1B.2	Yes	1988-01-01	 © 1994 Robert E. Preston, Ph.D.
Atriplex cordulata var. erecticaulis	Earlimart orache	Chenopodiaceae	annual herb	Aug-Sep(Nov)	None	None	G3T1	S1	1B.2	Yes	2001-01-01	 © 2009 Robert E. Preston, Ph.D.
Atriplex depressa	brittlescale	Chenopodiaceae	annual herb	Apr-Oct	None	None	G2	S2	1B.2	Yes	1994-01-01	 © 2009 Zoya Akulova
Atriplex minuscula	lesser saltscale	Chenopodiaceae	annual herb	May-Oct	None	None	G2	S2	1B.1	Yes	1994-01-01	 © 2000 Robert E. Preston, Ph.D.
Atriplex subtilis	subtle orache	Chenopodiaceae	annual herb	(Apr)Jun-Sep(Oct)	None	None	G1	S1	1B.2	Yes	1994-01-01	 © 2000 Robert E. Preston, Ph.D.

Carex comosa	bristly sedge	Cyperaceae	perennial rhizomatous herb	May-Sep	None	None	G5	S2	2B.1			1994-01-01	 Dean Wm. Taylor 1997
Convolvulus simulans	small-flowered morning-glory	Convolvulaceae	annual herb	Mar-Jul	None	None	G4	S4	4.2			1994-01-01	No Photo Available
Delphinium hansenii ssp. ewanianum	Ewan's larkspur	Ranunculaceae	perennial herb	Mar-May	None	None	G4T3	S3	4.2	Yes		1994-01-01	No Photo Available
Delphinium recurvatum	recurved larkspur	Ranunculaceae	perennial herb	Mar-Jun	None	None	G2?	S2?	1B.2	Yes		1988-01-01	No Photo Available
Eryngium spinosepalum	spiny-sepaled button-celery	Apiaceae	annual/perennial herb	Apr-Jun	None	None	G2	S2	1B.2	Yes		1980-01-01	No Photo Available
Erythranthe acutidens	Kings River monkeyflower	Phrymaceae	annual herb	Apr-Jul	None	None	G2G3	S2S3	3	Yes		1974-01-01	 Barry Breckling
Euphorbia hooveri	Hoover's spurge	Euphorbiaceae	annual herb	Jul-Sep(Oct)	FT	None	G1	S1	1B.2	Yes		1974-01-01	No Photo Available
Helianthus winteri	Winter's sunflower	Asteraceae	perennial shrub	Jan-Dec	None	None	G2?	S2?	1B.2	Yes		2014-10-15	 © 2014 Chris Winchell
Hordeum intercedens	vernal barley	Poaceae	annual herb	Mar-Jun	None	None	G3G4	S3S4	3.2			1994-01-01	No Photo Available
Imperata brevifolia	California satintail	Poaceae	perennial rhizomatous herb	Sep-May	None	None	G3	S3	2B.1			2006-12-26	 © 2020 Matt C. Berger
Lasthenia chrysantha	alkali-sink goldfields	Asteraceae	annual herb	Feb-Apr	None	None	G2	S2	1B.1	Yes		2019-09-30	 © 2009 California State University, Stanislaus
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Asteraceae	annual herb	Feb-Jun	None	None	G4T2	S2	1B.1			1994-01-01	 © 2013 Keir Morse

Orcuttia inaequalis	San Joaquin Valley Orcutt grass	Poaceae	annual herb	Apr-Sep	FT	CE	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
Pseudobahia peirsonii	San Joaquin adobe sunburst	Asteraceae	annual herb	Feb-Apr	FT	CE	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
Puccinellia simplex	California alkali grass	Poaceae	annual herb	Mar-May	None	None	G2	S2	1B.2		2015-10-15	No Photo Available
Sagittaria sanfordii	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct(Nov)	None	None	G3	S3	1B.2	Yes	1984-01-01	 ©2013 Debra L. Cook
Tuctoria greenei	Greene's tuctoria	Poaceae	annual herb	May-Jul(Sep)	FE	CR	G1	S1	1B.1	Yes	1974-01-01	 ©2008 F. Gauna

Showing 1 to 23 of 23 entries

Suggested Citation:
California Native Plant Society, Rare Plant Program. 2023. Rare Plant Inventory (online edition, v9.5). Website https://www.rareplants.cnps.org [accessed 29 June 2023].

Appendix C - Cultural Resources Assessment

California
Historical
Resources
Information
System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

To: Emily Bowen
Crawford & Bowen Planning, Inc.
113 N. Church Street, Suite 310
Visalia, CA 93291

Record Search 23-225

Date: June 26, 2023

Re: Dinuba El Monte Commercial and Residential Development Project

County: Tulare

Map(s): Reedley and Orange Cove South 7.5'

CULTURAL RESOURCES RECORDS SEARCH

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.

The following are the results of a search of the cultural resource files at the Southern San Joaquin Valley Information Center. These files include known and recorded cultural resources sites, inventory and excavation reports filed with this office, and resources listed on the National Register of Historic Places, the OHP Built Environment Resources Directory, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest. Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the OHP 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.

PRIOR CULTURAL RESOURCE STUDIES CONDUCTED WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there has been no previous cultural resource studies completed within the project area. There have been five studies completed within the one-half mile radius: See the attached list.

KNOWN/RECORDED CULTURAL RESOURCES WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there is one recorded resource within the project area. There are 28 additional recorded resources within the one-half mile radius: See the attached list. These resources consist of single-family properties, commercial buildings, and a religious building.

There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, for the California State Historic Landmarks.

COMMENTS AND RECOMMENDATIONS

We understand the project intends to develop 99 single-family residential units and approximately 4.74 acres of commercial area. Further, we understand the project area is currently vacant land. Because this project area has not been previously studied for cultural resources, it is unknown if any are present. As such, prior to ground disturbance activities, we recommend a qualified, professional consultant conduct a field survey to determine if cultural resources are present. A list of qualified consultants can be found at www.chrisinfo.org.

We also recommend that you contact the Native American Heritage Commission in Sacramento. They will provide you with a current list of Native American individuals/organizations that can assist you with information regarding cultural resources that may not be included in the CHRIS Inventory and that may be of concern to the Native groups in the area. The Commission can consult their "Sacred Lands Inventory" file to determine what sacred resources, if any, exist within this project area and the way in which these resources might be managed. Finally, please consult with the lead agency on this project to determine if any other cultural resource investigation is required. If you need any additional information or have any questions or concerns, please contact our office at (661) 654-2289.

By:

Jeremy E David, Assistant Coordinator

Date: June 26, 2023

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

SSJVIC Record Search 23-225

Reports in PA:	Reports in 0.5 Radius:	Resources in PA:	Resources in 0.5 Radius:
None	TU-00181	P-54-005011	P-54-004912
	TU-00405		P-54-004917
	TU-01684		P-54-004918
	TU-01765		P-54-004966
	TU-01822		P-54-004967
			P-54-004968
			P-54-004971
			P-54-004973
			P-54-004974
			P-54-004975
			P-54-004976
			P-54-004977
			P-54-004978
			P-54-004979
			P-54-004980
			P-54-004981
			P-54-004982
			P-54-004983
			P-54-004984
			P-54-004985
			P-54-004990
			P-54-004991
			P-54-005012
			P-54-005013
			P-54-005014
			P-54-005015
			P-54-005016
			P-54-005316

Appendix D - Traffic Impact Study

Project No: 524-35

TRAFFIC STUDY

MIXED-USE DEVELOPMENT

LOCATED ON THE NORTHEAST CORNER OF EL MONTE WAY & CRAWFORD AVE

DINUBA, CA

Prepared for:

CRAWFORD & BOWEN PLANNING, INC.

October 2023

Prepared by:

RUETTGERS & SCHULER CIVIL ENGINEERS

1800 30TH STREET, SUITE 260
BAKERSFIELD, CA 93301

Ian J. Parks, RCE 51825

REGISTERED PROFESSIONAL ENGINEER
IAN JEFFREY PARKS
No. C58155
Exp. 6-30-24
CIVIL
STATE OF CALIFORNIA

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INTRODUCTION

The purpose of this study is to evaluate the potential traffic impacts of a proposed mixed-use development located on the northeast corner of El Monte Way and Crawford Avenue in Dinuba, CA.

The proposed project consists of 96 single-family dwelling units and 82,600 square feet of retail shopping. A vicinity map and location map are presented in Figures 1 and 2, respectively.

A. Land Use, Site and Study Area Boundaries

The existing zoning is R-1-6 (One-Family Residential) and C-3 (Commercial) and the existing land use is Medium Residential and Neighborhood Commercial. No changes to the land use or zoning are planned.

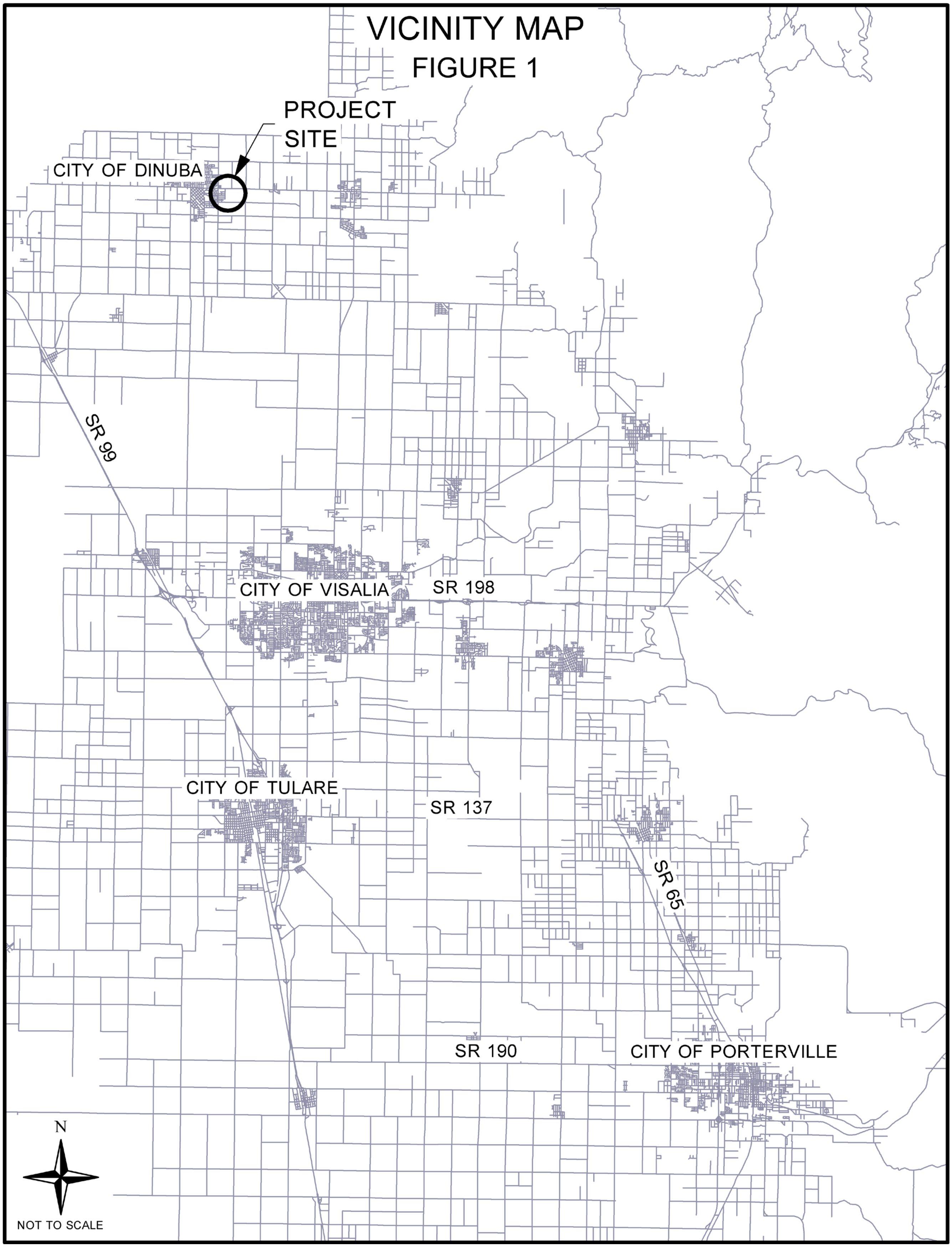
A total of seven intersections are included in the study: four stop-controlled and three signalized. The scope is based on a threshold of 50 project trips as defined in the Caltrans *Guide for the Preparation of Traffic Impact Studies*. Additionally, intersections were studied that were directly related to or adjacent to the project.

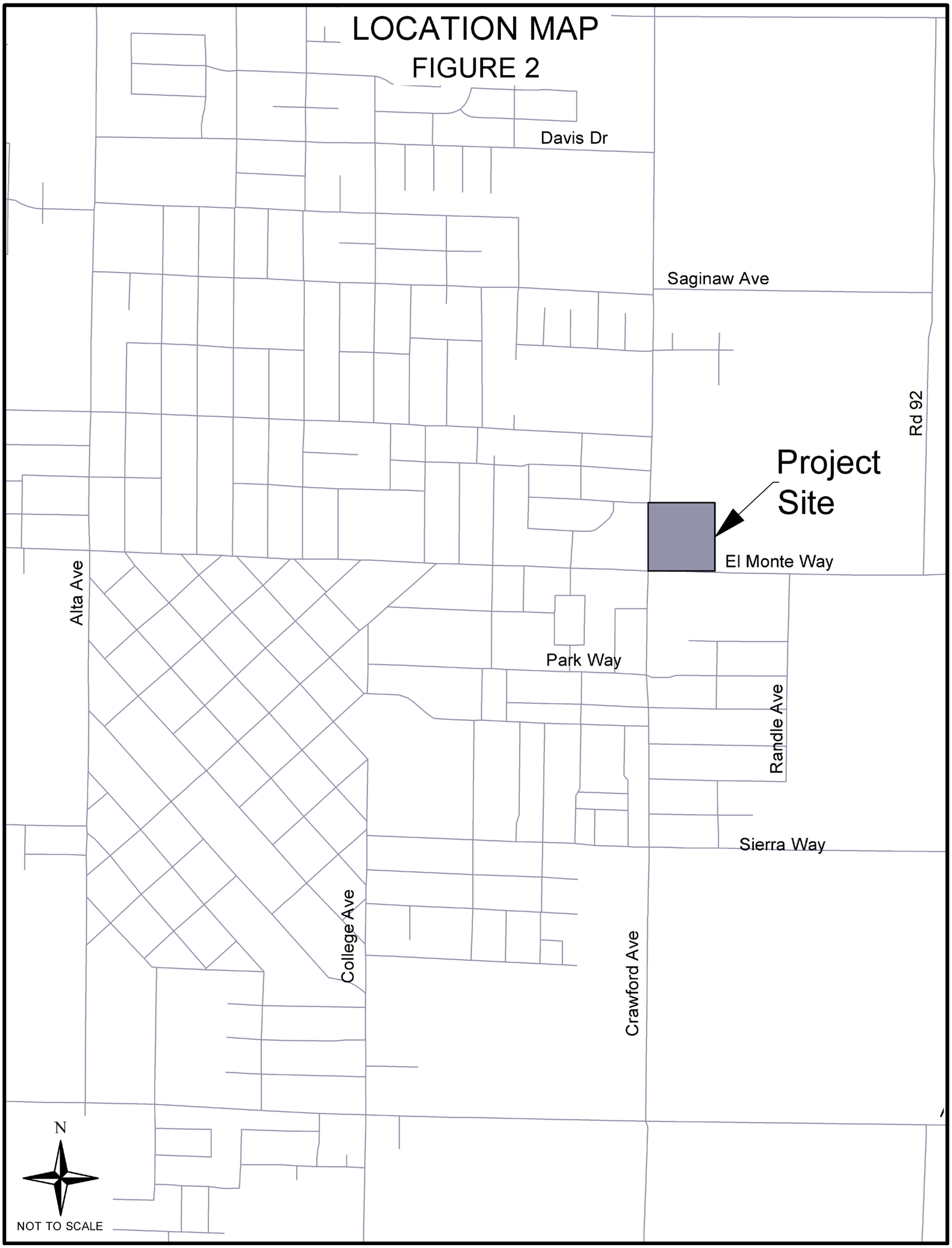
B. Existing Site Uses and Site Access

The site is currently vacant land. As currently planned, access to the proposed commercial would be provided along El Monte Way and access to the proposed residential development would be provided along Crawford Avenue. A conceptual site plan is shown in Figure 3.

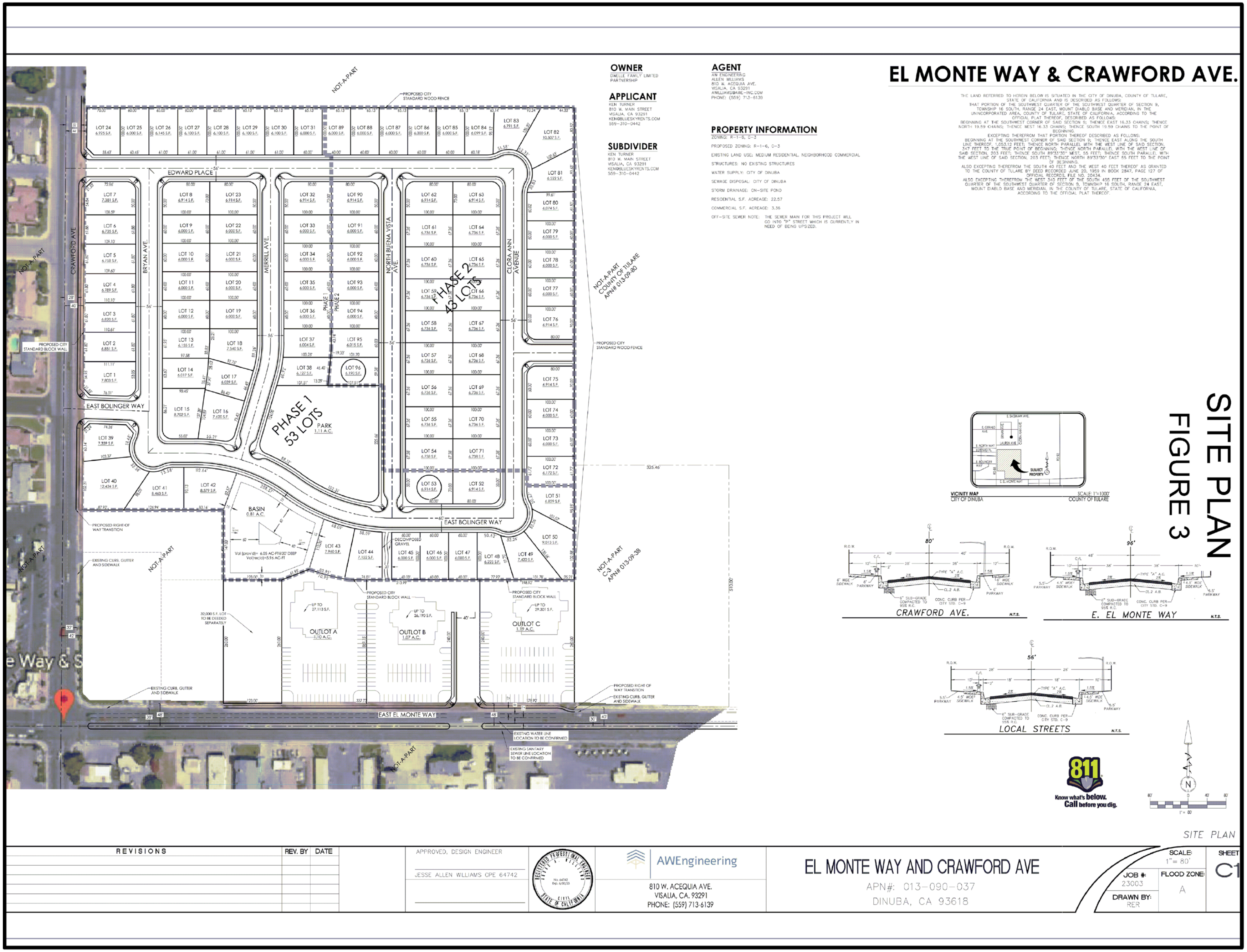
C. Existing Uses in Vicinity of the Site

Residential land uses exist to the west, north, and south of the proposed project. Agricultural land uses exist to the east of the project. There are also commercial and industrial land uses in the vicinity of the project.


VICINITY MAP
FIGURE 1
PROJECT SITE
CITY OF DINUBA
SR 99
CITY OF VISALIA
SR 198
CITY OF TULARE
SR 137
SR 65
SR 190
CITY OF PORTERVILLE
N
NOT TO SCALE



Ruettgers & Schuler Civil Engineers


EL MONTE WAY & CRAWFORD AVE.
OWNER
APPLICANT
SUBDIVIDER
AGENT
PROPERTY INFORMATION
SITE PLAN
FIGURE 3
PHASE 1
53 LOTS
PHASE 2
43 LOTS
PARK
1.11 A.C.
BASIN
0.81 A.C.
EDWARD PLACE
EAST BOLINGER WAY
CRAWFORD AVE
BRYAN AVE.
MERRILL AVE.
NORTH BUENA VISTA AVE.
CLORA ANN AVENUE
EAST EL MONTE WAY
OUTLOT A
OUTLOT B
OUTLOT C
NOT-A-PART
VICINITY MAP
CITY OF DINUBA
COUNTY OF TULARE
CRAWFORD AVE.
E. EL MONTE WAY
LOCAL STREETS
811
Know what's below.
Call before you dig.
SITE PLAN
REVISIONS
REV. BY
DATE
APPROVED, DESIGN ENGINEER
JESSE ALLEN WILLIAMS CPE 64742
AWEngineering
810 W. ACEQUIA AVE.
VISALIA, CA. 93291
PHONE: (559) 713-6139
EL MONTE WAY AND CRAWFORD AVE
APN#: 013-090-037
DINUBA, CA 93618
SCALE:
1" = 80'
SHEET
C1
JOB #:
23003
FLOOD ZONE:
A
DRAWN BY:
RER

D. Roadway Descriptions

Alta Avenue is a north-south arterial that extends throughout the City of Dinuba. In the vicinity of the project it exists as a four-lane roadway and provides access to residential, commercial, and agricultural land uses.

Crawford Avenue is a north-south arterial that extends from Avenue 384 to E American Avenue. In the vicinity of the project it exists as a two-lane roadway with curb and gutter. Crawford Avenue provides access to commercial, residential, and agricultural land uses.

El Monte Way is an east-west arterial that extends west from Road 72 through the City of Orosi. In the vicinity of the project it exists as four-lane roadway with curb and gutter. El Monte Way provides access to commercial, residential, and agricultural land uses.

Lincoln Avenue is a north-south collector that extends from Avenue 424 to El Monte Way. Lincoln Avenue exists as a two-lane roadway and provides access to residential land uses.

Perry Avenue is a north-south local roadway that extends from Millard Way to El Monte Way. Perry Avenue provides access to residential land uses.

Saginaw Avenue is an east-west collector that extends from Alta Avenue to Road 92. In the vicinity of the project it exists as two-lane roadway and provides access to residential, educational, commercial, and agricultural land uses.

Sierra Way is an east-west collector that extends from College Avenue to Road 112. In the vicinity of the project it exists as two-lane roadway and provides access to residential, educational, commercial, and agricultural land uses.

Tulare Avenue is a primarily north-south collector that extends south from El Monte Way. In the vicinity of the project it exists as a two-lane roadway and provides access to residential, religious, and commercial land uses.

PROJECT TRIP GENERATION AND DESIGN HOUR VOLUMES

The trip generation and design hour volumes for the residential and medical development were calculated using the Institute of Transportation Engineers (ITE) Trip Generation, 11th Edition. The ADT, AM and PM peak hour rate equations, and peak hour directional splits for ITE Land Use Codes 210 (Single-Family Detached Housing) and 821 (Shopping Plaza 40-150k) were used to estimate the project traffic.

Table 1
Project Trip Generation

General Information			Daily Trips		AM Peak Hour Trips			PM Peak Hour Trips		
ITE Code	Development Type	Variable	ADT RATE	ADT	Rate	In % Split/ Trips	Out % Split/ Trips	Rate	In % Split/ Trips	Out % Split/ Trips
210	Single-Family detached	96 Dwelling Units	eq	972	eq	25% 18	75% 54	eq	63% 60	37% 36
821	Shopping Plaza (40-150k)	82.6 1000 sq ft GLA	eq	7770	3.53	62% 181	38% 111	9.03	48% 361	52% 391
sub-total				8,742		199	165		421	427
Adjustments										
Capture		5%		437		9	6		18	20
Pass-by		15%		1,311		27	17		54	59
Total				6,994		163	142		349	348

TRIP DISTRIBUTION AND ASSIGNMENT

The project trip distribution in Table 2 represents the most likely travel routes for traffic accessing the project. Project traffic distribution was estimated based on a review of the potential draw from population centers within the region and the types of land uses involved.

Table 2
Project Trip Distribution

Direction	Percent
North	20
East	5
South	20
West	55

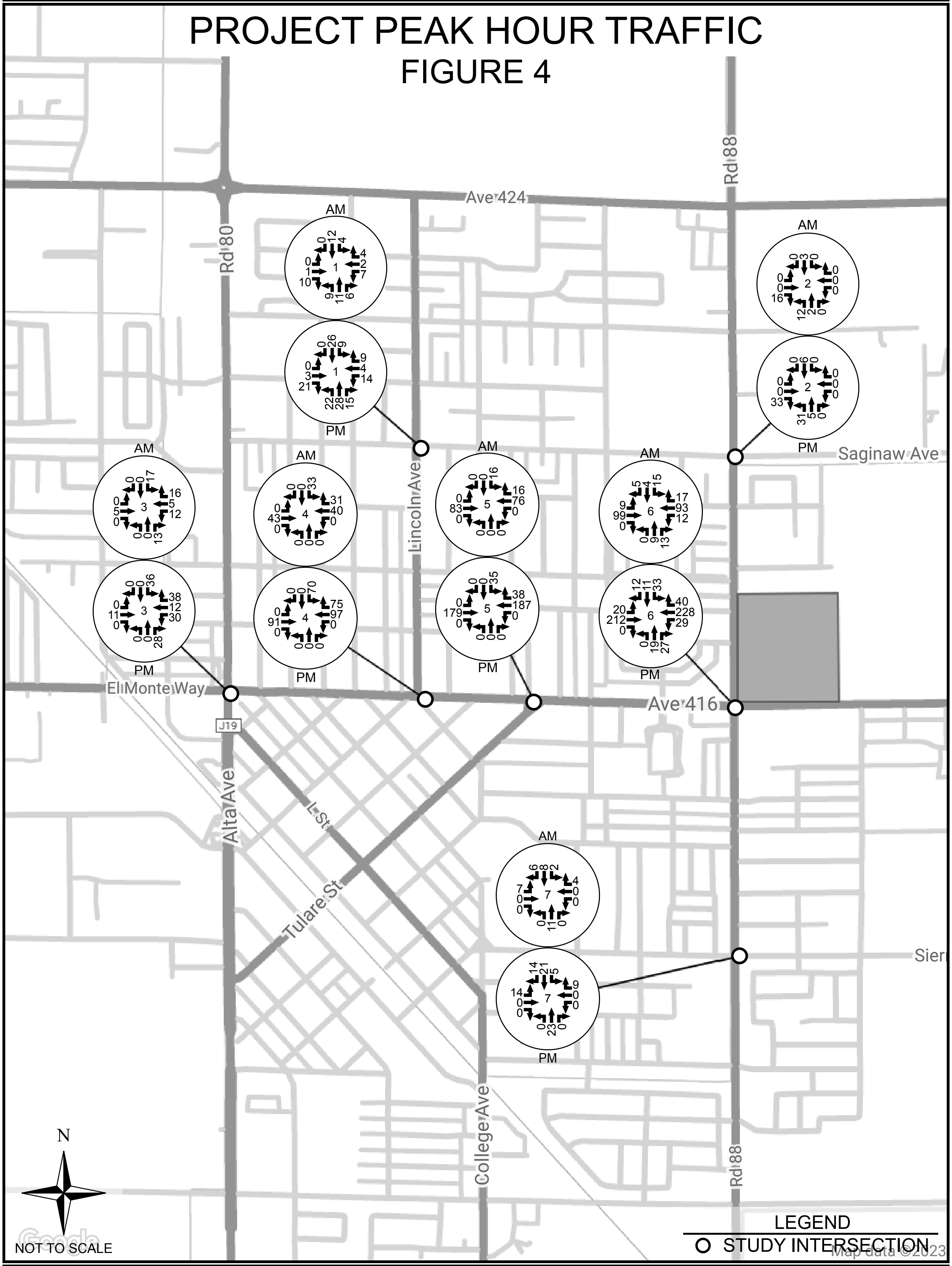
EXISTING AND FUTURE TRAFFIC

Weekday peak hour turning movements were counted at the following intersections in August 2023 (see Appendix for count data).

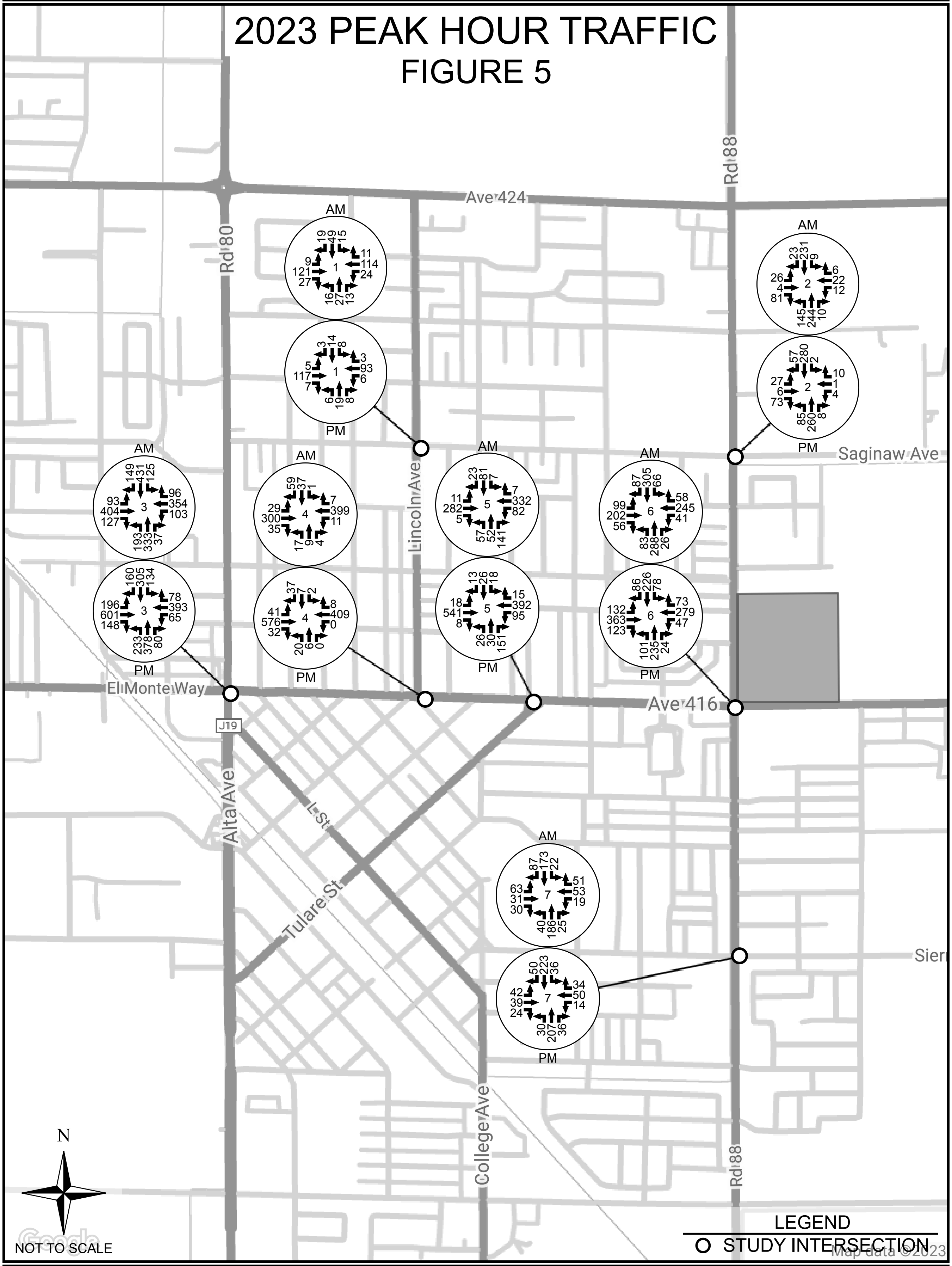
Traffic counts were conducted between the hours 6:00 to 8:00 AM and 4:00 to 6:00 PM and are shown in Figure 5. Existing + Project peak hour volumes are shown in Figure 6.

Annual growth rates ranging between 1.50% and 4.06% were applied to existing traffic volumes to estimate future traffic volumes for the year 2043. These growth rates were estimated based on a review of existing and approved future developments in the vicinity of the project and TCAG traffic model data. Future peak hour volumes are shown in Figures 7 and 8.

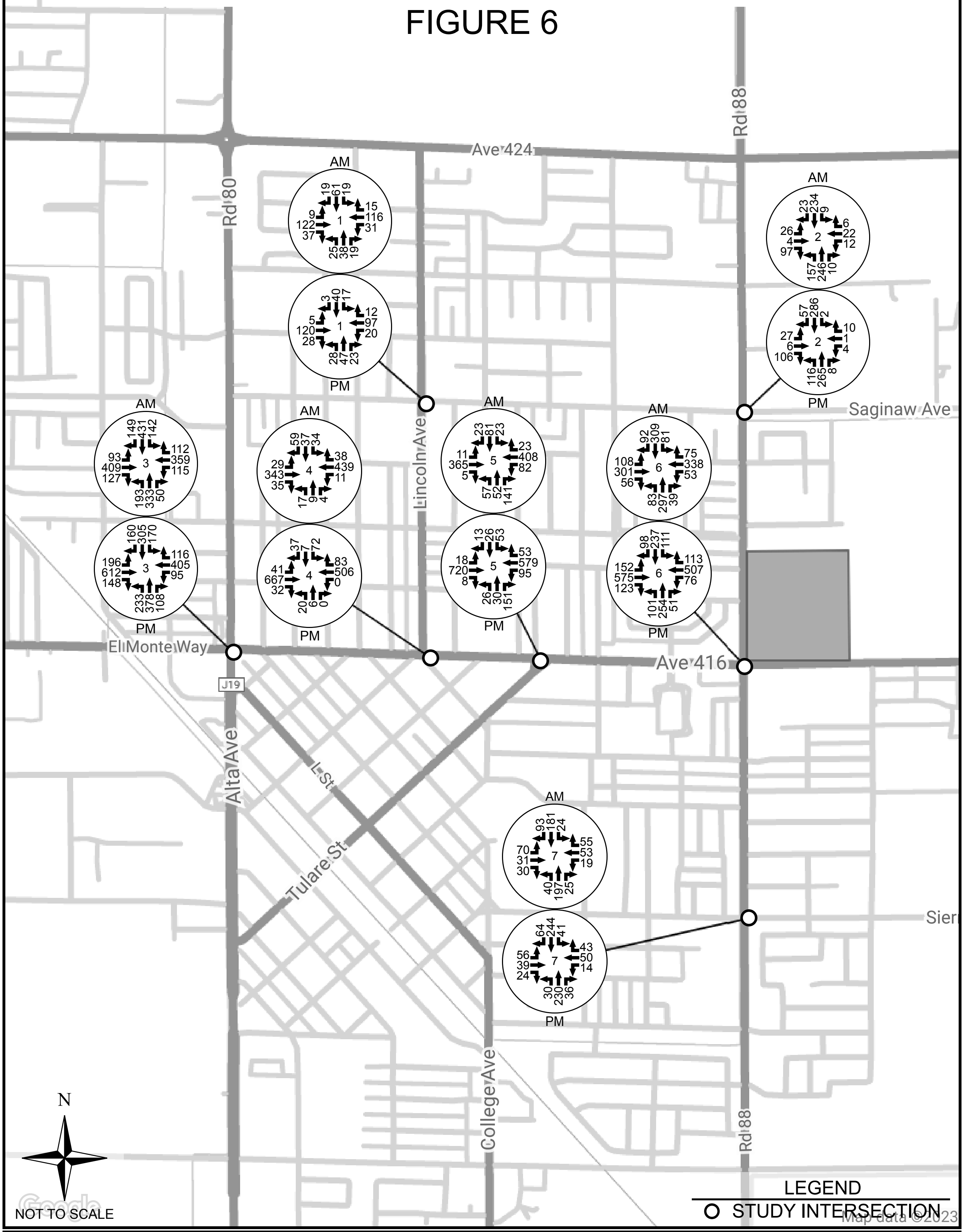
PROJECT PEAK HOUR TRAFFIC
FIGURE 4



2023 PEAK HOUR TRAFFIC
FIGURE 5

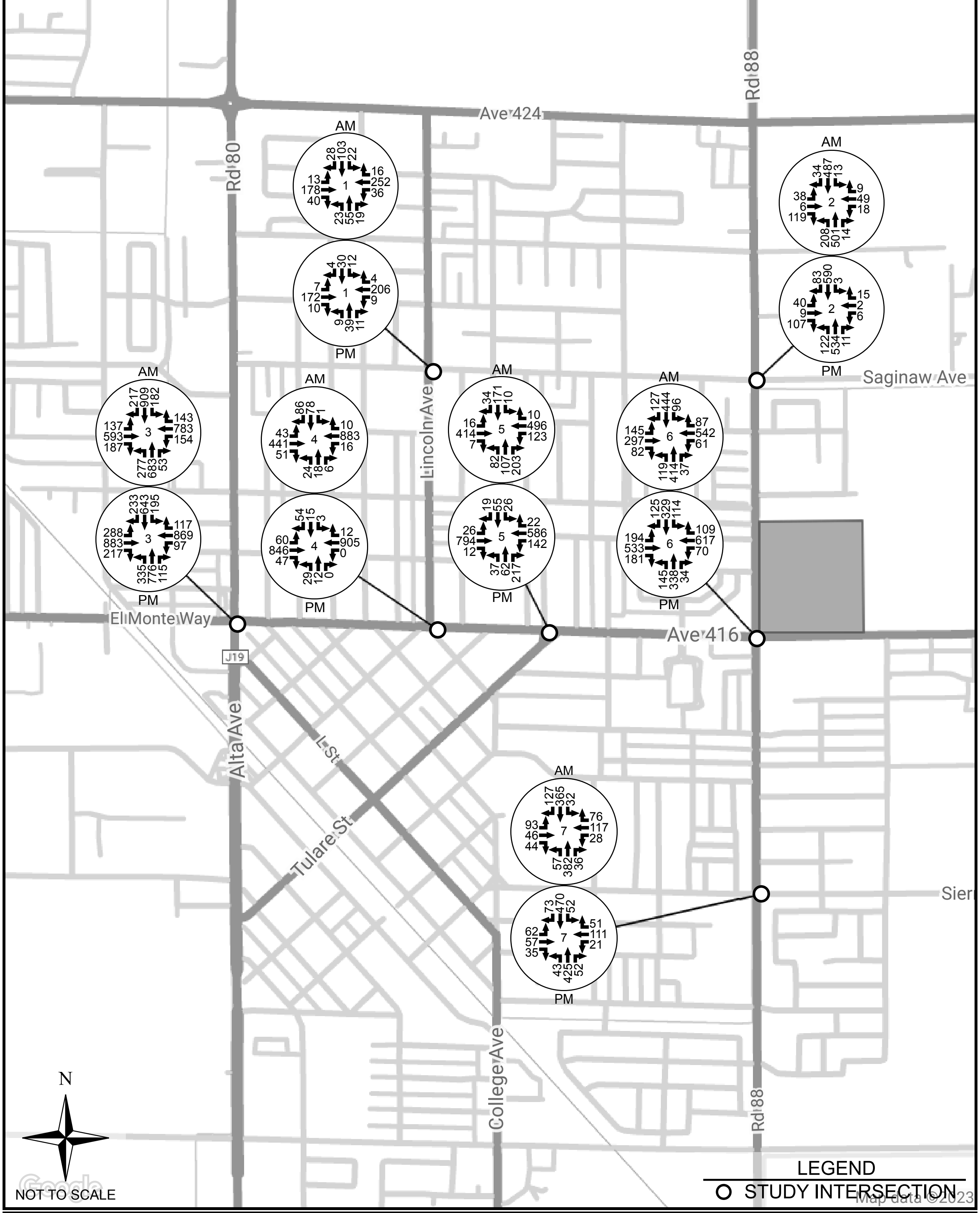


2023+PROJECT PEAK HOUR TRAFFIC
FIGURE 6



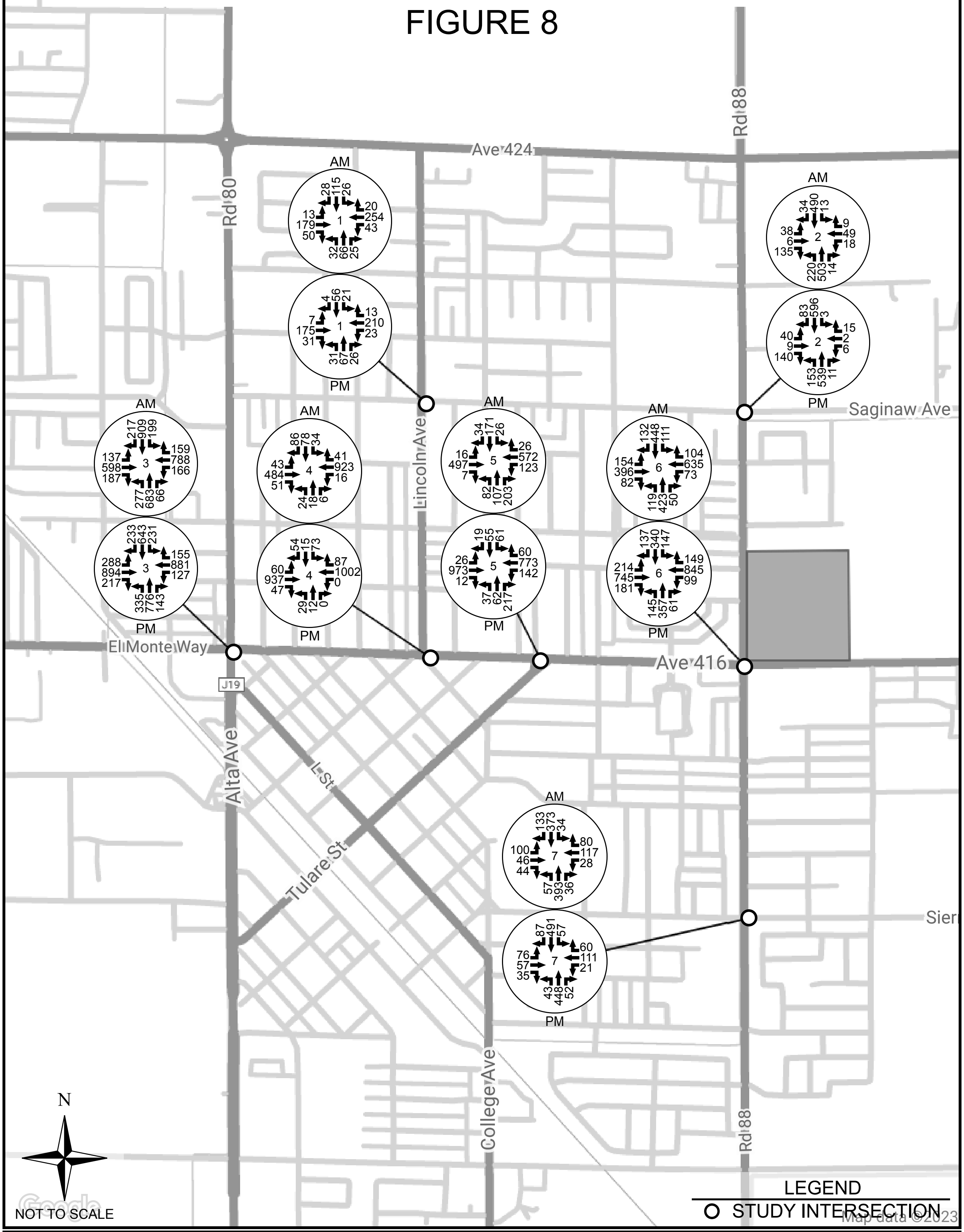
RUETTGERS & SCHULER CIVIL ENGINEERS

2043 PEAK HOUR TRAFFIC
FIGURE 7



RUETTGERS & SCHULER CIVIL ENGINEERS

2043+PROJECT PEAK HOUR TRAFFIC
FIGURE 8



RUETTGERS & SCHULER CIVIL ENGINEERS

INTERSECTION ANALYSIS

A capacity analysis of the study intersections was conducted using Synchro software from Trafficware. This software utilizes the capacity analysis methodology in the Transportation Research Board's Highway Capacity Manual 2010 (HCM 2010). The analysis was performed for each of the following traffic scenarios.

- Existing (2023)
- Existing (2023) + Project
- Future (2043)
- Future (2043) + Project

Level of service (LOS) criteria for unsignalized and signalized intersections, as defined in HCM 2010, are presented in the tables below. The Tulare County Regional Transportation Plan designates LOS D as the minimum acceptable intersection peak hour level of service.

LEVEL OF SERVICE CRITERIA
UNSIGNALIZED INTERSECTION

Average Control Delay (sec/veh)	Level of Service	Expected Delay to Minor Street Traffic
≤ 10	A	Little or no delay
> 10 and ≤ 15	B	Short traffic delays
> 15 and ≤ 25	C	Average traffic delays
> 25 and ≤ 35	D	Long traffic delays
> 35 and ≤ 50	E	Very long traffic delays
> 50	F	Extreme delays

LEVEL OF SERVICE CRITERIA
SIGNALIZED INTERSECTIONS

Volume/Capacity	Control Delay (sec/veh)	Level of Service
< 0.60	≤ 10	A
0.61 - 0.70	> 10 and ≤ 20	B
0.71 - 0.80	> 20 and ≤ 35	C
0.81 - 0.90	> 35 and ≤ 55	D
0.91 - 1.00	> 55 and ≤ 80	E
> 1.0	> 80	F

Peak hour level of service for the study intersections is presented in Tables 3a and 3b. The City of Dinuba Circulation Element states that the peak hour level of service for intersections shall be no lower than LOS C for urban areas. It should be noted that LOS D is allowed if the intersection is currently operating at an LOS D prior to the addition of the project traffic in the existing scenario.

Table 3a
PM Intersection Level of Service

#	Intersection	Control Type	2023	2023+ Project	2043	2043+ Project	2043+ Project w/Mitigation[1]
1	Lincoln Ave & Saginaw Ave	AWSC	A	A	A	A	-
2	Crawford Ave & Saginaw Ave	AWSC	B	B	E (47.7)	E (49.6)	B
3	Rd 80/Alta Ave & El Monte Way	Signal	D	D	D	D	-[2]
4	Lincoln Ave & El Monte Way	NB SB	E (35.0) C	F (56.7) F (110.9)	F (>300) F (>300)	F (>300) F (>300)	C
5	Perry Ave & El Monte Way	Signal	C	C	C	C	-
6	Crawford Ave & El Monte Way	Signal	D	D	D	D	-[2]
7	Crawford Ave & Sierra Way	AWSC	B	B	F (53.0)	F (53.7)	B

[1]Mitigation shown in Table 6
[2]Mitigation not necessary due to LOS D in existing year scenario

Table 3b
AM Intersection Level of Service

#	Intersection	Control Type	2023	2023+ Project	2043	2043+ Project	2043+ Project w/Mitigation[1]
1	Lincoln Ave & Saginaw Ave	AWSC	A	A	B	B	-
2	Crawford Ave & Saginaw Ave	AWSC	B	B	E (45.0)	E (46.8)	B
3	Rd 80/Alta Ave & El Monte Way	Signal	C	C	C	C	-
4	Lincoln Ave & El Monte Way	NB SB	C C	D (26.5) D (26.2)	F (>300) F (>300)	F (>300) F (>300)	C
5	Perry Ave & El Monte Way	Signal	B	B	C	C	-
6	Crawford Ave & El Monte Way	Signal	D	D	D	D	-[2]
7	Crawford Ave & Sierra Way	AWSC	B	B	F (52.6)	F (53.1)	B

[1]Mitigation shown in Table 6
[2]Mitigation not necessary due to LOS D in existing year scenario

TRAFFIC SIGNAL WARRANT ANALYSIS

Peak hour signal warrants were evaluated for the unsignalized intersections within the study based on the 2014 California Manual on Uniform Traffic Control Devices (2014 CA MUTCD). Peak hour signal warrants assess delay to traffic on minor street approaches when entering or crossing a major street. Signal warrant analysis results are shown in Tables 4a and 4b.

Table 4a
Traffic Signal Warrants
Weekday PM Peak Hour

		2023			2023+Project			2043			2043+Project		
#	Intersection	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met
1	Lincoln Ave at Saginaw Ave	231	33	NO	282	98	NO	408	59	NO	459	124	NO
2	Crawford Ave at Saginaw Ave	692	106	NO	734	139	NO	1343	156	YES	1385	189	YES
4	Lincoln Ave at El Monte Way	1066	46	NO	1329	116	YES	1870	72	NO	2133	142	YES
7	Crawford Ave at Sierra Way	582	105	NO	645	119	NO	1115	183	YES	1178	192	YES

Table 4b
Traffic Signal Warrants
Weekday AM Peak Hour

		2023			2023+Project			2043			2043+Project		
#	Intersection	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met
1	Lincoln Ave at Saginaw Ave	306	83	NO	330	99	NO	535	153	NO	559	169	NO
2	Crawford Ave at Saginaw Ave	662	111	NO	679	127	NO	1257	163	YES	1274	179	YES
4	Lincoln Ave at El Monte Way	781	97	NO	895	130	YES	1444	165	YES	1558	198	YES
7	Crawford Ave at Sierra Way	533	124	NO	560	131	NO	999	221	YES	1026	225	YES

It is important to note that a signal warrant defines the minimum condition under which signalization of an intersection might be warranted. Meeting this threshold does not suggest traffic signals are required, but rather, that other traffic factors and conditions be considered in order to determine whether signals are truly justified.

It is also noted that signal warrants do not necessarily correlate with level of service. An intersection may satisfy a signal warrant condition and operate at or above an acceptable level of service or operate below an acceptable level of service and not meet signal warrant criteria.

ROADWAY ANALYSIS

A capacity analysis of the study roadways was conducted using Table 4 in the State of Florida Department of Transportation *Quality/Level of Service Handbook* dated June 2020 (see Appendix). The City of Dinuba Circulation Element states that the peak hour level of service for roadways shall be no lower than LOS C for urban areas. It should be noted that LOS D is allowed if a roadway segment is currently operating at an LOS D prior to the addition of the project traffic in the existing scenario. The analysis was performed for the following AM and PM traffic scenarios:

- Existing (2023)
- Existing (2023) + Project
- Future Cumulative (2043)
- Future Cumulative (2043) + Project

Table 5a
PM ROADWAY LEVEL OF SERVICE

Street	2023 Two-Way LOS		2023+Project Two-Way LOS		2043 Two-Way LOS		2043+Project Two-Way LOS	
	VOL	LOS	VOL	LOS	VOL	LOS	VOL	LOS
El Monte Way: Alta Ave - Lincoln Ave	1351	C	1539	C	2276	D	2464	D
El Monte Way: Lincoln Ave - Tulare St	998	C	1364	C	1766	D	2132	D
El Monte Way: Tulare St - Rd 88	1212	C	1684	C	1795	C	2267	C
Lincoln Avenue: Saginaw Ave - Ave 416	101	C	246	C	156	C	301	C
Crawford Ave: Ave 420 - Ave 416	830	C	965	C	1370	C	1505	C
Crawford Ave: Ave 416 - Sierra Wy	756	C	842	C	1133	C	1219	C

Table 5b
AM ROADWAY LEVEL OF SERVICE

Street	2023 Two-Way LOS		2023+Project Two-Way LOS		2043 Two-Way LOS		2043+Project Two-Way LOS	
	VOL	LOS	VOL	LOS	VOL	LOS	VOL	LOS
El Monte Way: Alta Ave - Lincoln Ave	1119	C	1202	C	1908	D	1991	D
El Monte Way: Lincoln Ave - Tulare St	722	C	881	C	1357	C	1516	C
El Monte Way: Tulare St - Rd 88	851	C	1057	C	1312	C	1518	C
Lincoln Avenue: Saginaw Ave - Ave 416	156	C	220	C	276	C	340	C
Crawford Ave: Ave 420 - Ave 416	903	C	936	C	1370	C	1403	C
Crawford Ave: Ave 416 - Sierra Wy	799	C	837	C	1097	C	1135	C

IMPROVEMENTS

Intersection and roadway improvements needed by the year 2043 to maintain or improve the operational level of service of the street system in the vicinity of the project are presented in Tables 6a and 6b.

Table 6a
Future Intersection Improvements

#	Intersection	Total Improvements Required by 2043	Project Share
2	Crawford Ave & Saginaw Ave	Signal	9.57%
4	Lincoln Ave & El Monte Way	Signal	28.27%
7	Crawford Ave & Sierra Way	Signal	11.42%

Table 6b
Future Roadway Improvements

Roadway Segment	Total Improvements Required by 2043	Project Share
El Monte Way: Alta Ave – Lincoln Ave	Add Two Lanes	16.89%
El Monte Way: Lincoln Ave – Tulare St	Add Two Lanes	32.28%

Project percent share is calculated using the following formula:

$$\% \text{ Share} = \frac{\text{Project Traffic}}{\text{(Future+Project Traffic) - Existing Traffic}} \times 100\%$$

VMT ANALYSIS

An evaluation of vehicle miles traveled (VMT) for project traffic was conducted in accordance with California Environmental Quality Act (CEQA) requirements. The City of Dinuban has adopted the "County of Tulare SB 743 Guidelines", dated June 8, 2020, which contains recommendations regarding VMT assessment, significance thresholds and mitigation measures.

Analysis

The proposed project includes both commercial and residential components. The commercial portion of the project is considered locally serving retail as defined by the City of Tulare SB 743 guidelines, dated June 8, 2020. Locally serving retail screens out of analysis and is considered to have a less than significant VMT impact. Therefore, only the vehicle trips generated by the residential portion of the project were used in the VMT analysis and mitigation.

Baseline VMT was determined utilizing data from the California Statewide Travel Demand Model (CSTDM). The proposed residential project is located in Traffic Analysis Zone (TAZ) 2776, which has an average VMT/capita of 11.95 miles. The proposed residential project is considered a typical project within the TAZ and therefore the project would be expected to have the same VMT per capita. There are no special considerations with the project to assume the project would produce a VMT/capita lower than the average for the TAZ. The threshold of significance for residential project VMT/capita is if the project VMT is below the average in the TAZ where the project is located. Since VMT/capita is assumed to be equal to the average for the aforementioned zone, it is anticipated that the proposed project will have a significant transportation impact prior to mitigation.

Mitigation

The Tulare County guidelines include detailed instructions for mitigation if a project has significant impacts. The guidelines state "The preferred method of VMT mitigation in Tulare County is for project applicants to provide transportation improvements that facilitate travel by walking, bicycling, or transit." In accordance with these guidelines, a survey was conducted within a half mile of the project to determine any pedestrian, bicycle or transit facilities deficiencies exist. After review, ADA compliant wheelchair ramps are proposed to be constructed. The identified improvements include the following and are shown in Figure 9:

- Two (2) ADA compliant curb ramps at Roberts Place & Bolinger Way
- Two (2) ADA compliant curb ramps at Akers Way & Bolinger Way
- Two (2) ADA compliant curb ramps at Akers Way & Palm Drive

The guidelines include a minimum cost for mitigation of $20 per daily trip generated by the project or 0.5% of the total construction cost of the project (not including land acquisition). The mixed-use project includes both residential and commercial land uses but it is important to note that the commercial portion of the project will “screen out” of any mitigation measures due to being classified as locally-serving retail. As shown in Table 1, the project, excluding the locally-serving retail, is anticipated to generate 972 daily trips, which equates to a target value of improvements of $19,440. The total mitigation cost is estimated at approximately $21,600 with a 20% contingency.

Pursuant to the guidelines, if a project provides mitigation which meets the minimum threshold listed above, the project can presume a 1% reduction in VMT. The assumed VMT/capita reduction is 1% of 11.95 or 0.1195. The resulting VMT/capita after mitigation is 11.83 which is below the average VMT/capita in the TAZ which the project is located. After mitigation, the project will have a less than significant transportation impact.


VMT MITIGATION
FIGURE 9
Roberts Pl
2 ADA Ramps
Bolinger Way
2 ADA Ramps
Project Site
2 ADA Ramps
Akers Way
Palm Dr
Crawford Ave
N
NOT TO SCALE

SUMMARY AND CONCLUSIONS

The purpose of this study is to evaluate the potential traffic impacts of a proposed mixed-use development located on the northeast corner of El Monte Way and Crawford Avenue in Dinuba, CA.

All seven study intersections currently operate at or above LOS D during peak hours with and without project traffic in 2023.

The intersections of Crawford Avenue & Saginaw Avenue, Lincoln Avenue & El Monte Way, and Crawford Avenue & Sierra Way are anticipated to operate below LOS D in 2043 prior to the addition of project traffic. It is important to note that since the intersections degrade to LOS D in 2043 and do not currently operate at LOS D, improvements are required to operate at LOS C or better.

All roadway segments within the scope of the study currently operate above LOS C during peak hours prior to, and with the addition of project traffic in 2023.

The roadway segments of El Monte Way from Alta Avenue to Lincoln Avenue and El Monte Way from Lincoln Avenue to Tulare Street are anticipated to operate at LOS D in 2043 prior to the addition of project traffic.

Project VMT analysis showed a VMT which was equal to the existing local VMT in the area, which indicates a transportation impact under CEQA. With implementation of the mitigation measures identified above for reduction of VMT, the project will have a less than significant transportation impact.

REFERENCES

1. Highway Capacity Manual, Special Report 209, Transportation Research Board
2. California Manual on Uniform Traffic Control Devices for Streets and Highways, 2012 Edition, Federal Highway Administration (FHA)
3. Caltrans Guide for the Preparation of Traffic Impact Studies, June 2001
4. City of Dinuba General Plan Policies Statement, September 23, 2008
5. County of Tulare SB 743 Guidelines, June 8, 2020
6. Technical Advisory on Evaluating Impacts in CEQA, Governor's Office of Planning and Research, December 2018
7. Trip Generation, 11th Edition, Institute of Transportation Engineers (ITE)

APPENDIX

Intersection 1
Lincoln Ave & Saginaw Ave

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	5	117	7	0	6	93	3	0	6	19	8	0	8	14	3
Future Vol, veh/h	0	5	117	7	0	6	93	3	0	6	19	8	0	8	14	3
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	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	5	127	8	0	7	101	3	0	7	21	9	0	9	15	3
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8	7.8	7.6	7.7
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	18%	4%	6%	32%
Vol Thru, %	58%	91%	91%	56%
Vol Right, %	24%	5%	3%	12%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	33	129	102	25
LT Vol	6	5	6	8
Through Vol	19	117	93	14
RT Vol	8	7	3	3
Lane Flow Rate	36	140	111	27
Geometry Grp	1	1	1	1
Degree of Util (X)	0.044	0.16	0.128	0.034
Departure Headway (Hd)	4.407	4.103	4.145	4.519
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	817	865	855	797
Service Time	2.408	2.172	2.219	2.519
HCM Lane V/C Ratio	0.044	0.162	0.13	0.034
HCM Control Delay	7.6	8	7.8	7.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.6	0.4	0.1

Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	5	120	28	0	20	97	12	0	28	47	23	0	17	40	3
Future Vol, veh/h	0	5	120	28	0	20	97	12	0	28	47	23	0	17	40	3
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	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	5	130	30	0	22	105	13	0	30	51	25	0	18	43	3
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.5	8.5	8.4	8.3
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	29%	3%	16%	28%
Vol Thru, %	48%	78%	75%	67%
Vol Right, %	23%	18%	9%	5%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	98	153	129	60
LT Vol	28	5	20	17
Through Vol	47	120	97	40
RT Vol	23	28	12	3
Lane Flow Rate	107	166	140	65
Geometry Grp	1	1	1	1
Degree of Util (X)	0.137	0.203	0.175	0.087
Departure Headway (Hd)	4.627	4.401	4.505	4.788
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	774	817	796	748
Service Time	2.656	2.426	2.531	2.819
HCM Lane V/C Ratio	0.138	0.203	0.176	0.087
HCM Control Delay	8.4	8.5	8.5	8.3
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.5	0.8	0.6	0.3

Intersection	
Intersection Delay, s/veh	9
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	7	172	10	0	9	206	4	0	9	39	11	0	12	30	4
Future Vol, veh/h	0	7	172	10	0	9	206	4	0	9	39	11	0	12	30	4
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	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	8	187	11	0	10	224	4	0	10	42	12	0	13	33	4
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9	9.3	8.4	8.4
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	15%	4%	4%	26%
Vol Thru, %	66%	91%	94%	65%
Vol Right, %	19%	5%	2%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	59	189	219	46
LT Vol	9	7	9	12
Through Vol	39	172	206	30
RT Vol	11	10	4	4
Lane Flow Rate	64	205	238	50
Geometry Grp	1	1	1	1
Degree of Util (X)	0.088	0.254	0.294	0.07
Departure Headway (Hd)	4.916	4.454	4.441	5.017
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	727	805	809	713
Service Time	2.955	2.482	2.467	3.057
HCM Lane V/C Ratio	0.088	0.255	0.294	0.07
HCM Control Delay	8.4	9	9.3	8.4
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	1	1.2	0.2

Intersection	
Intersection Delay, s/veh	10
Intersection LOS	A

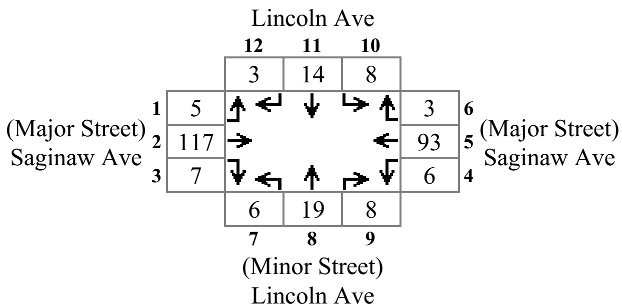
Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	7	175	31	0	23	210	13	0	31	67	26	0	21	56	4
Future Vol, veh/h	0	7	175	31	0	23	210	13	0	31	67	26	0	21	56	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	8	190	34	0	25	228	14	0	34	73	28	0	23	61	4
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.9	10.5	9.5	9.2
HCM LOS	A	B	A	A

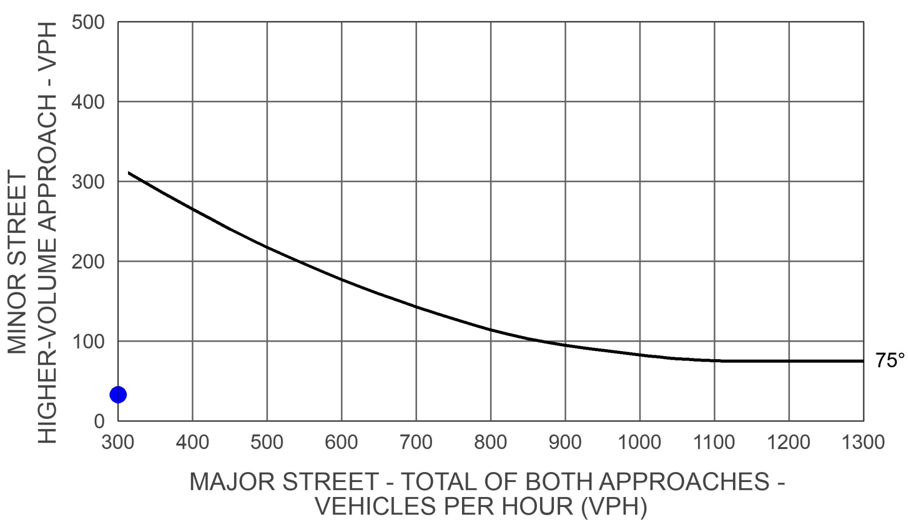
Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	25%	3%	9%	26%
Vol Thru, %	54%	82%	85%	69%
Vol Right, %	21%	15%	5%	5%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	124	213	246	81
LT Vol	31	7	23	21
Through Vol	67	175	210	56
RT Vol	26	31	13	4
Lane Flow Rate	135	232	267	88
Geometry Grp	1	1	1	1
Degree of Util (X)	0.193	0.306	0.355	0.13
Departure Headway (Hd)	5.152	4.753	4.775	5.322
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	689	750	749	666
Service Time	3.238	2.823	2.842	3.414
HCM Lane V/C Ratio	0.196	0.309	0.356	0.132
HCM Control Delay	9.5	9.9	10.5	9.2
HCM Lane LOS	A	A	B	A
HCM 95th-tile Q	0.7	1.3	1.6	0.4

Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Existing
Intersection #: 1

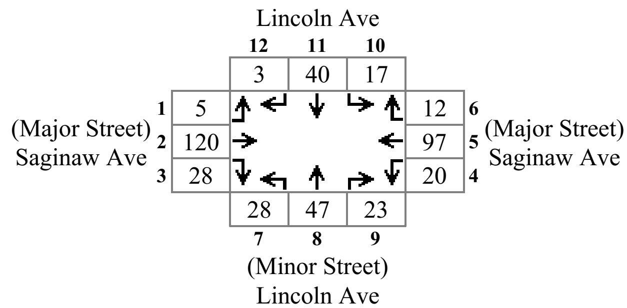


Major Total: 231
Minor High Volume: 33

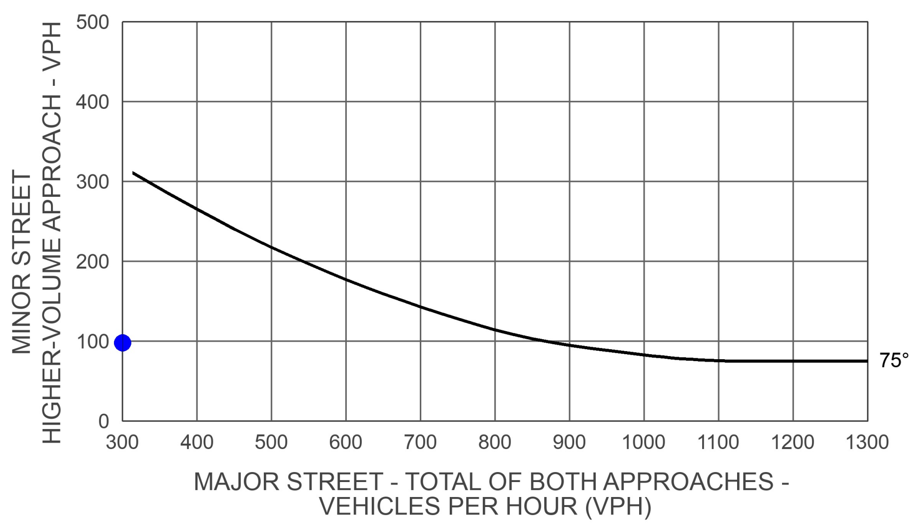


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Existing+Project
Intersection #: 1



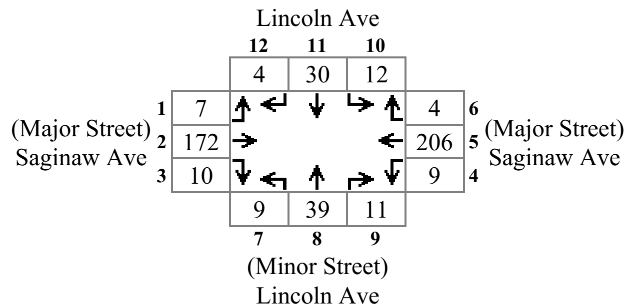
Major Total: 282
Minor High Volume: 98



Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

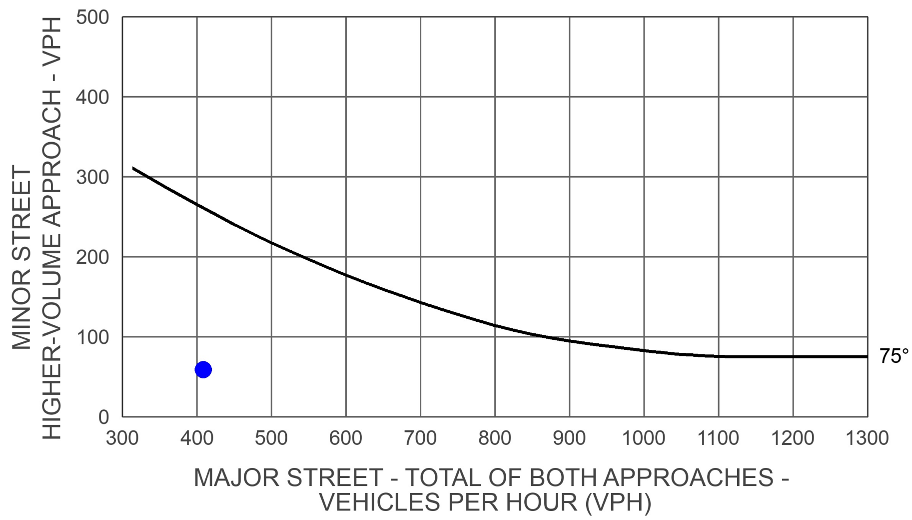
Scenario: PM Future

Intersection #: 1



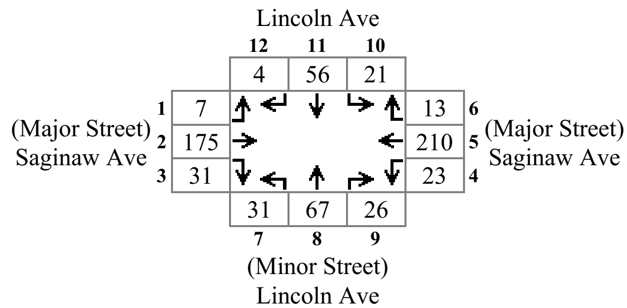
Major Total: 408

Minor High Volume: 59

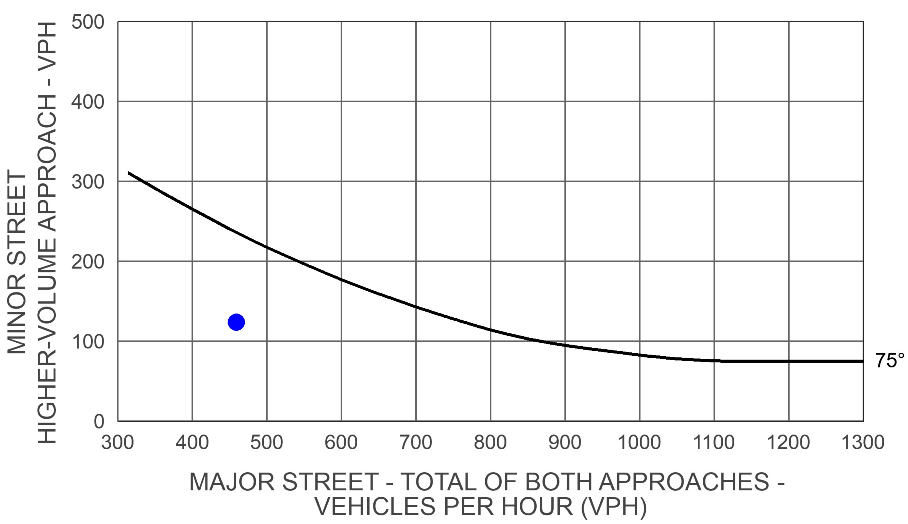


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future+Project
Intersection #: 1



Major Total: 459
Minor High Volume: 124



Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	9	121	27	0	24	114	11	0	16	27	13	0	15	49	19
Future Vol, veh/h	0	9	121	27	0	24	114	11	0	16	27	13	0	15	49	19
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	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	10	132	29	0	26	124	12	0	17	29	14	0	16	53	21
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.6	8.6	8.2	8.3
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	29%	6%	16%	18%
Vol Thru, %	48%	77%	77%	59%
Vol Right, %	23%	17%	7%	23%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	56	157	149	83
LT Vol	16	9	24	15
Through Vol	27	121	114	49
RT Vol	13	27	11	19
Lane Flow Rate	61	171	162	90
Geometry Grp	1	1	1	1
Degree of Util (X)	0.08	0.208	0.201	0.117
Departure Headway (Hd)	4.715	4.384	4.47	4.659
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	759	819	803	770
Service Time	2.747	2.408	2.495	2.689
HCM Lane V/C Ratio	0.08	0.209	0.202	0.117
HCM Control Delay	8.2	8.6	8.6	8.3
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.8	0.7	0.4

Intersection																
Intersection Delay, s/veh	8.8															
Intersection LOS	A															

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	9	122	37	0	31	116	15	0	25	38	19	0	19	61	19
Future Vol, veh/h	0	9	122	37	0	31	116	15	0	25	38	19	0	19	61	19
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	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	10	133	40	0	34	126	16	0	27	41	21	0	21	66	21
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.9	9	8.5	8.6
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	30%	5%	19%	19%
Vol Thru, %	46%	73%	72%	62%
Vol Right, %	23%	22%	9%	19%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	82	168	162	99
LT Vol	25	9	31	19
Through Vol	38	122	116	61
RT Vol	19	37	15	19
Lane Flow Rate	89	183	176	108
Geometry Grp	1	1	1	1
Degree of Util (X)	0.119	0.228	0.225	0.143
Departure Headway (Hd)	4.817	4.495	4.603	4.794
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	742	798	778	746
Service Time	2.862	2.53	2.638	2.838
HCM Lane V/C Ratio	0.12	0.229	0.226	0.145
HCM Control Delay	8.5	8.9	9	8.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.9	0.9	0.5

Intersection	
Intersection Delay, s/veh	11.3
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	13	178	40	0	36	252	16	0	23	55	19	0	22	103	28
Future Vol, veh/h	0	13	178	40	0	36	252	16	0	23	55	19	0	22	103	28
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	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	14	193	43	0	39	274	17	0	25	60	21	0	24	112	30
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.9	12.5	9.8	10.5
HCM LOS	B	B	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	24%	6%	12%	14%
Vol Thru, %	57%	77%	83%	67%
Vol Right, %	20%	17%	5%	18%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	97	231	304	153
LT Vol	23	13	36	22
Through Vol	55	178	252	103
RT Vol	19	40	16	28
Lane Flow Rate	105	251	330	166
Geometry Grp	1	1	1	1
Degree of Util (X)	0.166	0.356	0.466	0.256
Departure Headway (Hd)	5.664	5.1	5.072	5.535
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	633	706	710	649
Service Time	3.706	3.131	3.101	3.573
HCM Lane V/C Ratio	0.166	0.356	0.465	0.256
HCM Control Delay	9.8	10.9	12.5	10.5
HCM Lane LOS	A	B	B	B
HCM 95th-tile Q	0.6	1.6	2.5	1

Intersection	
Intersection Delay, s/veh	12.1
Intersection LOS	B

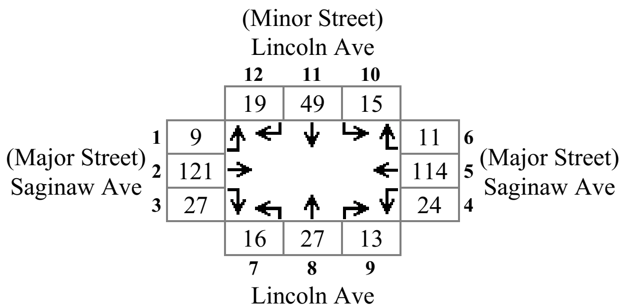
Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	13	179	50	0	43	254	20	0	32	66	25	0	26	115	28
Future Vol, veh/h	0	13	179	50	0	43	254	20	0	32	66	25	0	26	115	28
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	14	195	54	0	47	276	22	0	35	72	27	0	28	125	30
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	11.6	13.6	10.5	11.1
HCM LOS	B	B	B	B

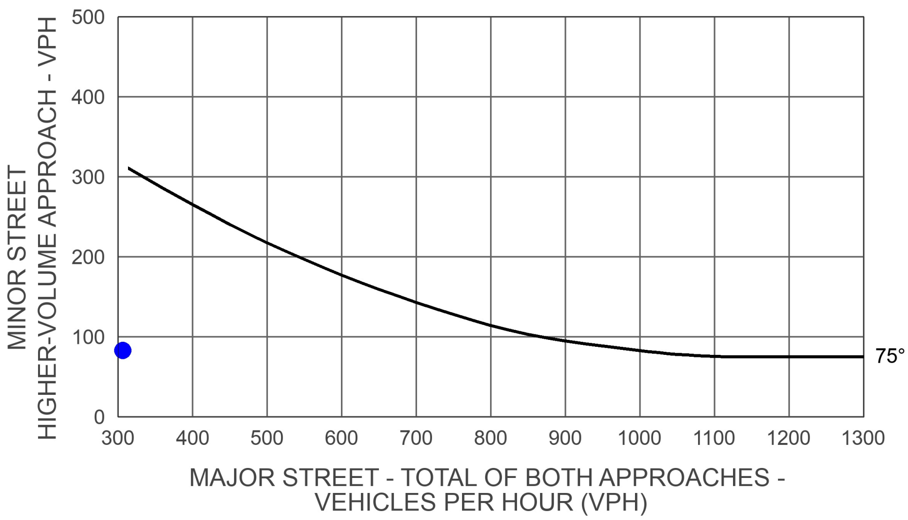
Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	26%	5%	14%	15%
Vol Thru, %	54%	74%	80%	68%
Vol Right, %	20%	21%	6%	17%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	123	242	317	169
LT Vol	32	13	43	26
Through Vol	66	179	254	115
RT Vol	25	50	20	28
Lane Flow Rate	134	263	345	184
Geometry Grp	1	1	1	1
Degree of Util (X)	0.216	0.386	0.504	0.292
Departure Headway (Hd)	5.826	5.287	5.263	5.726
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	614	679	682	626
Service Time	3.885	3.334	3.306	3.779
HCM Lane V/C Ratio	0.218	0.387	0.506	0.294
HCM Control Delay	10.5	11.6	13.6	11.1
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	0.8	1.8	2.9	1.2

Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Existing
Intersection #: 1

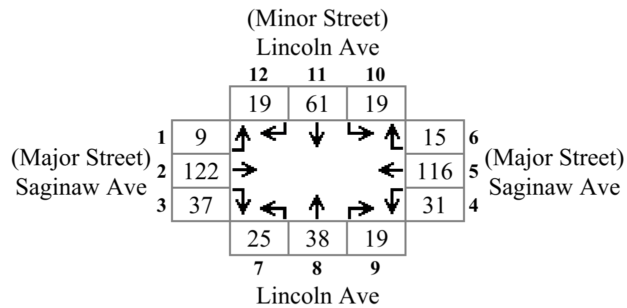


Major Total: 306
Minor High Volume: 83

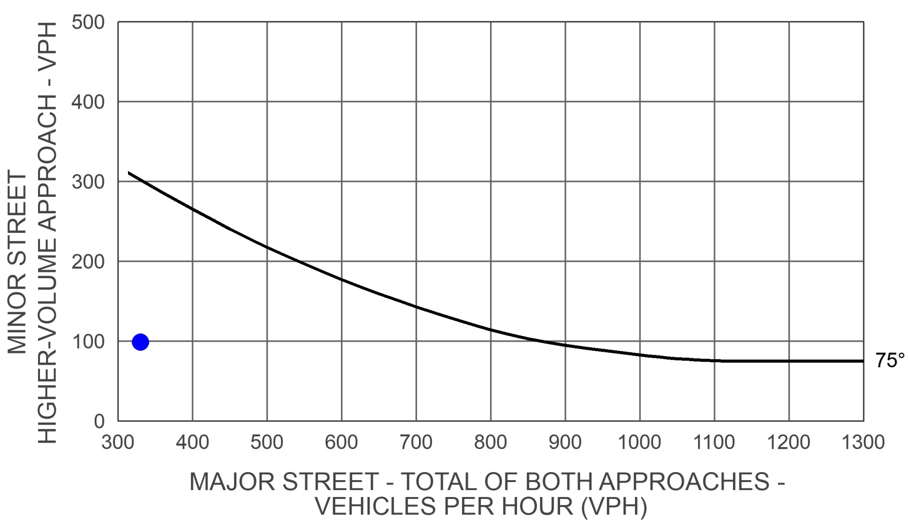


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Existing+Project
Intersection #: 1



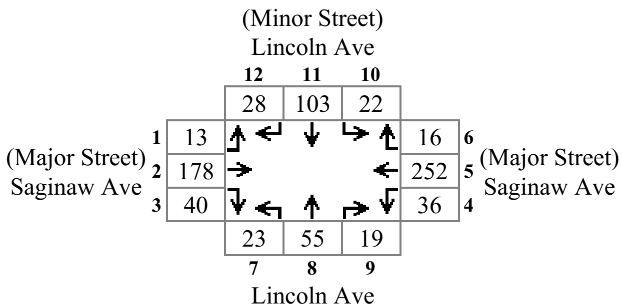
Major Total: 330
Minor High Volume: 99



Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

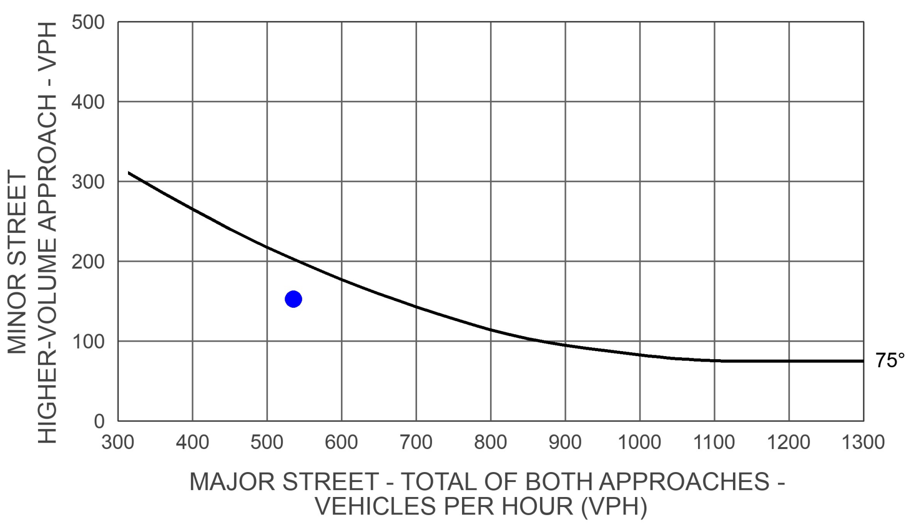
Scenario: AM Future

Intersection #: 1



Major Total: 535

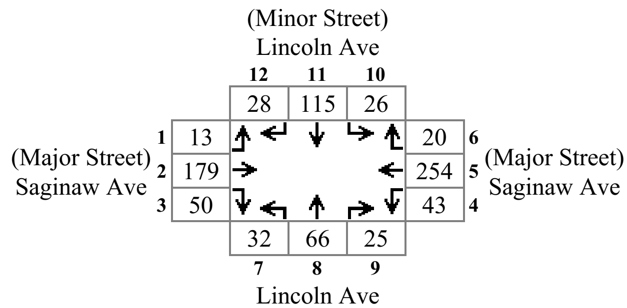
Minor High Volume: 153



Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

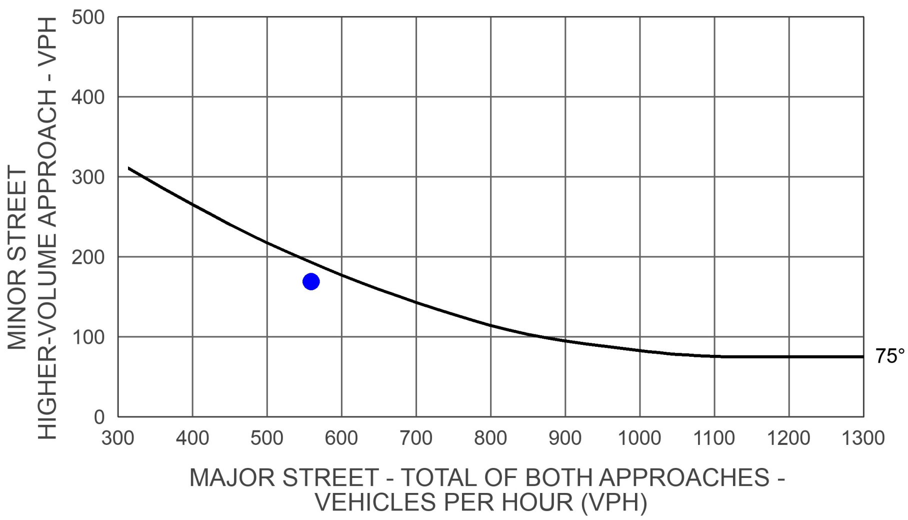
Scenario: AM Future+Project

Intersection #: 1



Major Total: 559

Minor High Volume: 169



Intersection 2
Crawford Ave & Saginaw Ave

Intersection	
Intersection Delay, s/veh	11.3
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	27	6	73	0	4	1	10	0	85	260	8	0	2	280	57
Future Vol, veh/h	0	27	6	73	0	4	1	10	0	85	260	8	0	2	280	57
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	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	29	7	79	0	4	1	11	0	92	283	9	0	2	304	62
Number of Lanes	0	0	1	0	0	0	1	0	0	1	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	9.4	8.7	11.1	12.1
HCM LOS	A	A	B	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	100%	0%	25%	27%	1%
Vol Thru, %	0%	97%	6%	7%	83%
Vol Right, %	0%	3%	69%	67%	17%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	85	268	106	15	339
LT Vol	85	0	27	4	2
Through Vol	0	260	6	1	280
RT Vol	0	8	73	10	57
Lane Flow Rate	92	291	115	16	368
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.146	0.418	0.169	0.025	0.483
Departure Headway (Hd)	5.684	5.16	5.275	5.589	4.714
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	628	693	674	644	759
Service Time	3.447	2.922	3.356	3.589	2.773
HCM Lane V/C Ratio	0.146	0.42	0.171	0.025	0.485
HCM Control Delay	9.4	11.6	9.4	8.7	12.1
HCM Lane LOS	A	B	A	A	B
HCM 95th-tile Q	0.5	2.1	0.6	0.1	2.7

Intersection	
Intersection Delay, s/veh	11.8
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	27	6	106	0	4	1	10	0	116	265	8	0	2	286	57
Future Vol, veh/h	0	27	6	106	0	4	1	10	0	116	265	8	0	2	286	57
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	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	29	7	115	0	4	1	11	0	126	288	9	0	2	311	62
Number of Lanes	0	0	1	0	0	0	1	0	0	1	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	10	9	11.5	12.9
HCM LOS	A	A	B	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	100%	0%	19%	27%	1%
Vol Thru, %	0%	97%	4%	7%	83%
Vol Right, %	0%	3%	76%	67%	17%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	116	273	139	15	345
LT Vol	116	0	27	4	2
Through Vol	0	265	6	1	286
RT Vol	0	8	106	10	57
Lane Flow Rate	126	297	151	16	375
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.203	0.435	0.223	0.026	0.506
Departure Headway (Hd)	5.807	5.282	5.319	5.796	4.861
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	613	677	668	621	735
Service Time	3.592	3.066	3.414	3.796	2.939
HCM Lane V/C Ratio	0.206	0.439	0.226	0.026	0.51
HCM Control Delay	10.1	12.1	10	9	12.9
HCM Lane LOS	B	B	A	A	B
HCM 95th-tile Q	0.8	2.2	0.8	0.1	2.9

Intersection	
Intersection Delay, s/veh	47.7
Intersection LOS	E

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	40	9	107	0	6	2	15	0	122	534	11	0	3	590	83
Future Vol, veh/h	0	40	9	107	0	6	2	15	0	122	534	11	0	3	590	83
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	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	43	10	116	0	7	2	16	0	133	580	12	0	3	641	90
Number of Lanes	0	0	1	0	0	0	1	0	0	1	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	12.9	10.9	45.5	59.1
HCM LOS	B	B	E	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	100%	0%	26%	26%	0%
Vol Thru, %	0%	98%	6%	9%	87%
Vol Right, %	0%	2%	69%	65%	12%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	122	545	156	23	676
LT Vol	122	0	40	6	3
Through Vol	0	534	9	2	590
RT Vol	0	11	107	15	83
Lane Flow Rate	133	592	170	25	735
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.236	0.969	0.318	0.052	1
Departure Headway (Hd)	6.411	5.889	6.745	7.478	5.657
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	557	610	534	482	647
Service Time	4.186	3.672	4.772	5.478	3.659
HCM Lane V/C Ratio	0.239	0.97	0.318	0.052	1.136
HCM Control Delay	11.2	53.2	12.9	10.9	59.1
HCM Lane LOS	B	F	B	B	F
HCM 95th-tile Q	0.9	13.7	1.4	0.2	15.4

Intersection	
Intersection Delay, s/veh	49.6
Intersection LOS	E

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	40	9	140	0	6	2	15	0	153	539	11	0	3	596	83
Future Vol, veh/h	0	40	9	140	0	6	2	15	0	153	539	11	0	3	596	83
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	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	43	10	152	0	7	2	16	0	166	586	12	0	3	648	90
Number of Lanes	0	0	1	0	0	0	1	0	0	1	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	13.9	11.1	50.7	59.7
HCM LOS	B	B	F	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	100%	0%	21%	26%	0%
Vol Thru, %	0%	98%	5%	9%	87%
Vol Right, %	0%	2%	74%	65%	12%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	153	550	189	23	682
LT Vol	153	0	40	6	3
Through Vol	0	539	9	2	596
RT Vol	0	11	140	15	83
Lane Flow Rate	166	598	205	25	741
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.307	1	0.385	0.053	1
Departure Headway (Hd)	6.642	6.128	6.751	7.667	5.825
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	542	592	536	469	638
Service Time	4.362	3.848	4.764	5.691	3.774
HCM Lane V/C Ratio	0.306	1.01	0.382	0.053	1.161
HCM Control Delay	12.3	61.4	13.9	11.1	59.7
HCM Lane LOS	B	F	B	B	F
HCM 95th-tile Q	1.3	14.8	1.8	0.2	15.3

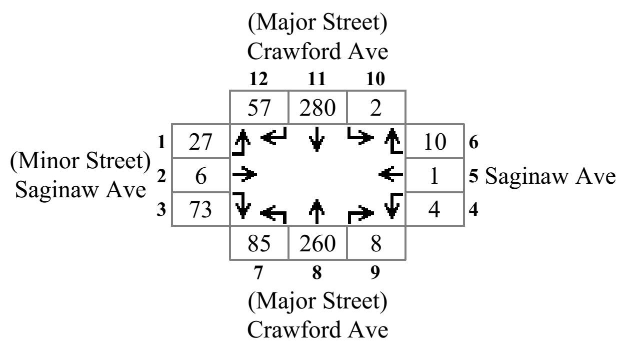
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	9	140	6	2	15	153	539	11	3	596	83
Future Volume (veh/h)	40	9	140	6	2	15	153	539	11	3	596	83
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	0.99		0.96	1.00		0.98	1.00		0.97
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
Adj Sat Flow, veh/h/ln	1750	1863	1750	1750	1863	1750	1716	1863	1750	1750	1863	1750
Adj Flow Rate, veh/h	43	10	152	7	2	16	166	586	12	3	648	90
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	0	1	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	80	25	177	90	40	150	196	1370	28	37	938	130
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.12	0.75	0.75	0.59	0.59	0.59
Sat Flow, veh/h	234	159	1129	282	259	961	1634	1818	37	1	1593	220
Grp Volume(v), veh/h	205	0	0	25	0	0	166	0	598	741	0	0
Grp Sat Flow(s),veh/h/ln	1523	0	0	1502	0	0	1634	0	1855	1815	0	0
Q Serve(g_s), s	9.1	0.0	0.0	0.0	0.0	0.0	10.0	0.0	11.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	13.1	0.0	0.0	1.3	0.0	0.0	10.0	0.0	11.7	28.3	0.0	0.0
Prop In Lane	0.21		0.74	0.28		0.64	1.00		0.02	0.00		0.12
Lane Grp Cap(c), veh/h	282	0	0	281	0	0	196	0	1398	1105	0	0
V/C Ratio(X)	0.73	0.00	0.00	0.09	0.00	0.00	0.85	0.00	0.43	0.67	0.00	0.00
Avail Cap(c_a), veh/h	317	0	0	315	0	0	253	0	1398	1105	0	0
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	0.00	0.00	1.00	0.00	0.00	0.09	0.00	0.09	1.00	0.00	0.00
Uniform Delay (d), s/veh	41.0	0.0	0.0	36.1	0.0	0.0	43.1	0.0	4.5	14.3	0.0	0.0
Incr Delay (d2), s/veh	7.2	0.0	0.0	0.1	0.0	0.0	2.0	0.0	0.1	3.2	0.0	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(50%),veh/ln	6.1	0.0	0.0	0.6	0.0	0.0	4.6	0.0	5.8	15.0	0.0	0.0
LnGrp Delay(d),s/veh	48.2	0.0	0.0	36.3	0.0	0.0	45.1	0.0	4.6	17.5	0.0	0.0
LnGrp LOS	D			D			D		A	B		
Approach Vol, veh/h		205			25			764			741	
Approach Delay, s/veh		48.2			36.3			13.4			17.5	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		79.9		20.1	16.5	63.4		20.1
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s		73.0		18.0	15.5	53.0		18.0
Max Q Clear Time (g_c+I1), s		13.7		15.1	12.0	30.3		3.3
Green Ext Time (p_c), s		7.4		0.2	0.2	6.5		0.7

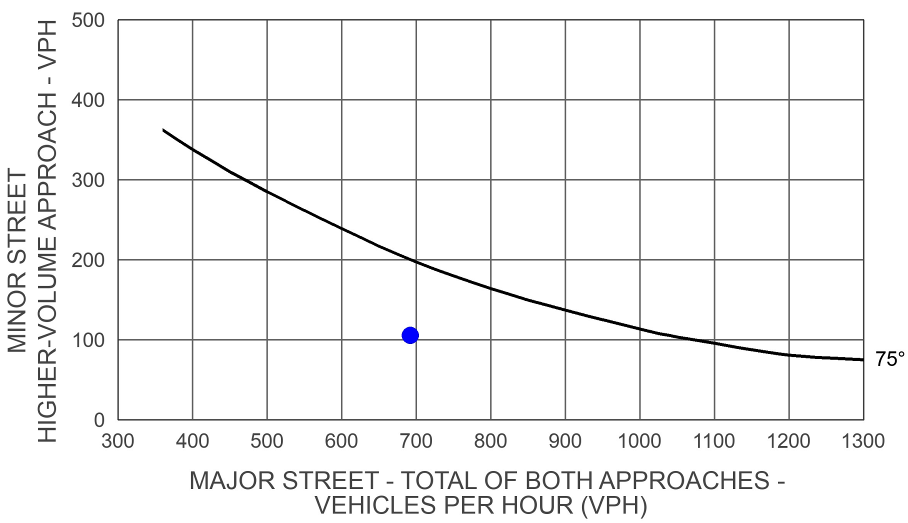
Intersection Summary	
HCM 2010 Ctrl Delay	19.6
HCM 2010 LOS	B

Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Existing
Intersection #: 2

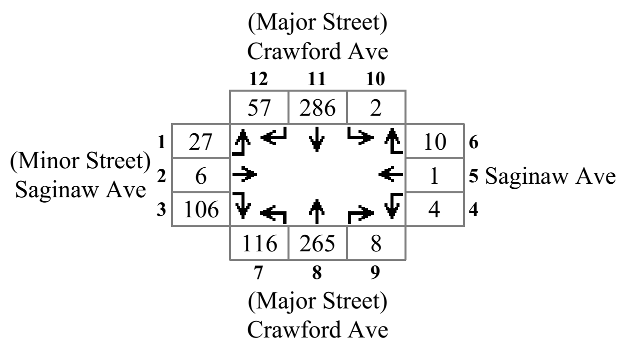


Major Total: 692
Minor High Volume: 106

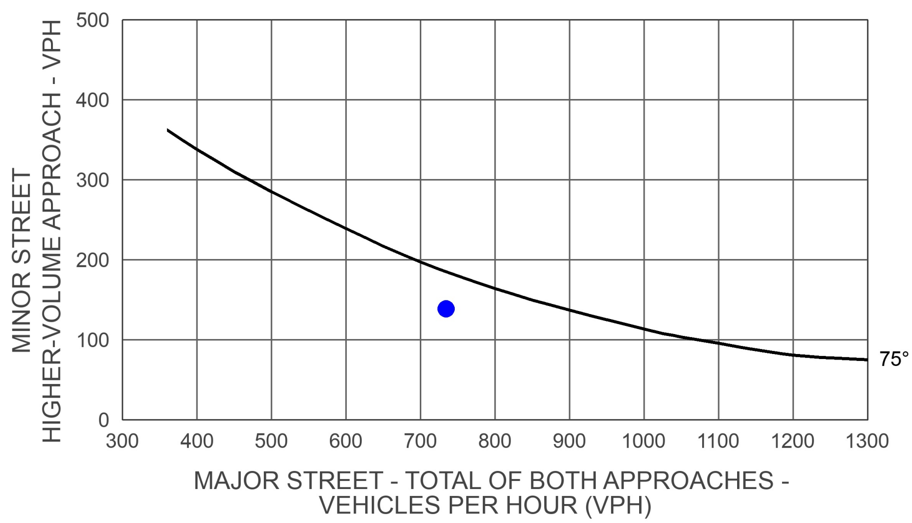


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Existing+Project
Intersection #: 2



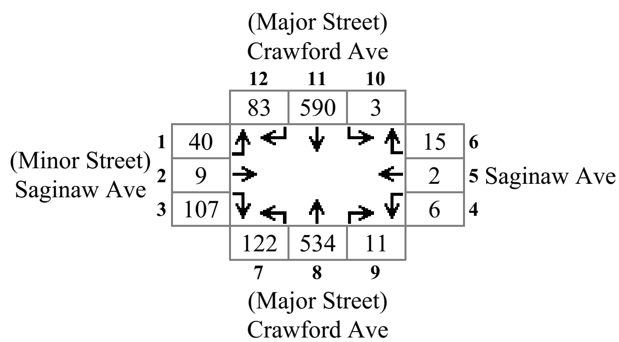
Major Total: 734
Minor High Volume: 139



Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

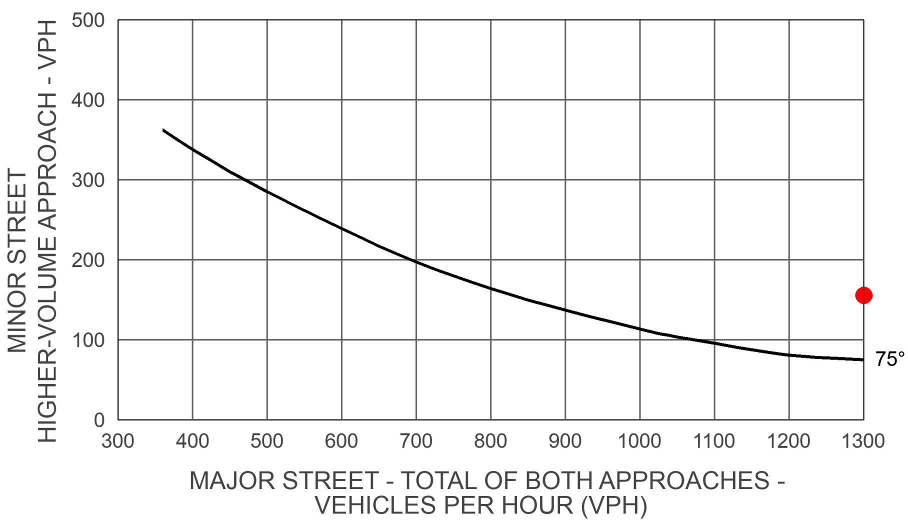
Scenario: PM Future

Intersection #: 2



Major Total: 1343

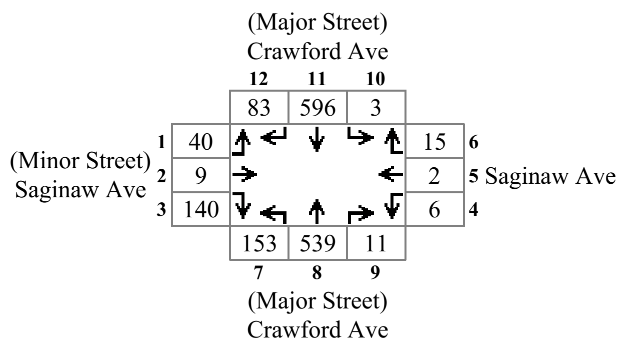
Minor High Volume: 156



Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

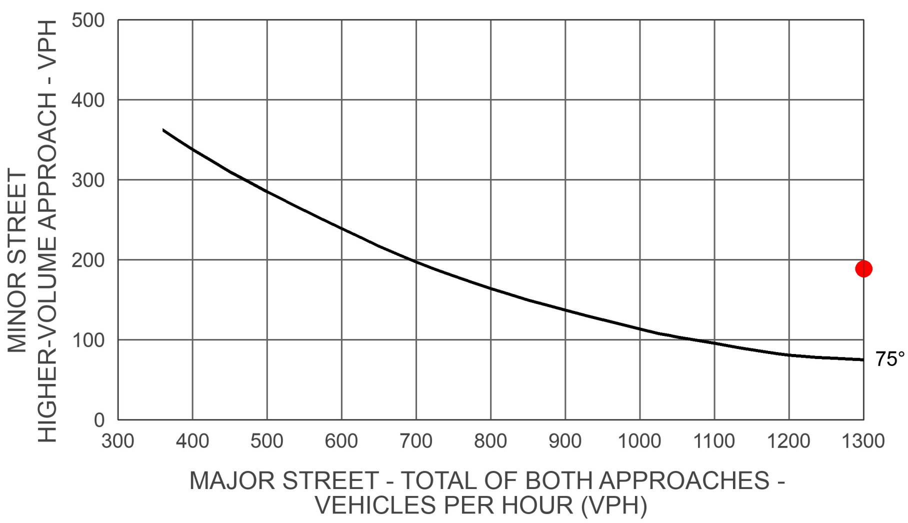
Scenario: PM Future+Project

Intersection #: 2



Major Total: 1385

Minor High Volume: 189



Intersection	
Intersection Delay, s/veh	10.7
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	26	4	81	0	12	22	6	0	145	244	10	0	9	231	23
Future Vol, veh/h	0	26	4	81	0	12	22	6	0	145	244	10	0	9	231	23
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	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	28	4	88	0	13	24	7	0	158	265	11	0	10	251	25
Number of Lanes	0	0	1	0	0	0	1	0	0	1	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	9.4	9.3	11	11.1
HCM LOS	A	A	B	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	100%	0%	23%	30%	3%
Vol Thru, %	0%	96%	4%	55%	88%
Vol Right, %	0%	4%	73%	15%	9%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	145	254	111	40	263
LT Vol	145	0	26	12	9
Through Vol	0	244	4	22	231
RT Vol	0	10	81	6	23
Lane Flow Rate	158	276	121	43	286
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.25	0.398	0.175	0.07	0.389
Departure Headway (Hd)	5.718	5.187	5.23	5.837	4.905
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	624	687	679	617	726
Service Time	3.493	2.961	3.317	3.837	2.981
HCM Lane V/C Ratio	0.253	0.402	0.178	0.07	0.394
HCM Control Delay	10.4	11.4	9.4	9.3	11.1
HCM Lane LOS	B	B	A	A	B
HCM 95th-tile Q	1	1.9	0.6	0.2	1.8

Intersection	
Intersection Delay, s/veh	11
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	26	4	97	0	12	22	6	0	157	246	10	0	9	234	23
Future Vol, veh/h	0	26	4	97	0	12	22	6	0	157	246	10	0	9	234	23
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	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	28	4	105	0	13	24	7	0	171	267	11	0	10	254	25
Number of Lanes	0	0	1	0	0	0	1	0	0	1	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	9.7	9.4	11.3	11.4
HCM LOS	A	A	B	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	100%	0%	20%	30%	3%
Vol Thru, %	0%	96%	3%	55%	88%
Vol Right, %	0%	4%	76%	15%	9%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	157	256	127	40	266
LT Vol	157	0	26	12	9
Through Vol	0	246	4	22	234
RT Vol	0	10	97	6	23
Lane Flow Rate	171	278	138	43	289
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.274	0.405	0.201	0.072	0.4
Departure Headway (Hd)	5.777	5.245	5.249	5.93	4.975
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	616	679	675	608	714
Service Time	3.563	3.031	3.345	3.93	3.062
HCM Lane V/C Ratio	0.278	0.409	0.204	0.071	0.405
HCM Control Delay	10.8	11.6	9.7	9.4	11.4
HCM Lane LOS	B	B	A	A	B
HCM 95th-tile Q	1.1	2	0.7	0.2	1.9

Intersection	
Intersection Delay, s/veh	45
Intersection LOS	E

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	38	6	119	0	18	49	9	0	208	501	14	0	13	487	34
Future Vol, veh/h	0	38	6	119	0	18	49	9	0	208	501	14	0	13	487	34
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	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	41	7	129	0	20	53	10	0	226	545	15	0	14	529	37
Number of Lanes	0	0	1	0	0	0	1	0	0	1	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	14.1	12.8	48.6	54.1
HCM LOS	B	B	E	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	100%	0%	23%	24%	2%
Vol Thru, %	0%	97%	4%	64%	91%
Vol Right, %	0%	3%	73%	12%	6%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	208	515	163	76	534
LT Vol	208	0	38	18	13
Through Vol	0	501	6	49	487
RT Vol	0	14	119	9	34
Lane Flow Rate	226	560	177	83	580
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.436	0.997	0.353	0.183	0.968
Departure Headway (Hd)	6.943	6.413	7.169	7.987	6.137
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	520	565	503	450	598
Service Time	4.671	4.141	5.195	6.023	4.137
HCM Lane V/C Ratio	0.435	0.991	0.352	0.184	0.97
HCM Control Delay	15	62.2	14.1	12.8	54.1
HCM Lane LOS	B	F	B	B	F
HCM 95th-tile Q	2.2	14.4	1.6	0.7	13.5

Intersection	
Intersection Delay, s/veh	46.8
Intersection LOS	E

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	38	6	135	0	18	49	9	0	220	503	14	0	13	490	34
Future Vol, veh/h	0	38	6	135	0	18	49	9	0	220	503	14	0	13	490	34
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	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	41	7	147	0	20	53	10	0	239	547	15	0	14	533	37
Number of Lanes	0	0	1	0	0	0	1	0	0	1	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	14.4	12.8	49.3	58.9
HCM LOS	B	B	E	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	100%	0%	21%	24%	2%
Vol Thru, %	0%	97%	3%	64%	91%
Vol Right, %	0%	3%	75%	12%	6%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	220	517	179	76	537
LT Vol	220	0	38	18	13
Through Vol	0	503	6	49	490
RT Vol	0	14	135	9	34
Lane Flow Rate	239	562	195	83	584
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.469	1	0.382	0.182	0.989
Departure Headway (Hd)	7.064	6.534	7.063	7.951	6.099
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	514	562	512	452	595
Service Time	4.764	4.234	5.081	5.987	4.121
HCM Lane V/C Ratio	0.465	1	0.381	0.184	0.982
HCM Control Delay	15.8	63.5	14.4	12.8	58.9
HCM Lane LOS	C	F	B	B	F
HCM 95th-tile Q	2.5	14.4	1.8	0.7	14.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	6	135	18	49	9	220	503	14	13	490	34
Future Volume (veh/h)	38	6	135	18	49	9	220	503	14	13	490	34
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	0.99		0.96	1.00		0.98	1.00		0.97
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
Adj Sat Flow, veh/h/ln	1750	1863	1750	1750	1863	1750	1716	1863	1750	1750	1863	1750
Adj Flow Rate, veh/h	41	7	147	20	53	10	239	547	15	14	533	37
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	0	1	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	84	23	179	88	197	32	274	1340	37	50	886	61
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.17	0.74	0.74	0.53	0.53	0.53
Sat Flow, veh/h	226	147	1140	245	1258	206	1634	1803	49	17	1686	115
Grp Volume(v), veh/h	195	0	0	83	0	0	239	0	562	584	0	0
Grp Sat Flow(s),veh/h/ln	1512	0	0	1709	0	0	1634	0	1853	1818	0	0
Q Serve(g_s), s	7.3	0.0	0.0	0.0	0.0	0.0	12.8	0.0	10.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	11.2	0.0	0.0	3.6	0.0	0.0	12.8	0.0	10.1	19.9	0.0	0.0
Prop In Lane	0.21		0.75	0.24		0.12	1.00		0.03	0.02		0.06
Lane Grp Cap(c), veh/h	286	0	0	318	0	0	274	0	1377	996	0	0
V/C Ratio(X)	0.68	0.00	0.00	0.26	0.00	0.00	0.87	0.00	0.41	0.59	0.00	0.00
Avail Cap(c_a), veh/h	349	0	0	387	0	0	336	0	1377	996	0	0
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	0.00	0.00	1.00	0.00	0.00	0.18	0.00	0.18	1.00	0.00	0.00
Uniform Delay (d), s/veh	36.6	0.0	0.0	33.5	0.0	0.0	36.5	0.0	4.3	14.9	0.0	0.0
Incr Delay (d2), s/veh	4.0	0.0	0.0	0.4	0.0	0.0	4.2	0.0	0.2	2.5	0.0	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(50%),veh/ln	5.0	0.0	0.0	1.9	0.0	0.0	6.1	0.0	5.1	10.8	0.0	0.0
LnGrp Delay(d),s/veh	40.6	0.0	0.0	33.9	0.0	0.0	40.7	0.0	4.4	17.4	0.0	0.0
LnGrp LOS	D			C			D		A	B		
Approach Vol, veh/h		195			83			801			584	
Approach Delay, s/veh		40.6			33.9			15.2			17.4	
Approach LOS		D			C			B			B	

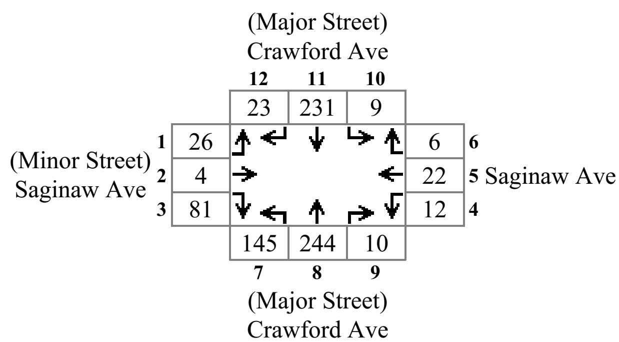
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		71.4		18.6	19.6	51.8		18.6
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s		63.0		18.0	18.5	40.0		18.0
Max Q Clear Time (g_c+I1), s		12.1		13.2	14.8	21.9		5.6
Green Ext Time (p_c), s		5.7		0.4	0.3	4.9		0.8

Intersection Summary	
HCM 2010 Ctrl Delay	19.9
HCM 2010 LOS	B

Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

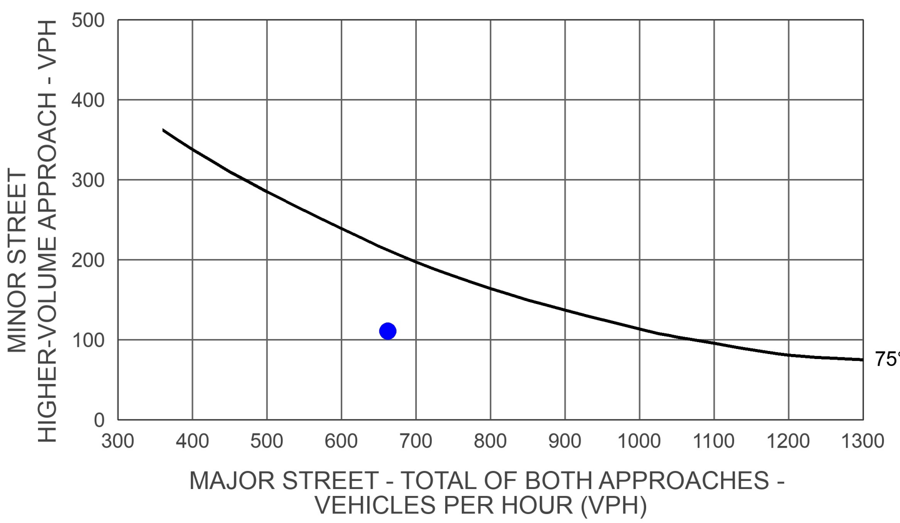
Scenario: AM Existing

Intersection #: 2



Major Total: 662

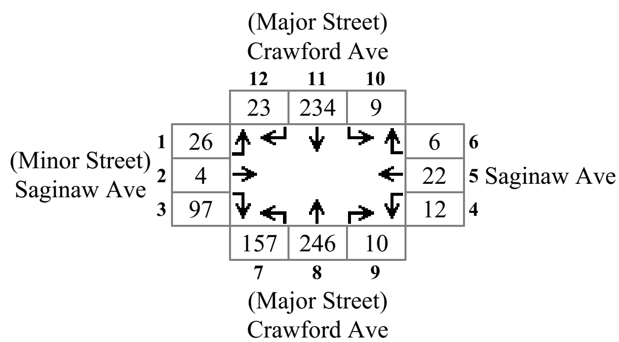
Minor High Volume: 111



Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

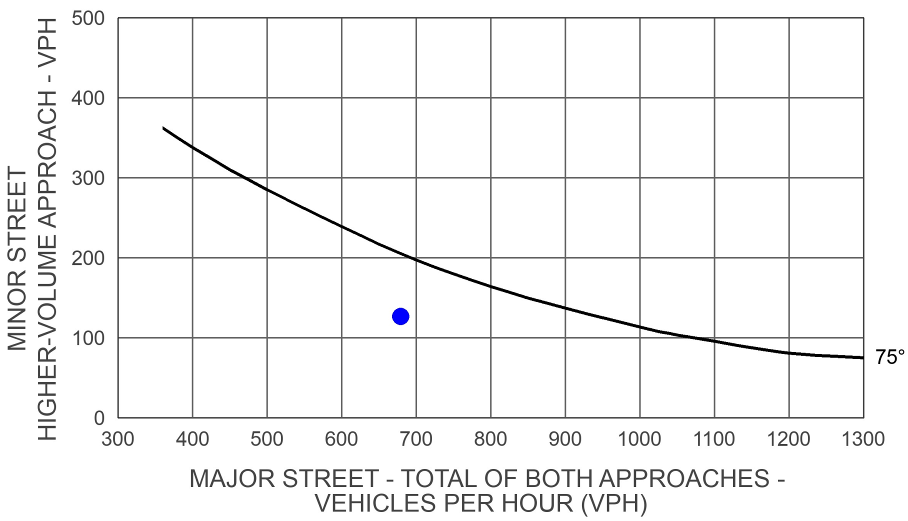
Scenario: AM Existing+Project

Intersection #: 2



Major Total: 679

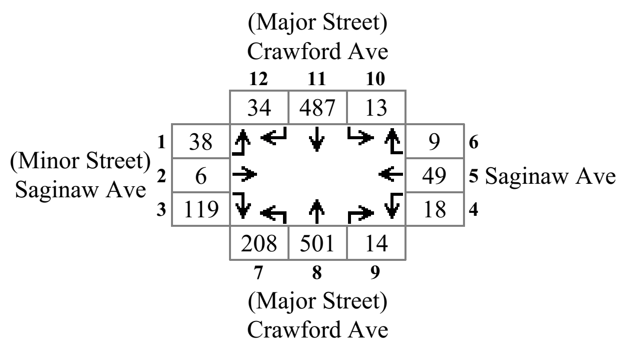
Minor High Volume: 127



Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

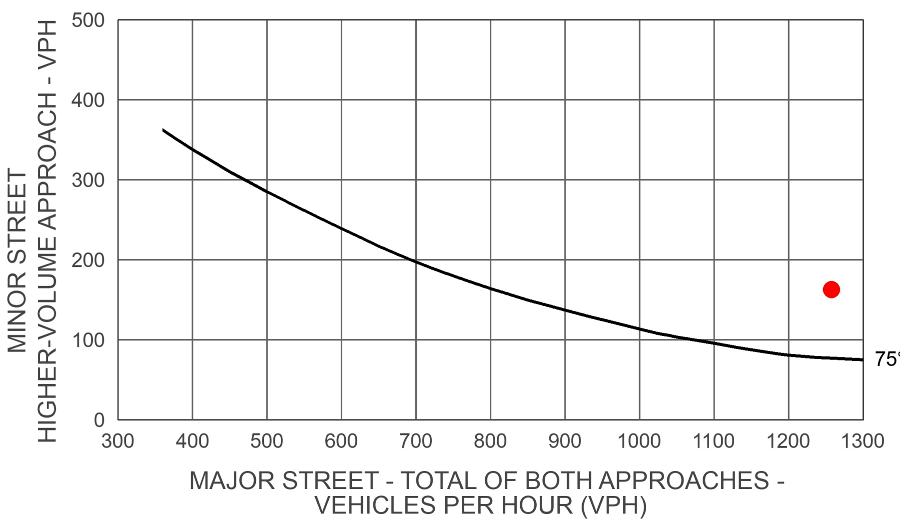
Scenario: AM Future

Intersection #: 2



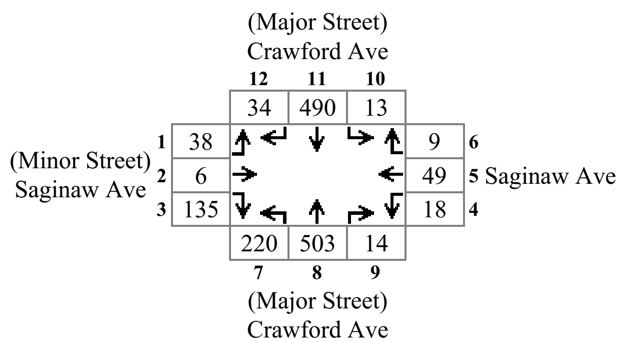
Major Total: 1257

Minor High Volume: 163

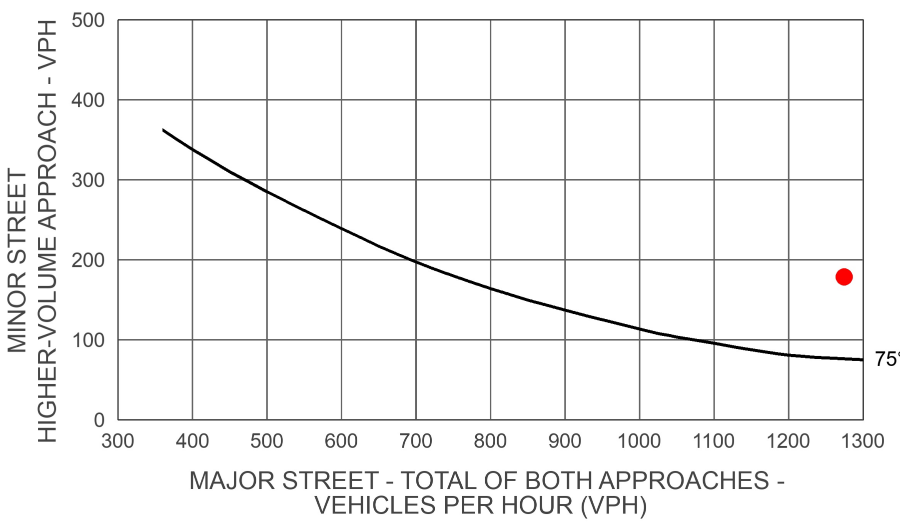


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: AM Future+Project
Intersection #: 2



Major Total: 1274
Minor High Volume: 179



Intersection 3
Rd 80/Alta Ave & El Monte Way

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	196	601	148	65	393	78	233	378	80	134	305	160
Future Volume (veh/h)	196	601	148	65	393	78	233	378	80	134	305	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
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
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	213	653	161	71	427	85	253	411	87	146	332	174
Adj No. of Lanes	2	2	1	2	2	1	2	2	0	1	2	1
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	817	1797	729	158	1062	429	325	547	115	197	731	295
Arrive On Green	0.26	0.51	0.51	0.05	0.30	0.30	0.10	0.19	0.18	0.12	0.21	0.21
Sat Flow, veh/h	3170	3539	1435	3170	3539	1432	3170	2901	608	1634	3539	1427
Grp Volume(v), veh/h	213	653	161	71	427	85	253	249	249	146	332	174
Grp Sat Flow(s),veh/h/ln	1585	1770	1435	1585	1770	1432	1585	1770	1739	1634	1770	1427
Q Serve(g_s), s	6.4	13.4	7.5	2.6	11.5	5.3	9.3	16.0	16.3	10.4	9.9	7.6
Cycle Q Clear(g_c), s	6.4	13.4	7.5	2.6	11.5	5.3	9.3	16.0	16.3	10.4	9.9	7.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.35	1.00		1.00
Lane Grp Cap(c), veh/h	817	1797	729	158	1062	429	325	334	328	197	731	295
V/C Ratio(X)	0.26	0.36	0.22	0.45	0.40	0.20	0.78	0.75	0.76	0.74	0.45	0.59
Avail Cap(c_a), veh/h	817	1797	729	158	1062	429	423	516	507	272	1150	464
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.4	17.8	16.4	55.4	33.4	31.3	52.5	46.0	46.2	51.0	41.7	14.4
Incr Delay (d2), s/veh	0.2	0.6	0.7	2.0	1.1	1.0	6.8	3.3	3.6	6.8	0.4	1.9
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(50%),veh/ln	2.8	6.7	3.1	1.2	5.8	2.2	4.4	8.1	8.1	5.0	4.9	3.2
LnGrp Delay(d),s/veh	35.6	18.4	17.1	57.4	34.6	32.3	59.3	49.3	49.8	57.8	42.1	16.3
LnGrp LOS	D	B	B	E	C	C	E	D	D	E	D	B
Approach Vol, veh/h		1027			583			751			652	
Approach Delay, s/veh		21.8			37.0			52.8			38.7	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.4	26.6	10.0	64.9	16.3	28.8	34.9	40.0
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	19.4	34.4	4.0	41.0	15.4	38.4	11.0	34.0
Max Q Clear Time (g_c+I1), s	12.4	18.3	4.6	15.4	11.3	11.9	8.4	13.5
Green Ext Time (p_c), s	1.6	1.6	0.0	4.8	0.4	2.6	1.3	2.1

Intersection Summary	
HCM 2010 Ctrl Delay	36.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	196	612	148	95	405	116	233	378	108	170	305	160
Future Volume (veh/h)	196	612	148	95	405	116	233	378	108	170	305	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
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
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	213	665	161	103	440	126	253	411	117	185	332	174
Adj No. of Lanes	2	2	1	2	2	1	2	2	0	1	2	1
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	632	1152	466	632	1152	466	328	561	158	183	760	307
Arrive On Green	0.20	0.33	0.33	0.20	0.33	0.33	0.10	0.21	0.20	0.11	0.21	0.21
Sat Flow, veh/h	3170	3539	1432	3170	3539	1432	3170	2714	764	1634	3539	1428
Grp Volume(v), veh/h	213	665	161	103	440	126	253	266	262	185	332	174
Grp Sat Flow(s),veh/h/ln	1585	1770	1432	1585	1770	1432	1585	1770	1708	1634	1770	1428
Q Serve(g_s), s	5.9	15.9	5.9	2.7	9.8	6.6	7.9	14.3	14.7	11.4	8.3	7.0
Cycle Q Clear(g_c), s	5.9	15.9	5.9	2.7	9.8	6.6	7.9	14.3	14.7	11.4	8.3	7.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		1.00
Lane Grp Cap(c), veh/h	632	1152	466	632	1152	466	328	366	353	183	760	307
V/C Ratio(X)	0.34	0.58	0.35	0.16	0.38	0.27	0.77	0.73	0.74	1.01	0.44	0.57
Avail Cap(c_a), veh/h	632	1152	466	632	1152	466	339	597	576	183	1211	489
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.1	28.6	11.8	33.8	26.5	25.4	44.5	37.8	38.0	45.3	34.7	14.3
Incr Delay (d2), s/veh	0.3	2.1	2.0	0.1	1.0	1.4	10.1	2.8	3.1	70.0	0.4	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	8.1	2.6	1.2	4.9	2.8	3.9	7.3	7.2	8.7	4.1	2.9
LnGrp Delay(d),s/veh	35.4	30.7	13.8	33.9	27.5	26.9	54.7	40.6	41.1	115.4	35.1	15.9
LnGrp LOS	D	C	B	C	C	C	D	D	D	F	D	B
Approach Vol, veh/h		1039			669			781			691	
Approach Delay, s/veh		29.0			28.3			45.3			51.8	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.4	25.1	24.3	37.2	14.6	25.9	24.3	37.2
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	10.8	33.8	5.0	31.2	10.3	34.3	5.0	31.2
Max Q Clear Time (g_c+I1), s	13.4	16.7	4.7	17.9	9.9	10.3	7.9	11.8
Green Ext Time (p_c), s	0.0	1.7	0.0	3.1	0.0	2.7	0.0	2.3

Intersection Summary	
HCM 2010 Ctrl Delay	37.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	288	883	217	97	869	117	335	776	115	195	643	233
Future Volume (veh/h)	288	883	217	97	869	117	335	776	115	195	643	233
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
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
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	313	960	236	105	945	127	364	843	125	212	699	253
Adj No. of Lanes	2	2	1	2	2	1	2	2	0	1	2	1
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	366	1288	522	174	1075	435	435	929	138	217	1051	425
Arrive On Green	0.12	0.36	0.36	0.06	0.30	0.30	0.14	0.30	0.30	0.13	0.30	0.30
Sat Flow, veh/h	3170	3539	1433	3170	3539	1432	3170	3084	457	1634	3539	1431
Grp Volume(v), veh/h	313	960	236	105	945	127	364	484	484	212	699	253
Grp Sat Flow(s),veh/h/ln	1585	1770	1433	1585	1770	1432	1585	1770	1772	1634	1770	1431
Q Serve(g_s), s	10.6	25.8	13.7	3.5	27.6	7.4	12.2	28.7	28.7	14.1	18.9	11.8
Cycle Q Clear(g_c), s	10.6	25.8	13.7	3.5	27.6	7.4	12.2	28.7	28.7	14.1	18.9	11.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.26	1.00		1.00
Lane Grp Cap(c), veh/h	366	1288	522	174	1075	435	435	533	534	217	1051	425
V/C Ratio(X)	0.86	0.75	0.45	0.60	0.88	0.29	0.84	0.91	0.91	0.98	0.67	0.60
Avail Cap(c_a), veh/h	366	1288	522	174	1075	435	459	558	559	217	1075	435
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.3	30.2	26.4	50.3	36.1	29.0	45.8	36.6	36.7	47.1	33.6	16.8
Incr Delay (d2), s/veh	17.7	3.9	2.8	5.7	10.3	1.7	12.2	18.2	18.2	53.8	1.5	2.1
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(50%),veh/ln	5.5	13.2	5.8	1.7	15.1	3.1	6.1	16.7	16.7	9.6	9.4	4.9
LnGrp Delay(d),s/veh	65.0	34.2	29.2	56.0	46.3	30.7	58.0	54.9	54.9	100.9	35.1	18.9
LnGrp LOS	E	C	C	E	D	C	E	D	D	F	D	B
Approach Vol, veh/h		1509			1177			1332			1164	
Approach Delay, s/veh		39.8			45.5			55.8			43.6	
Approach LOS		D			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.5	36.8	10.0	43.7	19.0	36.4	16.6	37.1
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	13.9	33.8	4.0	36.1	15.2	32.5	9.0	31.1
Max Q Clear Time (g_c+I1), s	16.1	30.7	5.5	27.8	14.2	20.9	12.6	29.6
Green Ext Time (p_c), s	0.0	1.3	0.0	4.4	0.2	4.0	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	46.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	288	894	217	127	881	155	335	776	143	231	643	233
Future Volume (veh/h)	288	894	217	127	881	155	335	776	143	231	643	233
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
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
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	313	972	236	138	958	168	364	843	155	251	699	253
Adj No. of Lanes	2	2	1	2	2	1	2	2	0	1	2	1
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	343	1233	499	185	1056	427	441	873	161	272	1135	459
Arrive On Green	0.11	0.35	0.35	0.06	0.30	0.30	0.14	0.29	0.29	0.17	0.32	0.32
Sat Flow, veh/h	3170	3539	1433	3170	3539	1431	3170	2976	547	1634	3539	1432
Grp Volume(v), veh/h	313	972	236	138	958	168	364	501	497	251	699	253
Grp Sat Flow(s),veh/h/ln	1585	1770	1433	1585	1770	1431	1585	1770	1754	1634	1770	1432
Q Serve(g_s), s	11.7	29.6	15.4	5.1	31.3	11.2	13.4	33.5	33.5	18.1	20.1	12.7
Cycle Q Clear(g_c), s	11.7	29.6	15.4	5.1	31.3	11.2	13.4	33.5	33.5	18.1	20.1	12.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.31	1.00		1.00
Lane Grp Cap(c), veh/h	343	1233	499	185	1056	427	441	519	514	272	1135	459
V/C Ratio(X)	0.91	0.79	0.47	0.75	0.91	0.39	0.82	0.97	0.97	0.92	0.62	0.55
Avail Cap(c_a), veh/h	343	1233	499	185	1056	427	560	519	514	272	1135	459
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	35.1	30.5	55.6	40.5	33.5	50.2	41.8	41.9	49.2	34.5	17.8
Incr Delay (d2), s/veh	27.5	5.2	3.2	15.2	12.8	2.7	7.9	30.8	31.0	34.5	1.0	1.4
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(50%),veh/ln	6.4	15.3	6.6	2.7	17.2	4.8	6.3	20.7	20.6	10.8	10.0	5.2
LnGrp Delay(d),s/veh	80.4	40.3	33.7	70.8	53.3	36.2	58.1	72.6	72.9	83.7	35.5	19.2
LnGrp LOS	F	D	C	E	D	D	E	E	E	F	D	B
Approach Vol, veh/h		1521			1264			1362			1203	
Approach Delay, s/veh		47.5			52.9			68.8			42.1	
Approach LOS		D			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.0	39.2	11.0	45.8	20.7	42.5	17.0	39.8
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	19.4	34.6	5.0	39.8	20.6	33.4	11.0	33.8
Max Q Clear Time (g_c+I1), s	20.1	35.5	7.1	31.6	15.4	22.1	13.7	33.3
Green Ext Time (p_c), s	0.0	0.0	0.0	4.4	0.7	4.0	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	53.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	404	127	103	354	96	193	333	37	125	431	149
Future Volume (veh/h)	93	404	127	103	354	96	193	333	37	125	431	149
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
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
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	101	439	138	112	385	104	210	362	40	136	468	162
Adj No. of Lanes	2	2	1	2	2	1	2	2	0	1	2	1
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	283	975	394	290	982	397	332	881	97	139	903	365
Arrive On Green	0.09	0.28	0.28	0.09	0.28	0.28	0.10	0.27	0.26	0.09	0.26	0.26
Sat Flow, veh/h	3170	3539	1431	3170	3539	1431	3170	3210	352	1634	3539	1430
Grp Volume(v), veh/h	101	439	138	112	385	104	210	198	204	136	468	162
Grp Sat Flow(s),veh/h/ln	1585	1770	1431	1585	1770	1431	1585	1770	1792	1634	1770	1430
Q Serve(g_s), s	1.8	6.0	4.5	1.9	5.2	3.3	3.7	5.4	5.5	4.9	6.6	5.6
Cycle Q Clear(g_c), s	1.8	6.0	4.5	1.9	5.2	3.3	3.7	5.4	5.5	4.9	6.6	5.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	283	975	394	290	982	397	332	486	492	139	903	365
V/C Ratio(X)	0.36	0.45	0.35	0.39	0.39	0.26	0.63	0.41	0.41	0.97	0.52	0.44
Avail Cap(c_a), veh/h	325	2030	821	325	2030	821	336	1039	1053	139	2006	811
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.1	17.6	17.0	25.1	17.1	16.5	25.1	17.4	17.4	26.7	18.7	18.3
Incr Delay (d2), s/veh	0.8	0.3	0.5	0.8	0.3	0.3	3.8	0.6	0.6	68.3	0.5	0.8
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(50%),veh/ln	0.8	3.0	1.8	0.9	2.5	1.3	1.8	2.7	2.7	4.8	3.3	2.3
LnGrp Delay(d),s/veh	25.9	17.9	17.5	25.9	17.4	16.8	28.9	17.9	18.0	95.1	19.2	19.2
LnGrp LOS	C	B	B	C	B	B	C	B	B	F	B	B
Approach Vol, veh/h		678			601			612			766	
Approach Delay, s/veh		19.0			18.9			21.7			32.6	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	20.1	9.4	20.1	10.1	19.0	9.2	20.3
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	4.4	33.8	4.0	31.6	5.6	32.6	4.0	31.6
Max Q Clear Time (g_c+I1), s	6.9	7.5	3.9	8.0	5.7	8.6	3.8	7.2
Green Ext Time (p_c), s	0.0	4.2	0.0	4.8	0.0	4.1	0.0	4.8

Intersection Summary	
HCM 2010 Ctrl Delay	23.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	409	127	115	359	112	193	333	50	142	431	149
Future Volume (veh/h)	93	409	127	115	359	112	193	333	50	142	431	149
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
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
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	101	445	138	125	390	122	210	362	54	154	468	162
Adj No. of Lanes	2	2	1	2	2	1	2	2	0	1	2	1
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	280	979	396	303	1005	406	330	848	125	137	901	364
Arrive On Green	0.09	0.28	0.28	0.10	0.28	0.28	0.10	0.27	0.26	0.08	0.25	0.25
Sat Flow, veh/h	3170	3539	1431	3170	3539	1431	3170	3085	456	1634	3539	1430
Grp Volume(v), veh/h	101	445	138	125	390	122	210	206	210	154	468	162
Grp Sat Flow(s),veh/h/ln	1585	1770	1431	1585	1770	1431	1585	1770	1772	1634	1770	1430
Q Serve(g_s), s	1.8	6.2	4.6	2.2	5.3	4.0	3.8	5.7	5.8	5.0	6.8	5.7
Cycle Q Clear(g_c), s	1.8	6.2	4.6	2.2	5.3	4.0	3.8	5.7	5.8	5.0	6.8	5.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.26	1.00		1.00
Lane Grp Cap(c), veh/h	280	979	396	303	1005	406	330	486	487	137	901	364
V/C Ratio(X)	0.36	0.45	0.35	0.41	0.39	0.30	0.64	0.42	0.43	1.12	0.52	0.45
Avail Cap(c_a), veh/h	320	2000	809	320	2000	809	331	1024	1025	137	1976	798
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.5	17.8	17.2	25.3	17.1	16.7	25.5	17.7	17.8	27.2	19.0	18.6
Incr Delay (d2), s/veh	0.8	0.3	0.5	0.9	0.2	0.4	4.0	0.6	0.6	112.8	0.5	0.9
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(50%),veh/ln	0.8	3.1	1.9	1.0	2.6	1.6	1.8	2.8	2.9	6.5	3.4	2.3
LnGrp Delay(d),s/veh	26.3	18.1	17.7	26.2	17.4	17.1	29.5	18.3	18.4	140.1	19.5	19.5
LnGrp LOS	C	B	B	C	B	B	C	B	B	F	B	B
Approach Vol, veh/h		684			637			626			784	
Approach Delay, s/veh		19.3			19.1			22.1			43.2	
Approach LOS		B			B			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	20.3	9.7	20.4	10.2	19.1	9.2	20.9
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	4.4	33.8	4.0	31.6	5.6	32.6	4.0	31.6
Max Q Clear Time (g_c+I1), s	7.0	7.8	4.2	8.2	5.8	8.8	3.8	7.3
Green Ext Time (p_c), s	0.0	4.3	0.0	4.9	0.0	4.2	0.0	5.0

Intersection Summary	
HCM 2010 Ctrl Delay	26.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	593	187	154	783	143	277	683	53	182	909	217
Future Volume (veh/h)	137	593	187	154	783	143	277	683	53	182	909	217
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
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
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	149	645	203	167	851	155	301	742	58	198	988	236
Adj No. of Lanes	2	2	1	2	2	1	2	2	0	1	2	1
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	211	917	371	366	1090	441	373	926	72	276	1168	473
Arrive On Green	0.07	0.26	0.26	0.12	0.31	0.31	0.12	0.28	0.27	0.17	0.33	0.33
Sat Flow, veh/h	3170	3539	1430	3170	3539	1432	3170	3321	259	1634	3539	1432
Grp Volume(v), veh/h	149	645	203	167	851	155	301	395	405	198	988	236
Grp Sat Flow(s),veh/h/ln	1585	1770	1430	1585	1770	1432	1585	1770	1811	1634	1770	1432
Q Serve(g_s), s	4.1	14.9	7.3	4.4	19.7	4.3	8.3	18.7	18.7	10.3	23.4	11.9
Cycle Q Clear(g_c), s	4.1	14.9	7.3	4.4	19.7	4.3	8.3	18.7	18.7	10.3	23.4	11.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	211	917	371	366	1090	441	373	493	505	276	1168	473
V/C Ratio(X)	0.71	0.70	0.55	0.46	0.78	0.35	0.81	0.80	0.80	0.72	0.85	0.50
Avail Cap(c_a), veh/h	211	1321	534	366	1321	534	373	676	692	276	1328	538
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.2	30.2	12.6	37.2	28.4	7.7	38.7	30.1	30.2	35.4	28.0	24.2
Incr Delay (d2), s/veh	10.2	1.0	1.3	0.9	2.5	0.5	12.3	4.9	4.8	8.7	4.7	0.8
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(50%),veh/ln	2.1	7.4	3.8	2.0	10.0	2.7	4.3	9.8	10.0	5.3	12.2	4.8
LnGrp Delay(d),s/veh	51.4	31.2	13.9	38.1	30.9	8.2	51.0	35.0	35.0	44.1	32.8	25.0
LnGrp LOS	D	C	B	D	C	A	D	D	C	D	C	C
Approach Vol, veh/h		997			1173			1101			1422	
Approach Delay, s/veh		30.7			28.9			39.4			33.1	
Approach LOS		C			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.2	29.1	14.4	27.3	14.6	33.7	10.0	31.7
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	9.4	33.8	4.0	31.6	10.0	33.2	4.0	31.6
Max Q Clear Time (g_c+I1), s	12.3	20.7	6.4	16.9	10.3	25.4	6.1	21.7
Green Ext Time (p_c), s	0.0	2.5	0.0	3.3	0.0	3.4	0.0	3.4

Intersection Summary	
HCM 2010 Ctrl Delay	33.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	598	187	166	788	159	277	683	66	199	909	217
Future Volume (veh/h)	137	598	187	166	788	159	277	683	66	199	909	217
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
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
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	149	650	203	180	857	173	301	742	72	216	988	236
Adj No. of Lanes	2	2	1	2	2	1	2	2	0	1	2	1
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	205	908	367	363	1085	439	389	912	88	288	1183	479
Arrive On Green	0.06	0.26	0.26	0.11	0.31	0.31	0.12	0.28	0.27	0.18	0.33	0.33
Sat Flow, veh/h	3170	3539	1430	3170	3539	1432	3170	3254	316	1634	3539	1432
Grp Volume(v), veh/h	149	650	203	180	857	173	301	403	411	216	988	236
Grp Sat Flow(s),veh/h/ln	1585	1770	1430	1585	1770	1432	1585	1770	1800	1634	1770	1432
Q Serve(g_s), s	4.3	15.6	7.6	5.0	20.6	8.9	8.6	19.8	19.8	11.7	24.0	9.2
Cycle Q Clear(g_c), s	4.3	15.6	7.6	5.0	20.6	8.9	8.6	19.8	19.8	11.7	24.0	9.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	205	908	367	363	1085	439	389	496	505	288	1183	479
V/C Ratio(X)	0.73	0.72	0.55	0.50	0.79	0.39	0.77	0.81	0.81	0.75	0.84	0.49
Avail Cap(c_a), veh/h	205	1241	501	363	1279	517	447	655	666	288	1381	559
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.7	31.5	13.1	38.6	29.5	25.4	39.6	31.2	31.2	36.3	28.6	14.0
Incr Delay (d2), s/veh	12.3	1.3	1.3	1.0	2.9	0.6	7.3	5.9	5.8	10.4	4.0	0.8
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(50%),veh/ln	2.2	7.7	3.1	2.2	10.4	3.6	4.2	10.4	10.6	6.1	12.3	3.8
LnGrp Delay(d),s/veh	55.0	32.7	14.4	39.7	32.4	26.0	46.8	37.1	37.1	46.7	32.6	14.8
LnGrp LOS	E	C	B	D	C	C	D	D	D	D	C	B
Approach Vol, veh/h		1002			1210			1115			1440	
Approach Delay, s/veh		32.3			32.6			39.7			31.8	
Approach LOS		C			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.4	30.1	14.7	27.9	15.4	35.1	10.0	32.5
Change Period (Y+Rc), s	4.6	4.6	6.0	6.0	4.6	4.6	6.0	6.0
Max Green Setting (Gmax), s	14.4	33.8	5.0	30.6	12.5	35.7	4.0	31.6
Max Q Clear Time (g_c+I1), s	13.7	21.8	7.0	17.6	10.6	26.0	6.3	22.6
Green Ext Time (p_c), s	0.5	2.5	0.0	3.2	0.2	4.3	0.0	3.3

Intersection Summary	
HCM 2010 Ctrl Delay	34.0
HCM 2010 LOS	C

Intersection 4
Lincoln Ave & El Monte Way

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	41	576	32	0	409	8	20	6	0	2	7	37
Future Vol, veh/h	41	576	32	0	409	8	20	6	0	2	7	37
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	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	60	-	-	-
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	45	626	35	0	445	9	22	7	0	2	8	40

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	453	0	0	661	0	0	1206	1186	643	1185	1199	449
Stage 1	-	-	-	-	-	-	733	733	-	449	449	-
Stage 2	-	-	-	-	-	-	473	453	-	736	750	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1108	-	-	927	-	-	160	189	473	166	185	610
Stage 1	-	-	-	-	-	-	412	426	-	589	572	-
Stage 2	-	-	-	-	-	-	572	570	-	411	419	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1108	-	-	927	-	-	140	181	473	156	177	610
Mov Cap-2 Maneuver	-	-	-	-	-	-	140	181	-	156	177	-
Stage 1	-	-	-	-	-	-	395	409	-	565	572	-
Stage 2	-	-	-	-	-	-	527	570	-	388	402	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0	35	15.1
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	148	-	1108	-	-	927	-	-	407
HCM Lane V/C Ratio	0.191	-	0.04	-	-	-	-	-	0.123
HCM Control Delay (s)	35	0	8.4	-	-	0	-	-	15.1
HCM Lane LOS	E	A	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.7	-	0.1	-	-	0	-	-	0.4

Intersection	
Int Delay, s/veh	10

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	41	667	32	0	506	83	20	6	0	72	7	37
Future Vol, veh/h	41	667	32	0	506	83	20	6	0	72	7	37
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	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	60	-	-	-
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	45	725	35	0	550	90	22	7	0	78	8	40

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	640	0	0	760	0	0	1451	1472	742	1430	1444	595
Stage 1	-	-	-	-	-	-	832	832	-	595	595	-
Stage 2	-	-	-	-	-	-	619	640	-	835	849	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	944	-	-	852	-	-	109	127	416	112	132	504
Stage 1	-	-	-	-	-	-	363	384	-	491	492	-
Stage 2	-	-	-	-	-	-	476	470	-	362	377	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	944	-	-	852	-	-	92	121	416	104	126	504
Mov Cap-2 Maneuver	-	-	-	-	-	-	92	121	-	104	126	-
Stage 1	-	-	-	-	-	-	346	366	-	468	492	-
Stage 2	-	-	-	-	-	-	431	470	-	339	359	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0	56.7	110.9
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	97	-	944	-	-	852	-	-	141
HCM Lane V/C Ratio	0.291	-	0.047	-	-	-	-	-	0.894
HCM Control Delay (s)	56.7	0	9	-	-	0	-	-	110.9
HCM Lane LOS	F	A	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	1.1	-	0.1	-	-	0	-	-	6

Intersection	
Int Delay, s/veh	17.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	60	846	47	0	905	12	29	12	0	3	15	54
Future Vol, veh/h	60	846	47	0	905	12	29	12	0	3	15	54
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	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	60	-	-	-
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	65	920	51	0	984	13	32	13	0	3	16	59

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	997	0	0	971	0	0	2104	2073	945	2072	2091	990
Stage 1	-	-	-	-	-	-	1076	1076	-	990	990	-
Stage 2	-	-	-	-	-	-	1028	997	-	1082	1101	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	694	-	-	710	-	-	38	54	318	40	52	299
Stage 1	-	-	-	-	-	-	266	296	-	297	324	-
Stage 2	-	-	-	-	-	-	283	322	-	263	288	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	694	-	-	710	-	-	~ 21	49	318	30	47	299
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 21	49	-	30	47	-
Stage 1	-	-	-	-	-	-	241	268	-	269	324	-
Stage 2	-	-	-	-	-	-	216	322	-	227	261	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0	$ 707.9	78.9
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	25	-	694	-	-	710	-	-	120
HCM Lane V/C Ratio	1.783	-	0.094	-	-	-	-	-	0.652
HCM Control Delay (s)	$ 707.9	0	10.7	-	-	0	-	-	78.9
HCM Lane LOS	F	A	B	-	-	A	-	-	F
HCM 95th %tile Q(veh)	5.5	-	0.3	-	-	0	-	-	3.4

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	175.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	60	937	47	0	1002	87	29	12	0	73	15	54
Future Vol, veh/h	60	937	47	0	1002	87	29	12	0	73	15	54
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	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	60	-	-	-
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	65	1018	51	0	1089	95	32	13	0	79	16	59

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1184	0	0	1070	0	0	2348	2358	1044	2317	2336	1136
Stage 1	-	-	-	-	-	-	1174	1174	-	1136	1136	-
Stage 2	-	-	-	-	-	-	1174	1184	-	1181	1200	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	590	-	-	651	-	-	~ 25	36	278	~ 26	37	246
Stage 1	-	-	-	-	-	-	234	266	-	246	277	-
Stage 2	-	-	-	-	-	-	234	263	-	232	258	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	590	-	-	651	-	-	~ 11	32	278	~ 16	33	246
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 11	32	-	~ 16	33	-
Stage 1	-	-	-	-	-	-	208	237	-	219	277	-
Stage 2	-	-	-	-	-	-	168	263	-	195	230	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0	$ 1534.2	$ 2411.7
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	14	-	590	-	-	651	-	-	27
HCM Lane V/C Ratio	3.183	-	0.111	-	-	-	-	-	5.717
HCM Control Delay (s)	$ 1534.2	0	11.9	-	-	0	-	-	$ 2411.7
HCM Lane LOS	F	A	B	-	-	A	-	-	F
HCM 95th %tile Q(veh)	6.4	-	0.4	-	-	0	-	-	19

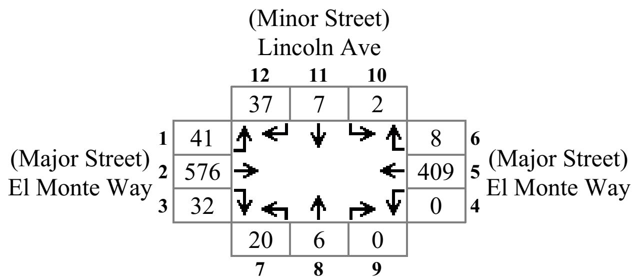
Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

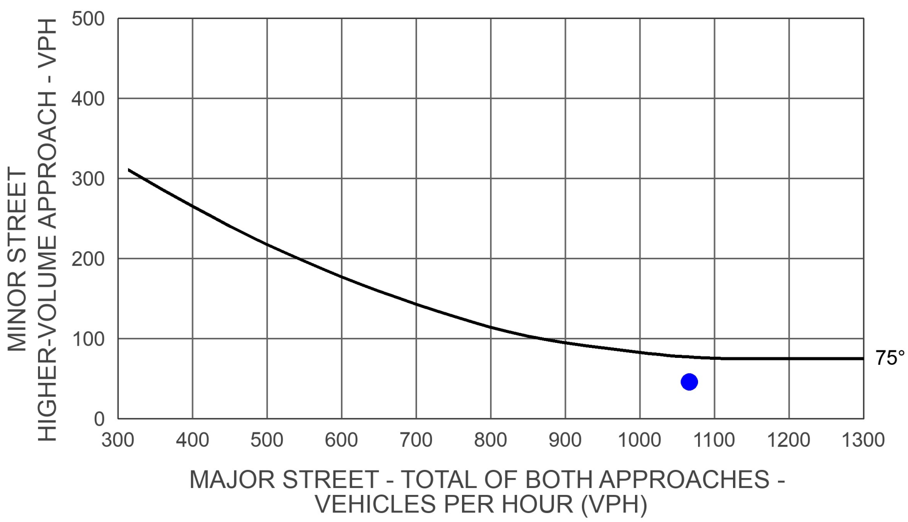
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	937	47	0	1002	87	29	12	0	73	15	54
Future Volume (veh/h)	60	937	47	0	1002	87	29	12	0	73	15	54
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	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
Adj Sat Flow, veh/h/ln	1716	1863	1900	1863	1863	1750	1900	1863	1863	1750	1863	1750
Adj Flow Rate, veh/h	65	1018	51	0	1089	95	32	13	0	79	16	59
Adj No. of Lanes	1	1	0	1	1	0	0	1	1	0	1	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	81	1282	64	2	1072	93	233	85	287	180	46	107
Arrive On Green	0.05	0.73	0.73	0.00	0.63	0.63	0.18	0.18	0.00	0.18	0.18	0.18
Sat Flow, veh/h	1634	1759	88	1774	1689	147	944	467	1583	696	254	590
Grp Volume(v), veh/h	65	0	1069	0	0	1184	45	0	0	154	0	0
Grp Sat Flow(s),veh/h/ln	1634	0	1847	1774	0	1837	1412	0	1583	1539	0	0
Q Serve(g_s), s	3.9	0.0	37.2	0.0	0.0	63.4	0.0	0.0	0.0	6.3	0.0	0.0
Cycle Q Clear(g_c), s	3.9	0.0	37.2	0.0	0.0	63.4	2.5	0.0	0.0	8.9	0.0	0.0
Prop In Lane	1.00		0.05	1.00		0.08	0.71		1.00	0.51		0.38
Lane Grp Cap(c), veh/h	81	0	1347	2	0	1165	317	0	287	333	0	0
V/C Ratio(X)	0.80	0.00	0.79	0.00	0.00	1.02	0.14	0.00	0.00	0.46	0.00	0.00
Avail Cap(c_a), veh/h	87	0	1347	71	0	1165	317	0	287	333	0	0
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)	0.47	0.00	0.47	0.00	0.00	0.10	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	47.0	0.0	8.7	0.0	0.0	18.3	34.5	0.0	0.0	37.0	0.0	0.0
Incr Delay (d2), s/veh	20.8	0.0	2.4	0.0	0.0	12.6	0.9	0.0	0.0	4.6	0.0	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(50%),veh/ln	2.2	0.0	19.3	0.0	0.0	35.8	1.1	0.0	0.0	4.3	0.0	0.0
LnGrp Delay(d),s/veh	67.8	0.0	11.1	0.0	0.0	30.9	35.4	0.0	0.0	41.6	0.0	0.0
LnGrp LOS	E		B			F	D			D		
Approach Vol, veh/h		1134			1184			45			154	
Approach Delay, s/veh		14.3			30.9			35.4			41.6	
Approach LOS		B			C			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.6	0.0	77.4		22.6	9.5	67.9				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.1	4.0	64.4		18.1	5.3	63.1				
Max Q Clear Time (g_c+I1), s		4.5	0.0	39.2		10.9	5.9	65.4				
Green Ext Time (p_c), s		0.5	0.0	15.3		0.4	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			24.2									
HCM 2010 LOS			C									

Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Existing
Intersection #: 4

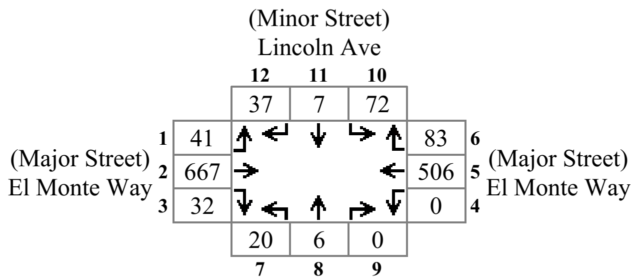


Major Total: 1066
Minor High Volume: 46

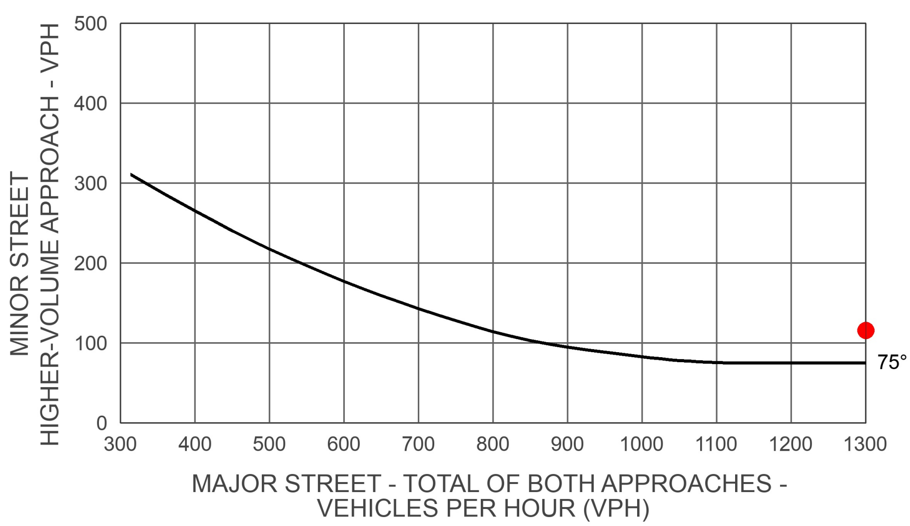


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Existing+Project
Intersection #: 4



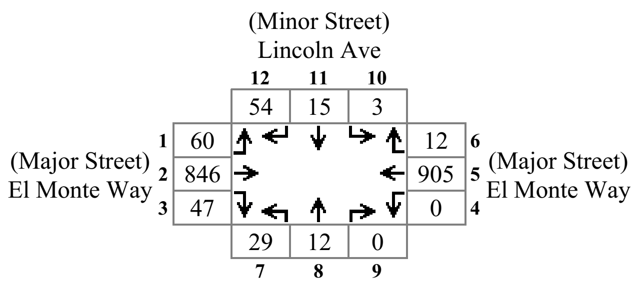
Major Total: 1329
Minor High Volume: 116



Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

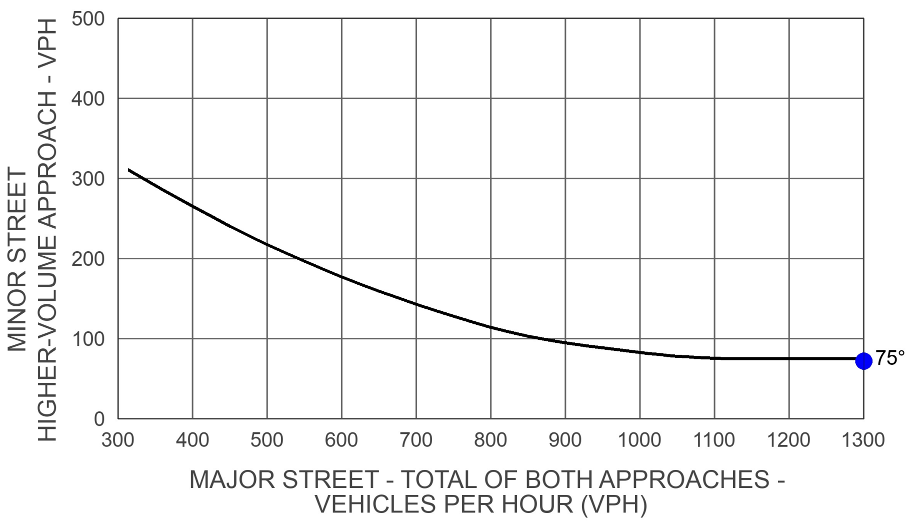
Scenario: PM Future

Intersection #: 4



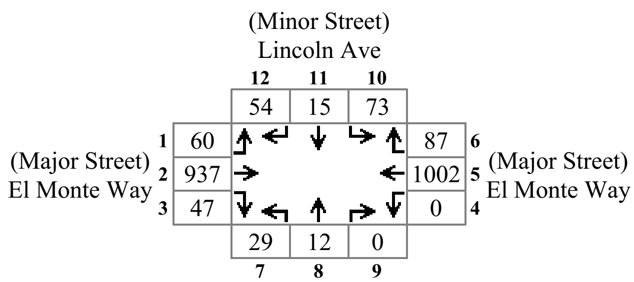
Major Total: 1870

Minor High Volume: 72

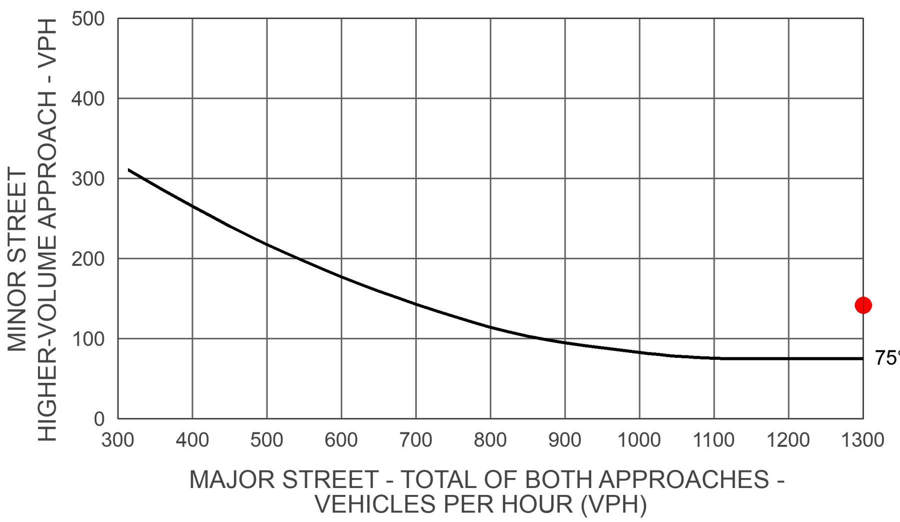


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Future+Project
Intersection #: 4



Major Total: 2133
Minor High Volume: 142



Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	29	300	35	11	399	7	17	9	4	1	37	59
Future Vol, veh/h	29	300	35	11	399	7	17	9	4	1	37	59
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	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	60	-	-	-
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	32	326	38	12	434	8	18	10	4	1	40	64

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	441	0	0	364	0	0	922	873	345	874	888	437
Stage 1	-	-	-	-	-	-	408	408	-	461	461	-
Stage 2	-	-	-	-	-	-	514	465	-	413	427	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1119	-	-	1195	-	-	251	289	698	270	283	620
Stage 1	-	-	-	-	-	-	620	597	-	581	565	-
Stage 2	-	-	-	-	-	-	543	563	-	616	585	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1119	-	-	1195	-	-	194	278	698	254	272	620
Mov Cap-2 Maneuver	-	-	-	-	-	-	194	278	-	254	272	-
Stage 1	-	-	-	-	-	-	602	580	-	564	559	-
Stage 2	-	-	-	-	-	-	447	557	-	585	568	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0.2	22.2	16.7
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	217	698	1119	-	-	1195	-	-	413
HCM Lane V/C Ratio	0.13	0.006	0.028	-	-	0.01	-	-	0.255
HCM Control Delay (s)	24.1	10.2	8.3	-	-	8	-	-	16.7
HCM Lane LOS	C	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.4	0	0.1	-	-	0	-	-	1

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	29	343	35	11	439	38	17	9	4	34	37	59
Future Vol, veh/h	29	343	35	11	439	38	17	9	4	34	37	59
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	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	60	-	-	-
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	32	373	38	12	477	41	18	10	4	37	40	64

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	518	0	0	411	0	0	1029	997	392	982	996	498
Stage 1	-	-	-	-	-	-	455	455	-	522	522	-
Stage 2	-	-	-	-	-	-	574	542	-	460	474	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1048	-	-	1148	-	-	212	244	657	228	244	572
Stage 1	-	-	-	-	-	-	585	569	-	538	531	-
Stage 2	-	-	-	-	-	-	504	520	-	581	558	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1048	-	-	1148	-	-	158	234	657	212	234	572
Mov Cap-2 Maneuver	-	-	-	-	-	-	158	234	-	212	234	-
Stage 1	-	-	-	-	-	-	567	552	-	522	525	-
Stage 2	-	-	-	-	-	-	409	515	-	550	541	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.2	26.5	26.2
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	178	657	1048	-	-	1148	-	-	308
HCM Lane V/C Ratio	0.159	0.007	0.03	-	-	0.01	-	-	0.459
HCM Control Delay (s)	29	10.5	8.5	-	-	8.2	-	-	26.2
HCM Lane LOS	D	B	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	0.6	0	0.1	-	-	0	-	-	2.3

Intersection	
Int Delay, s/veh	49.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	43	441	51	16	883	10	24	18	6	1	78	86
Future Vol, veh/h	43	441	51	16	883	10	24	18	6	1	78	86
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	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	60	-	-	-
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	47	479	55	17	960	11	26	20	7	1	85	93

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	971	0	0	535	0	0	1690	1606	507	1610	1628	965
Stage 1	-	-	-	-	-	-	601	601	-	1000	1000	-
Stage 2	-	-	-	-	-	-	1089	1005	-	610	628	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	710	-	-	1033	-	-	74	105	566	84	102	309
Stage 1	-	-	-	-	-	-	487	489	-	293	321	-
Stage 2	-	-	-	-	-	-	261	319	-	482	476	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	710	-	-	1033	-	-	~ 11	96	566	66	94	309
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 11	96	-	66	94	-
Stage 1	-	-	-	-	-	-	455	457	-	274	316	-
Stage 2	-	-	-	-	-	-	131	314	-	426	444	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0.2	$ 999.2	205.1
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	18	566	710	-	-	1033	-	-	147
HCM Lane V/C Ratio	2.536	0.012	0.066	-	-	0.017	-	-	1.22
HCM Control Delay (s)	$ 1140.3	11.4	10.4	-	-	8.5	-	-	205.1
HCM Lane LOS	F	B	B	-	-	A	-	-	F
HCM 95th %tile Q(veh)	6.2	0	0.2	-	-	0.1	-	-	10.5

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	65.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	43	484	51	16	923	41	24	18	6	34	78	86
Future Vol, veh/h	43	484	51	16	923	41	24	18	6	34	78	86
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	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	60	-	-	-
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	47	526	55	17	1003	45	26	20	7	37	85	93

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1048	0	0	582	0	0	1796	1730	554	1717	1735	1026
Stage 1	-	-	-	-	-	-	647	647	-	1060	1060	-
Stage 2	-	-	-	-	-	-	1149	1083	-	657	675	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	664	-	-	992	-	-	62	88	532	71	88	285
Stage 1	-	-	-	-	-	-	460	467	-	271	301	-
Stage 2	-	-	-	-	-	-	242	293	-	454	453	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	664	-	-	992	-	-	-	80	532	53	~ 80	285
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	80	-	53	~ 80	-
Stage 1	-	-	-	-	-	-	427	434	-	252	296	-
Stage 2	-	-	-	-	-	-	114	288	-	398	421	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0.1		$ 590
HCM LOS			-	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	532	664	-	-	992	-	-	103
HCM Lane V/C Ratio	-	0.012	0.07	-	-	0.018	-	-	2.089
HCM Control Delay (s)	-	11.9	10.8	-	-	8.7	-	-	$ 590
HCM Lane LOS	-	B	B	-	-	A	-	-	F
HCM 95th %tile Q(veh)	-	0	0.2	-	-	0.1	-	-	18.4

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

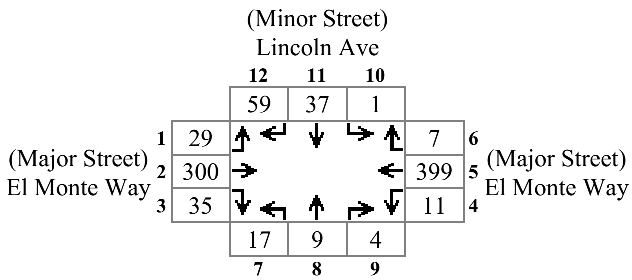
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	484	51	16	923	41	24	18	6	34	78	86
Future Volume (veh/h)	43	484	51	16	923	41	24	18	6	34	78	86
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	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
Adj Sat Flow, veh/h/ln	1716	1863	1900	1863	1863	1750	1900	1863	1863	1750	1863	1750
Adj Flow Rate, veh/h	47	526	55	17	1003	45	26	20	7	37	85	93
Adj No. of Lanes	1	1	0	1	1	0	0	1	1	0	1	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	58	1011	106	27	1043	47	217	151	369	88	177	168
Arrive On Green	0.04	0.61	0.61	0.02	0.59	0.59	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1634	1659	173	1774	1769	79	677	650	1583	187	761	722
Grp Volume(v), veh/h	47	0	581	17	0	1048	46	0	7	215	0	0
Grp Sat Flow(s),veh/h/ln	1634	0	1832	1774	0	1849	1328	0	1583	1670	0	0
Q Serve(g_s), s	2.7	0.0	17.2	0.9	0.0	51.0	0.0	0.0	0.3	3.0	0.0	0.0
Cycle Q Clear(g_c), s	2.7	0.0	17.2	0.9	0.0	51.0	2.1	0.0	0.3	10.5	0.0	0.0
Prop In Lane	1.00		0.09	1.00		0.04	0.57		1.00	0.17		0.43
Lane Grp Cap(c), veh/h	58	0	1117	27	0	1090	368	0	369	433	0	0
V/C Ratio(X)	0.82	0.00	0.52	0.63	0.00	0.96	0.12	0.00	0.02	0.50	0.00	0.00
Avail Cap(c_a), veh/h	77	0	1117	77	0	1119	368	0	369	433	0	0
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)	0.70	0.00	0.70	0.51	0.00	0.51	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	45.5	0.0	10.6	46.5	0.0	18.5	28.7	0.0	28.1	31.9	0.0	0.0
Incr Delay (d2), s/veh	28.0	0.0	0.3	11.7	0.0	11.4	0.7	0.0	0.1	4.0	0.0	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(50%),veh/ln	1.7	0.0	8.6	0.5	0.0	29.1	1.0	0.0	0.2	5.4	0.0	0.0
LnGrp Delay(d),s/veh	73.5	0.0	10.9	58.2	0.0	29.8	29.4	0.0	28.2	36.0	0.0	0.0
LnGrp LOS	E		B	E		C	C		C	D		
Approach Vol, veh/h		628			1065			53			215	
Approach Delay, s/veh		15.6			30.3			29.2			36.0	
Approach LOS		B			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		26.6	5.9	62.4		26.6	7.9	60.5
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.5	4.1	57.9		19.5	4.5	57.5
Max Q Clear Time (g_c+I1), s		4.1	2.9	19.2		12.5	4.7	53.0
Green Ext Time (p_c), s		0.8	0.0	10.4		0.5	0.0	3.0

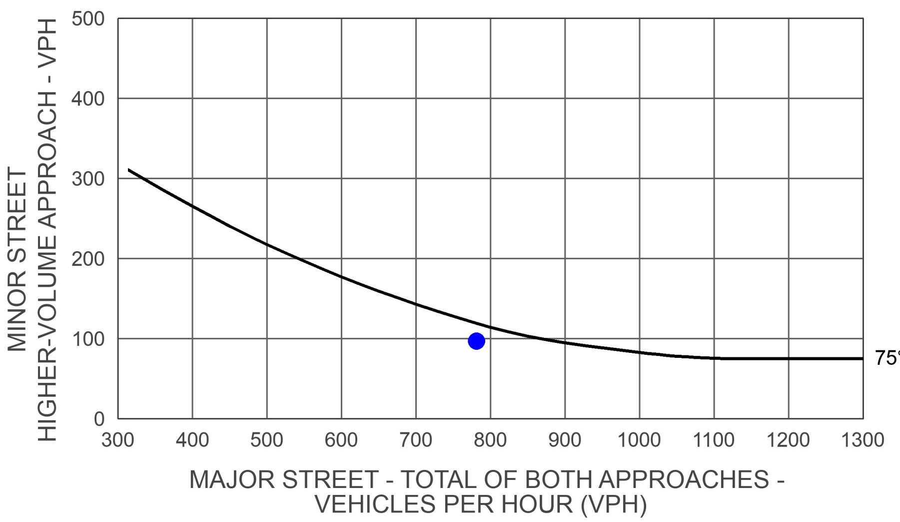
Intersection Summary	
HCM 2010 Ctrl Delay	26.2
HCM 2010 LOS	C

Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Existing
Intersection #: 4



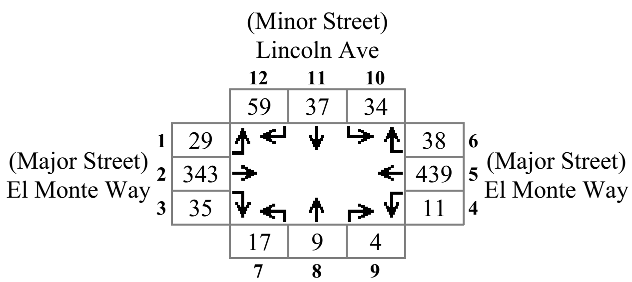
Major Total: 781
Minor High Volume: 97



Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

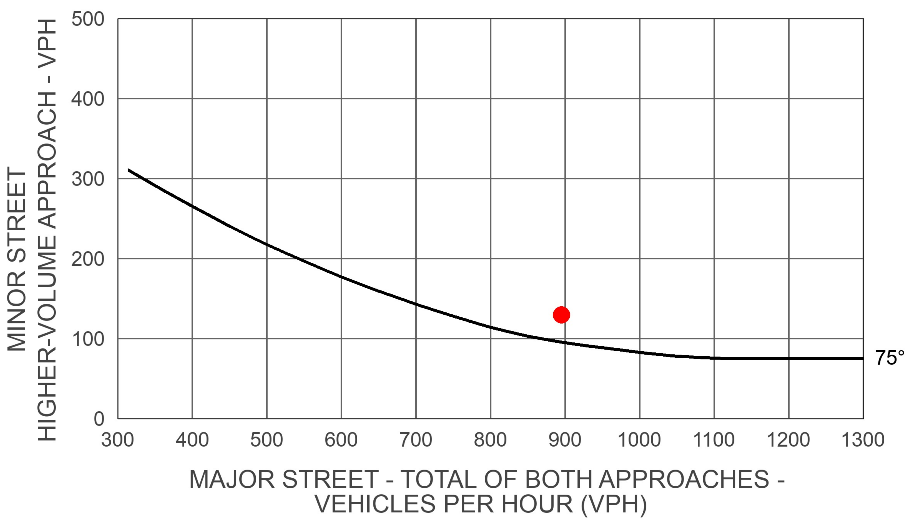
Scenario: AM Existing+Project

Intersection #: 4



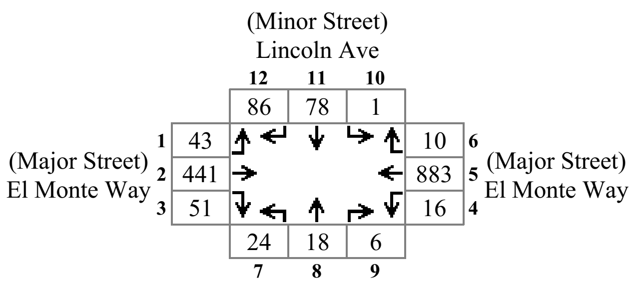
Major Total: 895

Minor High Volume: 130

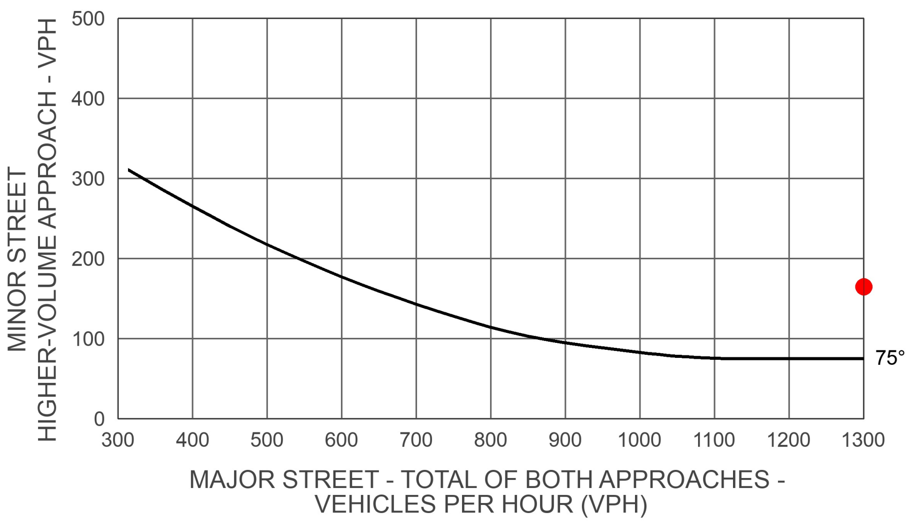


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: AM Future
Intersection #: 4



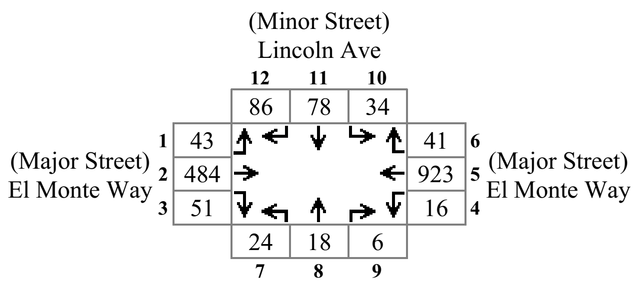
Major Total: 1444
Minor High Volume: 165



Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

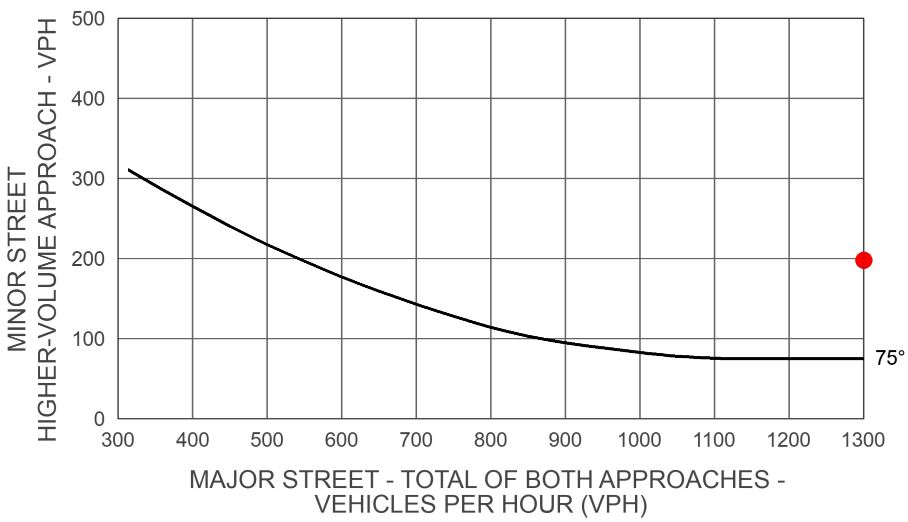
Scenario: AM Future+Project

Intersection #: 4



Major Total: 1558

Minor High Volume: 198



Intersection 5
Perry Ave & El Monte Way

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	541	8	95	392	15	26	30	151	18	26	13
Future Volume (veh/h)	18	541	8	95	392	15	26	30	151	18	26	13
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	0.99		0.98
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
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1750	1863	1716	1750	1863	1750
Adj Flow Rate, veh/h	20	588	9	103	426	16	28	33	164	20	28	14
Adj No. of Lanes	1	1	0	1	1	0	0	1	1	0	1	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	65	831	13	429	1207	45	0	279	213	105	132	54
Arrive On Green	0.04	0.45	0.43	0.35	0.90	0.87	0.00	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	1634	1829	28	1634	1782	67	0	1863	1422	346	882	358
Grp Volume(v), veh/h	20	0	597	103	0	442	0	33	164	62	0	0
Grp Sat Flow(s),veh/h/ln	1634	0	1857	1634	0	1849	0	1863	1422	1585	0	0
Q Serve(g_s), s	1.1	0.0	23.3	4.0	0.0	3.2	0.0	1.4	10.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.1	0.0	23.3	4.0	0.0	3.2	0.0	1.4	10.0	2.8	0.0	0.0
Prop In Lane	1.00		0.02	1.00		0.04	0.00		1.00	0.32		0.23
Lane Grp Cap(c), veh/h	65	0	844	429	0	1252	0	279	213	291	0	0
V/C Ratio(X)	0.31	0.00	0.71	0.24	0.00	0.35	0.00	0.12	0.77	0.21	0.00	0.00
Avail Cap(c_a), veh/h	109	0	844	429	0	1252	0	561	428	376	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.86	0.00	0.86	0.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	42.0	0.0	19.8	22.9	0.0	1.6	0.0	33.1	36.8	33.7	0.0	0.0
Incr Delay (d2), s/veh	2.6	0.0	5.0	0.2	0.0	0.7	0.0	0.2	5.8	0.4	0.0	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(50%),veh/ln	0.5	0.0	12.9	1.8	0.0	1.7	0.0	0.7	4.2	1.4	0.0	0.0
LnGrp Delay(d),s/veh	44.7	0.0	24.7	23.2	0.0	2.3	0.0	33.3	42.5	34.1	0.0	0.0
LnGrp LOS	D		C	C		A		C	D	C		
Approach Vol, veh/h		617			545			197			62	
Approach Delay, s/veh		25.4			6.2			41.0			34.1	
Approach LOS		C			A			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s		17.5	27.6	44.9	0.0	17.5	7.6	64.9
Change Period (Y+Rc), s		4.0	6.0	6.0	4.0	4.0	6.0	6.0
Max Green Setting (Gmax), s		27.1	8.0	38.9	4.5	18.6	4.0	42.9
Max Q Clear Time (g_c+I1), s		12.0	6.0	25.3	0.0	4.8	3.1	5.2
Green Ext Time (p_c), s		0.8	0.1	2.1	0.0	0.8	0.0	2.2

Intersection Summary	
HCM 2010 Ctrl Delay	20.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	720	8	95	579	53	26	30	151	53	26	13
Future Volume (veh/h)	18	720	8	95	579	53	26	30	151	53	26	13
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	0.99		0.97
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
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1750	1863	1716	1750	1863	1750
Adj Flow Rate, veh/h	20	783	9	103	629	58	28	33	164	58	28	14
Adj No. of Lanes	1	1	0	1	1	0	0	1	1	0	1	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	292	971	11	340	935	86	0	272	207	159	72	28
Arrive On Green	0.18	0.53	0.51	0.42	1.00	1.00	0.00	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	1634	1837	21	1634	1676	155	0	1863	1422	705	492	195
Grp Volume(v), veh/h	20	0	792	103	0	687	0	33	164	100	0	0
Grp Sat Flow(s),veh/h/ln	1634	0	1858	1634	0	1831	0	1863	1422	1391	0	0
Q Serve(g_s), s	1.0	0.0	35.7	4.3	0.0	0.0	0.0	1.6	11.4	5.0	0.0	0.0
Cycle Q Clear(g_c), s	1.0	0.0	35.7	4.3	0.0	0.0	0.0	1.6	11.4	6.5	0.0	0.0
Prop In Lane	1.00		0.01	1.00		0.08	0.00		1.00	0.58		0.14
Lane Grp Cap(c), veh/h	292	0	982	340	0	1021	0	272	207	259	0	0
V/C Ratio(X)	0.07	0.00	0.81	0.30	0.00	0.67	0.00	0.12	0.79	0.39	0.00	0.00
Avail Cap(c_a), veh/h	292	0	982	340	0	1021	0	495	378	308	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.66	0.00	0.66	0.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	34.8	0.0	19.8	24.8	0.0	0.0	0.0	37.9	42.1	39.9	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	7.1	0.3	0.0	2.3	0.0	0.2	6.6	0.9	0.0	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(50%),veh/ln	0.5	0.0	20.2	1.9	0.0	0.7	0.0	0.8	4.9	2.7	0.0	0.0
LnGrp Delay(d),s/veh	34.9	0.0	26.8	25.2	0.0	2.3	0.0	38.1	48.7	40.8	0.0	0.0
LnGrp LOS	C		C	C		A		D	D	D		
Approach Vol, veh/h		812			790			197			100	
Approach Delay, s/veh		27.0			5.3			46.9			40.8	
Approach LOS		C			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s		18.9	25.2	57.9	0.0	18.9	22.2	60.9
Change Period (Y+Rc), s		4.0	6.0	6.0	4.0	4.0	6.0	6.0
Max Green Setting (Gmax), s		27.1	7.0	51.9	4.5	18.6	4.0	54.9
Max Q Clear Time (g_c+I1), s		13.4	6.3	37.7	0.0	8.5	3.0	2.0
Green Ext Time (p_c), s		0.9	0.0	3.1	0.0	0.8	0.0	3.2

Intersection Summary	
HCM 2010 Ctrl Delay	20.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	794	12	142	867	22	37	62	217	26	55	19
Future Volume (veh/h)	26	794	12	142	867	22	37	62	217	26	55	19
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.98
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
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1750	1863	1716	1750	1863	1750
Adj Flow Rate, veh/h	28	863	13	154	942	24	40	67	236	28	60	21
Adj No. of Lanes	1	1	0	1	1	0	0	1	1	0	1	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	192	1086	16	180	1059	27	0	347	266	94	186	57
Arrive On Green	0.12	0.59	0.58	0.22	1.00	1.00	0.00	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	1634	1829	28	1634	1807	46	0	1863	1426	283	999	306
Grp Volume(v), veh/h	28	0	876	154	0	966	0	67	236	109	0	0
Grp Sat Flow(s),veh/h/ln	1634	0	1857	1634	0	1853	0	1863	1426	1589	0	0
Q Serve(g_s), s	1.7	0.0	39.6	9.9	0.0	0.0	0.0	3.3	17.6	0.3	0.0	0.0
Cycle Q Clear(g_c), s	1.7	0.0	39.6	9.9	0.0	0.0	0.0	3.3	17.6	5.8	0.0	0.0
Prop In Lane	1.00		0.01	1.00		0.02	0.00		1.00	0.26		0.19
Lane Grp Cap(c), veh/h	192	0	1102	180	0	1086	0	347	266	338	0	0
V/C Ratio(X)	0.15	0.00	0.79	0.86	0.00	0.89	0.00	0.19	0.89	0.32	0.00	0.00
Avail Cap(c_a), veh/h	192	0	1102	180	0	1086	0	463	355	338	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.47	0.00	0.47	0.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	43.2	0.0	17.1	41.7	0.0	0.0	0.0	37.4	43.2	38.4	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	5.9	17.2	0.0	5.6	0.0	0.3	18.6	0.5	0.0	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(50%),veh/ln	0.8	0.0	22.0	5.3	0.0	1.7	0.0	1.7	8.3	2.9	0.0	0.0
LnGrp Delay(d),s/veh	43.6	0.0	23.0	58.9	0.0	5.6	0.0	37.7	61.9	39.0	0.0	0.0
LnGrp LOS	D		C	E		A		D	E	D		
Approach Vol, veh/h		904			1120			303			109	
Approach Delay, s/veh		23.7			13.0			56.5			39.0	
Approach LOS		C			B			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s		24.3	16.0	68.7	0.0	24.3	16.8	67.9
Change Period (Y+Rc), s		4.0	6.0	6.0	4.0	4.0	6.0	6.0
Max Green Setting (Gmax), s		27.1	10.0	55.9	4.5	18.6	4.0	61.9
Max Q Clear Time (g_c+I1), s		19.6	11.9	41.6	0.0	7.8	3.7	2.0
Green Ext Time (p_c), s		0.7	0.0	3.8	0.0	1.2	0.2	5.6

Intersection Summary	
HCM 2010 Ctrl Delay	23.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	973	12	142	773	60	37	62	217	61	55	19
Future Volume (veh/h)	26	973	12	142	773	60	37	62	217	61	55	19
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
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
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1750	1863	1716	1750	1863	1750
Adj Flow Rate, veh/h	28	1058	13	154	840	65	40	67	236	66	60	21
Adj No. of Lanes	1	1	0	1	1	0	0	1	1	0	1	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	60	1146	14	150	1157	90	0	342	262	137	117	35
Arrive On Green	0.04	0.62	0.61	0.09	0.68	0.66	0.00	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	1634	1836	23	1634	1704	132	0	1863	1426	512	637	192
Grp Volume(v), veh/h	28	0	1071	154	0	905	0	67	236	147	0	0
Grp Sat Flow(s),veh/h/ln	1634	0	1858	1634	0	1836	0	1863	1426	1341	0	0
Q Serve(g_s), s	2.0	0.0	61.3	11.0	0.0	37.5	0.0	3.7	19.4	8.6	0.0	0.0
Cycle Q Clear(g_c), s	2.0	0.0	61.3	11.0	0.0	37.5	0.0	3.7	19.4	12.3	0.0	0.0
Prop In Lane	1.00		0.01	1.00		0.07	0.00		1.00	0.45		0.14
Lane Grp Cap(c), veh/h	60	0	1160	150	0	1247	0	342	262	290	0	0
V/C Ratio(X)	0.46	0.00	0.92	1.03	0.00	0.73	0.00	0.20	0.90	0.51	0.00	0.00
Avail Cap(c_a), veh/h	82	0	1160	150	0	1247	0	421	322	290	0	0
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	0.00	1.00	0.37	0.00	0.37	0.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	56.6	0.0	20.0	54.5	0.0	12.2	0.0	41.5	47.9	45.0	0.0	0.0
Incr Delay (d2), s/veh	5.4	0.0	13.4	52.3	0.0	1.4	0.0	0.3	23.7	1.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	35.6	7.1	0.0	19.4	0.0	1.9	9.4	4.6	0.0	0.0
LnGrp Delay(d),s/veh	62.1	0.0	33.4	107.1	0.0	13.6	0.0	41.7	71.6	46.4	0.0	0.0
LnGrp LOS	E		C	F		B		D	E	D		
Approach Vol, veh/h		1099			1059			303			147	
Approach Delay, s/veh		34.1			27.2			65.0			46.4	
Approach LOS		C			C			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s		26.1	15.0	78.9	0.0	26.1	8.4	85.5
Change Period (Y+Rc), s		4.0	6.0	6.0	4.0	4.0	6.0	6.0
Max Green Setting (Gmax), s		27.1	9.0	67.9	4.5	18.6	4.0	72.9
Max Q Clear Time (g_c+I1), s		21.4	13.0	63.3	0.0	14.3	4.0	39.5
Green Ext Time (p_c), s		0.6	0.0	3.5	0.0	0.8	0.0	13.8

Intersection Summary	
HCM 2010 Ctrl Delay	35.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	282	5	82	332	7	57	52	141	7	81	23
Future Volume (veh/h)	11	282	5	82	332	7	57	52	141	7	81	23
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.97	0.99		0.97
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
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1750	1863	1716	1750	1863	1750
Adj Flow Rate, veh/h	12	307	5	89	361	8	62	57	153	8	88	25
Adj No. of Lanes	1	1	0	1	1	0	0	1	1	0	1	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	55	1156	19	144	1246	28	0	272	208	50	197	53
Arrive On Green	0.03	0.63	0.61	0.18	1.00	1.00	0.00	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	1634	1827	30	1634	1814	40	0	1863	1422	48	1347	363
Grp Volume(v), veh/h	12	0	312	89	0	369	0	57	153	121	0	0
Grp Sat Flow(s),veh/h/ln	1634	0	1857	1634	0	1854	0	1863	1422	1759	0	0
Q Serve(g_s), s	0.6	0.0	6.7	4.5	0.0	0.0	0.0	2.4	9.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.6	0.0	6.7	4.5	0.0	0.0	0.0	2.4	9.3	5.6	0.0	0.0
Prop In Lane	1.00		0.02	1.00		0.02	0.00		1.00	0.07		0.21
Lane Grp Cap(c), veh/h	55	0	1175	144	0	1274	0	272	208	299	0	0
V/C Ratio(X)	0.22	0.00	0.27	0.62	0.00	0.29	0.00	0.21	0.74	0.40	0.00	0.00
Avail Cap(c_a), veh/h	109	0	1175	272	0	1274	0	631	482	469	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.90	0.00	0.90	0.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	42.3	0.0	7.3	35.7	0.0	0.0	0.0	33.9	36.8	35.2	0.0	0.0
Incr Delay (d2), s/veh	2.0	0.0	0.6	3.9	0.0	0.5	0.0	0.4	5.0	0.9	0.0	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(50%),veh/ln	0.3	0.0	3.6	2.2	0.0	0.2	0.0	1.3	3.9	2.8	0.0	0.0
LnGrp Delay(d),s/veh	44.3	0.0	7.9	39.5	0.0	0.5	0.0	34.2	41.8	36.1	0.0	0.0
LnGrp LOS	D		A	D		A		C	D	D		
Approach Vol, veh/h		324			458			210			121	
Approach Delay, s/veh		9.2			8.1			39.8			36.1	
Approach LOS		A			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s		17.1	11.9	60.9	0.0	17.1	7.0	65.8
Change Period (Y+Rc), s		4.0	6.0	6.0	4.0	4.0	6.0	6.0
Max Green Setting (Gmax), s		30.5	13.0	30.5	4.5	22.0	4.0	39.5
Max Q Clear Time (g_c+I1), s		11.3	6.5	8.7	0.0	7.6	2.6	2.0
Green Ext Time (p_c), s		1.1	0.1	2.5	0.0	1.0	0.0	2.7

Intersection Summary	
HCM 2010 Ctrl Delay	17.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	365	5	82	408	23	57	52	141	23	81	23
Future Volume (veh/h)	11	365	5	82	408	23	57	52	141	23	81	23
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.97	0.99		0.97
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
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1750	1863	1716	1750	1863	1750
Adj Flow Rate, veh/h	12	397	5	89	443	25	62	57	153	25	88	25
Adj No. of Lanes	1	1	0	1	1	0	0	1	1	0	1	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	55	1161	15	143	1197	68	0	273	208	74	175	45
Arrive On Green	0.03	0.63	0.61	0.18	1.00	1.00	0.00	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	1634	1835	23	1634	1744	98	0	1863	1422	184	1199	306
Grp Volume(v), veh/h	12	0	402	89	0	468	0	57	153	138	0	0
Grp Sat Flow(s),veh/h/ln	1634	0	1858	1634	0	1842	0	1863	1422	1688	0	0
Q Serve(g_s), s	0.6	0.0	9.1	4.5	0.0	0.0	0.0	2.4	9.3	1.6	0.0	0.0
Cycle Q Clear(g_c), s	0.6	0.0	9.1	4.5	0.0	0.0	0.0	2.4	9.3	6.6	0.0	0.0
Prop In Lane	1.00		0.01	1.00		0.05	0.00		1.00	0.18		0.18
Lane Grp Cap(c), veh/h	55	0	1175	143	0	1265	0	273	208	294	0	0
V/C Ratio(X)	0.22	0.00	0.34	0.62	0.00	0.37	0.00	0.21	0.74	0.47	0.00	0.00
Avail Cap(c_a), veh/h	109	0	1175	236	0	1265	0	590	450	417	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.83	0.00	0.83	0.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	42.3	0.0	7.8	35.7	0.0	0.0	0.0	33.8	36.7	35.5	0.0	0.0
Incr Delay (d2), s/veh	2.0	0.0	0.8	3.6	0.0	0.7	0.0	0.4	5.0	1.2	0.0	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(50%),veh/ln	0.3	0.0	4.8	2.2	0.0	0.2	0.0	1.3	3.9	3.3	0.0	0.0
LnGrp Delay(d),s/veh	44.3	0.0	8.6	39.3	0.0	0.7	0.0	34.2	41.7	36.7	0.0	0.0
LnGrp LOS	D		A	D		A		C	D	D		
Approach Vol, veh/h		414			557			210			138	
Approach Delay, s/veh		9.6			6.9			39.7			36.7	
Approach LOS		A			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s		17.2	11.9	60.9	0.0	17.2	7.0	65.8
Change Period (Y+Rc), s		4.0	6.0	6.0	4.0	4.0	6.0	6.0
Max Green Setting (Gmax), s		28.5	11.0	34.5	4.5	20.0	4.0	41.5
Max Q Clear Time (g_c+I1), s		11.3	6.5	11.1	0.0	8.6	2.6	2.0
Green Ext Time (p_c), s		1.2	0.1	3.5	0.0	1.0	0.0	3.6

Intersection Summary	
HCM 2010 Ctrl Delay	16.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	414	7	123	734	10	82	107	203	10	171	34
Future Volume (veh/h)	16	414	7	123	734	10	82	107	203	10	171	34
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.98
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
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1750	1863	1716	1750	1863	1750
Adj Flow Rate, veh/h	17	450	8	134	798	11	89	116	221	11	186	37
Adj No. of Lanes	1	1	0	1	1	0	0	1	1	0	1	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	249	813	14	409	997	14	0	346	265	44	271	52
Arrive On Green	0.15	0.45	0.43	0.50	1.00	1.00	0.00	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	1634	1824	32	1634	1832	25	0	1863	1426	36	1459	281
Grp Volume(v), veh/h	17	0	458	134	0	809	0	116	221	234	0	0
Grp Sat Flow(s),veh/h/ln	1634	0	1856	1634	0	1857	0	1863	1426	1777	0	0
Q Serve(g_s), s	0.9	0.0	18.5	5.0	0.0	0.0	0.0	5.5	15.2	1.9	0.0	0.0
Cycle Q Clear(g_c), s	0.9	0.0	18.5	5.0	0.0	0.0	0.0	5.5	15.2	12.5	0.0	0.0
Prop In Lane	1.00		0.02	1.00		0.01	0.00		1.00	0.05		0.16
Lane Grp Cap(c), veh/h	249	0	828	409	0	1011	0	346	265	367	0	0
V/C Ratio(X)	0.07	0.00	0.55	0.33	0.00	0.80	0.00	0.34	0.83	0.64	0.00	0.00
Avail Cap(c_a), veh/h	249	0	828	409	0	1011	0	520	398	385	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.63	0.00	0.63	0.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	37.0	0.0	20.8	20.3	0.0	0.0	0.0	36.1	40.0	38.9	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	2.7	0.3	0.0	4.3	0.0	0.6	9.2	3.3	0.0	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(50%),veh/ln	0.4	0.0	10.0	2.3	0.0	1.2	0.0	2.9	6.7	6.5	0.0	0.0
LnGrp Delay(d),s/veh	37.1	0.0	23.4	20.6	0.0	4.3	0.0	36.6	49.2	42.1	0.0	0.0
LnGrp LOS	D		C	C		A		D	D	D		
Approach Vol, veh/h		475			943			337			234	
Approach Delay, s/veh		23.9			6.6			44.9			42.1	
Approach LOS		C			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s		22.9	29.6	49.5	0.0	22.9	19.6	59.5
Change Period (Y+Rc), s		4.0	6.0	6.0	4.0	4.0	6.0	6.0
Max Green Setting (Gmax), s		28.5	14.0	43.5	4.5	20.0	4.0	53.5
Max Q Clear Time (g_c+I1), s		17.2	7.0	20.5	0.0	14.5	2.9	2.0
Green Ext Time (p_c), s		1.7	0.2	1.7	0.0	1.1	0.0	4.0

Intersection Summary	
HCM 2010 Ctrl Delay	21.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	497	7	123	572	26	82	107	203	26	171	34
Future Volume (veh/h)	16	497	7	123	572	26	82	107	203	26	171	34
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.98
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
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1750	1863	1716	1750	1863	1750
Adj Flow Rate, veh/h	17	540	8	134	622	28	89	116	221	28	186	37
Adj No. of Lanes	1	1	0	1	1	0	0	1	1	0	1	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	229	852	13	384	991	45	0	344	264	60	249	47
Arrive On Green	0.14	0.47	0.45	0.24	0.56	0.54	0.00	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	1634	1830	27	1634	1767	80	0	1863	1426	118	1346	253
Grp Volume(v), veh/h	17	0	548	134	0	650	0	116	221	251	0	0
Grp Sat Flow(s),veh/h/ln	1634	0	1857	1634	0	1846	0	1863	1426	1717	0	0
Q Serve(g_s), s	0.9	0.0	23.5	7.2	0.0	25.1	0.0	5.7	15.7	7.4	0.0	0.0
Cycle Q Clear(g_c), s	0.9	0.0	23.5	7.2	0.0	25.1	0.0	5.7	15.7	14.5	0.0	0.0
Prop In Lane	1.00		0.01	1.00		0.04	0.00		1.00	0.11		0.15
Lane Grp Cap(c), veh/h	229	0	865	384	0	1036	0	344	264	356	0	0
V/C Ratio(X)	0.07	0.00	0.63	0.35	0.00	0.63	0.00	0.34	0.84	0.71	0.00	0.00
Avail Cap(c_a), veh/h	229	0	865	384	0	1036	0	499	382	359	0	0
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	0.00	1.00	0.56	0.00	0.56	0.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	39.2	0.0	21.3	33.5	0.0	15.7	0.0	37.2	41.3	40.6	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	3.5	0.3	0.0	1.6	0.0	0.6	10.5	6.1	0.0	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(50%),veh/ln	0.4	0.0	12.9	3.3	0.0	13.1	0.0	3.0	6.9	7.5	0.0	0.0
LnGrp Delay(d),s/veh	39.4	0.0	24.8	33.8	0.0	17.3	0.0	37.8	51.8	46.8	0.0	0.0
LnGrp LOS	D		C	C		B		D	D	D		
Approach Vol, veh/h		565			784			337			251	
Approach Delay, s/veh		25.2			20.1			47.0			46.8	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s		23.4	28.7	52.9	0.0	23.4	18.7	62.9
Change Period (Y+Rc), s		4.0	6.0	6.0	4.0	4.0	6.0	6.0
Max Green Setting (Gmax), s		28.1	14.0	46.9	4.5	19.6	4.0	56.9
Max Q Clear Time (g_c+I1), s		17.7	9.2	25.5	0.0	16.5	2.9	27.1
Green Ext Time (p_c), s		1.7	0.2	2.1	0.0	0.8	0.0	2.8

Intersection Summary	
HCM 2010 Ctrl Delay	29.7
HCM 2010 LOS	C

Intersection 6
Crawford Ave & El Monte Way

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	363	123	47	279	73	101	235	24	78	226	86
Future Volume (veh/h)	132	363	123	47	279	73	101	235	24	78	226	86
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.98	1.00		0.97
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
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	143	395	134	51	303	79	110	255	26	85	246	93
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
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	191	549	184	121	471	120	151	323	33	556	825	628
Arrive On Green	0.04	0.07	0.07	0.07	0.17	0.16	0.09	0.19	0.18	0.34	0.44	0.44
Sat Flow, veh/h	1634	2580	863	1634	2766	707	1634	1659	169	1634	1863	1419
Grp Volume(v), veh/h	143	269	260	51	192	190	110	0	281	85	246	93
Grp Sat Flow(s),veh/h/ln	1634	1770	1673	1634	1770	1704	1634	0	1828	1634	1863	1419
Q Serve(g_s), s	7.8	13.4	13.7	2.7	9.1	9.4	5.9	0.0	13.2	3.3	7.6	3.5
Cycle Q Clear(g_c), s	7.8	13.4	13.7	2.7	9.1	9.4	5.9	0.0	13.2	3.3	7.6	3.5
Prop In Lane	1.00		0.52	1.00		0.41	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	191	377	356	121	301	290	151	0	356	556	825	628
V/C Ratio(X)	0.75	0.71	0.73	0.42	0.64	0.66	0.73	0.00	0.79	0.15	0.30	0.15
Avail Cap(c_a), veh/h	236	649	613	133	537	517	182	0	530	556	825	628
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.79	0.79	0.79	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.0	39.2	39.4	39.8	34.7	35.1	39.7	0.0	34.5	20.7	16.1	15.0
Incr Delay (d2), s/veh	7.9	2.0	2.3	2.3	2.2	2.5	11.2	0.0	16.2	0.1	0.9	0.5
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(50%),veh/ln	4.0	6.8	6.6	1.3	4.6	4.6	3.1	0.0	8.2	1.5	4.1	1.5
LnGrp Delay(d),s/veh	49.9	41.2	41.6	42.1	37.0	37.6	50.9	0.0	50.7	20.8	17.0	15.5
LnGrp LOS	D	D	D	D	D	D	D		D	C	B	B
Approach Vol, veh/h		672			433			391			424	
Approach Delay, s/veh		43.2			37.8			50.7			17.4	
Approach LOS		D			D			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	34.6	21.5	10.7	23.2	12.3	43.8	14.5	19.3
Change Period (Y+Rc), s	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
Max Green Setting (Gmax), s	6.7	25.2	6.4	32.1	9.1	22.8	12.1	26.4
Max Q Clear Time (g_c+I1), s	5.3	15.2	4.7	15.7	7.9	9.6	9.8	11.4
Green Ext Time (p_c), s	0.3	0.7	0.3	1.8	0.0	1.3	0.1	1.4

Intersection Summary	
HCM 2010 Ctrl Delay	37.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	152	575	123	76	507	113	101	254	51	111	237	98
Future Volume (veh/h)	152	575	123	76	507	113	101	254	51	111	237	98
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.97
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
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	165	625	134	83	551	123	110	276	55	121	258	107
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
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	211	757	162	163	667	148	149	322	64	435	725	552
Arrive On Green	0.04	0.09	0.08	0.10	0.23	0.22	0.09	0.21	0.21	0.27	0.39	0.39
Sat Flow, veh/h	1634	2882	617	1634	2858	635	1634	1503	299	1634	1863	1417
Grp Volume(v), veh/h	165	383	376	83	340	334	110	0	331	121	258	107
Grp Sat Flow(s),veh/h/ln	1634	1770	1730	1634	1770	1724	1634	0	1802	1634	1863	1417
Q Serve(g_s), s	10.2	21.7	21.8	4.9	18.6	18.8	6.7	0.0	18.0	6.0	10.0	5.1
Cycle Q Clear(g_c), s	10.2	21.7	21.8	4.9	18.6	18.8	6.7	0.0	18.0	6.0	10.0	5.1
Prop In Lane	1.00		0.36	1.00		0.37	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	211	465	454	163	413	403	149	0	387	435	725	552
V/C Ratio(X)	0.78	0.82	0.83	0.51	0.82	0.83	0.74	0.00	0.86	0.28	0.36	0.19
Avail Cap(c_a), veh/h	272	576	563	178	474	461	224	0	507	435	725	552
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.62	0.62	0.62	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.4	44.3	44.4	43.5	37.1	37.3	45.2	0.0	38.6	29.7	22.1	20.6
Incr Delay (d2), s/veh	6.8	5.0	5.2	2.4	10.1	10.8	6.9	0.0	20.9	0.3	1.4	0.8
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(50%),veh/ln	5.0	11.3	11.1	2.3	10.2	10.1	3.3	0.0	11.3	2.7	5.4	2.1
LnGrp Delay(d),s/veh	54.2	49.3	49.6	46.0	47.2	48.1	52.1	0.0	59.5	30.0	23.4	21.4
LnGrp LOS	D	D	D	D	D	D	D		E	C	C	C
Approach Vol, veh/h		924			757			441			486	
Approach Delay, s/veh		50.3			47.5			57.7			24.6	
Approach LOS		D			D			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	31.1	25.9	14.2	30.8	13.3	43.7	17.2	27.8
Change Period (Y+Rc), s	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
Max Green Setting (Gmax), s	12.1	27.8	10.2	32.3	13.1	26.8	16.1	26.4
Max Q Clear Time (g_c+I1), s	8.0	20.0	6.9	23.8	8.7	12.0	12.2	20.8
Green Ext Time (p_c), s	0.8	0.8	1.1	2.1	0.1	1.6	0.2	1.6

Intersection Summary	
HCM 2010 Ctrl Delay	45.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	194	533	181	70	617	109	145	482	34	114	476	125
Future Volume (veh/h)	194	533	181	70	617	109	145	482	34	114	476	125
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.97
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
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	211	579	197	76	671	118	158	524	37	124	517	136
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
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	252	693	235	216	740	130	195	606	43	161	619	470
Arrive On Green	0.05	0.09	0.09	0.13	0.25	0.24	0.12	0.35	0.34	0.10	0.33	0.33
Sat Flow, veh/h	1634	2572	873	1634	2993	526	1634	1718	121	1634	1863	1415
Grp Volume(v), veh/h	211	398	378	76	396	393	158	0	561	124	517	136
Grp Sat Flow(s),veh/h/ln	1634	1770	1675	1634	1770	1749	1634	0	1839	1634	1863	1415
Q Serve(g_s), s	14.0	24.1	24.2	4.6	23.7	23.8	10.3	0.0	31.0	8.1	28.0	7.7
Cycle Q Clear(g_c), s	14.0	24.1	24.2	4.6	23.7	23.8	10.3	0.0	31.0	8.1	28.0	7.7
Prop In Lane	1.00		0.52	1.00		0.30	1.00		0.07	1.00		1.00
Lane Grp Cap(c), veh/h	252	477	451	216	438	433	195	0	649	161	619	470
V/C Ratio(X)	0.84	0.83	0.84	0.35	0.91	0.91	0.81	0.00	0.86	0.77	0.84	0.29
Avail Cap(c_a), veh/h	255	586	555	216	443	438	195	0	649	165	619	470
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.51	0.51	0.51	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.4	47.3	47.4	43.0	39.8	39.9	46.8	0.0	32.9	47.9	33.7	26.9
Incr Delay (d2), s/veh	11.7	4.5	4.9	1.0	21.7	22.3	22.1	0.0	14.3	19.3	12.6	1.6
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(50%),veh/ln	7.2	12.4	11.9	2.1	14.2	14.1	5.8	0.0	18.3	4.5	16.5	3.2
LnGrp Delay(d),s/veh	62.0	51.8	52.3	44.0	61.5	62.2	68.9	0.0	47.2	67.3	46.3	28.5
LnGrp LOS	E	D	D	D	E	E	E		D	E	D	C
Approach Vol, veh/h		987			865			719			777	
Approach Delay, s/veh		54.2			60.3			52.0			46.5	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.7	42.5	18.4	33.4	17.0	40.2	20.8	31.0
Change Period (Y+Rc), s	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
Max Green Setting (Gmax), s	10.1	36.8	7.3	35.2	12.1	34.8	16.1	26.4
Max Q Clear Time (g_c+I1), s	10.1	33.0	6.6	26.2	12.3	30.0	16.0	25.8
Green Ext Time (p_c), s	0.0	2.0	0.3	2.2	0.0	2.4	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	53.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	214	745	181	99	845	149	145	357	61	147	340	137
Future Volume (veh/h)	214	745	181	99	845	149	145	357	61	147	340	137
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.97
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
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	233	810	197	108	918	162	158	388	66	160	370	149
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
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	253	1079	263	144	952	168	251	416	71	184	425	321
Arrive On Green	0.15	0.38	0.38	0.09	0.32	0.31	0.15	0.27	0.26	0.11	0.23	0.23
Sat Flow, veh/h	1634	2806	682	1634	2992	528	1634	1547	263	1634	1863	1409
Grp Volume(v), veh/h	233	511	496	108	543	537	158	0	454	160	370	149
Grp Sat Flow(s),veh/h/ln	1634	1770	1719	1634	1770	1750	1634	0	1810	1634	1863	1409
Q Serve(g_s), s	15.5	27.5	27.5	7.1	33.2	33.2	10.0	0.0	26.9	10.6	21.0	6.9
Cycle Q Clear(g_c), s	15.5	27.5	27.5	7.1	33.2	33.2	10.0	0.0	26.9	10.6	21.0	6.9
Prop In Lane	1.00		0.40	1.00		0.30	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	253	681	661	144	563	557	251	0	487	184	425	321
V/C Ratio(X)	0.92	0.75	0.75	0.75	0.96	0.96	0.63	0.00	0.93	0.87	0.87	0.46
Avail Cap(c_a), veh/h	253	681	661	160	563	557	251	0	487	184	508	384
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	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.9	29.3	29.4	49.0	36.9	37.0	43.6	0.0	39.3	48.0	40.9	17.2
Incr Delay (d2), s/veh	36.5	4.6	4.8	16.1	29.0	29.3	4.9	0.0	24.9	32.9	13.3	1.0
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(50%),veh/ln	9.5	14.2	13.9	3.9	20.7	20.5	4.8	0.0	16.7	6.5	12.4	2.7
LnGrp Delay(d),s/veh	82.3	33.9	34.2	65.1	65.8	66.3	48.5	0.0	64.2	80.9	54.2	18.2
LnGrp LOS	F	C	C	E	E	E	D		E	F	D	B
Approach Vol, veh/h		1240			1188			612			679	
Approach Delay, s/veh		43.1			66.0			60.2			52.6	
Approach LOS		D			E			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.4	33.6	13.7	46.3	20.9	29.1	21.0	39.0
Change Period (Y+Rc), s	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
Max Green Setting (Gmax), s	11.5	28.7	9.9	40.3	11.1	29.1	16.1	34.1
Max Q Clear Time (g_c+I1), s	12.6	28.9	9.1	29.5	12.0	23.0	17.5	35.2
Green Ext Time (p_c), s	0.0	0.0	0.0	6.6	0.0	1.1	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	55.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	202	56	41	245	58	83	288	26	66	305	87
Future Volume (veh/h)	99	202	56	41	245	58	83	288	26	66	305	87
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.98	1.00		0.97
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
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	108	220	61	45	266	63	90	313	28	72	332	95
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
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	151	581	157	71	462	107	128	374	33	561	909	693
Arrive On Green	0.03	0.07	0.07	0.04	0.16	0.15	0.08	0.22	0.21	0.34	0.49	0.49
Sat Flow, veh/h	1634	2734	736	1634	2829	655	1634	1682	150	1634	1863	1420
Grp Volume(v), veh/h	108	140	141	45	164	165	90	0	341	72	332	95
Grp Sat Flow(s),veh/h/ln	1634	1770	1701	1634	1770	1714	1634	0	1832	1634	1863	1420
Q Serve(g_s), s	5.9	6.8	7.1	2.4	7.7	8.0	4.8	0.0	16.0	2.7	10.0	3.3
Cycle Q Clear(g_c), s	5.9	6.8	7.1	2.4	7.7	8.0	4.8	0.0	16.0	2.7	10.0	3.3
Prop In Lane	1.00		0.43	1.00		0.38	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	151	376	362	71	289	280	128	0	408	561	909	693
V/C Ratio(X)	0.71	0.37	0.39	0.63	0.57	0.59	0.70	0.00	0.84	0.13	0.37	0.14
Avail Cap(c_a), veh/h	218	635	610	127	537	520	182	0	523	561	909	693
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.95	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.4	36.1	36.3	42.3	34.7	35.0	40.5	0.0	33.4	20.3	14.4	12.6
Incr Delay (d2), s/veh	5.8	0.6	0.6	9.0	1.8	2.0	6.8	0.0	18.1	0.1	1.1	0.4
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(50%),veh/ln	2.9	3.4	3.4	1.3	3.9	4.0	2.4	0.0	10.1	1.2	5.4	1.4
LnGrp Delay(d),s/veh	48.2	36.7	37.0	51.4	36.5	37.0	47.3	0.0	51.5	20.4	15.5	13.1
LnGrp LOS	D	D	D	D	D	D	D		D	C	B	B
Approach Vol, veh/h		389			374			431			499	
Approach Delay, s/veh		40.0			38.5			50.6			15.7	
Approach LOS		D			D			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	34.9	24.0	7.9	23.1	11.1	47.9	12.3	18.7
Change Period (Y+Rc), s	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
Max Green Setting (Gmax), s	8.1	24.8	6.1	31.4	9.1	23.8	11.1	26.4
Max Q Clear Time (g_c+I1), s	4.7	18.0	4.4	9.1	6.8	12.0	7.9	10.0
Green Ext Time (p_c), s	0.7	0.7	0.0	2.2	0.0	1.6	0.1	2.1

Intersection Summary			
HCM 2010 Ctrl Delay			35.2
HCM 2010 LOS			D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	108	301	56	53	338	75	83	297	39	81	309	92
Future Volume (veh/h)	108	301	56	53	338	75	83	297	39	81	309	92
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.98	1.00		0.97
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
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	117	327	61	58	367	82	90	323	42	88	336	100
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
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	167	694	128	88	531	117	128	380	49	488	850	647
Arrive On Green	0.03	0.08	0.07	0.05	0.19	0.18	0.08	0.24	0.23	0.30	0.46	0.46
Sat Flow, veh/h	1634	2967	546	1634	2861	631	1634	1611	209	1634	1863	1419
Grp Volume(v), veh/h	117	193	195	58	225	224	90	0	365	88	336	100
Grp Sat Flow(s),veh/h/ln	1634	1770	1744	1634	1770	1722	1634	0	1821	1634	1863	1419
Q Serve(g_s), s	6.4	9.4	9.6	3.1	10.7	11.0	4.8	0.0	17.2	3.6	10.8	2.3
Cycle Q Clear(g_c), s	6.4	9.4	9.6	3.1	10.7	11.0	4.8	0.0	17.2	3.6	10.8	2.3
Prop In Lane	1.00		0.31	1.00		0.37	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	167	414	408	88	329	320	128	0	430	488	850	647
V/C Ratio(X)	0.70	0.47	0.48	0.66	0.68	0.70	0.70	0.00	0.85	0.18	0.40	0.15
Avail Cap(c_a), veh/h	200	602	593	140	537	522	163	0	560	488	850	647
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.1	36.1	36.3	41.8	34.2	34.5	40.5	0.0	32.9	23.4	16.2	5.4
Incr Delay (d2), s/veh	7.7	0.7	0.8	8.1	2.5	2.8	9.3	0.0	18.5	0.2	1.4	0.5
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(50%),veh/ln	3.2	4.7	4.8	1.6	5.4	5.5	2.5	0.0	10.8	1.6	5.8	1.0
LnGrp Delay(d),s/veh	49.8	36.9	37.1	49.9	36.7	37.2	49.7	0.0	51.4	23.6	17.6	5.9
LnGrp LOS	D	D	D	D	D	D	D		D	C	B	A
Approach Vol, veh/h		505			507			455			524	
Approach Delay, s/veh		40.0			38.5			51.1			16.4	
Approach LOS		D			D			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	30.9	25.2	8.8	25.1	11.0	45.1	13.2	20.7
Change Period (Y+Rc), s	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
Max Green Setting (Gmax), s	7.1	26.8	6.8	29.7	8.1	25.8	10.1	26.4
Max Q Clear Time (g_c+I1), s	5.6	19.2	5.1	11.6	6.8	12.8	8.4	13.0
Green Ext Time (p_c), s	0.4	0.9	0.0	1.7	0.0	1.7	0.4	1.4

Intersection Summary	
HCM 2010 Ctrl Delay	35.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	145	297	82	61	542	87	119	591	37	96	643	127
Future Volume (veh/h)	145	297	82	61	542	87	119	591	37	96	643	127
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.98	1.00		0.97
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
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	158	323	89	66	589	95	129	642	40	104	699	138
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
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	170	464	125	272	707	114	141	676	42	190	783	596
Arrive On Green	0.03	0.06	0.05	0.17	0.23	0.22	0.09	0.39	0.38	0.12	0.42	0.42
Sat Flow, veh/h	1634	2729	737	1634	3037	488	1634	1733	108	1634	1863	1418
Grp Volume(v), veh/h	158	207	205	66	342	342	129	0	682	104	699	138
Grp Sat Flow(s),veh/h/ln	1634	1770	1697	1634	1770	1756	1634	0	1841	1634	1863	1418
Q Serve(g_s), s	9.8	11.7	12.1	3.6	18.8	18.9	8.0	0.0	36.6	6.1	35.5	6.4
Cycle Q Clear(g_c), s	9.8	11.7	12.1	3.6	18.8	18.9	8.0	0.0	36.6	6.1	35.5	6.4
Prop In Lane	1.00		0.43	1.00		0.28	1.00		0.06	1.00		1.00
Lane Grp Cap(c), veh/h	170	301	289	272	412	409	141	0	718	190	783	596
V/C Ratio(X)	0.93	0.69	0.71	0.24	0.83	0.84	0.92	0.00	0.95	0.55	0.89	0.23
Avail Cap(c_a), veh/h	170	482	462	272	474	470	141	0	728	190	783	596
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.85	0.85	0.85	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.9	45.5	45.7	36.9	37.2	37.4	46.2	0.0	30.2	42.5	27.5	19.0
Incr Delay (d2), s/veh	44.5	2.4	2.8	0.5	10.7	11.1	51.1	0.0	23.3	3.3	14.7	0.9
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(50%),veh/ln	6.6	6.0	5.9	1.6	10.4	10.4	5.6	0.0	23.2	2.9	21.5	2.6
LnGrp Delay(d),s/veh	93.4	47.9	48.5	37.4	47.9	48.5	97.3	0.0	53.4	45.8	42.2	19.9
LnGrp LOS	F	D	D	D	D	D	F		D	D	D	B
Approach Vol, veh/h		570			750			811			941	
Approach Delay, s/veh		60.7			47.2			60.4			39.3	
Approach LOS		E			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.9	43.8	21.0	21.4	12.8	46.9	14.6	27.7
Change Period (Y+Rc), s	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
Max Green Setting (Gmax), s	6.9	39.4	9.2	26.9	7.9	38.4	9.7	26.4
Max Q Clear Time (g_c+I1), s	8.1	38.6	5.6	14.1	10.0	37.5	11.8	20.9
Green Ext Time (p_c), s	0.0	0.3	1.1	1.2	0.0	0.4	0.0	1.4

Intersection Summary	
HCM 2010 Ctrl Delay	50.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	154	396	82	73	635	104	119	423	50	111	448	132
Future Volume (veh/h)	154	396	82	73	635	104	119	423	50	111	448	132
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.98	1.00		0.97
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
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	167	430	89	79	690	113	129	460	54	121	487	143
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
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	210	571	117	321	801	131	170	556	65	161	624	474
Arrive On Green	0.13	0.20	0.19	0.20	0.26	0.25	0.10	0.34	0.33	0.10	0.34	0.34
Sat Flow, veh/h	1634	2905	596	1634	3030	496	1634	1633	192	1634	1863	1415
Grp Volume(v), veh/h	167	260	259	79	403	400	129	0	514	121	487	143
Grp Sat Flow(s),veh/h/ln	1634	1770	1731	1634	1770	1756	1634	0	1825	1634	1863	1415
Q Serve(g_s), s	9.5	13.2	13.5	3.9	20.7	20.7	7.3	0.0	24.7	6.9	22.4	7.1
Cycle Q Clear(g_c), s	9.5	13.2	13.5	3.9	20.7	20.7	7.3	0.0	24.7	6.9	22.4	7.1
Prop In Lane	1.00		0.34	1.00		0.28	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	210	348	340	321	468	464	170	0	622	161	624	474
V/C Ratio(X)	0.80	0.75	0.76	0.25	0.86	0.86	0.76	0.00	0.83	0.75	0.78	0.30
Avail Cap(c_a), veh/h	223	516	505	321	509	505	189	0	930	171	930	707
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	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.3	36.1	36.3	32.4	33.4	33.6	41.5	0.0	28.9	41.8	28.5	23.4
Incr Delay (d2), s/veh	17.1	3.3	3.8	0.4	13.3	13.5	14.7	0.0	3.9	15.8	2.5	0.4
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(50%),veh/ln	5.3	6.8	6.8	1.8	11.8	11.8	4.0	0.0	13.1	3.8	11.9	2.8
LnGrp Delay(d),s/veh	57.4	39.4	40.2	32.8	46.7	47.1	56.2	0.0	32.8	57.6	31.1	23.8
LnGrp LOS	E	D	D	C	D	D	E		C	E	C	C
Approach Vol, veh/h		686			882			643			751	
Approach Delay, s/veh		44.1			45.6			37.5			34.0	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.4	36.5	22.7	22.7	13.9	36.0	16.3	29.2
Change Period (Y+Rc), s	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
Max Green Setting (Gmax), s	9.1	47.7	11.7	26.9	10.1	46.7	12.1	26.5
Max Q Clear Time (g_c+I1), s	8.9	26.7	5.9	15.5	9.3	24.4	11.5	22.7
Green Ext Time (p_c), s	0.0	4.9	1.9	1.5	0.0	5.0	0.0	1.3

Intersection Summary	
HCM 2010 Ctrl Delay	40.5
HCM 2010 LOS	D

Intersection 7
Crawford Ave & Sierra Way

Intersection	
Intersection Delay, s/veh	11.1
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	42	39	24	0	14	50	34	0	30	207	36	0	36	223	50
Future Vol, veh/h	0	42	39	24	0	14	50	34	0	30	207	36	0	36	223	50
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	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	46	42	26	0	15	54	37	0	33	225	39	0	39	242	54
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.9	9.6	11.3	11.9
HCM LOS	A	A	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	11%	40%	14%	12%
Vol Thru, %	76%	37%	51%	72%
Vol Right, %	13%	23%	35%	16%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	273	105	98	309
LT Vol	30	42	14	36
Through Vol	207	39	50	223
RT Vol	36	24	34	50
Lane Flow Rate	297	114	107	336
Geometry Grp	1	1	1	1
Degree of Util (X)	0.402	0.179	0.164	0.449
Departure Headway (Hd)	4.982	5.64	5.536	4.918
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	727	639	651	736
Service Time	2.982	3.646	3.542	2.918
HCM Lane V/C Ratio	0.409	0.178	0.164	0.457
HCM Control Delay	11.3	9.9	9.6	11.9
HCM Lane LOS	B	A	A	B
HCM 95th-tile Q	1.9	0.6	0.6	2.3

Intersection	
Intersection Delay, s/veh	12.4
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	56	39	24	0	14	50	43	0	30	230	36	0	41	244	64
Future Vol, veh/h	0	56	39	24	0	14	50	43	0	30	230	36	0	41	244	64
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	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	61	42	26	0	15	54	47	0	33	250	39	0	45	265	70
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.6	10.1	12.5	13.7
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	10%	47%	13%	12%
Vol Thru, %	78%	33%	47%	70%
Vol Right, %	12%	20%	40%	18%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	296	119	107	349
LT Vol	30	56	14	41
Through Vol	230	39	50	244
RT Vol	36	24	43	64
Lane Flow Rate	322	129	116	379
Geometry Grp	1	1	1	1
Degree of Util (X)	0.46	0.212	0.186	0.532
Departure Headway (Hd)	5.152	5.911	5.757	5.045
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	698	605	621	713
Service Time	3.189	3.962	3.809	3.08
HCM Lane V/C Ratio	0.461	0.213	0.187	0.532
HCM Control Delay	12.5	10.6	10.1	13.7
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	2.4	0.8	0.7	3.2

Intersection	
Intersection Delay, s/veh	53
Intersection LOS	F

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	62	57	35	0	21	111	51	0	43	425	52	0	52	470	73
Future Vol, veh/h	0	62	57	35	0	21	111	51	0	43	425	52	0	52	470	73
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	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	67	62	38	0	23	121	55	0	47	462	57	0	57	511	79
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	15.9	16.8	64.1	64.1
HCM LOS	C	C	F	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	8%	40%	11%	9%
Vol Thru, %	82%	37%	61%	79%
Vol Right, %	10%	23%	28%	12%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	520	154	183	595
LT Vol	43	62	21	52
Through Vol	425	57	111	470
RT Vol	52	35	51	73
Lane Flow Rate	565	167	199	647
Geometry Grp	1	1	1	1
Degree of Util (X)	1	0.376	0.434	1
Departure Headway (Hd)	6.57	8.083	7.847	6.594
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	554	447	461	556
Service Time	4.607	6.104	5.865	4.594
HCM Lane V/C Ratio	1.02	0.374	0.432	1.164
HCM Control Delay	64.1	15.9	16.8	64.1
HCM Lane LOS	F	C	C	F
HCM 95th-tile Q	14.3	1.7	2.2	14.3

Intersection	
Intersection Delay, s/veh	53.7
Intersection LOS	F

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	76	57	35	0	21	111	60	0	43	448	52	0	57	491	87
Future Vol, veh/h	0	76	57	35	0	21	111	60	0	43	448	52	0	57	491	87
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	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	83	62	38	0	23	121	65	0	47	487	57	0	62	534	95
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	16.8	17.4	64.9	64.8
HCM LOS	C	C	F	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	8%	45%	11%	9%
Vol Thru, %	83%	34%	58%	77%
Vol Right, %	10%	21%	31%	14%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	543	168	192	635
LT Vol	43	76	21	57
Through Vol	448	57	111	491
RT Vol	52	35	60	87
Lane Flow Rate	590	183	209	690
Geometry Grp	1	1	1	1
Degree of Util (X)	1	0.412	0.457	1
Departure Headway (Hd)	6.655	8.13	7.888	6.632
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	543	442	457	545
Service Time	4.753	6.185	5.937	4.73
HCM Lane V/C Ratio	1.087	0.414	0.457	1.266
HCM Control Delay	64.9	16.8	17.4	64.8
HCM Lane LOS	F	C	C	F
HCM 95th-tile Q	14.1	2	2.3	14.2

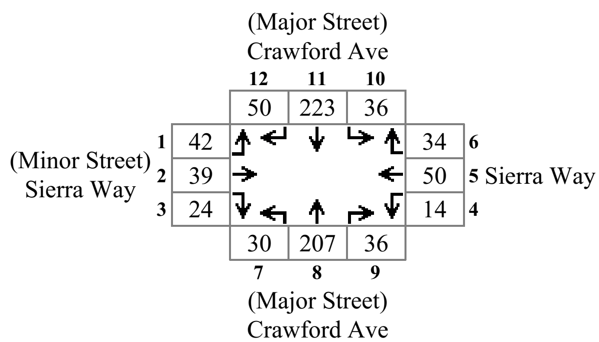
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	57	35	21	111	60	43	448	52	57	491	87
Future Volume (veh/h)	76	57	35	21	111	60	43	448	52	57	491	87
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	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
Adj Sat Flow, veh/h/ln	1750	1863	1750	1750	1863	1750	1750	1863	1750	1750	1863	1750
Adj Flow Rate, veh/h	83	62	38	23	121	65	47	487	57	62	534	95
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	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	144	93	47	63	181	90	108	1074	122	121	1000	172
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.74	0.74	0.74	0.74	0.74	0.74
Sat Flow, veh/h	522	563	284	114	1099	547	89	1460	165	105	1361	234
Grp Volume(v), veh/h	183	0	0	209	0	0	591	0	0	691	0	0
Grp Sat Flow(s),veh/h/ln	1369	0	0	1760	0	0	1714	0	0	1699	0	0
Q Serve(g_s), s	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	11.8	0.0	0.0	10.0	0.0	0.0	11.3	0.0	0.0	14.6	0.0	0.0
Prop In Lane	0.45		0.21	0.11		0.31	0.08		0.10	0.09		0.14
Lane Grp Cap(c), veh/h	284	0	0	334	0	0	1304	0	0	1293	0	0
V/C Ratio(X)	0.65	0.00	0.00	0.63	0.00	0.00	0.45	0.00	0.00	0.53	0.00	0.00
Avail Cap(c_a), veh/h	423	0	0	497	0	0	1304	0	0	1293	0	0
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	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	0.42	0.00	0.00
Uniform Delay (d), s/veh	36.1	0.0	0.0	35.6	0.0	0.0	4.7	0.0	0.0	5.1	0.0	0.0
Incr Delay (d2), s/veh	2.5	0.0	0.0	1.9	0.0	0.0	1.1	0.0	0.0	0.7	0.0	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(50%),veh/ln	4.6	0.0	0.0	5.1	0.0	0.0	6.0	0.0	0.0	7.3	0.0	0.0
LnGrp Delay(d),s/veh	38.6	0.0	0.0	37.5	0.0	0.0	5.8	0.0	0.0	5.8	0.0	0.0
LnGrp LOS	D			D			A			A		
Approach Vol, veh/h		183			209			591			691	
Approach Delay, s/veh		38.6			37.5			5.8			5.8	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		70.7		19.3		70.7		19.3
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green Setting (Gmax), s		57.5		23.5		57.5		23.5
Max Q Clear Time (g_c+I1), s		13.3		13.8		16.6		12.0
Green Ext Time (p_c), s		7.4		1.0		7.4		1.1

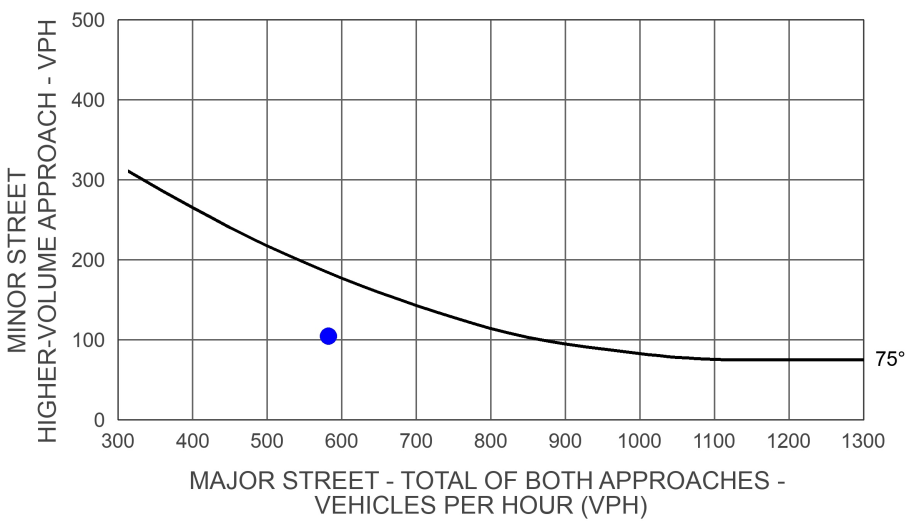
Intersection Summary	
HCM 2010 Ctrl Delay	13.3
HCM 2010 LOS	B

Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Existing
Intersection #: 7

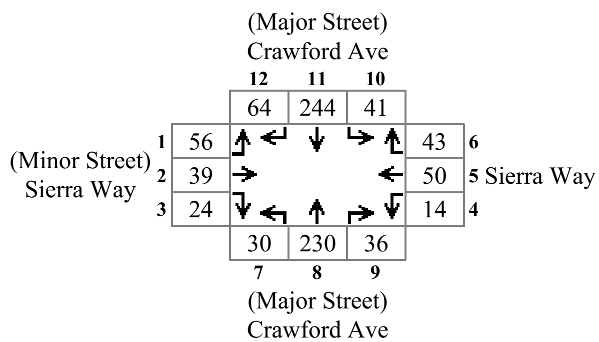


Major Total: 582
Minor High Volume: 105

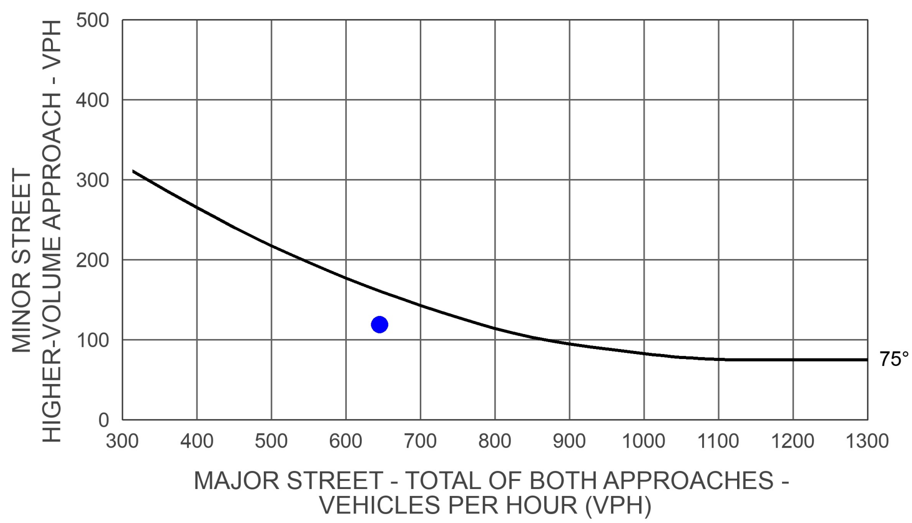


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Existing+Project
Intersection #: 7

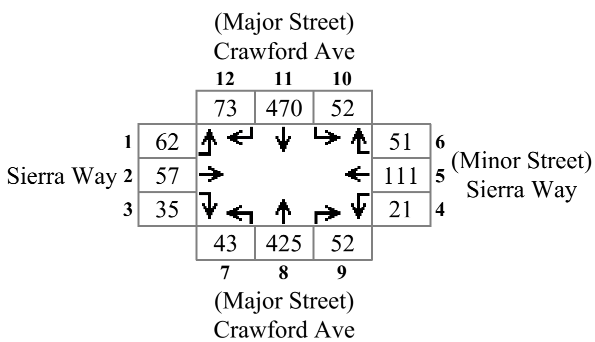


Major Total: 645
Minor High Volume: 119

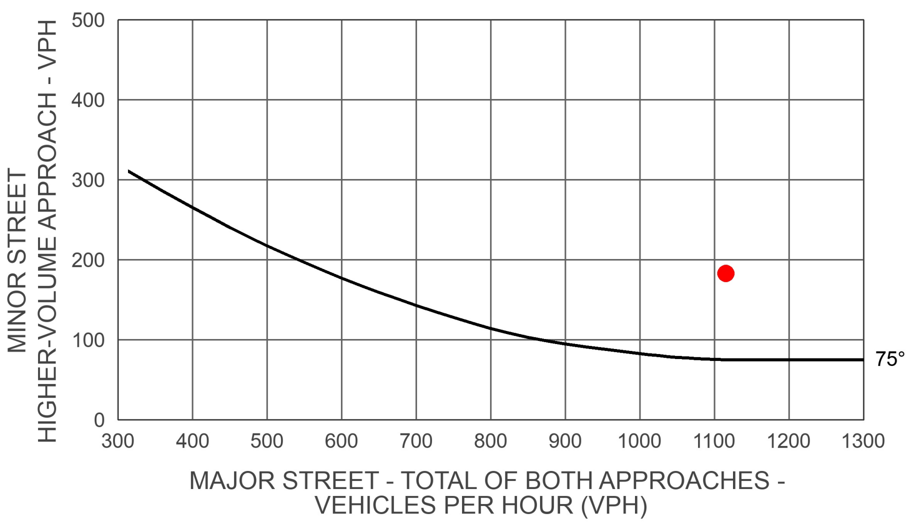


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Future
Intersection #: 7



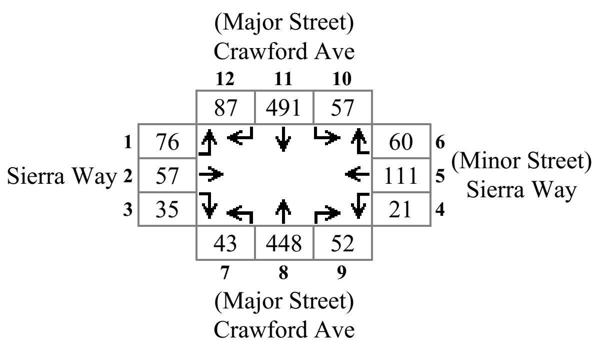
Major Total: 1115
Minor High Volume: 183



Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

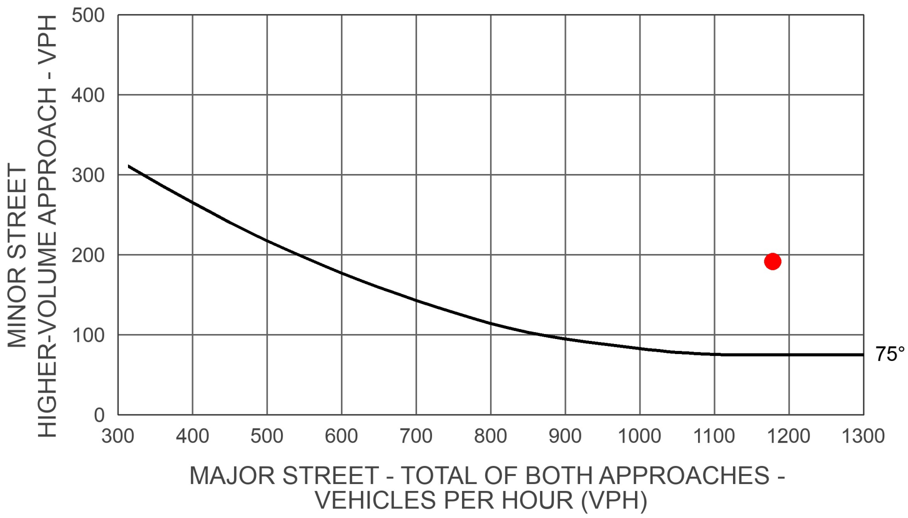
Scenario: PM Future+Project

Intersection #: 7



Major Total: 1178

Minor High Volume: 192



Intersection	
Intersection Delay, s/veh	10.9
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	63	31	30	0	19	53	51	0	40	186	25	0	22	173	87
Future Vol, veh/h	0	63	31	30	0	19	53	51	0	40	186	25	0	22	173	87
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	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	68	34	33	0	21	58	55	0	43	202	27	0	24	188	95
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.1	9.8	11.3	11.3
HCM LOS	B	A	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	16%	51%	15%	8%
Vol Thru, %	74%	25%	43%	61%
Vol Right, %	10%	24%	41%	31%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	251	124	123	282
LT Vol	40	63	19	22
Through Vol	186	31	53	173
RT Vol	25	30	51	87
Lane Flow Rate	273	135	134	307
Geometry Grp	1	1	1	1
Degree of Util (X)	0.386	0.209	0.201	0.41
Departure Headway (Hd)	5.091	5.588	5.421	4.944
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	709	644	663	733
Service Time	3.112	3.609	3.442	2.944
HCM Lane V/C Ratio	0.385	0.21	0.202	0.419
HCM Control Delay	11.3	10.1	9.8	11.3
HCM Lane LOS	B	B	A	B
HCM 95th-tile Q	1.8	0.8	0.7	2

Intersection	
Intersection Delay, s/veh	11.4
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	70	31	30	0	19	53	55	0	40	197	25	0	24	181	93
Future Vol, veh/h	0	70	31	30	0	19	53	55	0	40	197	25	0	24	181	93
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	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	76	34	33	0	21	58	60	0	43	214	27	0	26	197	101
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.4	10.1	11.8	12.1
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	15%	53%	15%	8%
Vol Thru, %	75%	24%	42%	61%
Vol Right, %	10%	23%	43%	31%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	262	131	127	298
LT Vol	40	70	19	24
Through Vol	197	31	53	181
RT Vol	25	30	55	93
Lane Flow Rate	285	142	138	324
Geometry Grp	1	1	1	1
Degree of Util (X)	0.41	0.226	0.212	0.449
Departure Headway (Hd)	5.177	5.708	5.525	4.99
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	695	628	649	722
Service Time	3.213	3.753	3.57	3.025
HCM Lane V/C Ratio	0.41	0.226	0.213	0.449
HCM Control Delay	11.8	10.4	10.1	12.1
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	2	0.9	0.8	2.3

Intersection	
Intersection Delay, s/veh	52.6
Intersection LOS	F

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	93	46	44	0	28	117	76	0	57	382	36	0	32	365	127
Future Vol, veh/h	0	93	46	44	0	28	117	76	0	57	382	36	0	32	365	127
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	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	101	50	48	0	30	127	83	0	62	415	39	0	35	397	138
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	18.3	19.8	66.5	65.9
HCM LOS	C	C	F	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	12%	51%	13%	6%
Vol Thru, %	80%	25%	53%	70%
Vol Right, %	8%	24%	34%	24%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	475	183	221	524
LT Vol	57	93	28	32
Through Vol	382	46	117	365
RT Vol	36	44	76	127
Lane Flow Rate	516	199	240	570
Geometry Grp	1	1	1	1
Degree of Util (X)	1	0.459	0.532	1
Departure Headway (Hd)	7.008	8.303	7.976	6.974
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	516	434	452	524
Service Time	5.072	6.372	6.044	4.96
HCM Lane V/C Ratio	1	0.459	0.531	1.088
HCM Control Delay	66.5	18.3	19.8	65.9
HCM Lane LOS	F	C	C	F
HCM 95th-tile Q	13.8	2.4	3.1	13.9

Intersection	
Intersection Delay, s/veh	53.1
Intersection LOS	F

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	100	46	44	0	28	117	80	0	57	393	36	0	34	373	133
Future Vol, veh/h	0	100	46	44	0	28	117	80	0	57	393	36	0	34	373	133
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	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	109	50	48	0	30	127	87	0	62	427	39	0	37	405	145
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	19	20.4	66.9	66.4
HCM LOS	C	C	F	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	12%	53%	12%	6%
Vol Thru, %	81%	24%	52%	69%
Vol Right, %	7%	23%	36%	25%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	486	190	225	540
LT Vol	57	100	28	34
Through Vol	393	46	117	373
RT Vol	36	44	80	133
Lane Flow Rate	528	207	245	587
Geometry Grp	1	1	1	1
Degree of Util (X)	1	0.481	0.547	1
Departure Headway (Hd)	7.09	8.381	8.055	6.975
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	512	432	448	522
Service Time	5.163	6.42	6.094	5.049
HCM Lane V/C Ratio	1.031	0.479	0.547	1.125
HCM Control Delay	66.9	19	20.4	66.4
HCM Lane LOS	F	C	C	F
HCM 95th-tile Q	13.7	2.5	3.2	13.8

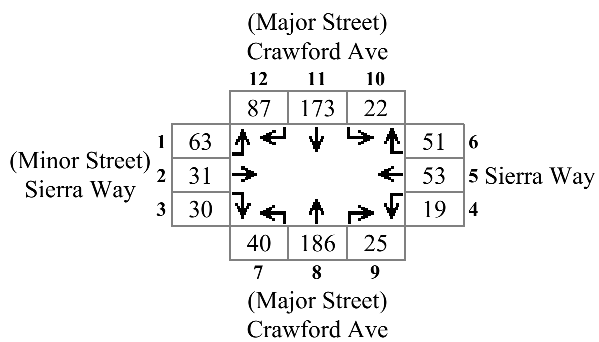
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	46	44	28	117	80	57	393	36	34	373	133
Future Volume (veh/h)	100	46	44	28	117	80	57	393	36	34	373	133
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike 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
Adj Sat Flow, veh/h/ln	1750	1863	1750	1750	1863	1750	1750	1863	1750	1750	1863	1750
Adj Flow Rate, veh/h	109	50	48	30	127	87	62	427	39	37	405	145
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	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	176	78	58	72	201	126	146	975	86	86	860	296
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.70	0.70	0.70	0.70	0.70	0.70
Sat Flow, veh/h	565	382	286	132	984	618	145	1401	123	63	1235	426
Grp Volume(v), veh/h	207	0	0	244	0	0	528	0	0	587	0	0
Grp Sat Flow(s),veh/h/ln	1233	0	0	1734	0	0	1669	0	0	1724	0	0
Q Serve(g_s), s	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	14.9	0.0	0.0	11.6	0.0	0.0	11.0	0.0	0.0	13.4	0.0	0.0
Prop In Lane	0.53		0.23	0.12		0.36	0.12		0.07	0.06		0.25
Lane Grp Cap(c), veh/h	312	0	0	398	0	0	1207	0	0	1243	0	0
V/C Ratio(X)	0.66	0.00	0.00	0.61	0.00	0.00	0.44	0.00	0.00	0.47	0.00	0.00
Avail Cap(c_a), veh/h	482	0	0	605	0	0	1207	0	0	1243	0	0
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	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	0.27	0.00	0.00
Uniform Delay (d), s/veh	34.4	0.0	0.0	33.2	0.0	0.0	5.8	0.0	0.0	6.2	0.0	0.0
Incr Delay (d2), s/veh	2.4	0.0	0.0	1.5	0.0	0.0	1.2	0.0	0.0	0.3	0.0	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(50%),veh/ln	5.2	0.0	0.0	5.8	0.0	0.0	6.0	0.0	0.0	6.6	0.0	0.0
LnGrp Delay(d),s/veh	36.8	0.0	0.0	34.7	0.0	0.0	7.0	0.0	0.0	6.5	0.0	0.0
LnGrp LOS	D			C			A			A		
Approach Vol, veh/h		207			244			528			587	
Approach Delay, s/veh		36.8			34.7			7.0			6.5	
Approach LOS		D			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		67.2		22.8		67.2		22.8
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green Setting (Gmax), s		51.5		29.5		51.5		29.5
Max Q Clear Time (g_c+I1), s		13.0		16.9		15.4		13.6
Green Ext Time (p_c), s		5.9		1.4		5.9		1.5

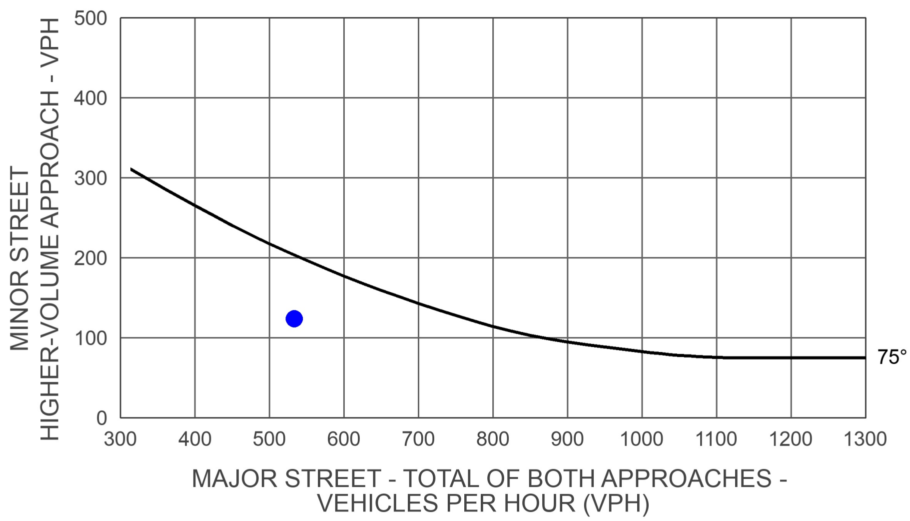
Intersection Summary	
HCM 2010 Ctrl Delay	15.1
HCM 2010 LOS	B

Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Existing
Intersection #: 7

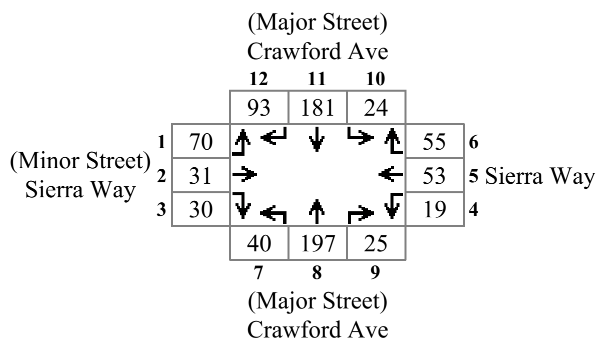


Major Total: 533
Minor High Volume: 124

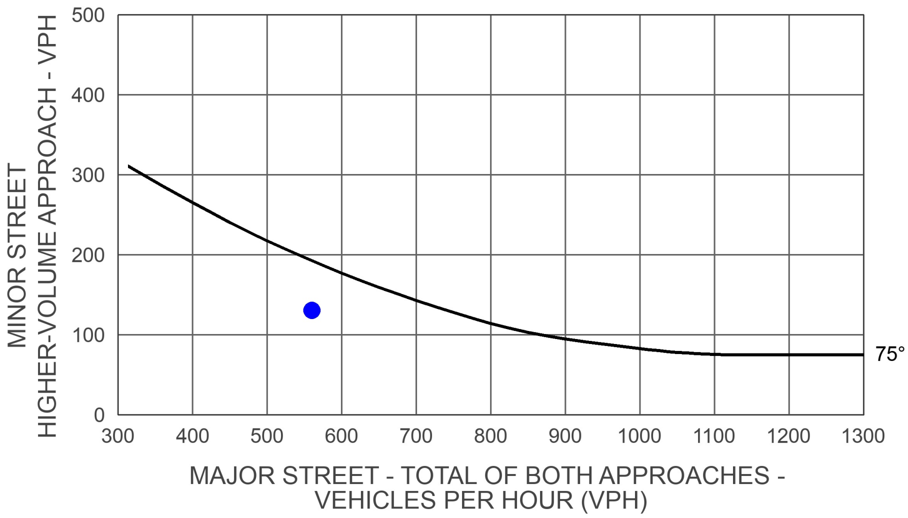


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Existing+Project
Intersection #: 7

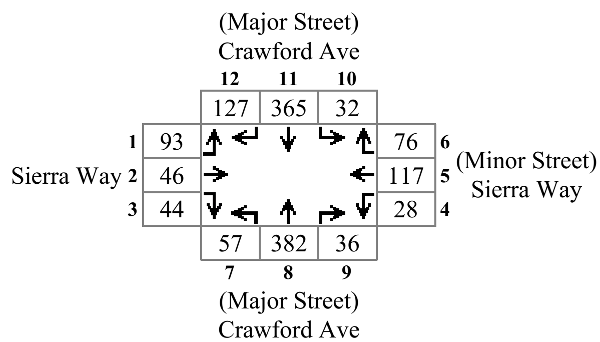


Major Total: 560
Minor High Volume: 131

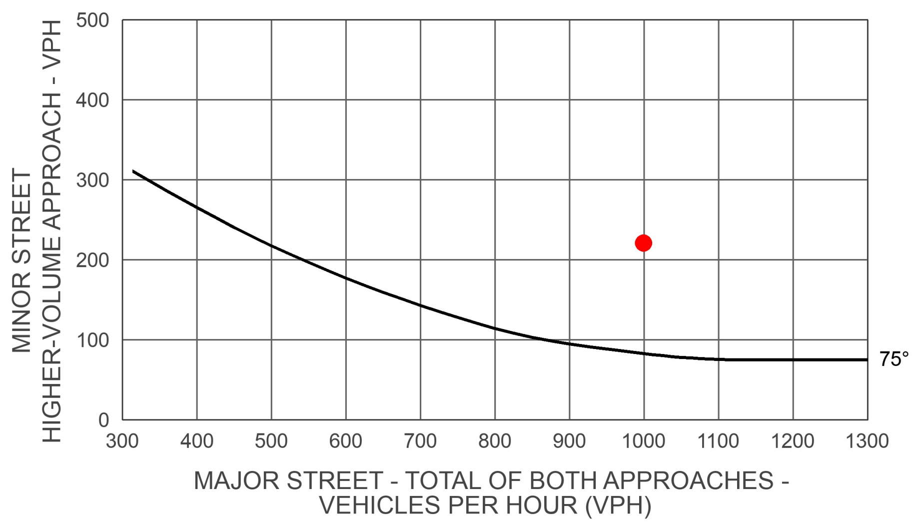


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: AM Future
Intersection #: 7



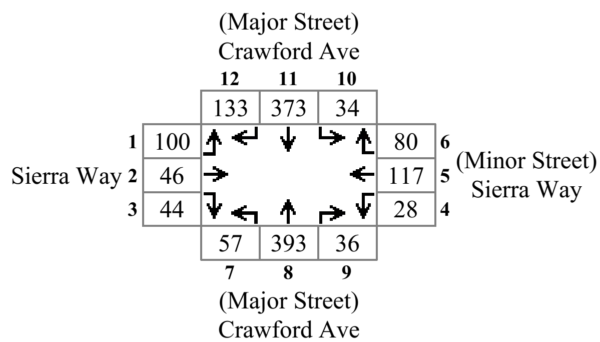
Major Total: 999
Minor High Volume: 221



Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

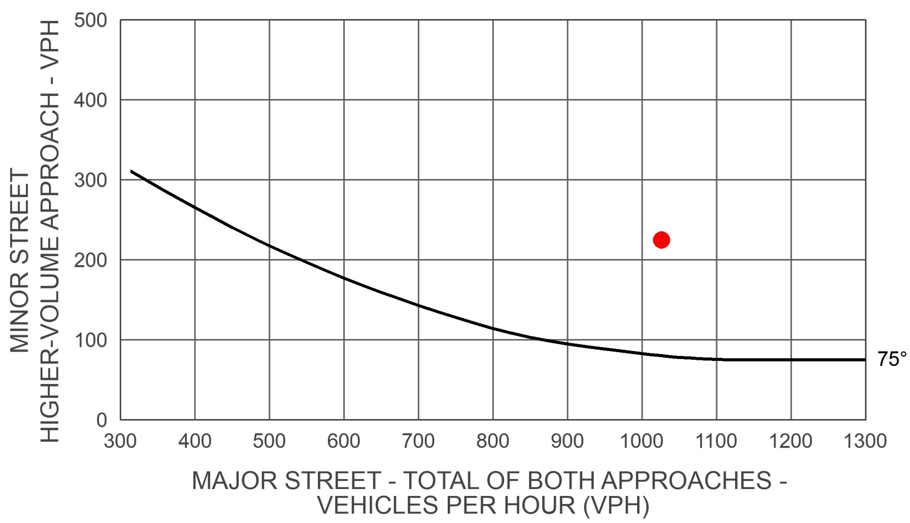
Scenario: AM Future+Project

Intersection #: 7



Major Total: 1026

Minor High Volume: 225



Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

Turning Movement Report

Prepared For:
Ruettgers & Schuler Civil Engineers
1800 30th St, Ste 260
Bakersfield, CA 93301

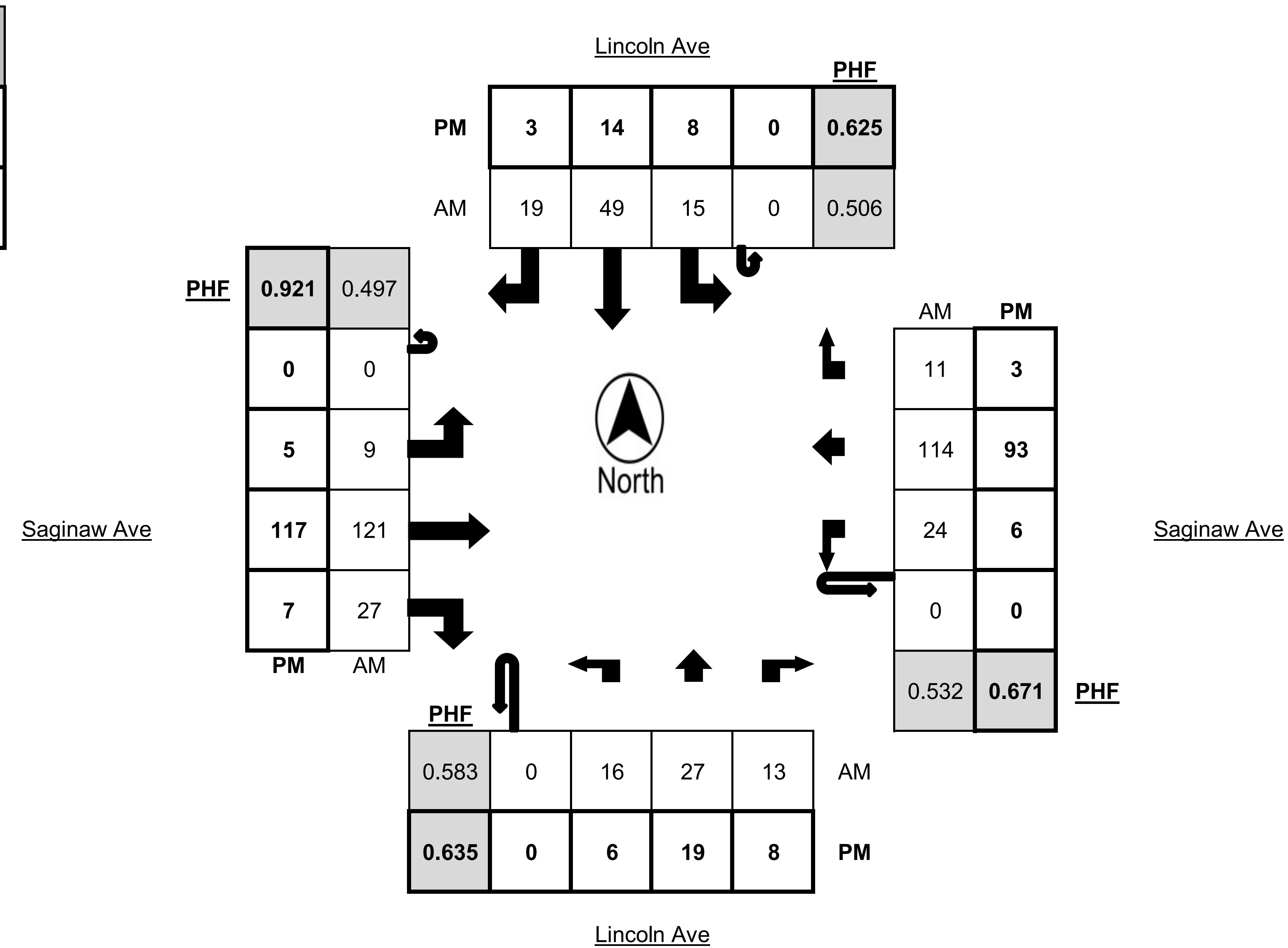
LOCATION	Lincoln Ave @ Saginaw Ave	**LATITUDE**	36.5529
COUNTY	Tulare	**LONGITUDE**	-119.3883
COLLECTION DATE	Tuesday, August 29, 2023	**WEATHER**	Clear

	Northbound					Southbound					Eastbound					Westbound				
Time	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks
6:00 AM - 6:15 AM	0	0	2	0	0	0	0	1	0	0	0	0	3	1	0	0	0	5	1	0
6:15 AM - 6:30 AM	0	1	1	0	0	0	0	1	0	0	0	0	2	0	0	0	0	16	0	0
6:30 AM - 6:45 AM	0	0	2	0	0	0	0	3	0	0	0	0	4	0	0	0	0	10	0	0
6:45 AM - 7:00 AM	0	0	3	2	1	0	2	0	0	0	0	1	4	0	0	0	0	9	4	0
7:00 AM - 7:15 AM	0	0	4	2	2	0	1	6	1	1	0	0	11	0	0	0	0	9	2	0
7:15 AM - 7:30 AM	0	1	4	3	0	0	4	8	0	0	0	0	17	0	0	0	5	18	2	0
7:30 AM - 7:45 AM	0	5	7	6	0	0	4	12	6	0	0	2	44	4	0	0	7	32	4	0
7:45 AM - 8:00 AM	0	10	12	2	0	0	6	23	12	0	0	7	49	23	0	0	12	55	3	1
TOTAL	**0**	**17**	**35**	**15**	**3**	**0**	**17**	**54**	**19**	**1**	**0**	**10**	**134**	**28**	**0**	**0**	**24**	**154**	**16**	**1**

	Northbound					Southbound					Eastbound					Westbound				
Time	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks
4:00 PM - 4:15 PM	0	1	5	0	0	0	3	12	1	2	0	1	25	2	0	0	1	17	0	0
4:15 PM - 4:30 PM	0	1	5	1	0	0	0	4	0	0	0	1	30	5	0	0	1	29	1	0
4:30 PM - 4:45 PM	0	2	5	5	1	0	1	5	4	0	0	0	20	3	0	0	2	14	0	0
4:45 PM - 5:00 PM	0	0	5	5	0	0	1	3	0	0	0	1	14	3	0	0	0	29	1	0
5:00 PM - 5:15 PM	0	3	5	3	0	0	0	5	0	0	0	1	32	2	0	0	0	18	0	0
5:15 PM - 5:30 PM	0	0	6	0	0	0	1	7	0	0	0	0	31	2	0	0	1	29	0	0
5:30 PM - 5:45 PM	0	3	6	4	1	0	6	2	2	1	0	1	26	3	0	0	2	13	1	0
5:45 PM - 6:00 PM	0	0	2	1	0	0	1	0	1	0	0	3	28	0	0	0	3	33	2	0
TOTAL	**0**	**10**	**39**	**19**	**2**	**0**	**13**	**38**	**8**	**3**	**0**	**8**	**206**	**20**	**0**	**0**	**10**	**182**	**5**	**0**

	Northbound					Southbound					Eastbound					Westbound				
PEAK HOUR	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks
7:00 AM - 8:00 AM	0	16	27	13	2	0	15	49	19	1	0	9	121	27	0	0	24	114	11	1
5:00 PM - 6:00 PM	0	6	19	8	1	0	8	14	3	1	0	5	117	7	0	0	6	93	3	0

	PHF	Trucks
AM	0.520	0.9%
PM	0.938	0.7%



Turning Movement Report

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Prepared For:
Ruettgers & Schuler Civil Engineers
1800 30th St, Ste 260
Bakersfield, CA 93301

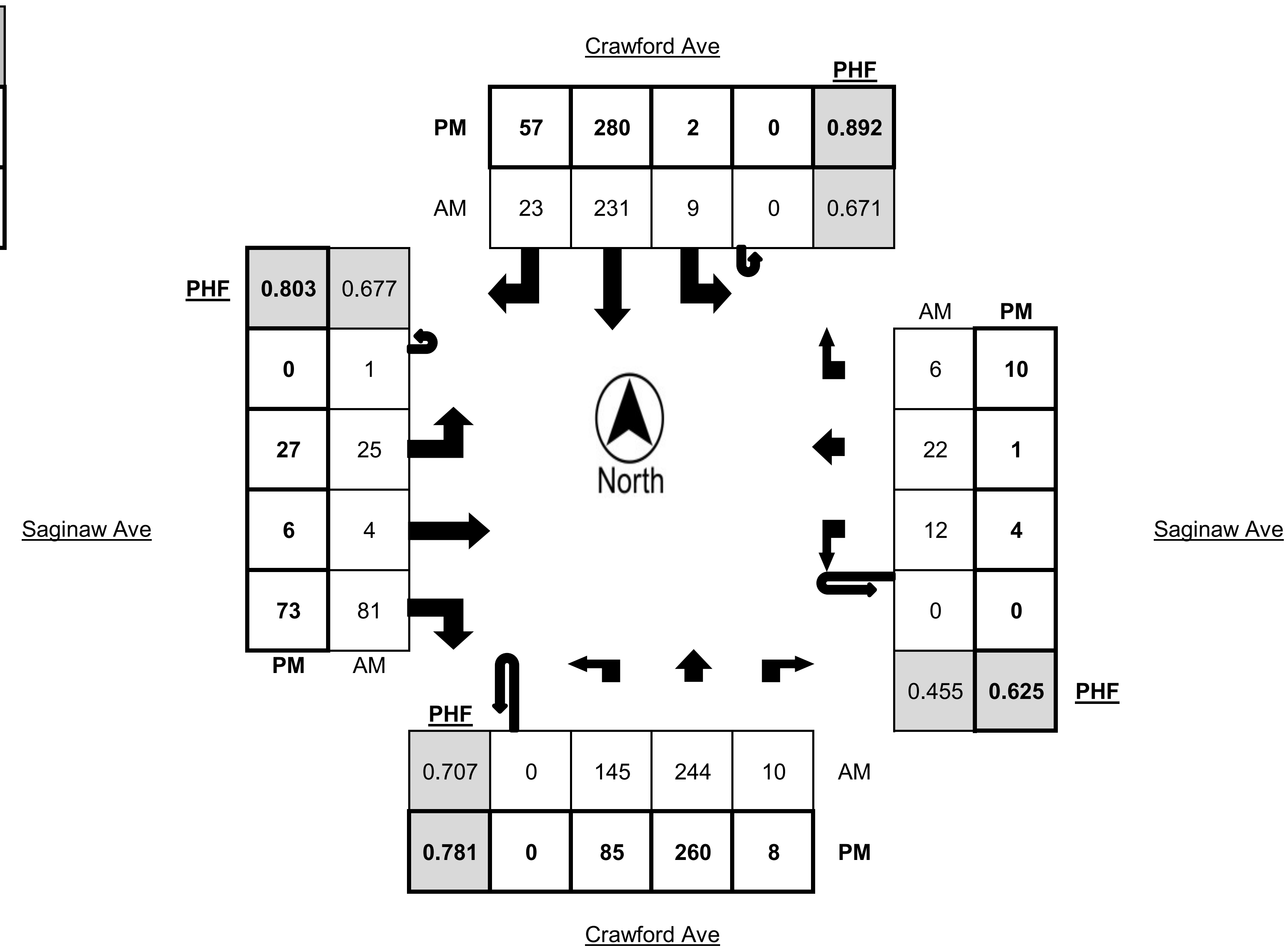
LOCATION	Crawford Ave @ Saginaw Ave	**LATITUDE**	36.5526
COUNTY	Tulare	**LONGITUDE**	-119.3769
COLLECTION DATE	Tuesday, August 29, 2023	**WEATHER**	Clear

	Northbound					Southbound					Eastbound					Westbound				
Time	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks
6:00 AM - 6:15 AM	0	3	25	1	0	0	1	17	1	0	0	0	0	1	0	0	1	0	0	0
6:15 AM - 6:30 AM	0	7	29	1	1	0	1	17	3	0	0	2	0	2	0	0	1	0	0	0
6:30 AM - 6:45 AM	0	6	33	0	0	0	1	21	2	0	0	0	0	4	0	0	0	0	0	0
6:45 AM - 7:00 AM	0	15	36	2	0	0	0	35	0	0	0	1	3	6	0	0	1	0	2	0
7:00 AM - 7:15 AM	0	7	33	2	1	0	0	25	0	0	0	2	0	12	0	0	0	1	1	0
7:15 AM - 7:30 AM	0	29	47	2	0	0	1	40	2	2	0	3	1	14	1	0	3	2	0	0
7:30 AM - 7:45 AM	0	63	78	0	1	0	4	84	9	1	1	13	1	26	0	0	2	7	2	0
7:45 AM - 8:00 AM	0	46	86	6	2	0	4	82	12	0	0	7	2	29	0	0	7	12	3	0
TOTAL	**0**	**176**	**367**	**14**	**5**	**0**	**12**	**321**	**29**	**3**	**1**	**28**	**7**	**94**	**1**	**0**	**15**	**22**	**8**	**0**

	Northbound					Southbound					Eastbound					Westbound				
Time	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks
4:00 PM - 4:15 PM	0	10	55	2	1	0	0	65	1	0	0	1	1	15	0	0	2	0	1	0
4:15 PM - 4:30 PM	0	14	62	4	2	0	1	74	4	2	0	4	0	15	0	0	2	1	3	0
4:30 PM - 4:45 PM	0	12	67	3	3	0	4	65	6	0	0	4	4	14	0	0	1	1	2	0
4:45 PM - 5:00 PM	0	15	42	2	0	0	1	77	5	1	0	4	1	15	1	0	3	3	1	0
5:00 PM - 5:15 PM	0	14	70	2	1	0	1	73	4	2	0	4	2	13	0	0	2	1	1	0
5:15 PM - 5:30 PM	0	19	56	3	1	0	0	79	16	0	0	10	2	21	0	0	1	0	1	0
5:30 PM - 5:45 PM	0	20	53	3	0	0	0	66	20	0	0	6	1	16	0	0	0	0	6	0
5:45 PM - 6:00 PM	0	32	81	0	0	0	1	62	17	0	0	7	1	23	1	0	1	0	2	0
TOTAL	**0**	**136**	**486**	**19**	**8**	**0**	**8**	**561**	**73**	**5**	**0**	**40**	**12**	**132**	**2**	**0**	**12**	**6**	**17**	**0**

	Northbound					Southbound					Eastbound					Westbound				
PEAK HOUR	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks
7:00 AM - 8:00 AM	0	145	244	10	4	0	9	231	23	3	1	25	4	81	1	0	12	22	6	0
5:00 PM - 6:00 PM	0	85	260	8	2	0	2	280	57	2	0	27	6	73	1	0	4	1	10	0

	PHF	Trucks
AM	0.687	1.0%
PM	0.895	0.6%



Metro Traffic Data Inc.
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Turning Movement Report

Prepared For:
Ruettgers & Schuler Civil Engineers
1800 30th St, Ste 260
Bakersfield, CA 93301

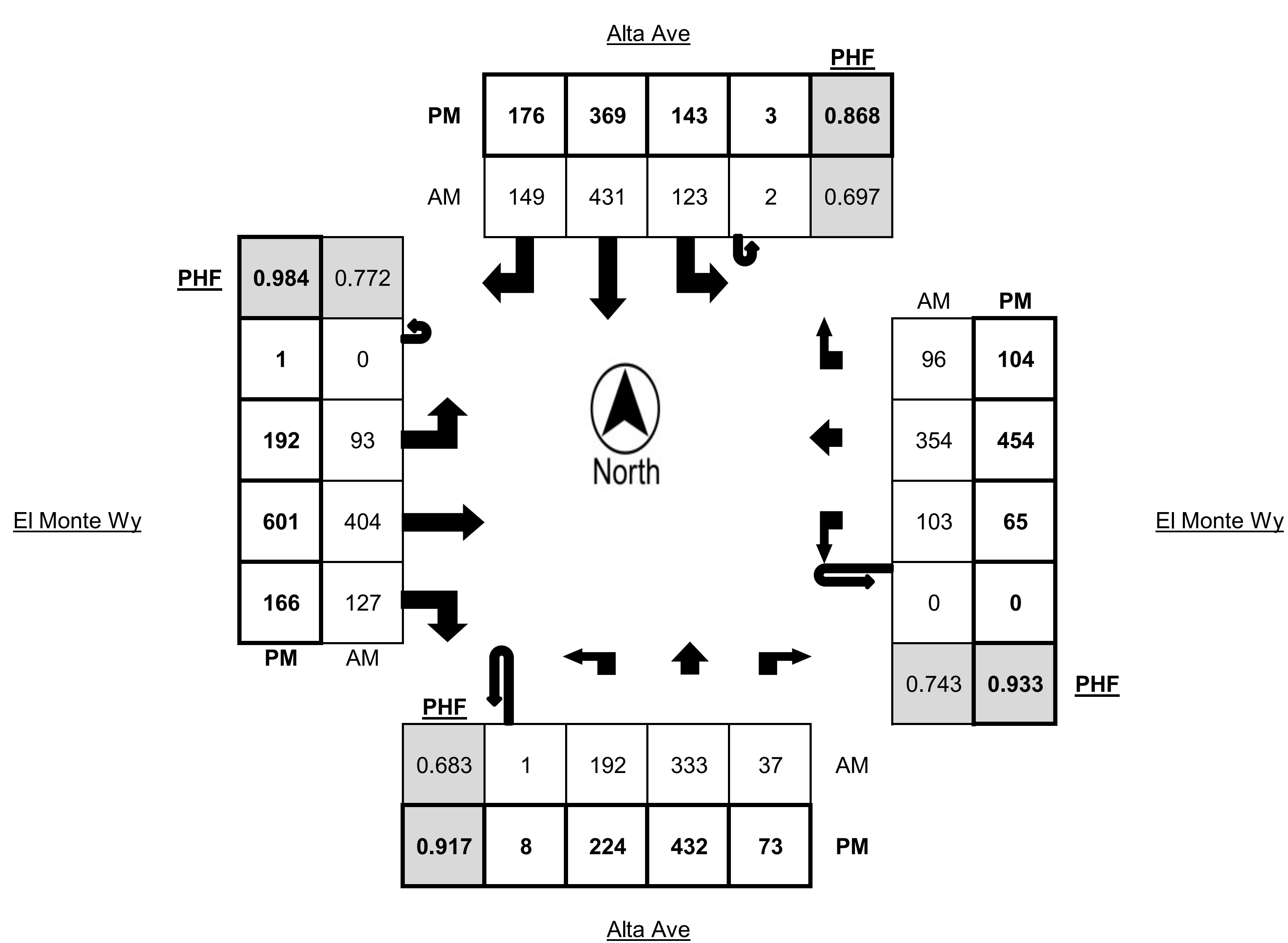
LOCATION El Monte Wy @ Alta Ave
LATITUDE 36.5459
COUNTY Tulare
LONGITUDE -119.3951
COLLECTION DATE Tuesday, August 29, 2023
WEATHER Clear

	Northbound					Southbound					Eastbound					Westbound				
Time	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks
6:00 AM - 6:15 AM	1	29	50	4	2	0	7	35	19	0	0	7	37	22	2	0	25	66	13	1
6:15 AM - 6:30 AM	0	25	38	4	3	0	7	44	16	0	0	7	27	12	1	0	15	52	3	2
6:30 AM - 6:45 AM	1	25	47	3	5	0	9	63	17	0	0	4	37	17	4	0	23	68	6	3
6:45 AM - 7:00 AM	1	30	58	8	2	0	18	68	21	0	0	7	70	15	3	0	15	87	12	1
7:00 AM - 7:15 AM	0	30	34	3	9	1	15	57	21	1	0	13	83	17	3	0	18	74	17	0
7:15 AM - 7:30 AM	1	40	60	7	7	1	20	81	33	1	0	17	91	25	2	0	23	85	16	2
7:30 AM - 7:45 AM	0	65	106	11	4	0	46	141	36	0	0	35	122	45	7	0	30	82	22	3
7:45 AM - 8:00 AM	0	57	133	16	6	0	42	152	59	0	0	28	108	40	3	0	32	113	41	0
TOTAL	**4**	**301**	**526**	**56**	**38**	**2**	**164**	**641**	**222**	**2**	**0**	**118**	**575**	**193**	**25**	**0**	**181**	**627**	**130**	**12**

	Northbound					Southbound					Eastbound					Westbound				
Time	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks
4:00 PM - 4:15 PM	3	54	87	22	8	2	23	88	47	2	0	50	124	37	6	0	20	92	27	1
4:15 PM - 4:30 PM	1	44	94	24	4	0	41	100	58	0	1	52	156	35	2	0	12	118	23	4
4:30 PM - 4:45 PM	1	61	119	17	6	0	34	86	38	0	0	39	153	45	6	0	21	120	26	4
4:45 PM - 5:00 PM	5	69	115	12	2	0	33	90	42	0	0	47	148	41	3	0	14	111	28	2
5:00 PM - 5:15 PM	1	50	104	20	3	3	35	93	38	3	0	54	144	45	6	0	18	105	27	2
5:15 PM - 5:30 PM	2	73	77	20	4	5	32	75	42	5	0	42	136	36	1	0	15	97	12	0
5:30 PM - 5:45 PM	1	50	116	19	3	3	23	72	37	3	0	51	147	39	3	0	19	91	16	2
5:45 PM - 6:00 PM	3	53	81	21	0	1	32	65	43	1	0	49	174	28	3	0	13	100	23	2
TOTAL	**17**	**454**	**793**	**155**	**30**	**14**	**253**	**669**	**345**	**14**	**1**	**384**	**1182**	**306**	**30**	**0**	**132**	**834**	**182**	**17**

	Northbound					Southbound					Eastbound					Westbound				
PEAK HOUR	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks
7:00 AM - 8:00 AM	1	192	333	37	26	2	123	431	149	2	0	93	404	127	15	0	103	354	96	5
4:15 PM - 5:15 PM	8	224	432	73	15	3	143	369	176	3	1	192	601	166	17	0	65	454	104	12

	PHF	Trucks
AM	0.745	2.0%
PM	0.990	1.6%



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Turning Movement Report

Prepared For:
Ruettgers & Schuler Civil Engineers
1800 30th St, Ste 260
Bakersfield, CA 93301

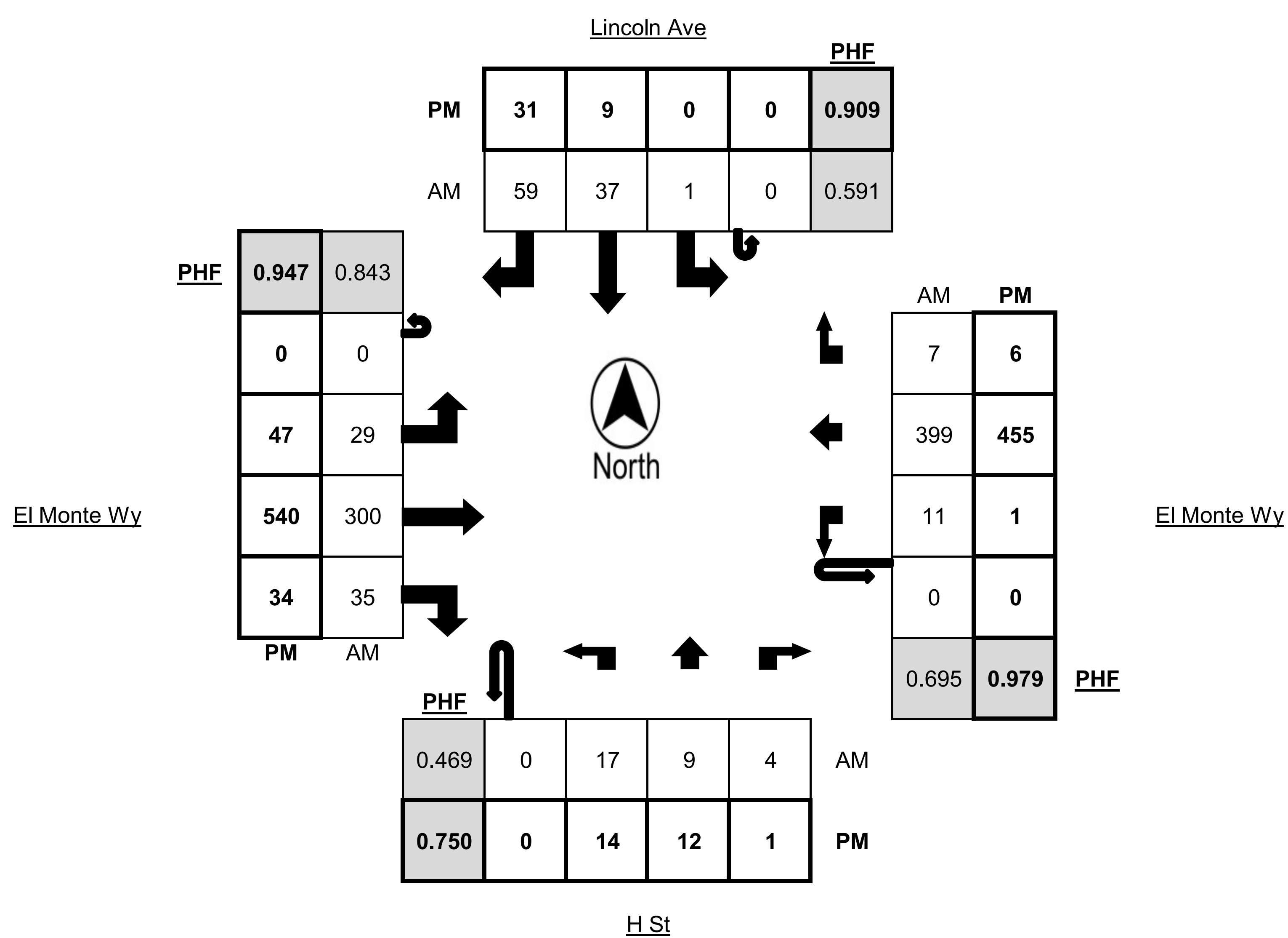
LOCATION	El Monte Wy @ Lincoln Ave	**LATITUDE**	36.5457
COUNTY	Tulare	**LONGITUDE**	-119.3883
COLLECTION DATE	Tuesday, August 29, 2023	**WEATHER**	Clear

	Northbound					Southbound					Eastbound					Westbound				
Time	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks
6:00 AM - 6:15 AM	0	8	1	0	0	0	0	2	9	0	0	1	33	1	0	0	0	83	0	2
6:15 AM - 6:30 AM	0	1	0	0	0	0	0	0	5	0	0	0	32	4	2	0	0	59	1	2
6:30 AM - 6:45 AM	0	2	1	0	0	0	0	1	6	0	0	0	25	2	5	0	0	74	0	1
6:45 AM - 7:00 AM	0	3	0	0	0	0	0	2	5	0	0	3	64	4	2	0	1	100	0	1
7:00 AM - 7:15 AM	0	2	0	1	0	0	0	6	10	1	0	2	69	5	2	0	0	67	0	0
7:15 AM - 7:30 AM	0	2	1	0	0	0	0	5	13	0	0	7	68	8	2	0	0	82	2	2
7:30 AM - 7:45 AM	0	5	2	1	0	0	0	9	13	0	0	10	87	11	5	0	1	114	1	2
7:45 AM - 8:00 AM	0	8	6	2	0	0	1	17	23	0	0	10	76	11	3	0	10	136	4	0
TOTAL	**0**	**31**	**11**	**4**	**0**	**0**	**1**	**42**	**84**	**1**	**0**	**33**	**454**	**46**	**21**	**0**	**12**	**715**	**8**	**10**

	Northbound					Southbound					Eastbound					Westbound				
Time	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks
4:00 PM - 4:15 PM	0	3	6	0	0	0	0	5	6	1	0	9	112	8	1	0	0	115	2	2
4:15 PM - 4:30 PM	0	2	7	0	0	0	0	2	9	0	0	16	136	11	1	0	0	109	1	3
4:30 PM - 4:45 PM	0	5	1	0	0	0	0	3	8	0	0	10	125	8	2	0	0	117	1	4
4:45 PM - 5:00 PM	0	0	2	1	0	0	0	1	8	0	0	14	129	8	1	0	1	115	2	3
5:00 PM - 5:15 PM	0	7	2	0	0	0	0	3	6	0	0	7	150	7	3	0	0	114	2	3
5:15 PM - 5:30 PM	0	4	1	0	0	0	1	2	9	0	0	12	133	9	1	0	0	83	3	0
5:30 PM - 5:45 PM	0	3	3	0	0	0	0	0	10	0	0	10	132	5	0	0	0	100	2	1
5:45 PM - 6:00 PM	0	6	0	0	0	0	1	2	12	0	0	12	161	11	2	0	0	112	1	3
TOTAL	**0**	**30**	**22**	**1**	**0**	**0**	**2**	**18**	**68**	**1**	**0**	**90**	**1078**	**67**	**11**	**0**	**1**	**865**	**14**	**19**

	Northbound					Southbound					Eastbound					Westbound				
PEAK HOUR	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks
7:00 AM - 8:00 AM	0	17	9	4	0	0	1	37	59	1	0	29	300	35	12	0	11	399	7	4
4:15 PM - 5:15 PM	0	14	12	1	0	0	0	9	31	0	0	47	540	34	7	0	1	455	6	13

	PHF	Trucks
AM	0.747	1.9%
PM	0.965	1.7%



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Turning Movement Report

Prepared For:
Ruettgers & Schuler Civil Engineers
1800 30th St, Ste 260
Bakersfield, CA 93301

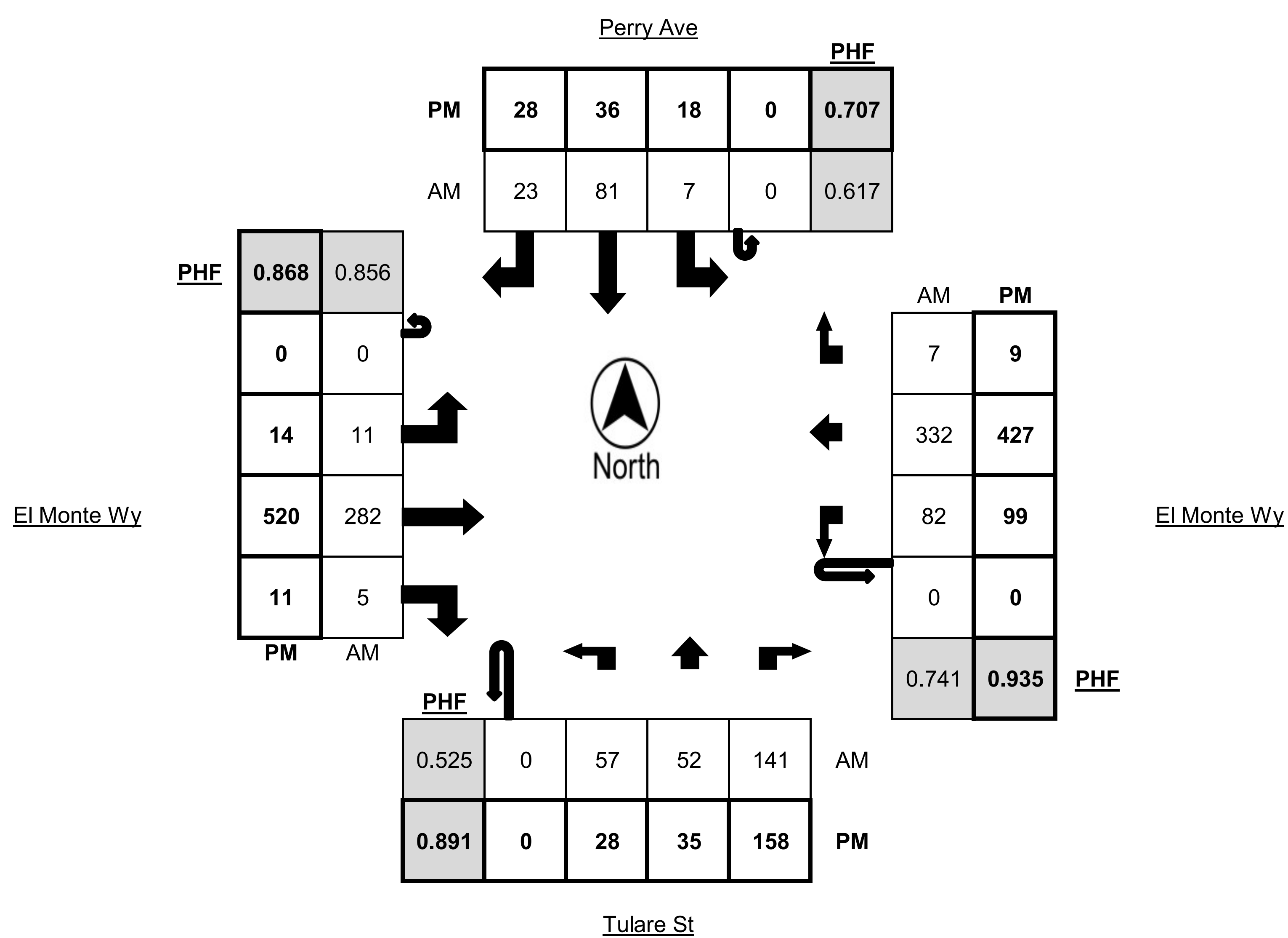
LOCATION	El Monte Wy @ Perry Ave / Tulare St	**LATITUDE**	36.5456
COUNTY	Tulare	**LONGITUDE**	-119.3842
COLLECTION DATE	Tuesday, August 29, 2023	**WEATHER**	Clear

	Northbound					Southbound					Eastbound					Westbound				
Time	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks
6:00 AM - 6:15 AM	0	8	0	5	0	0	1	2	6	0	0	0	38	1	0	0	8	66	0	2
6:15 AM - 6:30 AM	0	2	0	10	1	0	0	1	2	1	0	0	28	0	1	0	1	52	0	2
6:30 AM - 6:45 AM	0	6	2	8	1	0	2	5	2	0	0	0	29	0	5	0	6	75	0	0
6:45 AM - 7:00 AM	0	6	5	8	0	0	2	13	6	0	0	0	58	0	2	0	8	86	0	1
7:00 AM - 7:15 AM	0	5	4	19	1	0	1	6	5	0	0	3	67	0	2	0	9	59	0	1
7:15 AM - 7:30 AM	0	7	1	20	1	0	0	9	4	1	0	2	65	0	3	0	10	69	0	3
7:30 AM - 7:45 AM	0	15	19	41	3	0	1	33	7	0	0	6	79	2	5	0	29	100	3	0
7:45 AM - 8:00 AM	0	30	28	61	2	0	5	33	7	0	0	0	71	3	2	0	34	104	4	0
TOTAL	**0**	**79**	**59**	**172**	**9**	**0**	**12**	**102**	**39**	**2**	**0**	**11**	**435**	**6**	**20**	**0**	**105**	**611**	**7**	**9**

	Northbound					Southbound					Eastbound					Westbound				
Time	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks
4:00 PM - 4:15 PM	1	10	11	32	0	0	2	10	6	0	0	9	104	1	1	0	22	97	5	3
4:15 PM - 4:30 PM	0	7	7	48	1	0	5	14	10	0	0	4	115	2	0	0	27	97	1	3
4:30 PM - 4:45 PM	0	8	15	33	0	0	6	9	6	0	0	4	130	3	2	0	28	109	2	4
4:45 PM - 5:00 PM	0	7	5	32	0	0	6	9	7	0	0	3	124	3	1	0	25	116	2	5
5:00 PM - 5:15 PM	0	6	8	45	0	0	1	4	5	0	0	3	151	3	3	0	19	105	4	3
5:15 PM - 5:30 PM	0	4	7	36	1	0	2	8	4	0	0	5	121	3	2	0	30	82	6	1
5:30 PM - 5:45 PM	0	7	10	32	0	0	3	6	2	0	0	5	120	2	0	0	16	95	3	1
5:45 PM - 6:00 PM	0	9	5	38	0	0	12	8	2	0	0	5	149	0	2	0	30	110	2	4
TOTAL	**1**	**58**	**68**	**296**	**2**	**0**	**37**	**68**	**42**	**0**	**0**	**38**	**1014**	**17**	**11**	**0**	**197**	**811**	**25**	**24**

	Northbound					Southbound					Eastbound					Westbound				
PEAK HOUR	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks
7:00 AM - 8:00 AM	0	57	52	141	7	0	7	81	23	1	0	11	282	5	12	0	82	332	7	4
4:15 PM - 5:15 PM	0	28	35	158	1	0	18	36	28	0	0	14	520	11	6	0	99	427	9	15

	PHF	Trucks
AM	0.711	2.2%
PM	0.977	1.6%



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Turning Movement Report

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Prepared For:
Ruettgers & Schuler Civil Engineers
1800 30th St, Ste 260
Bakersfield, CA 93301

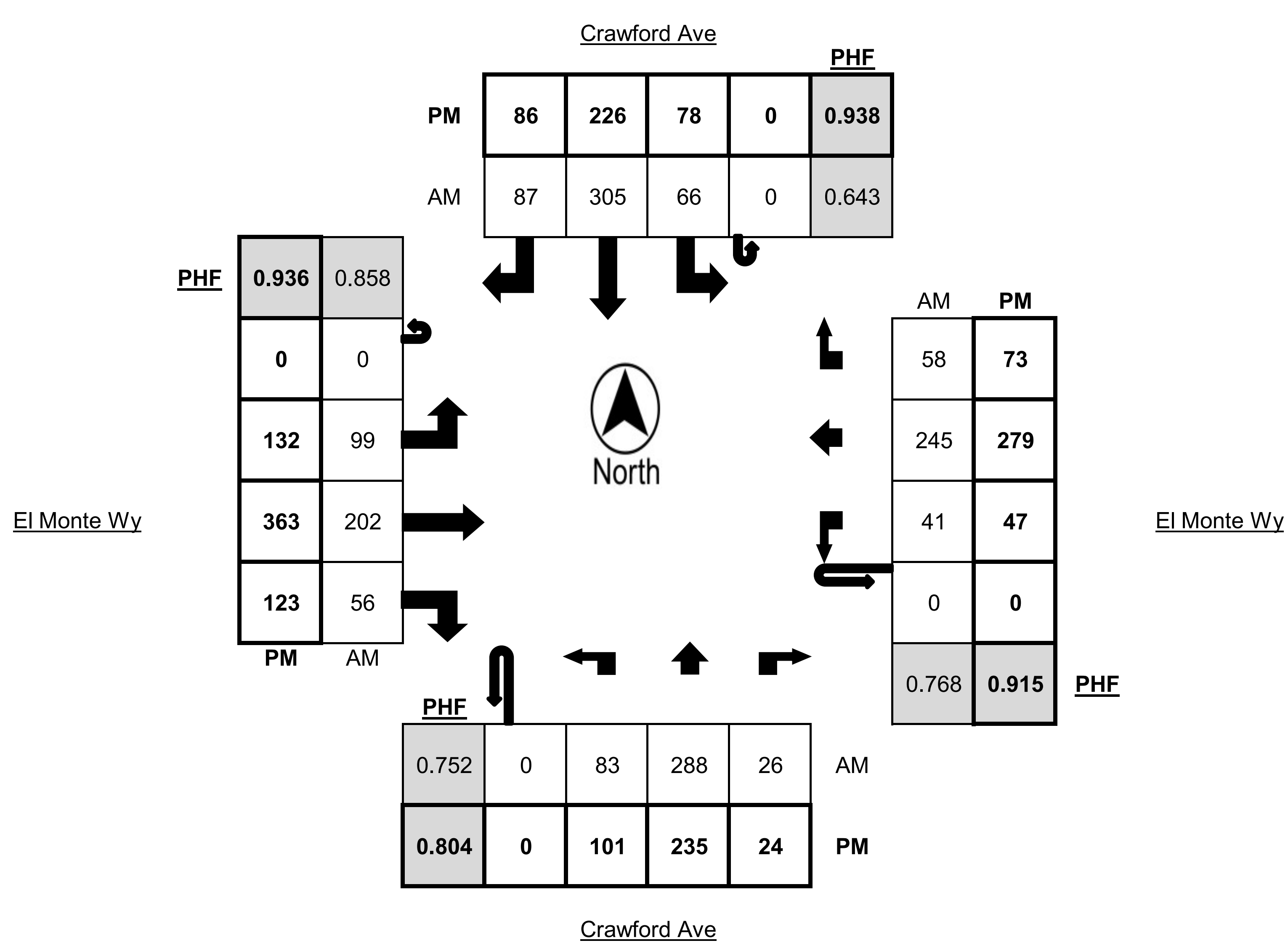
LOCATION	El Monte Wy @ Crawford Ave	**LATITUDE**	36.5454
COUNTY	Tulare	**LONGITUDE**	-119.3769
COLLECTION DATE	Tuesday, August 29, 2023	**WEATHER**	Clear

	Northbound					Southbound					Eastbound					Westbound				
Time	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks
6:00 AM - 6:15 AM	0	11	18	1	0	0	3	10	8	0	0	9	25	10	0	0	4	42	4	1
6:15 AM - 6:30 AM	0	13	21	2	2	0	7	13	6	0	0	5	14	13	4	0	3	35	8	1
6:30 AM - 6:45 AM	0	12	27	2	1	0	6	20	8	0	0	9	16	7	3	0	4	42	6	0
6:45 AM - 7:00 AM	0	21	38	5	1	0	10	27	11	0	0	8	54	8	3	0	9	50	12	2
7:00 AM - 7:15 AM	0	19	27	6	1	0	9	31	11	0	0	13	47	19	5	0	5	39	7	0
7:15 AM - 7:30 AM	0	20	65	5	2	0	19	42	11	4	0	17	44	12	2	0	8	58	9	2
7:30 AM - 7:45 AM	0	19	108	5	1	0	20	105	32	2	0	32	58	11	4	0	14	65	27	0
7:45 AM - 8:00 AM	0	25	88	10	0	0	18	127	33	1	0	37	53	14	4	0	14	83	15	1
TOTAL	**0**	**140**	**392**	**36**	**8**	**0**	**92**	**375**	**120**	**7**	**0**	**130**	**311**	**94**	**25**	**0**	**61**	**414**	**88**	**7**

	Northbound					Southbound					Eastbound					Westbound				
Time	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks
4:00 PM - 4:15 PM	0	29	49	5	0	0	19	46	20	2	0	27	68	24	1	0	11	75	15	4
4:15 PM - 4:30 PM	0	26	66	13	1	0	27	56	25	2	0	31	95	24	1	0	11	66	22	6
4:30 PM - 4:45 PM	0	24	50	3	1	0	18	54	19	0	0	29	88	28	4	0	11	71	15	5
4:45 PM - 5:00 PM	0	21	39	5	1	0	18	62	31	2	0	25	98	26	1	0	7	80	22	4
5:00 PM - 5:15 PM	0	24	43	6	1	0	20	58	14	2	0	31	97	31	2	0	15	76	18	4
5:15 PM - 5:30 PM	0	26	51	6	1	0	22	56	26	0	0	25	103	23	4	0	12	61	15	1
5:30 PM - 5:45 PM	0	26	58	8	1	0	13	58	19	0	0	38	78	27	0	0	12	69	20	0
5:45 PM - 6:00 PM	0	25	83	4	2	0	23	54	27	1	0	38	85	42	1	0	8	73	20	5
TOTAL	**0**	**201**	**439**	**50**	**8**	**0**	**160**	**444**	**181**	**9**	**0**	**244**	**712**	**225**	**14**	**0**	**87**	**571**	**147**	**29**

	Northbound					Southbound					Eastbound					Westbound				
PEAK HOUR	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks
7:00 AM - 8:00 AM	0	83	288	26	4	0	66	305	87	7	0	99	202	56	15	0	41	245	58	3
5:00 PM - 6:00 PM	0	101	235	24	5	0	78	226	86	3	0	132	363	123	7	0	47	279	73	10

	PHF	Trucks
AM	0.752	1.9%
PM	0.916	1.4%



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Turning Movement Report

Prepared For:
Ruettgers & Schuler Civil Engineers
1800 30th St, Ste 260
Bakersfield, CA 93301

LOCATION	Sierra Way @ Crawford Ave	**LATITUDE**	36.5382
COUNTY	Tulare	**LONGITUDE**	-119.3769
COLLECTION DATE	Tuesday, August 29, 2023	**WEATHER**	Clear

	Northbound					Southbound					Eastbound					Westbound				
Time	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks
6:00 AM - 6:15 AM	0	0	12	4	0	0	2	22	1	0	0	3	4	5	0	0	2	3	0	0
6:15 AM - 6:30 AM	0	1	21	4	3	0	1	23	3	0	0	3	1	2	0	0	5	4	3	0
6:30 AM - 6:45 AM	0	2	20	1	0	0	3	20	4	1	0	6	0	1	0	0	4	4	6	0
6:45 AM - 7:00 AM	0	0	32	0	1	0	5	30	6	2	0	6	4	2	0	0	1	11	6	0
7:00 AM - 7:15 AM	0	6	27	3	1	0	8	32	8	0	0	6	0	0	0	0	1	2	5	0
7:15 AM - 7:30 AM	0	5	37	3	3	0	2	33	14	1	0	13	6	5	1	0	3	9	13	0
7:30 AM - 7:45 AM	0	13	67	8	1	0	5	54	27	3	0	24	12	6	1	0	5	13	21	0
7:45 AM - 8:00 AM	0	16	55	11	0	0	7	54	38	1	0	20	13	19	0	0	10	29	12	0
TOTAL	**0**	**43**	**271**	**34**	**9**	**0**	**33**	**268**	**101**	**8**	**0**	**81**	**40**	**40**	**2**	**0**	**31**	**75**	**66**	**0**

	Northbound					Southbound					Eastbound					Westbound				
Time	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks
4:00 PM - 4:15 PM	0	8	48	7	1	0	15	42	10	2	0	15	11	7	0	0	4	9	3	1
4:15 PM - 4:30 PM	0	10	57	7	0	0	9	41	8	0	0	21	9	6	0	0	6	13	4	0
4:30 PM - 4:45 PM	0	4	50	7	1	0	11	46	15	0	0	13	11	4	0	0	3	7	6	0
4:45 PM - 5:00 PM	0	5	42	8	1	0	12	56	11	0	0	11	12	4	0	0	6	5	6	0
5:00 PM - 5:15 PM	0	6	38	9	2	0	9	59	11	3	0	8	8	5	1	0	4	8	10	0
5:15 PM - 5:30 PM	0	8	48	7	1	0	11	43	18	0	0	12	8	5	0	0	2	17	7	0
5:30 PM - 5:45 PM	0	9	55	13	0	0	8	55	6	0	0	12	14	11	0	0	4	15	8	0
5:45 PM - 6:00 PM	0	7	66	7	0	0	8	66	15	0	0	10	9	3	0	0	4	10	9	0
TOTAL	**0**	**57**	**404**	**65**	**6**	**0**	**83**	**408**	**94**	**5**	**0**	**102**	**82**	**45**	**1**	**0**	**33**	**84**	**53**	**1**

	Northbound					Southbound					Eastbound					Westbound				
PEAK HOUR	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks	U-Turn	Left	Thru	Right	Trucks
7:00 AM - 8:00 AM	0	40	186	25	5	0	22	173	87	5	0	63	31	30	2	0	19	53	51	0
5:00 PM - 6:00 PM	0	30	207	36	3	0	36	223	50	3	0	42	39	24	1	0	14	50	34	0

	PHF	Trucks
AM	0.687	1.5%
PM	0.917	0.9%