



Community Development Department

STAFF REPORT

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TO: Planning Commission

FROM: Kelvin Parker, Community Development Director

DATE: April 22, 2024

SUBJECT: **Proposed Mixed-Use Development
(Commercial and Multi-Family Residential)**

APPLICATIONS: **Special Use Permit (SUP) 2023-70011; Development Agreement (DAGR) 2023-70001; Protected Tree Permit (PTP) 2023-70067; and Environmental Impact Report Addendum (CEQA) 2023-70004**

APPLICANT: **Cherry Tree Development, LLC**

LOCATION: 500 East Thousand Oaks Boulevard
 (APNs: 525-0-012-230, 669-0-201-030, 669-0-201-040, 669-0-201-050, and 669-0-201-105)

REQUEST:

That the Planning Commission consider the Addendum to Thousand Oaks Boulevard Specific Plan Environmental Impact Report (EIR) No. 327 prepared in accordance with the California Environmental Quality Act (CEQA) and recommend approval to City Council the below listed requests based on the findings and subject to the recommended conditions of approval included in the attached Resolution (Attachment #4) and Ordinance (Attachment #5).

The request includes the following applications:

1. **Environmental Impact Report Addendum (CEQA) 2023-70004:**
 Consider the Addendum to EIR No. 327 prepared for Thousand Oaks Boulevard Specific Plan (SP-20), which includes the project site for the proposed mixed-use development. EIR No. 327 applies to all developments within the area covered by SP-20. An Initial Study and Addendum to EIR No. 327 were prepared for the proposed project which determined that, with the inclusion of recommended mitigation measures contained in the EIR No. 327, the project will not result in new significant impacts nor substantially increase the severity of previously

disclosed impacts beyond those already identified in EIR No. 327. Conditions of approval applied to the project ensure that applicable mitigation measures provided in EIR No. 327 are implemented.

2. **Special Use Permit (SUP) 2023-70011**: allow the construction of a 609,633 square foot mixed-use development consisting of 328 residential units with a 50% Density Bonus providing 44 lower-income affordable units, including 8,500 square feet of commercial retail and restaurant space, linear park, pocket park, dog park, plazas, seating areas, and other amenities. The 328 residential units would be distributed across one 4-story mixed-use building, one 5-story podium-style mixed-use building, and one 5-story podium-style multi-family residential building with maximum building heights ranging from 47 feet to 62 feet. The project includes 475 total parking spaces consisting of 16 surface parking spaces and two semi-subterranean parking structures comprising 32 commercial and 427 residential parking spaces.

The applicant is requesting to utilize the State Density Bonus Law parking ratios, as well as requesting three (3) Concessions and four (4) Waivers as allowed by State Density Bonus Law as follows:

Concessions

1. Building Height – Allow an increase in the number of allowable stories for a building, from 3 stories to 5 stories, as specified by Thousand Oaks Boulevard Specific Plan No. 20 (SP-20);
2. Building Windows Details – Decrease the minimum window depth to two (2) inches from glass to wall edge instead of three (3) inches and incorporate vinyl window frames instead of aluminum, fiberglass, wood, or manufactured wood, as otherwise required by TOMC Section 9-4.2205(h)(1)(ii) and (h)(3)(i); and
3. Retail Frontage – Decrease the minimum required 50% retail area required for any building with greater than 100 feet of frontage along Thousand Oaks Boulevard to 18% retail area, as specified by SP-20.

Waivers

1. Building Setback – Increase in the front yard building setback for mixed-use Building A from the maximum allowable 15 feet to 98.5 feet, as specified by SP-20;

2. Building Types and Design – Increase the stacked dwelling type and mixed-use building type interior corridor length to 150 feet instead of maximum 100 feet, as otherwise required by TOMC Section 9-4.2205(e)(8)(iv) and (e)(9)(vi);
3. Courtyards – Courtyards within podium building types shall be located no more than one story above street level, as otherwise required by TOMC Section 9-4.2205(e)(8)(vi); and
4. Building Access – All ground floor residential units within a stacked dwelling building type are required to provide a main entrance to each residential unit directly from the street, as otherwise required by TOMC Section 9-4.2205(e)(8)(ii).

The applicant is requesting three (3) Modifications to the Objective Design Standards (ODS) of the TOMC as follows:

Modifications

1. Building Massing and Articulation – Increase building length to 369 feet instead of the maximum 200-foot length as otherwise required by TOMC Section 9-4.2205(g)(1);
 2. Building Articulation – Buildings over three (3) stories tall must have major massing breaks at a minimum of thirty inches (30") deep and four (4) feet wide and extend the full height of the building and provide minor massing breaks at least every 50 feet along the street frontage, minor breaks must be a minimum of twelve inches (12") deep and four (4) feet wide and extend the full height of the building as otherwise required by TOMC Section 9-4.2205(g)(2)(iii)(ab) and (ac); and
 3. Open Space Design – Decrease the minimum sixty percent (60%) of the common usable open space to be provided as a landscaped green area, as otherwise required by TOMC Section 9-4.2205(e)(8)(x) and (e)(9)(xi).
3. **Development Agreement (DAGR) 2023-70001**: To create a binding contract that vests the applicant's rights to a specific project, sets forth the time period to construct the project, and specify public and private benefits and responsibilities related to the project.
 4. **Protected Tree Permit (PTP) 2023-70067**: Allow removal of 17 Coast Live Oak (*Quercus agrifolia*) trees and five (5) Valley Oak (*Quercus lobata*) trees, as well as the encroachment into the protected zone of six (6) Coast Live Oak trees, two (2) Valley Oak trees, and one (1) Holly Oak (*Quercus ilex*) tree.

RECOMMENDATION:

That the Planning Commission adopt a Resolution based on the findings and subject to the conditions contained therein, recommending that City Council:

1. Find that Addendum to EIR No. 327 (CEQA 2023-70004), dated April 2024, was prepared in accordance with the requirements of CEQA, and the Addendum analyzes the proposed Project as required under the CEQA Guidelines, Sections 15162 and 15164. Under CEQA Guidelines Section 15164, and based on the Addendum prepared for the project, it is found that the proposed project will not result in new significant impacts nor substantially increase the severity of previously disclosed impacts beyond those already identified in EIR No. 327;
2. Approve Special Use Permit (SUP) 2023-70011 and Protected Tree Permit (PTP) 2023-70067 based on the findings and subject to the recommended conditions of approval included in the attached Resolution (Attachment #4).
3. Adopt an Ordinance approving Development Agreement (DAGR) 2023-70001 (Attachment #5).

PLANNING COMMISSION REVIEW

Typically, decisions on Development Permits are rendered by the Planning Commission, with City Council consideration if a Planning Commission decision is appealed. Since this project involves a Development Agreement between the applicant and the City, the subject applications require the Planning Commission to make a recommendation to City Council.

BACKGROUND

Project Site and Setting

The subject site consists of one vacant irregularly shaped parcel totaling 6.09 acres at 412/450/500 East Thousand Oaks Boulevard, and two parcels with unassigned addresses. The subject site is within the western district of SP-20 and General Plan Land Use designation of Mixed-Use (>20 to 30 du/acre), which allows for a mix of residential and commercial uses. The site is currently vacant and is primarily used for temporary seasonal uses, including pumpkin sales in the fall and as a Christmas tree lot in the winter. In the early 1970s, a plumbing supply storage building existed in the southeasterly portion of the site.

The site's topography is characterized by a slope that descends from the southeastern portion of the site to the northwest portion of the site. The vacant

property has been previously graded and the site gradient consists of an existing 4.6% slope from southeast to northwest. The western portion of the site has an average 2.6% slope and the eastern portion of the site has an average 5.3% slope. Site elevation ranges from an elevation of 772 at the southeast portion of the site to an elevation of 738 at the intersection of Thousand Oaks Boulevard and Lombard Street. As such, the eastern portion of the site sits above the Thousand Oaks Boulevard grade elevation and the relatively flat western portion of the site sits at road grade with both Thousand Oaks Boulevard and Lombard Street. Previously graded areas of the site include an existing pad at the southeast and the southeast (elevation 770), an existing pad at the northeast (elevation 753), and a large pad on the west half of the property (elevation 744).

The project site is surrounded by developed urban uses and is located north of 101 Freeway (US 101), east of Lombard Street, west of a self-serve car wash and commercial office uses, and south of Thousand Oaks Boulevard. Regional access to the project site now and with the proposed project would be via the U.S. 101 (freeway or 101 Freeway) using the Thousand Oaks Boulevard / Moorpark Road exits and State Route 23 ("23 Freeway") to the east via Thousand Oaks Boulevard and Hillcrest Drive (see Figure 1).

Figure 1: Existing Conditions



The proposed mixed-use project is located within close proximity of job centers and nearby commercial retail, medical, and professional office sites. The site is approximately 650 feet east of an existing mixed-use development located at 299 East Thousand Oaks Boulevard. The closest residential uses are single-family homes located approximately 400 feet north of the subject site, beyond Thousand Oaks Boulevard. The project location is within walking distance of convenience markets, restaurants, general retail uses, and entertainment. Public transit (bus stop) is adjacent to the site along Thousand Oaks Boulevard with six others within a half mile, providing service connections along Hillcrest Drive, Moorpark Road, Westlake Village, and the Thousand Oaks Transit Center. Bicycle share lanes (sharrows) exist within the Thousand Oaks Boulevard right-of-way.

The subject property is served by existing utility infrastructure and the proposed project includes undergrounding existing high-voltage overhead powerlines that bisect the subject property, including overhead powerlines extending north along Hodencamp Road to Hillcrest Drive.

Application Process

On January 26, 2021, a Residential Capacity Allocation (RCA) and initiation of a General Plan Amendment (LU) for the above project was authorized by City Council which allocated 235 dwelling units for the residential component of the project. In addition, City Council also allowed concurrent processing of the entitlement applications (LU 2019-70238 and RCA 2019-70236). Subsequently, the City adopted an updated General Plan, including a new Land Use Map, which allocates units to each residential land use based on its assigned density, therefore the Measure E allocation is no longer necessary.

On November 14, 2022, a Pre-Application (PAR) 2022-70001 was submitted. Staff met with the applicant and provided development requirements and other feedback on City standards, codes, guidelines, and policies.

On March 16, 2023, the applicant began submitting the subject formal applications, which are listed in the “Recommendation” section of this report.

On September 21, 2023, the Notice of Application sign was posted at the property site.

On September 23, 2023, the Notice of Application was mailed to surrounding property owners.

On April 8, 2024, the Notice of Hearing was mailed and posted at the property site.

PROJECT OVERVIEW

Project Summary

The entitlement applications submitted on March 29, 2022, included a General Plan Land Use amendment application. When the application was submitted, the City was in the process of updating the General Plan, which was approved by City Council on December 5, 2023. The project site is located within the Mixed Use land use designation of the adopted General and therefore, the project is consistent with the new land use designation and consideration of the project no longer requires a General Plan amendment.

Special Use Permit (SUP-2023-70011) is a request to allow the proposed mixed-use development encompassing 609,633 gross square foot of building area, which proposes 328 multi-family residential units (including 44 lower-income affordable units), common areas, and amenities, 8,500 gross square foot of commercial retail and restaurant space, two parking structures containing a total of 459 parking spaces, and 16 surface parking spaces (475 total on-site parking spaces). The 328 residential units would be distributed across one 4-story mixed-use building, one 5-story podium style mixed-use building, and one 5-story podium style multi-family residential building with maximum building heights ranging from 47 feet to 62 feet, with the third, fourth, and fifth floor of each proposed building to be stepped back from adjacent roadways and public views.

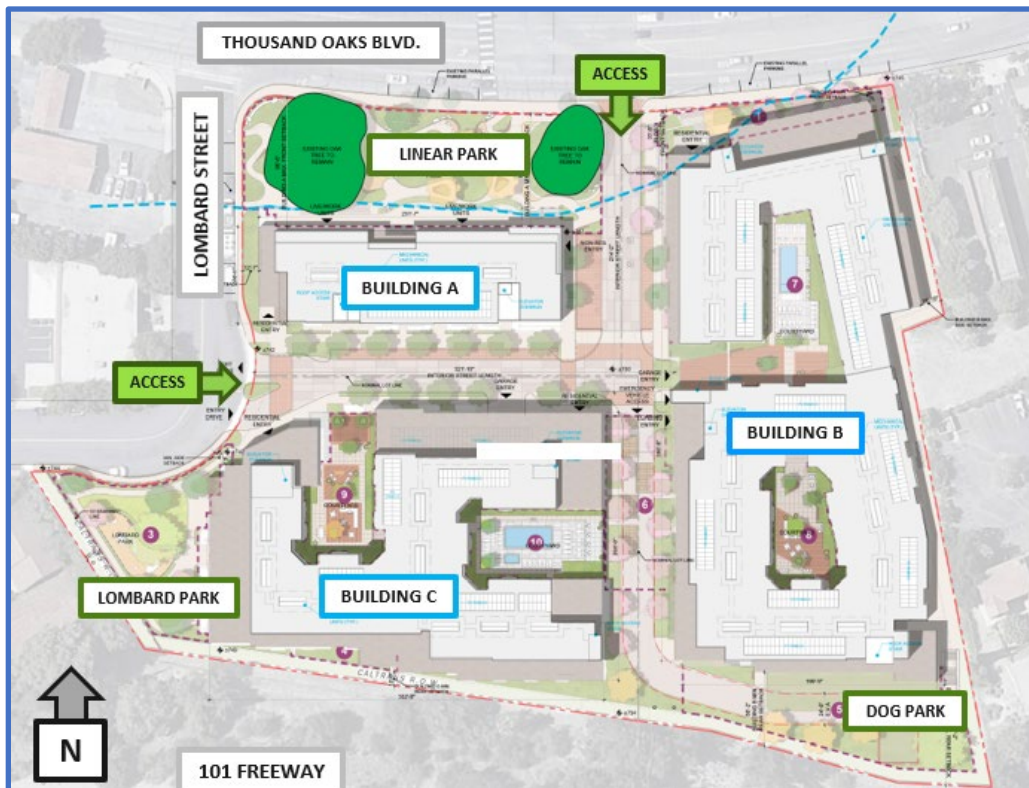
The project would create a mixed-use residential apartment community comprised of three buildings, which would appear at ground level as four buildings due to the massing break of the largest easterly building (Building B). The northerly buildings, fronting Thousand Oaks Boulevard (Buildings A and B), would be mixed-use, with three and four levels of apartments above a ground floor that consist of mixed residential and commercial tenant spaces. The commercial spaces would be open to the public, as well as the outdoor open spaces proximate to those uses. In addition, three (3) live/work residential units are proposed on the north side of "Building A." These live/work units are intended to accommodate low-intensity commercial operations. These two-bedroom and two-bath live/work units provide a dedicated workspace area that functions similarly to a home-based business, which is permitted use in any residential zone and is ideal for small, start-up businesses that require minimal work area and create few or no customer trips.

The podium building (Building C) is located at the southwest portion of the site. It consists of a 269,416 square foot, 62-foot tall, 5-story podium style residential structure with 131 residential units, 120,725 square foot semi-subterranean parking garage with 280 parking spaces, and two third-level courtyards. The units

are located on all 5 levels of the proposed building, including 19 units providing direct ground-floor access to the internal access road and the pocket park immediately to the west.

Private indoor and outdoor amenities would be provided for use by the residents throughout the site, including a playground, swimming pool, courtyards with active play spaces, roof decks, fitness room, lounges, learning center, and a dog park. Figure 2 below illustrates the proposed site configuration.

Figure 2: Proposed Site Plan



Landscaping is provided throughout the proposed open space, including within landscape buffers, courtyards, and walkways, as seen on the conceptual landscape plan submitted (Attachment #6). Thirty-four (34) protected trees are located within and adjacent to the subject property. The project proposes the removal of 17 Coast Live Oak trees and five (5) Valley Oak trees, and encroachment within the protected zone of six (6) Coast Live Oak trees, two (2) Valley Oak trees, and one (1) Holly Oak tree, as described in the "Oak Tree Report" dated January 2024 (Attachment #8). Each protected tree to be removed must be replaced with three (3) trees (two 24-inch box and one 36-inch box sized trees). A

total of 64 replacement trees would be required for the project. Per the proposed landscape plan, the project includes six (6) replacement trees to be planted on-site due to site constraints resulting from compliance with Ventura County Fire Department (VCFD) requirements for fire defensibility. Conditions have been applied to the project requiring the applicant to plant the remaining 58 trees at an off-site location for public benefit or provide an in-lieu payment in the amount of \$102,614.77 to the City's Open Space Conservation Fund.

EVALUATION

Consistency with General Plan and Zoning Designation

The property is within the boundary of SP-20, which was adopted by City Council on November 15, 2011. This plan provides specific and unique development standards and establishes a regulatory framework for a defined area. The Land Use Element of the General Plan designates the property as Mixed-Use (>20 to 30 du/acre). The subject site and surrounding properties are within the western portion of SP-20 which allows for a mix of commercial and residential uses on the same site. The project site totals 6.09 net acres, based on the lot size the maximum density for this project, without a Density Bonus, is 183 dwelling units (6.09 net acres x 30 dwelling units per acre = 182.7 units, rounded up to 183 units)¹. The project includes 24% of the base number of units as affordable units in the lower-income category, which equates to 44 affordable lower-income units. This allows the project to add 50% more residential units as a "Density Bonus." This bonus translates to 92 Density Bonus units per statutory allowance. The total overall number of residential units proposed is 328, which is a result of the base number (183 units), plus the 50% density bonus (92 units), plus the additional units above commercial (53 units). Therefore, the density of the project is consistent with both the General Plan Land Use Element designation and Thousand Oaks Boulevard Specific Plan. In addition, the project will be consistent with the goals and policies of the General Plan Housing Element and Inclusionary Housing Ordinance by providing rental housing in the form of 44 lower-income affordable units.

¹ Pursuant to Government Code Section 65915(q): Each component of any density calculation, including base density and bonus density, resulting in fractional units shall be separately rounded up to the next whole number. The Legislature finds and declares that this provision is declaratory of existing law.

Special Use Permit (SUP 2023-70011)

Objective Design Standards

On March 29, 2022, the City Council adopted the Objective Design Standards for Residential Development, which went into effect on May 1, 2022. Per TOMC Section 9-4.2202 "Applicability," the Objective Standards apply to projects deemed "Complete" after the effective date of the article. This project was deemed Complete on November 1, 2023, after the effective date and is therefore subject to the Objective Design Standards.

Projects that are subject to the Objective Design Standards must select a Building Type and Frontage Type which informs the architectural and operational characteristics of the project. This project fits with the Mixed-Use and Stacked Dwelling Building types.

The project requires Objective Design Standards Modifications, which requires the following Findings:

1. The Modification, while not consistent with a specific provision of this Code, is justified by its intent or by design hardship and allows reasonable and conforming use that is consistent with the General Plan goals and policies and underlying zoning district.
2. The Modification would result in development consistent with the scale and character of existing and allowable development in the vicinity under the same zoning.
3. The Modification would result in development that is not detrimental to or that would not adversely impact adjacent properties.

Modifications

With the proposal as it has been submitted three (3) Modifications to the Objective Design Standards (ODS) of the TOMC are requested.

1. Building Massing and Articulation – Increase building length to 369 feet instead of the maximum 200-foot length as otherwise required by TOMC Section 9-4.2205(g)(1);
2. Building Articulation – Buildings over three (3) stories tall must have major massing breaks at a minimum of thirty inches (30") deep and four (4) feet wide and extend the full height of the building and provide minor massing breaks at least every 50 feet along the street frontage, minor breaks must be a minimum of twelve inches (12") deep and four (4) feet wide and extend

- the full height of the building as otherwise required by TOMC Section 9-4.2205(g)(2)(iii)(ab) and (ac); and
3. Open Space Design – Decrease the minimum sixty percent (60%) of the common usable open space to be provided as a landscaped green area as otherwise required by TOMC Section 9-4.2205(e)(8)(x) and (e)(9)(xi).

Staff supports these requests for modifications. The design and layout of the project considered the existing flood plain at the northwest portion of the site, elevated topography at the southwestern portion of the site, and existing and future surrounding development. The buildings have been sited and designed with architectural components that are compatible with existing site conditions and surrounding property characteristics. Although the length of Building B is greater than the maximum allowable building length of 200 feet, requiring the building to be redesigned and split into two buildings to comply with the standard would prevent the project from meeting the allowable density and potentially reduce the number of affordable units. Further, there are site constraints that limit development within the northeastern portion of the site due to an existing floodplain, thus resulting in a design hardship due to the existing site characteristics. Additionally, construction within the floodplain would be a financial hardship and the natural setting of the site would change because the floodplain supports two mature oak trees. Proposed Building B provides: 1) a massing break at the building midpoint by incorporating a courtyard along the western elevation; 2) third story element setback of 20 feet, fourth story element setback of 32 feet, and the fifth story element setback of 215 feet from Thousand Oaks Boulevard; and 3) varying façade elements such as balconies, trellis, and rooftop terraces.

The proposed buildings, as designed, incorporate vertical and horizontal elements, building articulation, roofline variation, and decorative material finishes and colors. The architectural design of all structures differentiates between the first and upper floors using material changes, increased upper floor setbacks, and ground-floor patios to further reduce the massing from the ground level.

A reduction to the required landscaped green area of the proposed common useable open space can be supported because the project includes an expansive quasi-public open space area, including a pocket park and dog park. The project includes 54,763 square feet of common public open space area which also serves to complement the proposed mixed-use development.

Therefore, the proposed Modifications would result in development consistent with the scale and character of existing and allowable development in the vicinity under the same zoning and land use designations, and the Modifications would not result in development that is detrimental to or that would adversely impact adjacent

properties as adjacent properties would still receive adequate light and air, public utilities would serve existing and proposed development, and the proposed building would be constructed to meet Building and Fire Code requirements.

Residential Unit Types

The proposed 328 residential units would be distributed across two mixed-use buildings, “Buildings A and B” and one multifamily residential building “Building C.” Building A provides 1,500 square foot of commercial space as well as 43 residential units. Building B provides 7,500 square foot of commercial space as well as 154 residential units. A total of 131 units are provided within the residential-use only building (Building C). The unit types within the two proposed mixed-use buildings (Buildings A and B) include 6 studio units, 88 one-bedroom units, and 103 two-bedroom including 3 live/work units at Building A. The unit types within Building C include 6 studio units, 68 one-bedroom units, and 57 two-bedroom (see Table 1). The 328 units include 44 affordable units dispersed throughout all buildings and consist of 2 studio units, 21 one-bedroom units, and 21 two-bedroom units (see Table 2).

Table 1 – Unit Mix

Unit Type	No. of Units	Total Unit (%)	Average Sq. Ft.
Studio	12	3.7%	568
1-Bedroom	156	47.6%	747
2-Bedroom including 3 Live/Work	160	47.5%	1,141
TOTAL	328		819

Table 2 – Affordable Unit Mix

Unit Type	No. of Units	Total Unit (%)	Average Sq. Ft.
Studio	2	4.5%	568
1-Bedroom	21	47.7%	747
2-Bedroom	21	47.7%	1,141
TOTAL	44		819

As indicated in Table 2 above, 44 units are proposed to be affordable at the lower-income level to households with income at or below 80% of the Ventura County average median income (AMI). As previously mentioned, the maximum base density for this project is 183 dwelling units. In conjunction with the base density, the applicant is seeking a density bonus as provided by the State’s Affordable Housing Density Bonus law. The State density bonus law housing projects to be

granted a density bonus unit based on the percentage of affordable units to be provided at a given level of household income. In this case, the applicant is proposing that 24% of the units be affordable in the lower-income category. This percentage is applied to the base 183 units, which equates to 44 affordable lower-income units, entitling the applicant to a 50 percent density bonus. This bonus translates to 92 Density Bonus units per statutory allowance as shown in Table 3.

Table 3 – Project Density Bonus Formula

Unit Type	Formula	Result	Proposed
Base Density	6.09 acres x 30 units per acre	182.7 Base Density Units Allowed, rounded up**	183 Base Density Units
Affordable Units	183 Base Density Units x 0.24	44 Affordable Units Required**	44 “Lower-Income”-Affordable Units
Bonus Units	183 Base Density Units x 0.50*	92 Additional Market Rate Units Allowed**	92 Additional Units
MAXIMUM BONUS UNITS ALLOWED	183 Base Density Units + 92 Additional Units	275 Units Allowed	275 Units
SP-20 UNITS ALLOWED***	Bldg. A 1,500 square feet commercial = 3 units Bldg. B 7,000 square feet commercial = 50 units	53 Units	53 Units
		TOTAL	328 Dwelling Units

*44 Low Income units are proposed to contribute to the density bonus calculation = 50% density bonus pursuant to Government Code Section 65915.

**Pursuant to Government Code Section 65915(q): Each component of any density calculation, including base density and bonus density, resulting in fractional units shall be separately rounded up to the next whole number.

***SP-20 allows for unlimited units over commercial. The proposed 53 units are located above the commercial component of Buildings A and B and are not calculated towards the base density.

Additionally, SP-20 allows unlimited dwelling units above commercial space. The project proposes 53 units above the proposed 8,500 square foot nonresidential space yielding a total of 328 units. Measure E units are only required to be allocated to allow for the base density of the property, plus the 53 units above commercial. Units proposed above the base density, as allowed by the State Density Bonus Law, are not subject to Measure E regulations. The purpose of the State Density Bonus Law is to incentivize the development and availability of

affordable housing by encouraging the inclusion of affordable housing units within new developments. As such, the overall density for the project is proposed at 54 units per acre instead of the base 30 units per acre.

Housing Element

The recently adopted Housing Element includes a land inventory that demonstrates how the City will accommodate its fair share of the regional need for housing, known as the Regional Housing Needs Assessment (RHNA), which was determined by the Southern California Association of Governments (SCAG). The RHNA allocation is distributed among four income categories (very low, lower, moderate, and above moderate). The affordable income categories are defined as less than 50% of Area Median Income (AMI) as very low, between 50% to 80% of AMI is lower, and between 80% to 120% of AMI is moderate. Using Table 4 below for reference, a 2-person household, the current maximum “Low” income limit is \$85,000 per year.

Table 4 – 2023 Ventura County Income Limits

Annual Income	Persons per Household							
	1	2	3	4	5	6	7	8
Acutely Low (15% AMI)	\$ 13,000	\$ 14,850	\$ 16,700	\$ 18,500	\$ 20,050	\$ 21,500	\$ 23,00	\$ 24,500
Extremely Low (30% AMI)	\$ 27,900	\$ 31,900	\$ 35,900	\$ 39,850	\$ 43,050	\$ 46,250	\$ 49,450	\$ 52,650
Very Low (50% AMI)	\$ 46,500	\$ 53,150	\$ 59,800	\$ 66,400	\$ 71,750	\$ 77,050	\$ 82,350	\$ 87,650
Lower (80% AMI)	\$ 74,400	\$ 85,000	\$ 95,650	\$106,250	\$114,750	\$123,250	\$131,750	\$140,250
Median (100% AMI)	\$ 86,450	\$ 98,800	\$111,150	\$123,500	\$133,400	\$143,250	\$153,150	\$163,000
Moderate (120% AMI)	\$103,750	\$118,550	\$133,400	\$148,200	\$160,050	\$171,900	\$183,750	\$195,600

Ventura County Area Median Income (AMI): \$123,500

Source: CA Department of Housing and Community Development (HCD), 2023

The proposed 44 affordable lower-income units are needed to satisfy the required RHNA allocation of affordable housing units in the City in the lower-income category. Once building permits are issued for the development, each unit will count towards the City's 6th Regional Housing Needs Assessment (RHNA) cycle, ending in 2029, as shown in Table 5.

Table 5: 6th Regional Housing Needs Assessment

	Income Categories				
	Very Low	Low	Moderate	Above Moderate	Total
RHNA 6th Cycle	735	494	532	860	2,621

Furthermore, an Affordable Housing Agreement would be required to establish the specific obligations of the project including:

- a) that all affordable units are dispersed throughout the project;
- b) affordability level be set at a "Low" income level for 44 units;
- c) that the affordable units shall have the same standard features and amenities provided to market-rate units of the same type; and
- d) that the restricted-income covenants are required by state law to be in effect for 55 years.

Concessions

Per California Government Code Section 65915(d)(2)(C) and the Density Bonus Law, the applicant is also entitled to three incentives, or concessions, for this project since the applicant is providing at least 24% of the total units for lower-income households. The three requested concessions include:

1. Building Height – Allow an increase in the number of allowable stories for a building, from 3 stories to 5 stories, as specified by SP-20;
2. Building Windows Details – Decrease the minimum window depth to two (2) inches from glass to wall edge instead of three (3) inches and incorporate vinyl window frames instead of aluminum, fiberglass, wood, or manufactured wood as otherwise required by TOMC Section 9-4.2205(h)(1)(ii) and (h)(3)(i); and
3. Retail Frontage – Decrease the minimum required 50% retail area for any building with greater than 100 feet of frontage along Thousand Oaks Boulevard to 18% retail area, as specified by SP-20.

Building Form and Design

The proposed project is characterized by a mixed-use development that includes an internal vehicular and pedestrian-friendly roadway separating three buildings which comprise a total of 609,633 gross square feet, including 26,219 square feet of private open space and 86,242 square feet of common space for the residents (Table 6).

Table 6 - Gross Floor Area and Land Use Summary

Land Use Type	Building A	Building B	Building C	TOTAL
Commercial	1,500 sf	7,000 sf	N/A	8,500 sf
Residential	44,254 sf	142,322 sf	114,675	301,251 sf
Parking Structure	N/A	92,915 sf	120,725	213,640
Non-Residential Area (Lobby/Amenity etc.)	11,091 sf	41,135 sf	34,016 sf	86,242 sf
Totals	56,845 sf	283,372 sf	269,416 sf	609,633 sf

The northern building (Building A) is located within the northwestern portion of the site and immediately south of flood plain. The flood plain has been designed with an expansive quasi-public open space area with protected oak trees to remain in place. Although Building A is setback approximately 100 feet from the front property line the proposed building incorporates enhanced building materials including significant building articulation and massing breaks. These design features include elevated terraces on the north side of the building, balconies, third and fourth floor stepbacks, and fourth floor roof decks. The northeastern building (Building B), located immediately south of Thousand Oaks Boulevard, incorporates enhanced building materials, including building articulation and massing breaks. The design features applied to Building B include a public plaza at the entrance, elevated terraces, balconies, a courtyard at the building midpoint, third and fourth floor stepbacks, and fourth floor roof deck, at the corner of the building above the commercial areas overlooking Thousand Oaks Boulevard. Trellises on the rooftop deck provide a variety of material changes throughout to provide a visually diverse and appealing building as seen from Thousand Oaks Boulevard (see Figure 3).

Figure 3 – Project Renderings



Figure 3 – Project Renderings



The site also features a public seating area on the ground floor plaza in front of the commercial units of Building B. Building A features a terrace and public seating area on the ground floor in front of the commercial, live/work, and residential units which front an expansive public open space area. Conditions of approval have been included in the Resolution requiring that the project provide decorative materials such as cast in place concrete with enhanced finish for the pedestrian building entrances and decorative pavers at the driveway entries to enhance pedestrian safety and connectivity. While only 1,500 square feet of the 56,845 square-foot gross building area of mixed-use Building A will be dedicated to commercial use, the residential amenities would appear commercial in nature, such as a large lobby, club/lounge, and live/work units, are provided on the ground floor and roof level to contribute to its mixed-use style. Although Building C is not

a mixed-use design, Building C includes direct outside access residential ground-floor units, as required by TOMC Section 9-4.2205(e)(8)(ii). Additionally, five units along the western elevation of Building C provide direct ground floor access to the internal access road and five ground floor units provide direct access to the pocket park immediately west of Building C. The ground floor access provided meets the intent of the SP-20 and Objective Design Standards because the ground floor units are compatible with the proposed mixed-use building and activate the building frontage along the internal access road.

The project's architectural design is a contemporary-modern style. The exterior walls of the building are earth-toned colors primarily consisting of stucco finishes, fiber cement siding, simulated wood fiber cement panels, corrugated metal paneling, brick veneer, multi-panel window areas with dark bronze trim, glass balcony with metal railings, canopies, and trellises (see Attachment #6). The architectural design incorporates vertical and horizontal articulation, roof line variation, and detailing throughout. As previously mentioned, the largest proposed building located along the eastern portion of the site (Building B) will appear to be two buildings because the building design incorporates a second level courtyard located at the midpoint of the western building elevation (See Figure 4). Additional decorative roofline trim and enhanced façade materials are required by conditions of approval to further improve building design and reduce building size, mass, and scale.

Figure 4 – Building B Mass Break



Building Height

Proposed building heights, as measured from the top of the building down to the lowest adjacent finished grade, range from 47 feet (Building A), 57.55 feet (Building B), and 62 feet (Building C). SP-20 allows buildings up to 3 stories with a 50-foot maximum average height. The proposed buildings are four and five stories and the average building height is 45 feet which complies with the requirements and design intent of SP-20.

The applicant has requested a concession to exceed the maximum number of stories from 3 to 5 stories as allowed by the State Density Bonus Law. Although the proposed project exceeds the maximum allowable number of stories per SP-20, the proposed buildings have been designed to include a staggered building façade design with increased third, fourth, and fifth floor setbacks, further reducing the visual impacts from public view and providing visual interest from surrounding properties. The two proposed buildings fronting Thousand Oaks Boulevard (Building A and B) have been designed to comply with SP-20 development standards requiring a 10-foot third-floor setback from the buildings first floor. The proposed 3rd and 4th floor elements of both buildings include increased building setbacks from the first floor and the 5th floor of Building B is setback more than 200 feet from Thousand Oaks Boulevard further reducing the size, mass, and scale of the proposed buildings. Furthermore, the recently adopted General Plan (2045) Land Use Element identifies the project site as Mixed-Use land use designation which allows a maximum of 50 feet in height. This designation facilitates a variety of multi-family residential housing that supports walkable, transit-ready neighborhoods.

Compatibility with Surrounding Uses

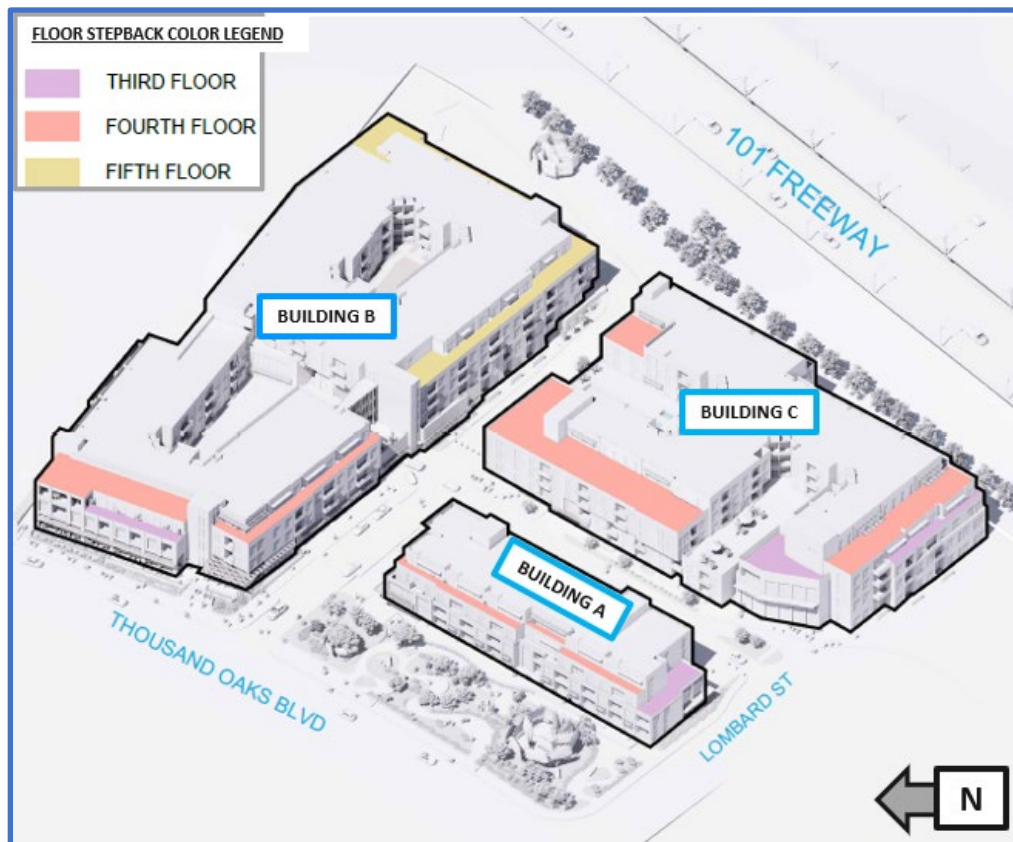
The project is located within an urbanized area, with transportation and utility infrastructure in place. Land use designations for the surrounding area is Mixed-Use (>20 to 30 du/acre) within SP-20 to the east, west, north, and south. Surrounding properties to the north, south, east, and west are located within Thousand Oaks Boulevard Specific Plan No. 20. As previously mentioned, the subject site and surrounding properties along Thousand Oaks Boulevard are within the western portion of SP-20 which allows for a mix of commercial and residential uses on the same site.

Development surrounding the site includes a carwash, a restaurant, and one to two-story commercial office buildings to the east, two one-story commercial buildings to the north beyond Thousand Oaks Boulevard, and a one-story gas

station and one-story commercial office building to the west. Architecturally, the proposed building design, materials, and landscaping complement existing uses as the color palette of browns and grays mimic the colors used in the adjacent commercial developments.

The site topography guided the site design, and although Building B is a four and five-story structure with a maximum 57.55-foot building height, the structure is notched into the existing slope within the eastern portion of the site. The expansive 21,154 square-foot linear park landscape at the northwest portion of the site acts as a buffer by providing an extended setback area between the proposed development and surrounding properties. In addition, the third, fourth and fifth floor stepbacks are provided on the external facades of the proposed buildings fronting Thousand Oak Boulevard to further reduce the appearance of height from neighboring properties (see Figure 5).

Figure 5 – Project Massing



Setbacks

Per SP-20, the maximum allowable front yard setback for Building A fronting Thousand Oaks Boulevard is fifteen (15) feet, which includes a 5-foot easement. Due to an existing flood plain within the northwestern portion of the site, the proposed project provides an approximate 100-foot front yard building setback from Thousand Oaks Boulevard, which includes public open space. The applicant has elected to request a concession to exceed the maximum allowable front yard building setback for Building A from a maximum allowable 15 feet to 98.5 feet.

Per SP-20, the maximum allowable front yard setback for Building B fronting Thousand Oaks Boulevard is of fifteen (15) feet, which includes a 5-foot easement. Building B is sited outside of the flood plain and complies with the maximum 15-foot front yard setback. The setbacks required by SP-20 are detailed in Table 7.

Table 7: Building Setbacks

Building Setbacks			
Building A	Required (ft.)	Proposed (f.t)	Complies
Front (North):	First Floor Maximum: 15*	98.5	Yes (Concession)
	Third Floor Average: 10	10	Yes
	Fourth Floor: N/A	110	N/A
Right (West):	First Floor Minimum: 10	12.58	Yes
Building B	Required	Proposed	
Front (North):	First Floor Maximum: 15**	15	Yes
	Third Floor Average: 10	10	Yes
	Fourth Floor: N/A	32.6	N/A
	Fifth Floor: N/A	215	N/A
Left (East):	First Floor Minimum: 10	15	Yes
Rear (South)	First Floor Minimum: 10	56.16	Yes
Building C	Required	Proposed	
Right (West):	First Floor Minimum: 10	11.33	Yes
	Fourth Floor: N/A	21.33	N/A
	Fifth Floor: N/A	31.5	N/A
Rear (South)	First Floor Minimum: 10	10	Yes
	Fifth Floor: N/A	20	N/A

*If a building cannot be located at the front of the property adjacent to Thousand Oaks Boulevard due to physical constraints (i.e. flood control channel or topography), a minimum 25-foot landscaped setback planted with trees. A 90-foot landscape setback is provided.

**A 5-foot sidewalk easement is required to achieve a 15-foot setback from the curb.

The subject property is visible intermittently from the 101 Freeway, and Resolution No. 91-172 “101 Freeway Design Guidelines” applies. Although there are no public viewsheds or corridors to be protected, such as views of distant natural features,

open space, public parks, lakes, designated protected ridgelines, and any other designated types of scenic resource, the project has been designed to be sensitive to the existing topography and proximity to the highway. These design considerations include landscaping proposed along the southwest and southeast project perimeters, protective screening of roof-mounted mechanical equipment integrated into the building's overall design of wall and roof components, balconies, courtyards, roof line variation, and the increased Building B rear yard setback between the rear property line and the freeway to allow for reduced visual impacts. Further, the berm along the south property line adjacent to the freeway contains various mature trees and landscaping that partially screen the proposed buildings.

Amenities and Open Space

The proposed project includes quasi-public and private amenities. Quasi-public amenities include publicly accessible ground-level plazas and open space with seating areas at Buildings A and B within the northern entrance of the site. The public open space area provides lush landscaped walking paths along the northwestern portion of the site and adjacent to Thousand Oaks Boulevard, serving as a transition between the public and semi-public space to the mixed-use buildings and multi-family residential building to the rear of the site, thus complementing SP-20 development policies and guidelines.

Private common outdoor amenities include approximately 9.6% of the total site area or 26,203 square feet of outdoor spaces designed for specific activities and uses. These amenities would include but are not limited to, outdoor landscaped open space areas, swimming pools, courtyard spaces, barbecue areas, and roof decks. Two fourth-floor roof-deck areas are provided in mixed-use Buildings A and B, each including seating areas and planter areas. The open spaces are connected by a system of pathways and paseos to provide residents and visitors with multiple opportunities to gather (see Figure 6). These paseos also include outdoor furniture, landscape, and hardscape to encourage the use of outdoor spaces. Approximately 20.6% of the total site area, or 54,763 square feet, consists of a common public open space area (see Table 8B, Public Amenities).

Figure 6: Site Plan and Outdoor Amenity Map



Indoor common amenities total approximately 12,529 square feet, which include but are not limited to a leasing office with concierge services, learning center, club/lounge area, bike room, co-working area, fitness rooms, and rooftop decks etc (see Table 8A, Common Resident-only Amenities). The co-working space would be equipped with bring-your-own computer stations for use by residents only. Private amenities are provided for each unit as well as the public and common facilities. Of the proposed 328 units a total of 318 units include private open space, either in the form of a balcony or patio that ranges between 42 to 450 square feet with an average size of 82 square feet. In addition, a minimum of 115 cubic feet of private storage locker is provided per unit, to supplement the bicycle facilities and private open spaces. The project also includes 1,600 square feet of resident storage, consisting of 474 square feet in Building B garage level one and 1,126 square feet in Building C garage level one. The proposed project conforms with the requirements of SP-20 and the intent of the TOMC by providing ample private and common-area open space areas and other amenities for use by residents and visitors.

Table 8A- Common Resident-Only Amenities

Project Amenities	Floor Area (sf)	Location (Bldg. and Floor)
Outdoor		
Courtyard B1	8,563	Bldg. B, L2
Courtyard B2	5,188	Bldg. B, L3
Courtyard C1	5,274	Bldg. C, L3
Courtyard C2	6,400	Bldg. C, L3
Roof Deck A (4th Floor Roof Deck)	288	Bldg. A, L4
Roof Deck B (4th Floor Roof Deck)	490	Bldg. B, L4
Total	26,203	
Indoor		
Building A (Club/Lounge)	618	Bldg. A, L4
Building A (Lobby/Lounge)	568	Bldg. A, L1
Building B (Mail, Concierge, etc)	2,047	Bldg. B, L1
Building B (Fitness/Yoga)	2,888	Bldg. B, L2
Building B (Club/Lounge)	567	Bldg. B, L4
Building B (Co-Working Space)	1,000	Bldg. B, L3
Building B (Bike Room)	570	Bldg. B, L1
Building C (Lobby/Lounge)	1,545	Bldg. C, L1
Building C (Club/Lounge)	1,608	Bldg. C, L3
Building C (Learning Center)	500	Bldg. C, L3
Building C (Bike Room)	618	Bldg. C, L1
Total	12,529	

Table 8B - Public Amenities

Project Amenities	Floor Area (sf)	Location (Bldg. and Floor)
Linear Park	21,154	North Property Boundary
Retail Plaza	7,389	Northeastern Property Boundary
Dog Park	14,171	Southeastern Property Boundary
Lombard Park	12,049	Southwestern Property Boundary
Total	54,763	

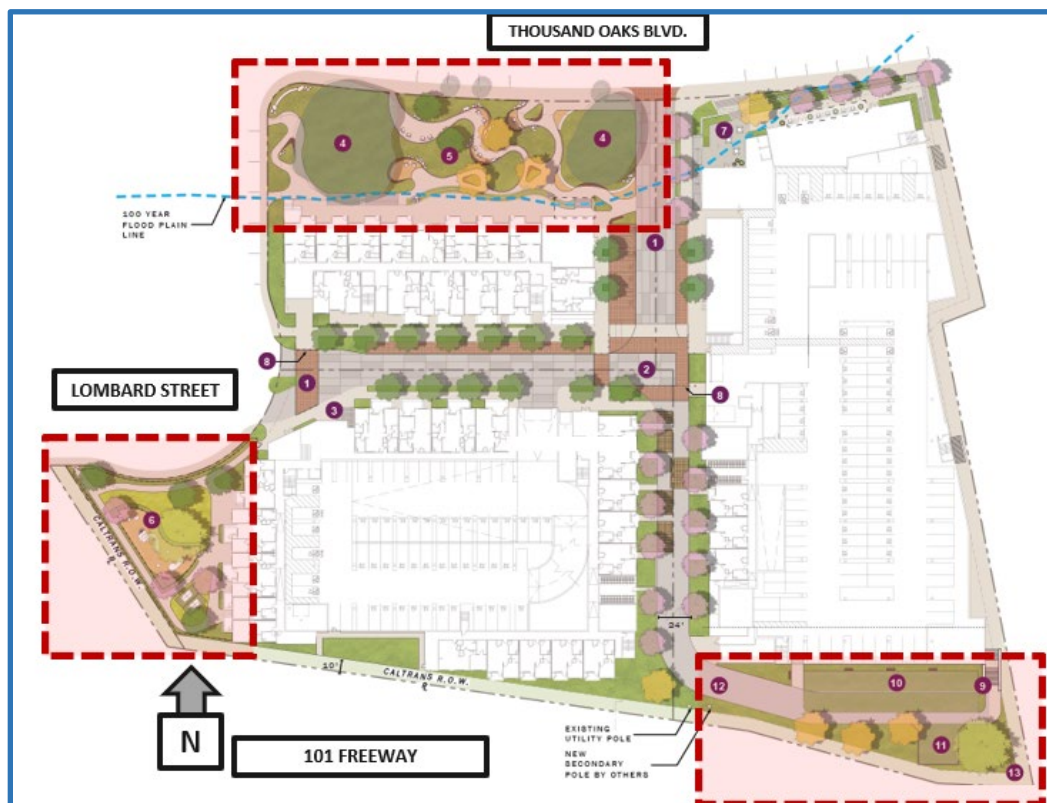
Landscape Plan

A conceptual landscape plan has been prepared to demonstrate the proposed landscaping for the project and compliance with city landscaping standards. If the

project is approved, a formal landscape plan will be required, and technical evaluation of that plan will be provided through a Landscape Plan Check process to further ensure compliance with the City's landscape and irrigation standards. The project proposes primarily native, and drought-tolerant plants and minimal turf, which is isolated to the 1,400 square foot children's play area. Of the 34 protected trees, three (3) oak trees will be preserved in place and (6) additional protected trees will be planted on-site. Also, 16 ornamental trees are proposed and incorporated as part of an open space paseo and pathway system.

In addition, in line with Precise Plan of Design Guidelines, substantial landscape treatment to create a comfortable living environment and soften the visual impact of structures while reducing potential adverse off-site views has been incorporated into the project. The protected trees are proposed to be placed within the on-site open space programs which are located at the north, southwest, and southeast boundaries of the site. The proposed project provides landscape buffers between the proposed structures and adjacent roadways to the north, west, and south (see Figure 7- dashed red). The project includes rooftop landscaping within mixed-use buildings A and B which front Thousand Oaks Boulevard thereby softening the overall building size, mass, and scale.

Figure 7 – Planting Area Plan



Pedestrian Access and Walkability

The project site has been designed with an emphasis on walkability and pedestrian connectivity, which has been incorporated throughout the site design proposed project. Enhancements to existing sidewalks within the public right of way are to be provided at both entrances on Thousand Oaks Boulevard and Lombard Street per conditions of approval applied to the project. An expansive quasi-public open space area, which features meandering pedestrian pathway connections from the sidewalk to the proposed building's entrances, is provided along the northern property line adjacent to Thousand Oaks Boulevard.

In addition, internal pedestrian site circulation includes a series of walkways, breezeways, courtyards, and seating areas with landscaping, planters, and other decorative features. Furthermore, connectivity between the mixed-use buildings and the residential-only area to the southwest of the site is designed with raised crosswalks introducing traffic calming measures, thus reducing vehicle speeds and improving pedestrian and vehicular circulation.

There are several pedestrian entrances to the residential areas of each building provided through dedicated lobby areas, as well as controlled-access gates to the outdoor amenity areas located west of Building C and south of Building B. In addition, ground floor units provide direct access to the sidewalks along the perimeter of Buildings A and C, and on the southwest side of Building B.

As required by conditions of approval, visually distinct materials are to be incorporated at the driveway entrances, lobby entrances, and walkways throughout the site to encourage pedestrian safety and enhance the overall site appearance. The project is adjacent to and within walking distance of several commercial centers offering dining, retail, grocery, professional, and recreation uses, thus reducing the potential number of vehicle trips from the project and reducing greenhouse gases.

Public Art

SP-20 requires new projects to provide public art with a value of 0.25% of the building cost, or provide an equivalent in-lieu fee. According to the applicant's initial analysis, the total building cost is approximately \$109,000,000. Based on this estimate, 0.25% is \$272,500. The applicant intends to provide art in the form of decorative tiles and pavers at pedestrian entrances and crosswalks, in the project area. Final determination of public art to be incorporated into the project area will be made prior to issuance of building permits. A condition of approval has been included in the Resolution to ensure compliance with this requirement.

Quimby Act

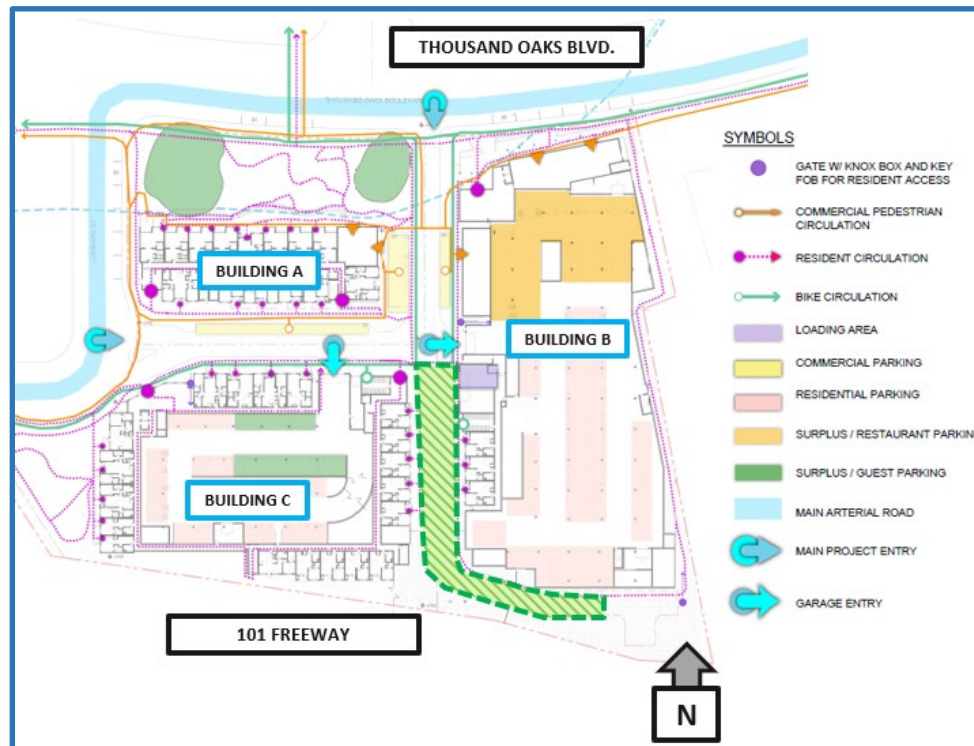
Pursuant to the City's Parkland Dedication ordinance (Quimby Act), conditions have been applied to the project requiring the developer to pay a fee in lieu of land dedication to satisfy the park needs of future residents. This fee is to be determined by and paid to the Conejo Recreation and Park District (CRPD) prior to the issuance of a building permit for the construction of the buildings proposed herein.

The applicant has also agreed with (CRPD) to donate the land to help provide parkland and park improvements necessary to serve residents of the new development. The project proposes 21,154 square feet of linear park along Thousand Oaks Blvd., and 12,049 square feet park along Lombard Street. The park improvements would be passive and would provide a neighborhood park level of service with features such as seating and gathering spaces, walkways, preservation of two large mature oak trees, game areas, small playground, and open turf areas with landscaping. The developer will be responsible for developing and maintaining the parks. The parks would need to be accessible to the public during normal operating hours which must not be less than 1 hour after sunrise and 1 hour after sunset. In return, CRPD would reduce the Quimby fees by 50 percent.

Vehicular Access and Parking

Primary ingress and egress to the site are provided from two bi-directional driveways, both accessed from Thousand Oaks Boulevard and Lombard Street, as seen in Figure 8 and Sheet A0-16 of the Project Plans (Attachment #6). Within the site, the internal roadway extends from both Thousand Oaks Boulevard and Lombard Street leading to the parking garage entrances within Buildings B and C. These roadways are lined with sidewalks and surface parking spaces designed with permeable pavers and raised crosswalks. The internal access road also provides access to temporary parking and loading areas as well as parallel parking spaces to serve commercial uses.

Figure 8 – Circulation Plan



In addition, a pedestrian-oriented road extends to the south between Building B and Building C (Figure 8 - hatched green). This pedestrian-oriented road not only serves as access to the residential units on the ground floor units of Building B and C and to the dog park located at the southeast corner of the site but also provides VCFD access. As conditioned, all access ways meet the minimum design standards of the TOMC and Ventura County Fire Prevention District minimum standards.

The parking structure at Building B, serving the mixed-use building, is a two-level structure at grade, with the first and second levels completely encapsulated by the proposed commercial and residential uses. The entrance is located at the midpoint of the east side of the building and is not visible from any public road due to the location of Building C immediately to the West and existing commercial buildings to the west along Lombard Street. A portion of the parking structure is exposed at the southwest elevation of Building B, however, the elevations of the below-grade parking structure have been designed to reflect architectural compatibility with the proposed development. Additional conditions of approval have been included requiring the applicant to work with staff to determine materials to improve the proposed decorative metal vent covers that appear on the south and southwest sides of the Building B parking structure.

Semi-subterranean parking structure at Building C, serving the residential-use-only building. Ingress and egress to the below-grade parking structure is provided on the north side of the building and are completely screened by Building A to the north, which minimizes public view of the entry areas. As normally required by the TOMC and as included in the conditions of approval, all parking stalls within Parking Structure B will be designated for and accessible by the tenants of Building B and Parking Structure C will be designated for and accessible by the tenants of both Buildings A and C. A total of 475 parking spaces are proposed for the proposed mixed-use and apartment buildings, as shown in Table 9.

Table 9: Number of Parking Spaces by Type

Parking Location	Number of Parking Spaces by Type				
	Compact*	Tandem ¹	ADA**	Standard	Total
Parking Structure B	28	12	7	132	179
Parking Structure C	66	8	7	199	280
Surface	0	0	2	14	16
Total					475

**Per Section 9-4.2404(d)(1)(i) of the Municipal Code, a maximum of 35% of the residential parking spaces may be compact size. Twenty (20%) percent is provided, in compliance with the Code standards.*

***Number of spaces provided complies with the Americans with Disabilities Act (ADA), contained in Title 24 of the California Building Code.*

Thousand Oaks Boulevard Specific Plan requires off-street parking for restaurant and commercial uses. As shown in Table 10, the project is required to provide one parking space per 200 square feet of gross leasable area for the first 2,000 square feet of gross leasable area, and one parking space is required per 100 square feet of gross leasable area over 2,000 square feet of a restaurant. In addition, one loading zone/dock is required to be provided for the project with one proposed at Building B.

¹ The City has approved tandem parking for apartment buildings in the past when conditions of approval require the tandem spaces to be assigned to each residential dwelling unit to eliminate any parking conflicts. A suggested condition requires the applicant to prepare a "Parking Management Program" where tandem parking spaces are assigned.

Table 10: Vehicle Parking Supply and Demand

Parking Categories	Parking Ratio	Number of Units/ Commercial s.f.	Parking Required	Parking Provided
Residential				
1 Bedroom	1 space/unit	168	168	408
2 Bedroom	1.5 spaces/unit*	160	240	
Guest Parking**	0 spaces/unit	328	None	19***
Total Residential		328	408	427
Commercial				
Retail	1 space/300 s.f.	5,300 s.f	18	48
First 2,000 s.f.	1 space/200 s.f.	2,000 s.f	10	
>2,000 s.f.	1 space/100 s.f.	1,200 s.f***.	12	
Total Commercial		8,500 s.f.	40	
Total Parking			448	475

*1.5 space/unit allowed by State density bonus law.

**State density bonus law exempts provision of guest parking.

***The 19 surplus spaces within Building C are not designated for either use type specifically and may be used by either commercial visitors or residential guests.

SP-20 allows on-street parking spaces immediately adjacent to and on the same side of the street of the subject property to be counted toward meeting the off-street parking requirement for the project. The proposed project includes 14 surplus on-street parking spaces that may be used by either commercial visitors, residents, or guests. As previously mentioned, the project requires a minimum of 448 parking spaces, and 475 parking spaces are provided on-site. Therefore, the 14 additional on-street parking spaces will serve to complement the proposed mixed-use development but are not required.

The site provides on-site parking for vehicles while accommodating and encouraging other multi-modal transportation methods. Amenities include on-site bicycle racks for visitors and dedicated bicycle corals for tenants. The number of bicycle spaces required by the California Green Building Code must be equal to or exceed ten percent of the number of proposed parking spaces. The proposed project exceeds the requirements, as 120 spaces are being provided (96 long-term and 24 short-term bicycle spaces), including 3 electric bicycle charging stations and 3 electric scooter charging stations. The short-term bicycle parking, as designed, is distributed across the site frontage, adjacent to the open space and parks, in front of commercial spaces, and at building lobbies. Long-term bicycle parking spaces are located in two designated indoor spaces: one in Building B, at the northeast end of the site, and one in Building C, at the southwest end of the site.

A designated drop-off/pick-up area near the front entrance to Building B is provided to accommodate private transportation services, such as taxi cabs, Uber™, Lyft™, etc. Additionally, a designated drop-off/pick-up area near the northeast corner of Building C is provided to accommodate local delivery and loading services. This area may also be utilized for larger delivery vehicles for short-term pick-up/drop-off services. As required in the conditions of approval, appropriate curb designations and signage indicating the hours of operation must be provided to ensure this area is utilized for these short-term uses and not for the standard parking of vehicles.

Lastly, pursuant to the State Density Bonus Law, Government Code Section 65915(p), the parking ratios required for multi-family apartment buildings are one parking space per one-bedroom unit and one and a half parking spaces for a two-bedroom unit. Government Code Section 65915(p) does not require guest parking. The applicant is proposing the minimum required residential parking, totaling 408 parking spaces. Although not required, the proposed project includes 19 guest parking spaces for the proposed multi-family residential uses. A condition of approval has been applied to the project allowing a maximum 50% reduction of surplus guest parking spaces to serve the commercial component of the project subject to review and approval of the Community Development Department.

In addition, the project will provide infrastructure for electric vehicle charging stations beyond the requirements of the California Building Code, as outlined in the draft Development Agreement (Attachment #5B).

Traffic

As required by CEQA, a Vehicle Miles Traveled (VMT) analysis was conducted to evaluate the project's transportation impacts. The proposed project Circulation and Vehicle Miles Traveled Study dated April 2024 details the VMT analysis and is summarized in Table 10, Project VMT Analysis Summary.

Table 10 – Project VMT Analysis Summary

Project Component	VMT Calculation Methodology	Citywide Average Daily VMT	Project TAZ* Daily VMT	Project Difference
Residential	Citywide average daily VMT per resident	15.32 VMT	11.05 VMT	28% less than the City-wide average
Commercial	Citywide average daily VMT per employee	22.55 VMT	21.72 VMT	4% less than the City-wide average

* TAZ = Traffic Analysis Zone

The VMT analysis of the project determined the impacts resulting from the project would be less than significant and no mitigation measures are required (see the Transportation Section included with the Addendum to EIR No 327). As shown in Table 10, the project's daily residential VMT per capita and commercial VMT per employee would be approximately 28% and 4% less than the City-wide averages, respectively. As such, neither the VMT per capita nor VMT per employee would exceed the Citywide average VMT baselines, and the project-generated VMT impact would be less than significant. It should be noted that the study provides a conservative analysis. The VMT analysis assumed a proposed ground-floor commercial area that included 3,200 square feet of restaurant use out of the total 8,500 sq. ft of commercial area proposed. The resulting analysis is conservative in assuming more intense commercial uses would occur, and actual impacts would be reduced if general retail were to occupy the total 8,500 sq. ft of commercial area proposed.

While VMT is the metric for assessing transportation impacts under CEQA, it should be noted that staff required traffic delay to be analyzed as part of the planning review process, outside of CEQA. The project is adjacent to the intersection of Thousand Oaks Boulevard/Hodencamp Road and Thousand Oaks Boulevard/Lombard Street. The Vehicle Miles Traveled Study examined eight intersections in the project vicinity to assess the existing Level of Service (LOS) plus the proposed project (Attachment #7). Based on the analysis, the study concluded that all studied intersections currently operate at LOS D or better during morning and evening peak hours, which would continue to operate at an acceptable LOS of D or better with the proposed project. Per Resolution No. 2019-011, a Level of Service D is the minimum standard acceptable. As such, the project will not cause adverse impacts related to LOS at nearby intersections. In addition, the Public Works Department has included conditions of approval requiring adequate line of sight visibility, traffic impact fees, and any necessary

traffic signal, signs, and striping to accommodate the proposed project driveways. It should be noted that the proposed Thousand Oaks Boulevard driveway is designed to accommodate full inbound movements and right-turn outbound movements only. The proposed Lombard Street driveway is proposed to accommodate full inbound and outbound access.

Grading

Proposed grading quantities include approximately 79,000 cubic yards (c.y.) of cut and 3,000 c.y. of fill, with an export about 76,000 c.y. export due to excavation for the underground parking garages and modifications to the site characterized by a descending slope from the northeastern (front) to south and southwestern (rear) of the site. Using a capacity of 14 c.y. per truck, it is estimated that 10,856 truck trips will be necessary to haul away the dirt, consisting of 5,428 loaded truck trips and 5,428 returning empty truck trips. The proposed project will not involve grading impacts to 25% or greater natural terrain.

Conditions of approval are included in the Resolution requiring the applicant to obtain a grading permit which requires a description of the grading activities, including a haul route, number of truck trips per day, proposed hours of operation, traffic control measures, and identification of the disposition location.

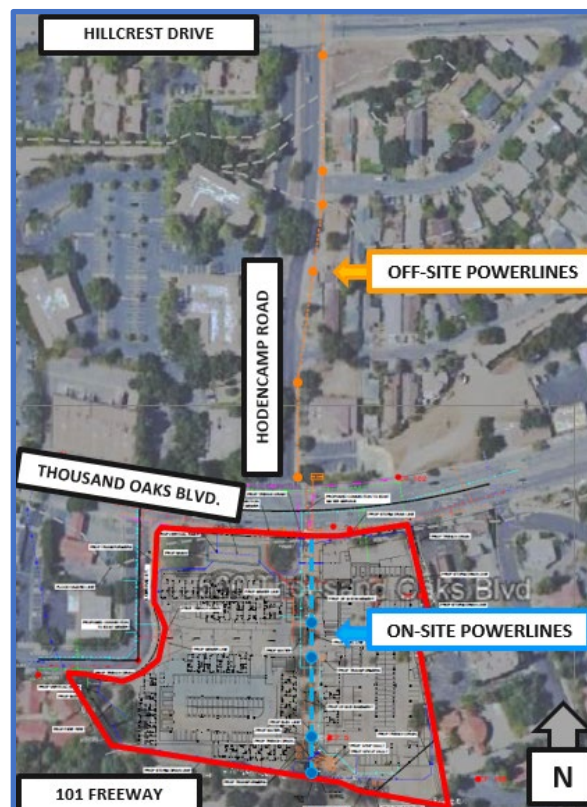
With inclusion of mitigation measures identified in the EIR No. 327 and conditions of approval, including, but not limited to, dust and rodent control, amongst other measures, the proposed grading will have a less than significant impact on surrounding properties. Additionally, the TOMC limits construction hours between the hours of 7:00 a.m. and 7:00 p.m., Monday through Saturday with no work allowed on Sunday or City recognized holidays, so no grading activities or truck trips are permitted to occur outside these hours.

Overhead Utilities

There are existing high-voltage 66KV overhead powerlines and overhead electricity, telephone, and cable television utility lines that bisect the subject property. The high-voltage overhead powerlines extend north of the subject site across Thousand Oaks Boulevard and along the eastern side of Hodencamp Road. The applicant agreed to underground all the electrical systems within its property, including the 66KV system. Conditions of approval are applied to the project requiring all existing on-site and adjacent utility lines to be placed underground and the poles removed in conjunction with the development of this project, and as set forth in the Development Agreement DAGR 2023-70001

(Attachment 5). Furthermore, the applicant agreed to enter into a cooperative agreement with the City to assist the City with the undergrounding of the Southern California Edison (SCE) systems located along Hodencamp Drive, from Thousand Oaks Boulevard to Hillcrest Drive. This system includes 16KV line, 66KV line, communications lines, and all the structures. Section 8 of the Development Agreement sets forth the two possible undergrounding plans for undergrounding. A Reimbursement Agreement will also be entered into between the parties to address the responsibilities of the parties in obtaining permits, managing construction and design, and cost-sharing. The parties will also need to work collaboratively with Southern California Edison (SCE) for the undergrounding portion of the project. Figure 9 demonstrates the high-voltage overhead powerlines extending to the north will be placed underground and the poles removed from the subject site to Hillcrest Drive to the north.

Figure 9 – Overhead Powerline Plan



Protected Trees (PTP 2023-70067)

The site contains a total of 34 protected oak trees that consist of twenty-four (24) protected Coast Live Oak trees, eight (8) Valley Oak trees, and two (2) Holly Oak

Cherry Tree Development, LLC**(SUP 2023-70011/ DAGR 2023-70001/PTP 2023-70067/CEQA 2023-70004)****April 22, 2024****Page 35**

trees on-site per the Oak Tree Report dated January 2024 (Attachment #8). This report evaluated the health of each tree and the extent of the impacts resulting from project activities. The project design requires removal of 17 protected Coast Live Oak trees and 5 Valley Oak trees and encroachment into the protected zone of 6 protected Coast Live Oak trees, 2 Valley Oak trees, and 1 Holly Oak tree. One (1) Coast Live Oak tree, One (1) Valley Oak tree, and one (1) Holly Oak tree will remain in place, which include oak trees within the Caltrans right-of-way along the south property line and one Holly Oak tree along the west property line. Descriptions of the protected trees impacted by the proposed development through removal and encroachment are provided in Table 12 below.

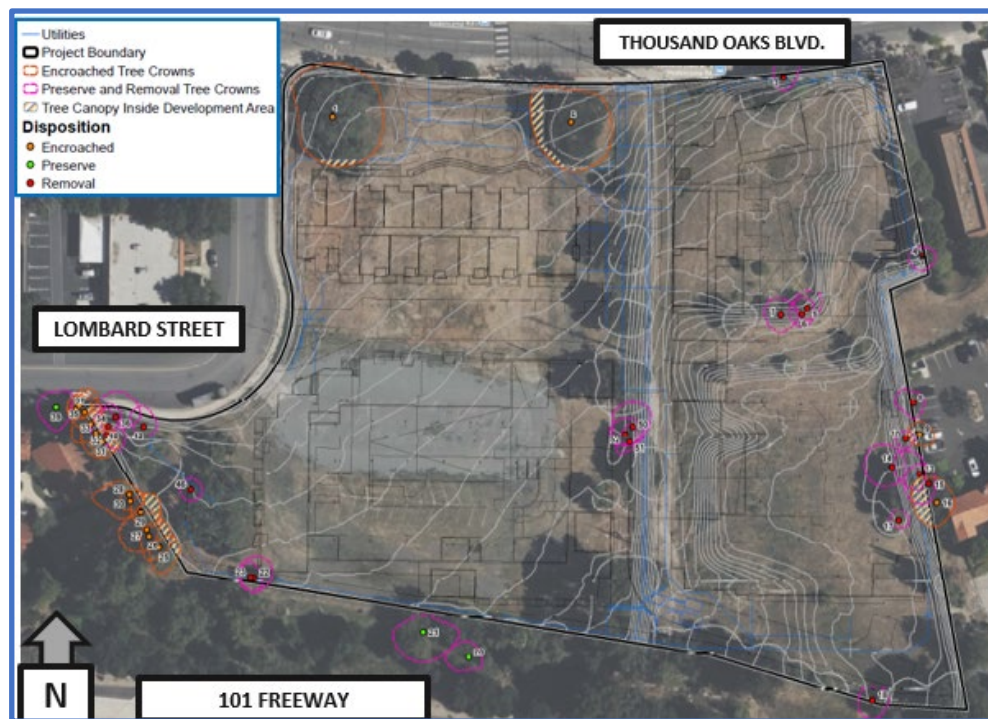
Table 12: Impacted Protected Trees

Tree No.	Common Name	Trunk Diameter	Health	Appearance
Retain and Protect				
20	Coast Live Oak	6"	Fair	B
21	Valley Oak	15"	Fair	B
39	Holly Oak	15"	Good	B
Removal				
3	Coast Live Oak	7"	Good	B
4	Coast Live Oak	5"	Good	B
5	Coast Live Oak	5"	Fair	C
6	Coast Live Oak	14"	Fair	C
7	Coast Live Oak	9"	Fair	C
8	Coast Live Oak	6"	Good	B
10	Coast Live Oak	3"	Fair	C
13	Coast Live Oak	11"	Fair	C
14	Coast Live Oak	55"	Fair	C
15	Coast Live Oak	11"	Fair	C
17	Coast Live Oak	3"	Fair	C
18	Coast Live Oak	7"	Fair	C
22	Coast Live Oak	9"	Fair	C
23	Coast Live Oak	3"	Fair	C
32	Valley Oak	13	Fair	C
36	Coast Live Oak	6"	Fair	C
40	Valley Oak	4"	Poor	D
43	Valley Oak	4"	Good	B
46	Coast Live Oak	15"	Fair	C
50	Coast Live Oak	53"	Fair	C
51	Valley Oak	9"	Good	B
52	Valley Oak	8"	Fair	C
Pruning/Encroachment				
1	Valley Oak	54"	Fair	A
2	Valley Oak	42"	Fair	A

Pruning/Encroachment				
9	Coast Live Oak	10"	Fair	B
16	Coast Live Oak	22"	Fair	C
29	Coast Live Oak	12"	Fair	B
30	Coast Live Oak	3"	Good	B
31	Holly Oak	8"	Fair	C
35	Coast Live Oak	7"	Fair	C
37	Coast Live Oak	5"	Fair	C

The removal of protected oak trees is necessary to accommodate the proposed improvements and grading activities associated with the construction of the new mixed-use development, including adequate vehicular and pedestrian circulation and parking facilities. Figure 10 demonstrates the development areas and tree locations affected by the proposed construction activities.

Figure 10 – Protected Tree Impacts



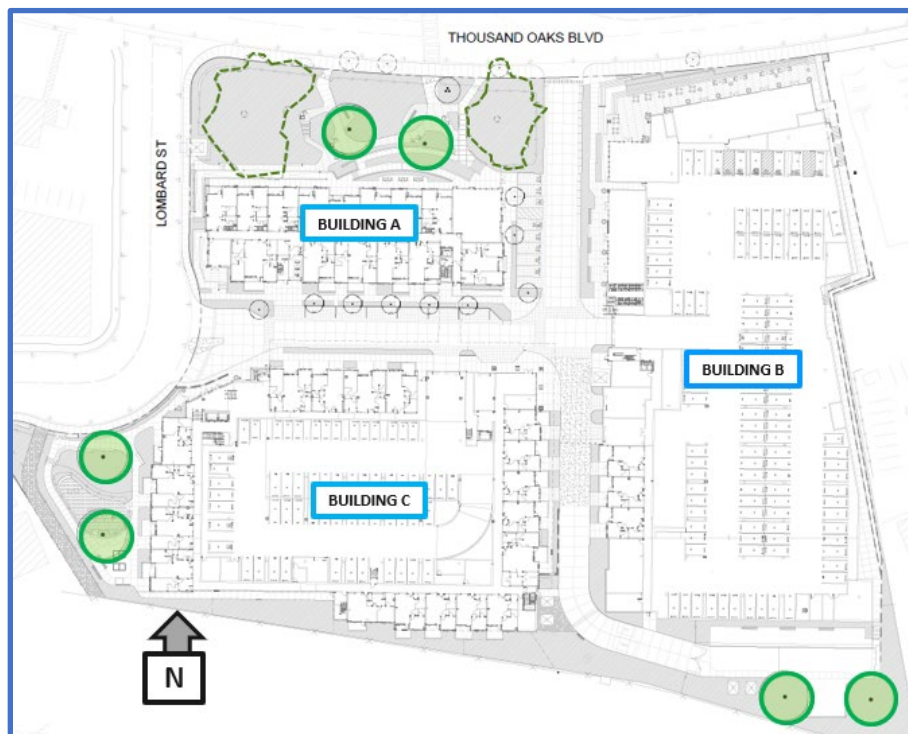
Encroachment and Pruning of 9 of the 34 protected Coast Live Oak, Valley Oak, and Holly Oak trees onsite is necessary to maintain proper clearance over proposed sidewalks, outdoor patios, driveways, and open space. Existing protected trees located along the northwestern portion of the site and near the public right-of-way were prioritized for preservation and only encroachments are proposed, which was a City Council priority expressed during the public hearing initiating the General Plan Amendment and allocating the residential capacity to the site. A City

Landscape Consultant provided an independent evaluation of the applicant's report and recommendations contained therein for the work occurring within the protected zone of the oak trees. The City consultant concluded that, with the inclusion of the suggested project conditions, including appropriate work methods and monitoring for the work performed around the protected oak trees, that the proposed encroachments will not have a detrimental effect on the health of trees. If any of the nine trees which are to be encroached upon die within five years of the encroachment, they shall be replaced at the 3:1 ratio required for the removal of live trees required by the Oak Tree Preservation and Protection Ordinance.

The Oak Tree Preservation and Protection Ordinance allows for oak tree encroachments and removals if the request is not contrary to the purpose and intent of the ordinance. In this case, the removal of the 22 oak trees and encroachment into the protected zone of 9 oak trees is consistent with the intent of the oak tree preservation and protection ordinances since the removals will be replaced with three trees for each one removed (3:1 ratio - two 24" box and one 36" box tree). The quantity and size are as follows:

- 40 twenty-four (24") inch box specimens, and
- 20 thirty-six (36") inch box specimens.
- 4 sixty (60") inch box specimens

Figure 11 – Replacement Tree Plan



As seen in Figure 11 above (demonstrated in green circles), six (6) Island Oak (*Quercus tomentella*) trees 36-inch box specimens are to be provided onsite per the Replacement Tree Plan as demonstrated within the Project Plan Set (Attachment #6). Per Resolution 2010-014, only the oak tree species count towards the number of replacement trees required. Therefore, the applicant will either need to submit a new Replacement Tree Plan, propose the planting of the trees at an off-site location for public benefit, subject to Community Development Director approval, or provide a \$102,614.77 in-lieu payment to the City's Open Space Conservation Fund used toward the acquisition of open space, as prescribed by Resolution 2010-014.

Further, replacement trees have been strategically located within the open space programs of the project to provide use of the trees by both residents and the public. Also, six trees have been sited in a manner that acts as a physical barrier between the residential structures and surrounding roadways to the north, west, and south. The specific placement of the trees within the site provides further visual screening to and from the roadways while attenuating noise for future residents. Therefore, staff supports the proposed replacement tree layout.

Staff has reviewed the proposed protected tree removals and encroachments in the context of the Findings contained within TOMC Sec. 9-4.4206(b), and has found that the project, as conditioned, would be consistent with these Findings as specified in the draft Resolution (Attachment #4).

Development Agreement (DAGR 2023-70001)

A DAGR is required for approval of projects that receive allocation of Measure E units (Attachment #5). Development agreements are typically executed to provide certainty to the involved parties and to memorialize understanding about the development of the property. Thousand Oaks Municipal Code Section 9-11.01 et seq. outlines the process for implementation of a development agreement. The applicant's representatives and staff have worked together to prepare an agreement in compliance with the Municipal Code that identifies public and private benefits and responsibilities.

The DAGR lists various obligations and benefits received by the parties in the Agreement. If the project is approved and constructed as proposed, the City will have 284 market-rate and 44 lower-income restricted affordable units to add to its residential stock and count towards the current RHNA requirements from the State, as well as the development of a vacant mixed-use site, built with enhanced sustainability features. Significantly, while the City cannot normally condition a property owner to underground 66KV transmission lines, the parties agreed that in

this project the applicant will underground all of the overhead utilities, including the 66KV transmission poles. Moreover, in collaboration with the City and SCE, the applicant will manage the extension of the undergrounding of SCE utility lines from Thousand Oaks Boulevard, north up Hodencamp Road to the intersection of Hillcrest Drive.

Additional points of the DAGR include a term of seven (7) years, a lock of certain City impact fees, waivers of certain objective design standards, and some additional sustainability components.

Environmental Review (CEQA 2023-70004)

In accordance with the California Environmental Quality Act (CEQA), a comprehensive evaluation of the potential environmental impacts for this project was performed. Addendum to EIR No. 327 (Attachment #9) was prepared for the project and analyzed as required under the CEQA Guidelines, Sections 15162 and 15164. The evaluation determined that the project will not result in new significant impacts nor substantially increase the severity of previously disclosed impacts beyond those already identified in EIR No. 327. Thus, a subsequent EIR or supplemental EIR need not be prepared. Appropriate measures are identified in the Addendum to ensure mitigation is in place so no significant adverse environmental impact results from the project. Furthermore, EIR No. 327 mitigation monitoring plan is required to ensure the indicated mitigation measures are applied to the project to reduce and avoid potential effects of the project on the environment, and adequately identifies the appropriate timing and enforcement details for each to ensure each mitigation measure is implemented (Attachment #9). Environmental documents can also be found here: [Environmental Documents](#).

Staff is therefore recommending the Planning Commission consider the Addendum to EIR No. 327 prepared for the project in accordance with the California Environmental Quality Act (CEQA) 2023-70004).

CORRESPONDENCE

Staff received one public correspondence dated April 11, 2024, that raised concerns related to traffic impacts resulting from the proposed project. No other public comments were received (see Attachment #10).

CONCLUSION

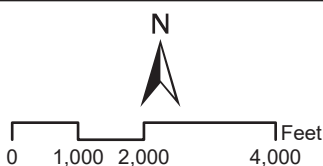
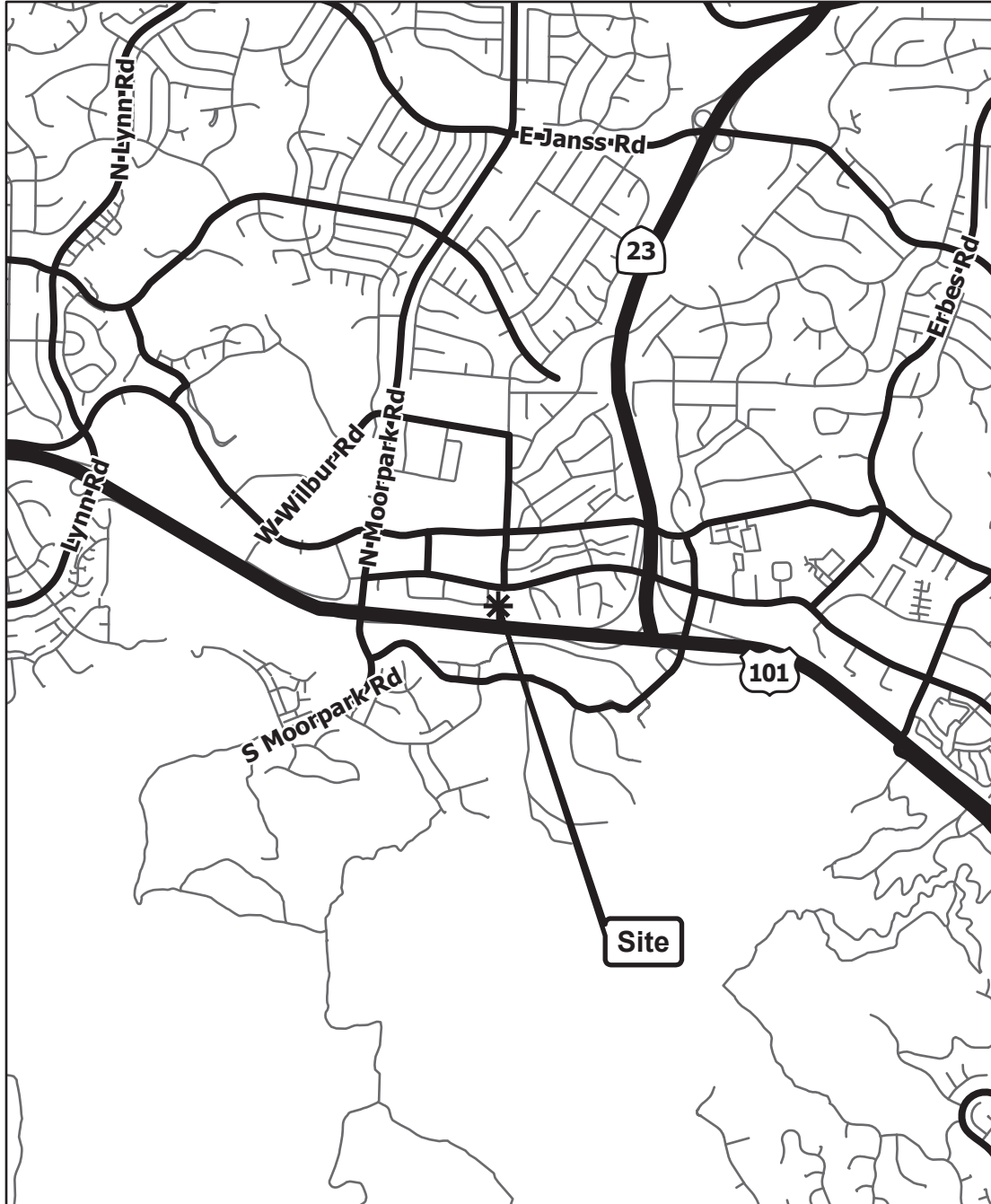
The proposed project has been designed to meet the intent of the City's General Plan, standards, codes, and policies, including SP-20. The proposed building design and site layout integrate well with surrounding development and has a cohesive architectural design meeting the City's Architectural Design Guidelines, Freeway Corridor Guidelines, and Objective Design Standards by including pedestrian-oriented site plan emphasizing public and private exterior spaces. Based on the analysis and findings contained in this report, staff recommends approval of this project, subject to the conditions of approval in the attached Resolution as well as recommends that the City Council consider the Addendum prepared for the project in accordance with CEQA.

PREPARED BY: Carlos Contreras, Senior Planner

Attachments:

- Attachment #1 – Vicinity Map
- Attachment #2 – Location Map
- Attachment #3 – Aerial Photo
- Attachment #4 – Resolution for SUP 2023-70011; and PTP 2023-70067
- Attachment #5A – DAGR (DAGR 2023-70001) Ordinance - NOT INCLUDED
- Attachment #5B – DAGR (DAGR 2023-70001) Draft Agreement - NOT INCLUDED
- Attachment #6 – Project Plans, dated February 15, 2024 - NOT INCLUDED
- Attachment #7 – Traffic Study dated April 2024
- Attachment #8 – Oak Tree Report, dated January 2024
- Attachment #9 – Addendum (CEQA 2023-70004), dated April 2024 - NOT INCLUDED
- Attachment #10 – Public Correspondence

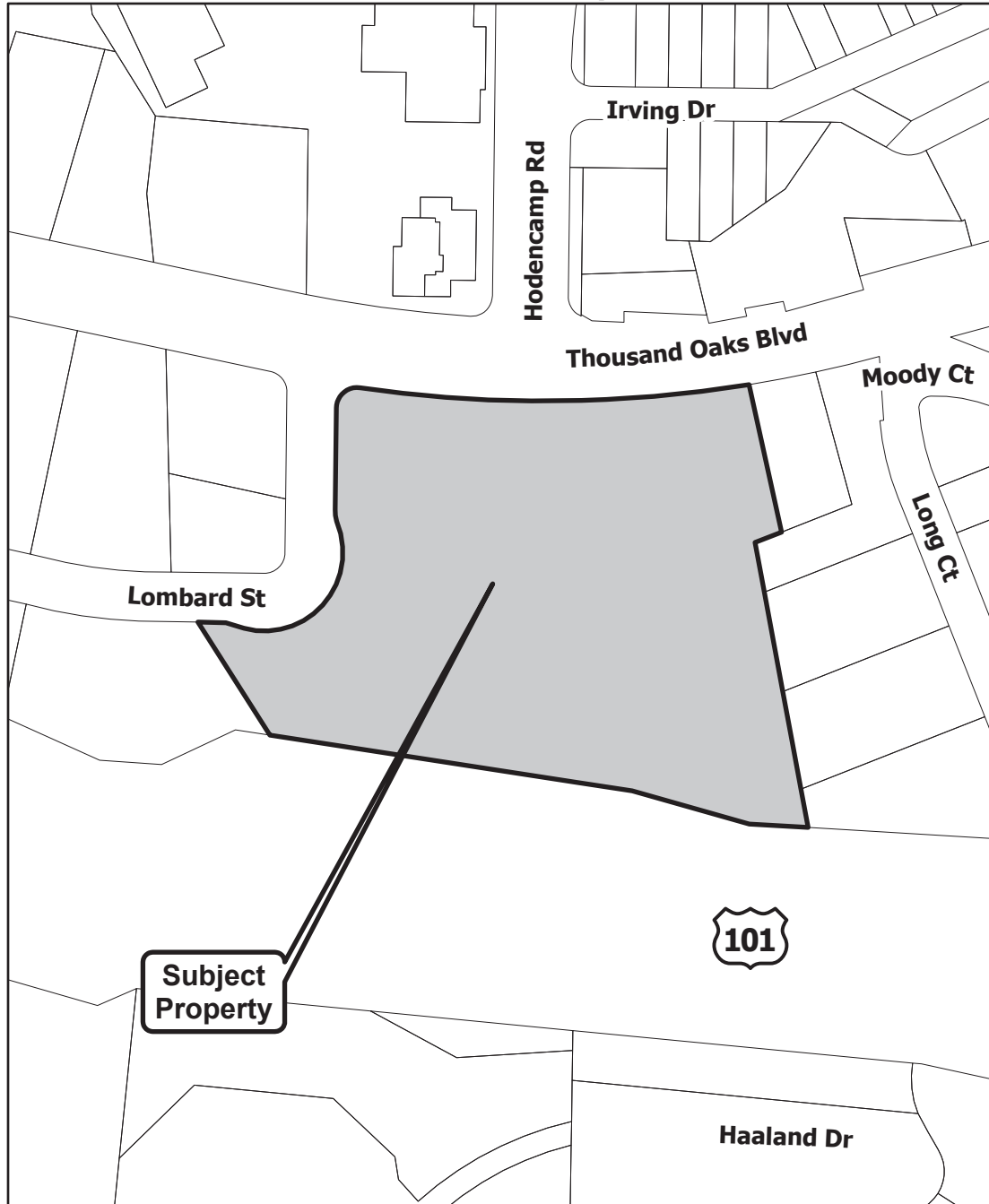
**SUP-2023-70011, DAGR-2023-70001, PTP-2023-70067,
CEQA-2023-70004
Michael Militello/Tim Stanley - Cherry Tree Capital Partners
Vicinity Map**



City of Thousand Oaks
Community Development Department

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**SUP-2023-70011, DAGR-2023-70001, PTP-2023-70067,
CEQA-2023-70004
Michael Militello/Tim Stanley - Cherry Tree Capital Partners
Location Map**



City of Thousand Oaks
Community Development Department

**SUP-2023-70011, DAGR-2023-70001, PTP-2023-70067,
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Aerial Map**



City of Thousand Oaks
Community Development Department

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CITY OF THOUSAND OAKS

PLANNING COMMISSION

RESOLUTION NO. 06-2024 PC

A RESOLUTION OF THE PLANNING COMMISSION
OF THE CITY OF THOUSAND OAKS
RECOMMENDING CITY COUNCIL CONSIDER THE
ADDENDUM TO ENVIRONMENTAL IMPACT
REPORT (EIR) NO. 327 AND APPROVE A SPECIAL
USE PERMIT; DEVELOPMENT AGREEMENT; AND
PROTECTED TREE PERMIT FOR THE USE OF
CERTAIN PROPERTY WITHIN SAID CITY AT 500
EAST THOUSAND OAKS BOULEVARD

Applications: Special Use Permit (SUP) 2023-70011; Development Agreement
(DAGR) 2023-70001; Protected Tree Permit (PTP) 2023-70067;
and Environmental Impact Report Addendum (CEQA) 2023-
70004

Applicant: Cherry Tree Development, LLC

Location: 500 East Thousand Oaks Boulevard
(APNs: 525-0-012-230, 669-0-201-030, 669-0-201-040,
669-0-201-050, and 669-0-201-105)

SECTION 1

The Planning Commission of the City of Thousand Oaks, California, DOES
RESOLVE AS FOLLOWS:

WHEREAS, the applicant has filed with the City an application under the
provisions of the City of Thousand Oaks Municipal Code requesting the
following:

1. CEQA 2023-70004: Addendum to the Thousand Oaks Boulevard
Specific Plan 20 Environmental Impact Report No. 327 prepared for
the project and in accordance with the California Environmental
Quality Act (CEQA) for the subject project; and
2. SUP 2023-70011: Allow the construction of a 609,633 square foot
(s.f.) mixed-use development consisting of 328 residential units with
a 50% Density Bonus providing 44 lower-income affordable units,
including 8,500 square feet of commercial retail and restaurant space,
pocket parks, dog park, plazas, seating areas, and other amenities.
The 328 residential units would be distributed across one 4-story

mixed-use building, one 5-story podium-style mixed-use building, and one 5-story podium-style multi-family residential building with maximum building heights ranging from 47 feet to 62 feet. The project also includes surface parking and two semi-subterranean parking structures comprised of 48 commercial parking spaces, and 427 residential parking spaces; and

3. DAGR 2023-70001: Create a binding contract that vests the rights of the applicant to a specific project, set forth the time period to construct the project, and specify public and private benefits and responsibilities related to the project; and
4. PTP 2023-70067: Allow removal of 17 Coast Live Oak (*Quercus agrifolia*) trees and five (5) Valley Oak (*Quercus lobata*) trees, as well as the encroachment into the protected zone of six (6) Coast Live Oak trees, two (2) Valley Oak trees, and one (1) Holly Oak (*Quercus ilex*) tree.

The applicant is requesting to utilize the State Density Bonus Law parking ratios, including three (3) Concessions and four (4) Waivers as allowed by State Density Bonus Law as follows:

Concessions

1. Building Height – Allow an increase in the number of allowable stories for a building, from 3 stories to 5 stories, as specified by Thousand Oaks Boulevard Specific Plan No. 20 (SP-20);
2. Building Windows Details – Decrease the minimum window depth to two (2) inches from glass to wall edge instead of three (3) inches and incorporate vinyl window frames instead of aluminum, fiberglass, wood, or manufactured wood, as otherwise required by TOMC Section 9-4.2205(h)(1)(ii) and (h)(3)(i); and
3. Retail Frontage – Decrease the minimum 50% retail area required for any building with greater than 100 feet of frontage along Thousand Oaks Boulevard to 18% retail area, as specified by SP-20.

Waivers

1. Building Setback – Increase in the front yard building setback for mixed-use Building A from the maximum allowable 15 feet to 98.5 feet, as specified by SP-20;
2. Building Types and Design – Increase the stacked dwelling type and mixed-use building type interior corridor length to 150 feet instead of 100 feet as otherwise required by TOMC Section 9-4.2205(e)(8)(iv) and (e)(9)(vi);

3. Courtyards – Courtyards within podium building types shall be located no more than one story above street level as otherwise required by TOMC Section 9-4.2205(e)(8)(vi); and
4. Building Access – All ground floor residential units within a stacked dwelling building type are required to provide a main entrance to each residential unit directly from the street, as otherwise required by TOMC Section 9-4.2205(e)(8)(ii).

The applicant is requesting three (3) Modifications to the Objective Design Standards (ODS) of the TOMC as follows:

Modifications

1. Building Massing and Articulation – Increase building length to 369 feet instead of the maximum 200-foot length as otherwise required by TOMC Section 9-4.2205(g)(1);
2. Building Articulation – Buildings over three (3) stories tall must have major massing breaks at a minimum of thirty inches (30") deep and four (4) feet wide and extend the full height of the building and provide minor massing breaks at least every 50 feet along the street frontage, minor breaks must be a minimum of twelve inches (12") deep and four (4) feet wide and extend the full height of the building as otherwise required by TOMC Section 9-4.2205(g)(2)(iii)(ab) and (ac); and
3. Open Space Design – Decrease the minimum sixty percent (60%) of the common usable open space to be provided as a landscaped green area as otherwise required by TOMC Section 9-4.2205(e)(8)(x) and (e)(9)(xi).

WHEREAS, on September 21, 2023, a Notice of Application sign was posted on the subject property to inform the public of the proposed project at the early stages of the project; and

WHEREAS, on September 23, 2023, a Notice of Application was mailed to all property owners and occupants within a 500-foot radius of the subject property; and

WHEREAS, on April 8, 2024, a Notice of Planning Commission Public Hearing sign was posted on the subject property; and

WHEREAS, on April 8, 2024, a Notice of Planning Commission Public Hearing was mailed to all property owners of record within a 500-foot radius of the subject site; and

WHEREAS, on April 8, 2024, a Notice of Planning Commission Public Hearing was published in a newspaper of general circulation within the City of Thousand Oaks; and

WHEREAS, the Planning Commission, upon giving the required notice, did, on the 22nd day of April 2024, conduct a duly advertised public hearing as prescribed by law to consider said application; and

WHEREAS, at the April 22, 2024, Planning Commission public hearing, oral and written evidence, including a staff report, were presented and received, and comments and arguments were heard from all interested parties appearing in the matter.

SECTION 2

WHEREAS, pursuant to CEQA, City conducted an environmental review of the project, prepared and duly processed an Addendum to Environmental Impact Report (EIR) No. 327 (CEQA 2023-70004), dated April 2024; and

WHEREAS, pursuant to CEQA (Public Res. Code, Section 21000 et seq.), the State CEQA Guidelines (14 CCR Section 15000 et seq.) and the City of Thousand Oaks' Local CEQA Guidelines, the City of Thousand Oaks (City) is the lead agency for the Project, as the public agency with general governmental powers; and

WHEREAS, the City, as the lead agency, determined that an Addendum to EIR No. 327 would be prepared pursuant to CEQA to analyze all potential adverse environmental impacts of the Project; and

WHEREAS, the City, as the lead agency under CEQA Section 15164, considered the potential environmental impacts of the project and based on the information contained in the Addendum the City, as the lead agency, determined that the proposed Project will not result in new significant impacts nor substantially increase the severity of previously disclosed impacts beyond those already identified in EIR No. 327; and

WHEREAS, prior to taking action, the Planning Commission has heard, been presented with, reviewed, and considered all of the information and data in the administrative record, including the Addendum to EIR No. 327, and all oral and written evidence presented to it during all the meetings and public hearing; and

WHEREAS, the Addendum reflects the independent judgment of the City and is deemed adequate for purposes of making decisions on the merits of the Project; and

WHEREAS, all other legal prerequisites to the adoption of this Resolution have occurred; and

WHEREAS, the Planning Commission has reviewed and considered the information contained in the Addendum (CEQA 2023-70004), and makes the following findings of fact and recommends the following to City Council:

1. Addendum to EIR No. 327 (CEQA 2023-70004) was prepared in accordance with the requirements of CEQA, reflects the independent judgment of the City of Thousand Oaks, and has been reviewed and considered by the Planning Commission prior to making its decision. This Addendum neither recommends approval or denial of the proposed Project nor will it be the sole basis for the City's action on the proposed Project.
2. This addendum analyzes the proposed Project as required under the CEQA Guidelines, Sections 15162 and 15164. Under CEQA Guidelines Section 15164, an addendum to an adopted EIR shall be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR have occurred. Under Section 15162, the lead agency shall prepare an EIR if there are any new significant environmental effects associated with the project.
3. On the basis of the Addendum prepared for the project, it is found that, the proposed Project will not result in new significant impacts nor substantially increase the severity of previously disclosed impacts beyond those already identified in EIR No. 327. Thus, a subsequent EIR or supplemental EIR need not be prepared.
4. Addendum to EIR No. 327 (CEQA 2023-70004) has been reviewed for conformance with the provisions of the California Environmental Quality Act. For this application, the City is the Lead Agency and, on behalf of the Applicant, the Planning Commission is being asked to consider the Addendum to EIR No. 327 and make the CEQA Findings legally adequate under CEQA as to each development application associated with the project.
5. The Planning Commission has reviewed and considered the information contained in the Addendum to EIR No. 327 (CEQA 2023-70004), and written and oral comments regarding environmental effects. The project Addendum was prepared in accordance with the requirements of CEQA, includes all comments received on the Addendum and the City's response thereto, reflects the independent judgment of the City of Thousand Oaks, and the Planning Commission is being asked to recommend to City Council the consideration of the Addendum to EIR No. 327 that was prepared for the project.
6. EIR No. 327 Mitigation Monitoring and Reporting Program (MMRP) designates responsibility and anticipated timing for the implementation of mitigation measures imposed as conditions of approval which are fully

enforceable through fees, permit conditions, agreements or other measures. The MMRP describes the mitigation measures identified in the Addendum to reduce and avoid potential effects of the project on the environment and adequately identifies the appropriate timing and enforcement details for each to ensure each mitigation measure is implemented.

7. Based on all written and oral evidence and testimony in the record, the project Addendum to EIR No. 327 (a) complies with the requirements of CEQA and adequately identifies and considers all potentially significant environmental effects of the Development Agreement; Special Use Permit; and Protected Tree Permit, and (b) reflects the City's independent judgment and analysis.
8. The Planning Commission recommends that the City Council consider the Addendum and make the CEQA Findings as legally adequate under CEQA as to each development application associated with the project and incorporate its provisions as conditions of approval for each of the development applications associated with the project to the extent appropriate.

SECTION 3

WHEREAS, the findings of the Planning Commission supporting approval of said SUP 2023-70011 are as follows:

1. *The project is consistent with the Thousand Oaks General Plan and any applicable specific plan or redevelopment plan (TOMC Section 9-4.2803(c)(1)).*

The Land Use Element of the General Plan designates the property as "Mixed-Use (>20 to 30 du/acre)," which allows 30 dwelling units per acre. The subject property is located within the western portion of SP-20, which was adopted by City Council on November 15, 2011. This plan provides specific and unique development standards and establishes policy and regulations for a defined area. SP-20 allows for a mix of commercial and residential uses on the same site. The project consists of the construction of two mixed-use buildings and one multi-family residential building, 328 residential units (including 44 lower-income affordable units), 8,500 square feet of commercial retail and restaurant space, and two semi-subterranean parking structures. SP-20 allows for the proposed mixed-use development subject to review and approval of a Special Use Permit. The project site is located at the southeast corner of Thousand Oaks Boulevard and Lombard Street and is surrounded by several commercial centers offering dining, retail, grocery, professional, and recreation uses, thus reducing the potential number of vehicle trips from the project. The subject site has easy access to Ventura Freeway Corridor ("US 101") to the south via Thousand Oaks Boulevard and Moorpark Road and to State Route 23 ("23 Freeway") to the east via Thousand Oaks Boulevard and Hillcrest Drive.

The proposed project is consistent with the General Plan goals and policies because it is a mixed-use development that supports residential uses consistent with densities anticipated by the "Mixed-Use (>20 to 30 du/acre)" land use designation. The project site totals 6.09 net acres, based on the lot size the maximum density for this project, without a Density Bonus, is 183 dwelling units (6.09 net acres x 30 dwelling units per acre = 182.7 units, rounded up to 183 units)¹. The project includes 24% of the base number of units as affordable units in the lower-income category, which equates to 44 affordable lower-income units. This allows the project to add 50% more residential units as a "Density Bonus." This bonus translates to 92 Density Bonus units per statutory allowance. The total overall number of residential units proposed is 328, which is a result of the base number (183 units), plus the additional unlimited units above commercial (53 units), plus the 50% density bonus (92 units). Therefore, the density of the project is consistent with both the General Plan Land Use Element designation and Thousand Oaks Boulevard Specific Plan. In addition, the project will be consistent with the goals and policies of the General Plan Housing Element by providing rental housing, including 44 lower-income affordable units.

The project is consistent with the General Plan Land Use Element Policies which include but are not limited to:

Policy 1.1 Overall City structure – Incentivizing and streamlining infill multi-family development.

Policy 1.2 Complete community – Strive to maintain a diverse and balanced mix of uses in the City, so that Thousand Oaks is a "complete community" with a diversity of housing for all stages of life and income levels; improve alignment of educational attainment opportunities with high-paying employment opportunities, open space, public facilities that meet residents' needs, and retail and service to support daily life.

Policy 1.3 Balance character and infill – Maintain community character while promoting infill development that brings needed housing, amenities, and jobs to the City.

Policy 1.5 Mixed-use development – Allow mixed-use developments, consistent with the General Plan land use map, to support a healthy jobs/housing balance, promote walkability, and increase economic vibrancy.

Policy 1.7 Quality "Third Places" – Support the development and enhancement of "Third Places" (places people go after work or when not at home), including open space, recreation, art, and entertainment venues.

¹ Pursuant to Government Code Section 65915(q): Each component of any density calculation, including base density and bonus density, resulting in fractional units shall be separately rounded up to the next whole number. The Legislature finds and declares that this provision is declaratory of existing law.

A General Plan consistency analysis is described in the table below, demonstrating that the development is consistent and would not conflict with City land use goals and policies of the General Plan:

General Plan Policies	Consistency Analysis
Land Use Element	
<p>Goal LU-1: Create a land use pattern of development that preserves existing neighborhoods while providing opportunities for targeted infill projects in strategic locations to enhance the quality of life, preserve the natural environment, and ensure the long-term fiscal viability of Thousand Oaks.</p> <p>Policy 1.1 Overall City structure – Incentivizing and streamlining infill multi-family development.</p> <p>Policy 1.2 Complete community – Strive to maintain a diverse and balanced mix of uses in the City, so that Thousand Oaks is a “complete community” with a diversity of housing for all stages of life and income levels; improve alignment of educational attainment opportunities with high-paying employment opportunities, open space, public facilities that meet residents’ needs, and retail and service to support daily life.</p>	<p>The project is located within an underutilized site that is vacant and temporarily occupied by a pumpkin patch and tree lot use. The property is surrounded by a mix of uses that support a mixed-use development. The site is located within the General Plan Designation of “Commercial/Residential,” that allows a density of 30 units per acre. The project has an overall density of 54 units per acre as the Specific Plan 20 allows by right the construction of additional units above commercial space and additional units allowed under the State Density Bonus Law.</p> <p>As stated above, the subject site is a vacant property surrounded by existing development and the infill project would be compatible with and supported by surrounding development.</p> <p>The proposed project includes two mixed-use buildings and one multi-family residential building, consisting of 328 units including 44 affordable units. The project would provide housing for lower income families across the three buildings and in a mix of housing unit sizes which range from 1 to 2 bedrooms.</p>

General Plan Policies	Consistency Analysis
<p>Policy 1.3 Balance character and infill – Maintain community character while promoting infill development that brings needed housing, amenities, and jobs to the City.</p>	<p>The project, as designed, would provide needed housing in the community. The project has been designed to preserve some of the mature trees onsite to the maximum extent feasible. The project is designed to preserve the natural landform and minimize grading on the site. The project includes a 21,154 s.f. quasi-public park along the frontage with outdoor seating and walkways.</p>
<p>Goal LU-2: Preserve and enhance existing neighborhoods throughout the City.</p> <p>Policy 2.3 – Sustainable Residences – Encourage property owners to use sustainable and climate-appropriate landscaping by incorporating natural materials and native vegetation and trees to enhance the urban forest and provide shade and habitat fauna.</p> <p>Policy 2.7 – Access to neighborhood amenities – Improve sidewalks and bike lanes within neighborhoods and along routes to retail areas, schools, parks, and other points of interest to promote active transportation-related street amenities, including bike parking, lighting, and seating along major routes.</p>	<p>The project has a base density of 30 units per acre, consistent with the underlying Mixed Use land use designation. The proposed project includes a mix of residential and commercial uses with public open space and incorporates a design that is compatible with the development potential of surrounding properties within SP-20.</p> <p>The proposed project would be preserving a couple of existing mature oak trees along Thousand Oaks Boulevard. All new landscaping will be reviewed and approved by the Ventura County Fire Department to minimize the risk of fire while providing sustainable and climate-appropriate landscaping that enhances the urban forest and provides shade for people and wildlife.</p> <p>The project site is served by existing sidewalks along Thousand Oaks Boulevard and Lombard Street. The project provides three (3) open space play areas within the development consisting of: one for general use, one for teenagers, and one for younger children. The project includes an expansive public</p>

General Plan Policies	Consistency Analysis
	<p>open space along the frontage and a proposed dog park at the rear (south) portion of the site. The developer worked with the Conejo Recreation and Park District (CRPD) to facilitate public access to the park. The project incorporates bicycle parking and storage. Bicycle share lanes (sharrows) exist within the Thousand Oaks Boulevard right-of-way.</p>
<p>Goal LU-3: Promote a diversity of housing types for Thousand Oaks residents through all stages of life.</p> <p>Policy 3.1 Diversity of housing – Promote diversity of housing types in locations throughout the City, specifically in neighborhood areas that contain goods and services, parks and open space, and public schools in a walkable setting.</p> <p>Policy 3.2 Housing for different life stages and incomes – Encourage new housing types for all residents including young professionals, older adults, and middle- and low-income families.</p> <p>Policy 3.5 Housing for special needs – Support housing for older adults, special needs groups (including those with developmental disabilities), and non-traditional family groups by allowing a diverse range of housing configurations and universally accessible design features.</p>	<p>The project is consistent with Goal LU-3 as it provides 44 affordable units across the three proposed buildings and the affordable units consist of a variety of unit sizes for low-income family housing.</p> <p>The project provides 44 affordable units within two mixed-use buildings and one multi-family residential building. The proposed mixed-use project is located in an area where there are a variety of job centers in nearby commercial retail, medical, and professional office sites. The project includes 54,763 square feet of public open space that consist of one park and retail plaza along the frontage, a pocket park, and dog park. Public transit (bus stop) is adjacent to the site along Thousand Oaks Boulevard as well as different bus routes within a half mile connecting to other areas of the City and County.</p> <p>A total of 328 units would be provided, including 44 lower-income units, across the two mixed-use buildings and one multi-family residential building. The affordable units consist of a variety of unit sizes for low-income family housing.</p> <p>The project provides 475 total parking spaces, consisting of 48 commercial</p>

General Plan Policies	Consistency Analysis
<p>Policy 3.7 Parking Requirements – Allow a reduction in parking requirements on a project-by-project basis to achieve high-quality design, increase housing affordability, and promote walking, bicycling, and transit use while working to minimize potential negative impacts on adjacent properties.</p> <hr/> <p>Goal LU-14: Activate Thousand Oaks Boulevard as a walkable, mixed-use area with housing, retail, restaurants, office, and services. Policy 14.1 Revitalize the Boulevard – Support efforts to revitalize Thousand Oaks Boulevard as the main mixed-use boulevard in the City with a diverse mix of multi-family housing types, including multiplexes, courtyard housing and related commercial and retail uses.</p> <p>Policy 14.8 Mix of uses on Thousand Oaks Boulevard – Encourage mixed-use development of various housing types, including townhouses, multiplexes, courtyard housing and related commercial that is oriented towards Thousand Oaks Boulevard and interior streets.</p> <p>Policy 14.10 Parks, Open Space Areas, and Community Gathering Spaces – Work with CRPD to pursue opportunities to provide parks and other open space areas in closer proximity to planned housing and mixed-use projects.</p> <p>Goal N-1:</p>	<p>spaces, 408 residential spaces, and 19 “surplus” guest parking spaces. The amount of parking provided onsite will minimize parking impacts within the surrounding areas.</p> <hr/> <p>The project consists of the construction of two mixed-use buildings and one multi-family residential building with 328 residential units, 8,500 gross square feet of commercial retail and restaurant space, and retail plaza. The project provides 44 affordable units across the three proposed buildings and the affordable units consist of a variety of unit sizes for low-income family housing. The project site is located at the southeast corner of Thousand Oaks Boulevard and Lombard Street and is surrounded by several commercial centers offering dining, retail, grocery, professional, and recreation uses. As previously mentioned, the project includes 54,763 square feet of quasi-public open space that consist of one park and retail plaza along the frontage, a pocket park, and dog park. The developer worked with the Conejo Recreation and Park District (CRPD) to facilitate public access to the park.</p> <p>The project consists of the construction of two mixed-use buildings and one multi-</p>

General Plan Policies	Consistency Analysis
<p>Promote a pattern of land uses that is compatible with current and future noise levels.</p> <p>Policy 1.2 Noise-reducing design features – Incorporate design features into land use projects that can be used to shield residents from noise exceeding the normally acceptable ranges included in Table 11.2. Design features may include, but are not limited to berms, walls, and sound attenuating building configuration, architectural design, and construction method and materials.</p> <p>Policy 1.3 Mixed-use developments – Require design and construction of mixed-use developments to achieve noise levels in the conditionally acceptable range or lower per Table 11.2 for outdoor recreation areas associated with residential components and to achieve interior noise levels in residences of 45 CNEL or lower, consistent with Title 24 interior noise standards.</p> <p>Goal N-2: Minimize adverse noise impacts associated with transportation.</p> <p>Policy 2.2 Noise sensitive receptors and roadway noise – Protect sensitive receptors from freeway and roadway noise through minimization techniques, including building configuration and design, sound walls, traffic calming, traffic diversion, or rubberized asphalt.</p>	<p>family residential building and existing surrounding development include commercial uses to the east, west and north. The proposed Project would include three buildings containing 328 multi-family units, approximately 8,500 square feet of retail commercial space, and live-work areas. The project would introduce an increase in vehicle trips to and from the project site which would increase roadway noise. The project would also include residential units near US 101 which may be generally considered a freeway-noise-incompatible land use. The existing ambient noise levels on the project site range from 58.9 to 68.5 dB CNEL at five measurement locations. The project is required to incorporate into the building design various construction features which reduce interior noise levels to 45 dBA CNEL. Further, the buildings and existing and planned landscaping would serve to attenuate freeway noise in many of the open space areas and walkways of the site.</p>

General Plan Policies	Consistency Analysis
Housing Element	
HE Goal 1: Provide a wide range of housing opportunities for persons of all income levels.	The proposed development would provide housing opportunities, especially for entry-level professionals such as teachers.

2. *The project complies with all applicable laws, regulations and policies, including the Thousand Oaks Municipal Code (TOMC Section 9-4.2803I(2)).*

The project is consistent with all applicable laws, regulations, and policies, including the General Plan, Thousand Oaks Municipal Code, SP-20, Precise Plan of Design Guidelines (Res. No. 2023-061), and Architectural Design Guidelines for Commercial Projects (Res. No. 2005-011), with the application of the Density Bonus parking ratios and Density Bonus Concessions and approval of Objective Design Standards Modifications. The proposed project is being developed at the maximum density allowable with 44 affordable lower-income units while incorporating a design that is compatible with the development potential of surrounding properties within SP-20. Further, the proposed buildings, as designed, incorporate roofline variation, building articulation, vertical and horizontal elements, and decorative material finishes and colors.

The project also complies with the requirements of the Inclusionary Housing Ordinance by providing 44 affordable lower-income units, 24% of the project, which far exceeds the requirements of the City's Inclusionary Housing Ordinance.

The Applicant is requesting Concessions and Waivers that are consistent with State Density Bonus law to facilitate the construction of a mixed-use development that includes 24% of the residential units as affordable in the lower-income category, which equates to 44 affordable lower-income units. Additionally, the law allows the proposed project to be built without providing guest parking. The project utilizes the Density Bonus Law parking ratios (Government Code Section 65915(p)), which require one (1) parking space per 1-bedroom unit and one and a half (1.5) parking spaces for a 2-bedroom unit. As such, 408 parking spaces are required, and a total of 427 parking spaces are provided which consist of 408 residential parking spaces and 19 guest parking spaces, far exceeding the requirements under State law.

The following three (3) Density Bonus Concessions and four (4) Density Bonus Waivers are approved as these Concessions/Waivers result in identifiable and actual cost reductions to provide for affordable housing costs or rents and the strict application of the development standards could physically preclude the construction of the units needed to meet the required density under the General Plan:

Concessions

1. Allow an increase in the number of allowable stories for a building, from 3 stories as specified by Thousand Oaks Boulevard Specific Plan No. 20 (SP-20) up to 5 stories.

The Concession to increase the maximum number of stories avoids decreasing the number of residential units proposed. The 4th and 5th floor building components allow for additional units to be provided vertically because there is an existing flood plain located within the northwestern portion of the site which restricts the buildings from potentially expanding horizontally within a significant portion of the site. Although proposed Building A exceeds the maximum allowable front yard setback, all proposed buildings comply with the side and rear yard setbacks. Additionally, the proposed project has been designed to include a staggered building façade design with increased third, fourth, and fifth floor setbacks, further reducing the visual impacts from public view and providing visual interest from surrounding properties. The proposed buildings fronting Thousand Oaks Boulevard (Buildings A and B) have been designed to comply with SP-20 development standards requiring a 10-foot third-floor setback from the buildings' first floor. Furthermore, the proposed 4th and 5th floor elements include increased building setbacks from the first floor, further reducing the size, mass, and scale of the proposed buildings. The maximum building heights range from 47 to 62 feet with an average building height of 45 feet. The average height proposed is less than the maximum allowable average 50-foot height pursuant to SP-20.

The proposed project incorporates design elements that reduce visual impacts from 101 Freeway and is consistent with the Freeway Corridor Guidelines. The project has been designed to be sensitive to the existing topography and proximity to the freeway located immediately south of the subject site. Design considerations include screening of roof-mounted mechanical equipment which is integrated into the building's overall design, building roof line variation, and horizontal and vertical building articulation. The proposed buildings provide increased third, fourth, and fifth floor building setbacks from the rear property line, avoiding a long, blank façade parallel to the 101 Freeway and therefore, reduce visual impacts. Additionally, existing mature landscaping exists along the south property line which will partially screen the proposed buildings. Architecturally, the proposed building design, materials, and landscaping complement existing uses as the earth tone color palette mimic the colors used in the adjacent commercial developments.

2. Building Windows Details – Decrease the minimum window depth to two (2) inches from glass to wall edge instead of three (3) inches and incorporate vinyl window frames instead of aluminum, fiberglass, wood, or manufactured wood, as otherwise required by TOMC Section 9-4.2205(h)(1)(ii) and (h)(3)(i).

The Concession to decrease the minimum window depth avoids financial hardship. Two of the three proposed buildings (Buildings A and B) are located along Thousand Oaks Boulevard. The north elevation of Building B incorporates inset windows on all four stories including recessed windows on the second floor. The west elevation of Building B incorporates inset windows on the second floor and third floors. The north, east, and south elevation of Building A incorporates inset windows on all four stories including recessed windows on the first and second floor of the north and west elevations. Building C, which is sited behind and to the south of Building A incorporates inset windows on all four stories. Flushed windows are primarily provided along the east south, and southwest elevations of Building B and the south and east elevation of Building C. It should be noted that these buildings elevations are least visible from the Thousand oaks Boulevard or Lombard Street. The intent of this standard is to avoid a monotonous façade as visible along the public right-of-way. Design features incorporated into the general building design include varying façade elements such as balconies, trellis, canopies, overhangs, roof line variation, vertical and horizontal variation, and roof top terraces resulting in a visually interesting and attractive design.

3. Decrease the minimum required 50% retail area required for any building with greater than 100 feet of frontage along Thousand Oaks Boulevard to 18% retail area, as specified by SP-20.

The Concession to decrease the minimum required retail area frontage within Building A avoids decreasing the number of residential units while activating the building frontage. The proposed project includes 8 residential units on the ground floor fronting Thousand Oaks Boulevard, and of those units 3 are live/work units. The live/work units are located within the eastern portion of Building A and are located immediately adjacent to 1,500 s.f. commercial area. The live/work units are designed to accommodate low-intensity workspace and operations, such as professional offices, which are compatible to the proposed mixed-use development. The live/work units activate the frontage at the ground level because the “work” portion of these units is normally on the first floor, with the living area above. Thus, the live/work units are designed to meet the intent of the SP-20 standards because the live/work units are compatible with the adjacent commercial and mixed uses of the proposed development and the first-floor workspace will activate Building A frontage.

Additionally, due to the existence of the flood plain and limitations of development within this area, the proposed project includes an approximate 100-foot front yard building setback from Thousand Oaks Boulevard, which includes public open space. The purpose of the 50% retail area is to activate the frontage along Thousand Oaks Boulevard with structures that are setback a maximum of 15 feet, such as Building B to the east of Building A. The live/work units have been positioned in a manner that improves the site design and layout because the units are located immediately south of the expansive public open space area, serving

as a transition between the public and semi-public space to the mixed-use buildings and multi-family residential building to the rear of the site.

Waivers

1. Increase in the front yard building setback for mixed-use Building A from the maximum allowable 15 feet to 98.5 feet, as specified by SP-20.

As previously mentioned, the SP 20 development standards for building setbacks are intended to provide buildings along Thousand Oaks Boulevard that promote and activate the street frontage. The increased building setback is necessary due to an existing flood zone located within the northwest portion of the site. The proposed Concession allows the project to provide an adequate building setback outside of the flood zone while avoiding a reduced number of units on the project. Requiring the maximum allowable 15-foot building setback with the construction of a building within the flood zone would require costs that are not practical and development that is not feasible, and thus result in fewer residential units. An increased building setback has been achieved while also providing public open space and landscaping along Thousand Oaks Boulevard. Additionally, the increased building setback serves as a transition from the public and semi-public realm to the proposed mixed-use development. The increased building setback is only applicable to one of the two buildings fronting Thousand Oaks Boulevard. Proposed Building B, located at the northeastern and eastern portions of the site, complies with the maximum allowable front yard building setback because the building is not located within the flood plain.

2. Building Types and Design – Increase the stacked dwelling type and mixed-use building type interior corridor length to 150 feet instead of 100 feet as otherwise required by TOMC Section 9-4.2205(e)(8)(iv) and (e)(9)(vi).

The project includes single- and double-loaded corridors that exceed 100 feet in length. To meet this standard, the proposed buildings would need to be broken up into smaller buildings with different building typologies. This would require a site layout redesign and dwelling units would be lost to accommodate substantially shorter corridors. The proposed project does not propose any interior corridor longer than 150 feet without a bend, break, or pause.

3. Courtyards – Courtyards within podium building types shall be located no more than one story above street level as otherwise required by TOMC Section 9-4.2205(e)(8)(vi).

The project includes three courtyards on the 3rd floor of Buildings B and C instead of the one story above the street (2nd floor). The intent of the courtyard is to create a semi-public gathering space for residents that is open to the sky and has access to light and ventilation. Building C is a podium style building situated within the

southern portion of the property where the grade elevation is below the Thousand Oaks Boulevard grade. Due to the podium building design, topography, and semi-subterranean parking structures the courtyards within can only be accommodated on the third (3rd) floor. Although the courtyard in Building C is located on the 3rd floor, it does provide direct access to the internal access road below.

4. Building Access – All ground floor residential units within a stacked dwelling building type are required to provide a main entrance to each residential unit directly from the street as otherwise required by TOMC Section 9-4.2205(e)(8)(ii).

This project's Stacked Dwelling building (Building C) has common access through a common lobby directly accessible from the street with interior circulation provided by single- or double-loaded corridors. Building C includes 19 ground floor units with 14 residential entries providing direct access from the internal street. All of the residential units and the common areas are accessed by enclosed pedestrian corridors, stairways, and elevators. A main entrance to each dwelling directly from and facing the internal street has been provided, except for 5 units not facing a street but rather an ascending slope at the rear of the site. Five units along the western elevation of Building C provide direct ground floor access, however, it should be noted that those five units front a proposed pocket park immediately adjacent to the west. To meet the standard for the units along the southern portion of Building C the proposed project would require additional grading into an existing manufactured slope at the rear of the property and potentially require encroachment into an existing Southern California Edison and Caltrans easement. This would be a financial hardship and the natural setting of the site would change the existing character of the area.

3. *The project will not be detrimental to the public health, safety or general welfare (TOMC Section 9-4.2803(c)(3)).*

The project will not be detrimental to public health, safety, or general welfare because the project has been reviewed and approved by the Community Development Department, Public Works Department, Police Department, and the Ventura County Fire Department (VCFD). With the incorporation of the conditions set forth by these department and agencies, the project will not be detrimental to public health, safety, or general welfare as the granting of this permit:

- a. Will maintain the degree of compatibility of property uses that the Zoning Ordinance is intended to promote and preserve, considering the particular site, and uses on parcels within the zone in which the use is located; and,
- b. Will not result in a use which may reasonably be expected to become obnoxious, dangerous, offensive or injurious to the public health, safety or welfare, by reason of the emission of noise, smoke, dust, fumes, vibrations, odor or harmful or annoying substances: and,

- c. Will preserve the integrity and character of the zone in which the use will be located and the utility and the value of property in the zone and in adjacent zones; and,
- d. Will not become detrimental to the public interest, health, safety, convenience or general welfare.

As demonstrated in the Addendum to EIR No. 327 (CEQA 2023-70004), the project will not unreasonably interfere with the use and enjoyment of neighboring, existing, or future developments. Specifically, the project would not create traffic or pedestrian hazards because the project would utilize a network of roads and sidewalks that were designed to accommodate the vehicle and pedestrian traffic generated by this development and the existing surrounding development including the commercial uses to the east, west, and north. The mixed-use project's operational noise is anticipated to be similar to and compatible with the nearby commercial and residential developments. With the Mitigation Measures required by Addendum to EIR No. 327 (CEQA 2023-70004) and conditions of approval, construction noise will be reduced so the impact is less than significant. Therefore, the project will not be detrimental to the public health, safety, or general welfare.

- 4. *The project has been reviewed in conformance with the provisions of the California Environmental Quality Act (TOMC Section 9-4.2803(c)(4)).*

The proposed Development Permit has been reviewed for conformance with the provisions of the California Environmental Quality Act. For this application, the City is the Lead Agency and, on behalf of the Applicant, the City Council is being asked to consider the Addendum to EIR No. 327 that was prepared for the project. The Addendum to EIR No. 327 identifies that with the inclusion of the existing mitigation measures contained in EIR No. 327, the project will not result in new significant impacts nor substantially increase the severity of previously disclosed impacts beyond those already identified in EIR No. 327. Further, project design features and conditions of approval have been applied to the project to ensure that applicable mitigation measures provided in EIR No. 327 are implemented and reduce potentially significant environmental impacts to a less than significant level. Therefore, the proposed Project, will not result in any new significant environmental effect(s) and the Project does not require an EIR.

SECTION 4

WHEREAS, the findings of the Planning Commission supporting approval of said Modifications from TOMC Section 9-4.2202 Objective Design Standards" as set forth in TOMC Section 9-4.2202 are as follows:

- 1. *The Modification, while not consistent with a specific provision of this Code, is justified by its intent or by design hardship and allows reasonable and conforming use that is consistent with the General Plan goals and policies and underlying zoning district.*

The proposed building's (Building B) length is approximately 369 feet deep, which is greater than the maximum allowable building length of 200 feet. Requiring the building to be redesigned and split into two buildings, less than 200 feet in length, would prevent the project from meeting the allowable density and reduce the number of affordable units. Development within the northeastern portion of the site is limited due to an existing floodplain, which restricts development within a significant portion of the site, thus resulting in a design hardship due to the existing site characteristics. Additionally, construction within the floodplain would be a financial hardship and the natural setting of the site would change because the floodplain supports two mature oak trees.

Consequently, the Planning Commission finds the Modifications can be granted as proposed due to site constraints and design hardship. The proposed Modifications do not change the overall scale or character of the building and result in development consistent with the scale and character of existing and allowable development in the vicinity, are not detrimental to or that would not adversely impact, and provide the proposed affordable housing units. Granting the modifications would result in a project that is compatible with the existing neighborhood and future development potential within SP-20 while providing a better layout and design. The proposed project provides a density of 30 units per acre, maximizing the 30-unit per acre allowed by the General Plan Land Use designation, therefore, supporting production of long-term affordable housing within the City.

2. *The Modification would result in development consistent with the scale and character of existing and allowable development in the vicinity under the same zoning.*

As previously mentioned, the proposed Building B exceeds the maximum allowable building length of 200 feet. The intent of this standard is to avoid a monotonous façade as visible along the public right-of-way. Building B consists of a 283,372 s.f., 5-story, 57.55 foot tall building located within the northeastern portion of the site and fronting Thousand Oaks Boulevard. The long side (east and west elevations) of the proposed building will be seen from the terminus of East Thousand Oaks Boulevard at Hodencamp Road along the north property line and Lombard Street along the west property line. Although the long side of the building extends approximately 369 feet south from Thousand Oaks Boulevard, the building has been designed to add a massing break at the building midpoint by incorporating a courtyard along the western elevation. The building midpoint is approximately 215 feet south of the north building façade. The courtyard is accessible from the ground level, measures 30 feet in width, and extends the full height of the building. Furthermore, the proposed building includes architectural enhancements and incorporates strong horizontal elements and pedestrian-scaled geometric forms which further reduce the mass and scale of the structure and is consistent with the intent of this standard. The scale of the proposed project is

compatible with the development potential of the properties to the northeast across Thousand Oaks Boulevard and east of the site. These properties are in SP-20 which could be redeveloped with buildings with a minimum height of twenty (20) feet and a maximum average height of fifty (50) feet.

For the reasons described above and in the staff report to the Planning Commission dated April 22, 2024, the design of the new mixed-use development complies with the intent of all applicable laws, regulations, and policies, including the City's Guidelines for development within the corridors of Route 101 and Objective Design Standards for Residential Development. The proposed mixed-use development is compatible with the surrounding land uses in the vicinity because it is located within an urbanized setting with established infrastructure and existing nearby comparable uses. The project incorporates design elements such as color palettes and material choices that are complementary to surrounding development while providing a modern design aesthetic. Although the new development is designed to be taller than the surrounding development various design features have been implemented into the site layout and building design to reduce impacts to surrounding properties. The northwestern portion of the site provides an expansive public open space area creating a physical buffer between the new structures and Thousand Oaks Boulevard. The open space together with the retail plaza and activated frontages along Thousand Oaks Boulevard provide a transition from surrounding properties and commercial uses to the proposed mixed-use development. Proposed Building B, fronting Thousand Oaks Boulevard, provides a third story element that is setback 20 feet, fourth story element that is setback 32 feet, and the fifth story element that is setback 215 feet. The architectural design differentiates between the first and upper floors using material changes, increased upper floor setbacks, and ground-floor patios to further reduce the massing from the ground level.

Therefore, the proposed Modifications would result in development consistent with the scale and character of existing and allowable development in the vicinity under the same zoning and land use designations, and the Modification would not result in development that is detrimental to or that would adversely impact adjacent properties as adjacent properties would still receive adequate light and air, public utilities would serve existing and proposed development, and the proposed building would be constructed to the current Building and Fire Code requirements.

3. The Modification would result in development that is not detrimental to or that would not adversely impact adjacent properties.

The Modification would result in development that is not detrimental to or that would not adversely impact adjacent properties. While the project as designed does not comply with the Building Mass, Articulation and Access requirements, the project meets all other Objective Design Standards requirements. These Modifications do not change the overall size, mass, and scale or character of the building and result in development consistent with and compatible to the character

of existing and allowable development in the vicinity under the same zoning. Additionally, the project has also been reviewed by other City departments and agencies for conformance with applicable laws, regulations, and policies, and provided appropriate conditions of approval. Therefore, the Modifications would not result in development that is detrimental to or that would adversely impact adjacent properties as adjacent properties.

SECTION 5

WHEREAS, the findings of the Planning Commission supporting approval of said PTP 2023-70067, as stated in (TOMC Section 9-4.4206(b)) as follows:

1. *The condition or location of the oak trees requires cutting to maintain or aid its health, balance, structure, or to maintain adequate clearance from existing structures.*

The subject scope of work does not include cutting to maintain or aid its health, balance, structure, or to maintain adequate clearance from existing structures.

2. *The condition of the tree(s) with respect to disease, danger of falling, proximity to existing structures, high pedestrian traffic areas such as parking lots, pedestrian walkways, interference with utility services, or is causing or is likely to cause substantial property damage based on sufficient evidence and/or documentation and said damage cannot be controlled or remedied through reasonable preservation and/or preventive procedures and practices.*

The proposed scope of work does not include the removal or cutting of trees exclusively to remove a condition hazardous to existing development. However, one (1) of the protected trees proposed to be removed is noted to be in poor condition, as stated in the Oak Tree Report dated January 2024.

3. *A permit may be approved when necessary to remove, relocate, cut or encroach into the protected zone of an oak tree to enable the reasonable and conforming use of the subject property, which is otherwise prevented by the presence of the tree. Reasonable use of the property shall be determined in accordance with the Oak Tree Preservation and Protection Guidelines.*

Encroachment and Pruning of 9 of the 34 protected Coast Live Oak (*Quercus agrifolia*), Valley Oak (*Quercus lobata*), and Holly Oak (*Quercus ilex*) trees onsite is necessary to maintain proper clearance over proposed sidewalks, outdoor patios, driveways, and open space. A City Tree Consultant inspected the subject trees and determined that the proposed encroachment will not be detrimental to the health of the subject oak trees. Appropriate project conditions are in place to safeguard the oak trees, including the installation of fencing around the protected zones and on-site monitoring by the applicant's consultant during all encroachment and pruning operations.

The removal of 17 Coast Live Oak (*Quercus agrifolia*) trees and five (5) Valley Oak (*Quercus lobata*) trees is necessary to accommodate the proposed improvements and grading activities associated with the construction of the new mixed-use development, including adequate vehicular and pedestrian circulation and parking facilities. Existing protected trees located along the northwestern portion of the site and near the public right-of-way were prioritized for preservation. Additionally, preserving protected trees is a priority of the City Council when designing projects involving new construction. .

4. Approval of the request is not contrary to or in conflict with the general purpose and intent of this chapter.

Approval is consistent with the intent of the Oak Tree Preservation and Protection Ordinance since the proposed removal of 22 protected oak trees will be mitigated in accordance with standards adopted by the Oak Tree Preservation and Protection Guidelines Resolution 2010-14.

The proposed tree replacement program would plant three (3) trees for each protected tree removed, consisting of two 24-inch boxes and one 36-inch box tree in compliance with the City's Oak Tree Preservation and Protection Guidelines. The total number of replacement oaks required would be forty 24-inch box trees, twenty 36-inch box trees, and four 60-inch box trees. The applicant will either need to submit a Replacement Tree Plan which complies with Resolution 2010-014, propose the planting of the trees at an off-site location for public benefit, subject to Community Development Director approval, or provide an in-lieu cash payment to the City's Open Space Conservation Fund used toward acquisition of open space, as prescribed by Resolution 2010-014. The applicant is proposing to plant six mitigation oak trees on the development site and, due to site constraints and Fire Prevention District limitations on landscaping, will pay an in-lieu for the balance of the mitigation trees.

With the inclusion of the recommended conditions, approval of this request will not be contrary to, or conflict with, the general purpose and intent of the Oak Tree Ordinance (Chapter 42 of Title 9 of the Municipal Code) and Oak Tree Preservation and Protection Guidelines, Resolution 2010-14.

In addition, the project is consistent with the Thousand Oaks General Plan, including the Conservation Element, in that conditions have been applied to minimize impacts from encroachment within the protected zone of six (6) Coast Live Oak trees, two (2) Valley Oak trees, and one (1) Holly Oak (*Quercus ilex*) tree. With the inclusion of conditions, the proposed encroachment within the tree's protected zone is not likely to result in a decline in the health of the trees.

5. The project has been reviewed in conformance with the provisions of the California Environmental Quality Act.

The Protected Tree Permit request has been reviewed for conformance with the provisions of the California Environmental Quality Act. For this application, the City is the Lead Agency and, on behalf of the Applicant, the City Council is being asked to consider Addendum to EIR No. 327 that was prepared for the project. The Addendum to EIR No. 327 identifies that with the inclusion of mitigation measures contained in EIR No. 327, the project will not result in new significant impacts nor substantially increase the severity of previously disclosed impacts beyond those already identified in EIR No. 327. Further, project design features and conditions of approval have been applied to the project to ensure that applicable mitigation measures provided in EIR No. 327 are implemented and reduce potentially significant environmental impacts to a less than significant level. Therefore, the proposed Project, will not result in any new significant environmental effect(s) and the Project does not require an EIR.

SECTION 6

WHEREAS, local governments are authorized by the Government Code Section 65864 et seq., to enter into development agreements with any person having legal and equitable interest in real property for the development of that property; and

WHEREAS, the Applicant and City have negotiated the terms of the Development Agreement ("Agreement"); and

WHEREAS, the Planning Commission has reviewed the terms of the Agreement, has conducted a public hearing on April 22, 2024, and believes that it will be in the best interest of the City, and the best interest of the public, considered the recommendation of the Planning Commission, and considered all public testimony; and

WHEREAS, the findings of the Planning Commission supporting approval of said DAGR 2023-70001 through City Council adoption of an ordinance prepared in accordance with the requirements of the TOMC, are as follows:

As determined and recommended by the Planning Commission pursuant to TOMC Sec. 9-11.09 the development agreement:

- 1. Is consistent with the objectives, policies, general land uses and programs specified in the General Plan and any applicable specific plan:*

Approval is consistent with the objectives, policies, general land uses and programs specified in the General Plan and SP-20, as described in the findings made above.

2. *Is compatible with the uses authorized in, and the regulations prescribed for, the land use district in which the real property is located;*

The Development Agreement is compatible with the uses authorized in, and the regulations prescribed for, the land use district in which the real property is located, as described in the findings made above.

3. *Is in conformity with public convenience, general welfare and good land use practice;*

The Development Agreement is in conformity with public convenience, general welfare, and good land use practice, as described in the findings made above.

4. *Will [not] be detrimental to the health, safety and general welfare; and*

Approval will not be detrimental to the health, safety and general welfare, as described in the findings made above.

5. *Will [not] adversely affect the orderly development of property or the preservation of property values.*

Approval will not adversely affect the orderly development of property or the preservation of property values as the project will replace a vacant site with a new mixed-use development which will bring amenities to other surrounding residential and commercial uses.

6. *In addition, the City Council finds that none of the conditions described in California Code of Regulations, Title 14, Chapter 3, Section 15162 are present, including the following:*

- a. Approval of the Agreement does not propose substantial changes which will require major revisions to the Addendum to EIR No. 327 due to the involvement of new significant effects or a substantial increase in the severity of previously identified significant effects; and
- b. Approval of the Agreement does not create substantial changes with respect to the circumstances under which the project is being undertaken which would require major revisions to the Addendum to EIR No. 327; and
- c. Approval of the Agreement does not reveal new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the Addendum to EIR No. 327 was considered.

NOW, THEREFORE, BE IT RESOLVED that based on substantial evidence contained within the record, the analysis in the staff report, the Findings of Fact above, and, having considered the Addendum to EIR No. 327, the Planning Commission recommends that City Council approve SUP 2023-70011; DAGR

2023-70001; and PTP 2023-70067, subject to conformance with the conditions set forth and attached hereto and made a part hereof as well as recommends to City Council consider EIR Addendum (CEQA) 2023-70004 prepared for the project. Except as otherwise expressly indicated, said conditions shall be fully performed and completed, or at the City's discretion, shall be secured by bank or cash deposit or other security satisfactory to the City Attorney before the use or occupancy of the property is commenced and before a Certificate of Occupancy is issued. The violation of any of the conditions of said permit shall be grounds for revocation by the Planning Commission or City Council.


I HEREBY CERTIFY that the foregoing resolution reflects action taken by the Planning Commission of the City of Thousand Oaks at a regular meeting held on the 22nd day of April 2024, by the following vote:

AYES: Commissioners Tyler Ketelhut, McMahon, Link, and
Chair Lanson

NOES: None

ABSENT: None

ABSTAIN: Commissioner Farris



Don Lanson, Chair
Planning Commission

Fabiola Zelaya Melcher, Secretary
Planning Commission

COMMUNITY DEVELOPMENT DEPARTMENT CONDITIONS OF APPROVAL FOR;
DAGR 2023-70001; SUP 2023-70011; and PTP 2023-70067

COMMUNITY DEVELOPMENT DEPARTMENT –
GENERAL PROJECT CONDITIONS

STANDARD

1. **Land and Application** – The Development Agreement; Special Use Permit; and Protected Tree Permit; are adopted, granted, or accepted for the land described in the application, any attachment thereto, and as shown on the submitted "Project Plan Set," dated February 15, 2024.
2. **Scope of Permit Approval** – This permit is for a Development Agreement specifying development performance; and a Special Use Permit; along with a Protected Tree Permit, to allow the construction of 328 residential units distributed across one, five-story, podium style mixed-use building, one four-story mixed-use building, and one, five-story multi-family residential building, including pocket parks, a dog park, plazas, seating areas, and other amenities as well as the removal of 17 Coast Live Oak (*Quercus agrifolia*) trees and five (5) Valley Oak (*Quercus lobata*) trees and encroachment into the protected zone of six (6) Coast Live Oak trees, two (2) Valley Oak trees and one (1) Holly Oak (*Quercus ilex*) tree at 500 East Thousand Oaks Boulevard, as shown on project plans labeled "Project Plan Set" dated February 15, 2024, and the Oak Tree Report dated January 2024 unless conditioned otherwise herein.
3. **Approval Period** – The above referenced permits are granted for the period set forth in DAGR 2023-70001.
4. **Compliance with Applicable Laws, Rules, and Regulations** – The applicant shall at all times comply with any and all local, city, county, state and federal laws, regulations and orders now in effect or which may hereafter be enacted pertaining to the approved modification or affecting the installation, operation or maintenance of the mixed-use development.
5. **Regulatory Agency Approval** – The requirements of all applicable regulatory agencies shall be met, and approval obtained, prior to gas release, Certificate of Occupancy, or as otherwise required by the City's Building and Safety Division. Copies of all required licenses shall be submitted to the Community Development Department.
6. **Payment of Fees** – Approval is subject to the applicant paying all fees and assessments to the City of Thousand Oaks, School District, Conejo Recreation and Parks District, Ventura County Fire Prevention District, and any other agency requiring fees related to the subject development as required by the Municipal Code and established by City Council, except as

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otherwise modified by, and in accordance with the Project conditions of approval or the Development Agreement DAGR 2023-70001.

7. **Impact Fees for Affordable Housing Units** – Per California Government Code Section 65915 and Section 65915.1, affordable housing impact fees, including inclusionary zoning fees and in-lieu fees, shall not be imposed on a housing development's affordable units.
8. **Dedications/Reservations and Public Improvements** – With respect to dedications, reservations, construction of public improvements and fees as required by the project development conditions, the applicant is advised, pursuant to Government Code Section 66020, that the ninety (90) day protest period has commenced upon approval of the proposed improvement by the City.
9. **Condition Compliance** – All development on the subject property shall be constructed and thereafter maintained in accordance with the conditions of this permit.
10. **Project Changes/Modifications** – Changes to the project are subject to the requirements described in DAGR 2023-70001. Minor changes to SUP 2023-70011 or PTP 2023-70067 may be approved by the Community Development Department, provided such changes achieve substantially the same results and the project is still in compliance with the Municipal Code. Revised plans reflecting the minor changes and additional fees shall be required.
11. **Acknowledgment** – The applicant acknowledges that all aspects of this project are of special concern to and regulated by the City of Thousand Oaks, which has established specific criteria and standards concerning development within the City. Any change, modification, or alteration to improvements on the subject property shall first be approved by the City of Thousand Oaks. Any unauthorized changes may require future corrective work and may result in a City Code compliance effort.
12. **Unauthorized Changes** – The applicant acknowledges that the exterior treatment, location of structures and architectural features of the development are of special concern to, and regulated by, the City of Thousand Oaks, which has established criteria and standards concerning development within the City. Any substantial change, modification, or alteration to the architectural design, or in the exterior treatment of any building and structure, including building colors, materials, changes in walkways, doorways, window locations, or in the parking, landscaping and other related features, must first be approved by the City of Thousand Oaks

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prior to performing the work. Unauthorized change(s) or failure to comply with the conditions of this permit may require future corrective work and result in a City Code violation and appropriate action.

13. **Indemnification** – The applicant agrees to defend, indemnify and hold harmless the City, its agents, officials, and employees from any claim, action or proceeding against the City or its agents, officials or employees to attack, set aside, void or annul an approval of the City. The City shall promptly notify the applicant of any claim, action or proceeding and the City shall cooperate fully in the defense.
14. **Signed Acceptance of Conditions** – A signed Acceptance of Conditions affidavit shall be executed by the applicant and property owner, or his duly authorized representative, and shall be returned to the Community Development Department prior to the issuance of a building permit.
15. **Other Applicable Permits** – All entitlements and conditions of approval associated with prior onsite development approved by the City of Thousand Oaks (OTP 919, Z 90-659, DP 92-695 and DP 92-695 Minor Modification No. 1) are rescinded, voided and of no further effect. The property's Title Report is to be updated to remove references to Covenants, Agreements and Declarations required by the permits which are rescinded, voided and of no further effect.

ENVIRONMENTAL MITIGATION MEASURES

16. **Mitigation Compliance** – All applicable mitigation measures contained in Appendix C of the Thousand Oaks Boulevard Specific Plan (SP-20, Amended August 2016) and Addendum to EIR No. 327 shall apply to this entitlement. Prior to the issuance of any grading or building permit, the applicant shall submit a written report demonstrating that all mitigation measures imposed by the City to either reduce or avoid significant environmental impacts identified in Addendum to the EIR No. 327 have either been incorporated in the project design or undertaken as required. Final determination of compliance with imposed mitigation measures pursuant to the requirements of Section 21081.6 of the Public Resources Code shall in turn be subject to the review and approval of the Community Development Department.

CULTURAL RESOURCES

17. **Archaeological Discovery Protocol** – Impacts to cultural resources shall be minimized through implementation of pre- and post-construction tasks. Tasks pertaining to cultural resources include the development of a Cultural

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Resource Monitoring and Inadvertent Discovery Plan (Cultural Resources Plan). The purpose of the Cultural Resources Plan is to outline a program of appropriate monitoring as well as treatment and mitigation in the case of an inadvertent discovery of cultural resources during ground-disturbing phases (including, but not limited to, pre-construction site mobilization and testing, grubbing, removal of soils for remediation, construction ground disturbance, construction grading, trenching, and landscaping) and to provide for the proper identification, evaluation, treatment, and protection of any cultural resources throughout the duration of the Project. This Cultural Resources Plan shall define the process to be followed for the identification and management of cultural resources in the Project area during construction. The Cultural Resources Plan shall be provided to the Santa Ynez Band of Chumash Indians for review and comment. The existence and requirement to comply with the Cultural Resources Plan shall be stated on all Project plans intended for use by those conducting the ground-disturbing activities.

18. **Conditional Archaeological and Tribal Monitoring** – Prior to the issuance of a grading or other permit allowing ground disturbing construction activities, the Applicant shall retain a Native American monitor approved by the Santa Ynez Band of Chumash Indians and a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, to oversee the archaeological monitoring of initial (first movement of soils within each ground disturbance location at complete horizontal and vertical extents) ground disturbances that occur in native soils either through fulltime or spot monitoring as determined by intact native soils would only exist within the Building C footprint and only between 7.5 to 16 feet below ground surface. The qualified archaeologist should oversee and adjust monitoring efforts as needed (increase, decrease, or discontinue spot monitoring frequency) based on the observed potential for construction activities to encounter cultural deposits. The archaeological monitor should be responsible for maintaining monitoring logs. Following the completion of construction, the qualified archaeologist should provide an archaeological monitoring report to the City, the Santa Ynez Band of Chumash Indians and the South Central Coastal Information Center with the results of the cultural monitoring program.
19. **Inadvertent Discovery of Archaeological Resources** – In the event that archaeological resources (sites, features, or artifacts) are exposed during ground disturbing activities for the Project, all construction work occurring within 100 feet of the find should immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, can evaluate the significance of the find and determine whether or not additional study is warranted. Depending upon

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the significance of the find under the California Environmental Quality Act (14 CCR 15064.5(f); California PRC Section 21082), the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work, such as preparation of an archaeological treatment plan, testing, or data recovery, may be warranted. If Native American resources are discovered or are suspected, the Native American monitor shall be notified and as dictated by California Health and Safety Code Section 7050.5, California Public Resources Code Section 5097.98, and CEQA Guidelines Section 15064.5(e).

20. **Discovery of Human Remains** – If human remains are encountered during implementation of any phase of the project, the project archaeologist shall temporarily divert or redirect excavation activities in the vicinity of the find in order to make an evaluation of the find and notify the City and Santa Ynez Band of Chumash Indians within 24 hours of the find. In the event that human remains are inadvertently encountered during construction activities, such resources would be treated in accordance with state and local regulations that provide requirements with regard to the accidental discovery of human remains, including California Health and Safety Code Section 7050.5, California Public Resources Code (PRC) Section 5097.98, and CEQA Guidelines Section 15064.5(e). In accordance with these regulations, if human remains are found, the County Coroner must be immediately notified of the discovery. No further excavation or disturbance of the Project Site or any nearby area reasonably suspected to overlie adjacent remains can occur until the County Coroner has determined, within 2 working days of notification of the discovery, if the remains are potentially human in origin. If the County Coroner determines that the remains are, or are believed to be, Native American, he or she is required to notify the Native American Heritage Commission (NAHC) within 24 hours. As required by PRC Section 5097.98, the NAHC will notify the person or persons it believes to be the Most Likely Descendent (MLD) from the deceased Native American. The MLD must follow the procedures and preliminary treatment options in the Cultural Resource Monitoring and Inadvertent Discovery Plan (CRMDP) and make a recommendation to the City and Santa Ynez Band of Chumash Indians for means of treating, with appropriate dignity, the human remains, and any associated grave goods as provided in PRC Section 5097.98. If more than one MLD is designated for the Project by the NAHC, each MLD shall be consulted regarding the handling of the human remains, and any associated grave goods and/or burial related soils. Burial associated grave goods and soil shall be reinterred with the associated burial.

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BIOLOGICAL RESOURCES

21. **Nesting Bird Survey** – If project activities (i.e. demolition, grading, construction, landscaping, tree encroachment, pruning and/or removal, etc.) occur between February 1st and September 1st, a breeding bird survey is required to be conducted and active nests shall be avoided with a minimum buffer distance as determined by a qualified biological monitor. To prevent disturbance of any active nests, a 300-foot radius for raptors and 100-foot radius for all other bird species is required until all juveniles have fledged, or the nest is abandoned.

AIR QUALITY

22. **Air Filtration Requirements** – Prior to issuance of a certificate of occupancy the project must demonstrate compliance with California's Building Energy Efficiency Standard (24 CCR, Part 6, Subchapter 7, Section 150.0) which limits particulate infiltration by installing and maintaining air filtration systems equal to or exceeding the identified filter efficiencies as defined by the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) Standard 52.2. All filtration devices provided must meet the minimums identified in Project Freeway Health Risk Assessment dated February 2024. The leasing office shall provide notification/disclosure to all future residents of the project site of the potential risk from the I-101 Freeway related to the increased risk of exposure to diesel particulates from the freeway when windows/doors are open and when outside at the recreation areas.

BUILDING SAFETY AND CONSTRUCTION

23. **Condition Execution** – Compliance with and execution of all conditions listed herein shall be necessary prior to obtaining final building inspection clearance and/or prior to obtaining any occupancy clearance, unless stated otherwise herein. Deviation from this requirement shall be permitted only by written consent of the Community Development Director or designee.
24. **Final Plans** – Prior to the issuance of a building permit, final site, grading, floor, elevation and roof plans shall be submitted for the review and approval of the Community Development Department. Said plans shall incorporate any design change and other requirement as conditioned herein.
25. **Approval Inclusion** – The following shall apply:
- a. This approval, in its entirety as adopted, shall be included in the initial plan-check submittal that is submitted to the Building Division. The

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approval and conditions shall be copied directly onto plan sheets and included as part of the project plans throughout the plan-check process and shall be part of the project plans for which building permits are issued.

- b. All agreements, development standards, use allowances contained in SP-20 and DAGR 2023-70001 shall apply to this approval.

- 26. **Preconstruction Meeting** – Prior to issuance of a grading permit, the applicant shall coordinate with the Community Development and Public Works Departments including, a preconstruction meeting at the job site to review field conditions, project conditions, methods and procedures, individual and City department responsibilities associated with the project. Members attending this meeting shall include but not be limited to City department representatives, City landscape consultant/arborist, owner or designated project coordinator, architect, project consultants, project landscape consultant general contractor and other representatives associated with the project. The meeting shall be arranged no sooner than one (1) week prior to commencement of work.
- 27. **Construction Progress** – Once permits have been issued to commence work on the improvements, it is the applicant's/owner's responsibility to diligently pursue completion per all conditions, requirements and as represented on the approved plans. Reasonable progress shall occur on a continual basis until completion to the satisfaction of the Community Development Director. Work shall not be discontinued for a period exceeding 30 days, without acceptable cause. The intent is to have the project completed in a timely fashion to prevent a potential blight from partially completed construction.
- 28. **Phasing** – The project shall be graded and constructed in a single phase as specified and in accordance with the parameters contained in the recorded Development Agreement (DAGR 2023-70001).
- 29. **Hours of Construction** – All grading and construction activities shall be limited to the hours of 7:00 a.m. to 7:00 p.m., Monday through Saturday with no construction activity permitted on Sunday. Construction workers and vehicles shall not be permitted to congregate in the residential neighborhood or onsite before and after the construction hours authorized herein. Likewise, warming of equipment engines shall not be permitted outside the allowable construction hours.
- 30. **Construction/Security Fencing** – Prior to the issuance of a grading/building permit, the applicant shall install a temporary five (5) foot high chain-link fence within the limits of the proposed development area.

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Said fencing shall be provided for purposes of maintaining security, as well as containing trash and debris on-site. The fence shall remain in place during all phases of construction and shall be maintained until no longer needed for trash and debris control as determined by the Community Development Department. The applicant shall be responsible for pick-up of trash and debris on a weekly basis during building construction operations.

31. **Occupancy** – No final inspection or final occupancy permit shall be granted until construction and landscaping are complete in accordance with the approved plans and the conditions required herein.
32. **City's Recycling Program** – The project's owner shall participate in the City of Thousand Oaks recycling program, which collects cardboard, plastics, glass and mixed paper and shall attempt to use post-consumer building materials (recycled products) whenever possible in the construction of the project.
33. **Rodent Control** – The applicant shall submit a rodent control plan to the Community Development Department prior to the issuance of any building permit, which shall include measures to protect adjacent and nearby properties from any rodent displacement during the project demolition and construction activities.
34. **Parking/Materials Storage During Construction** – All construction equipment, materials, and related contractor vehicles shall be located on-site during all phases of development.

GRADING

35. **Final Detailed Grading, Paving and Drainage Plan Submittal** – Prior to issuance of a grading permit, a final detailed grading, paving and drainage plan demonstrating compliance with all imposed conditions of this Development Permit shall be submitted for review and approval by the Community Development and Public Works Departments.
36. **Certified As-Built Grading** – Prior to issuance of a building permit, a rough grading completion certification on the City standard form, shall be prepared and signed by the applicant's Civil Engineer and submitted to the Public Works Department. Said certificate shall state that the graded pad design and pad elevations are consistent with the pad elevation and grading details shown on the conceptual grading plan, and grading plan/exhibits labeled "Project Plan Set," date stamped February 15, 2024.

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37. **APCD Permit** – The applicant shall obtain all necessary clearances from the Ventura County Air Pollution Control District (APCD) prior to beginning any construction activity.
38. **Dust Prevention** – In order to prevent excessive amounts of fugitive dust, all materials excavated (on-site) shall be controlled for with Ventura County Air Pollution Control District methods, which includes adherence to Rule 50 (Opacity) that sets opacity standards on the discharge from sources of air contaminants. This rule would apply during construction of the proposed project, specifically grading activities, Rule 55 (Fugitive Dust) that requires dust generators to implement control measures to limit the amount of dust from vehicle track-out, earth moving, bulk material handling, and truck hauling activities, and Rule 55.2 (Street Sweeping Equipment) that requires the use of PM₁₀ efficient street sweepers for routine street sweeping and for removing vehicle track-out pursuant to Rule 55. The project is to comply with the City of Thousand Oaks Water Conservation Ordinance Requirements. Level 4 Conservation Measures prohibit potable water use for dust suppression unless approved through a City waiver. For more information see: <https://www.toakswater.org/conservationstages>.
39. **Exporting/Importing Earth Materials** – Any exporting or importing of earth material and debris shall be authorized by permit issued by the Public Works Department. The developer shall comply with an approved haul route to and from the project site and shall coordinate the hauling of this material with the Public Works and Community Development Departments to minimize traffic disruptions and disturbances to the project area. The exporting and importing of any earth materials to new sites within the jurisdiction of the City of Thousand Oaks shall be subject to the review and approval by the Planning Commission unless such sites have previously been approved for development with an active entitlement, and said grading is in accordance with Public Works Department approved plan for the project.

COMMUNITY DEVELOPMENT DEPARTMENT –

CONDITIONS FOR SUP 2023-70011

BUILDING FORM AND ARCHITECTURAL DESIGN

40. **Architectural Building Design** – Unless otherwise modified herein or within the Development Agreement, the architectural design shall comply with the building plans as shown in the attachments labeled “Project Plan Set,” dated February 15, 2024, and attached to the Planning Commission staff report dated February 15, 2024. Prior to the issuance of a building

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permit, fully dimensioned and detailed architectural drawings shall be submitted for review and approval by the Community Development Department, with all elevations coordinated with color, materials, and architectural form to achieve design harmony and continuity.

41. **Colors and Materials Board** – All exterior materials and colors shall match or be upgraded from those depicted on the exhibits labeled “Project Plan Set,” date stamped February 15, 2024 and as conditioned herein, subject to review and approval of the Planning Division of the Community Development Department. Changes to materials which are not comparable or better must be approved by the Planning Commission. Prior to the issuance of a building and/or grading permit, a final color and materials sample board, including, but not limited to, specific materials and paint manufacturer colors, shall be submitted for the review and approval by the Community Development Department. The applicant shall indicate the type of finish on the revised plans and materials and colors sample board.
42. **Front, Side, and Rear Yard Setbacks** – All structural and landscape setback requirements from property line shall be provided as depicted on the submitted “Project Plan Set” dated February 15, 2024, as required in Thousand Oaks Specific Plan (SP-20), and as follows:

Building Setbacks			
Building A	Required (ft.)	Proposed (f.t)	Complies
Front (North):	First Floor Maximum: 15	98.5	Yes (Concession)
	Third Floor Average: 10	10	Yes
	Fourth Floor: N/A	110	N/A
Right (West):	First Floor Minimum: 10	12.58	Yes
Building B	Required	Proposed	
Front (North):	First Floor Maximum: 15	15	Yes
	Third Floor Average: 10	10	Yes
	Fourth Floor: N/A	32.6	N/A
	Fifth Floor: N/A	215	N/A
Left (East):	First Floor Minimum: 10	15	Yes
Rear (South)	First Floor Minimum: 10	56.16	Yes
Building C	Required	Proposed	
Right (West):	First Floor Minimum: 10	10	Yes
	Fourth Floor: N/A	21.33	N/A
	Fifth Floor: N/A	31.5	N/A
Rear (South)	First Floor Minimum: 10	10	Yes
	Fifth Floor: N/A	20	N/A

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43. **Building Heights** – The maximum building heights shall be provided as shown on the elevation plans as shown in the “Project Plan Set,” dated February 15, 2024. The average height shall not exceed 45 feet and absolute maximum height at any point from adjacent finished grade shall not exceed 62 feet.
44. **Façade Articulation** – Façade articulation, including setbacks, material offsets as well as significant, major, and minor massing breaks shall be provided as show in the “Project Plan Set” dated February 15, 2024.
45. **Building Design** – Unless otherwise modified herein or within the associated Development Agreement, the proposed design of the building shall be constructed substantially as depicted on the building elevations and perspectives as shown in exhibits labeled “Project Plan Set,” dated February 15, 2024, including but not limited to:
 - a. Building B west building façade length shall incorporate a courtyard at the midpoint of the building and extending no less than 215 feet from the front property line. The courtyard is necessary to accommodate massing break for the building.
 - b. Northeast portion of Building A shall include a minimum of 1,500 square feet of commercial area.
 - c. Increased 4th and 5th floor setbacks, as provided in the Buildings Setback Table above.
46. **Building Colors/Materials and Elevations** – Unless otherwise approved by the Community Development or within the associated Development Agreement, the proposed design of the building shall be constructed substantially as depicted on the building elevations and perspectives as shown in exhibits labeled “Project Plan Set,” dated February 15, 2024, including but not limited to:
 - a. Provision of heavy-gauge, decorative screening material for parking garage openings.
 - b. Fiber cement wood tone siding at Building B parking garage opening.
 - c. Enhanced architectural building materials shall be provided on the north and west buildings elevations as shown in exhibits labeled “Project Plan Set” dated February 15, 2024, and including but not limited to:
 - i. Textured or dimensional brick veneer;
 - ii. Fiber cement siding;
 - iii. Corrugated metal paneling;
 - iv. Fiber cement wood siding; and
 - v. Stucco shall be permitted on the remainder of the project.

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47. **Window Design** – Window recesses, insets, trim and other window elements shall be designed as shown in exhibits labeled “Project Plan Set” dated February 15, 2024, including but not limited to:
 - a. Windows shall be recessed at a minimum depth of at least two inches (2”) from glass face to wall edge around the windows if there is no trim.
 - b. Windows shall be inset a minimum of two-inches and include a decorative trim element.
48. **Window Materials** – Windows frames must be made of vinyl, or aluminum, fiberglass, wood, or manufactured wood; or another material with a wood grain texture finish as reviewed and approved by the Community Development Department.
49. **Window Divided-Lites/Mullions** – Divided-lite windows, where utilized, must consist of true/full divided-lites or simulated divided-lites, in accordance with the following standards:
 - c. Muntins or grids must project at least three-eighths of an inch (3/8”) from the glass surface.
 - d. Muntins or grids must be used on both the exterior and interior of the glass.
 - e. For simulated divided-lites, spacers must be used between panes.
50. **Storefront Window Area** – A minimum of 65% of the commercial storefront façade provided shall have transparent window area and minimum three-inch recess as shown in the “Project Plan Set” date stamped February 15, 2024.
51. **Residential Direct Outdoor Primary Access** – Primary entrances to first-floor residential units with direct exterior access shall be provided as shown on plans date stamped February 15, 2024.
52. **Emergency Exit/Service Doors** – All exterior emergency exit and service doors as viewed from public streets shall be decorative and located in recessed vestibules of sufficient depth to accommodate the installation of overhead recessed security light fixtures. Other doors not viewed from public streets may be illuminated by either the same method or by the installation of decorative architectural light fixtures. Said doors shall be operated from the inside with appropriate approved hardware and shall be alarmed. No exposed hardware including door latches shall be permitted on the exterior surface of any door. Any access from the exterior shall be limited to key activated hardware locks only. All such doors shall be painted or treated a color to match the adjacent exterior finish of the building or as approved herein. Design and location of all doors shall be subject to review and approval by the Community Development and Police Departments.

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53. **Flat Roof Areas** – Flat roof areas and parapet walls exposed to view from surrounding areas shall be color-coded to blend with the exterior wall finishes, subject to the review and approval of the Community Development Department.
54. **Exterior Trash Enclosures** – Exterior trash enclosures shall consist of solid masonry walls plastered to match the building's exterior with metal gates set in metal frames and shall be protected with a solid overhang roof structure subject to review by the Community Development Department and Public Works Departments. Trash enclosure areas shall be designed in accordance with the City's adopted trash area design criteria. Trash enclosures will be constructed to have outside visibly to reduce the possibility of camping or sleeping in the area. Prior to the issuance of a building permit, the developer is to provide a signed letter from the City's solid waste service provider to the Community Development Director and Public Works Director confirming the trash enclosure has been designed consistent with their operational needs. Prior to the issuance of a building permit, the final design and locations for trash enclosure areas shall be submitted for review and approval by the Community Development and Public Works Departments.

During the project's operational phase, exterior trash enclosures shall be kept closed and locked during non-business hours to discourage, loitering, illegal dumping and theft.

55. **Outside Storage** – No outside open storage of any kind shall be permitted on the site, including recycled materials, packaged materials or materials within containers. There shall be no outside containers for the purposes of storing items, such as cargo containers, unless otherwise approved through an evaluation process set by the Community Development Department Director including any necessary noticing requirements and documents deemed required by the Director.
56. **Roof Access** – Access to the building roof shall only be from the interior of each building and shall be secured with appropriate hatches and locked when not being used.. Exterior ladders are prohibited. Design, location and security requirements of said access shall be subject to approval of the Community Development Department and the Police Department.
57. **Downspouts** – Downspouts shall be avoided or concealed within the building walls at specific feature corner elements, such as the commercial/retail corner or any façade viewable from Thousand Oaks Boulevard. Any downspout not concealed within the building walls must be painted to match the wall behind.

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58. **Roof-Mounted Mechanical Equipment** – All roof-mounted mechanical equipment, including air conditioning, roof fans and any other similar equipment, as well as roof ladder protrusions, shall be located within the mechanical equipment enclosures as depicted on “Project Plan Set,” date stamped February 15, 2024. Said equipment shall be screened from public view including Thousand Oaks Boulevard, Lombard Street, 101 Freeway, and from properties adjacent to and within the project site. Roof screening treatment shall be designed in a manner that is integrated with the building design.

Prior to issuance of a building permit, final detailed cross-section drawings, studies, equipment manufacturer’s catalogue cuts, brochures, specifications and specific exhibits and roof equipment locations shall be submitted for the review and approval of the Community Development Department. After installation if any roof mounted equipment is visible from public view, additional screening will be required. The design and extent of said screening shall be subject to the review and approval of the Community Development Department.

59. **Surface-Mounted Mechanical Equipment** – All surface-mounted mechanical equipment, including transformers, terminal boxes or meter cabinets, shall be screened by landscaping or enclosed by solid decorative masonry walls or stucco wood frame and solid wood gates of a material which is integrated into the character and materials of the project and/or surrounding landscaping design subject to the review and approval of the Planning Division of the Community Development Department and other City utility providers.

60. **Utility Lines** – All new utility service lines shall be installed underground.

61. **Existing Overhead Utility Poles and Utility Lines Undergrounding** – Prior to the issuance of a Certificate of Occupancy, the existing 66KV and all other associated overhead utility lines located within the project site and adjacent to the project site along East Thousand Oaks Boulevard shall be installed underground, as set forth in the Development Agreement DAGR 2023-70001. All existing utility poles shall also be removed, other than the riser pole at the southern edge of the property, and a riser pole on either the north side of Thousand Oaks Blvd (or at Hillcrest Drive), in accordance with DAGR 2023-70001. The undergrounding of SCE overhead utility poles and utility lines will extend north along Hodencamp Road under the terms of DAGR 2023-70001 unless the City and Applicant, Owner or any other party assigned the rights to the project approvals agree to alter the undergrounding plan under the terms of the development agreement. City and any party subject to these conditions will enter into a reimbursement agreement for the cost of undergrounding as set forth in DAGR 2023-70001.

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62. **Backflow Device** – Any proposed backflow device shall be screened from public view, subject to review and approval by the Community Development and Public Works Departments.

PARKING, ACCESS, AND DRIVEWAY

63. **Required Parking** – A minimum of 475 total parking spaces shall be provided for the project, consisting of 48 commercial spaces, 408 residential spaces, and 19 “surplus” guest parking spaces, as shown on site within “Project Plan Set,” date stamped February 15, 2024. A maximum 50% reduction of surplus guest parking spaces may be permitted upon review and approval of the Community Development Department. The commercial and residential parking shall be spatially distinct and independent of each other. All parking spaces and driveway aisles shall be designed in accordance with Section 9.4-2404 of the Municipal Code and SP-20. Any minor change to parking or future development on the subject property shall be reviewed and evaluated by the Community Development Department. Any substantial change may require the filing of a modification application to be considered by the Planning Commission.

64. **Buildings B and C Parking Garage Design** – The floor level above the parking structure shall not exceed six (6) feet above finished grade for more than fifty (50%) percent of the perimeter and shall not exceed twelve (12) feet above finished grade at any point, as shown on site within “Project Plan Set,” date stamped February 15, 2024.

Any exposed elevation associated with the below-grade parking structure shall be designed to reflect architectural compatibility with existing or proposed structure. Any above-grade, visible portions of the exterior elevations of the below-grade parking structure shall be designed to minimize the use of blank facades through the combined use of appropriate architectural treatment such as heavy textured concrete, planters, openings, indentations, and projections of exterior walls to provide visual interest. at least 20% of the daylighting portion of the garage, must consist of windows or other openings.

65. **Parking Striping** – All parking spaces shall be identified with double four inch (4") wide stripes at sixteen inches (16") on center as specified in Section 9-4.2404(a)(2) of the Thousand Oaks Municipal Code.
66. **Multi-Family Residential Compact Parking** – Maximum permitted compact parking spaces shall not exceed thirty-five percent (35%) parking spaces based on the total parking requirements as indicated under Section 9-4.2404(d)(1)(i). No overhang compact parking space shall be permitted within five (5) feet of any vertical obstruction.

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67. **Commercial Compact Parking** – Maximum permitted compact parking spaces shall not exceed twenty-five percent (25%) parking spaces based on the total parking requirements as indicated under Section 9-4.2404(d)(1)(iii). No overhang compact parking space shall be permitted within five (5) feet of any vertical obstruction.
68. **Parking Stall Dimensions** – The dimensions and design of all standard (non-compact or ADA) parking stalls shall be installed as required in Article 24, Chapter 4, of Title 9 of the Thousand Oaks Municipal Code. Parking stall lengths for stalls that overhang a landscape planter shall be reduced from twenty (20) feet to a depth of eighteen (18) feet to allow the remaining two (2) feet to be converted to landscaping. A width of nine (9) feet shall be required for all parking spaces.
69. **Parking Stall Clearance** – Parking spaces located adjacent to walls must be at least one (1) foot wider to accommodate door opening clearance and vehicle maneuverability. Parking located adjacent to columns within a parking structure also must be one (1) foot wider except for columns placed within four feet of the front or back of a stall.
70. **Parking Overhang/Path of Travel** – Where head-in parking spaces are located adjacent to a path of travel, the minimum path of travel sidewalk width shall not be less than seven (7) feet to accommodate a minimum clear sidewalk width of four (4) feet, allowing three (3) feet for the parking overhang.
71. **Loading Zone** – One loading zone at Building B, shall be provided and maintained. The loading zone shall be not less than twelve (12) feet in width by twenty-five (25) feet in depth by fourteen (14) feet in height pursuant to TOMC Section 9-4.2405.
72. **Temporary Parking Area** – A designated temporary parking area to accommodate pick-up and/or drop-off activities by delivery and rideshare companies, (i.e. DoorDash®, Uber®, Lyft®, Relay Rides®, etc.) shall be provided at the northeast corner of Building C. Appropriate curb designations and signage indicating the hours of operation shall be provided to ensure this area is utilized for these short-term uses and not for the parking of vehicles. All signage is subject to review and approval by the Public Works and Police Departments.
73. **Parking Restriction** – No parking space shall be utilized for overnight storage of vehicles, other than tenant vehicles.

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74. **Parking Management Program** – Prior to occupancy of the project, a Parking Management Program shall be designed and submitted to ensure that proper parking assignments for tenants, guests, and employees are established within the parking structure and designated exterior spaces, as well as address timing and procedures for moving activities and moving-related vehicles/vans for all residential, commercial tenants and live/work units.

All parking stalls within below-grade parking structures shall be designed for the use of owners, tenants, residents, and employees only. A physical barrier shall be provided separating residential and commercial parking stalls.

As part of the Parking Management Program, the applicant shall provide appropriate signage and develop an action plan to prevent parking from spilling off-site onto adjacent locations/properties and prevent residential use of exterior parking spaces intended for the commercial operations on the site. Said program shall be subject to the review and approval by the Community Development, Public Works and Police Departments.

75. **Pedestrian-Friendly Roadway Design** – The internal roadway shall provide raised crosswalks, utilize cast in place concrete with enhanced finish (such as topcast and sawcut patterning), and install bollards as shown on the “Project Plan Set” dated February 15, 2024. Final materials and design shall be subject to review and approval by the Community Development, Public Works, and Fire Departments.

76. **Decorative Sidewalk Treatment** – The use of decorative material such as rock, tiles, pavers, cast in place concrete with enhanced finish, or similar patterned material shall be provided at the pedestrian entrance(s) to each building, including but not limited to pedestrian access from Thousand Oaks Boulevard and the commercial uses, as well as between Lombard Street Boulevard and Building A. The materials and colors shall be submitted to the Community Development Department for review and approval prior to issuance of building permits. The installation and materials shall comply with ADA and Title 24 disabled access requirements for path-of-travel areas.

77. **Pedestrian Walkways** – The applicant shall utilize a decorative and contrasting surface material and/or color, such as cast in place concrete with enhanced finish, for the pedestrian building entrances and internal road cross-walks, as depicted within the “Project Plan Set,” date stamped February 15, 2024. The materials and colors shall be submitted to the Community Development Department for review and approval prior to issuance of building permits. The installation and materials shall comply with ADA and Title 24 disabled access requirements for path-of-travel areas.

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78. **Driveway Entrances** – The project's two-way driveway aisle entrances from Thousand Oaks Boulevard and Lombard Street shall be composed of decorative paving materials (such as at-grade cast-in-place concrete with enhanced finish), subject to the review and approval by the Community Development and Public Works Departments.
79. **Driveway and Parking Lot Grades** – The driveway and parking lot shall be designed as depicted on grading within "Project Plan Set," date stamped February 15, 2024. All parking lot areas shall have a maximum gradient slope of 2.5% and parking spaces shall have a maximum cross-slope of 2%. All driveways including exterior and interior shall have a slope no greater than 7% and each ramp in the parking garage shall not exceed a maximum of 10% gradient as specified under Section 9-4.2405(a) of the Municipal Code unless otherwise approved by the Community Development and Public Works Departments.

LANDSCAPING

80. **Parking Lot Shade Coverage** – The applicant shall provide ten (10%) percent shade coverage in all surface parking areas within fifteen (15) years per Section 9-4.2409(a)(6)(i) of the Municipal Code. .
81. **Parking Lot Finger Planters** – A tree shall be planted at the ends of each finger planter per Landscape Guidelines Resolution No. 2007-116 as depicted within the "Project Plan Set," date stamped February 15, 2024.
82. **Added Landscaping for Compact Parking and Parking Structure** – The project shall provide a minimum 5 feet of landscaping anywhere the parking garage daylights. An alternate landscaping proposal (considering size, quantity, tree type, siting) shall be reviewed and approved by the City of Thousand Oaks Community Development Director during plan check.
83. **Garage Screening** – The perimeter of any below-grade parking structure, above grade, visible to view, shall be provided with a landscape planter of at least five (5) feet in width at ground level unless otherwise recommended or required by the Community Development Department, including the Building Division.
84. **Landscape Design Compliance/Approval** – All landscaping and irrigation improvements shall be designed and installed in accordance with the City's Guidelines and Standards for Landscape Planting and Irrigation (Resolution No. 2007-116). All landscape plans shall demonstrate compliance with the State of California Model Water Efficiency Landscape Ordinance (MWEL0).

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Complete landscape and irrigation plans reflecting compliance with all imposed conditions of project entitlements shall be submitted and receive final decision prior to the issuance of any grading permit and building permits. Said plans shall be subject to review and approval by the Community Development and Public Works Departments.

The location of light fixtures shall be shown on the landscape plans to ensure no conflict occurs between placement of trees/shrubs and light fixtures and to avoid plant growth interference with the level of illumination. The use of reclaimed water for landscaping where available is encouraged.

85. **Landscaping and Irrigation** – Landscaping shall be designed using xeriscaping techniques; i.e. drought-tolerant low water-using plants and as allowed in SP-20. The use of lawn, grasses, and turf shall be minimized. Landscape irrigation systems shall likewise be designed using low-output sprinklers and/or drip automatic timed controls.
86. **Landscape Planters** – All landscape planters and fingers shall be planted with shrubs, trees and flowers subject to the review and approval of the Community Development Department. Trees planted on the podium will be installed in either raised planters constructed of masonry or cast in place concrete, or in depression cast into the podium deck as depicted within the "Project Plan Set," date stamped February 15, 2024. A minimum of 42" of soil depth and minimum horizontal dimension of 2 times the root ball must be provided unless otherwise approved by the City landscape consultant and Building Division.
87. **Landscaping Material Selection** – All new landscaping treatment shall consist of combinations of minimum fifteen (15) gallon, twenty-four inch (24"), thirty-six inch (36") and forty-eight inch (48") box size deciduous and evergreen trees as well as five (5) and fifteen (15) gallon shrubs. Larger size trees may be required to complement the building's facades. The type of landscaping material shall be selected in a manner that blends with existing landscaping treatment in the area. The specific size, number and species of plant materials used shall be included on the landscape plans subject to review and approval by the Community Development Department.
88. **Final Landscape Plans** – The submitted preliminary landscape plan is approved in concept only. Prior to the issuance of a grading and building permit, final construction landscape and irrigation plans reflecting compliance with all imposed conditions of project entitlements shall be submitted under separate permit for review and approval by the Community Development Department through a Landscape Plan Check application.

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Any landscape and irrigation improvements shall be designed and installed in accordance with the City's Guidelines and Standards for Landscape Planting and Irrigation Plans (Resolution No. 2007-116).

89. **Public Exterior Space and Common Amenity Space** – Potted landscaping and built-in tree wells shall be provided within the exterior public space and common amenity areas as shown on the conceptual landscape plan within the "Project Plan Set," dated February 15, 2024. Said plant materials shall be incorporated on the required final landscape plan.

FENCES, AND WALLS

90. **Existing Chain-link Fencing** – Any existing chain-link fencing shall be removed, but may be re-used as temporary construction fencing and repositioned in order to preserve and protect on-site oak and landmark trees as determined by the Project's Tree Consultant and the Community Development Department.
91. **Wall/Fence/Gate Design** – All walls, fences, and gates shall be constructed of decorative material(s) that match the materials and style of the primary buildings. Final detailed drawings of all walls and fencing including elevations, material selections and site plan locations shall be submitted prior to the issuance of any building permit, subject to review and approval of the Community Development and Public Works Departments. Chain link fencing is not approved for any wall, fence or gate.
92. **Screen Walls or Hedge** – Screen walls along the eastern and southern property lines shall provide a decorative cap detail along the entirety of the wall(s) and painted to match the new development prior to final occupancy. Prior to the issuance of a grading permit, such design shall be submitted for review and approval by the Community Development, Public Works Department, and Caltrans.
93. **Retaining Walls** – Retaining walls along the eastern and southeastern property lines shall consist of masonry with stucco slim coat material, pilasters at 40-foot intervals, and decorative cap. All other retaining walls shall be constructed of a decorative masonry material with a decorative cap that match the materials and style of the primary buildings. All retaining walls shall be limited to a maximum exposed height of six (6) feet, unless otherwise authorized by the Community Development and Public Works Departments for purposes of lessening the amount of grading without negatively impacting public views of the property. In no case shall retaining walls exceed twelve (12) feet. All retaining walls shall incorporate the design and materials utilized on the buildings and be softened by the installation of

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landscaping adjacent to the wall. Where such walls are exposed to public view, pilasters and/or horizontal articulation of varying depths shall be provided to break up a long linear monotonous appearance. The design and location of all retaining walls shall be subject to review and approval of the Community Development and Public Works Departments.

LIGHTING

94. **Site Illumination** – Site illumination within the project shall be designed in a manner that is uniform in design and appearance. Parking lot illumination shall be designed in accordance with the City's parking lot standards and compliance with the California Building Codes applicable at the time of issuance of the permit. Review and approval of such lighting shall be processed under a separate permit. Special design features within these fixtures shall include flat lens and shielding devices to avoid an over-intensification of illumination, to direct the illumination in a downward direction (full cut-off) and to eliminate any spillover of light into adjacent properties and past the centerline of public streets.

All pole lighting utilized shall not exceed 14 feet in height and shall be provided with concrete pedestals finished to complement the earthtone colors of the buildings as shown on site within "Project Plan Set," date stamped February 15, 2024. All pedestals shall be painted the same color which shall complement one of the main wall colors of the buildings, subject to the review and approval of the Community Development Department. Where pedestrian walkways occur, the height of these fixtures may be reduced in proportion to human scale.

Use of bollard type lighting for safety adjacent to driveways is also encouraged for pedestrian traffic circulation. All lighting attached to these features shall be decorative, oriented in a downward direction, and downward shielded. Prior to issuance of a parking lot electrical permit, a photometric analysis and light fixture catalogue cuts and specifications shall be submitted to the Planning and Building Divisions for review and approval.

95. **Photometric/Light Fixture Catalogues and Specifications** – All exterior lighting shall be processed under a separate permit. Prior to the issuance of any electrical and building permits for exterior lighting, a photometric analysis prepared by a registered Electrical Engineer and accompanied by light fixture catalogs, brochures, and specifications shall be submitted for review and approval by Building and Planning Divisions of the Community Development Department, as well as review by the Police Department.

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96. **Light Spillover** – Light spillover may not occur outside property boundaries or past the centerline of public streets.
97. **Restriction of Light Poles** – Light poles are prohibited at the ends of the landscape fingers as the end of landscape fingers are intended to be planted with trees to allow their canopies to cover drive aisles and parking spaces and to reduce the likelihood of a vehicle colliding with a light pole. The location of a light pole within a landscape finger is to be a coordinated effort between a landscape architect and a photometric engineer. Deviations from this prohibition shall be permitted only by written consent of the Community Development Director or designee.
98. **Decorative Lighting Above Public Area** – Low intensity lighting may be provided above and across the public exterior space.
99. **Lighting on Roof Top Terrace** – No roof illumination shall be permitted except as otherwise needed to comply with building security requirements. The design and location of such fixtures shall be subject to review and approval of the Community Development Department prior to the issuance of a building permit. The rooftop areas shall be illuminated with wall sconces and shall not extend beyond the height of the parapet. Additionally, the rooftop areas may be illuminated subject to the following:
 - a. Cut-off shields shall be installed/maintained on each side of the light fixtures visible from the parapet wall perspectives;
 - b. Motion sensors shall be installed to limit operation of the lighting to times activity is detected on the rooftop areas. Lighting shall be off when no activity is on the rooftop; and
 - c. Stand-alone light standards shall not exceed the height of the parapet.
100. **Wall Lighting** – Wall-pack type light fixtures at building entrance doors, loading areas, and outdoor areas within public view area shall not be permitted. Lighting may be provided by decorative downward shielded light fixtures, recessed in a downward direction from projecting canopies, recessed doorways, and window openings. Decorative architectural light fixtures shall be installed on the building walls. Light fixture cut sheets shall be submitted for review and approval by the Planning Division. Architecturally designed fixed pendant and bracket light fixtures are permitted. The use of such lighting shall be designed to create a uniform illumination generally in a downward direction and not create illumination hot spots on adjacent surfaces.
101. **Light Source** – The use of low-pressure sodium illumination; bright white, high intensity LED; or metal halide lighting is prohibited.

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SIGNS

102. **All Signs** – All site and building signage shall be designed to meet the Architectural Guidelines for Commercial Projects (Res. No. 2005-011), Precise Plan of Design Guidelines (Res. No. 2023-61), as well as Title 9, Chapter 4, Article 23 of the Municipal Code and SP-20. The design, color and location of all site and building signs as well as address numbers shall be processed under separate permits. Prior to the issuance of any sign permits, detailed plans shall be submitted for the review and approval of the Community Development Department.

AMENITIES

103. **Private Storage** – A minimum of 56 cubic feet of private enclosed storage area per unit, must be provided in garages, carports or patio areas must be provided as shown on the “Project Plan Set” dated February 15, 2024.
104. **Amenity Play Areas** – The project must provide three (3) open space play areas within the development consisting of one (1) for general use, one (1) for teenagers, and one (1) for younger children. The one play area for children shall include the following:
- a. Have a minimum dimension of 15 feet in any direction unless otherwise approved by the Community Development Director, and a minimum area of 600 square feet.
 - b. Play equipment for children under the age of five (5) must be included in child play areas.
 - c. The play area must be visible to as many units as possible to provide casual surveillance.
 - d. The play area must be separated from traffic and any adjacent streets or parking lots with a fence or other barrier at least four (4) feet in height.
 - e. Seating for adults that are accompanying younger children must be provided.
105. **Public Exterior Space** – The public space located in front of Buildings A and B shall utilize decorative paver stones. The outdoor public and open space area shall incorporate potted plant materials. The size, type, and location shall be identified on the formal landscape plan check review, subject to the review and approval by the Community Development Department.

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106. **Maintenance of Common Facilities** – All improvements within common areas of the project including lighting, landscaping, fences, walls, buildings, and other related features shall be properly maintained in accordance with conditions of this permit as well as all applicable ordinances and shall not be altered in any manner without prior approval of the City. Any alteration, removal, abandonment, or discontinuance without prior City approval shall constitute a violation of the Development Permit and conditions and shall be sufficient grounds for a Code Compliance action.
107. **Common On-Site Recreational Amenities for Residents** – The applicant shall provide common on-site recreation amenities for the exclusive use by the residents and/or their guests, which include a swimming pool and associated courtyard with seating areas, interior amenity/fitness room, roof terraces and seating courtyard area as shown on the site, floor and conceptual landscape plans in the “Project Plan Set” dated February 15, 2024.
108. **Common On-Site Recreational Amenities for Guests of Residents** – The applicant shall provide common on-site outdoor public amenities for guests of the project consisting of seating, public art, water feature(s), gardens and roof terraces as shown on the site, floor and conceptual landscape plans in the “Project Plan Set” dated February 15, 2024.
109. **Private Useable Open Space** – A minimum of 25% of residential units facing a street, alley or common interior courtyard must include a balcony, as shown in the “Project Plan Set” dated February 15, 2024. Each residential unit must have direct access to adjoining private open space reserved for the exclusive use of residents of the dwelling unit and their guests. Private open space for each unit must be a minimum of 24 square feet with a minimum dimension of six (6) feet.
110. The applicant shall submit a building cost analysis, including the cost for both buildings and provide on-site public art equivalent to 0.25 percent of the building cost, submit an equivalent in-lieu fee, or combination thereof equaling the required public art percentage value.

COMMERCIAL USES

111. **Notice to Tenants** – The management of the property shall include, as an addendum to all tenant leases, disclosure of the hours of operation for the commercial tenants, including the live/work units, and advisement of the potential for alcoholic beverage consumption and/or live entertainment and special events on the site.

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112. **Outdoor Dining Area Limitation** – Outdoor dining areas shall be subject to all requirements as specified in Section 9– 4.2523 of the Thousand Oaks Municipal Code except that no parking spaces are required for the first 500 square feet of outdoor dining per commercial unit. Any outdoor dining area more than 500 square feet shall require 1 space per 100 square feet (as required by SP-20).
113. **Outdoor Dining Enclosure** – Outdoor dining areas shall be reviewed in conjunction with any proposed future restaurants and the applicant shall submit a sample of the enclosure materials and colors for review and approval by the Community Development Department prior to installation.
114. **Advertising Prohibited on Furniture for Outdoor Dining Areas** – Tables, chairs and/or umbrellas within any outdoor customer dining area shall be consistent in materials with the design requirements for the commercial component of the project and shall not contain any advertising or signs.
115. **Outdoor Dining Furniture** – The design, colors, and materials of the furniture proposed for the outdoor customer seating area shall be subject to the review and approval of the Community Development Department. The applicant shall submit cut sheets and/or brochure information for review and approval by the Community Development Department.
116. **Path of Travel** – A minimum four (4) foot wide path of travel shall be maintained for pedestrian and disabled access circulation to and within any proposed outdoor customer seating area.
117. **Storefront Window Display Area** – Product display and product display window areas shall comply with the following standards:
 - a. The bottom of any window or product display window may not be more than three and one-half feet above the adjacent sidewalk.
 - b. Product display windows must have a minimum height of four feet and be internally lit.
118. **Commercial Operations** – Commercial-only use areas must include direct service to customers on site and may not include those businesses which only serve off-site customers through delivery services. All on-site commercial operations shall provide services from the tenant space to the public. No “delivery-only” operations are permitted.
119. **Delivery Hours** – Deliveries for the commercial uses shall be limited to the hours of 7:00 A.M. to 7:00 P.M., seven days a week. Should any verified complaint of a nuisance occur as a result of delivery hours and/or operations, the City may add or modify a project condition to change the delivery hours and/or operation to mitigate the nuisance.

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120. **Truck Deliveries** – Delivery vehicle engines shall be turned off during loading/unloading activities. Signage expressing this condition of approval shall be posted at designated loading areas.
121. **Live/Work Units** – The Community Development Director shall determine the appropriateness of all uses within the designated work/live unit. Other business operations requiring interpretation as a permissible use shall be considered by the Community Development Director through an appropriate permit process. The designated work/live units as shown on the “Project Plan Set” dated February 15, 2024 shall comply with the following:
- a. The work portion of the tenant space shall be limited to the designated work area within the first floor of the unit and exclusively operated by the occupant of the living area portion of the unit. No additional employees are permitted.
 - b. The commercial uses shall be restricted to business and professional offices with individual client programs, including, but not limited to, attorneys, insurance agents, accountants, design professionals, and similar uses with low volume customer traffic.
 - c. The following commercial uses are not permitted:
 - i. Any business involving medical, dental, physical therapy, or surgical use that requires additional parking other than allowed under this special use permit; or
 - ii. Any use that causes noise and/or vibration not typical of the ambient levels in the residential area.
 - d. Exterior signage shall be limited to one on– building non– illuminated sign that shall be centered horizontally and vertically above the tenant space entrance.
 - e. The work/live units shall not be combined or otherwise modified to increase the unit size.

AFFORDABLE HOUSING

122. **Affordable Housing Covenant** – Approval of this residential project is subject to execution of an Affordable Housing Covenant entered into between the Developer and City of Thousand Oaks. Said Affordable Housing Covenant shall incorporate the following conditions and is subject to approval by the City Attorney and Community Development Director.
- a. Affordable Housing Covenant shall be recorded prior to final building permit issuance. The covenant shall be recorded with the County of Ventura to provide notice and obligations to any future owners.
 - b. The Affordable Housing Covenant shall require 44 units as affordable units. 44 units will be preserved to households at the lower-income level of 80% of the Ventura County area median income.

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- c. Developer agrees to execute an Affordable Housing Covenant with City that provides for the on-going affordability of these 44 restricted units for 55 years from the date of the City's issuance of the final certificate of occupancy.
- d. The City may extend the affordable period if the owner does not comply with the Affordable Housing Covenant.
- e. Affordable Housing Covenant shall include the affordable housing site plan identifying the location of the specific affordable unit, bedroom size, and restriction level.
- f. Affordable units shall be comparable in exterior appearance and overall quality of construction to market-rate dwelling units in the same residential development. The design and appearance of the affordable units shall be compatible with the design of the market-rate units.
- g. Affordable units shall be proportional, in number of bedrooms and gross floor area of habitable space to the market rate units, including washer and dryer, and access to all amenities.
- h. Affordable units shall be dispersed throughout the mixed-use and multi-family residential buildings of the development in a manner acceptable to the City. The on-site resident manager's unit shall not be counted as one of the affordable units.
- i. The operation and maintenance of the affordable residential units shall comply with applicable property maintenance and habitability codes. The deed restriction/affordable housing covenant shall address operation and maintenance performance standards and schedules to ensure parity of operation and maintenance between the affordable residential units and the market rate units at all times.
- j. The Affordable Housing Covenant shall require the Developer to create an Affirmative Fair Housing Marketing plan to ensure that fair housing laws and practices are implemented.
- k. The Affordable Housing Covenant shall require the Developer and future owners to annually verify and certify household income as well as tenant's occupancy.
- l. The Affordable Housing Covenant shall require the Developer and future owners to submit to the City an annual report.
- m. The Affordable Housing Covenant shall be in compliance with the latest California State requirements.

The Affordable Housing Covenant shall be reviewed and approved by the Community Development Department and City Attorney's office prior to the issuance of a grading permit.

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CONDITIONS FOR PTP 2023-70067**

123. **Land and Application** – The Protected Tree Permit is granted for the land described in the application and any attachments thereto and as indicated on the Tree Location Map and part of the Protected Tree Report, dated January 2024 prepared by Dudek.
124. **Scope of Permit Approval** – The Protected Tree Permit is granted to allow the following:
- Removal of 17 Coast Live Oak (*Quercus agrifolia*) trees (Tree Nos. 3– 8, 10, 13-15, 17- 18, 22- 23, 36, 46 and 50);
 - Removal of 5 Valley Oak (*Quercus lobata*) trees (Tree Nos. 32, 40,43,51, and 52);
 - Encroachment into the protected zone of 6 Coast Live Oak (*Quercus agrifolia*) trees (Tree Nos. 9,16,29,30,35, and 37);
 - Encroachment into the protected zone of two (2) Valley Oak (*Quercus lobata*) trees (Tree Nos. 1 and 2); and
 - Encroachment into the protected zone of one (1) Holly Oak (*Quercus ilex*) trees (Tree No. 31).
125. **Preservation of Existing Oak and Landmark Trees** – The preservation of one coast live oak tree identified as trees numbered 20, one valley oak tree identified as tree numbered 21, and one holly oak tree identified as tree numbered 39 in the Protected Tree Report, is authorized under this permit. Appropriate work methods and monitoring are required as described in the Protected Tree Report dated January 2024, prepared by Dudek.
126. **Oak Tree Replacement** – The applicant shall provide two 24– inch box and one 36– inch oak replacement tree for each Coast Live Oak (*Quercus agrifolia*) tree removed. As such, a total of 64 mitigation trees are required:
1. 40 twenty– four (24”) inch box specimens, and
 2. 20 thirty– six (36”) inch box specimens.
 3. 4 sixty (60”) inch box specimens

Depending on nursery availability and project site size limitations, if different sized trees are proposed for installation, an alternate proposal (considering size, quantity, tree type and site) shall be reviewed and approved by the City of Thousand Oaks Community Development Director during plan check.

Prior to the Certificate of Occupancy being issued, if all of the replacement trees cannot fit on the developed project site, the applicant shall instead either plant the replacement oak trees on public property such as designated open space area, public parks, etc., subject to Community Development Director approval; or provide an in-lieu cash payment to the

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City's Open Space Conservation Fund in the amount of \$102,614.77, which represents the total current cost of purchasing similar tree species of the required mitigation size, transporting the trees to a receiving site, planting the tree, installing necessary irrigation, and the anticipated cost of water. The Community Development Direct may require fewer trees to be planted off-site or a smaller in-lieu fee if the developer plants and maintains larger box-size oak trees on the project site than required by the City of Thousand Oaks Oak Tree Preservation regulation.

The Community Development Direct shall coordinate any off-site tree planting locations with the Conejo Open Space Conservation Agency (COSCA) and replacement trees shall be placed on COSCA property or as agreed to by the Director of the Community Development Department. Any in-lieu fee approved by the Community Development Director in association with COSCA shall be made prior to the Certificate of Occupancy being issued for the final building.

127. **Mitigation Oak and Landmark Tree Location Map** – Prior to issuance of a grading permit, the applicant shall submit a mitigation tree location map demonstrating the location of the replacement trees.
128. **Oak Tree Preservation and Protection Guidelines Compliance** – All construction activities to or near an oak tree shall conform and abide by the City of Thousand Oaks, Oak Tree Preservation and Protection requirements as specified in Article 42, Chapter 4 of Title 9 of the Thousand Oaks Municipal Code and Resolution No. 2010-014.
129. **Removal of Tree Debris** – Pursuant to Resolution No. 2010-014, all portions of the 17 Coast Live Oak (*Quercus agrifolia*) trees and 5 Valley Oak (*Quercus lobata*) trees approved for removal, as well as any deadwood from the on-site protected trees shall be removed from the site and disposed of legally. Additionally, the stumps shall be completely removed to a minimum of four inches below grade and the hole filled with soil.
130. **Pre-Construction Meeting** – Pursuant to Resolution No. 2010-014, a pre-construction meeting shall be held between all contractors (including grading, tree removal/pruning, builders) and the ISA-Certified Arborist. The ISA-Certified Arborist shall instruct the contractors on tree protection practices and answer any questions. All equipment operators and spotters, assistants, or those directing operators from the ground shall provide written acknowledgment of having received tree protection training. This training shall include information on the location and marking of protected trees, the necessity of preventing damage, and the discussion of work practices that will accomplish such.

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131. **On-Site Work Monitoring** – Pursuant to Resolution No. 2010-014, all work described in this permit shall be monitored by the applicant's Tree Consultant and it shall be the responsibility of the applicant to contact the consultant and arrange for the successful completion of these conditions. The applicant is required to provide written notice to the following parties at least 48 hours prior to beginning any work within the protected zone of any preserved tree: the City's Community Development Department, the City's Oak Tree Consultant, the Applicant's Oak Tree Preservation Consultant.
132. **Root Protection** – Pursuant to Resolution No. 2010-014, where structural footings are required and roots will be impacted, the footing(s) shall be bridged, and the roots protected. All such roots shall be covered with a layer of plastic cloth and two to four inches of Styrofoam matting, or other protective measure as approved by permit, prior to pouring the footing.
133. **Root Preservation** – During excavation, if an oak and/or landmark tree root over two inches (2") in diameter is encountered, the applicant shall immediately contact Planning Division of the Community Development Department to schedule a field inspection to determine if it is appropriate to cut the root(s) or whether the improvements need to be redesigned and/or relocated to avoid root damage to ensure preservation of the trees.
134. **Protective Fencing, Flagging and Signage for Onsite Oak Trees** – Pursuant to Resolution No. 2010-014, an International Society of Arboriculture (ISA) Certified Arborist shall be retained to oversee that all remaining trees that will not be relocated or removed shall be preserved and protected in place. Prior to any grading or construction activities, the applicant and the applicant's Tree Consultant shall confirm with the Community Development Department that required signage and protective chain– link fencing (or other material satisfactory to City of Thousand Oaks planning staff) measuring a minimum of five (5) feet in height shall be placed at the protected zones (approximately 15 feet from the trunk or 5 feet outside the dripline, whichever is greater, of each tree or edge of canopy for cluster of trees) or construction limits for all on– site and off– site protected trees in accordance with the Oak and Landmark Tree Preservation and Protection requirements.

Additionally, signs must be installed on the fence in four locations (equidistant) around each tree. The size of each sign must be a minimum of two (2) feet by two (2) feet square and must contain the language as recommended by the Applicant's Oak Tree Preservation Consultant.

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135. **Mitigation Tree Maintenance** – An irrigation system designed for “dryscape” planting shall be installed for successful oak establishment, which generally involves a drip-system irrigation for managing water distribution near the oak trees and does not include watering during summer months when natural rainfall would not be abundant. Maintenance shall include leaving the leaf-litter build-up or a 3-inch layer of mulch under the canopies of the oak trees to promote healthy tree growth and root development.

In the event a mitigation trees dies or is otherwise removed, each dead or removed tree shall be replaced with 2-24" box and 1-36" box oak trees of the same Genus and species.

136. **Oak and Landmark Tree Maintenance** – The continued maintenance of all on-site oak and landmark trees is the responsibility of the property owner. All oak trees shall be maintained in accordance with the Oak Tree Preservation and Protection Guidelines Resolution 2010-14.
137. **Use of Hand Tools** – Unless otherwise authorized by the Community Development Director, all work, other than the tree removals, within the protected zones of oak and landmark trees shall be performed with hand tools only and performed under direct supervision of the applicant’s oak tree consultant.
138. **Excavation in Protected Zones** – All excavation and construction activity within the protected zone of the existing oak and landmark trees shall be performed with the use of hand tools only, in accordance with the Oak Tree Preservation and Protection Guidelines Resolution, No. 2010– 14, and observed in progress by the applicant’s oak tree consultant.
139. **Storage of Materials** – No storage of materials is permitted within the protected zones of any oak and landmark trees.
140. **Irrigation/Landscaping Encroachments** – All plans for landscaping beneath a protected tree shall be submitted for the review and approval of the Community Development Department.
141. **Drainage** – Positive drainage shall be provided to direct run-off away from any protected tree.
142. **Lighting Encroachments** – No lighting system shall be installed within the protected zone of any oak tree or landmark tree except as otherwise authorized by the Community Development Department.

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143. **Herbicides** – No herbicides shall be used within one hundred (100) feet of the dripline of any oak and landmark tree.
144. **Billing by City Oak and Landmark Tree Consultant** – The applicant shall be billed on a real time basis for any work performed by the City's oak and landmark tree consultant in conjunction with the Oak Tree Permit.
145. **Written Certification** – The applicant's oak/landmark tree consultant shall certify in writing that all conditions of the Oak Tree Permit have been met and that protective measures, to ensure the preservation of the subject oak trees, have been properly implemented. A final inspection by the City's Oak and Landmark Tree Consultant, paid for by the applicant, shall be performed upon receipt of certification and prior to final inspection for building occupancy.

BUILDING SAFETY DIVISION

146. **Bicycle Parking** – In accordance with the 2022 California Green Building Standards Code, Section 5.106.4, the number of short-term bicycle parking facilities shall be equivalent to 5% of proposed vehicle parking. The number of long-term bicycle parking facilities shall be equivalent to an additional 5% of proposed vehicle parking. The configuration and location of all bicycle parking facilities shall be as review and approved by the City Planning Division. The bicycle parking shall be designed to provide two (2) points of contact on the bicycle, be supported upright, and cause no stress onto tires. All provided bicycle parking shall be able to accommodate a standard U-lock.
 - a. Short-term bicycle parking spaces are to be provided on site near the front entrance. Bicycle parking should be located along the natural desire lines of travel from the bikeways to the facility entrance, in well-lit areas visible from the front entrance and public areas, in the nature of a bicycle corral or racks. Bicycle parking shall be located outside of pedestrian walkways, loading areas, landscape planters, etc. Where feasible, bicycle-parking areas should be covered.
 - b. Long-term bicycle parking spaces shall be convenient from the street and shall be provided in one or more of the following configurations:
 - i. Covered, lockable enclosures with permanently anchored racks for bicycles;
 - ii. Lockable bicycle rooms with permanently anchored racks; or
 - iii. Lockable, permanently anchored bicycle lockers.
 - c. The applicant shall submit a bicycle parking plan to be reviewed and approved by the Chief Building Official, Traffic Engineering representative in the Engineering Services Division, and the Community Development Director (or his/her appointee). All bicycle parking shall comply with AASHTO, NACTO, or APBP standards, as permitted by the California Building Code.

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147. **Title 24 Compliance** – All requirements of California Uniform Building Code, Title 24, California Code of Regulations, shall be met. A set of plans, at a scale not less than one inch equal to ten feet (1"=10') shall be submitted to the Community Development Department displaying all exterior physically disabled accessibility requirements, including point elevations and details. Prior to the issuance of building permits, the accessibility requirements for the exterior shall be approved by the Building Division for disabled access compliance.
148. **Path of Travel** – The path of travel from the accessible parking spaces to the building entrances shall meet the current standards of the California Uniform Building Code.
149. **Interior Design Approval** – The accessibility requirements for the interior of the proposed buildings will be reviewed when construction documents are submitted for plan check to the Building Division.

PUBLIC WORKS DEPARTMENT

GENERAL

150. **Plan Format** – All plans submitted to the Public Works Department shall be formatted to 24 inch by 36-inch sheet size, using city standard title block, and as-built/record plans shall be submitted as part of the closure and acceptance of the project.
151. **Standard Plates** – The City of Thousand Oaks Public Works Road Design and Construction Standards and Standard Plates, adopted May 15, 2018 in Resolution No. 2018-024 shall be used as the principal criteria for the design of development plans. It shall be the responsibility of the applicant to maintain a copy of the latest edition of said Plates available to all parties utilizing said Plates for construction purposes. The Standards establish uniform criteria, policies, standard and procedures for the design and construction of City roads, drainage facilities and appurtenances. The design engineer shall review the methods and procedures contained in the Road Standards, where not considered applicable, the design engineer shall request an exception from these standards in writing to be approved by the City Engineer. Said Road Standards are available for download at www.toaks.org/roadstandards.
152. **Updating of Existing Improvement Drawings** – All existing improvement drawings in the Department's possession for water and wastewater which are affected by the subject project will be updated by the City to reflect the new improvements associated with this project. This work shall be considered as part of the project final process, and subject to a change order fee.
153. **Base Topography Map** – The grading plan for this project must be prepared using topography which has been plotted by photogrammetric methods or survey data compiled no longer than two years prior to the date of submittal of the grading plan and must be on current City datum. The name of the firm which prepared the topography and the date(s) on which the data was compiled or obtained must be shown on the plan. Topography must be presented in 1" = 40' or larger (closer) scale and must extend a minimum of 100 feet outside the limits of the property proposed for development. Any deviation from this condition must be approved by the City Engineer.

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154. **Title Report** – A copy of the applicant's preliminary title report for the subject property, dated within 1 year of the entitlement application, shall be submitted to the Public Works Department for review prior to grading plan-check or the issuance of any Building or Grading Permits.
155. **Inspection Hours** – The applicant is advised that City Hall is closed on alternating Fridays, and as such, inspection services are not available on those particular dates. The applicant shall schedule any and all grading, stormwater, encroachment, paving and utility work requiring City inspection accordingly. A schedule of City Hall hours may be obtained from City Hall or at the City's website www.toaks.org.
156. **Survey Monuments** – The Applicant shall be fully responsible for the preservation of all survey monuments to the satisfaction of the City Engineer. Prior to the issuance of any permit and start of construction and prior to the disturbance or destruction of any existing survey monument, all monuments shall be located and referenced with minimum of four (4) ties by the Applicant's Land Surveyor. A corner record or record of survey shall be filed with and approved by the County Surveyor showing monuments that will be disturbed or destroyed, along with the reference monuments or marks and bearings or azimuth and distances to the location of the monument to be disturbed or destroyed. Documentation shall be provided to the City that the surveying has been completed. Prior to completion of construction, all affected monuments shall be reset by the applicant's Land Surveyor. A corner record or record of survey shall be filed with and approved by the County Surveyor prior to the recording of a certificate of completion for project. Documentation shall be provided to the City that the surveying has been completed.

WATER AND WASTEWATER

157. **Water Service Requirements** – In order to obtain water service, the applicant shall pay for the Cost of the Water Meter Deposit plus the City's Water Plant Investment Fee, at the rates in effect at the time of payment, prior to issuance of a building permit. Additional fees for special facilities zones and fire flow surcharges may also apply. The applicant shall also pay the established change order fee for updating the plans for this new lateral.
158. **Fire Water Service** – If required by the Fire Department to install fire sprinkler systems, the applicant shall install a new separate fire water service line to the building, along with associated double detector check valve to protect the domestic water supply. Applicant is encouraged to contact the County of Ventura's Environmental Health Division for details pertaining to the selection, installation and testing of the double detector check valve assembly.

159. **Fire-Flow Verification** – The applicant shall pay the Department a fee for calculation and verification of the existing water system to deliver required fire flows. In the event the fire flow, as determined by the Ventura County Fire Protection District, cannot be met utilizing the existing system, the applicant shall design and install new water main(s) of sufficient size and length, as determined by the Department, to provide said fire flow. A completed copy of the above-mentioned fire flow calculation must be provided to the Department before, or at the same time as, the submittal of the first plan check for the water system. Plans will not be checked or processed unless these calculations, along with a copy of the plan showing locations for proposed fire hydrants approved by the Fire Department, are submitted.
160. **Cross Connection Device** – The applicant shall design and construct new backflow connection devices for the project's irrigation water as well as fire sprinkler systems. Prior to the issuance of clearance for occupancy by the Department, all cross-connection control devices must be inspected and approved by the Cross Connection Control Specialist of the County of Ventura, telephone 805.654.2436 (TOMC 10-2.600). Full right of access and entry to the cross-connection device shall be granted to the Public Works Department.
161. **Usefulness of Existing Water Laterals** – Where there are existing water laterals serving the subject property and it is the desire of the applicant to reuse these laterals as part of the proposed project, the applicant must demonstrate to the satisfaction of the Department that the lateral(s) are in acceptable condition (no broken pipe, no root intrusion, etc.). These laterals must be made of copper; all poly services must be abandoned at the main under Department inspection and the meter boxes removed. Laterals that are not appropriate for re-use must be abandoned at the main under Department inspection.
162. **Revision to Wastewater Design and Construction Standards** – For Cleanouts and Slopes of Mains: the end of all mains shall terminate in a manhole rather than a cleanout, regardless of the downstream length to the next manhole. The minimum slope for wastewater mains shall be 1 percent where the main has less than 10 residences connected to said main. In streets with grades of less than 1.5 percent, the engineer shall attempt to attain the maximum slope possible on wastewater mains in those streets.

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For manholes: Standard Plates 17 through 20 are modified to provide that all joints between the barrel sections/riser shafts and/or cone sections shall be wrapped around the exterior circumference of the shafts with "Rub-R-Neck" and joints sealed with "Ram-Neck" mastic joint sealer (both as manufactured by the Henry Company Sealants Division, 1277 Boyles Street, Houston, Texas 77020) or approved equal. Manholes shall be negative pressure tested as specified in ASTM Designation C 1244-93. Steps shall not be installed in the manholes.

For manhole frame and covers: The Alhambra A-1254 frame and cover specified on Standard Plate 17 shall have a cover diameter of 26¼ inches, along with lettering conforming to Section 3.10 of the City's "Wastewater Design and Construction Standards". A note shall be shown on the title sheet of the wastewater plans indicating the last two revisions mentioned above for manhole construction.

163. **Procedure for Determination of Wastewater Fees** – Prior to issuance of a building permit for this project, applicant shall submit a plumbing plan and a listing of proposed fixture units for the subject project to the Public Works Department for determination of a "preliminary" wastewater connection fee estimate. The plan and listing will be reviewed for apparent correctness only and the applicant shall pay the wastewater connection fee based on this "preliminary" estimate at the time a building permit is issued. The final fee amount to be paid by the applicant will be based on the actual numbers and types of plumbing fixture units installed as determined by City staff from a field count made of the project building(s) before certificate of occupancy is granted. Any difference between the actual/field verified fixture unit count and the total amount paid will be reimbursed to the applicant. If additional connection fees are due, these shall be paid by the applicant to the City upon request. Any existing fixture units for which fees have been previously paid on the parcel will act as a credit against the amount to be paid.

The applicant is strongly encouraged to contact the Public Works Department prior to needing building permits to determine if additional fees are due.

164. **Usefulness of Existing Wastewater Laterals** – Where there is an existing wastewater lateral(s) serving the subject property and it is the desire of the applicant to reuse these laterals as part of the proposed project, the applicant must demonstrate to the satisfaction of the Department that the lateral(s) are in acceptable condition (no broken pipe, no root intrusion, etc.). This can best be done by utilization of a television video from a point on the subject property to the main, or by excavating the lateral at the

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property line and making a visual inspection of the lateral. Other methods may be utilized, but are subject to Department approval. If the lateral is acceptable to the Department, it may be reused; where it is not acceptable, a replacement lateral must be constructed or the existing lateral renovated (such as by use of pipe bursting technology). Laterals that are not appropriate for re-use must be abandoned at the main under Department inspection.

165. **Restaurant/Cafeteria Grease Interceptor/Trap** – The applicant shall install a grease interceptor (sized as required by the City's Building and Safety Division) to collect and treat oil and grease wastes from any restaurant use prior to discharge to the wastewater system.

DEVELOPMENT ENGINEERING

166. **Encroachment Permit** – Where any construction occurs within public right-of-way, an encroachment permit shall be obtained, plan check and inspection fees paid, an approved traffic control submitted, and bond/security posted (if required) prior to initiating construction of any improvements.
167. **Underground Conduits** – Pursuant to the City Council policy and Resolution No. 91-174, adopted on July 23, 1991, the applicant shall install a minimum two-inch diameter conduit capable of carrying coaxial or fiber optic cable suitable for carrying health and safety features such as fire alarm, water meter reading, telecommunications, etc. Said conduit shall be continuous and placed behind the sidewalk or curb within a public service easement or within a public right-of-way, where applicable. Pull boxes shall be placed at alternate property lines of all lots. The conduit and pull boxes shall be of materials approved by the Public Works Department. The conduits and pull boxes shall be dedicated to the City. The architecture and technical specifications of the conduit system shall be subject to the review and approval of the City Engineer. A 1"=100' scale plan shall be prepared under the direction of a Registered Engineer and shall be submitted to the City Engineer for review prior to approval of the final map or improvement plans. The plan shall include details and general notes, and shall be part of the plan set.
168. **Permission for Offsite Construction** – Prior to the issuance of a grading permit, written permission for all proposed offsite construction along with any required easements from the owners of the affected property shall be submitted to the City Engineer.

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169. **Blasting** – If blasting is found to be necessary within the tract boundaries, a modification to the grading permit shall be required, whereupon special provisions relating to the protection of adjacent commercial areas from damage shall be made a part of said grading permit.
170. **Hauling of Imported or Exported Materials** – This project will require exporting of earth from the project site. Prior to issuance of a grading permit the applicant shall submit a written plan to the Department for review and approval. Said plan shall detail the quantity of earth to be exported, the location to which the earth will be taken, the proposed haul routes to be used, the size and numbers of the trucks to be used, the proposed hours of operation (times of day, days of the week, and estimated number of days), the estimated number of round trip truck movements, the proposed methods to be utilized to keep the haul route clear of any dirt dropped along the route, and any other information as may be required by the Department.
171. **Grading Permit and Soils Certification** – The applicant shall prepare and submit final grading plans, improvement plans, erosion control plans, BMP improvement plans, geotechnical soils reports, supporting hydrology and hydraulic calculation reports, title report, and other items as required by the City Engineer in order to obtain a grading permit in accordance with the requirements of the City's Grading Ordinance. Applicant shall also prepare and submit detailed erosion control plans for both phases of land development; the pre-grading / site stabilization phase, as well as the post grading / building construction phase. The grading and improvement plans submitted to the City for plancheck shall at a minimum indicate all topography, proposed improvements, drainage features, water/wastewater connections and laterals, existing easements, interface with adjacent properties, storm drain and drainage systems, and street improvements. All submittals shall include the completed public and private improvement cost estimate worksheets, the required plancheck and inspection fees, and the posting of the required grading bond prior to the start of any construction. After the grading is complete, the applicant shall submit a building pad compaction report and a rough grading certificate from the soils engineer prior to issuance of a building permit. Grading bonds shall be exonerated after satisfactory completion of the project punchlist items, which are generated after the applicant's engineer provides a submittal of the final Record (as-built) Drawings.
172. **On-Site Drainage Design** – Project design shall use the City of Thousand Oaks "Master Plan of Drainage" (2007) for the purpose of establishing on-site storm flows. The project lies within subareas 238C of said Master Plan, with $Q_{10} = 1.73$ cfs/acre and $Q_{100} = 3.02$ cfs/acre. The CFS-per-acre unit

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discharge in the Master Plan shall be used when preparing the Q_{10} (developed) discharge flows and for the detention calculations up through Q_{100} .

173. **On-Site Drainage** – Project design and engineering plans shall show drainage flows to street and/or yard drains and elevations.
174. **Drainage Study** – The applicant's engineer shall prepare a hydraulic/hydrology analysis for the project. The study shall include, but is not limited to addressing offsite tributary flows, retention/detention, inlet hydraulics and storm drains and appurtenances intended to convey and treat project storm discharges. The focus of the study is to ensure the existing conveyances possess sufficient capacity to pass the Q_{10} (developed) and to demonstrate that no new flooding will occur adjacent to or upon the property during a Q_{100} event as a result of development. The study shall be subject to the review and approval of the City Engineer prior to grading permit issuance.
175. **On-site Ribbon Gutters** – The City prohibits the use of ribbon gutters and encourages the use of graded parking lots with perimeter curb and gutter to convey flow away from pedestrian pathways. Parking lot and drive drainage shall conform to this standard. The use of ribbon gutters will only be considered under special circumstances as determined by the Public Works and Community Development Directors (TOMC 9-4.2405).
176. **Parking Structure Drainage** – The City prohibits the discharge of pressure-washing effluent, antifreeze and motor oils into either the wastewater system or storm drain system. Inasmuch as these are the anticipated discharges from the interior of the parking structure, the applicant shall incorporate a blind sump containment area within the parking structure designed to capture and store such discharges. Provisions shall be provided for periodic pump-out of the blind sump via tanker truck with disposal in conformance with all local, state and federal regulations. The roof and other surfaces of the parking structure directly exposed to rainfall may be drained and discharged in accordance with NPDES design parameters for a normal, rainfall-exposed surface parking lot.
177. **Building Pad Protection** – The project engineer must provide analysis to demonstrate building pad protection from Q_{100} flows. On-site discharges (including roofs, etc) shall be detained behind a wall, graded barriers or curb, and metered through a weir or other controlling device, constraining discharge to the Q_{10} developed condition for the tributary area. Applicants' engineer must prepare calculations to support this design. Said calculations must be approved by the City Engineer (TOMC 4-7.01).

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178. **FEMA Flood Plain** – A portion of the property lies within a FEMA designated flood plain. All proposed improvements shall be located outside the designated flood plain. If applicant chooses to apply for a Letter of Map Revision (LOMR) to revise the flood plain limits, building permits for the proposed structures will not be issued until the LOMR is approved by FEMA. This requirement is limited to structures and not improvements such as flat works, sidewalks, etc.
179. **Detention of Onsite Storm Flows** – The applicant's engineer shall prepare a hydraulic/hydrology analysis for the site and design onsite catch basin(s) and conveyances which will pass only the Q_{10} (developed) flows into the public storm drain system. All flows in excess of Q_{10} (developed) up to and including Q_{100} (developed) must be detained on-site. A simplified detention method is available for this site.
180. **Existing Improvements** – Existing improvements adjacent to the property, including but not limited to sidewalks and curb & gutter which are broken or uneven shall conform to City and ADA standards, and if deemed necessary by the City Engineer, shall be repaired or replaced.
181. **Sidewalk Improvements** – Existing sidewalk along Thousand Oaks Boulevard shall be removed and replaced with a new 10-foot wide sidewalk, and existing sidewalk along Lombard Street shall be removed and replaced with a new 8-foot wide sidewalk per City Plate No. 8-3. Damaged curb and gutter shall be replaced per City Plate No. 8-2.
182. **On-site Paving** – An approved pavement section from the registered soils engineer of record shall be submitted to the City prior to initiating the construction of on-site parking, paving, and/or drainage improvements (TOMC MC 9-4.2405).
183. **Existing Storm Drain** – There is currently a 6.5 feet wide by 6 feet high concrete box culvert situated along the southwestern property line. The storm drain easement depicted on existing maps has not been accepted by the City. Consequently, the box culvert is privately owned by the applicant and the adjacent property owner. Both property owners share the responsibility of maintaining the box culvert. If the applicant intends to dedicate the box culvert to the City for maintenance, they must enhance it to meet City standards acceptable to the City Engineer.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

184. **NPDES Permit Compliance** – Development shall be undertaken in accordance with conditions and requirements of the Ventura Countywide Stormwater Quality Management Program, National Pollutant Discharge Elimination System (NPDES) Permit No. CAS004002. The project shall employ NPDES best management practices in accordance with the latest applicable version of the Countywide Stormwater Program “Technical Guidance Manual” and the California Stormwater Quality Association (CASQA) “BMP Handbooks” and/or other approved reference documents cited in Permit No. CAS004002 (M.C. 7-8.302).

The Los Angeles Regional Water Quality Control Board approved a new MS4 permit for local municipalities in September 2021 to implement starting in 2024. All projects not deemed “complete” from a planning/entitlement standpoint by the time the new permit goes into effect will need to comply with the new post-construction stormwater requirements.

185. **MS4 Stormwater Retention Requirements** – The project meets the thresholds requiring stormwater treatment and site retention specified in the Ventura County NPDES Municipal Stormwater Permit (MS4) and 2011 Technical Guidance Manual (TGM). The project shall design, construct and maintain treatment and retentive catchments that will capture, treat and retain all rainfall runoff from disturbed and directly-connected impervious areas affected by the project. The design shall function for the first three-quarter-inch (3/4”) of all rainfall events, including drawdown and elimination of the captured runoff within 72-hours of the rainfall event. Drawdown may typically be achieved via groundwater recharge/percolation or vegetative irrigation/ evapotranspiration. Treatment of the site’s pollutants of concern is preferably addressed through vegetative contact and other natural biological processes. Further details and design requirements are available at www.vcstormwater.org.

186. **BMP Sizing Requirements** – Prior to issuance of a grading/paving permit, the project’s engineer shall prepare analyses to demonstrate that the proposed Best Management Practices (BMP’s) for stormwater treatment will mitigate pollutants of concern. The analyses shall include calculations demonstrating that the selected BMP’s must satisfy one of the following sizing criteria:

- Treat the storm flow equivalent to ten percent (10%) of the 50-year peak flow; or

- Treat the volume of annual runoff (based upon the unit storage water quality volume) to achieve 80 percent or more volume treatment by the method recommended in the “*California Stormwater Best Management Practices Handbook – Industrial / Commercial (1993)*” and the “*Ventura Countywide Stormwater Quality Management Program Technical Guidance Manual for Stormwater Quality Control Measures (2002)*.”
187. **Inlet Labels** – All on-site drain inlets, whether newly constructed or existing, shall be labeled “Don’t Dump - Drains to Creek” in accordance with City requirements prior to final acceptance.
188. **Landscaped Areas / Roof Drains** – Landscaped areas shall be designed with efficient irrigation to reduce runoff and promote surface filtration and minimize the use of fertilizers and pesticides which can contribute to urban runoff pollution. Unless otherwise recommended in the soils report, on-site stormwater discharges (including roof drains if applicable) shall be directed toward landscaped areas. Applicant may employ pervious landscaping design, rainfall capture pocket-planters, and other L.I.D. techniques and measures to the maximum extent practicable.
189. **Stormwater Pollution Prevention Plan and Notice of Intent (SWPPP)** – Prior to the issuance of any grading permit and/or the commencement of any clearing, grading or excavation for all projects that disturb over 1 acre, the applicant/owner shall submit a Notice of Intent (NOI) to the California State Water Resources Control Board, Storm Water Permit Unit, in accordance with the NPDES Construction General Permit (No. 2009-009-DWQ including amendments). The applicant/owner shall provide the City with a WDID number or proof of the NOI submittal. The applicant/owner shall comply with all additional requirements of this General Permit including preparation of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP shall be prepared by a certified QSD, fully comply with RWQCB requirements and contain specific BMPs to be implemented during project construction to reduce erosion and sedimentation to the maximum extent practicable. A copy of the adopted SWPPP shall be maintained in the construction site office at all times during construction and the site superintendent shall use the plan to train all construction site contractors in site Best Management Practices prior to starting work on the site. At a minimum, the following BMPs and requirements shall be included:
- A. Pollutant Escape: Deterrence
 - B. Pollutant Containment Areas
 - C. Pollutant Detainment Methods
 - D. Sediment control and capture

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- E. Erosion Control / Dust Control
- F. Recycling/Disposal
- G. Hazardous Materials Identification and Response

190. **Deed Restriction Regarding Best Management Practices (BMPs)** – Prior to issuance of occupancy, the applicant/owner shall record a Prior to issuance of occupancy, the applicant/owner shall record a Stormwater Covenant and Deed Restriction, requiring all property owners and their successors in interest to assume all duties and responsibilities for ongoing maintenance of all onsite permanent stormwater BMP's, including, but not limited to, maintenance of all Best Management Practice and any and all equipment which is required for implementation of Best Management Practices. Contained within the Covenant and Deed Restriction must be a description of the BMP's that are being provided as part of the project, a description of the inspection and maintenance requirements and procedures, and a site map indicating the location of the BMP's to be maintained. The draft language and contents included in the Covenant and Deed Restriction shall be submitted to the City Attorney's Office and Public Works Department for review and approval prior to issuance of building/paving/grading permits (TOMC 7-8.401(c)).

SUSTAINABILITY

191. **Trash Hauler Approval** – Prior to issuance of a trash enclosure building permit, the applicant shall provide a letter from Athens Services, the City's trash hauler, indicating they have reviewed the project plans and that the enclosure locations and orientation as shown are acceptable to their company for purposes of trash and recyclables pick up. Contact Athens Services at (805) 852-5264, or visit their Sustainability Center at 2251 E. Thousand Oaks Blvd.
192. **Construction/Demolition Debris Recycling Plan** – Required: Prior to the issuance of a demolition permit (where the site contains existing structures or facilities) or of a grading/building permit, the applicant shall submit a Construction and Demolition (C&D) Debris Recycling Plan to the Department for review and approval.

The applicant must divert a minimum sixty-five percent (65%) of all C&D waste materials generated from the project. The C&D Debris Recycling Plan shall indicate the proposed means of disposition of all C&D waste materials, including but not limited to, asphalt, concrete, wood, drywall, brush and vegetation, landscaping materials, lights, piping, concrete block, metal, and the like, which will be recycled, reused, salvaged, and /or delivered to a

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landfill. The Recycling Plan must also include estimated weights of the materials, list of proposed recycling/disposal facilities, and authorized hauling companies to be used. For a list of authorized waste haulers and/or to complete and submit a C&D Debris Recycling Plan go to ThousandOaks.WasteTracking.com.

193. **Solid Waste, Recycling and Organics Collection** – American with Disabilities (ADA) accessible, covered 3-bin enclosures with a ramp are required for the collection of solid waste, recycling, and organics (food waste). The design of the enclosure must be large enough to accommodate collection containers for source-separated solid waste, organic waste, and recyclable materials.

Refer to the City's revised waste ordinance (November 16, 2021) governing the enclosures' locations, specific sizing, configuration, and clearances. Resident access to Waste Enclosures serving MFD-C or MXD developments via walk-up shall be located no further than **150 feet** from the front door of the furthest residential unit served as measured along the accessible path of travel, unless as otherwise approved by Public Works and Community Development Departments. The site plan shows the location of the enclosures with the expected travel path and distance in feet to the furthest door served by that enclosure exceeding the 150-foot standard. Please revise or Public Works Sustainability Division contact at 805-449-2472 to discuss options.

Locations with preparation areas like Kitchens or Cafés should have organics collection containers included in the back of house and in the front of house if the occupants dispose of finished food and packaging materials. Organics containers should also be located in break rooms, kitchens, or other locations where food is commonly consumed.

Please add the bulky item collection location(s) to the site plan showing the enclosures, bin placement, and doors.

194. **Mandatory Organics Recycling** – The applicant/owner is hereby notified that California State law requires businesses, schools, hospitals, restaurants, government buildings and other commercial properties to begin separating and recycling their organic waste (food waste, yard waste, food-soiled paper). Effective January 2017, businesses generating 4+ cubic yards per week of organic waste shall implement the above-stated separation requirements. Effective January 2019, businesses generating 4+ cubic yards per week of combined trash and organics waste shall implement the above-stated separation requirements.

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195. **Trash/Recycling Areas** – The applicant proposes chutes and trash receptacles for on-site trash and recyclable collection. Bins within trash enclosure spaces shall be afforded a 9'0" interior soffit clearance and means to keep bins separated and easily accessed for trash deposits and disposal. Trash and/or recycling areas shall be covered and shall be designed in accordance with the City's latest Refuse Enclosure Space Requirements. Receptacles for trash, recyclables, and organics recycling shall be available within each enclosure. All litter/waste material shall be kept in leak proof containers. Area(s) shall be paved with impermeable material and include zero-slope upon interior slabs. No other area shall drain onto these areas. The trash enclosure and/or recycling area(s) shall not drain to the storm drain system nor the sanitary sewer, shall not have a hose-bib or other water supply, and all cleaning shall be performed using dry cleanup methods. The trash enclosures and their placement shall be designed to accommodate the above considerations, as well as access requirements of the City's waste hauler. Compactor units that are self-contained and watertight may remain exposed to rainfall provided the surrounding area is frequently inspected and cleaned.
196. **Operational Recycling Plan** – Prior to occupancy, in accordance with the City's Enclosure Space Regulations, each applicant and/or owner must submit a Recycling Plan pertaining to operational solid waste management after occupancy. A completed Recycling Plan form must be submitted for review and approval by the Public Works Department. A Certificate of Occupancy cannot be issued by the Community Development Department until the form is completed and processed by the Public Works Department.
197. **Bulky Item Collection** – A covered location shall be provided for occupants to place bulky items for collection by the authorized hauler. Access door(s) and egress walkways shall be clearly shown that is adequate to accommodate King-size mattresses and sofas (84" length and 40" depth).
198. **Operational Plan** – Operational Diversion plans are required before occupancy.
199. **Turf Landscape** – State law and City Ordinance prohibit non-functional turf in commercial developments. Replace the non-functional with an alternate groundcover, such as California native grasses, UC Verde Buffalo Grass or non-invasive Kurapia. If the developer proposes turf as part of the project, please include an explanation of why it is "functional turf" and request a waiver from the Sustainability Division. Low flow irrigation systems are required for new groundcover installations.

TRAFFIC

200. **Traffic Mitigation Fees** – The applicant acknowledges that the subject development will impact traffic and agrees to provide for the mitigation by depositing with the City of Thousand Oaks the appropriate non-refundable fees no later than prior to the issuance of building permits.

201. **Sight Distance** – Adequate vehicular and pedestrian sight visibility shall be provided at all intersections of public streets and private driveways in accordance with the criteria specified within Plate 3-10. The improvement plans for all projects shall demonstrate compliance with this plate (and a means to execute ongoing maintenance to guarantee the preservation of sight visibility).

Stopping sight distance shall be the principal criterion in determining the appropriate location of on or off-site improvements. It is especially critical that mature landscaping be considered in evaluating visibility, not just the barren ground. Stopping sight distance less than the minimum criteria as specified within Plate 3-10 shall be reviewed and approved by the Planning Commission if determined necessary by the City Engineer or the Community Development Department. Where applicable, Covenants, Conditions, and Restrictions shall require continued compliance with this condition and the requirements contained within Plate 3-10.

202. **Ingress and egress** – The proposed Thousand Oaks Boulevard driveway shall accommodate full inbound movements and right-turn outbound movements only. The proposed Thousand Oaks Boulevard driveway shall not have a separate phase at the Thousand Oaks Boulevard and Hodencamp Road intersection traffic signal. The proposed Lombard Street driveway shall accommodate full inbound and outbound access. Upon occupancy of the project, any modifications to driveway access and adjacent signal operations shall be determined by the Department of Public Works.

203. **Signing, Striping & Signal Plans** – Prior to grading permits, the developer shall submit plans to the City Engineer for review and approval detailing proposed signing, striping, and/or signal modifications along Thousand Oaks Boulevard at the Hodencamp Road and Lombard Street intersections, as required by the Public Works Department. Signing, striping, and signal work shall be shown on a plan sheet separate from the proposed street improvements. The signing, striping, and signal plans shall include the following modifications at Thousand Oaks Boulevard/Hodencamp Road:

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- Install Westbound left-turn striping into the project driveway.
- Install Westbound flashing arrow traffic signal equipment (protected-permissive phasing) with associated traffic signal pole and mast arm modifications to match Eastbound signal operations.
- Install pedestrian signal equipment at both sides of the project driveway to control pedestrian crossing.
- Relocate the traffic signal pole located on the south side of Thousand Oaks Boulevard, which is currently located where the project driveway is proposed.
- Install Northbound flashing red signal equipment for vehicles exiting the project driveway.
- Install associated signage with the improvements listed above.

The signing and striping plans shall include the following modifications at Thousand Oaks Boulevard/Lombard Street:

- Install separate left-turn and right-turn striping at the Northbound approach.
- Install associated signage with the improvement listed above.

The applicant shall construct all proposed changes to the signing, striping, and traffic signal in conjunction with the development of the site and related street improvements prior to final acceptance.

204. **Signs and Striping** – Control signs for regulation, warning, and guidance of traffic shall be installed as required by the Department of Public Works. These shall include, but are not limited to, stop signs, speed limit signs, turn prohibition signs, pedestrian and school crossing signs, curve warning signs, not a through street signs, parking signs, bicycle facility signs, pavement and curb markings, road symbols, and street name signs as required.

Prior to occupancy, all signs and striping shall be installed, and prior to final acceptance, the city may require the applicant to add traffic safety devices, such as signing and striping, the need for which is not apparent at the time of plan approval, but which are warranted due to actual field condition. The applicant shall install the traffic safety devices prior to final acceptance.

CONEJO RECREATION AND PARKS DISTRICT (CRPD)

205. **Park Land Dedication** – Developer at its sole cost, shall set aside the land and build park-like improvements on their property in an amount equal to or greater than as required by Conejo Recreation and Park District:
- 500 Thousand Oaks Boulevard Public Park Dedication and Improvements based on February 15, 2024 Formal Resubmittal (26,267 square feet for the "Linear Park" along TO Blvd. and 13,576 square feet for the "Lombard Park" for a total of 39,843 square feet).
 - Developer shall bear all costs and expenses associated with improving, ongoing maintenance and capital improvements at the "Linear Park" and "Lombard Park" to meet District level amenities as found in public parks.
206. **Park Maintenance and Operation** – Developer shall keep and maintain the "Linear Park" and "Lombard Park" sites open and available for recreational use and enjoyment by the general public in a manner similar to public parks. Any fencing shall not keep out public access during normal operating hours which shall not be less than 1 hour after sunrise until 1 hour after sunset.
207. **Plan Development** – Developer shall include and coordinate with District staff to ensure park amenities and plans meet the satisfaction of the District prior and during construction of project.
208. **General Public Access and Recreational Use** – Developer shall grant an easement over the land area of the "Linear Park" and "Lombard Park" to the Conejo Recreation and Park District for the benefit of general public access and recreational use of Linear Park and Lombard Park.
209. **Quimby in-lieu fee** – Developer is proposing to build a total of 328 multi-family apartment units. As consideration for Developer's above agreement, including but not limited to the public access easement, improvements, and ongoing management and maintenance of "Linear Park" and "Lombard Park", District will calculate Quimby Fees per the "flat-rate" method established in CRPD Resolution 020515-A (rather than the FMV method in the City's ordinance) and agrees to a 50% credit for the Quimby Fees due at the time of payment.
- a. Current (9/29/23) Quimby Fee = \$12,076/unit.
Full payment is (\$12,076/unit) x (328 units) = \$3,960,928

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50% reduction is \$1,980,464.

- b. Quimby Fee beginning February 5, 2024 =\$12,438/unit.
Full payment is (\$12,438/unit) x (328 units) = \$4,079,554.
50% reduction is \$2,039,832.
- c. Under CRPD resolution, fee increases 3% annually every February 5th.
- d. CRPD is currently considering a Quimby Fee/Park Impact Fee update.

210. **Termination "Buy Out"** – Developer or its successor has the right to terminate the easement and eliminate public access over "Linear Park" and "Lombard Park" by paying to Conejo Recreation and Park District Fifty percent (50%) of the current prevailing Quimby/Park Impact Fee for the 328 units of multi-family housing at date of termination.

211. **Proportionate Relationship** – Developer shall provide a proportionate fee per Condition 5 for any Park Land Dedication reduction for the approved total area as outlined in Condition 1. As the Park Land Dedication is 50% credit of the required fee, the percentage of fee increase should be 50% of the reduced area percentage.

The Developer submitted a design proposal (Sept 18, 2023), which was approved by CRPD Board Oct 19, 2023 and was to include equal or greater area of below:

26,267 Linear Park
13,576 Lombard Park
= 39,843 Total square feet

The latest Developer design proposal (Dec 4, 2023) as submitted to city planning and under consideration of the Planning Commission is:

21,154 Linear Park
12,049 Lombard Park
= 33,203 Total square feet

The reduction in publicly accessible, improved park land is 6,640 square feet which represents 16.6% reduction in the CRPD Board approved park land. This may be addressed through payment of additional fees proportionate to the change in publicly accessible, improved park acreage approved by the CRPD Board on October 19, 2023.

Developer Submitted Design Proposal Approved by the CRPD Board:

- 50% Publicly Accessible Park Improvements - 39,843 square feet.
- 50% Fee - Quimby Fee beginning February 5, 2024 =\$12,438/unit.

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- Full payment is $(\$12,438/\text{unit}) \times (328 \text{ units}) = \$4,079,664$.
- 50% reduction is \$2,039,832.

Adjusted Park Proposal, under consideration by Planning Commission:

- 41.7% Park Improvements - > 33,203 Total square feet.
- 16.6% area reduction = 8.3% of 50% land dedication.
- Add change to fee by 8.3% increase.
- 58.3% Fee - Quimby Fee beginning February 5, 2024 = \$12,438/unit.
- Full payment is $(\$12,438/\text{unit}) \times (328 \text{ units}) = \$4,079,664$.
- 41.7% reduction is \$2,378,444.

Netting a difference of \$338,612 in additional park fees (per the 2024 fee schedule) from the developer submitted design proposal approved by the CRPD Board.

VENTURA COUNTY FIRE PROTECTION DISTRICT

212. **Code Compliance** – Applicant shall comply with all current Ventura County Fire Protection District Ordinances, Codes, and Standards.
213. **Fire Department Clearance** – Applicant shall obtain VCFD Form 610B "Requirements for Construction" prior to obtaining a building permit for any new structures or additions to existing structures. The applicant shall verify that the water purveyor can provide the required fire-flow requirements by having them fill out Section II of the form.
214. **Fire Flow (Commercial, Industrial, Multi-family buildings)** – The minimum fire flow required shall be determined as specified by the current adopted edition of the International Fire Code Appendix B with adopted Amendments and the applicable Water Manual for the jurisdiction (with ever is more restrictive). The applicant shall verify that the water purveyor can provide the required volume and duration at the project prior to obtaining a building permit.
215. **Site Access** – Two (2) means of ingress/egress shall be provided to the development in accordance with VCFPD access standards.
216. **Access Road Certification** – The access road(s)/driveway(s) inclusive of bridges, culverts, and other appurtenant structures which supplement the roadway bed or shoulders, shall be certified by a registered civil engineer as having an all-weather surface in conformance with the City of Thousand Oaks Public Works and/or Fire District standards. This certification shall be submitted to the Fire District for review and approval prior to occupancy.
217. **Access Road Location** – The access / driveway shall be extended to within 250 feet of all portions of the exterior walls of the first story of any building and shall be in accordance with Fire District access standards. Where the access roadway cannot be provided, approved fire protection system or systems shall be installed as required and acceptable to the Fire District.
218. **Turning Radius** – The access road shall be of sufficient width to allow for a 40-foot centerline turning radius at all turns in the road.
219. **Vertical Clearance** – All access roads / driveways shall have a minimum vertical clearance of 13 feet 6 inches (13' 6"). Clear of building to sky.

220. **Access Road Width, Private Roads/Driveways** – Private roads shall comply with Public Road Standards.

- Access road width of 36 feet shall be provided for residential use with parallel parking permitted on both sides.
- Access road width of 32 feet shall be provided for residential use with parallel parking permitted on one side.
- Access road width of 24 feet shall be required with no on-street parking permitted.
- Where one-way traffic and off-street parking occurs, a 20-foot driveway width shall be provided. (Note: limited use only and not for high hazard occupancies: H, R-1 over 2 stories, R-2)
- Aerial Fire Apparatus Access; Multi-Family, Commercial or Industrial Buildings or portions of buildings or facilities with perimeter eave lines exceeding 30 feet in height above the lowest level of fire department access shall require an approved aerial ladder fire apparatus access roads and driveways. Aerial fire apparatus access roads and driveways shall have a minimum clear width of 30 feet. Overhead utility and power lines shall not be located within the aerial ladder fire apparatus access roads and driveways. At least one of the required access routes meeting this condition shall be located a minimum of 15 feet and a maximum of 30 feet parallel to one side of the buildings, as approved by the Fire District. Buildings exceeding 50,000 SQFT shall have the required access route along a minimum of two sides. Parking shall be prohibited along the required width of the access roads and driveways. Landscaping and other improvements between the required access and the buildings shall not interfere with aerial ladder fire apparatus operations, as approved by the Fire District.

221. **Mitigation to Aerial Fire Apparatus Access Roads** – The fire code official is authorized to reduce the required width to not less than 24 feet when all of the following are provided.

- Automatic fire sprinklers are installed throughout the structure in accordance with NFPA 13.
- Fire sprinkler standpipes are provided on all floors and through to the roof.
- Two or more roof access points are provided through 2-hour fire rated stairs separated a distance not less than half of the diagonal of the structure.

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222. **Ground Ladder Access** – Access around the building shall be provided to allow for laddering the building, at a maximum 75-degree angle, to reach emergency escape and rescue openings below the fourth story above the grade plane. A three (3) foot clear working space shall be provided around the ladder at ground level.
223. **Construction Access** – Prior to combustible construction, a paved all-weather access road/driveway suitable for use by a 20-ton Fire District vehicle shall be installed at locations approved by the Fire District.
224. **Construction Access Utilities** – Prior to combustible construction, all utilities located within the access road and the first lift of the access road pavement shall be installed. A minimum 20-foot clear width shall remain free of obstruction during any construction activities within the development once combustible construction starts.
225. **Turnarounds** – Approved turnaround areas for fire apparatus shall be provided when dead-end Fire Department access roads / driveways exceed 150 feet. Turnaround areas shall not exceed a 5% cross slope in any direction and shall be located within 150 feet of the end of the access road / driveway. Turnaround areas shall not be used for parking and shall be kept free of obstructions at all times. Turnaround areas shall be posted as Fire Lanes in accordance with Fire District Fire Lane Standards.
226. **Parking Prohibited** – The property owner(s) are hereby advised that parking on access roads / driveways and fire department turnarounds is prohibited.
227. **Fire Lanes** – Prior to construction the applicant shall submit two (2) site plans to the Fire District for approval of the location of fire lanes. **Prior to occupancy**, all fire lanes shall be posted “NO PARKING-FIRE LANE-TOW AWAY” in accordance with California Vehicle Code, the International Fire Code and current VCFPD Fire Lane Standards. All signs and or Fire Lane markings shall be within recorded access easements.
228. **Access Road Gates** – Any gates to control vehicle access are to be located to allow a vehicle waiting for entrance to be completely off the intersecting roadway. A minimum clear open width of 15 feet in each direction shall be provided for separate entry / exit gates and a minimum 20 for combined entry / exit gates. If gates are to be locked, a Knox system shall be installed. The method of gate control, including operation during power failure (battery back-up), shall be subject to review by the Fire Prevention Division. Gate plan details shall be submitted to the Fire District for approval prior to

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installation. A final acceptance inspection by the Fire District is required prior to placing any gate into service.

229. **Walkways** – Approved walkways shall be provided from all building openings to the public way or fire department access road / driveway.
230. **Walk and Pedestrian Gates** – If gates are to be locked, a Knox system shall be installed. The method of gate control, including operation during power failure (battery back-up), shall be subject to review by the Fire Prevention Division. Gate plan details shall be submitted to the Fire District for approval prior to installation. A final acceptance inspection by the Fire District is required prior to placing any gate into service.
231. **Address Numbers (Commercial, Industrial, Multi-family buildings)** – Building address numbers, a minimum of ten inches (10") high, shall be installed prior to occupancy, shall be of contrasting color to the background, and shall be readily visible at night. Brass or gold-plated numbers shall not be used. Where structures are set back more than 150 feet from the street, larger numbers will be required so that they are distinguishable from the street. In the event a structure(s) is not visible from the street, the address number(s) shall be posted adjacent to the driveway entrance on an elevated post. Individual unit numbers shall be a minimum of 4 inches in height and shall be posted at the front and rear entrance to each unit. Additional address directional signs may be required at common building entrances and stairways.
232. **Address Directory** – An address directory shall be provided at all entrances to the project at locations approved by the Fire District. Design shall be in accordance with Fire District Addressing Standards. Directory plans shall be submitted to the Fire Prevention Division for review and approval prior to installation.
233. **Address Number Plan** – A plan shall be submitted to the Fire District for review indicating the method in which buildings are to be identified by address numbers.
234. **Accessory Room Door Labeling** – All accessory room doors shall be labeled on the doors indicating use of the room (i.e., Electrical Room, Riser Room, Fire Alarm Panel Inside, Storage Room, Janitor, Roof Access, etc).
235. **Knox Device** – Exterior access leading to fire sprinkler riser rooms and alarm control panels shall be provided with a Knox Box for emergency access.

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- 236. **Door Swing** – All exit doors shall swing in the direction of travel (outwards) when leaving the building.
- 237. **Panic Hardware** – All exit doors shall be provided with panic hardware when serving A, E, I occupancies with an occupant load of 50 or more persons.
- 238. **Egress Aisle Clearance** – All required egress aisles shall be maintained clear of obstructions at any time.
- 239. **Emergency Lighting and Exit Signs** – All emergency lights and exit signs shall be always maintained in an operable condition.
- 240. **Emergency Planning and Preparedness** – The owner / applicant and all occupants of buildings shall comply with the Fire Department requirements for Evacuation Plans, Drills and training as indicated under The International Fire Code, Chapter 4 “Emergency Planning and Preparedness”, and CCR Title 19 Sec 3.09. All required records and documentation shall be available for review by the Fire Department upon request.
- 241. **Fire Hydrant Plan** – Prior to construction, the applicant shall submit plans to the Fire District for placement of fire hydrants. On plans, show existing hydrants within 300 feet of the development. Indicate the type of hydrant, number and size of outlets.
- 242. **Fire Hydrant(s) Required** – Fire hydrant(s) shall be provided in accordance with current adopted edition of the International Fire Code, Appendix C and adopted amendments. On-site fire hydrants may be required as determined by the Fire District.
- 243. **Fire Hydrant Design (Commercial, Industrial, Multi-family buildings)** – Fire hydrants shall be installed and in service prior to combustible construction and shall conform to the minimum standard of the City of Thousand Oaks Water Works Manual and the following.
 - a. Each hydrant shall be a 6-inch wet barrel design and shall have (1) 4 inch and (2) 2 ½ inch outlet(s).
 - b. The required fire flow shall be achieved at no less than 20-psi residual pressure.
 - c. Fire hydrants shall be spaced in accordance with the California Fire Code Chapter 5 and Appendix C.

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- d. Fire hydrants shall be set back in from the curb face 24 inches on center.
 - f. No obstructions, including walls, trees, light and sign posts, meter, shall be placed within three (3) feet of any hydrant.
 - g. A concrete pad shall be installed extending 18 inches out from the fire hydrant. Ground clearance to the lowest operating nut shall be between 18 to 24 inches.
244. **Fire Hydrant Installation** – Prior to combustible construction on any parcel, a fire hydrant capable of providing the required fire flow and duration shall be installed and in service along the access road / driveway at a location approved by the Fire District, but no further than 150 feet from the building site. The owner of the combustible construction is responsible for the cost of this installation.
245. **Hydrant Location Markers** – Prior to occupancy of any structure, blue reflective hydrant location markers shall be placed on the access roads in accordance with Fire District standards. If the final asphalt cap is not in place at time of occupancy, hydrant location markers shall still be installed and shall be replaced when the final asphalt cap is completed.
246. **Water System Plans** – Plans for water systems supplying fire hydrants and / or fire sprinkler systems and not located within a water purveyor's easement, shall be submitted to the Fire District for review and approval prior to issuance of grading and/or building permits or signing of Mylar plans, whichever is first. Plans shall reflect only dedicated private fire service lines and associated appurtenances. Plan shall be design and submitted with the appropriate fees in accordance with VCFPD Standard 14.7.2.
247. **Fire Sprinklers** – All structures shall be provided with an automatic fire sprinkler system in accordance with current VCFPD Ordinance at time of building permit application.
248. **Fire Alarm/Sprinkler Monitoring Plans** – Plans for any fire alarm system or sprinkler monitoring system shall be submitted, with payment for plan check, to the Fire District for review and approval prior to installation.
249. **Fire Alarm System** – A fire alarm system shall be installed in all buildings in accordance with California Building and Fire Code requirements.

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- 250. **Fire Extinguishers** – Fire extinguishers shall be installed in accordance with the International Fire Code. The placement of extinguishers shall be subject to review by the Fire District.
- 251. **Spark Arrester** – An approved spark arrester shall be installed on the chimney of any structure(s).
- 252. **Fire Code Permits** – Applicant and / or tenant shall obtain all applicable International Fire Code (IFC) permits prior to occupancy or use of any system or item requiring an IFC permit.
- 253. **Trash Dumpster Locations** – Commercial trash dumpsters and containers with an individual capacity of 1.5 cubic yards or greater shall not be stored or placed within 5 feet of openings, combustible walls, or combustible roof eave lines unless protected by approved automatic fire sprinklers.
- 254. **Building Plan Review** – Building plans of all A, E, I, H, R-1, R-2 or R-4 occupancies shall be submitted, with payment for plan check, to the Fire District for review and approval prior to obtaining a building permit.
- 255. **Hazardous Fire Area** – Portions of this development may be in a Hazardous Fire Area and those structures shall meet hazardous fire area building code requirements. Contact the Building Department for requirements.
- 256. **Hazard Abatement** – All grass or brush exposing any structure(s) to fire hazards shall be cleared for a distance of 100 feet prior to construction of any structure and shall be maintained in accordance with VCFPD Ordinance.
- 257. **Hazard Abatement** – All grass and brush shall be cleared to a distance of ten (10) feet on each side of all access roads / driveways.
- 258. **Fuel Modification/Landscape Plans** – Project is located within a Hazardous Fire Area. Fuel Modification Zone (FMZ) and or landscape plans shall be submitted for review and approval to the Fire Prevention Bureau prior to Fire Department final inspection of the building or installation of any landscape, whichever occurs first. Where landscape plans have not been developed prior to a structure being ready for the Fire Department final, the owner may sign an affidavit that plans will be submitted prior to installation. See VCFD Guidelines 416.

POLICE DEPARTMENT

259. **Door Security Hardware** – Exterior double doors shall have an astragal constructed of steel or aluminum a minimum of .125” thick, which will cover the opening between the doors. The attachment of the astragal shall comply with all applicable provisions of the Fire Code. Exterior, outward opening single doors shall have the appropriate type of latch guard installed to prevent the violation of the latch and strike. The latch guard shall be a minimum of .125” thick and extend a minimum of six inches above and below the door latch or deadbolt. Doors utilizing rim and cylinder locks shall have heavy-duty cylinder guards installed. All outward opening exterior doors shall have hinges equipped with non-removable hinge pins or a mechanical interlock (set screws) to prevent removal of the door from the outside by removing the hinge pins.
260. **Lighting** – Weather and breakage resistant covers shall protect all exterior lighting. Exterior lighting fixtures will be fully enclosed to minimize tampering and breakage. After hours exterior lighting shall provide sufficient illumination to allow viewing of the exterior of the buildings, all pedestrian walkways and patron gathering areas. The use of Light-Emitting Diode (LED) is preferred since LEDs provide superior illumination and color rendition. Adequate lighting (3000+ Kelvin / LED / 3 ft candles / even coverage) is to be provided throughout the property where patrons/residents are anticipated to gather and parking areas as to clearly see persons outside of building surrounds. All lights shall include shielding to prevent light pollution, spillage, and glare to roadways and all surrounding properties not owned and/or controlled by the project owners, including overhead. Project photometrics will be provided to the Thousand Oaks Police Department Community Resource Unit for review and approval. The planned “park” area at the south west corner of the property closest to Lombard St will be adequately lighted as described above during hours of darkness.
261. **Landscaping** – Landscaping shall not cover, nor partially cover any exterior door or window. Landscaping, including trees, will not be placed directly under any overhead lighting that could cause loss of light at ground level. All landscaping will be kept trimmed in order to provide an unobstructed view of the parking areas and building from adjacent streets. The standard CPTED (Crime Prevention through Environmental Design) landscaping rules of “two foot / six foot” shall apply to the property (No shrubbery shall be higher than 2 feet and lower the tree canopy shall not grow below 6 feet).

POLICE DEPARTMENT CONDITIONS OF APPROVAL FOR; DAGR 2023-70001; SUP 2023-70011; and PTP 2023-70067

This will reduce concealment areas and keep the area well-lit during darkness hours.

A combination of walls/fencing and thorny vegetation shall be used along the southern property edge. Wall/fence height should be no less than 7 feet. Thorny vegetation should be used on one or both sides of the fence/wall to prevent unauthorized access to the property from Hwy 101 located to the south of the property. Thorny vegetation will dissuade illegal camping along the length of the wall as well. Examples of thorny vegetation include but are not limited to cactus, bougainvillea, Chinese bitter orange, etc.

262. **Address Numbers** – Wall mounted address numbers shall be a minimum of ten inches in height, be of a highly contrasting color to the background on which they are attached, and shall be illuminated from dusk to dawn by a permanent, dedicated light source. All sides of the residential structures will be marked with the main street address for easy viewing from the street level. Map signs of the location will be placed at all vehicular and pedestrian entrances to residential units.

Address numbers shall be mounted in a prominent, non-obstructed location on all sides of the building. All individual unit numbers shall be a minimum of 4" in height.

Unit numbers will be clearly marked on the outside of each residential door, as well as descriptors on those rooms not housing residents (closet, electrical, restroom, etc.). Floor plans of the facility will be displayed in prominent locations inside of any exterior to interior access points to the building. Floor plans of the current floor will be displayed inside stairwells near door access to current floor, as well as outside each elevator opening. Directional signs shall be placed at elevator access points on each level indicating which direction each room number can be located for speed of ingress for emergency personnel.

263. **Utility Rooms and Enclosures** – All exterior utility rooms and enclosures containing electrical and telephone equipment shall be kept locked at all times.
264. **Trash Enclosures** – Exterior trash enclosures shall be kept closed and locked during non-business hours to discourage, loitering, illegal dumping and theft. The site shall be maintained in a neat and clean condition at all times. Litter on the site or any litter scattered to a nearby property, streets, and walkways shall be removed daily. Trash enclosures will be constructed to have outside visibly to reduce the possibility of camping or sleeping in the area.

265. **Video Surveillance System** – Will be required for a 360 degree view around the parking level/areas. Additionally, video surveillance with the same below listed parameters will be required for all roof deck areas and in such positions as to capture vehicles and persons entering and exiting from the parking areas. The video surveillance feed will be made immediately available to the Thousand Oaks Police Department upon request in the event of a major emergency or incident. A phone number to the security company or video surveillance provider will be provided to the Thousand Oaks Police Department upon completion of the project. The surveillance system will be HD quality, have night vision capabilities and be able to retain video data for no less than 30 days.
266. **Emergency Access** – The location will have emergency access for the police and fire department to entrance / exit doors and parking areas via a “Knox Box” or similar security device for all secured exterior doors. A generic code for building access should (if applicable) also be provided to Sheriff’s Dispatch at 805-654-9511. Any code changes need to be provided to Sheriff’s Dispatch within 48 hours.

A detailed floor map of the entire complex including room numbers and street addresses shall be provided to the Sheriff’s Dispatch Advanced Real Time Information Center (ARTIC). For the express use of expediting emergency personnel response to calls for service. These maps are often referred to as a tactical map.

267. **Roof Access** – Roof access must be secured with locking doors or any other mechanism to restrict access for non-public areas. Roof access to the residential area is to be controlled by “keyfob” or any other similar security device. Roof access to public areas will be control at the discretion of the developer.
268. **Retail Stores, Restaurants, and Bar Spaces** – The projected/planned retail, restaurants, bars, and commercial spaces within the project must submit for specific conditions from the Thousand Oaks Police Department Community Resource Unit prior to building alterations or providing goods or services to the public.

The Door Security Hardware, Lighting, Landscaping, and Address Numbers portions of this conditions memorandum shall apply to each of the individual retail/commercial spaces.

POLICE DEPARTMENT CONDITIONS OF APPROVAL FOR; DAGR 2023-70001; SUP 2023-70011; and PTP 2023-70067

269. **Noise and Music** – No amplified music/announcements shall be allowed between the hours of 11 PM and 9 AM.
270. **Other Security Concerns** – The businesses will correct any safety or security concerns upon written notice by the Thousand Oaks Police Department.

The applicant shall notify a Thousand Oaks Police Department representative (Sergeant or senior deputy of the Community Resource Unit {805-371-8362}) at least one week prior to special entertainment events, which are reasonably anticipated to attract a larger or different patronage.

The Thousand Oaks Police Department also reserves the right to make further comments or conditions related to security or safety after the issuance of occupancy permits, and the applicant will correct any safety or security concerns upon written notice by the Police Department within the time period set forth in any such notice.

271. **Level 1 Parking** – For the residents, will have a motorized gate to limit free and unrestricted access from persons not having business at the location. All exterior openings in the structure's level 1 walls shall be secured with decorative metal grids to minimize unauthorized pedestrian entry. The concrete flooring of the structure shall be rough swirled to prevent skateboarding, rollerblading, etc. The garage area will have emergency access to the gate via a "Knox Box" or similar security device. A generic code for gate access will also be provided to Sheriff's Dispatch at 805-654-9511. Any code changes need to be provided to Sheriff's Dispatch ASAP.
272. **Stairwells** – Stairwells leading to additional floors in the enclosed public and non-public areas will either have (1) mirrors, (2) an open stairs concept, (3) half-wall concept or (4) any combination of the aforementioned, to allow the traveler to view up or down to the next floor for the purposes of an increased field of view and reduced blind spots.

Additionally, any stairwell or doors leading from the public area to any residential area is to be accessed by key-fob, key, punch code or other control device as to restrict access from the general, non-residing public. This includes all exterior doors on the perimeter of the residential portion of the project. The doors will have emergency access via a "Knox Box" or similar security device. A generic code for door access will also be provided to Sheriff's Dispatch at 805-654-9511 if coded. Any code changes need to be provided to Sheriff's Dispatch ASAP.

POLICE DEPARTMENT CONDITIONS OF APPROVAL FOR; DAGR 2023-70001; SUP 2023-70011; and PTP 2023-70067

273. **Mailboxes** – If a cluster box is used, it shall be placed in an area conducive to surveillance. A designated location for package delivery shall be established in an area conducive to surveillance. Hub style delivery/pickup locations are suggested. The delivery location shall be used for all packages within size restrictions to prevent packages from being left unattended outside of residences and greatly diminish the likelihood of package theft.
274. **Elevators** – Elevator interiors shall be equipped with mirrors or highly reflective surfaces to allow surveillance of the interior prior to entry, and shall have a minimum interior dimension of 6' 8" wide x 4'9" deep in order to accommodate a standard sized medical gurney and emergency response personnel.
275. **Signs** – Any signs displayed must be far enough back from the street as to not impede with visibility to traffic. The street address shall be prominently displayed on the sign to assist first responders with identifying the facility. Sign mounted address shall be no less than 5 inches in height, will be of a highly contrasting color to the background on which they are attached, and shall be illuminated from dusk to dawn by a permanent, dedicated light source. Signs of the location will be placed at all vehicular and pedestrian entrances.
276. **Maintenance** – Any and all graffiti, etchings, unauthorized writing/painting/ art shall be removed/abated as soon as practicable, not to exceed 72 hours. Allowing time for police reporting if desired by location management.

500 Thousand Oaks Boulevard

Traffic Impact Study

Prepared for:
Cherry Tree Capital Partners
130 Newport Center Dr, Ste 210
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April 2024

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I. INTRODUCTION

This traffic impact study evaluates the traffic circulation impacts associated with the proposed 500 Thousand Oaks Boulevard development project on Thousand Oaks Boulevard (hereinafter referred to as “Project”). This study presents the scope, methodology, inputs, assumptions, and results of the traffic analysis. The City of Thousand Oaks has contracted with W.G. Zimmerman Engineering, Inc. (WGZE) to develop and complete the traffic analysis for the Project located at 500 Thousand Oaks Boulevard. Although this is a technical traffic analysis, every effort has been made to write the report clearly and concisely.

II. PROJECT DESCRIPTION

The 265,280 square-foot (6.09 acre) project site is located at 500 Thousand Oaks Boulevard in the City of Thousand Oaks. Adjacent streets providing direct access to the Project are Thousand Oaks Boulevard and Lombard Street. Major roadways adjacent to the Project are Rancho Road to the east, Moorpark Road to the west, and Hodencamp Road to the north. Regional access is available via the 101 Freeway, accessible from both the east and west of the subject site, as well as Highway 23 from the east. The project site is currently an undeveloped lot. **Figure 1** shows the project location map.

The proposed project consists of developing the empty lot into two 5-story independent living communities and one 4-story independent living community with space designated for restaurant and retail usage. The Project includes a ½ acre linear park off Thousand Oaks Boulevard and a smaller amenity park off Lombard Street. The Project will also include amenities such as a central clubhouse, fitness center, co-working area, and a pair of roof decks for residents to utilize. The proposed site plan is shown in **Figure 2**.

Residential parking will be provided as a mixture of surface level retail parking, ground floor parking garages, and a subterranean garage. In total, the Project will provide 477 parking spaces.



Figure 1: Project Location Map

III. EXISTING ROADWAY SYSTEM

Thousand Oaks Boulevard is a four-lane divided/undivided street (two lanes each direction) oriented in the east-west direction. Thousand Oaks Boulevard is classified as a principal arterial street per the City of Thousand Oak's General Plan-Mobility Element. Thousand Oaks Boulevard allows two-way left turns in the median within the project vicinity. The posted speed limit on Thousand Oaks Boulevard is 35 miles per hour (mph). On-street parking is permitted on both sides of Thousand Oaks Boulevard. Sharrow pavement stencils are provided on this facility to serve as a reminder to motorists that the travel lane is shared by both automobiles and bicyclists.

Hillcrest Drive is a four-lane divided/undivided street (two lanes each direction) oriented in the east-west direction, north of Thousand Oaks Boulevard. Hillcrest Drive is classified as a minor arterial street east of Moorpark Road and principal arterial street west of Moorpark Road per the City of Thousand Oak's General Plan-Mobility Element. The posted speed limit on Hillcrest Drive is 40 mph east of Hodencamp Road and 45 mph west of Hodencamp Road. On-street parking is permitted in both directions on Hillcrest Drive. There are Class II bicycle lanes provided along Hillcrest Drive, east of Holdencamp Road.

Moorpark Road is a 5-lane divided street (two lanes in the south direction and three in the north direction) that transitions to include two more left turn lanes in both directions. Moorpark Road is classified as a principal arterial street per the City of Thousand Oak's General Plan-Mobility Element. The posted speed limit on Moorpark Road is 35 mph. There are no marked lanes for bicycles along Moorpark Road due to limited road width.

Hodencamp Road is a four-lane divided street (two lanes each direction) oriented in the north-south direction. Hodencamp Road is classified as a minor arterial street south of Hillcrest Drive and a collector road north of Hillcrest Drive per the City of Thousand Oak's General Plan-Mobility Element. Hodencamp Road has a posted speed limit of 35 mph. There are no marked bicycle lanes along Hodencamp Road and on-street parking is allowed in both directions.

Rancho Road is a four-lane undivided street (two lanes each direction) oriented in the north-south direction. Rancho Road is classified as a principal arterial street south of Thousand Oaks Boulevard and a minor arterial north of Thousand Oaks Boulevard per the City of Thousand Oak's General Plan-Mobility Element. The posted speed limit on Rancho Road is 35 mph north of Thousand Oaks Boulevard and 40 mph south of Thousand Oaks Boulevard. There are Class II bicycle lanes provided along Rancho Road south of Thousand Oaks Boulevard.



i. Study Intersections

A total of eight (8) intersections, as shown in **Figure 3**, were studied for the proposed development on 500 Thousand Oaks Boulevard.

Table 1: List of Intersections for Traffic Analysis

No.	Intersections	Intersection Type
1	Hillcrest Drive and Moorpark Road	Signalized
2	Hillcrest Drive and Hodencamp Road	Signalized
3	Hillcrest Drive and Highway 23 Off-Ramp/Frontage Road	Signalized
4	Thousand Oaks Boulevard and Moorpark Road	Signalized
5	Thousand Oaks Boulevard and Lombard Street	Unsignalized
6	Thousand Oaks Boulevard and Hodencamp Road	Signalized
7	Thousand Oaks Boulevard and Highway 23 Frontage Road	Signalized
8	Thousand Oaks Boulevard and Rancho Road	Signalized

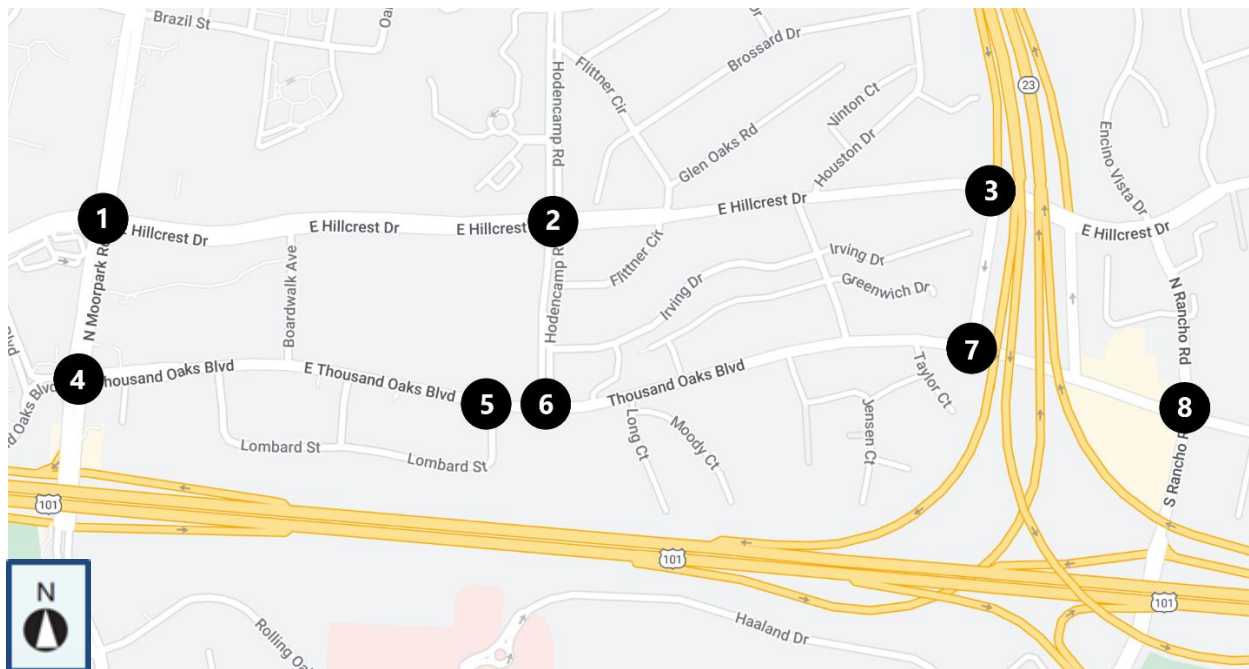


Figure 3: Study Intersections Location Map

ii. Bicycle and Pedestrian Routes

Sidewalks are currently provided on both sides of Thousand Oaks Boulevard, Hillcrest Drive, Moorpark Road, Hodencamp Road, and Rancho Road in the project vicinity to facilitate pedestrian movement. There are marked crosswalks and pedestrian signal heads provided on Thousand Oaks Boulevard at Rancho Road, Highway 23, Hodencamp Road, and Moorpark Road as well as on Hillcrest Drive at Highway 23, Hodencamp Road, and Moorpark Road. Class II Bike Lanes are provided on Hillcrest Drive from Hodencamp Road to Highway 23 Frontage Road.

IV. EXISTING TRAFFIC CONDITIONS

Existing peak hour traffic volumes are based upon morning and evening peak period intersection turning movement counts obtained from Counts Unlimited on June 7, 2023, during typical weekday conditions. The morning peak period was collected between 7:00 AM and 9:00 AM and the evening peak period was collected between 4:00 PM and 6:00 PM. The resulting AM and PM peak hour traffic flows were developed into passenger car units (pcu's) for the surrounding road network. The actual peak hour within the peak period is the four consecutive 15-minute periods with the highest total volume when all movements are added together. Thus, for example, the weekday evening peak hour at one intersection may be 4:45 PM to 5:45 PM if those four consecutive 15-minute periods have the highest combined volume. Intersection turning movement count worksheets are provided in **Appendix A**.

Figure 4 and **Figure 5** show the existing morning and evening peak hour intersection turning movement volumes, respectively.

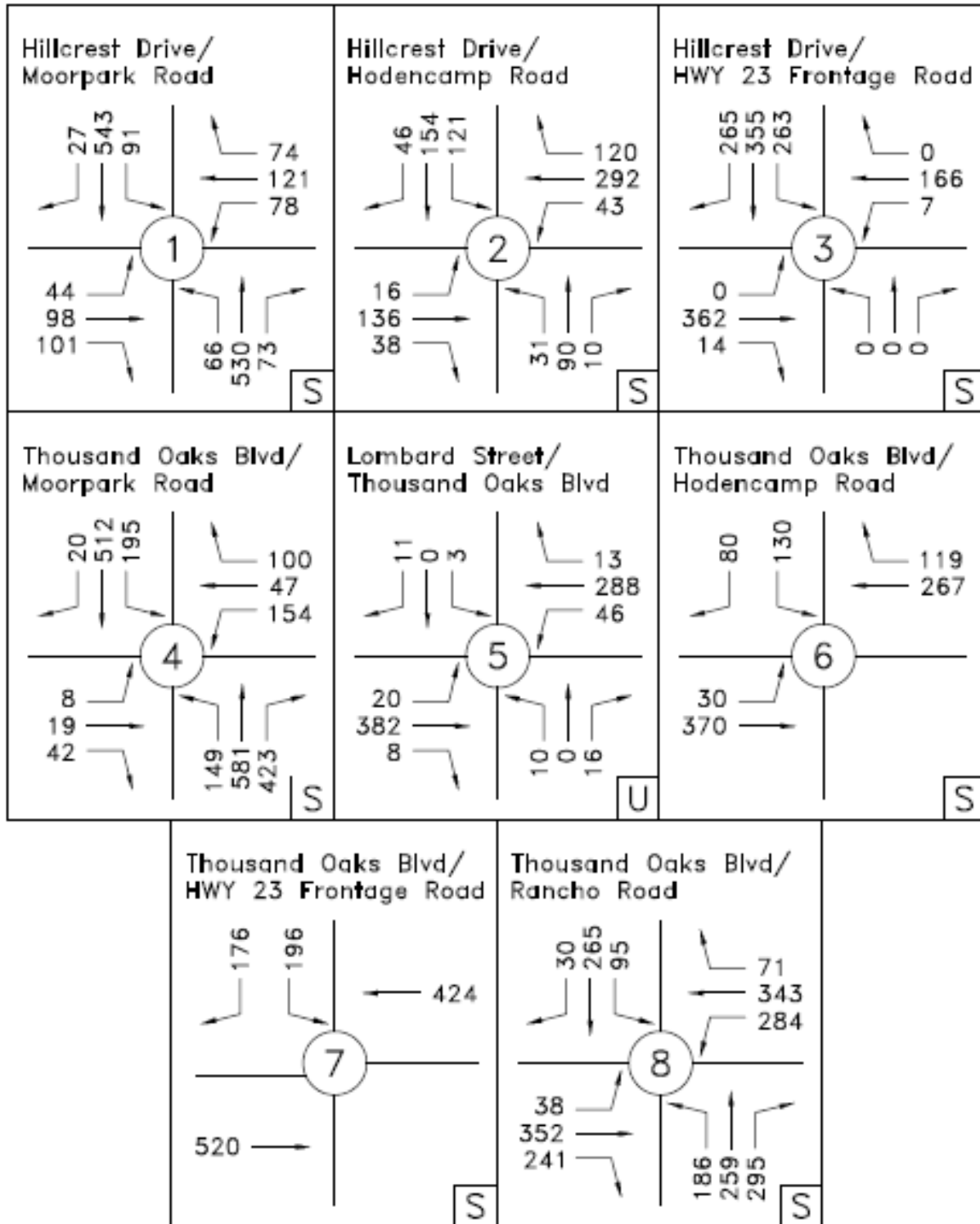


Figure 4: Existing AM Peak Hour Intersection Turning Movement Volumes

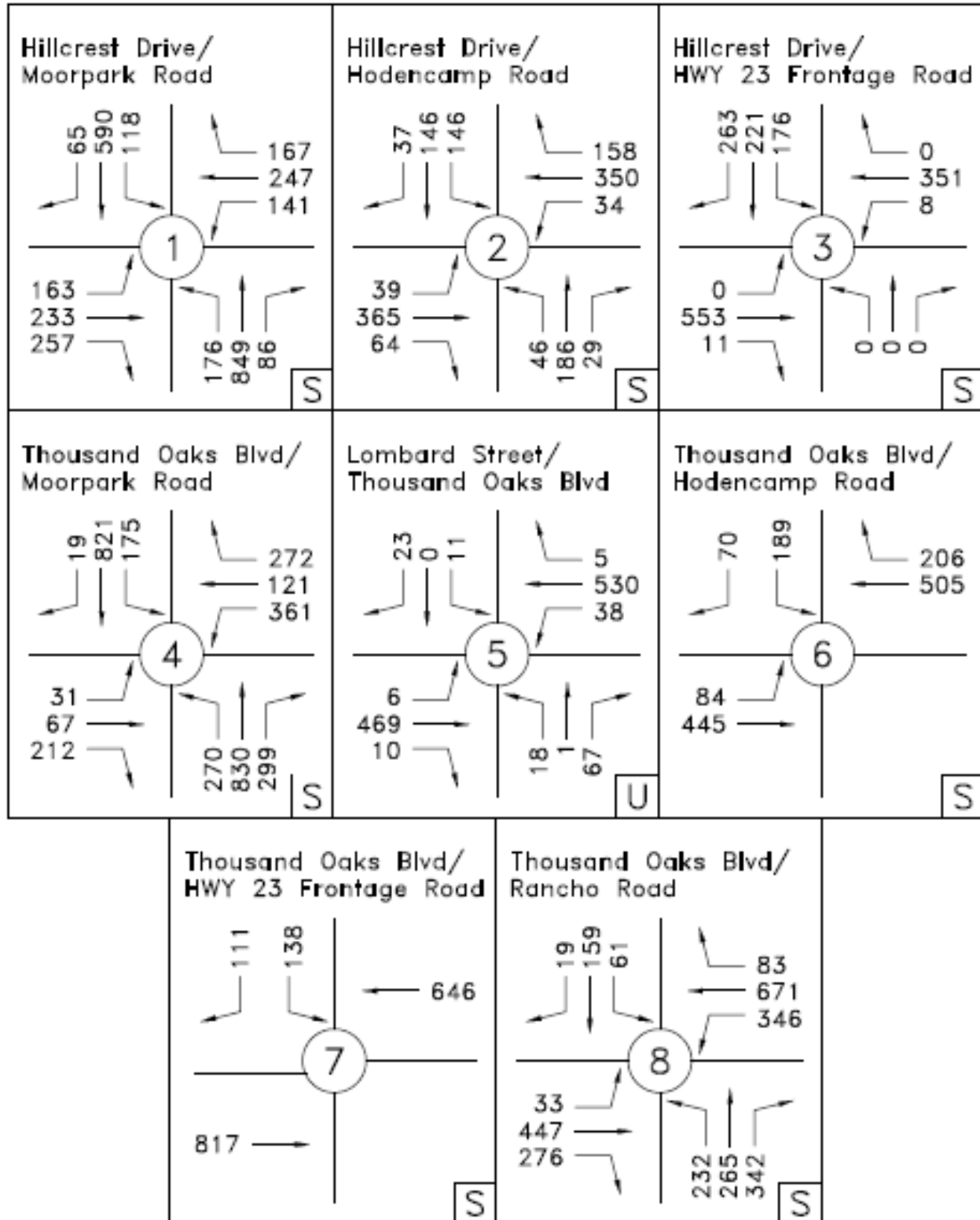


Figure 5: Existing PM Peak Hour Intersection Turning Movement Volumes

i. Roadway Segments

The study roadway segment is evaluated based on Average Daily Traffic (ADT) Volume/Capacity (V/C) ratios with Level of Service as defined below:

The Average Daily Traffic (ADT) counts on Thousand Oaks Boulevard and Lombard Street in the study area were collected on June 7, 2023, by Counts Unlimited. The traffic counts are provided in **Appendix A**. The ADT counts on Thousand Oaks Boulevard were taken on both the eastern and western sides of the intersection at Lombard Street. 7,839 vehicles in the eastbound direction and 6,702 in the westbound direction were recorded over a 24-hour period. ADT traffic patterns show that the eastbound direction has more vehicle traffic during both AM and PM hours. The ADT traffic pattern on Lombard Street is shown in **Figure 6**.

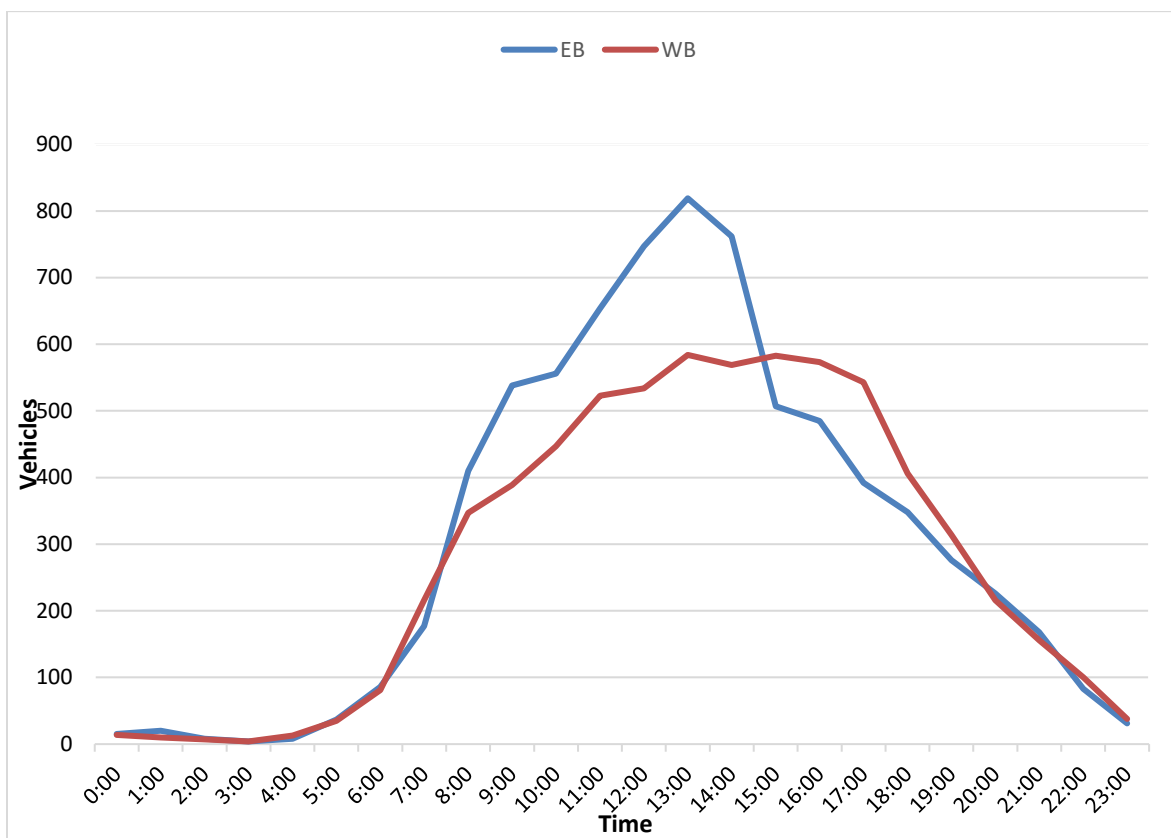


Figure 6: Thousand Oaks Boulevard ADT Counts At Lombard Street

V. PROJECT TRIP GENERATION

Table 3 shows the trip generation based upon regression/linear equations for each project based on the land use obtained from the Institute of Transportation Engineers (ITE), Trip Generation Manual, 11th Edition, 2021.

In accordance with the Institute of Transportation Engineers recommendations, the numbers of trips forecast to be generated by the proposed land use are determined by solving for trips (T) in the trip generation equation given the land use quantity (X).

As shown in **Table 2**, the proposed project is estimated to generate approximately 1614 daily trips in passenger car equivalents, of which, 135 trips would occur during the morning peak hour and 135 trips would occur during the afternoon peak hour. The Peak hour's trips estimates are used in analyzing the affected intersections and streets in the City of Thousand Oaks.

Table 2: 500 Thousand Oaks Blvd Mixed-Use Development Project Trip Generation

Land Use	ITE #	Rate	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Generation Rates									
Mid-Rise Multifamily	221	DU	4.54	23%	77%	.37	61%	39%	.39
Restaurant	932	KSF	107.20	55%	45%	9.57	61%	39%	9.05
Retail	822	KSF	54.45	60%	40%	2.36	50%	50%	6.59
Mixed-Use Internal Capture									
Mid-Rise Multifamily	221	328 DU	7%	7%	4%	5%	9%	10%	9%
Restaurant	932	3.2 KSF	36%	24%	14%	20%	44%	64%	52%
Retail	822	5.3 KSF	40%	25%	40%	31%	41%	56%	49%
Trip Generation Estimate									
Mid-Rise Multifamily	221	328 DU	1489	28	93	121	78	50	128
Internal Capture			-105	-2	-4	-6	-7	-5	-12
Restaurant	932	3.2 KSF	343	17	14	31	18	11	29
Internal Capture			-122	-4	-2	-6	-8	-7	-15
Pass-By			-95	-6	-5	-11	-4	-2	-6
Retail	822	5.3 KSF	289	8	5	13	17	18	35
Internal Capture			-115	-2	-2	-4	-7	-10	-17
Pass-By			-70	-2	-1	-3	-4	-3	-7
Total Net Trips			1614	37	98	135	83	52	135
¹ Trip Rates from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11 th Edition (2021).									
² KSF= 1,000 gross square feet of building area									
³ Pass-By Trips are trips made as intermediate stops on the way from an origin to a primary trip destination. Pass-by trips are attracted from traffic passing the site on adjacent streets, which contain direct access to the generator. For this analysis, the following pass-by reduction factors were used (Source: Trip Generation Manual, 11 th Edition, ITE 2021): Land Use Code 822 – Strip Retail Plaza uses an estimated 40% pass-by rate per ITE 821 – Shopping plaza (Weekday). Land use code 932 – High Turnover Sit Down Restaurant has an average pass-by rate of 43%.									
⁴ Internal Capture based on the NCHRP 684 Internal Trip Capture Estimation Tool, developed by the Texas A&M Transportation Institute									

VI. PROJECT TRIP DISTRIBUTION

i. Cumulative Projects

Figure 7 shows several upcoming projects in the vicinity that may contribute to future cumulative trip generation. The red dots detail several upcoming projects, and the blue dot is the project site for this study. **Table 3** summarizes the traffic volumes of nearby projects.

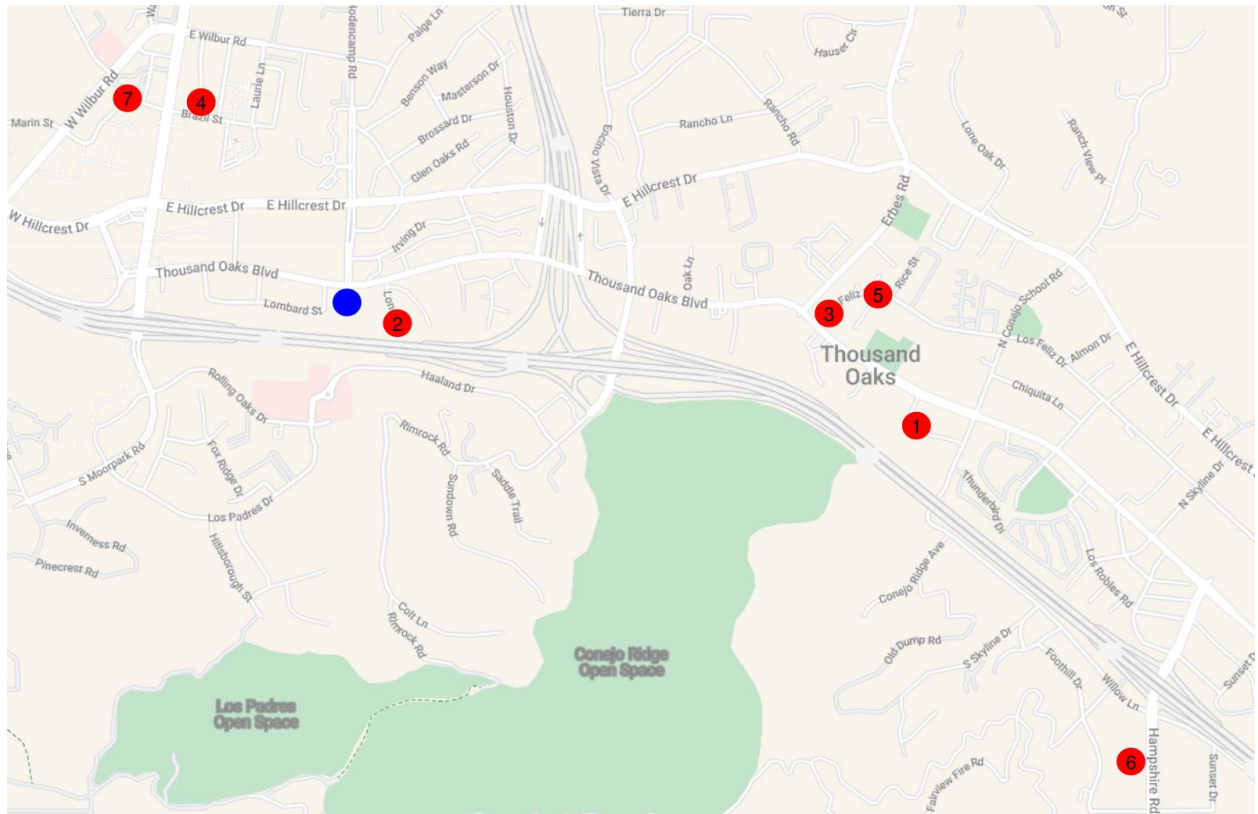


Figure 7: Upcoming Projects in the Project Area Vicinity

Table 3: Trip Generation For Local Projects

	Project Location	Size	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
1	2200 E Thousand Oaks Boulevard ³	165 DU	14	47	61	39	25	64
2	86 Long Court ¹	73 DU	-20	18	-2	18	-10	8
3	1730 Los Feliz Drive ³	24 DU	2	8	10	8	4	12
4	420 Pennsfield Place ³	12,293 SF Medical Office	30	8	38	14	34	48
5	1816 Los Feliz Drive ³	16 DU	1	5	6	5	3	8
6	325 Hampshire Road ²	15,000 SF Retail 420 DU	48	139	187	157	105	262
7	Janns Marketplace Hotel Project ⁴	13,308 SF Retail 216 Rooms	35	29	64	24	17	41
¹ 86 Long Court trip generation is provided by the 86 Long Court Supplemental Memo DP 22-70629. ² 325 Hampshire Road trip generation is provided by the Thousand Oaks Ranch TIA by Iteris. ³ Trip Generation is provided by ITE Trip Generation Manual 11 th Edition. ⁴ Janns Marketplace Hotel Project EIR provided by City of Thousand Oaks Website.								

Cumulative projects are only an estimate on how these projects affect the Project study area. Each of the cumulative projects will require a detailed evaluation in the form of a Traffic Impact Analysis. The most impacted intersection of these type of projects is the intersections adjacent to the project. Project trips dissipate over distance because of either the project proximity to freeways or an end trip such as work, shopping or recreation. Most projects' trips dissipate over a mile from the source because of these factors. These factors were applied to the Project to determine impact. Each project is discussed further below.

There are several factors that impact how significant nearby projects:

- Land Use – Most of the local projects are residential apartments. Most trips that multi-family residential projects produce are from the residence to a commercial or industrial area and back.
- Local Access – There are several 101 Freeway access points located near the Project location as well as further down near other local projects. Additionally, there is access to the 23 Freeway on Hillcrest Drive that further connects to the 101 Freeway. These freeways are located between the local project and 500 Thousand Oaks Boulevard.

The two largest planned projects (Commercial Land Use), No. 4 - Pennsfield Plaza and No. 7 - Janss Market Place Hotel have direct access to/from the Ventura Freeway from the adjacent Moorpark Road and the Moorpark Freeway from Hillcrest Drive, located northwest of the Project. Typically, medical offices serve the adjacent community. Existing residential communities are located to the west, north, and east of this site. Janss Market Place is centrally located to these same communities with multiple street networks available without using Thousand Oaks Boulevard. Cumulative Projects 1, 3, 5, and 6 which are multifamily units, located more than a mile away, and adjacent to retail are expected to have negligible traffic impacts related to Project. In addition, these projects have adjacent access to the Ventura and Moorpark Freeways. No. 2 (86 Long Court) provides a total of 8 trips in the PM peak. However, these trips will split east and west along Thousand Oaks Boulevard causing the project to have a negligible impact on the Project.

ii. Trip Distribution

Figure 8 shows site circulation intended for the project. The site circulation includes driveways to enter and exit the project, pathways to circulate vehicles, intended parking zoning, as well as pedestrian circulation.

Figure 9 and **Figure 10** show the forecasted inbound and outbound directional distribution patterns for the project generated trips. The project trip distribution patterns are based on review of existing traffic volume data, surrounding land uses, circulation plan, and the local and regional roadway facilities in the project vicinity.

Based on the identified project trip generation and distributions, morning and evening peak hour intersection turning movement volumes expected from the project are shown in **Figure 11** and **Figure 12**, respectively.

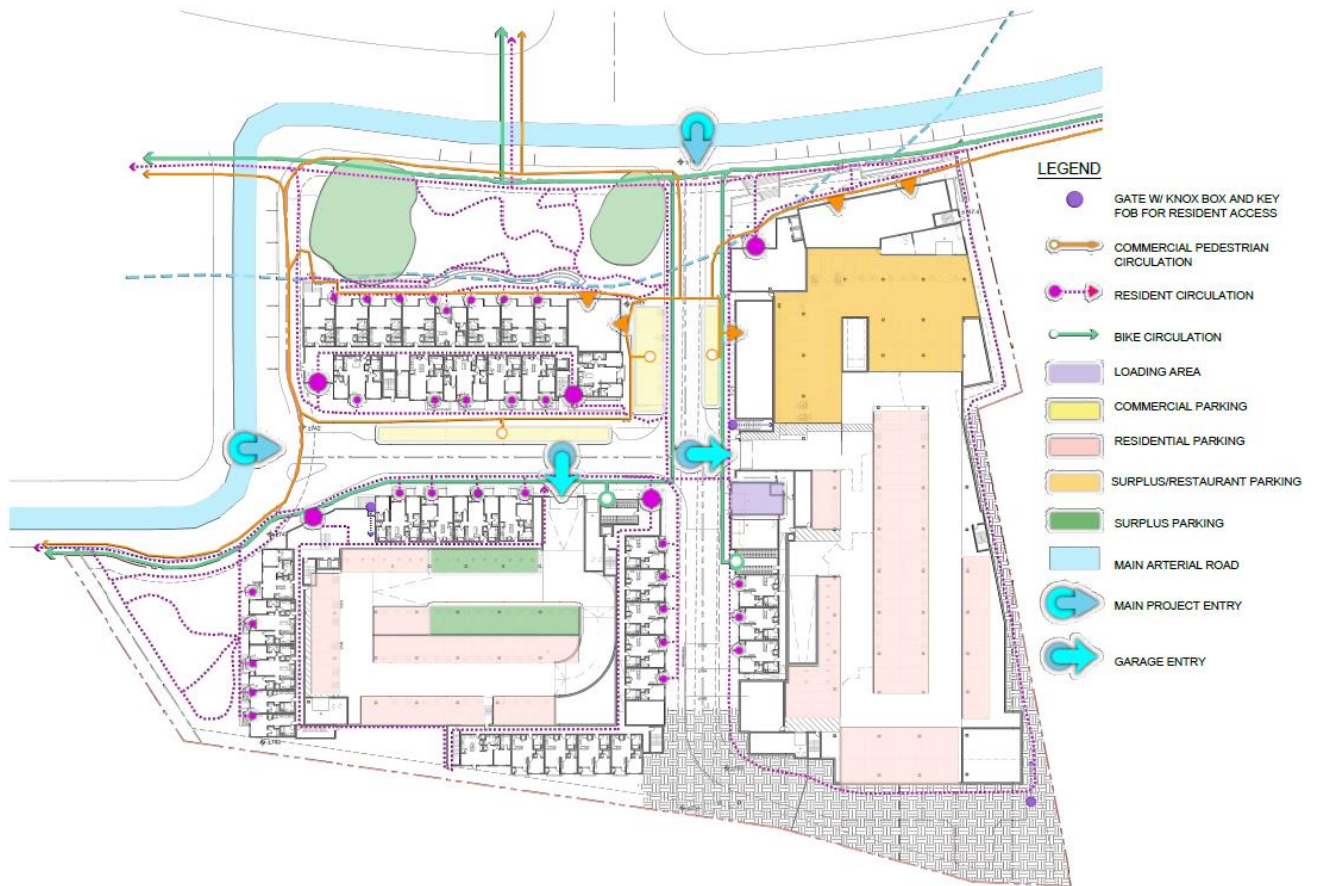


Figure 8: Intended Site Circulation

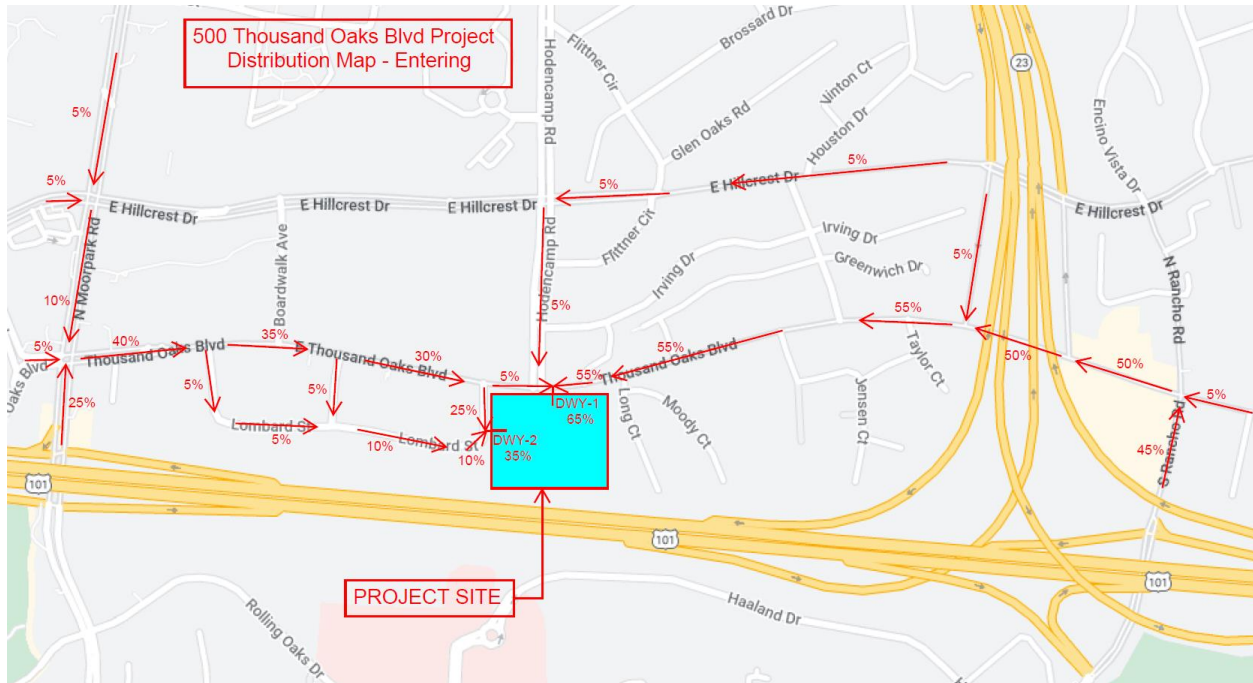


Figure 9: Inbound Trip Distribution and Assignment



Figure 10: Outbound Trip Distribution and Assignment

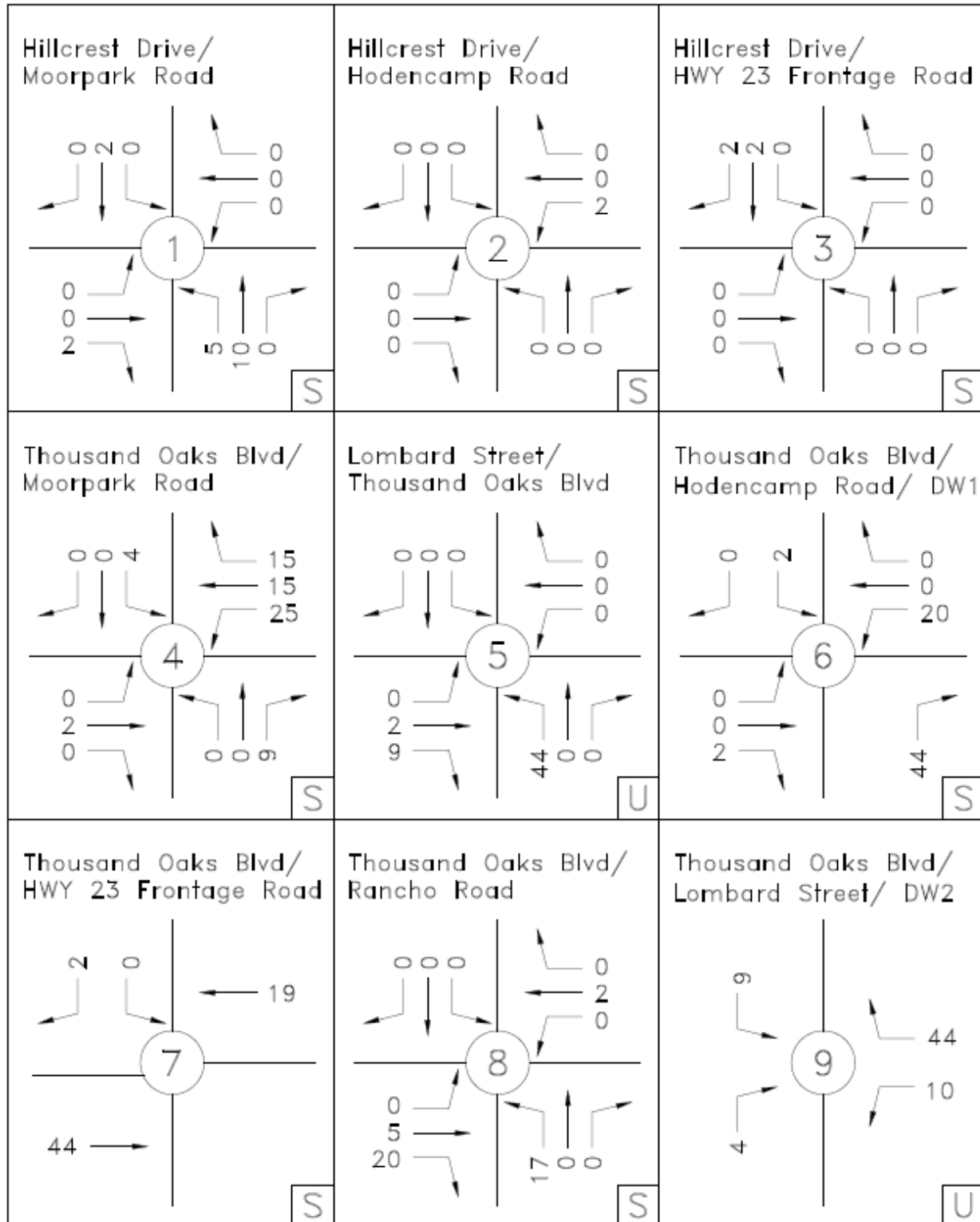


Figure 11: Project Total Vehicles AM Peak Hour Intersection Turning Movement Volumes

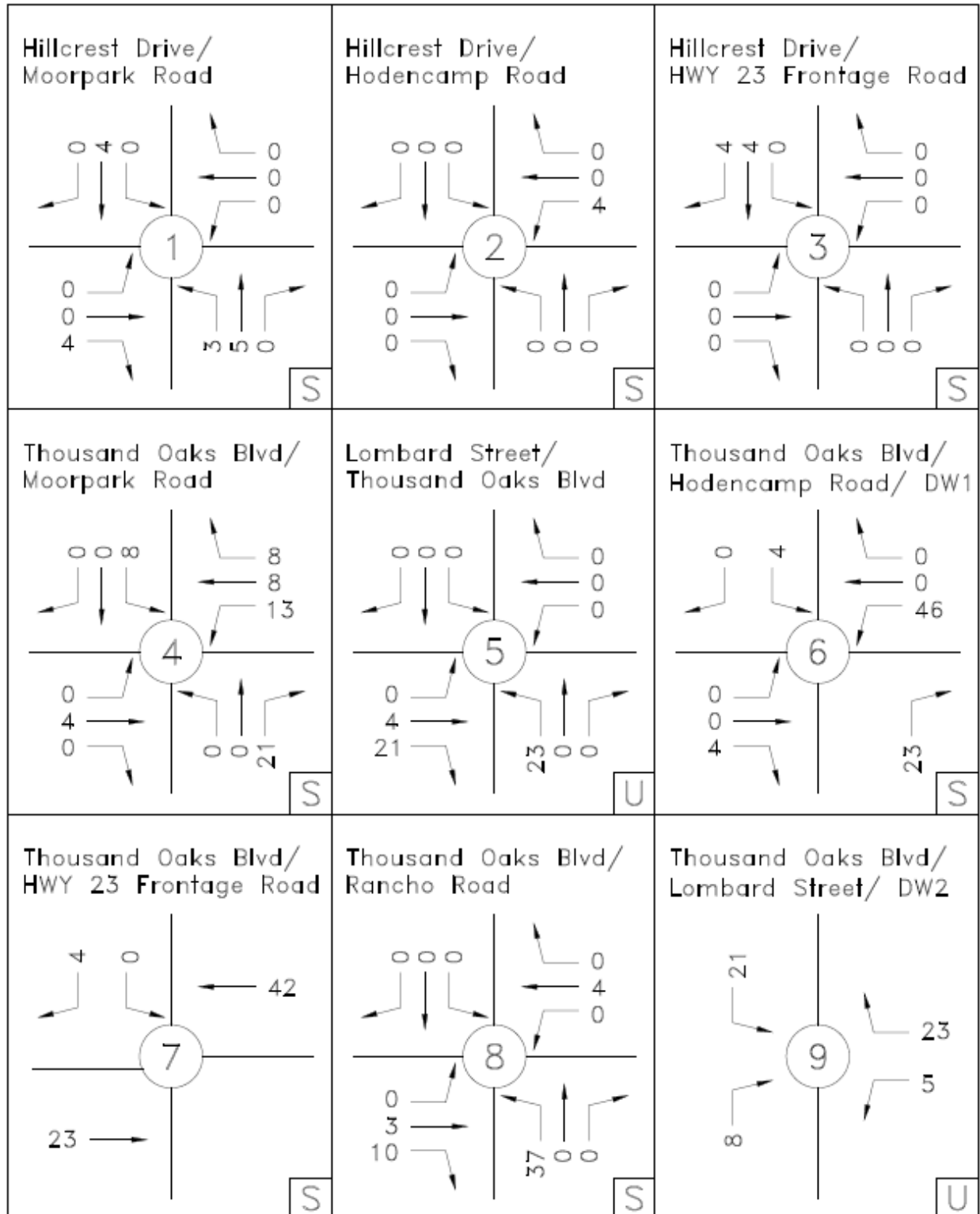


Figure 12: Project Total Vehicles PM Peak Hour Intersection Turning Movement Volumes

VII. TRAFFIC FORECASTS

a) Existing Plus Project

The traffic volumes for existing plus project traffic conditions have been derived by adding the project generated trips to existing traffic volumes. Existing plus project morning and evening peak hour intersection turning movement volumes are shown in **Figure 13** and **Figure 14**, respectively.

b) Future (Opening Year - 2040) Without Project

To assess Future (2040) without Project traffic conditions, existing traffic volumes were combined with an annual growth factor of 0.376% per year to the year 2040 consistent with the City's Traffic Impact Mitigation Fee Nexus Study. This growth factor includes future unspecified (unidentified) development projects city-wide and only used to forecast future traffic volumes. Future (2040) without Project morning and evening peak hour intersection turning movement volumes are shown in **Figure 15** and **Figure 16**, respectively.

c) Future (Opening Year - 2040) Plus Project

To assess Future (2040) plus Project traffic conditions, Project generated trips were added to Future (2040) With Project traffic volumes. Future (2040) with Project morning and evening peak hour intersection turning movement volumes are shown in **Figure 17** and **Figure 18**, respectively.

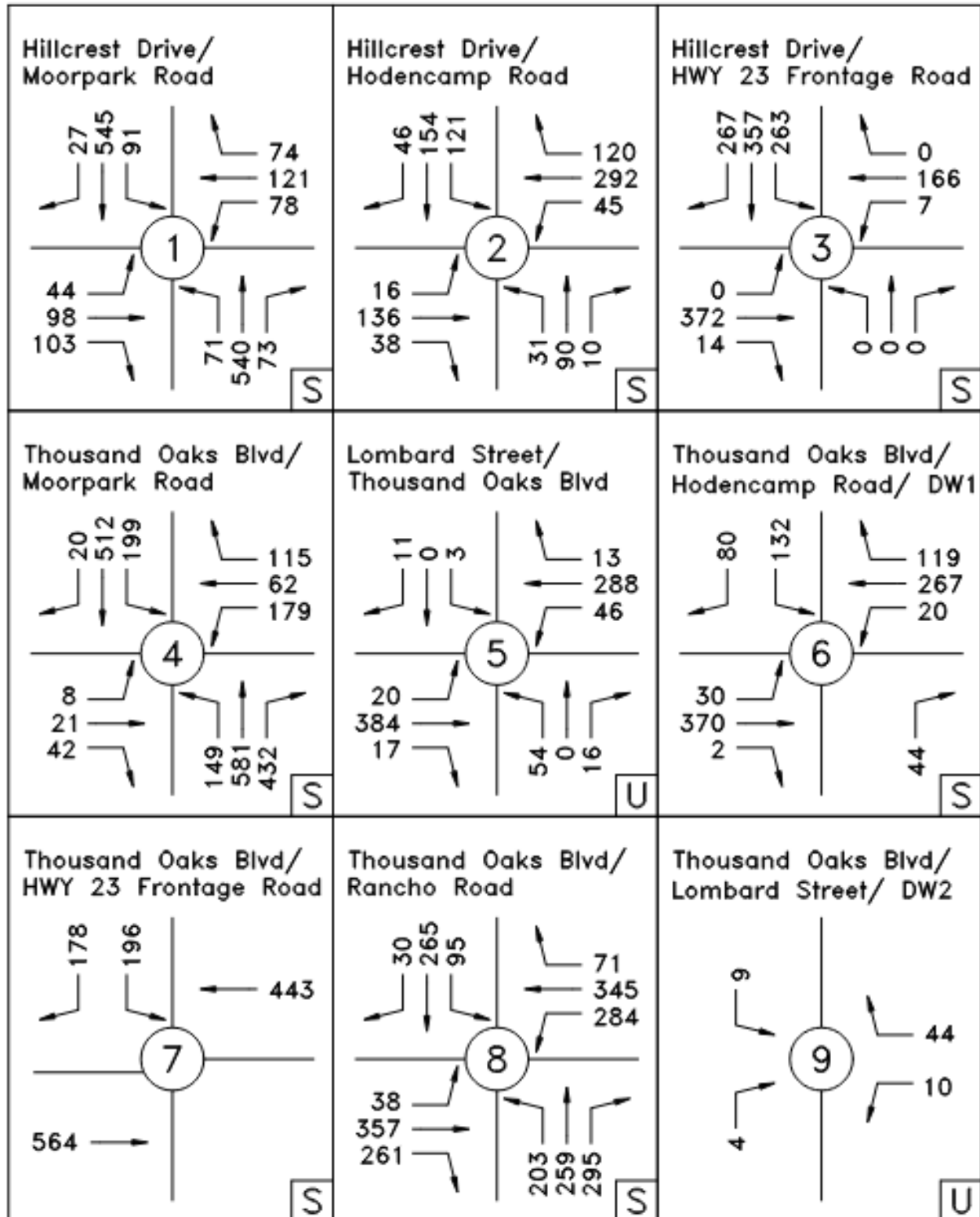


Figure 13: Existing Plus Project AM Peak Hour Intersection Turning Movement Volumes

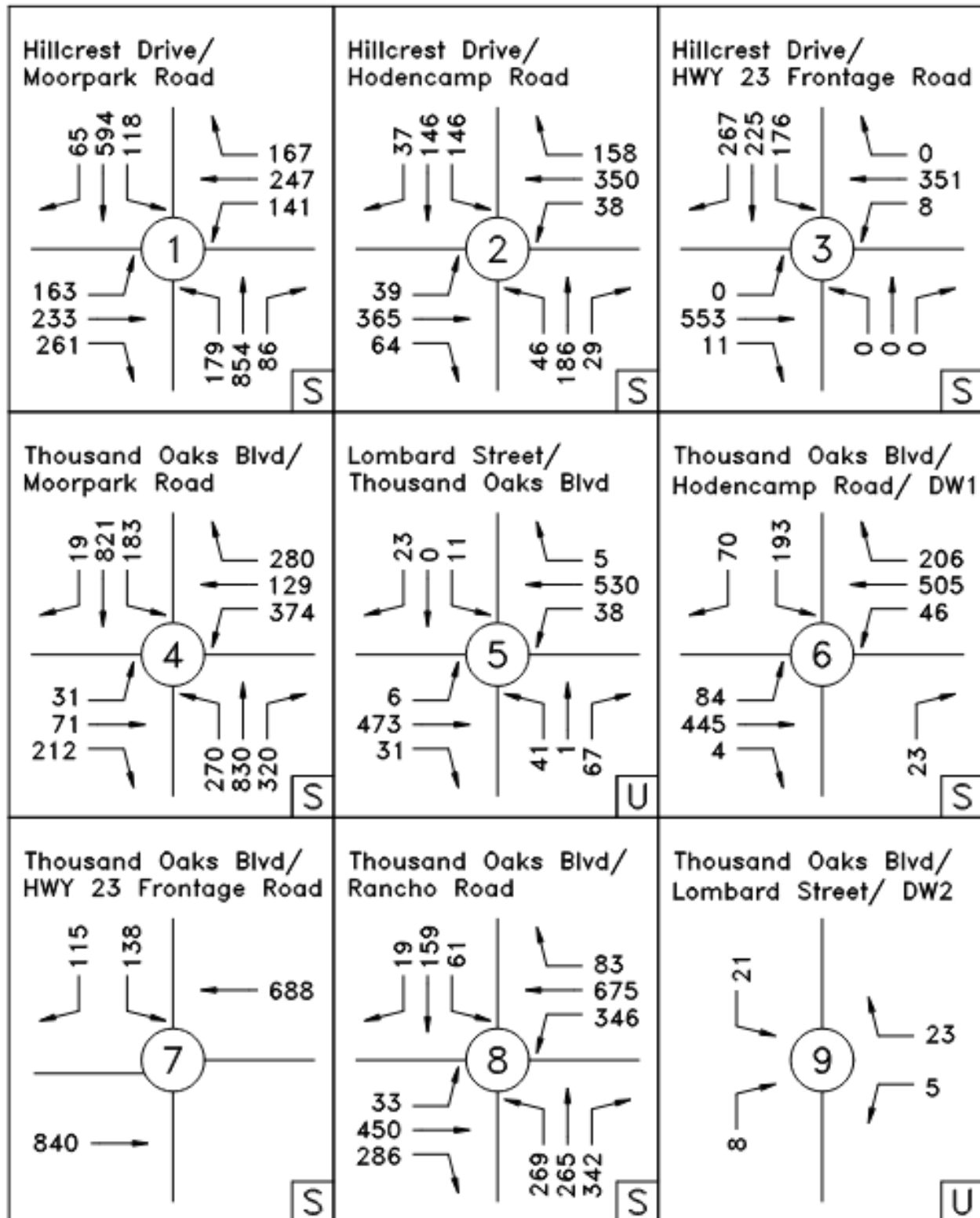


Figure 14: Existing Plus Project PM Peak Hour Intersection Turning Movement Volumes

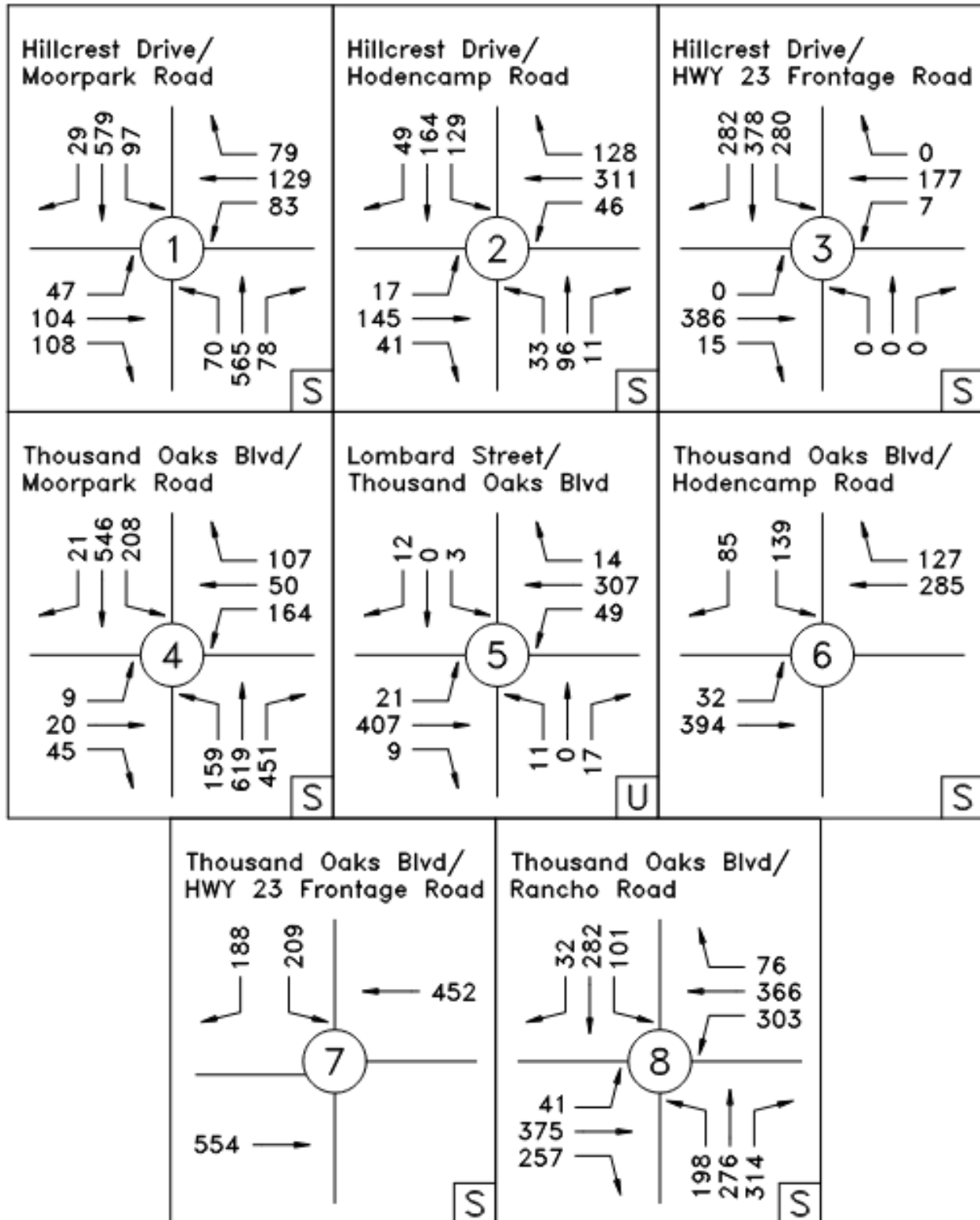


Figure 15: Future AM Peak Hour Intersection Turning Movement Volumes

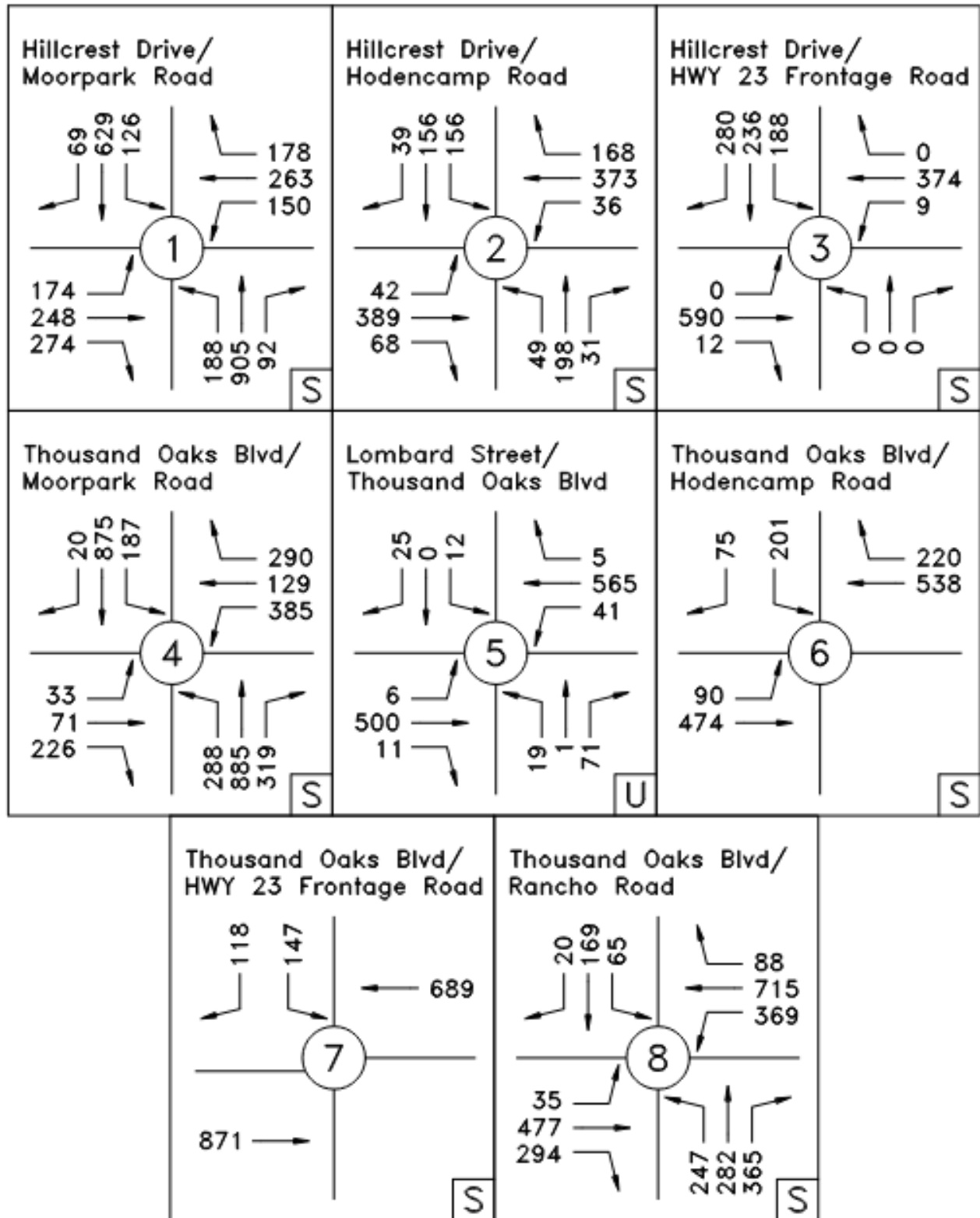


Figure 16: Future PM Peak Hour Intersection Turning Movement Volumes

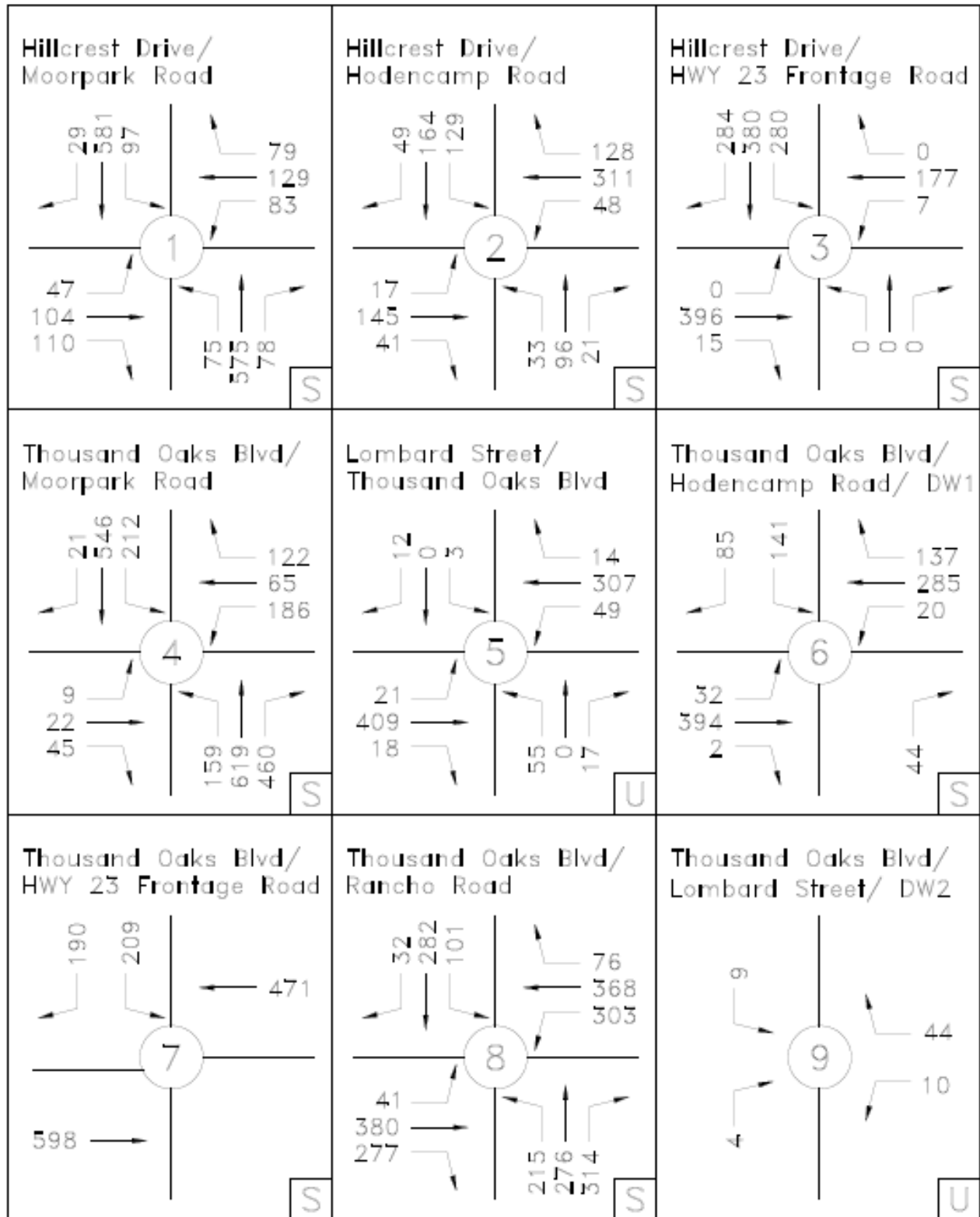


Figure 17: Future Plus Project AM Peak Hour Intersection Turning Movement Volumes

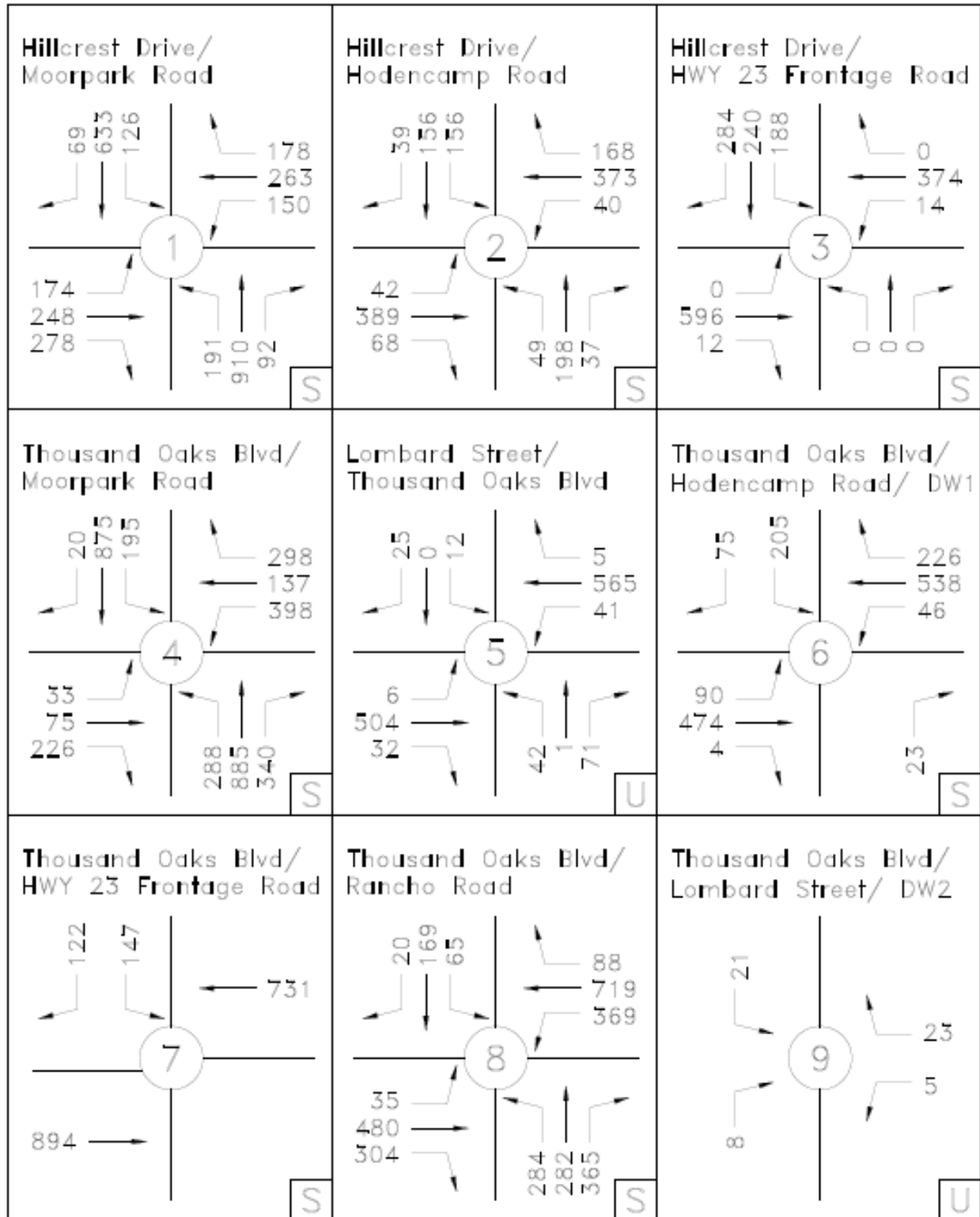


Figure 18: Future Plus Project PM Peak Hour Intersection Turning Movement Volumes

VIII. TRAFFIC ASSESSMENT

i. Project Methodology

The traffic assessment for the Project was analyzed in the context of the City of Thousand Oaks and CA MUTCD policies and guidelines. Field counts for turning movements at each intersection within the study area were collected and used for the existing 2023 network conditions.

The reference material used to evaluate the study area intersections included the following:

- California Manual on Uniform Traffic Control Devices (CA-MUTCD), 2014 Edition, Rev 7
- The Highway Capacity Manual (HCM), 7th Edition, 2022
- City of Thousand Oaks Standard Traffic Impact Analysis Methodology

For this study, level of service (LOS) will be used to determine the operating conditions of each signalized intersection during the weekday AM and PM peak hours. The criteria for LOS in this study are based on the control delay methodology for signalized intersections and two-way stop intersections. The control delay methodology quantifies the increase in travel time that a vehicle experiences due to the traffic signal control and provides a surrogate measure for driver discomfort and fuel consumption. The resulting control delay is expressed in terms of LOS, where the LOS is stated in terms of average control delay per vehicle during a specified time period (i.e. weekday, AM and PM peak hour).

Level of Service

Level of Service (LOS) is a qualitative measure of the effect of traffic flow factors, such as speed, travel time, interruptions, freedom to maneuver, driver comfort, and convenience. Roadway and traffic conditions, ranging from ideal to forced flow, have been divided into six LOS categories for qualitative evaluation.

- Level A – At this LOS, traffic volumes are low and speed is not restricted by other vehicles. All signal cycles clear with no vehicles waiting through more than one original cycle.
- Level B – At this LOS, traffic volumes begin to be affected by other traffic. Between 1 and 10 percent of the signal cycles have one or more vehicles which wait through more than one signal cycle during peak traffic periods.
- Level C – At this LOS, operating speeds and maneuverability are closely controlled by other traffic. Between 11 and 30 percent of the signal cycle have one or more vehicles which wait through more than one signal cycle during peak traffic periods.

- Level D – At this LOS, traffic will operate at tolerable operating speeds, although with restricted maneuverability.
- Level E – Traffic will experience restricted speeds, vehicles will frequently have to wait through two or more cycles at signalized intersections, and any additional traffic will result in breakdown of the traffic carrying ability of the system.
- Level F – Long queues of traffic, unstable flow, stoppages of long duration with traffic volumes and traffic, speed can drop to zero. LOS F is considered unacceptable for most drivers, often occurs with oversaturation.

The HCM's methodology is used to determine the LOS at a signalized intersection. The relationship of signalized intersection delay to LOS is demonstrated in **Table 4**. For signalized intersections, control delay and volume-to-capacity ratio are used to categorize the LOS.

Table 4: Signalized Intersection LOS Criteria

Level of Service (LOS)	Signalized Intersection Delay (Sec/veh)
A	≤ 10
B	> 10 and ≤ 20
C	> 20 and ≤ 35
D	> 35 and ≤ 55
E	> 55 and ≤ 80
F	> 80
Source: Highway Capacity Manual, 7 th Edition, 2022	

The HCM's methodology is used to determine the LOS at two-way stop intersections. The relationship of unsignalized intersection delay to LOS is demonstrated in **Table 5**. For two-way stop control, the delay and LOS is evaluated using the time a driver used to approach the front position, time to evaluate a gap in major-street flow, and the distribution of gaps in the major-street stream.

Table 5: Unsignalized Intersection LOS Criteria

Level of Service (LOS)	Unsignalized Intersection Delay (Sec/veh)
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50
Source: Highway Capacity Manual, 7 th Edition, 2022	

The City of Thousand Oaks has adopted various Level of Service criteria for different intersections. A summary is provided below:

- a) All intersections – Level Of Service “C” unless otherwise stated.
- b) Per Resolution No. 2019-011, a minimum Level of Service D is the minimum standard acceptable at specific intersections, including, but not limited to the following: Moorpark Road at Thousand Oaks, Rancho Road at Thousand Oaks, and Moorpark Road at Hillcrest Drive.
- c) Drop in Level of Service considered significant impact in the “plus Project” and operates in an unacceptable LOS.
- d) Determine mitigation for significantly impacted intersections.

Traffic engineering software Synchro and SimTraffic were used to conduct the study network analysis.

ii. Level of Service

The existing intersections’ LOS for the study area is based on collected traffic counts. The primary measures of evaluation include level of service and delay. The study intersections’ LOS was calculated using Synchro software which is based on the Highway Capacity Manual method for signalized and unsignalized intersections. The AM and PM peak hour LOS were calculated based on following conditions:

- Existing conditions (2023)
- Existing conditions (2023) plus project
- Future conditions (2040)
- Future conditions (2040) plus project

Table 7 summarizes the results of the existing weekday morning and evening peak hour control delay and corresponding LOS at each intersection. As shown in **Table 6**, all study intersections within the project vicinity are above their minimum acceptable LOS thresholds. The detailed Synchro reports for existing and future conditions are attached as **Appendix B**.

Table 6: Existing Conditions Intersection Level of Service

ID	Intersection	Acceptable LOS	Peak Hour	Existing		Existing + Project		Change in Delay	Significant Impact?
				Delay	LOS	Delay	LOS		
1	Hillcrest Drive and Moorpark Road	D	AM PM	23.5 27.7	C C	23.1 28.0	C C	-0.40 0.30	NO NO
2	Hillcrest Drive and Hodencamp Road	C	AM PM	10.9 12.7	B B	10.8 12.7	B B	-0.10 0.00	NO NO
3	Hillcrest Drive and Highway 23 Off-Ramp	C	AM PM	9.7 8.9	A A	9.1 8.9	A A	-0.60 0.00	NO NO
4	Thousand Oaks Blvd and Moorpark Road	D	AM PM	22.9 28.2	C C	23.2 28.2	C C	0.30 0.00	NO NO
5	Thousand Oaks Blvd and Lombard Street ¹	C	AM PM	[1.2] [1.4]	A A	[1.9] [1.7]	A A	0.70 0.30	NO NO
6	Thousand Oaks Blvd and Hodencamp Road	C	AM PM	11.2 12.2	B B	11.0 12.2	B B	-0.20 0.00	NO NO
7	Thousand Oaks Blvd and Highway 23 Frontage Road	C	AM PM	10.3 11.4	B B	10.1 11.6	B B	-0.20 0.20	NO NO
8	Thousand Oaks Blvd and Rancho Road	D	AM PM	22.8 24.1	C C	22.9 24.4	C C	0.10 0.30	NO NO
[1] Unsignalized									

Table 7 summarizes the results of the future (Year 2040) weekday morning and evening peak hour control delay and corresponding LOS at each intersection. As shown in **Table 8**, all study intersections align with the City's criteria and remain the same LOS with the addition of Project traffic volumes. The detailed Synchro reports for existing and future conditions are attached as **Appendix B**.

Table 7: Future (Year 2040) Conditions Intersection Level of Service

ID	Intersection	Acceptable LOS	Peak Hour	Future		Future + Project		Change in Delay	Significant Impact?
				Delay	LOS	Delay	LOS		
1	Hillcrest Drive and Moorpark Road	D	AM PM	23.2 28.7	C C	23.2 28.7	C C	0.00 0.00	NO NO
2	Hillcrest Drive and Hodencamp Road	C	AM PM	11.1 13.2	B B	11.0 13.2	B B	-0.10 0.00	NO NO
3	Hillcrest Drive and Highway 23 Off-Ramp	C	AM PM	10.3 9.3	B A	10.3 9.3	B A	0.00 0.00	NO NO
4	Thousand Oaks Blvd and Moorpark Road	D	AM PM	23.0 28.0	C C	23.5 28.4	C C	0.50 0.40	NO NO
5	Thousand Oaks Blvd and Lombard Street ¹	C	AM PM	[1.2] [1.5]	A A	[1.9] [1.7]	A A	0.70 0.20	NO NO
6	Thousand Oaks Blvd and Hodencamp Road	C	AM PM	11.2 12.5	B B	11.1 13.4	B B	-0.10 0.90	NO NO
7	Thousand Oaks Blvd and Highway 23 Frontage Road	C	AM PM	10.4 11.8	B B	10.5 12.0	B B	0.10 0.20	NO NO
8	Thousand Oaks Blvd and Rancho Road	D	AM PM	23.3 25.0	C C	23.1 24.8	C C	-0.20 -0.20	NO NO
[1] Unsignalized									

iii. Driveway Analysis

A driveway analysis was performed for the Project site to determine whether drivers exiting the Project are provided sufficient sight distance to turn. To perform this analysis, a clear sight triangle is formed using the driver position on the driveway as the starting point, the geometry of the roadway, and a stopping sight distance provided by the Road Standard Plate 3-10 per the City of Thousand Oaks. The clear sight triangle will be based upon the "Formal" Applicant Submittal Plan No. A1-0. The turn is acceptable when there are no obstructions within the clear sight triangle.

Vehicles exiting the proposed Thousand Oaks Boulevard driveway must turn right. Vehicles entering the driveway may left and right turn in. A clear sight triangle was constructed on the

northern driveway #1 to analyze the right turn onto Thousand Oaks Boulevard. The posted speed limit of Thousand Oaks Boulevard is 35 MPH. Per the Road Standard Plate 3-10, the corresponding minimum stopping sight distance for right turns at this speed is 220 feet. As shown in **Figure 19**, the driver has clear sight of incoming traffic and has enough distance to complete a right turn. Based upon the California Vehicle Code and the Highway Design Manual, drivers can look through and around temporary obstructions such as vehicles. The sight distance triangle provides a tool to ensure a clear line of sight without physical obstructions.

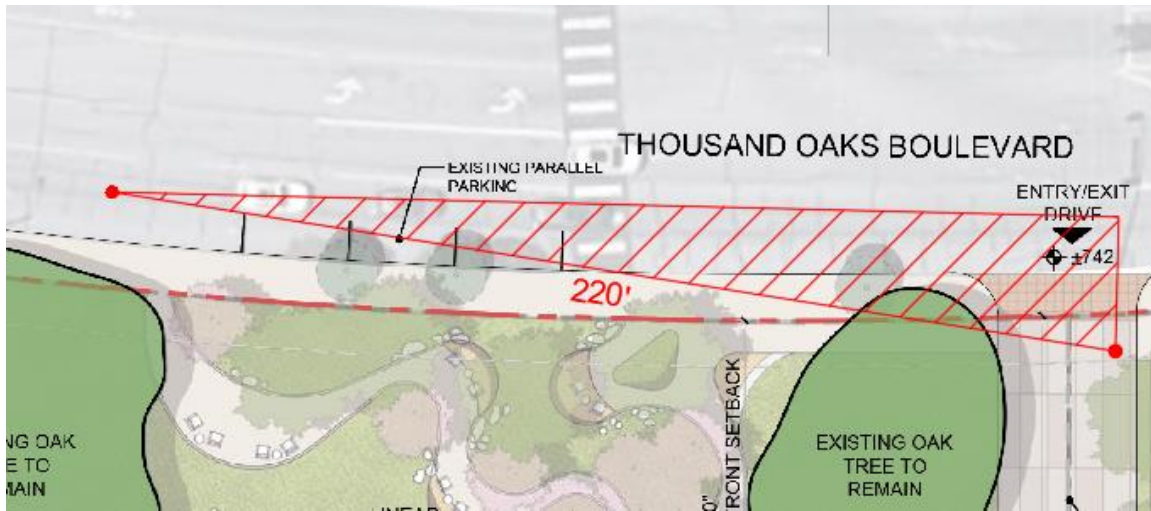


Figure 19: Clear Sight Triangle For Right Turn Onto Thousand Oaks Boulevard

Vehicles exiting the driveway can turn left or right to exit. Vehicles entering the driveway can turn left or right to enter. Clear sight triangles were constructed on the western driveway #2 to analyze the left and right onto Lombard Street. There is no posted speed limit, so an assumption of 30 MPH was made for the purpose of stopping sight distance. Per the Road Standard Plate 3-10, the corresponding stopping sight distance for right turns is 190 feet. As shown in **Figure 20**, the driver has clear sight of incoming traffic and has enough distance to complete a right turn. **Figure 21** shows the sight distance triangle entering the intersection of Thousand Oaks Boulevard and Lombard Street. Road Standard Plate 3-10 states the corresponding minimum stopping sight distance at 30 mph for left turns is 330 feet. Vehicles will be obstructed by one of the Project buildings when stopping behind the crosswalk. Road Standard Plate 3-10 assumes the driver location to be 8 feet behind the curb. There is approximately 16 feet of space between the crosswalk and the road allowing vehicles to creep past the crosswalk to improve their sight of oncoming traffic. Additionally, vehicles turning onto Lombard Street will be moving slower than the assumed 30 mph and will require a lower minimum stopping sight distance. Based on the

factors indicated above, the driver will have a clear sight with no obstructions of vehicles traveling southbound on Lombard Street from Thousand Oaks Boulevard. As such, the driver is expected to have enough distance to complete a left turn from the driveway.

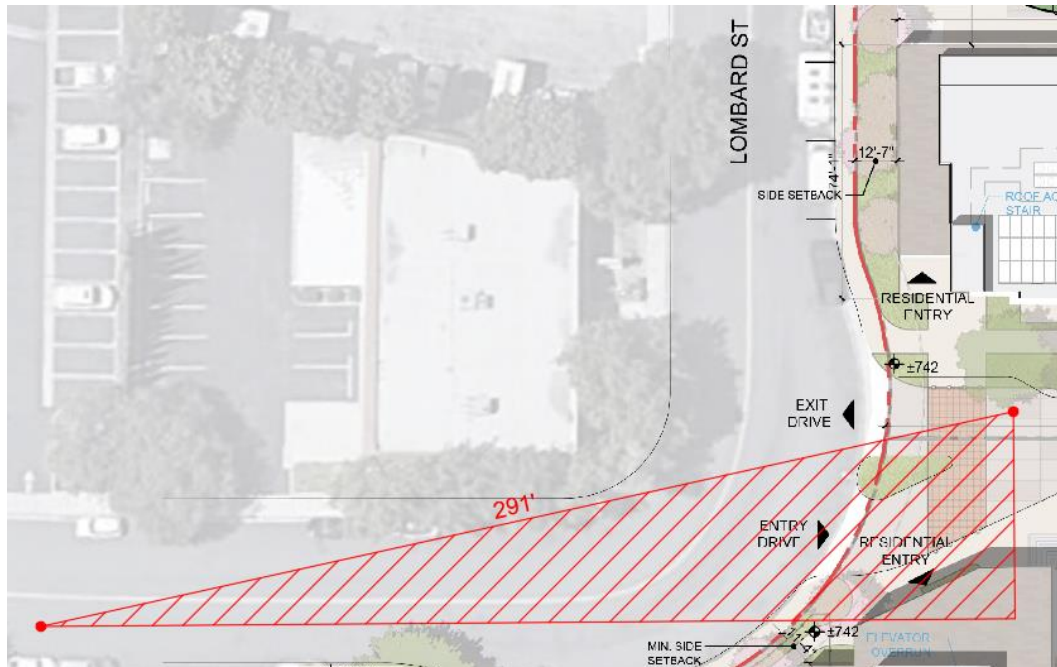


Figure 20: Clear Sight Triangle For Right Turn Onto Lombard Street

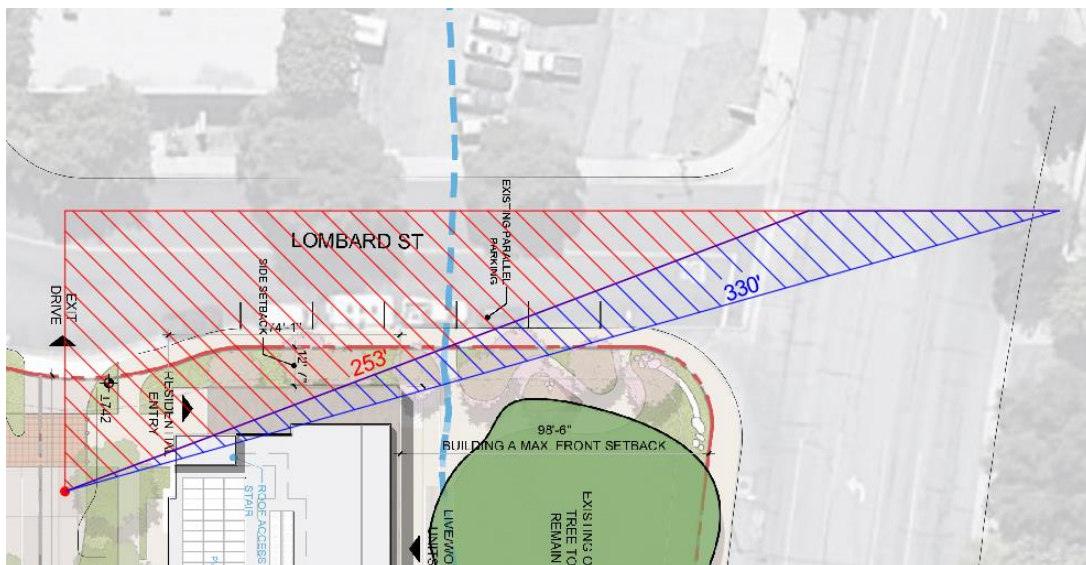


Figure 21: Clear Sight Triangle For Left Turn Onto Lombard Street

iv. Lombard Street and Thousand Oaks Boulevard Queueing

The Project driveway at Lombard Street is expected to be utilized by approximately 55% of residents leaving the Project site, per **Figure 10**. Of these residents exiting, 45% of residents will use Lombard Street to turn left onto Thousand Oaks Boulevard. **Figure 22** shows a concept plan to restripe Thousand Oaks Boulevard and Lombard Street. The goal is to alleviate any potential queueing issues on Lombard Street as well as to create a left turn pocket for the north Project driveway. Using SimTraffic, a simulation was created to evaluate the length of queue that would accumulate during peak hours. According to the simulation, northbound Lombard Street will see at most 3 vehicles in the left turn queue onto Thousand Oaks Boulevard. The northbound approach is approximately 24 feet wide and is sufficiently striped to allow vehicles to maneuver left and right turns separately with minimal queueing. **Figure 23** shows a snapshot of the simulation and queue. Synchro illustrations are not an exact representation of existing roadway geometry. It is for queueing and simulation purposes only.

The project will also require traffic signal modifications to the intersection of Hodencamp Road and Thousand Oaks Boulevard to accommodate the project driveway as required by the Department of Public Works. These modifications include but are not limited to, converting the westbound direction signal head to a four-section head with a flashing arrow into the development for westbound left turning movements, the installation of an ADA compliant countdown pedestrian head with an accompanying ADA pushbutton for the north driveway crossing for pedestrians, a near and far side Flashing Red indicator for the right turn movement of the north driveway exit with CA MUTCD compliant signage, and the relocation of the traffic signal pole located on the south side of Thousand Oaks Boulevard, at the proposed project driveway.



Figure 22: Concept Striping Plan for Lombard Street and Thousand Oaks Blvd

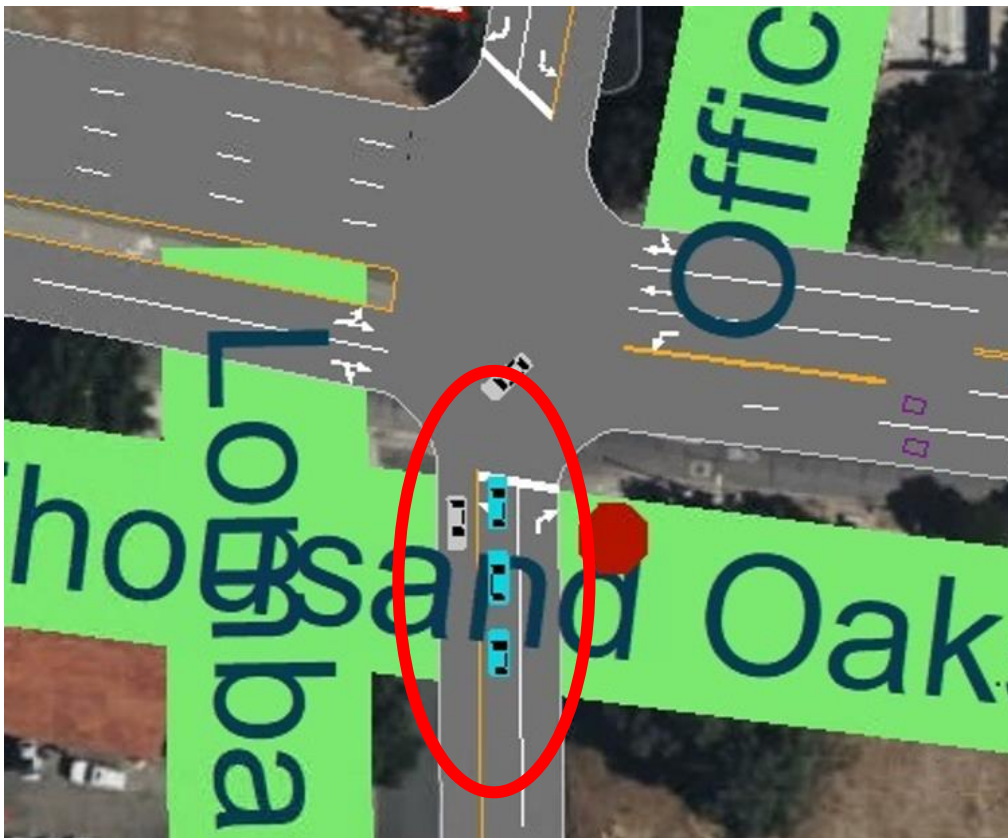


Figure 23: Northbound Left Turn Queue from Lombard Street at Thousand Oaks

IX. SIGNAL WARRANT ANALYSIS

A signal warrant analysis was performed for the intersection of Lombard Street and Thousand Oaks Boulevard. The purpose of the warrant analysis is to determine whether installation of a traffic control signal is justified at the location. There are nine (9) warrants that can justify a traffic control signal. Satisfying a warrant does not in itself require the installation of a traffic control signal. The nine warrants were completed using counts provided by Counts Unlimited as well as Project location observations. The intersection of Lombard Street and Thousand Oaks Boulevard does not warrant a signal with “Existing + Project” traffic conditions. **Table 8** is provided to summarize the results of the analysis. The worksheets used to complete the analysis are provided in **Appendix C**. Further analysis was done using future traffic conditions extrapolated from the growth rate provided by the City’s Traffic Impact Mitigation Fee Nexus Study. The intersection additionally does not warrant a signal with “Future + Project” traffic conditions.

Table 8: Signal Warrant Analysis

Warrant	Yes	No
Warrant 1 – 8 Hour Volume		X
Warrant 2 – 4 Hour Volume		X
Warrant 3 – Peak Hour		X
Warrant 4 – Pedestrian Volume		X
Warrant 5 – School Crossing		X
Warrant 6 – Coordinated Signal System		X
Warrant 7- Crash Experience Warrant		X
Warrant 8 – Roadway Network		X
Warrant 9 – Intersection Near a Grade Crossing		X

X. VEHICLE MILES TRAVELED ANALYSIS

CEQA analysis for determining potential significant transportation impacts from vehicles is required by Senate Bill (SB) 743 using Vehicle Miles Traveled (VMT) as the metric. VMT is a performance measure that compares the overall performance of a development and is used as a metric to assess transportation environmental impacts. Iteris was tasked to model and assess the development for VMT significance using the Ventura County Transportation Model to generate VMT statistics. Iteris has found the daily residential VMT per capita is approximately 28% less than the Citywide average daily residential VMT per Capita and the daily employment VMT per employee is approximately 4% less than the Citywide average daily employment VMT per employee. Iteris concludes that the Project would not result in a significant transportation impact under CEQA Checklist XVII. The report can be found in **Appendix D**.

XI. CONCLUSION AND RECOMMENDATION

The Highway Capacity Manual, 7th Edition methodology is used to analyze the LOS at surrounding signalized and unsignalized intersections along Thousand Oaks Boulevard and Hillcrest Drive. Peak hour delay analysis of all study intersections was carried out using SYNCHRO. As shown in **Table 6** and **Table 7**, the delays of surrounding intersections along Thousand Oaks Boulevard and Hillcrest Drive do not see significant impact in AM/PM times due to the addition of the Project. The Project TAZ's daily residential VMT is 28% lower than the City average and the daily employee VMT is 4% lower than the city average, which Iteris concludes is an insignificant transportation impact. Furthermore, traffic signal modifications should be made per Section VII (iv.) of this analysis as to address the increase in future pedestrian and vehicular traffic at the intersection of Hodencamp Road and Thousand Oaks Boulevard.

APPENDIX

Appendix A: Traffic Counts Data

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Thousand Oaks
N/S: Moorpark Road
E/W: Hillcrest Drive
Weather: Clear

File Name : 01_TNO_Moor_Hill AM
Site Code : 23723527
Start Date : 6/7/2023
Page No : 1

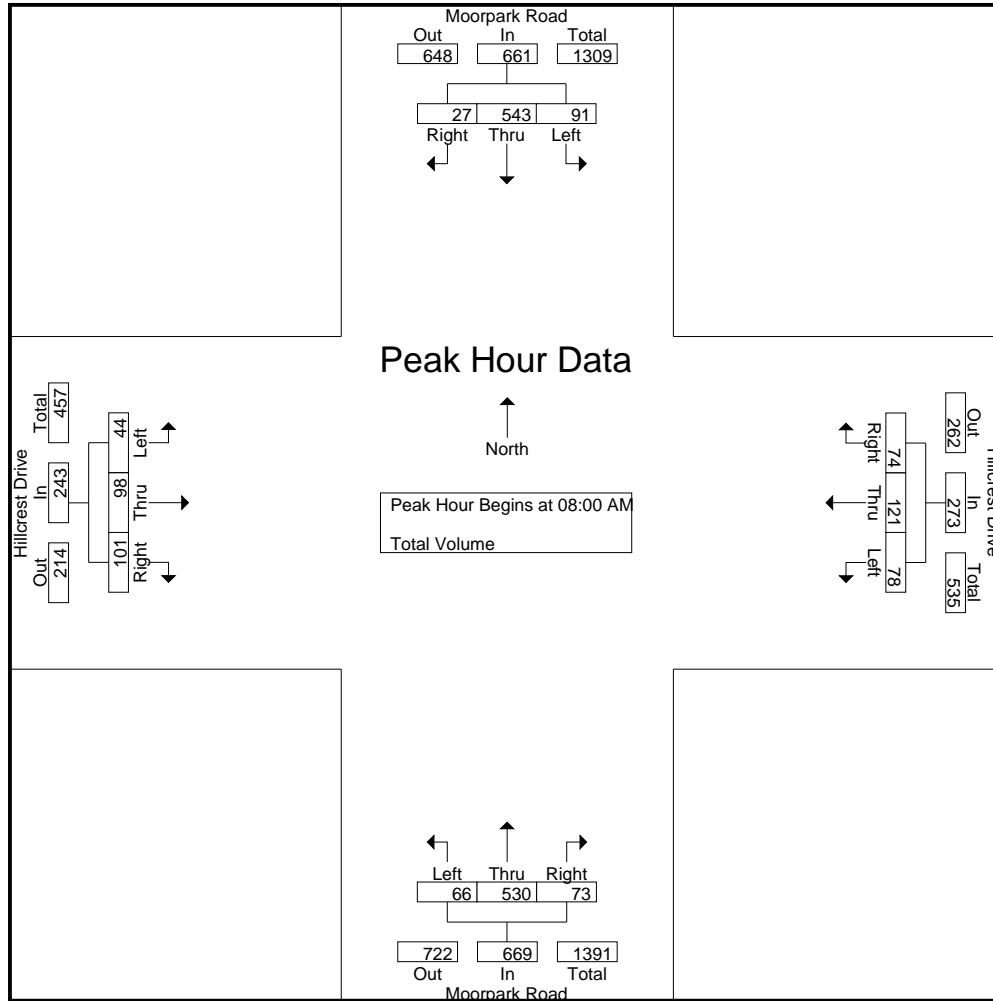
Groups Printed- Total Volume

	Moorpark Road Southbound				Hillcrest Drive Westbound				Moorpark Road Northbound				Hillcrest Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	7	67	2	76	12	7	5	24	6	54	3	63	3	13	11	27	190
07:15 AM	6	98	1	105	18	18	7	43	6	63	4	73	9	10	15	34	255
07:30 AM	10	99	3	112	8	13	10	31	8	82	11	101	7	15	17	39	283
07:45 AM	18	125	1	144	15	26	12	53	18	135	13	166	8	12	14	34	397
Total	41	389	7	437	53	64	34	151	38	334	31	403	27	50	57	134	1125
08:00 AM	15	112	3	130	17	20	16	53	12	132	14	158	9	22	19	50	391
08:15 AM	19	149	7	175	17	23	16	56	22	127	14	163	13	24	24	61	455
08:30 AM	28	142	8	178	24	28	16	68	15	124	10	149	9	29	29	67	462
08:45 AM	29	140	9	178	20	50	26	96	17	147	35	199	13	23	29	65	538
Total	91	543	27	661	78	121	74	273	66	530	73	669	44	98	101	243	1846
Grand Total	132	932	34	1098	131	185	108	424	104	864	104	1072	71	148	158	377	2971
Apprch %	12	84.9	3.1		30.9	43.6	25.5		9.7	80.6	9.7		18.8	39.3	41.9		
Total %	4.4	31.4	1.1	37	4.4	6.2	3.6	14.3	3.5	29.1	3.5	36.1	2.4	5	5.3	12.7	

	Moorpark Road Southbound				Hillcrest Drive Westbound				Moorpark Road Northbound				Hillcrest Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	15	112	3	130	17	20	16	53	12	132	14	158	9	22	19	50	391
08:15 AM	19	149	7	175	17	23	16	56	22	127	14	163	13	24	24	61	455
08:30 AM	28	142	8	178	24	28	16	68	15	124	10	149	9	29	29	67	462
08:45 AM	29	140	9	178	20	50	26	96	17	147	35	199	13	23	29	65	538
Total Volume	91	543	27	661	78	121	74	273	66	530	73	669	44	98	101	243	1846
% App. Total	13.8	82.1	4.1		28.6	44.3	27.1		9.9	79.2	10.9		18.1	40.3	41.6		
PHF	.784	.911	.750	.928	.813	.605	.712	.711	.750	.901	.521	.840	.846	.845	.871	.907	.858

City of Thousand Oaks
N/S: Moorpark Road
E/W: Hillcrest Drive
Weather: Clear

File Name : 01_TNO_Moor_Hill AM
Site Code : 23723527
Start Date : 6/7/2023
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	15	112	3	130	17	20	16	53	12	132	14	158	9	22	19	50
+15 mins.	19	149	7	175	17	23	16	56	22	127	14	163	13	24	24	61
+30 mins.	28	142	8	178	24	28	16	68	15	124	10	149	9	29	29	67
+45 mins.	29	140	9	178	20	50	26	96	17	147	35	199	13	23	29	65
Total Volume	91	543	27	661	78	121	74	273	66	530	73	669	44	98	101	243
% App. Total	13.8	82.1	4.1		28.6	44.3	27.1		9.9	79.2	10.9		18.1	40.3	41.6	
PHF	.784	.911	.750	.928	.813	.605	.712	.711	.750	.901	.521	.840	.846	.845	.871	.907

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City of Thousand Oaks
N/S: Moorpark Road
E/W: Hillcrest Drive
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File Name : 01_TNO_Moor_Hill PM
Site Code : 23723527
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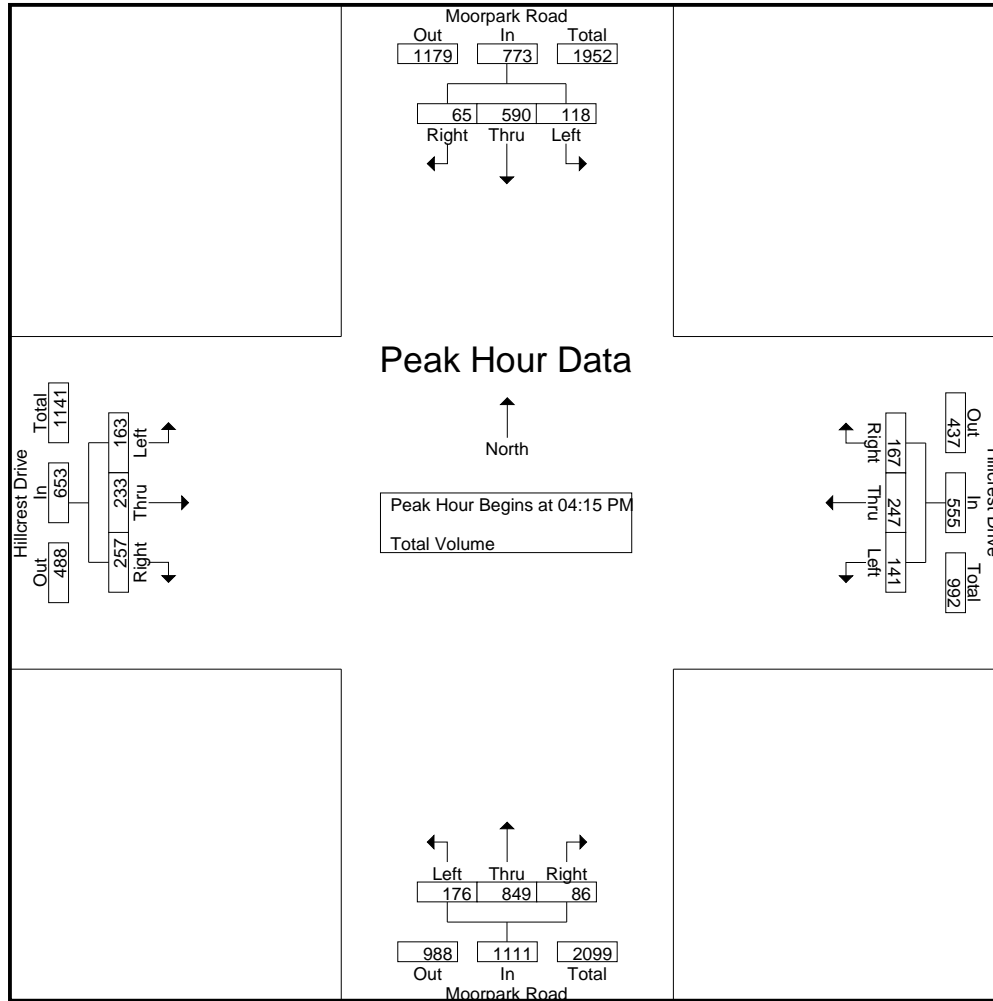
Groups Printed- Total Volume

	Moorpark Road Southbound				Hillcrest Drive Westbound				Moorpark Road Northbound				Hillcrest Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	40	137	22	199	37	46	43	126	50	213	21	284	48	60	75	183	792
04:15 PM	40	140	16	196	39	54	47	140	40	200	26	266	44	69	57	170	772
04:30 PM	24	151	8	183	35	67	42	144	41	218	22	281	43	52	56	151	759
04:45 PM	28	149	21	198	31	69	32	132	50	189	20	259	38	54	65	157	746
Total	132	577	67	776	142	236	164	542	181	820	89	1090	173	235	253	661	3069
05:00 PM	26	150	20	196	36	57	46	139	45	242	18	305	38	58	79	175	815
05:15 PM	25	147	17	189	36	59	35	130	39	225	21	285	33	69	59	161	765
05:30 PM	33	154	14	201	35	58	41	134	44	216	23	283	30	50	54	134	752
05:45 PM	23	131	18	172	33	62	44	139	44	216	16	276	38	67	57	162	749
Total	107	582	69	758	140	236	166	542	172	899	78	1149	139	244	249	632	3081
Grand Total	239	1159	136	1534	282	472	330	1084	353	1719	167	2239	312	479	502	1293	6150
Apprch %	15.6	75.6	8.9		26	43.5	30.4		15.8	76.8	7.5		24.1	37	38.8		
Total %	3.9	18.8	2.2	24.9	4.6	7.7	5.4	17.6	5.7	28	2.7	36.4	5.1	7.8	8.2	21	

	Moorpark Road Southbound				Hillcrest Drive Westbound				Moorpark Road Northbound				Hillcrest Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	40	140	16	196	39	54	47	140	40	200	26	266	44	69	57	170	772
04:30 PM	24	151	8	183	35	67	42	144	41	218	22	281	43	52	56	151	759
04:45 PM	28	149	21	198	31	69	32	132	50	189	20	259	38	54	65	157	746
05:00 PM	26	150	20	196	36	57	46	139	45	242	18	305	38	58	79	175	815
Total Volume	118	590	65	773	141	247	167	555	176	849	86	1111	163	233	257	653	3092
% App. Total	15.3	76.3	8.4		25.4	44.5	30.1		15.8	76.4	7.7		25	35.7	39.4		
PHF	.738	.977	.774	.976	.904	.895	.888	.964	.880	.877	.827	.911	.926	.844	.813	.933	.948

City of Thousand Oaks
N/S: Moorpark Road
E/W: Hillcrest Drive
Weather: Clear

File Name : 01_TNO_Moor_Hill PM
Site Code : 23723527
Start Date : 6/7/2023
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:15 PM				05:00 PM				04:00 PM			
+0 mins.	28	149	21	198	39	54	47	140	45	242	18	305	48	60	75	183
+15 mins.	26	150	20	196	35	67	42	144	39	225	21	285	44	69	57	170
+30 mins.	25	147	17	189	31	69	32	132	44	216	23	283	43	52	56	151
+45 mins.	33	154	14	201	36	57	46	139	44	216	16	276	38	54	65	157
Total Volume	112	600	72	784	141	247	167	555	172	899	78	1149	173	235	253	661
% App. Total	14.3	76.5	9.2		25.4	44.5	30.1		15	78.2	6.8		26.2	35.6	38.3	
PHF	.848	.974	.857	.975	.904	.895	.888	.964	.956	.929	.848	.942	.901	.851	.843	.903

Location: Thousand Oaks
 N/S: Moorpark Road
 E/W: Hillcrest Drive



Date: 6/7/2023
 Day: Wednesday

PEDESTRIANS

	North Leg Moorpark Road	East Leg Hillcrest Drive	South Leg Moorpark Road	West Leg Hillcrest Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	1	1
7:15 AM	0	0	0	0	0
7:30 AM	1	1	0	0	2
7:45 AM	0	4	1	0	5
8:00 AM	4	0	0	0	4
8:15 AM	0	0	1	0	1
8:30 AM	0	1	1	0	2
8:45 AM	1	0	3	0	4
TOTAL VOLUMES:	6	6	6	1	19

	North Leg Moorpark Road	East Leg Hillcrest Drive	South Leg Moorpark Road	West Leg Hillcrest Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	4	0	0	0	4
4:15 PM	3	4	1	0	8
4:30 PM	5	5	1	0	11
4:45 PM	3	3	0	0	6
5:00 PM	8	2	3	2	15
5:15 PM	3	1	2	4	10
5:30 PM	3	0	0	1	4
5:45 PM	4	2	0	2	8
TOTAL VOLUMES:	33	17	7	9	66

Location: Thousand Oaks
 N/S: Moorpark Road
 E/W: Hillcrest Drive



Date: 6/7/2023
 Day: Wednesday

BICYCLES

	Southbound Moorpark Road			Westbound Hillcrest Drive			Northbound Moorpark Road			Eastbound Hillcrest Drive			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	1	0	0	0	0	0	2	0	3
TOTAL VOLUMES:	0	0	0	0	2	0	0	0	0	0	3	0	5

	Southbound Moorpark Road			Westbound Hillcrest Drive			Northbound Moorpark Road			Eastbound Hillcrest Drive			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	1
5:15 PM	0	0	1	0	0	0	0	0	0	0	1	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	1	0	0	0	0	0	0	1	3	0	6

City of Thousand Oaks
N/S: Moorpark Road
E/W: Thousand Oaks Boulevard
Weather: Clear

File Name : 02_TNO_Moor_1KO AM
Site Code : 23723527
Start Date : 6/7/2023
Page No : 1

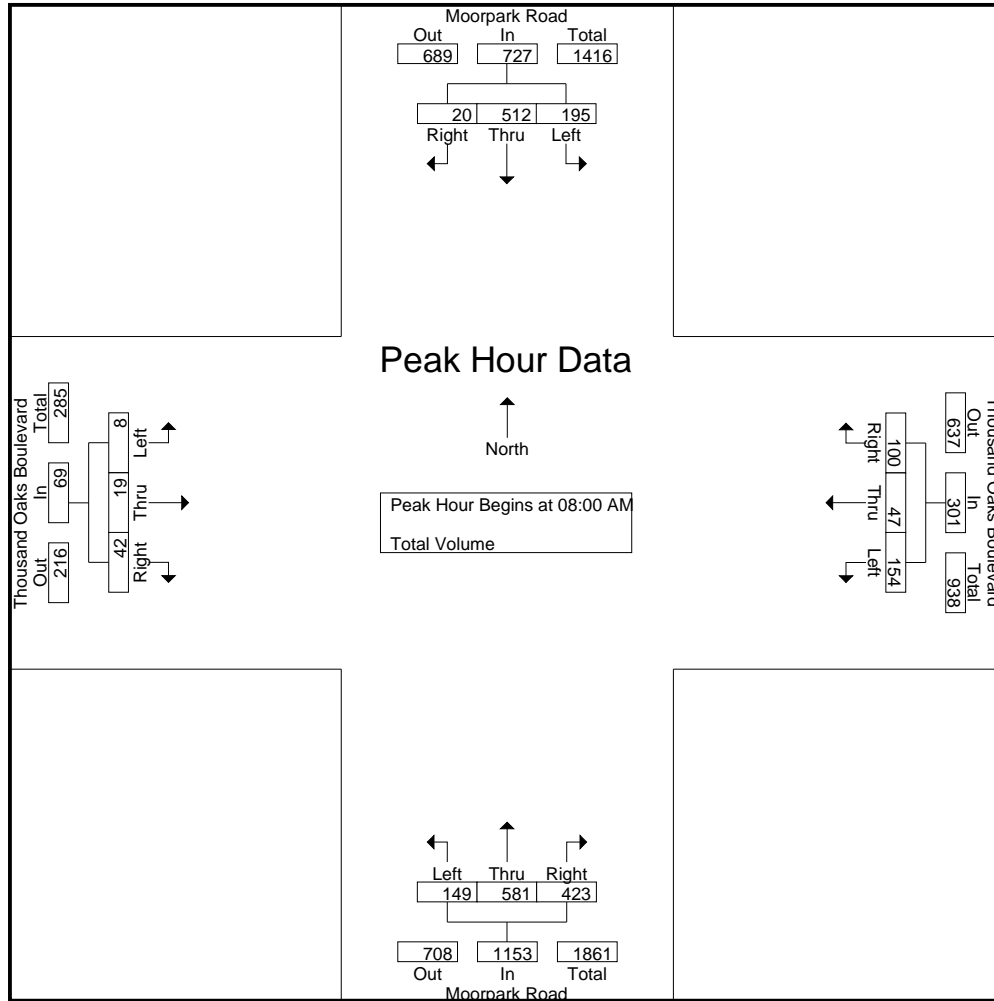
Groups Printed- Total Volume

	Moorpark Road Southbound				Thousand Oaks Boulevard Westbound				Moorpark Road Northbound				Thousand Oaks Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	13	80	0	93	18	2	9	29	9	54	28	91	1	1	4	6	219
07:15 AM	24	105	2	131	27	4	10	41	19	66	40	125	0	1	9	10	307
07:30 AM	27	101	1	129	28	9	19	56	23	81	66	170	0	4	9	13	368
07:45 AM	22	120	3	145	34	7	18	59	28	157	112	297	1	5	8	14	515
Total	86	406	6	498	107	22	56	185	79	358	246	683	2	11	30	43	1409
08:00 AM	40	113	2	155	36	9	18	63	20	136	79	235	2	3	15	20	473
08:15 AM	44	139	2	185	32	10	25	67	45	140	93	278	1	6	8	15	545
08:30 AM	54	135	7	196	45	9	26	80	41	127	105	273	3	6	8	17	566
08:45 AM	57	125	9	191	41	19	31	91	43	178	146	367	2	4	11	17	666
Total	195	512	20	727	154	47	100	301	149	581	423	1153	8	19	42	69	2250
Grand Total	281	918	26	1225	261	69	156	486	228	939	669	1836	10	30	72	112	3659
Apprch %	22.9	74.9	2.1		53.7	14.2	32.1		12.4	51.1	36.4		8.9	26.8	64.3		
Total %	7.7	25.1	0.7	33.5	7.1	1.9	4.3	13.3	6.2	25.7	18.3	50.2	0.3	0.8	2	3.1	

	Moorpark Road Southbound				Thousand Oaks Boulevard Westbound				Moorpark Road Northbound				Thousand Oaks Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	40	113	2	155	36	9	18	63	20	136	79	235	2	3	15	20	473
08:15 AM	44	139	2	185	32	10	25	67	45	140	93	278	1	6	8	15	545
08:30 AM	54	135	7	196	45	9	26	80	41	127	105	273	3	6	8	17	566
08:45 AM	57	125	9	191	41	19	31	91	43	178	146	367	2	4	11	17	666
Total Volume	195	512	20	727	154	47	100	301	149	581	423	1153	8	19	42	69	2250
% App. Total	26.8	70.4	2.8		51.2	15.6	33.2		12.9	50.4	36.7		11.6	27.5	60.9		
PHF	.855	.921	.556	.927	.856	.618	.806	.827	.828	.816	.724	.785	.667	.792	.700	.863	.845

City of Thousand Oaks
N/S: Moorpark Road
E/W: Thousand Oaks Boulevard
Weather: Clear

File Name : 02_TNO_Moor_1KO AM
Site Code : 23723527
Start Date : 6/7/2023
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	40	113	2	155	36	9	18	63	20	136	79	235	2	3	15	20
+15 mins.	44	139	2	185	32	10	25	67	45	140	93	278	1	6	8	15
+30 mins.	54	135	7	196	45	9	26	80	41	127	105	273	3	6	8	17
+45 mins.	57	125	9	191	41	19	31	91	43	178	146	367	2	4	11	17
Total Volume	195	512	20	727	154	47	100	301	149	581	423	1153	8	19	42	69
% App. Total	26.8	70.4	2.8		51.2	15.6	33.2		12.9	50.4	36.7		11.6	27.5	60.9	
PHF	.855	.921	.556	.927	.856	.618	.806	.827	.828	.816	.724	.785	.667	.792	.700	.863

City of Thousand Oaks
N/S: Moorpark Road
E/W: Thousand Oaks Boulevard
Weather: Clear

File Name : 02_TNO_Moor_1KO PM
Site Code : 23723527
Start Date : 6/7/2023
Page No : 1

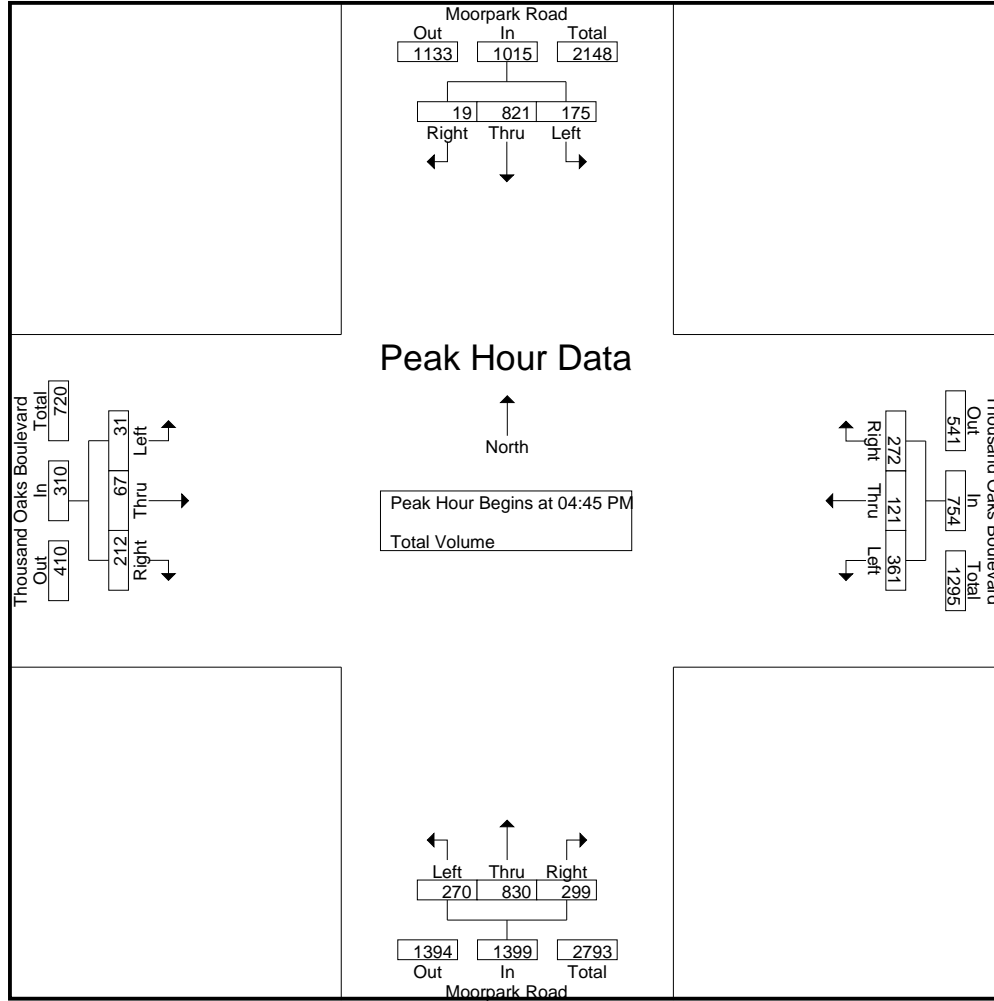
Groups Printed- Total Volume

	Moorpark Road Southbound				Thousand Oaks Boulevard Westbound				Moorpark Road Northbound				Thousand Oaks Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	53	186	13	252	73	33	66	172	70	200	80	350	8	21	55	84	858
04:15 PM	41	164	13	218	88	34	66	188	52	189	78	319	11	27	61	99	824
04:30 PM	53	192	3	248	87	31	71	189	54	199	74	327	12	9	47	68	832
04:45 PM	46	193	5	244	90	30	65	185	71	190	95	356	8	13	43	64	849
Total	193	735	34	962	338	128	268	734	247	778	327	1352	39	70	206	315	3363
05:00 PM	47	213	6	266	114	30	84	228	68	214	61	343	7	19	65	91	928
05:15 PM	39	211	4	254	90	27	69	186	69	202	58	329	8	17	44	69	838
05:30 PM	43	204	4	251	67	34	54	155	62	224	85	371	8	18	60	86	863
05:45 PM	42	177	8	227	78	33	50	161	47	215	71	333	7	14	57	78	799
Total	171	805	22	998	349	124	257	730	246	855	275	1376	30	68	226	324	3428
Grand Total	364	1540	56	1960	687	252	525	1464	493	1633	602	2728	69	138	432	639	6791
Apprch %	18.6	78.6	2.9		46.9	17.2	35.9		18.1	59.9	22.1		10.8	21.6	67.6		
Total %	5.4	22.7	0.8	28.9	10.1	3.7	7.7	21.6	7.3	24	8.9	40.2	1	2	6.4	9.4	

	Moorpark Road Southbound				Thousand Oaks Boulevard Westbound				Moorpark Road Northbound				Thousand Oaks Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	46	193	5	244	90	30	65	185	71	190	95	356	8	13	43	64	849
05:00 PM	47	213	6	266	114	30	84	228	68	214	61	343	7	19	65	91	928
05:15 PM	39	211	4	254	90	27	69	186	69	202	58	329	8	17	44	69	838
05:30 PM	43	204	4	251	67	34	54	155	62	224	85	371	8	18	60	86	863
Total Volume	175	821	19	1015	361	121	272	754	270	830	299	1399	31	67	212	310	3478
% App. Total	17.2	80.9	1.9		47.9	16	36.1		19.3	59.3	21.4		10	21.6	68.4		
PHF	.931	.964	.792	.954	.792	.890	.810	.827	.951	.926	.787	.943	.969	.882	.815	.852	.937

City of Thousand Oaks
N/S: Moorpark Road
E/W: Thousand Oaks Boulevard
Weather: Clear

File Name : 02_TNO_Moor_1KO PM
Site Code : 23723527
Start Date : 6/7/2023
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:15 PM				04:45 PM				05:00 PM			
+0 mins.	46	193	5	244	88	34	66	188	71	190	95	356	7	19	65	91
+15 mins.	47	213	6	266	87	31	71	189	68	214	61	343	8	17	44	69
+30 mins.	39	211	4	254	90	30	65	185	69	202	58	329	8	18	60	86
+45 mins.	43	204	4	251	114	30	84	228	62	224	85	371	7	14	57	78
Total Volume	175	821	19	1015	379	125	286	790	270	830	299	1399	30	68	226	324
% App. Total	17.2	80.9	1.9		48	15.8	36.2		19.3	59.3	21.4		9.3	21	69.8	
PHF	.931	.964	.792	.954	.831	.919	.851	.866	.951	.926	.787	.943	.938	.895	.869	.890

Location: Thousand Oaks
 N/S: Moorpark Road
 E/W: Thousand Oaks Boulevard



Date: 6/7/2023
 Day: Wednesday

PEDESTRIANS

	North Leg Moorpark Road Pedestrians	East Leg Thousand Oaks Boulevard Pedestrians	South Leg Moorpark Road Pedestrians	West Leg Thousand Oaks Boulevard Pedestrians	
7:00 AM	1	2	0	0	3
7:15 AM	1	3	0	0	4
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	2	0	0	2
8:15 AM	2	0	0	1	3
8:30 AM	2	2	0	0	4
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	6	9	0	1	16

	North Leg Moorpark Road Pedestrians	East Leg Thousand Oaks Boulevard Pedestrians	South Leg Moorpark Road Pedestrians	West Leg Thousand Oaks Boulevard Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	3	2	0	0	5
4:30 PM	1	1	0	0	2
4:45 PM	2	1	0	0	3
5:00 PM	3	4	0	0	7
5:15 PM	1	3	0	1	5
5:30 PM	2	0	0	0	2
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	12	11	0	1	24

Location: Thousand Oaks
 N/S: Moorpark Road
 E/W: Thousand Oaks Boulevard



Date: 6/7/2023
 Day: Wednesday

BICYCLES

	Southbound Moorpark Road			Westbound Thousand Oaks Boulevard			Northbound Moorpark Road			Eastbound Thousand Oaks Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:15 AM	0	0	0	0	0	0	0	0	1	0	0	0	1
7:30 AM	0	0	0	0	1	0	0	0	0	0	1	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	1	0	0	0	1	0	3	0	5

	Southbound Moorpark Road			Westbound Thousand Oaks Boulevard			Northbound Moorpark Road			Eastbound Thousand Oaks Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	3	1	0	0	0	0	0	1	0	5
4:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	2	0	0	0	2
TOTAL VOLUMES:	0	0	0	5	5	0	0	0	2	0	1	0	13

City of Thousand Oaks
N/S: Hodencamp Road
E/W: Hillcrest Drive
Weather: Clear

File Name : 03_TNO_Hode_Hill AM
Site Code : 23723527
Start Date : 6/7/2023
Page No : 1

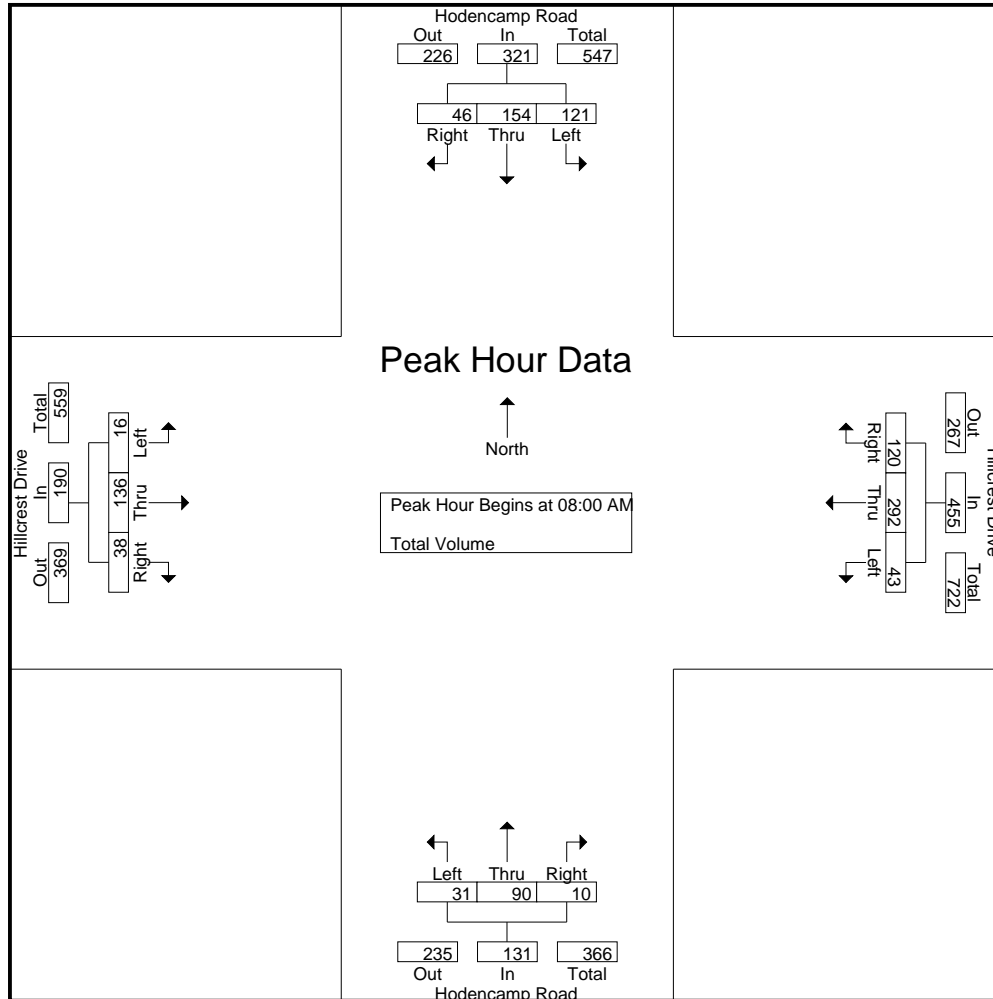
Groups Printed- Total Volume

	Hodencamp Road Southbound				Hillcrest Drive Westbound				Hodencamp Road Northbound				Hillcrest Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	13	23	3	39	2	23	16	41	2	10	0	12	1	19	6	26	118
07:15 AM	31	21	12	64	6	42	16	64	1	9	4	14	2	17	2	21	163
07:30 AM	34	34	10	78	11	41	26	78	1	12	0	13	1	22	5	28	197
07:45 AM	36	40	12	88	12	75	26	113	7	22	1	30	5	20	9	34	265
Total	114	118	37	269	31	181	84	296	11	53	5	69	9	78	22	109	743
08:00 AM	34	38	12	84	11	59	33	103	9	25	0	34	5	23	7	35	256
08:15 AM	35	37	9	81	15	65	26	106	5	17	5	27	2	35	8	45	259
08:30 AM	29	37	13	79	7	72	24	103	9	18	1	28	3	30	11	44	254
08:45 AM	23	42	12	77	10	96	37	143	8	30	4	42	6	48	12	66	328
Total	121	154	46	321	43	292	120	455	31	90	10	131	16	136	38	190	1097
Grand Total	235	272	83	590	74	473	204	751	42	143	15	200	25	214	60	299	1840
Apprch %	39.8	46.1	14.1		9.9	63	27.2		21	71.5	7.5		8.4	71.6	20.1		
Total %	12.8	14.8	4.5	32.1	4	25.7	11.1	40.8	2.3	7.8	0.8	10.9	1.4	11.6	3.3	16.2	

	Hodencamp Road Southbound				Hillcrest Drive Westbound				Hodencamp Road Northbound				Hillcrest Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	34	38	12	84	11	59	33	103	9	25	0	34	5	23	7	35	256
08:15 AM	35	37	9	81	15	65	26	106	5	17	5	27	2	35	8	45	259
08:30 AM	29	37	13	79	7	72	24	103	9	18	1	28	3	30	11	44	254
08:45 AM	23	42	12	77	10	96	37	143	8	30	4	42	6	48	12	66	328
Total Volume	121	154	46	321	43	292	120	455	31	90	10	131	16	136	38	190	1097
% App. Total	37.7	48	14.3		9.5	64.2	26.4		23.7	68.7	7.6		8.4	71.6	20		
PHF	.864	.917	.885	.955	.717	.760	.811	.795	.861	.750	.500	.780	.667	.708	.792	.720	.836

City of Thousand Oaks
N/S: Hodencamp Road
E/W: Hillcrest Drive
Weather: Clear

File Name : 03_TNO_Hode_Hill AM
Site Code : 23723527
Start Date : 6/7/2023
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	36	40	12	88	11	59	33	103	9	25	0	34	5	23	7	35
+15 mins.	34	38	12	84	15	65	26	106	5	17	5	27	2	35	8	45
+30 mins.	35	37	9	81	7	72	24	103	9	18	1	28	3	30	11	44
+45 mins.	29	37	13	79	10	96	37	143	8	30	4	42	6	48	12	66
Total Volume	134	152	46	332	43	292	120	455	31	90	10	131	16	136	38	190
% App. Total	40.4	45.8	13.9		9.5	64.2	26.4		23.7	68.7	7.6		8.4	71.6	20	
PHF	.931	.950	.885	.943	.717	.760	.811	.795	.861	.750	.500	.780	.667	.708	.792	.720

City of Thousand Oaks
N/S: Hodencamp Road
E/W: Hillcrest Drive
Weather: Clear

File Name : 03_TNO_Hode_Hill PM
Site Code : 23723527
Start Date : 6/7/2023
Page No : 1

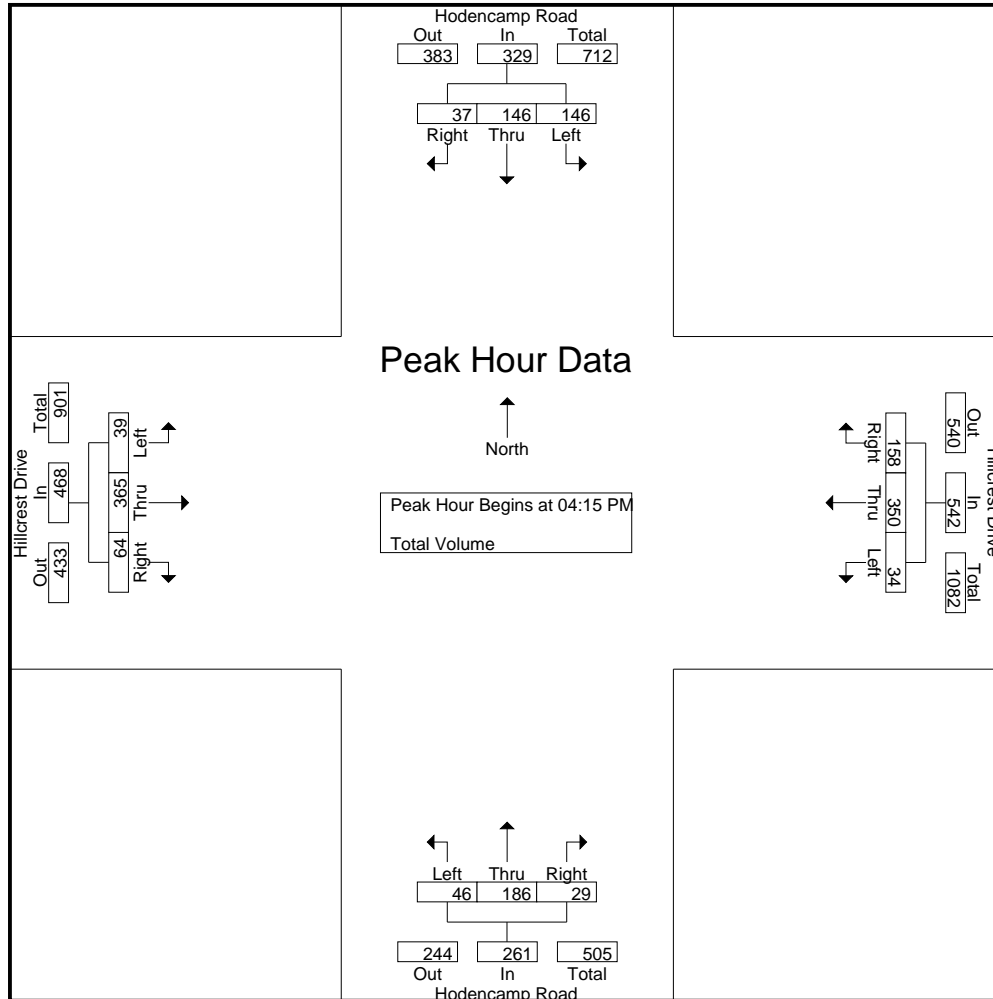
Groups Printed- Total Volume

	Hodencamp Road Southbound				Hillcrest Drive Westbound				Hodencamp Road Northbound				Hillcrest Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	33	42	9	84	8	84	32	124	8	44	4	56	7	99	17	123	387
04:15 PM	43	38	14	95	11	85	40	136	7	37	8	52	13	104	25	142	425
04:30 PM	29	43	3	75	6	91	34	131	13	52	8	73	10	80	17	107	386
04:45 PM	31	37	13	81	10	89	38	137	16	45	6	67	11	78	10	99	384
Total	136	160	39	335	35	349	144	528	44	178	26	248	41	361	69	471	1582
05:00 PM	43	28	7	78	7	85	46	138	10	52	7	69	5	103	12	120	405
05:15 PM	39	33	6	78	2	86	51	139	14	55	11	80	17	88	12	117	414
05:30 PM	28	18	5	51	5	94	37	136	12	37	13	62	13	80	15	108	357
05:45 PM	31	25	8	64	6	104	38	148	5	42	6	53	10	93	13	116	381
Total	141	104	26	271	20	369	172	561	41	186	37	264	45	364	52	461	1557
Grand Total	277	264	65	606	55	718	316	1089	85	364	63	512	86	725	121	932	3139
Apprch %	45.7	43.6	10.7		5.1	65.9	29		16.6	71.1	12.3		9.2	77.8	13		
Total %	8.8	8.4	2.1	19.3	1.8	22.9	10.1	34.7	2.7	11.6	2	16.3	2.7	23.1	3.9	29.7	

	Hodencamp Road Southbound				Hillcrest Drive Westbound				Hodencamp Road Northbound				Hillcrest Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	43	38	14	95	11	85	40	136	7	37	8	52	13	104	25	142	425
04:30 PM	29	43	3	75	6	91	34	131	13	52	8	73	10	80	17	107	386
04:45 PM	31	37	13	81	10	89	38	137	16	45	6	67	11	78	10	99	384
05:00 PM	43	28	7	78	7	85	46	138	10	52	7	69	5	103	12	120	405
Total Volume	146	146	37	329	34	350	158	542	46	186	29	261	39	365	64	468	1600
% App. Total	44.4	44.4	11.2		6.3	64.6	29.2		17.6	71.3	11.1		8.3	78	13.7		
PHF	.849	.849	.661	.866	.773	.962	.859	.982	.719	.894	.906	.894	.750	.877	.640	.824	.941

City of Thousand Oaks
N/S: Hodencamp Road
E/W: Hillcrest Drive
Weather: Clear

File Name : 03_TNO_Hode_Hill PM
Site Code : 23723527
Start Date : 6/7/2023
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				05:00 PM				04:30 PM				04:00 PM			
+0 mins.	33	42	9	84	7	85	46	138	13	52	8	73	7	99	17	123
+15 mins.	43	38	14	95	2	86	51	139	16	45	6	67	13	104	25	142
+30 mins.	29	43	3	75	5	94	37	136	10	52	7	69	10	80	17	107
+45 mins.	31	37	13	81	6	104	38	148	14	55	11	80	11	78	10	99
Total Volume	136	160	39	335	20	369	172	561	53	204	32	289	41	361	69	471
% App. Total	40.6	47.8	11.6		3.6	65.8	30.7		18.3	70.6	11.1		8.7	76.6	14.6	
PHF	.791	.930	.696	.882	.714	.887	.843	.948	.828	.927	.727	.903	.788	.868	.690	.829

Location: Thousand Oaks
 N/S: Hodencamp Road
 E/W: Hillcrest Drive



Date: 6/7/2023
 Day: Wednesday

PEDESTRIANS

	North Leg Hodencamp Road Pedestrians	East Leg Hillcrest Drive Pedestrians	South Leg Hodencamp Road Pedestrians	West Leg Hillcrest Drive Pedestrians	
7:00 AM	5	0	0	1	6
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	1	0	1	2
8:00 AM	1	0	0	1	2
8:15 AM	0	0	2	0	2
8:30 AM	0	1	1	0	2
8:45 AM	0	1	1	1	3
TOTAL VOLUMES:	6	3	4	4	17

	North Leg Hodencamp Road Pedestrians	East Leg Hillcrest Drive Pedestrians	South Leg Hodencamp Road Pedestrians	West Leg Hillcrest Drive Pedestrians	
4:00 PM	0	0	0	3	3
4:15 PM	1	0	0	1	2
4:30 PM	0	0	0	0	0
4:45 PM	1	0	0	1	2
5:00 PM	1	0	1	2	4
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	2	2
5:45 PM	0	0	0	2	2
TOTAL VOLUMES:	3	0	1	11	15

Location: Thousand Oaks
 N/S: Hodencamp Road
 E/W: Hillcrest Drive



Date: 6/7/2023
 Day: Wednesday

BICYCLES

		Southbound Hodencamp Road			Westbound Hillcrest Drive			Northbound Hodencamp Road			Eastbound Hillcrest Drive			
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	2	0	0	1	0	0	0	0	0	0	0	3
	8:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	1
	8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
	8:30 AM	1	0	0	0	0	0	0	0	0	0	1	0	2
	8:45 AM	0	0	2	0	0	0	0	0	0	0	0	0	2
TOTAL VOLUMES:		2	3	2	0	1	0	0	0	0	0	1	0	9

		Southbound Hodencamp Road			Westbound Hillcrest Drive			Northbound Hodencamp Road			Eastbound Hillcrest Drive			
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	4:00 PM	0	1	0	0	0	1	0	0	0	1	1	0	4
	4:15 PM	0	0	0	0	1	0	0	1	0	0	1	0	3
	4:30 PM	0	1	0	0	0	0	0	0	0	1	0	0	2
	4:45 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
	5:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
	5:15 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
TOTAL VOLUMES:		0	2	1	0	4	1	0	2	0	2	3	0	15

City of Thousand Oaks
N/S: Hodencamp Road
E/W: Thousand Oaks Boulevard
Weather: Clear

File Name : 04_TNO_Hode_1KO AM
Site Code : 23723527
Start Date : 6/7/2023
Page No : 1

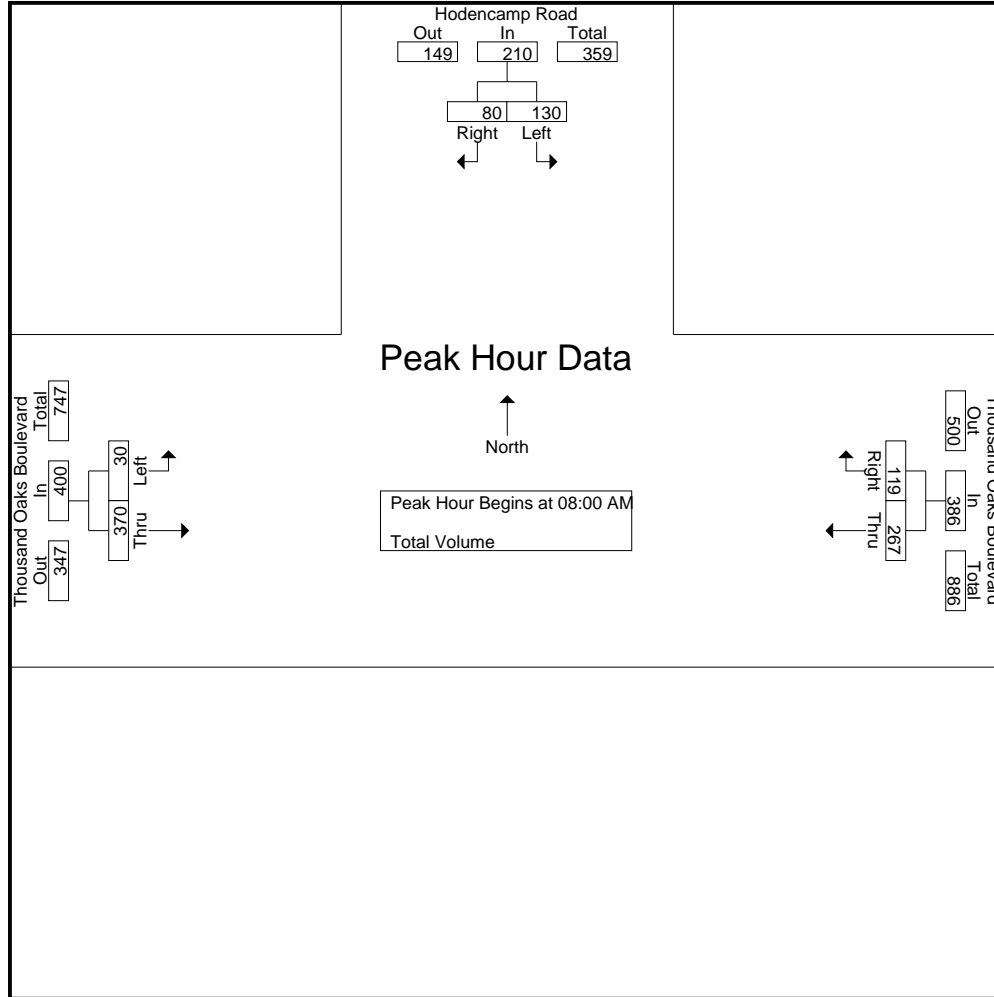
Groups Printed- Total Volume

	Hodencamp Road Southbound			Thousand Oaks Boulevard Westbound			Thousand Oaks Boulevard Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	24	6	30	29	7	36	3	23	26	92
07:15 AM	21	6	27	43	10	53	7	32	39	119
07:30 AM	31	11	42	41	13	54	4	44	48	144
07:45 AM	34	15	49	65	23	88	6	44	50	187
Total	110	38	148	178	53	231	20	143	163	542
08:00 AM	32	16	48	55	28	83	4	57	61	192
08:15 AM	28	18	46	69	18	87	13	70	83	216
08:30 AM	27	24	51	65	31	96	6	120	126	273
08:45 AM	43	22	65	78	42	120	7	123	130	315
Total	130	80	210	267	119	386	30	370	400	996
Grand Total	240	118	358	445	172	617	50	513	563	1538
Apprch %	67	33		72.1	27.9		8.9	91.1		
Total %	15.6	7.7	23.3	28.9	11.2	40.1	3.3	33.4	36.6	

	Hodencamp Road Southbound			Thousand Oaks Boulevard Westbound			Thousand Oaks Boulevard Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	32	16	48	55	28	83	4	57	61	192
08:15 AM	28	18	46	69	18	87	13	70	83	216
08:30 AM	27	24	51	65	31	96	6	120	126	273
08:45 AM	43	22	65	78	42	120	7	123	130	315
Total Volume	130	80	210	267	119	386	30	370	400	996
% App. Total	61.9	38.1		69.2	30.8		7.5	92.5		
PHF	.756	.833	.808	.856	.708	.804	.577	.752	.769	.790

City of Thousand Oaks
N/S: Hodencamp Road
E/W: Thousand Oaks Boulevard
Weather: Clear

File Name : 04_TNO_Hode_1KO AM
Site Code : 23723527
Start Date : 6/7/2023
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			08:00 AM			08:00 AM		
+0 mins.	32	16	48	55	28	83	4	57	61
+15 mins.	28	18	46	69	18	87	13	70	83
+30 mins.	27	24	51	65	31	96	6	120	126
+45 mins.	43	22	65	78	42	120	7	123	130
Total Volume	130	80	210	267	119	386	30	370	400
% App. Total	61.9	38.1		69.2	30.8		7.5	92.5	
PHF	.756	.833	.808	.856	.708	.804	.577	.752	.769

City of Thousand Oaks
N/S: Hodencamp Road
E/W: Thousand Oaks Boulevard
Weather: Clear

File Name : 04_TNO_Hode_1KO PM
Site Code : 23723527
Start Date : 6/7/2023
Page No : 1

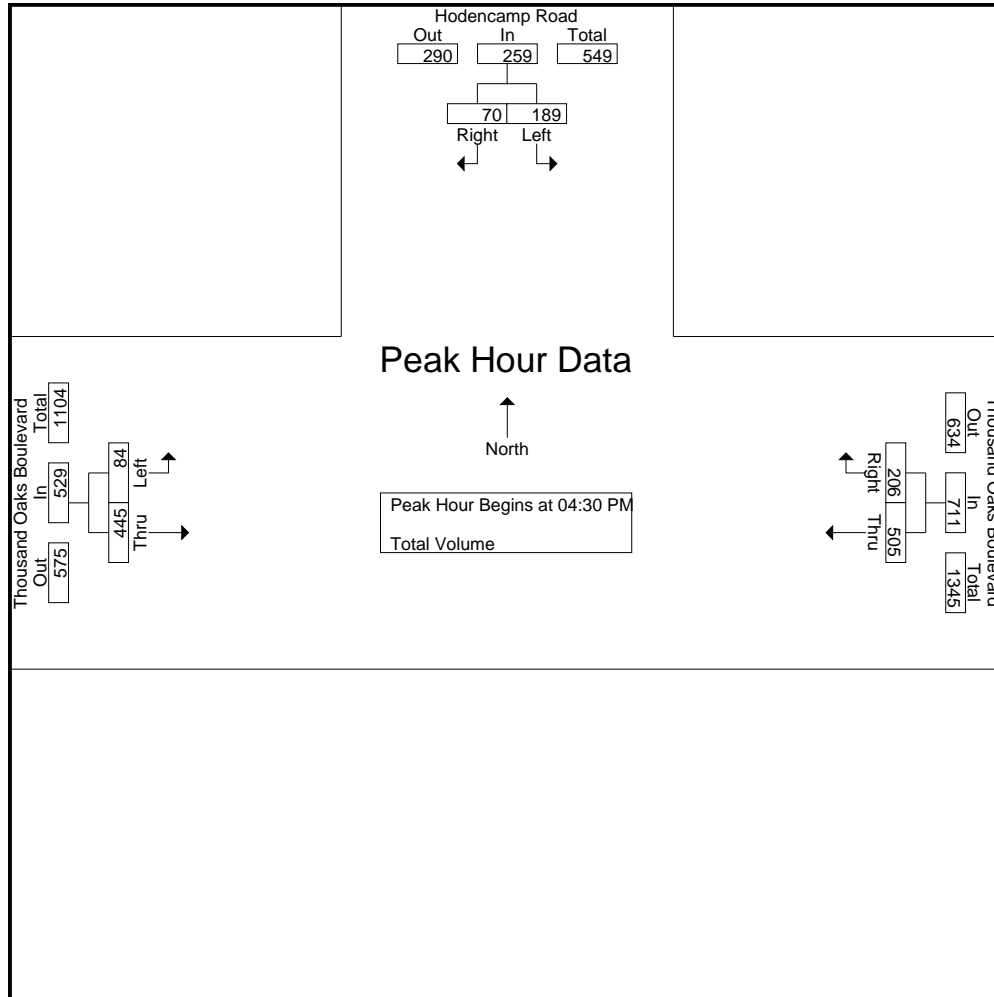
Groups Printed- Total Volume

	Hodencamp Road Southbound			Thousand Oaks Boulevard Westbound			Thousand Oaks Boulevard Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	46	28	74	119	36	155	24	135	159	388
04:15 PM	61	21	82	118	38	156	18	108	126	364
04:30 PM	55	17	72	130	49	179	24	109	133	384
04:45 PM	41	23	64	113	51	164	19	108	127	355
Total	203	89	292	480	174	654	85	460	545	1491
05:00 PM	48	18	66	135	47	182	20	114	134	382
05:15 PM	45	12	57	127	59	186	21	114	135	378
05:30 PM	47	10	57	118	47	165	15	93	108	330
05:45 PM	37	15	52	105	42	147	15	66	81	280
Total	177	55	232	485	195	680	71	387	458	1370
Grand Total	380	144	524	965	369	1334	156	847	1003	2861
Apprch %	72.5	27.5		72.3	27.7		15.6	84.4		
Total %	13.3	5	18.3	33.7	12.9	46.6	5.5	29.6	35.1	

	Hodencamp Road Southbound			Thousand Oaks Boulevard Westbound			Thousand Oaks Boulevard Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	55	17	72	130	49	179	24	109	133	384
04:45 PM	41	23	64	113	51	164	19	108	127	355
05:00 PM	48	18	66	135	47	182	20	114	134	382
05:15 PM	45	12	57	127	59	186	21	114	135	378
Total Volume	189	70	259	505	206	711	84	445	529	1499
% App. Total	73	27		71	29		15.9	84.1		
PHF	.859	.761	.899	.935	.873	.956	.875	.976	.980	.976

City of Thousand Oaks
N/S: Hodencamp Road
E/W: Thousand Oaks Boulevard
Weather: Clear

File Name : 04_TNO_Hode_1KO PM
Site Code : 23723527
Start Date : 6/7/2023
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM			04:30 PM			04:00 PM		
+0 mins.	46	28	74	130	49	179	24	135	159
+15 mins.	61	21	82	113	51	164	18	108	126
+30 mins.	55	17	72	135	47	182	24	109	133
+45 mins.	41	23	64	127	59	186	19	108	127
Total Volume	203	89	292	505	206	711	85	460	545
% App. Total	69.5	30.5		71	29		15.6	84.4	
PHF	.832	.795	.890	.935	.873	.956	.885	.852	.857

Location: Thousand Oaks
 N/S: Hodencamp Road
 E/W: Thousand Oaks Boulevard



Date: 6/7/2023
 Day: Wednesday

PEDESTRIANS

	North Leg Hodencamp Road Pedestrians	East Leg Thousand Oaks Boulevard Pedestrians	South Leg Hodencamp Road Pedestrians	West Leg Thousand Oaks Boulevard Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	1	1	2
7:30 AM	0	0	1	0	1
7:45 AM	1	0	1	0	2
8:00 AM	0	0	1	1	2
8:15 AM	1	0	1	1	3
8:30 AM	1	0	0	0	1
8:45 AM	3	0	0	1	4
TOTAL VOLUMES:	6	0	5	4	15

	North Leg Hodencamp Road Pedestrians	East Leg Thousand Oaks Boulevard Pedestrians	South Leg Hodencamp Road Pedestrians	West Leg Thousand Oaks Boulevard Pedestrians	
4:00 PM	2	0	0	1	3
4:15 PM	2	0	2	0	4
4:30 PM	2	0	0	0	2
4:45 PM	1	0	1	3	5
5:00 PM	3	0	0	1	4
5:15 PM	3	0	0	0	3
5:30 PM	2	0	2	1	5
5:45 PM	3	0	4	1	8
TOTAL VOLUMES:	18	0	9	7	34

Location: Thousand Oaks
 N/S: Hodencamp Road
 E/W: Thousand Oaks Boulevard



Date: 6/7/2023
 Day: Wednesday

BICYCLES

	Southbound Hodencamp Road			Westbound Thousand Oaks Boulevard			Northbound Hodencamp Road			Eastbound Thousand Oaks Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
7:45 AM	1	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	1	0	0	0	1	0	0	0	0	0	3	0	5

	Southbound Hodencamp Road			Westbound Thousand Oaks Boulevard			Northbound Hodencamp Road			Eastbound Thousand Oaks Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
4:30 PM	0	0	1	0	3	0	0	0	0	0	1	0	5
4:45 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
5:00 PM	0	0	0	0	1	1	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
TOTAL VOLUMES:	1	0	1	0	7	2	0	0	0	0	2	0	13

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Thousand Oaks
N/S: SR-23 SB Off Ramp/W SR-23 Frontage
E/W: Hillcrest Drive
Weather: Clear

File Name : 05_TNO_S23 Off_Hill AM
Site Code : 23723527
Start Date : 6/7/2023
Page No : 1

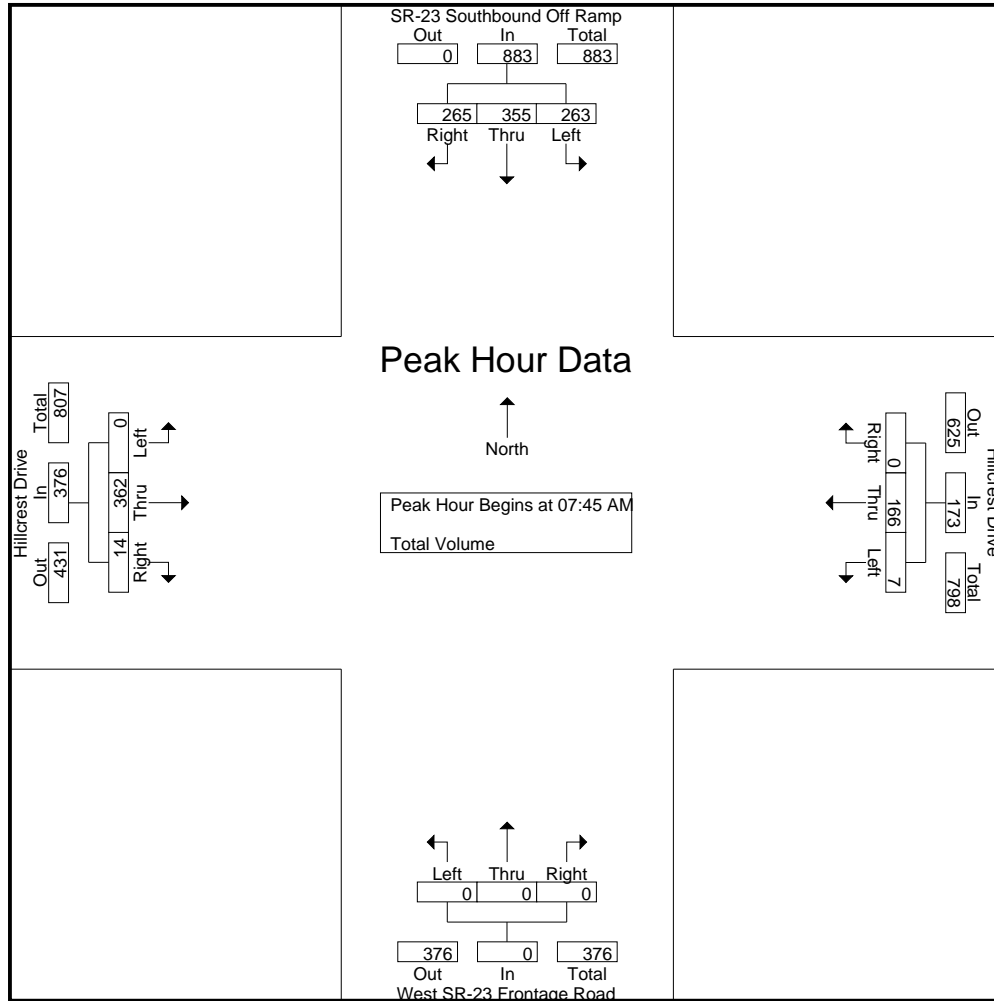
Groups Printed- Total Volume

	SR-23 Southbound Off Ramp Southbound				Hillcrest Drive Westbound				West SR-23 Frontage Road Northbound				Hillcrest Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	38	43	23	104	0	16	0	16	0	0	0	0	0	44	6	50	170
07:15 AM	45	58	35	138	0	22	0	22	0	0	0	0	0	69	3	72	232
07:30 AM	66	67	42	175	1	35	0	36	0	0	0	0	1	70	4	75	286
07:45 AM	65	106	72	243	1	46	0	47	0	0	0	0	0	98	5	103	393
Total	214	274	172	660	2	119	0	121	0	0	0	0	1	281	18	300	1081
08:00 AM	59	74	53	186	1	42	0	43	0	0	0	0	0	89	1	90	319
08:15 AM	66	97	75	238	3	41	0	44	0	0	0	0	0	84	5	89	371
08:30 AM	73	78	65	216	2	37	0	39	0	0	0	0	0	91	3	94	349
08:45 AM	49	98	85	232	1	54	0	55	0	0	0	0	0	83	5	88	375
Total	247	347	278	872	7	174	0	181	0	0	0	0	0	347	14	361	1414
Grand Total	461	621	450	1532	9	293	0	302	0	0	0	0	1	628	32	661	2495
Apprch %	30.1	40.5	29.4		3	97	0		0	0	0		0.2	95	4.8		
Total %	18.5	24.9	18	61.4	0.4	11.7	0	12.1	0	0	0	0	0	25.2	1.3	26.5	

	SR-23 Southbound Off Ramp Southbound				Hillcrest Drive Westbound				West SR-23 Frontage Road Northbound				Hillcrest Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	65	106	72	243	1	46	0	47	0	0	0	0	0	98	5	103	393
08:00 AM	59	74	53	186	1	42	0	43	0	0	0	0	0	89	1	90	319
08:15 AM	66	97	75	238	3	41	0	44	0	0	0	0	0	84	5	89	371
08:30 AM	73	78	65	216	2	37	0	39	0	0	0	0	0	91	3	94	349
Total Volume	263	355	265	883	7	166	0	173	0	0	0	0	0	362	14	376	1432
% App. Total	29.8	40.2	30		4	96	0		0	0	0		0	96.3	3.7		
PHF	.901	.837	.883	.908	.583	.902	.000	.920	.000	.000	.000	.000	.000	.923	.700	.913	.911

City of Thousand Oaks
N/S: SR-23 SB Off Ramp/W SR-23 Frontage
E/W: Hillcrest Drive
Weather: Clear

File Name : 05_TNO_S23 Off_Hill AM
Site Code : 23723527
Start Date : 6/7/2023
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				08:00 AM				07:00 AM				07:45 AM			
+0 mins.	65	106	72	243	1	42	0	43	0	0	0	0	0	98	5	103
+15 mins.	59	74	53	186	3	41	0	44	0	0	0	0	0	89	1	90
+30 mins.	66	97	75	238	2	37	0	39	0	0	0	0	0	84	5	89
+45 mins.	73	78	65	216	1	54	0	55	0	0	0	0	0	91	3	94
Total Volume	263	355	265	883	7	174	0	181	0	0	0	0	0	362	14	376
% App. Total	29.8	40.2	30		3.9	96.1	0		0	0	0	0	0	96.3	3.7	
PHF	.901	.837	.883	.908	.583	.806	.000	.823	.000	.000	.000	.000	.000	.923	.700	.913

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Thousand Oaks
N/S: SR-23 SB Off Ramp/W SR-23 Frontage
E/W: Hillcrest Drive
Weather: Clear

File Name : 05_TNO_S23 Off_Hill PM
Site Code : 23723527
Start Date : 6/7/2023
Page No : 1

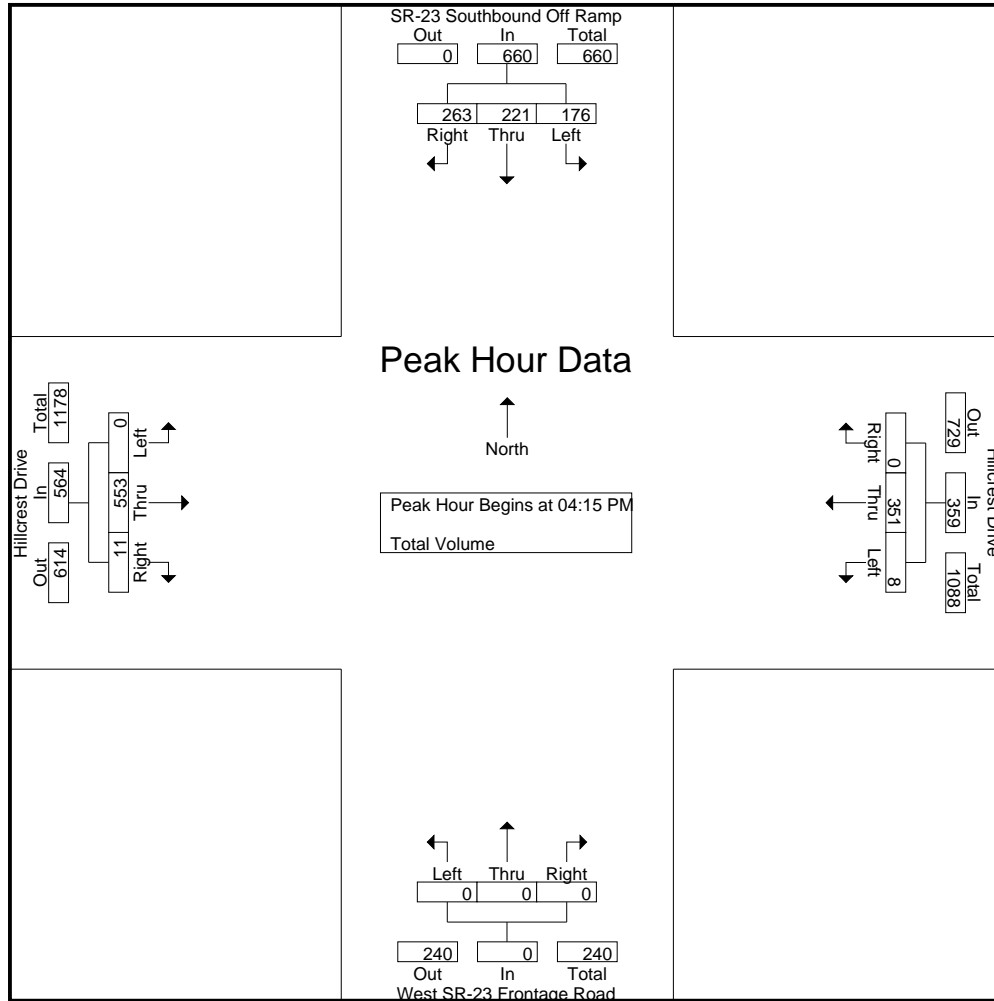
Groups Printed- Total Volume

	SR-23 Southbound Off Ramp Southbound				Hillcrest Drive Westbound				West SR-23 Frontage Road Northbound				Hillcrest Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	34	65	48	147	0	87	0	87	0	0	0	0	0	136	3	139	373
04:15 PM	56	47	67	170	2	78	0	80	0	0	0	0	0	145	4	149	399
04:30 PM	47	43	65	155	1	92	0	93	0	0	0	0	0	128	3	131	379
04:45 PM	32	72	74	178	3	78	0	81	0	0	0	0	0	113	4	117	376
Total	169	227	254	650	6	335	0	341	0	0	0	0	0	522	14	536	1527
05:00 PM	41	59	57	157	2	103	0	105	0	0	0	0	0	167	0	167	429
05:15 PM	51	55	60	166	3	79	0	82	0	0	0	0	0	146	1	147	395
05:30 PM	35	44	72	151	1	83	0	84	0	0	0	0	0	108	2	110	345
05:45 PM	48	55	81	184	1	84	0	85	0	0	0	0	0	133	4	137	406
Total	175	213	270	658	7	349	0	356	0	0	0	0	0	554	7	561	1575
Grand Total	344	440	524	1308	13	684	0	697	0	0	0	0	0	1076	21	1097	3102
Apprch %	26.3	33.6	40.1		1.9	98.1	0		0	0	0		0	98.1	1.9		
Total %	11.1	14.2	16.9	42.2	0.4	22.1	0	22.5	0	0	0	0	0	34.7	0.7	35.4	

	SR-23 Southbound Off Ramp Southbound				Hillcrest Drive Westbound				West SR-23 Frontage Road Northbound				Hillcrest Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	56	47	67	170	2	78	0	80	0	0	0	0	0	145	4	149	399
04:30 PM	47	43	65	155	1	92	0	93	0	0	0	0	0	128	3	131	379
04:45 PM	32	72	74	178	3	78	0	81	0	0	0	0	0	113	4	117	376
05:00 PM	41	59	57	157	2	103	0	105	0	0	0	0	0	167	0	167	429
Total Volume	176	221	263	660	8	351	0	359	0	0	0	0	0	553	11	564	1583
% App. Total	26.7	33.5	39.8		2.2	97.8	0		0	0	0		0	98	2		
PHF	.786	.767	.889	.927	.667	.852	.000	.855	.000	.000	.000	.000	.000	.828	.688	.844	.922

City of Thousand Oaks
N/S: SR-23 SB Off Ramp/W SR-23 Frontage
E/W: Hillcrest Drive
Weather: Clear

File Name : 05_TNO_S23 Off_Hill PM
Site Code : 23723527
Start Date : 6/7/2023
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:30 PM				04:00 PM				04:15 PM			
+0 mins.	56	47	67	170	1	92	0	93	0	0	0	0	0	145	4	149
+15 mins.	47	43	65	155	3	78	0	81	0	0	0	0	0	128	3	131
+30 mins.	32	72	74	178	2	103	0	105	0	0	0	0	0	113	4	117
+45 mins.	41	59	57	157	3	79	0	82	0	0	0	0	0	167	0	167
Total Volume	176	221	263	660	9	352	0	361	0	0	0	0	0	553	11	564
% App. Total	26.7	33.5	39.8		2.5	97.5	0		0	0	0	0	0	98	2	
PHF	.786	.767	.889	.927	.750	.854	.000	.860	.000	.000	.000	.000	.000	.828	.688	.844

Location: Thousand Oaks
 N/S: SR-23 SB Off Ramp
 E/W: Hillcrest Drive



Date: 6/7/2023
 Day: Wednesday

PEDESTRIANS

	North Leg SR-23 SB Off Ramp Pedestrians	East Leg Hillcrest Drive Pedestrians	South Leg West SR-23 Frontage Rd Pedestrians	West Leg Hillcrest Drive Pedestrians	
7:00 AM	2	0	0	0	2
7:15 AM	1	0	0	0	1
7:30 AM	1	0	1	0	2
7:45 AM	0	0	0	0	0
8:00 AM	1	0	0	0	1
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	1	0	1
TOTAL VOLUMES:	5	0	2	0	7

	North Leg SR-23 SB Off Ramp Pedestrians	East Leg Hillcrest Drive Pedestrians	South Leg West SR-23 Frontage Rd Pedestrians	West Leg Hillcrest Drive Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	1	0	0	1	2
4:30 PM	0	0	0	0	0
4:45 PM	0	0	2	0	2
5:00 PM	1	0	1	0	2
5:15 PM	0	0	0	0	0
5:30 PM	0	0	2	0	2
5:45 PM	0	0	0	1	1
TOTAL VOLUMES:	2	0	5	2	9

Location: Thousand Oaks
 N/S: SR-23 SB Off Ramp
 E/W: Hillcrest Drive



Date: 6/7/2023
 Day: Wednesday

BICYCLES

		Southbound SR-23 SB Off Ramp			Westbound Hillcrest Drive			Northbound West SR-23 Frontage Rd			Eastbound Hillcrest Drive			
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	2	0	2
	8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	2
TOTAL VOLUMES:		0	0	0	0	0	0	0	0	0	0	5	0	5

		Southbound SR-23 SB Off Ramp			Westbound Hillcrest Drive			Northbound West SR-23 Frontage Rd			Eastbound Hillcrest Drive			
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
	4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	4:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:		0	0	0	0	3	0	0	0	0	0	2	0	5

City of Thousand Oaks
N/S: West SR-23 Frontage Road
E/W: Thousand Oaks Boulevard
Weather: Clear

File Name : 06_TNO_23F_1KO AM
Site Code : 23723527
Start Date : 6/7/2023
Page No : 1

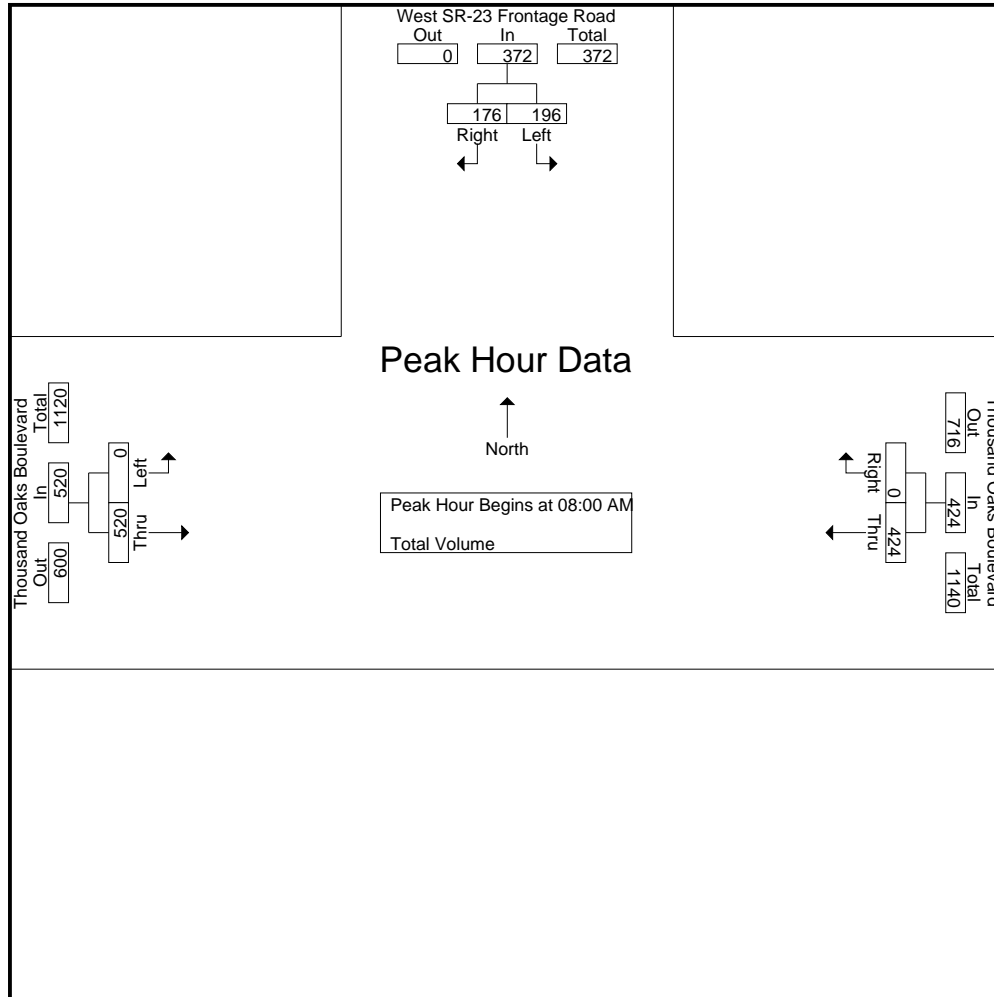
Groups Printed- Total Volume

	West SR-23 Frontage Road Southbound			Thousand Oaks Boulevard Westbound			Thousand Oaks Boulevard Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	33	15	48	34	0	34	0	59	59	141
07:15 AM	42	22	64	57	0	57	0	65	65	186
07:30 AM	35	38	73	60	0	60	0	70	70	203
07:45 AM	51	58	109	92	0	92	0	64	64	265
Total	161	133	294	243	0	243	0	258	258	795
08:00 AM	37	42	79	79	0	79	0	94	94	252
08:15 AM	61	44	105	100	0	100	0	100	100	305
08:30 AM	41	45	86	104	0	104	0	144	144	334
08:45 AM	57	45	102	141	0	141	0	182	182	425
Total	196	176	372	424	0	424	0	520	520	1316
Grand Total	357	309	666	667	0	667	0	778	778	2111
Apprch %	53.6	46.4		100	0		0	100		
Total %	16.9	14.6	31.5	31.6	0	31.6	0	36.9	36.9	

	West SR-23 Frontage Road Southbound			Thousand Oaks Boulevard Westbound			Thousand Oaks Boulevard Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	37	42	79	79	0	79	0	94	94	252
08:15 AM	61	44	105	100	0	100	0	100	100	305
08:30 AM	41	45	86	104	0	104	0	144	144	334
08:45 AM	57	45	102	141	0	141	0	182	182	425
Total Volume	196	176	372	424	0	424	0	520	520	1316
% App. Total	52.7	47.3		100	0		0	100		
PHF	.803	.978	.886	.752	.000	.752	.000	.714	.714	.774

City of Thousand Oaks
N/S: West SR-23 Frontage Road
E/W: Thousand Oaks Boulevard
Weather: Clear

File Name : 06_TNO_23F_1KO AM
Site Code : 23723527
Start Date : 6/7/2023
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM			08:00 AM			08:00 AM		
+0 mins.	51	58	109	79	0	79	0	94	94
+15 mins.	37	42	79	100	0	100	0	100	100
+30 mins.	61	44	105	104	0	104	0	144	144
+45 mins.	41	45	86	141	0	141	0	182	182
Total Volume	190	189	379	424	0	424	0	520	520
% App. Total	50.1	49.9		100	0		0	100	
PHF	.779	.815	.869	.752	.000	.752	.000	.714	.714

City of Thousand Oaks
N/S: West SR-23 Frontage Road
E/W: Thousand Oaks Boulevard
Weather: Clear

File Name : 06_TNO_23F_1KO PM
Site Code : 23723527
Start Date : 6/7/2023
Page No : 1

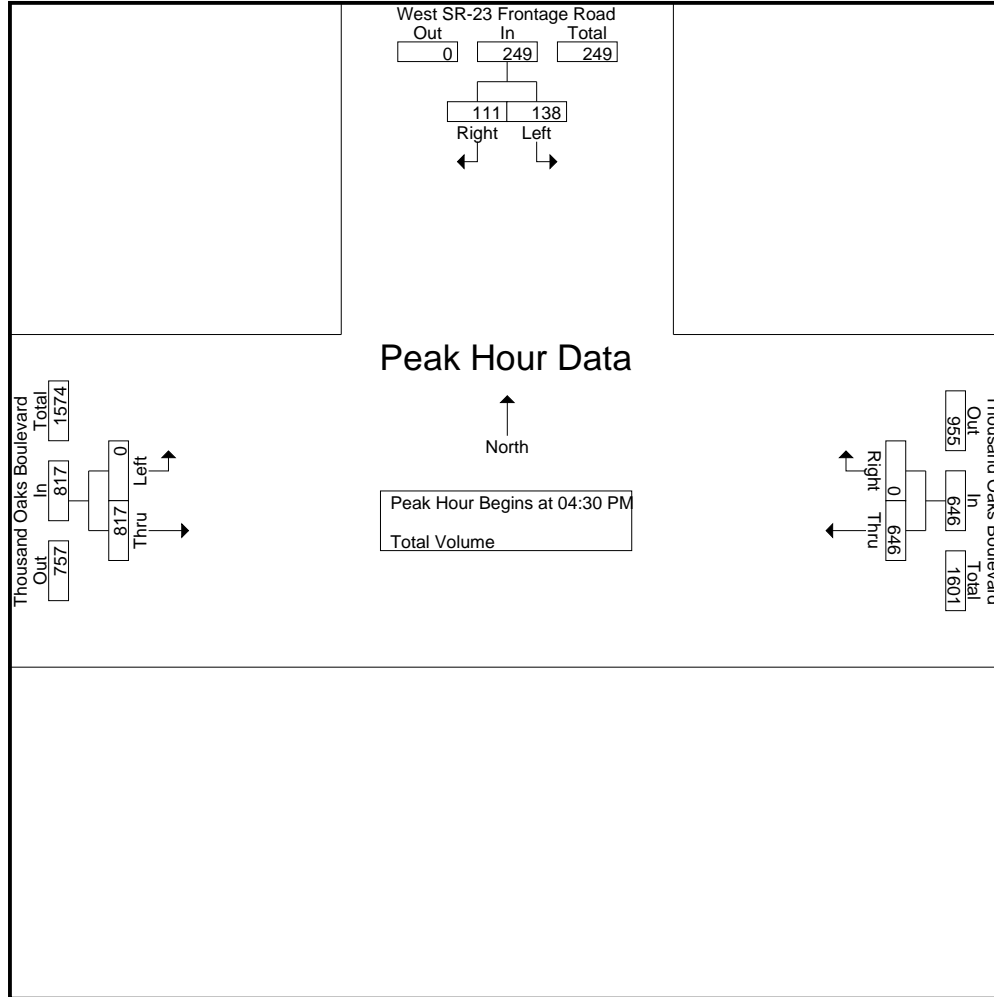
Groups Printed- Total Volume

	West SR-23 Frontage Road Southbound			Thousand Oaks Boulevard Westbound			Thousand Oaks Boulevard Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	31	32	63	155	0	155	0	212	212	430
04:15 PM	33	21	54	152	0	152	0	195	195	401
04:30 PM	31	19	50	161	0	161	0	198	198	409
04:45 PM	37	40	77	154	0	154	0	197	197	428
Total	132	112	244	622	0	622	0	802	802	1668
05:00 PM	38	23	61	172	0	172	0	232	232	465
05:15 PM	32	29	61	159	0	159	0	190	190	410
05:30 PM	20	26	46	141	0	141	0	152	152	339
05:45 PM	32	28	60	115	0	115	0	123	123	298
Total	122	106	228	587	0	587	0	697	697	1512
Grand Total	254	218	472	1209	0	1209	0	1499	1499	3180
Apprch %	53.8	46.2		100	0		0	100		
Total %	8	6.9	14.8	38	0	38	0	47.1	47.1	

	West SR-23 Frontage Road Southbound			Thousand Oaks Boulevard Westbound			Thousand Oaks Boulevard Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	31	19	50	161	0	161	0	198	198	409
04:45 PM	37	40	77	154	0	154	0	197	197	428
05:00 PM	38	23	61	172	0	172	0	232	232	465
05:15 PM	32	29	61	159	0	159	0	190	190	410
Total Volume	138	111	249	646	0	646	0	817	817	1712
% App. Total	55.4	44.6		100	0		0	100		
PHF	.908	.694	.808	.939	.000	.939	.000	.880	.880	.920

City of Thousand Oaks
 N/S: West SR-23 Frontage Road
 E/W: Thousand Oaks Boulevard
 Weather: Clear

File Name : 06_TNO_23F_1KO PM
 Site Code : 23723527
 Start Date : 6/7/2023
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:30 PM			04:30 PM			04:15 PM		
+0 mins.	31	19	50	161	0	161	0	195	195
+15 mins.	37	40	77	154	0	154	0	198	198
+30 mins.	38	23	61	172	0	172	0	197	197
+45 mins.	32	29	61	159	0	159	0	232	232
Total Volume	138	111	249	646	0	646	0	822	822
% App. Total	55.4	44.6		100	0		0	100	
PHF	.908	.694	.808	.939	.000	.939	.000	.886	.886

Location: Thousand Oaks
 N/S: West SR-23 Frontage Rd
 E/W: Thousand Oaks Boulevard



Date: 6/7/2023
 Day: Wednesday

PEDESTRIANS

	North Leg West SR-23 Frontage Rd Pedestrians	East Leg Thousand Oaks Boulevard Pedestrians	South Leg West SR-23 Frontage Rd Pedestrians	West Leg Thousand Oaks Boulevard Pedestrians	
7:00 AM	2	0	0	0	2
7:15 AM	1	0	1	0	2
7:30 AM	1	0	0	0	1
7:45 AM	2	0	3	1	6
8:00 AM	2	0	1	1	4
8:15 AM	1	0	2	2	5
8:30 AM	1	0	1	1	3
8:45 AM	0	0	1	0	1
TOTAL VOLUMES:	10	0	9	5	24

	North Leg West SR-23 Frontage Rd Pedestrians	East Leg Thousand Oaks Boulevard Pedestrians	South Leg West SR-23 Frontage Rd Pedestrians	West Leg Thousand Oaks Boulevard Pedestrians	
4:00 PM	3	0	2	0	5
4:15 PM	0	0	4	4	8
4:30 PM	0	0	2	2	4
4:45 PM	4	0	1	0	5
5:00 PM	1	0	0	2	3
5:15 PM	1	0	3	0	4
5:30 PM	1	0	2	2	5
5:45 PM	0	0	1	1	2
TOTAL VOLUMES:	10	0	15	11	36

Location: Thousand Oaks
 N/S: West SR-23 Frontage Rd
 E/W: Thousand Oaks Boulevard



Date: 6/7/2023
 Day: Wednesday

BICYCLES

	Southbound West SR-23 Frontage Rd			Westbound Thousand Oaks Boulevard			Northbound West SR-23 Frontage Rd			Eastbound Thousand Oaks Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	1	0	0	0	0	0	1	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:30 AM	0	0	0	0	1	0	0	0	0	0	2	0	3
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	2	0	0	0	0	0	6	0	8

	Southbound West SR-23 Frontage Rd			Westbound Thousand Oaks Boulevard			Northbound West SR-23 Frontage Rd			Eastbound Thousand Oaks Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	1	0	0	0	0	0	2	0	3
4:15 PM	0	0	0	0	3	0	0	0	0	0	0	0	3
4:30 PM	0	0	0	0	2	0	0	0	0	0	3	0	5
4:45 PM	0	0	0	0	2	0	0	0	0	0	1	0	3
5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
TOTAL VOLUMES:	0	0	0	0	12	0	0	0	0	0	7	0	19

City of Thousand Oaks
N/S: Rancho Road
E/W: Thousand Oaks Boulevard
Weather: Clear

File Name : 07_TNO_Ranc_1KO AM
Site Code : 23723527
Start Date : 6/7/2023
Page No : 1

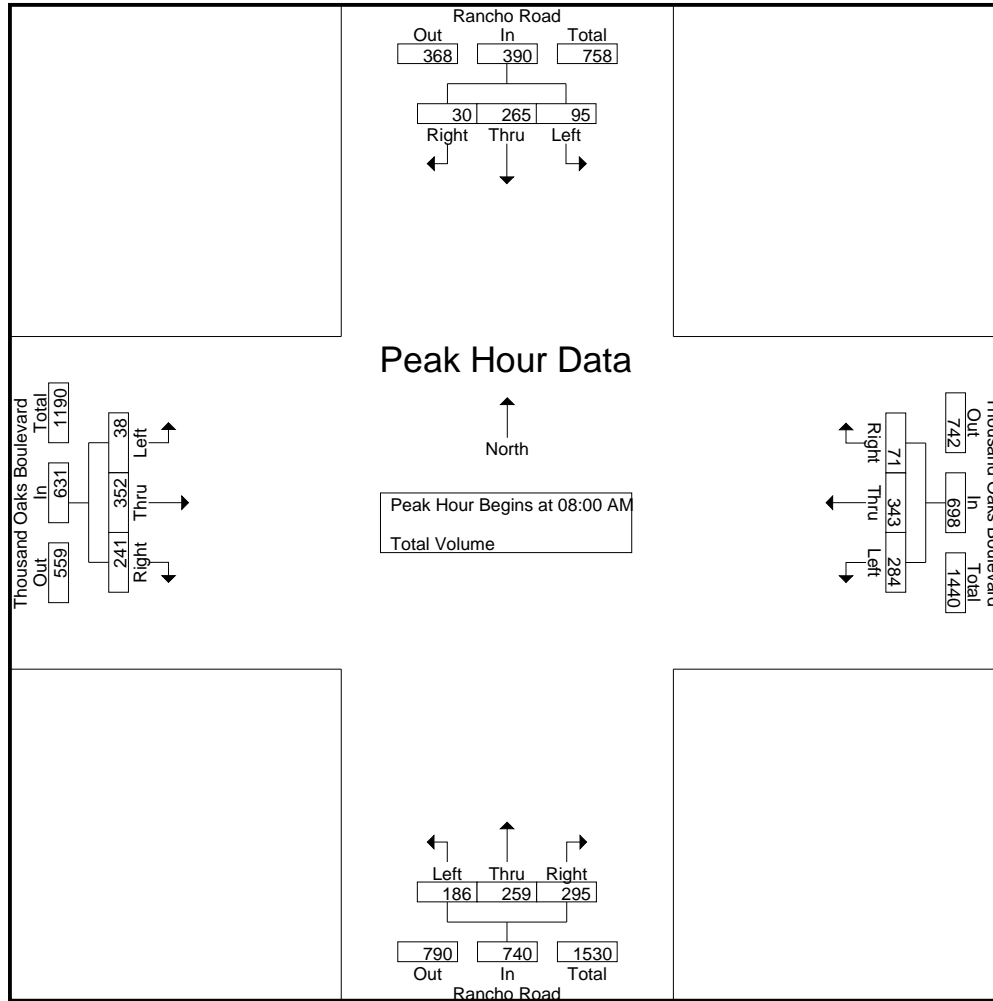
Groups Printed- Total Volume

	Rancho Road Southbound				Thousand Oaks Boulevard Westbound				Rancho Road Northbound				Thousand Oaks Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	13	37	4	54	41	38	14	93	12	21	33	66	3	54	29	86	299
07:15 AM	13	55	8	76	51	43	14	108	20	39	56	115	1	66	34	101	400
07:30 AM	14	60	5	79	61	53	26	140	36	88	62	186	6	52	36	94	499
07:45 AM	26	65	6	97	77	82	24	183	34	90	67	191	6	62	49	117	588
Total	66	217	23	306	230	216	78	524	102	238	218	558	16	234	148	398	1786
08:00 AM	18	64	5	87	68	62	11	141	32	44	64	140	7	73	35	115	483
08:15 AM	20	61	10	91	77	77	18	172	46	79	66	191	12	88	48	148	602
08:30 AM	28	73	9	110	76	93	21	190	47	71	64	182	9	73	72	154	636
08:45 AM	29	67	6	102	63	111	21	195	61	65	101	227	10	118	86	214	738
Total	95	265	30	390	284	343	71	698	186	259	295	740	38	352	241	631	2459
Grand Total	161	482	53	696	514	559	149	1222	288	497	513	1298	54	586	389	1029	4245
Apprch %	23.1	69.3	7.6		42.1	45.7	12.2		22.2	38.3	39.5		5.2	56.9	37.8		
Total %	3.8	11.4	1.2	16.4	12.1	13.2	3.5	28.8	6.8	11.7	12.1	30.6	1.3	13.8	9.2	24.2	

	Rancho Road Southbound				Thousand Oaks Boulevard Westbound				Rancho Road Northbound				Thousand Oaks Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	18	64	5	87	68	62	11	141	32	44	64	140	7	73	35	115	483
08:15 AM	20	61	10	91	77	77	18	172	46	79	66	191	12	88	48	148	602
08:30 AM	28	73	9	110	76	93	21	190	47	71	64	182	9	73	72	154	636
08:45 AM	29	67	6	102	63	111	21	195	61	65	101	227	10	118	86	214	738
Total Volume	95	265	30	390	284	343	71	698	186	259	295	740	38	352	241	631	2459
% App. Total	24.4	67.9	7.7		40.7	49.1	10.2		25.1	35	39.9		6	55.8	38.2		
PHF	.819	.908	.750	.886	.922	.773	.845	.895	.762	.820	.730	.815	.792	.746	.701	.737	.833

City of Thousand Oaks
N/S: Rancho Road
E/W: Thousand Oaks Boulevard
Weather: Clear

File Name : 07_TNO_Ranc_1KO AM
Site Code : 23723527
Start Date : 6/7/2023
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	18	64	5	87	68	62	11	141	32	44	64	140	7	73	35	115
+15 mins.	20	61	10	91	77	77	18	172	46	79	66	191	12	88	48	148
+30 mins.	28	73	9	110	76	93	21	190	47	71	64	182	9	73	72	154
+45 mins.	29	67	6	102	63	111	21	195	61	65	101	227	10	118	86	214
Total Volume	95	265	30	390	284	343	71	698	186	259	295	740	38	352	241	631
% App. Total	24.4	67.9	7.7		40.7	49.1	10.2		25.1	35	39.9		6	55.8	38.2	
PHF	.819	.908	.750	.886	.922	.773	.845	.895	.762	.820	.730	.815	.792	.746	.701	.737

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Thousand Oaks
N/S: Rancho Road
E/W: Thousand Oaks Boulevard
Weather: Clear

File Name : 07_TNO_Ranc_1KO PM
Site Code : 23723527
Start Date : 6/7/2023
Page No : 1

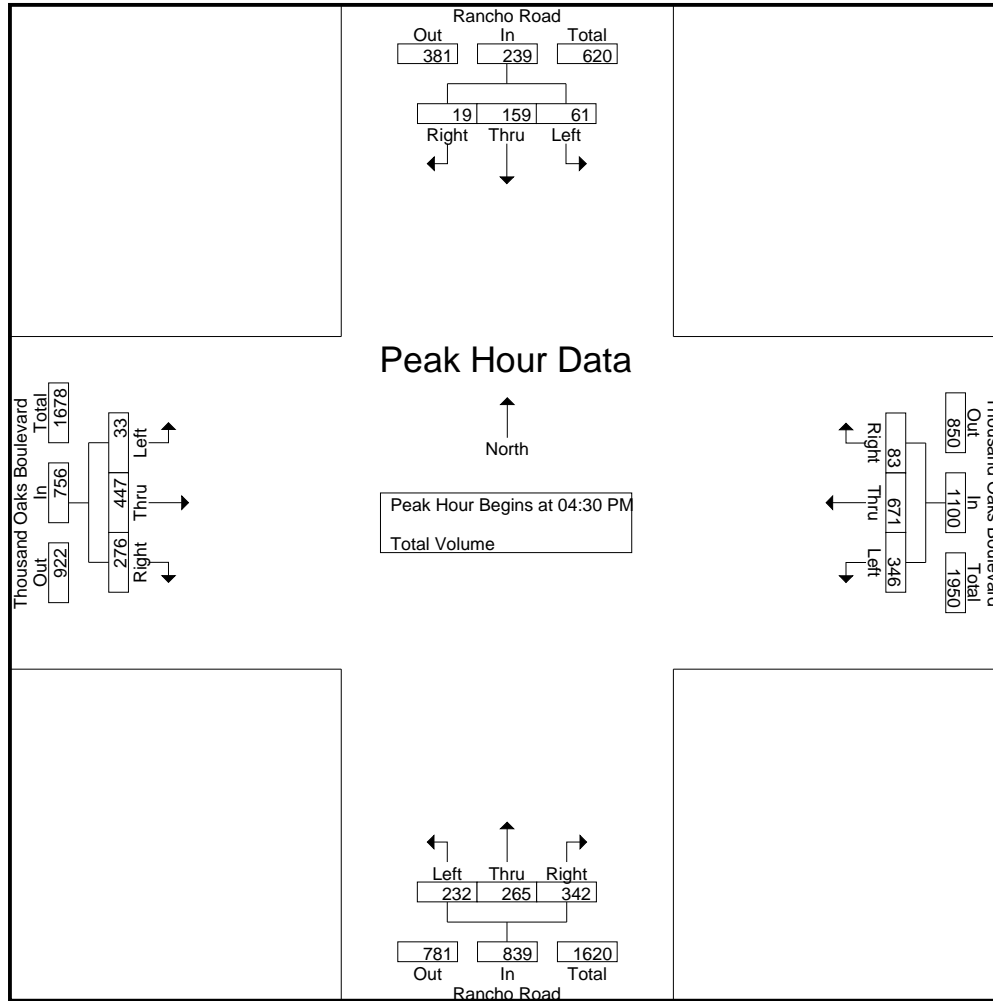
Groups Printed- Total Volume

	Rancho Road Southbound				Thousand Oaks Boulevard Westbound				Rancho Road Northbound				Thousand Oaks Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	14	43	8	65	87	161	23	271	49	50	88	187	11	110	66	187	710
04:15 PM	26	50	8	84	76	146	16	238	60	69	83	212	10	111	56	177	711
04:30 PM	14	38	6	58	80	161	21	262	53	55	82	190	7	108	73	188	698
04:45 PM	15	38	6	59	100	160	27	287	58	75	105	238	7	104	66	177	761
Total	69	169	28	266	343	628	87	1058	220	249	358	827	35	433	261	729	2880
05:00 PM	17	51	4	72	81	176	17	274	50	66	75	191	9	122	74	205	742
05:15 PM	15	32	3	50	85	174	18	277	71	69	80	220	10	113	63	186	733
05:30 PM	14	37	7	58	84	155	22	261	40	77	76	193	13	80	37	130	642
05:45 PM	14	42	4	60	84	123	17	224	40	76	70	186	12	79	41	132	602
Total	60	162	18	240	334	628	74	1036	201	288	301	790	44	394	215	653	2719
Grand Total	129	331	46	506	677	1256	161	2094	421	537	659	1617	79	827	476	1382	5599
Apprch %	25.5	65.4	9.1		32.3	60	7.7		26	33.2	40.8		5.7	59.8	34.4		
Total %	2.3	5.9	0.8	9	12.1	22.4	2.9	37.4	7.5	9.6	11.8	28.9	1.4	14.8	8.5	24.7	

	Rancho Road Southbound				Thousand Oaks Boulevard Westbound				Rancho Road Northbound				Thousand Oaks Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	14	38	6	58	80	161	21	262	53	55	82	190	7	108	73	188	698
04:45 PM	15	38	6	59	100	160	27	287	58	75	105	238	7	104	66	177	761
05:00 PM	17	51	4	72	81	176	17	274	50	66	75	191	9	122	74	205	742
05:15 PM	15	32	3	50	85	174	18	277	71	69	80	220	10	113	63	186	733
Total Volume	61	159	19	239	346	671	83	1100	232	265	342	839	33	447	276	756	2934
% App. Total	25.5	66.5	7.9		31.5	61	7.5		27.7	31.6	40.8		4.4	59.1	36.5		
PHF	.897	.779	.792	.830	.865	.953	.769	.958	.817	.883	.814	.881	.825	.916	.932	.922	.964

City of Thousand Oaks
N/S: Rancho Road
E/W: Thousand Oaks Boulevard
Weather: Clear

File Name : 07_TNO_Ranc_1KO PM
Site Code : 23723527
Start Date : 6/7/2023
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:30 PM				04:45 PM				04:30 PM			
+0 mins.	26	50	8	84	80	161	21	262	58	75	105	238	7	108	73	188
+15 mins.	14	38	6	58	100	160	27	287	50	66	75	191	7	104	66	177
+30 mins.	15	38	6	59	81	176	17	274	71	69	80	220	9	122	74	205
+45 mins.	17	51	4	72	85	174	18	277	40	77	76	193	10	113	63	186
Total Volume	72	177	24	273	346	671	83	1100	219	287	336	842	33	447	276	756
% App. Total	26.4	64.8	8.8		31.5	61	7.5		26	34.1	39.9		4.4	59.1	36.5	
PHF	.692	.868	.750	.813	.865	.953	.769	.958	.771	.932	.800	.884	.825	.916	.932	.922

Location: Thousand Oaks
 N/S: Rancho Road
 E/W: Thousand Oaks Boulevard



Date: 6/7/2023
 Day: Wednesday

PEDESTRIANS

	North Leg Rancho Road	East Leg Thousand Oaks Boulevard	South Leg Rancho Road	West Leg Thousand Oaks Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	1	0	1
7:30 AM	0	0	1	0	1
7:45 AM	4	0	0	0	4
8:00 AM	1	1	2	1	5
8:15 AM	0	1	1	0	2
8:30 AM	2	2	1	1	6
8:45 AM	3	1	2	0	6
TOTAL VOLUMES:	10	5	8	2	25

	North Leg Rancho Road	East Leg Thousand Oaks Boulevard	South Leg Rancho Road	West Leg Thousand Oaks Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	1	3	1	0	5
4:15 PM	3	0	0	2	5
4:30 PM	1	0	4	0	5
4:45 PM	3	1	2	1	7
5:00 PM	1	0	0	0	1
5:15 PM	1	0	1	0	2
5:30 PM	1	2	1	0	4
5:45 PM	1	3	2	1	7
TOTAL VOLUMES:	12	9	11	4	36

Location: Thousand Oaks
 N/S: Rancho Road
 E/W: Thousand Oaks Boulevard



Date: 6/7/2023
 Day: Wednesday

BICYCLES

	Southbound Rancho Road			Westbound Thousand Oaks Boulevard			Northbound Rancho Road			Eastbound Thousand Oaks Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	1	0	0	0	0	0	1	0	2
7:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:45 AM	0	0	0	1	0	0	0	0	1	0	1	0	3
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	1	0	0	0	0	0	0	0	0	0	1	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	1	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	2	0	0	2	1	0	0	0	1	0	4	0	10

	Southbound Rancho Road			Westbound Thousand Oaks Boulevard			Northbound Rancho Road			Eastbound Thousand Oaks Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	1	1	0	0	0	0	2	0	4
4:15 PM	0	0	0	0	3	1	0	0	0	0	0	0	4
4:30 PM	1	0	0	0	2	0	0	0	1	0	2	0	6
4:45 PM	0	0	0	0	1	0	0	0	1	0	1	0	3
5:00 PM	0	0	0	1	1	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
5:45 PM	1	0	0	0	1	0	0	0	0	0	1	0	3
TOTAL VOLUMES:	2	0	0	1	11	2	0	0	2	0	6	0	24

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City of Thousand Oaks
N/S: Lombard Street
E/W: Thousand Oaks Boulevard
Weather: Clear

File Name : 08_TNO_Lomb_1KO AM
Site Code : 23723527
Start Date : 6/7/2023
Page No : 1

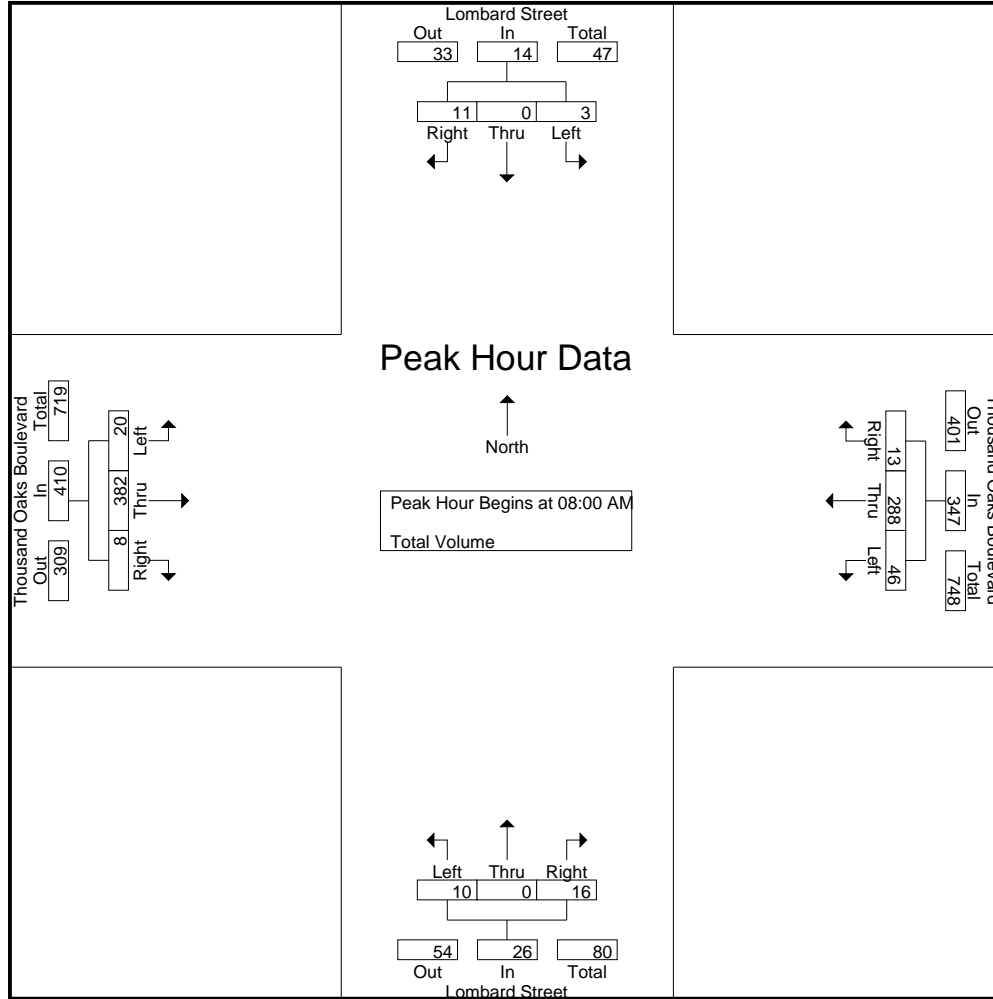
Groups Printed- Total Volume

	Lombard Street Southbound				Thousand Oaks Boulevard Westbound				Lombard Street Northbound				Thousand Oaks Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	0	1	2	5	30	0	35	0	0	0	0	2	25	0	27	64
07:15 AM	0	0	1	1	9	36	4	49	1	1	1	3	2	38	0	40	93
07:30 AM	0	0	0	0	9	42	1	52	1	0	1	2	4	49	2	55	109
07:45 AM	1	0	1	2	7	70	3	80	0	0	3	3	7	46	2	55	140
Total	2	0	3	5	30	178	8	216	2	1	5	8	15	158	4	177	406
08:00 AM	1	0	5	6	6	58	5	69	4	0	6	10	2	55	5	62	147
08:15 AM	1	0	1	2	8	76	3	87	1	0	2	3	6	81	0	87	179
08:30 AM	1	0	0	1	9	81	0	90	3	0	5	8	5	116	1	122	221
08:45 AM	0	0	5	5	23	73	5	101	2	0	3	5	7	130	2	139	250
Total	3	0	11	14	46	288	13	347	10	0	16	26	20	382	8	410	797
Grand Total	5	0	14	19	76	466	21	563	12	1	21	34	35	540	12	587	1203
Apprch %	26.3	0	73.7		13.5	82.8	3.7		35.3	2.9	61.8		6	92	2		
Total %	0.4	0	1.2	1.6	6.3	38.7	1.7	46.8	1	0.1	1.7	2.8	2.9	44.9	1	48.8	

	Lombard Street Southbound				Thousand Oaks Boulevard Westbound				Lombard Street Northbound				Thousand Oaks Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	1	0	5	6	6	58	5	69	4	0	6	10	2	55	5	62	147
08:15 AM	1	0	1	2	8	76	3	87	1	0	2	3	6	81	0	87	179
08:30 AM	1	0	0	1	9	81	0	90	3	0	5	8	5	116	1	122	221
08:45 AM	0	0	5	5	23	73	5	101	2	0	3	5	7	130	2	139	250
Total Volume	3	0	11	14	46	288	13	347	10	0	16	26	20	382	8	410	797
% App. Total	21.4	0	78.6		13.3	83	3.7		38.5	0	61.5		4.9	93.2	2		
PHF	.750	.000	.550	.583	.500	.889	.650	.859	.625	.000	.667	.650	.714	.735	.400	.737	.797

City of Thousand Oaks
N/S: Lombard Street
E/W: Thousand Oaks Boulevard
Weather: Clear

File Name : 08_TNO_Lomb_1KO AM
Site Code : 23723527
Start Date : 6/7/2023
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	1	0	5	6	6	58	5	69	4	0	6	10	2	55	5	62
+15 mins.	1	0	1	2	8	76	3	87	1	0	2	3	6	81	0	87
+30 mins.	1	0	0	1	9	81	0	90	3	0	5	8	5	116	1	122
+45 mins.	0	0	5	5	23	73	5	101	2	0	3	5	7	130	2	139
Total Volume	3	0	11	14	46	288	13	347	10	0	16	26	20	382	8	410
% App. Total	21.4	0	78.6		13.3	83	3.7		38.5	0	61.5		4.9	93.2	2	
PHF	.750	.000	.550	.583	.500	.889	.650	.859	.625	.000	.667	.650	.714	.735	.400	.737

City of Thousand Oaks
N/S: Lombard Street
E/W: Thousand Oaks Boulevard
Weather: Clear

File Name : 08_TNO_Lomb_1KO PM
Site Code : 23723527
Start Date : 6/7/2023
Page No : 1

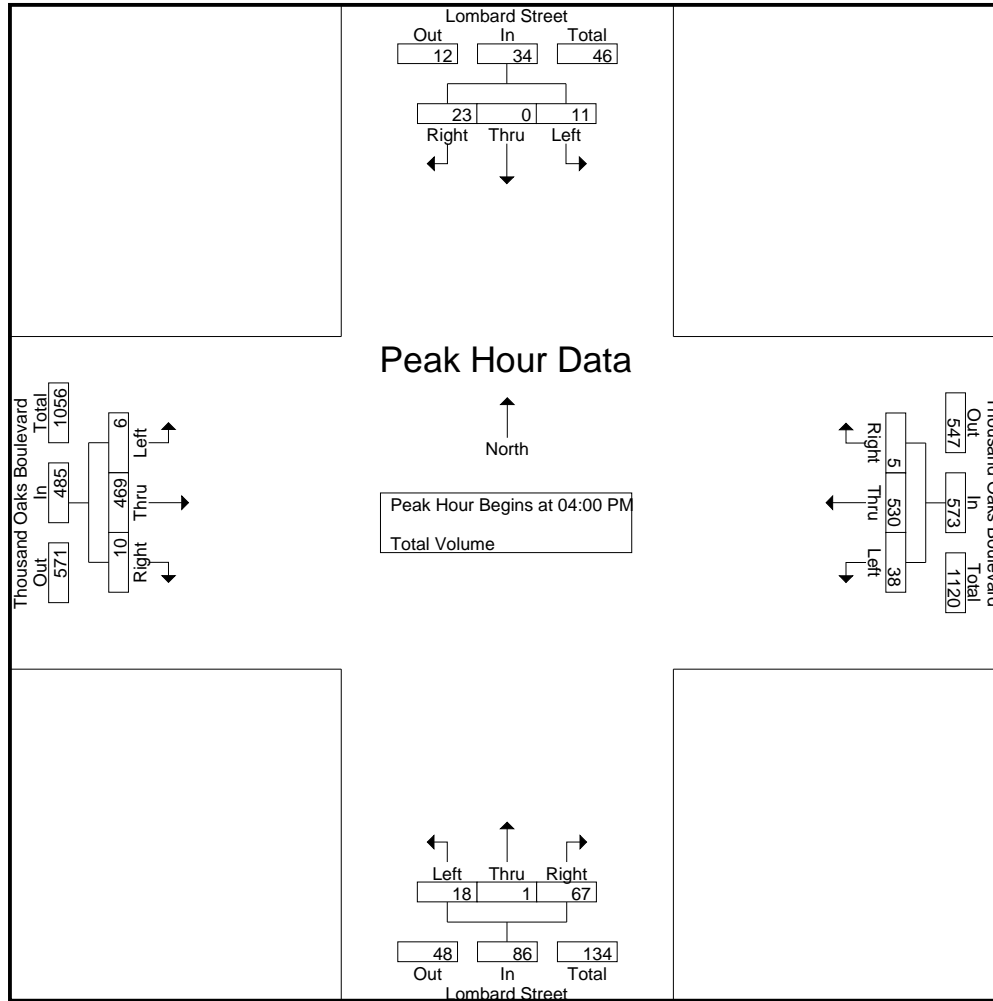
Groups Printed- Total Volume

	Lombard Street Southbound				Thousand Oaks Boulevard Westbound				Lombard Street Northbound				Thousand Oaks Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	6	0	7	13	8	139	3	150	5	0	15	20	0	140	7	147	330
04:15 PM	0	0	5	5	12	129	0	141	6	0	14	20	4	111	1	116	282
04:30 PM	3	0	8	11	9	139	1	149	4	1	18	23	1	116	1	118	301
04:45 PM	2	0	3	5	9	123	1	133	3	0	20	23	1	102	1	104	265
Total	11	0	23	34	38	530	5	573	18	1	67	86	6	469	10	485	1178
05:00 PM	6	0	7	13	14	140	0	154	4	0	23	27	1	110	2	113	307
05:15 PM	5	0	3	8	10	132	0	142	2	0	16	18	1	109	4	114	282
05:30 PM	5	0	8	13	8	116	0	124	2	0	16	18	0	85	3	88	243
05:45 PM	1	0	2	3	7	116	0	123	4	0	6	10	0	76	1	77	213
Total	17	0	20	37	39	504	0	543	12	0	61	73	2	380	10	392	1045
Grand Total	28	0	43	71	77	1034	5	1116	30	1	128	159	8	849	20	877	2223
Apprch %	39.4	0	60.6		6.9	92.7	0.4		18.9	0.6	80.5		0.9	96.8	2.3		
Total %	1.3	0	1.9	3.2	3.5	46.5	0.2	50.2	1.3	0	5.8	7.2	0.4	38.2	0.9	39.5	

	Lombard Street Southbound				Thousand Oaks Boulevard Westbound				Lombard Street Northbound				Thousand Oaks Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	6	0	7	13	8	139	3	150	5	0	15	20	0	140	7	147	330
04:15 PM	0	0	5	5	12	129	0	141	6	0	14	20	4	111	1	116	282
04:30 PM	3	0	8	11	9	139	1	149	4	1	18	23	1	116	1	118	301
04:45 PM	2	0	3	5	9	123	1	133	3	0	20	23	1	102	1	104	265
Total Volume	11	0	23	34	38	530	5	573	18	1	67	86	6	469	10	485	1178
% App. Total	32.4	0	67.6		6.6	92.5	0.9		20.9	1.2	77.9		1.2	96.7	2.1		
PHF	.458	.000	.719	.654	.792	.953	.417	.955	.750	.250	.838	.935	.375	.838	.357	.825	.892

City of Thousand Oaks
N/S: Lombard Street
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File Name : 08_TNO_Lomb_1KO PM
Site Code : 23723527
Start Date : 6/7/2023
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:30 PM				04:15 PM				04:00 PM			
+0 mins.	2	0	3	5	9	139	1	149	6	0	14	20	0	140	7	147
+15 mins.	6	0	7	13	9	123	1	133	4	1	18	23	4	111	1	116
+30 mins.	5	0	3	8	14	140	0	154	3	0	20	23	1	116	1	118
+45 mins.	5	0	8	13	10	132	0	142	4	0	23	27	1	102	1	104
Total Volume	18	0	21	39	42	534	2	578	17	1	75	93	6	469	10	485
% App. Total	46.2	0	53.8		7.3	92.4	0.3		18.3	1.1	80.6		1.2	96.7	2.1	
PHF	.750	.000	.656	.750	.750	.954	.500	.938	.708	.250	.815	.861	.375	.838	.357	.825

Location: Thousand Oaks
 N/S: Lombard Street
 E/W: Thousand Oaks Boulevard



Date: 6/7/2023
 Day: Wednesday

PEDESTRIANS

	North Leg Lombard Street Pedestrians	East Leg Thousand Oaks Boulevard Pedestrians	South Leg Lombard Street Pedestrians	West Leg Thousand Oaks Boulevard Pedestrians	
7:00 AM	1	0	0	0	1
7:15 AM	2	0	0	0	2
7:30 AM	0	0	1	0	1
7:45 AM	2	0	1	2	5
8:00 AM	0	0	0	1	1
8:15 AM	1	0	0	0	1
8:30 AM	2	0	0	0	2
8:45 AM	2	0	0	0	2
TOTAL VOLUMES:	10	0	2	3	15

	North Leg Lombard Street Pedestrians	East Leg Thousand Oaks Boulevard Pedestrians	South Leg Lombard Street Pedestrians	West Leg Thousand Oaks Boulevard Pedestrians	
4:00 PM	3	1	2	1	7
4:15 PM	3	0	2	0	5
4:30 PM	5	0	0	0	5
4:45 PM	2	0	2	0	4
5:00 PM	4	0	1	0	5
5:15 PM	2	0	0	0	2
5:30 PM	2	0	2	0	4
5:45 PM	3	0	5	0	8
TOTAL VOLUMES:	24	1	14	1	40

Location: Thousand Oaks
 N/S: Lombard Street
 E/W: Thousand Oaks Boulevard



Date: 6/7/2023
 Day: Wednesday

BICYCLES

	Southbound Lombard Street			Westbound Thousand Oaks Boulevard			Northbound Lombard Street			Eastbound Thousand Oaks Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	1	0	0	0	0	0	2	0	3

	Southbound Lombard Street			Westbound Thousand Oaks Boulevard			Northbound Lombard Street			Eastbound Thousand Oaks Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	4	0	0	0	0	0	1	0	5
4:45 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
TOTAL VOLUMES:	0	0	0	0	9	0	0	0	0	0	2	1	12

Counts Unlimited, Inc.

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City of Thousand Oaks
Lombard Street
S/ Thousand Oaks Boulevard
24 Hour Directional Volume Count

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

TNO001
Site Code: 237-23527

Start Time	6/7/23 Wed	Norrbound		Hour Totals		Southbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		0	27			0	20				
12:15		1	12			0	12				
12:30		0	17			0	11				
12:45		0	24	1	80	0	17	0	60	1	140
01:00		0	16			0	10				
01:15		1	15			0	18				
01:30		0	16			0	12				
01:45		0	16	1	63	0	20	0	60	1	123
02:00		0	21			0	12				
02:15		0	8			0	15				
02:30		0	17			0	12				
02:45		0	20	0	66	0	17	0	56	0	122
03:00		0	13			0	11				
03:15		0	18			0	24				
03:30		0	18			0	12				
03:45		0	18	0	67	0	14	0	61	0	128
04:00		0	20			0	15				
04:15		0	20			0	13				
04:30		0	23			0	10				
04:45		0	23	0	86	0	10	0	48	0	134
05:00		0	27			0	16				
05:15		0	18			0	14				
05:30		0	18			4	11				
05:45		0	10	0	73	2	8	6	49	6	122
06:00		2	16			5	10				
06:15		0	9			1	13				
06:30		2	17			4	11				
06:45		3	14	7	56	4	6	14	40	21	96
07:00		0	11			5	7				
07:15		3	12			9	11				
07:30		2	13			11	15				
07:45		3	13	8	49	9	6	34	39	42	88
08:00		10	8			11	9				
08:15		3	9			8	7				
08:30		8	7			10	8				
08:45		5	16	26	40	25	9	54	33	80	73
09:00		7	10			11	8				
09:15		8	10			12	8				
09:30		5	12			11	17				
09:45		8	14	28	46	16	9	50	42	78	88
10:00		9	9			8	7				
10:15		13	10			11	6				
10:30		13	7			14	6				
10:45		18	10	53	36	10	3	43	22	96	58
11:00		18	3			8	1				
11:15		11	1			8	0				
11:30		16	4			19	0				
11:45		17	0	62	8	11	0	46	1	108	9
Total		186	670	186	670	247	511	247	511	433	1181
Combined Total		856		856		758		758		1614	
AM Peak	-	10:45	-	-	-	08:45	-	-	-	-	-
Vol.	-	63	-	-	-	59	-	-	-	-	-
P.H.F.		0.875				0.590					
PM Peak	-	-	04:15	-	-	-	03:15	-	-	-	-
Vol.	-	-	93	-	-	-	65	-	-	-	-
P.H.F.			0.861				0.677				
Percentage		21.7%	78.3%			32.6%	67.4%				
ADT/AADT		ADT 1,614		AADT 1,614							

Counts Unlimited, Inc.

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City of Thousand Oaks
Thousand Oaks Boulevard
E/ Lombard Street
24 Hour Directional Volume Count

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

TNO002
Site Code: 237-23527

Start Time	6/7/23 Wed	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		5	190			5	149				
12:15		4	205			5	127				
12:30		3	182			3	125				
12:45		3	228	15	805	1	133	14	534	29	1339
01:00		7	196			4	134				
01:15		6	209			1	144				
01:30		5	201			2	137				
01:45		3	250	21	856	3	169	10	584	31	1440
02:00		2	226			3	142				
02:15		3	193			1	147				
02:30		1	189			0	147				
02:45		2	196	8	804	3	133	7	569	15	1373
03:00		1	123			0	138				
03:15		1	146			3	149				
03:30		0	147			0	153				
03:45		1	129	3	545	1	143	4	583	7	1128
04:00		1	161			0	150				
04:15		1	125			0	141				
04:30		2	137			2	149				
04:45		3	124	7	547	11	133	13	573	20	1120
05:00		5	139			7	154				
05:15		4	130			4	142				
05:30		6	106			11	124				
05:45		20	83	35	458	13	123	35	543	70	1001
06:00		17	102			13	110				
06:15		17	88			11	98				
06:30		15	111			26	92				
06:45		34	85	83	386	31	106	81	406	164	792
07:00		26	90			35	82				
07:15		39	84			49	81				
07:30		50	65			52	73				
07:45		50	64	165	303	80	78	216	314	381	617
08:00		62	71			69	57				
08:15		84	62			87	52				
08:30		122	56			90	58				
08:45		133	50	401	239	101	49	347	216	748	455
09:00		136	46			70	44				
09:15		138	47			101	38				
09:30		129	39			105	39				
09:45		139	61	542	193	113	35	389	156	931	349
10:00		154	37			110	31				
10:15		130	29			85	27				
10:30		152	21			131	24				
10:45		153	18	589	105	121	18	447	100	1036	205
11:00		172	11			127	9				
11:15		165	11			132	11				
11:30		167	9			117	14				
11:45		188	6	692	37	147	4	523	38	1215	75
Total		2561	5278	2561	5278	2086	4616	2086	4616	4647	9894
Combined Total		7839		7839		6702		6702		14541	
AM Peak	-	11:00	-	-	-	11:00	-	-	-	-	-
Vol.	-	692	-	-	-	523	-	-	-	-	-
P.H.F.		0.920				0.889					
PM Peak	-	-	01:15	-	-	-	01:45	-	-	-	-
Vol.	-	-	886	-	-	-	605	-	-	-	-
P.H.F.			0.886				0.895				
Percentage		32.7%	67.3%			31.1%	68.9%				
ADT/AADT		ADT 14,541	AADT 14,541								

Counts Unlimited, Inc.

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City of Thousand Oaks
Thousand Oaks Boulevard
W/ Lombard Street
24 Hour Directional Volume Count

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

TNO003
Site Code: 237-23527

Start Time	6/7/23 Wed	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		5	166			5	150				
12:15		4	200			6	126				
12:30		3	172			3	127				
12:45		3	209	15	747	1	126	15	529	30	1276
01:00		7	187			4	134				
01:15		5	200			1	138				
01:30		5	190			2	132				
01:45		3	242	20	819	3	158	10	562	30	1381
02:00		2	206			3	142				
02:15		3	188			1	133				
02:30		1	181			0	150				
02:45		2	187	8	762	3	128	7	553	15	1315
03:00		2	116			0	137				
03:15		1	138			3	142				
03:30		0	137			0	159				
03:45		1	116	4	507	1	139	4	577	8	1084
04:00		1	147			0	151				
04:15		1	116			0	140				
04:30		2	118			2	151				
04:45		4	104	8	485	10	129	12	571	20	1056
05:00		5	113			7	151				
05:15		4	114			4	137				
05:30		7	88			8	126				
05:45		21	77	37	392	12	122	31	536	68	928
06:00		16	88			9	109				
06:15		18	89			11	96				
06:30		17	98			23	91				
06:45		35	73	86	348	29	108	72	404	158	752
07:00		27	82			31	84				
07:15		40	79			38	77				
07:30		55	60			43	67				
07:45		55	55	177	276	71	76	183	304	360	580
08:00		62	72			67	57				
08:15		87	58			78	50				
08:30		122	54			84	56				
08:45		139	42	410	226	80	49	309	212	719	438
09:00		134	41			63	41				
09:15		135	43			92	35				
09:30		130	35			97	30				
09:45		139	49	538	168	101	28	353	134	891	302
10:00		148	29			107	25				
10:15		127	26			82	28				
10:30		142	16			123	20				
10:45		139	12	556	83	119	19	431	92	987	175
11:00		158	9			127	9				
11:15		160	10			132	11				
11:30		160	7			106	16				
11:45		176	5	654	31	143	4	508	40	1162	71
Total		2513	4844	2513	4844	1935	4514	1935	4514	4448	9358
Combined Total		7357		7357		6449		6449		13806	
AM Peak	-	11:00	-	-	-	11:00	-	-	-	-	-
Vol.	-	654	-	-	-	508	-	-	-	-	-
P.H.F.		0.929				0.888					
PM Peak	-	-	01:15	-	-	-	03:15	-	-	-	-
Vol.	-	-	838	-	-	-	591	-	-	-	-
P.H.F.			0.866				0.929				
Percentage		34.2%	65.8%			30.0%	70.0%				
ADT/AADT		ADT 13,806	AADT 13,806								

























Appendix B: Synchro Report (LOS)

Existing Conditions

Lanes, Volumes, Timings

3: Moorpark Road & Thousand Oaks Blvd

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	19	42	154	47	100	149	581	423	195	512	20
Future Volume (vph)	8	19	42	154	47	100	149	581	423	195	512	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	0.97	1.00	1.00	0.97	0.91	1.00	0.97	0.91	0.91
Fr't		0.922	0.850			0.850			0.850		0.994	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3126	1441	3433	1863	1583	3433	5085	1583	3433	5055	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3126	1441	3433	1863	1583	3433	5085	1583	3433	5055	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		23	118			109			460		7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		192			672			498			415	
Travel Time (s)		4.4			15.3			11.3			9.4	
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
Adj. Flow (vph)	9	21	46	167	51	109	162	632	460	212	557	22
Shared Lane Traffic (%)			50%									
Lane Group Flow (vph)	9	44	23	167	51	109	162	632	460	212	579	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Prot	Prot	NA	Prot	Prot	NA	Prot	Prot	NA	
Protected Phases	7	4	4	3	8	8	5	2	2	1	6	
Permitted Phases												
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	
Total Split (s)	10.0	22.0	22.0	19.0	31.0	31.0	18.0	59.0	59.0	20.0	61.0	
Total Split (%)	8.3%	18.3%	18.3%	15.8%	25.8%	25.8%	15.0%	49.2%	49.2%	16.7%	50.8%	
Maximum Green (s)	6.0	18.0	18.0	15.0	27.0	27.0	14.0	55.0	55.0	16.0	57.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	
Act Effect Green (s)	6.0	18.0	18.0	15.0	27.0	27.0	14.0	55.0	55.0	16.0	57.0	
Actuated g/C Ratio	0.05	0.15	0.15	0.12	0.22	0.22	0.12	0.46	0.46	0.13	0.48	
v/c Ratio	0.10	0.09	0.07	0.39	0.12	0.25	0.41	0.27	0.47	0.46	0.24	
Control Delay	57.1	26.2	0.4	51.3	38.1	8.4	52.5	20.5	3.5	64.3	11.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	57.1	26.2	0.4	51.3	38.1	8.4	52.5	20.5	3.5	64.3	11.0	













Existing - AM Peak 1:40 pm 09/06/2023 Baseline

Synchro 11 Report
Page 1

Lanes, Volumes, Timings

3: Moorpark Road & Thousand Oaks Blvd

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	C	A	D	D	A	D	C	A	E	B	
Approach Delay		22.1			34.9			18.4			25.3	
Approach LOS		C			C			B			C	
Stops (vph)	10	19	0	138	37	16	135	346	27	190	149	
Fuel Used(gal)	0	0	0	5	1	2	3	7	2	5	5	
CO Emissions (g/hr)	11	26	2	345	95	135	204	461	146	336	371	
NOx Emissions (g/hr)	2	5	0	67	18	26	40	90	28	65	72	
VOC Emissions (g/hr)	3	6	1	80	22	31	47	107	34	78	86	
Dilemma Vehicles (#)	0	0	0	0	0	0	0	0	0	0	0	
Queue Length 50th (ft)	7	7	0	62	32	0	60	108	0	88	46	
Queue Length 95th (ft)	24	26	0	97	67	47	95	136	57	128	64	
Internal Link Dist (ft)		112			592			418			335	
Turn Bay Length (ft)												
Base Capacity (vph)	88	488	316	429	419	440	400	2330	974	457	2404	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.10	0.09	0.07	0.39	0.12	0.25	0.41	0.27	0.47	0.46	0.24	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 0.47

Intersection Signal Delay: 22.9


Intersection LOS: C

Intersection Capacity Utilization 45.1%

ICU Level of Service A

Analysis Period (min) 15




















Splits and Phases: 3: Moorpark Road & Thousand Oaks Blvd

 Ø1	 Ø2 (R)	 Ø3	 Ø4
20 s	59 s	19 s	22 s
 Ø5	 Ø6 (R)	 Ø7	 Ø8
18 s	61 s	10 s	31 s

Lanes, Volumes, Timings

10: Lombard Street/Office Dwy & Thousand Oaks Boulevard

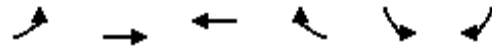
01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	383	8	46	288	13	10	0	16	3	0	11
Future Volume (vph)	20	383	8	46	288	13	10	0	16	3	0	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.997			0.994				0.850			0.850
Flt Protected		0.998		0.950			0.950			0.950		
Satd. Flow (prot)	0	3522	0	1770	3518	0	1770	0	1583	1770	0	1583
Flt Permitted		0.998		0.950			0.950			0.950		
Satd. Flow (perm)	0	3522	0	1770	3518	0	1770	0	1583	1770	0	1583
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1027			262			327			171	
Travel Time (s)		23.3			6.0			7.4			3.9	
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
Adj. Flow (vph)	22	416	9	50	313	14	11	0	17	3	0	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	447	0	50	327	0	11	0	17	3	0	12
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Yield	
Intersection Summary												
Area Type:	Other											
Control Type: Unsignalized												
Intersection Capacity Utilization 33.1%												
ICU Level of Service A												
Analysis Period (min) 15												

Lanes, Volumes, Timings

12: Thousand Oaks Boulevard/Thousand Oaks & Hodencamp

01/10/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	30	370	267	119	130	80
Future Volume (vph)	30	370	267	119	130	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	1.00
Fr't				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	3539	3539	1583	3433	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	3539	3539	1583	3433	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				129		87
Link Speed (mph)		30	30		30	
Link Distance (ft)		262	1493		609	
Travel Time (s)		6.0	33.9		13.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	402	290	129	141	87
Shared Lane Traffic (%)						
Lane Group Flow (vph)	33	402	290	129	141	87
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Minimum Split (s)	8.0	20.0	20.0	20.0	20.0	20.0
Total Split (s)	8.0	28.0	20.0	20.0	22.0	22.0
Total Split (%)	16.0%	56.0%	40.0%	40.0%	44.0%	44.0%
Maximum Green (s)	4.0	24.0	16.0	16.0	18.0	18.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Walk Time (s)		5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0	0	0	0
Act Effect Green (s)	4.0	24.0	16.0	16.0	18.0	18.0
Actuated g/C Ratio	0.08	0.48	0.32	0.32	0.36	0.36
v/c Ratio	0.23	0.24	0.26	0.22	0.11	0.14
Control Delay	25.9	8.1	13.4	4.2	18.2	11.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.9	8.1	13.4	4.2	18.2	11.6

Lanes, Volumes, Timings

12: Thousand Oaks Boulevard/Thousand Oaks & Hodencamp

01/10/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
LOS	C	A	B	A	B	B
Approach Delay		9.4	10.5		15.7	
Approach LOS		A	B		B	
Stops (vph)	32	197	183	22	115	52
Fuel Used(gal)	0	2	6	2	2	1
CO Emissions (g/hr)	28	172	439	157	146	75
NOx Emissions (g/hr)	5	33	85	31	29	15
VOC Emissions (g/hr)	6	40	102	36	34	17
Dilemma Vehicles (#)	0	0	0	0	0	0
Queue Length 50th (ft)	9	33	32	0	21	0
Queue Length 95th (ft)	30	54	56	28	44	32
Internal Link Dist (ft)		182	1413		529	
Turn Bay Length (ft)						
Base Capacity (vph)	141	1698	1132	594	1235	625
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.24	0.26	0.22	0.11	0.14

Intersection Summary

Area Type: Other

Cycle Length: 50

Actuated Cycle Length: 50

Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green

Natural Cycle: 50

Control Type: Pretimed

Maximum v/c Ratio: 0.26

Intersection Signal Delay: 11.2

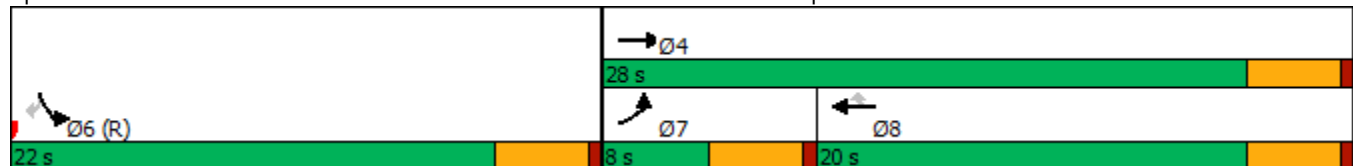
Intersection LOS: B

Intersection Capacity Utilization 24.4%

ICU Level of Service A























Analysis Period (min) 15

Splits and Phases: 12: Thousand Oaks Boulevard/Thousand Oaks & Hodencamp



Lanes, Volumes, Timings
17: Hodencamp Road & Hillcrest

01/10/2024













												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	136	38	43	292	120	31	90	10	121	154	46
Future Volume (vph)	16	136	38	43	292	120	31	90	10	121	154	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.956			0.985			0.965	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	3383	0	1770	3486	0	1770	3415	0
Flt Permitted	0.950			0.950			0.616			0.683		
Satd. Flow (perm)	1770	1863	1583	1770	3383	0	1147	3486	0	1272	3415	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			109		130			11			50	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1053			560			357			554	
Travel Time (s)		23.9			12.7			8.1			12.6	
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
Adj. Flow (vph)	17	148	41	47	317	130	34	98	11	132	167	50
Shared Lane Traffic (%)												
Lane Group Flow (vph)	17	148	41	47	447	0	34	109	0	132	217	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4				2			6		
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	8.0	20.0	20.0	9.0	21.0		21.0	21.0		21.0	21.0	
Total Split (%)	16.0%	40.0%	40.0%	18.0%	42.0%		42.0%	42.0%		42.0%	42.0%	
Maximum Green (s)	4.0	16.0	16.0	5.0	17.0		17.0	17.0		17.0	17.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Walk Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0	11.0		11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0		0	0		0	0	
Act Effect Green (s)	4.0	16.0	16.0	5.0	17.0		17.0	17.0		17.0	17.0	
Actuated g/C Ratio	0.08	0.32	0.32	0.10	0.34		0.34	0.34		0.34	0.34	
v/c Ratio	0.12	0.25	0.07	0.27	0.36		0.09	0.09		0.31	0.18	
Control Delay	23.4	14.0	0.3	25.0	9.6		8.0	7.1		14.6	9.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	23.4	14.0	0.3	25.0	9.6		8.0	7.1		14.6	9.3	

Existing - AM Peak 1:40 pm 09/06/2023 Baseline

Synchro 11 Report
Page 6

Lanes, Volumes, Timings
17: Hodencamp Road & Hillcrest

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	C	B	A	C	A		A	A		B	A	
Approach Delay		12.0			11.1			7.3			11.3	
Approach LOS		B			B			A			B	
Stops (vph)	19	95	0	43	203		20	49		86	100	
Fuel Used(gal)	0	3	1	1	9		0	1		1	2	
CO Emissions (g/hr)	33	233	48	84	638		28	82		95	126	
NOx Emissions (g/hr)	6	45	9	16	124		5	16		18	24	
VOC Emissions (g/hr)	8	54	11	20	148		6	19		22	29	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	5	31	0	13	34		8	11		28	17	
Queue Length 95th (ft)	20	66	2	38	63		14	12		62	36	
Internal Link Dist (ft)		973			480			277			474	
Turn Bay Length (ft)												
Base Capacity (vph)	141	596	580	177	1236		389	1192		432	1194	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.12	0.25	0.07	0.27	0.36		0.09	0.09		0.31	0.18	

Intersection Summary

Area Type: Other

Cycle Length: 50

Actuated Cycle Length: 50

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 50

Control Type: Pretimed

Maximum v/c Ratio: 0.36

Intersection Signal Delay: 10.9

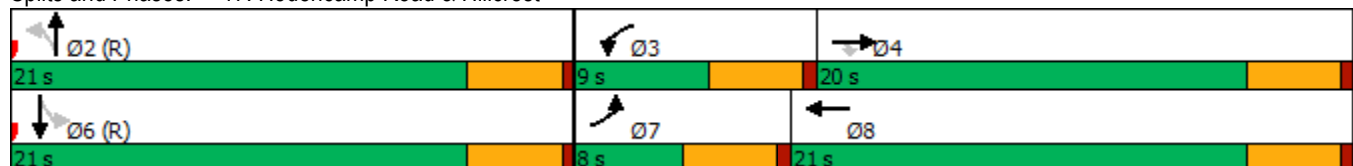
Intersection LOS: B

Intersection Capacity Utilization 38.6%

ICU Level of Service A























Analysis Period (min) 15

Splits and Phases: 17: Hodencamp Road & Hillcrest















Lanes, Volumes, Timings
21: Moorpark Road & Hillcrest

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	98	101	78	121	74	66	530	73	91	543	27
Future Volume (vph)	44	98	101	78	121	74	66	530	73	91	543	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95	0.95	0.97	0.91	0.91	0.97	0.95	0.95
Frt			0.850		0.943			0.982			0.993	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	1863	1583	1770	3337	0	3433	4994	0	3433	3514	0
Flt Permitted	0.950			0.688			0.950			0.950		
Satd. Flow (perm)	3433	1863	1583	1282	3337	0	3433	4994	0	3433	3514	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			110		80			26			5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		183			522			376			623	
Travel Time (s)		4.2			11.9			8.5			14.2	
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
Adj. Flow (vph)	48	107	110	85	132	80	72	576	79	99	590	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	48	107	110	85	212	0	72	655	0	99	619	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Prot	Perm	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	4		8		5	2		1	6	
Permitted Phases				8								
Minimum Split (s)	8.0	20.0	20.0	20.0	20.0		8.0	20.0		8.0	20.0	
Total Split (s)	14.0	48.0	48.0	34.0	34.0		16.0	55.0		17.0	56.0	
Total Split (%)	11.7%	40.0%	40.0%	28.3%	28.3%		13.3%	45.8%		14.2%	46.7%	
Maximum Green (s)	10.0	44.0	44.0	30.0	30.0		12.0	51.0		13.0	52.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead			Lag	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes		Yes	Yes		Yes	Yes	
Walk Time (s)		5.0	5.0	5.0	5.0			5.0			5.0	
Flash Dont Walk (s)		11.0	11.0	11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0	0	0	0			0			0	
Act Effect Green (s)	10.0	44.0	44.0	30.0	30.0		12.0	51.0		13.0	52.0	
Actuated g/C Ratio	0.08	0.37	0.37	0.25	0.25		0.10	0.42		0.11	0.43	
v/c Ratio	0.17	0.16	0.17	0.27	0.24		0.21	0.31		0.27	0.41	
Control Delay	52.7	26.4	5.3	38.9	22.8		68.3	12.5		51.2	24.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	52.7	26.4	5.3	38.9	22.8		68.3	12.5		51.2	24.2	

Lanes, Volumes, Timings
21: Moorpark Road & Hillcrest

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	C	A	D	C		E	B		D	C	
Approach Delay		22.4			27.4			18.0			27.9	
Approach LOS		C			C			B			C	
Stops (vph)	40	64	13	62	94		65	142		82	376	
Fuel Used(gal)	1	1	0	2	5		2	6		2	8	
CO Emissions (g/hr)	53	71	23	164	342		118	422		129	534	
NOx Emissions (g/hr)	10	14	4	32	67		23	82		25	104	
VOC Emissions (g/hr)	12	17	5	38	79		27	98		30	124	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	18	55	0	53	42		30	45		37	168	
Queue Length 95th (ft)	38	97	38	100	75		56	62		64	217	
Internal Link Dist (ft)		103			442			296			543	
Turn Bay Length (ft)												
Base Capacity (vph)	286	683	650	320	894		343	2137		371	1525	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.17	0.16	0.17	0.27	0.24		0.21	0.31		0.27	0.41	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 0.41

Intersection Signal Delay: 23.5

Intersection LOS: C

Intersection Capacity Utilization 42.0%

ICU Level of Service A

Analysis Period (min) 15













Splits and Phases: 21: Moorpark Road & Hillcrest

 Ø1	 Ø2 (R)	 Ø4
17 s	55 s	48 s
 Ø5	 Ø6 (R)	 Ø7
16 s	56 s	14 s
		 Ø8
		34 s

Lanes, Volumes, Timings

23: Frontage Road/Highway 23 Off-Ramp & Hillcrest

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↵	↑						↵↵	
Traffic Volume (vph)	0	362	14	7	166	0	0	0	0	263	355	265
Future Volume (vph)	0	362	14	7	166	0	0	0	0	263	355	265
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95
Fr't		0.994									0.955	
Flt Protected				0.950							0.985	
Satd. Flow (prot)	0	3518	0	1770	1863	0	0	0	0	0	3329	0
Flt Permitted				0.512							0.985	
Satd. Flow (perm)	0	3518	0	954	1863	0	0	0	0	0	3329	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11									199	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		112			455			823			414	
Travel Time (s)		2.5			10.3			18.7			9.4	
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
Adj. Flow (vph)	0	393	15	8	180	0	0	0	0	286	386	288
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	408	0	8	180	0	0	0	0	0	960	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases				8						6		
Minimum Split (s)		20.0		20.0	20.0					20.0	20.0	
Total Split (s)		20.0		20.0	20.0					20.0	20.0	
Total Split (%)		50.0%		50.0%	50.0%					50.0%	50.0%	
Maximum Green (s)		16.0		16.0	16.0					16.0	16.0	
Yellow Time (s)		3.5		3.5	3.5					3.5	3.5	
All-Red Time (s)		0.5		0.5	0.5					0.5	0.5	
Lost Time Adjust (s)		0.0		0.0	0.0						0.0	
Total Lost Time (s)		4.0		4.0	4.0						4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)		5.0		5.0	5.0					5.0	5.0	
Flash Dont Walk (s)		11.0		11.0	11.0					11.0	11.0	
Pedestrian Calls (#/hr)		0		0	0					0	0	
Act Effect Green (s)		16.0		16.0	16.0						16.0	
Actuated g/C Ratio		0.40		0.40	0.40						0.40	
v/c Ratio		0.29		0.02	0.24						0.66	
Control Delay		8.6		7.6	9.1						10.3	
Queue Delay		0.0		0.0	0.0						0.0	
Total Delay		8.6		7.6	9.1						10.3	

Lanes, Volumes, Timings

23: Frontage Road/Highway 23 Off-Ramp & Hillcrest

01/10/2024

	↖	→	↘	↙	←	↖	↙	↑	↘	↘	↓	↙
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		A		A	A						B	
Approach Delay		8.6			9.0						10.3	
Approach LOS		A			A						B	
Stops (vph)		222		7	101						531	
Fuel Used(gal)		8		0	3						8	
CO Emissions (g/hr)		590		10	222						534	
NOx Emissions (g/hr)		115		2	43						104	
VOC Emissions (g/hr)		137		2	51						124	
Dilemma Vehicles (#)		0		0	0						0	
Queue Length 50th (ft)		29		1	25						64	
Queue Length 95th (ft)		51		6	54						112	
Internal Link Dist (ft)		32			375			743			334	
Turn Bay Length (ft)												
Base Capacity (vph)		1413		381	745						1451	
Starvation Cap Reductn		0		0	0						0	
Spillback Cap Reductn		0		0	0						0	
Storage Cap Reductn		0		0	0						0	
Reduced v/c Ratio		0.29		0.02	0.24						0.66	

Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 40

Offset: 0 (0%), Referenced to phase 2: and 6:SBTL, Start of Green

Natural Cycle: 40

Control Type: Pretimed

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 9.7

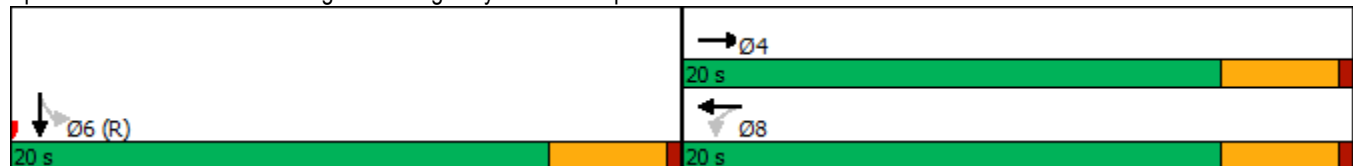
Intersection LOS: A

Intersection Capacity Utilization 43.1%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 23: Frontage Road/Highway 23 Off-Ramp & Hillcrest



Lanes, Volumes, Timings
24: Thousand Oaks & Frontage Road

01/10/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↘	↗↗
Traffic Volume (vph)	0	520	424	0	196	176
Future Volume (vph)	0	520	424	0	196	176
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	0.88
Fr _t						0.850
Fl _t Protected					0.950	
Satd. Flow (prot)	0	3539	3539	0	1770	2787
Fl _t Permitted					0.950	
Satd. Flow (perm)	0	3539	3539	0	1770	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						191
Link Speed (mph)		30	30		30	
Link Distance (ft)		251	831		823	
Travel Time (s)		5.7	18.9		18.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	565	461	0	213	191
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	565	461	0	213	191
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Minimum Split (s)		20.0	20.0		20.0	20.0
Total Split (s)		20.0	20.0		20.0	20.0
Total Split (%)		50.0%	50.0%		50.0%	50.0%
Maximum Green (s)		16.0	16.0		16.0	16.0
Yellow Time (s)		3.5	3.5		3.5	3.5
All-Red Time (s)		0.5	0.5		0.5	0.5
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)		5.0	5.0		5.0	5.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0
Act Effect Green (s)		16.0	16.0		16.0	16.0
Actuated g/C Ratio		0.40	0.40		0.40	0.40
v/c Ratio		0.40	0.33		0.30	0.16
Control Delay		9.6	9.1		16.4	8.5
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		9.6	9.1		16.4	8.5

Lanes, Volumes, Timings

24: Thousand Oaks & Frontage Road

01/10/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
LOS		A	A		B	A
Approach Delay		9.6	9.1		12.7	
Approach LOS		A	A		B	
Stops (vph)		337	263		181	107
Fuel Used(gal)		12	6		3	2
CO Emissions (g/hr)		821	417		204	142
NOx Emissions (g/hr)		160	81		40	28
VOC Emissions (g/hr)		190	97		47	33
Dilemma Vehicles (#)		0	0		0	0
Queue Length 50th (ft)		44	34		51	3
Queue Length 95th (ft)		72	58		m83	m23
Internal Link Dist (ft)		171	751		743	
Turn Bay Length (ft)						
Base Capacity (vph)		1415	1415		708	1229
Starvation Cap Reductn		0	0		0	0
Spillback Cap Reductn		0	0		0	0
Storage Cap Reductn		0	0		0	0
Reduced v/c Ratio		0.40	0.33		0.30	0.16

Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 40

Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green

Natural Cycle: 40

Control Type: Pretimed

Maximum v/c Ratio: 0.40

Intersection Signal Delay: 10.3

Intersection LOS: B

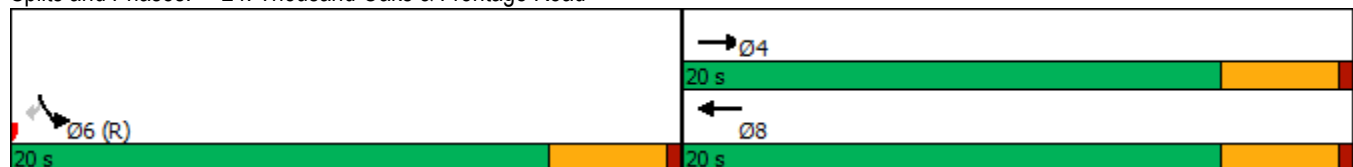
Intersection Capacity Utilization 31.9%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.
























Splits and Phases: 24: Thousand Oaks & Frontage Road



Lanes, Volumes, Timings

33: Rancho & Thousand Oaks

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	352	241	284	343	71	186	259	295	95	265	30
Future Volume (vph)	38	352	241	284	343	71	186	259	295	95	265	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Fr't			0.850		0.974				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	3433	3447	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.448			0.579		
Satd. Flow (perm)	1770	3539	1583	3433	3447	0	835	3539	1583	1079	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			262		28				321			195
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		296			389			511			569	
Travel Time (s)		6.7			8.8			11.6			12.9	
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
Adj. Flow (vph)	41	383	262	309	373	77	202	282	321	103	288	33
Shared Lane Traffic (%)												
Lane Group Flow (vph)	41	383	262	309	450	0	202	282	321	103	288	33
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA		pm+pt	NA	Prot	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2	2	1	6	
Permitted Phases			4				2			6		6
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0		8.0	20.0	20.0	8.0	20.0	20.0
Total Split (s)	12.0	26.0	26.0	22.0	36.0		18.0	35.0	35.0	12.0	29.0	29.0
Total Split (%)	12.6%	27.4%	27.4%	23.2%	37.9%		18.9%	36.8%	36.8%	12.6%	30.5%	30.5%
Maximum Green (s)	8.0	22.0	22.0	18.0	32.0		14.0	31.0	31.0	8.0	25.0	25.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Walk Time (s)		5.0	5.0		5.0			5.0	5.0		5.0	5.0
Flash Dont Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effect Green (s)	8.0	22.0	22.0	18.0	32.0		43.0	31.0	31.0	33.0	25.0	25.0
Actuated g/C Ratio	0.08	0.23	0.23	0.19	0.34		0.45	0.33	0.33	0.35	0.26	0.26
v/c Ratio	0.28	0.47	0.46	0.48	0.38		0.39	0.24	0.44	0.24	0.31	0.06
Control Delay	45.9	33.7	6.9	37.1	23.5		18.6	24.2	4.9	17.3	29.2	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.9	33.7	6.9	37.1	23.5		18.6	24.2	4.9	17.3	29.2	0.2













Existing - AM Peak 1:40 pm 09/06/2023 Baseline

Synchro 11 Report
Page 14

Lanes, Volumes, Timings

33: Rancho & Thousand Oaks

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	C	A	D	C		B	C	A	B	C	A
Approach Delay		24.2			29.1			15.1			24.0	
Approach LOS		C			C			B			C	
Stops (vph)	36	293	29	245	285		111	182	28	61	206	0
Fuel Used(gal)	1	7	3	4	5		2	3	2	2	6	0
CO Emissions (g/hr)	62	498	183	305	337		144	231	113	139	447	29
NOx Emissions (g/hr)	12	97	36	59	65		28	45	22	27	87	6
VOC Emissions (g/hr)	14	115	42	71	78		33	54	26	32	104	7
Dilemma Vehicles (#)	0	0	0	0	0		0	0	0	0	0	0
Queue Length 50th (ft)	24	105	0	86	100		73	65	0	35	73	0
Queue Length 95th (ft)	57	150	61	127	143		120	97	58	66	109	0
Internal Link Dist (ft)		216			309			431			489	
Turn Bay Length (ft)												
Base Capacity (vph)	149	819	567	650	1179		515	1154	732	433	931	560
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.47	0.46	0.48	0.38		0.39	0.24	0.44	0.24	0.31	0.06

Intersection Summary

Area Type: Other

Cycle Length: 95

Actuated Cycle Length: 95

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 0.48

Intersection Signal Delay: 22.8

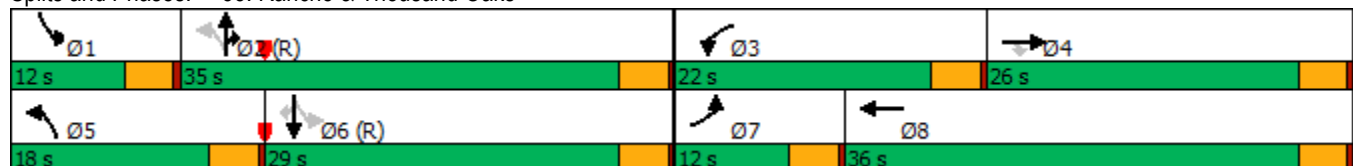
Intersection LOS: C

Intersection Capacity Utilization 48.8%

ICU Level of Service A

Analysis Period (min) 15

























Splits and Phases: 33: Rancho & Thousand Oaks



Lanes, Volumes, Timings

3: Moorpark Road & Thousand Oaks Blvd

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	67	212	361	121	272	270	830	299	175	821	19
Future Volume (vph)	31	67	212	361	121	272	270	830	299	175	821	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	0.97	1.00	1.00	0.97	0.91	1.00	0.97	0.91	0.91
Fr't		0.908	0.850			0.850			0.850		0.997	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3078	1441	3433	1863	1583	3433	5085	1583	3433	5070	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3078	1441	3433	1863	1583	3433	5085	1583	3433	5070	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		115	155			296			325		3	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		192			672			498			415	
Travel Time (s)		4.4			15.3			11.3			9.4	
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
Adj. Flow (vph)	34	73	230	392	132	296	293	902	325	190	892	21
Shared Lane Traffic (%)			50%									
Lane Group Flow (vph)	34	188	115	392	132	296	293	902	325	190	913	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Prot	Prot	NA	Prot	Prot	NA	Prot	Prot	NA	
Protected Phases	7	4	4	3	8	8	5	2	2	1	6	
Permitted Phases												
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	
Total Split (s)	12.0	23.0	23.0	30.0	41.0	41.0	24.0	48.0	48.0	19.0	43.0	
Total Split (%)	10.0%	19.2%	19.2%	25.0%	34.2%	34.2%	20.0%	40.0%	40.0%	15.8%	35.8%	
Maximum Green (s)	8.0	19.0	19.0	26.0	37.0	37.0	20.0	44.0	44.0	15.0	39.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	
Act Effect Green (s)	8.0	19.0	19.0	26.0	37.0	37.0	20.0	44.0	44.0	15.0	39.0	
Actuated g/C Ratio	0.07	0.16	0.16	0.22	0.31	0.31	0.17	0.37	0.37	0.12	0.32	
v/c Ratio	0.29	0.32	0.32	0.53	0.23	0.43	0.51	0.48	0.41	0.44	0.55	
Control Delay	60.0	19.8	5.0	44.6	32.3	5.5	49.2	30.3	4.5	56.6	25.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	60.0	19.8	5.0	44.6	32.3	5.5	49.2	30.3	4.5	56.6	25.0	













Existing - PM Peak 1:40 pm 09/06/2023 Baseline

Synchro 11 Report
Page 1

Lanes, Volumes, Timings

3: Moorpark Road & Thousand Oaks Blvd

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	B	A	D	C	A	D	C	A	E	C	
Approach Delay		18.8			28.5			28.4			30.4	
Approach LOS		B			C			C			C	
Stops (vph)	30	62	6	310	88	25	240	617	25	168	409	
Fuel Used(gal)	1	1	0	11	3	5	5	12	2	4	12	
CO Emissions (g/hr)	41	91	21	769	231	348	355	822	110	281	818	
NOx Emissions (g/hr)	8	18	4	150	45	68	69	160	21	55	159	
VOC Emissions (g/hr)	10	21	5	178	53	81	82	190	25	65	190	
Dilemma Vehicles (#)	0	0	0	0	0	0	0	0	0	0	0	
Queue Length 50th (ft)	26	26	0	139	76	0	107	195	0	77	125	
Queue Length 95th (ft)	60	63	26	190	128	63	153	237	59	113	178	
Internal Link Dist (ft)		112			592			418			335	
Turn Bay Length (ft)												
Base Capacity (vph)	118	584	358	743	574	692	572	1864	786	429	1649	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.29	0.32	0.32	0.53	0.23	0.43	0.51	0.48	0.41	0.44	0.55	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 0.55

Intersection Signal Delay: 28.2









Intersection LOS: C

Intersection Capacity Utilization 51.7%

ICU Level of Service A

Analysis Period (min) 15




















Splits and Phases: 3: Moorpark Road & Thousand Oaks Blvd

 Ø1	 Ø2 (R)	 Ø3	 Ø4
19 s	48 s	30 s	23 s
 Ø5	 Ø6 (R)	 Ø7	 Ø8
24 s	43 s	12 s	41 s

Lanes, Volumes, Timings

10: Lombard Street/Office Dwy & Thousand Oaks Boulevard

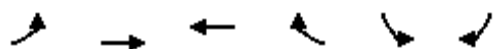
01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	469	10	38	530	5	18	1	67	11	0	23
Future Volume (vph)	6	469	10	38	530	5	18	1	67	11	0	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.997			0.999				0.850			0.850
Flt Protected		0.999		0.950			0.950			0.950		
Satd. Flow (prot)	0	3525	0	1770	3536	0	1770	0	1583	1770	0	1583
Flt Permitted		0.999		0.950			0.950			0.950		
Satd. Flow (perm)	0	3525	0	1770	3536	0	1770	0	1583	1770	0	1583
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1027			262			327			171	
Travel Time (s)		23.3			6.0			7.4			3.9	
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
Adj. Flow (vph)	7	510	11	41	576	5	20	1	73	12	0	25
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	528	0	41	581	0	20	1	73	12	0	25
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Yield	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization Err%	ICU Level of Service H											
Analysis Period (min)	15											

Lanes, Volumes, Timings

12: Thousand Oaks Boulevard/Thousand Oaks & Hodencamp

01/10/2024

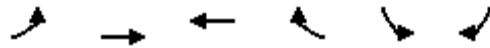


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	84	445	505	206	189	70
Future Volume (vph)	84	445	505	206	189	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	1.00
Fr _t				0.850		0.850
Fl _t Protected	0.950				0.950	
Satd. Flow (prot)	1770	3539	3539	1583	3433	1583
Fl _t Permitted	0.950				0.950	
Satd. Flow (perm)	1770	3539	3539	1583	3433	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				224		76
Link Speed (mph)		30	30		30	
Link Distance (ft)		262	1493		609	
Travel Time (s)		6.0	33.9		13.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	91	484	549	224	205	76
Shared Lane Traffic (%)						
Lane Group Flow (vph)	91	484	549	224	205	76
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Minimum Split (s)	8.0	20.0	20.0	20.0	20.0	20.0
Total Split (s)	10.0	30.0	20.0	20.0	20.0	20.0
Total Split (%)	20.0%	60.0%	40.0%	40.0%	40.0%	40.0%
Maximum Green (s)	6.0	26.0	16.0	16.0	16.0	16.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Walk Time (s)		5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0	0	0	0
Act Effect Green (s)	6.0	26.0	16.0	16.0	16.0	16.0
Actuated g/C Ratio	0.12	0.52	0.32	0.32	0.32	0.32
v/c Ratio	0.43	0.26	0.48	0.34	0.19	0.14
Control Delay	27.3	7.2	15.4	4.0	18.4	10.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.3	7.2	15.4	4.0	18.4	10.8

Lanes, Volumes, Timings

12: Thousand Oaks Boulevard/Thousand Oaks & Hodencamp

01/10/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
LOS	C	A	B	A	B	B
Approach Delay		10.3	12.1		16.4	
Approach LOS		B	B		B	
Stops (vph)	78	223	380	30	162	40
Fuel Used(gal)	1	3	12	4	3	1
CO Emissions (g/hr)	75	195	859	269	212	63
NOx Emissions (g/hr)	15	38	167	52	41	12
VOC Emissions (g/hr)	17	45	199	62	49	15
Dilemma Vehicles (#)	0	0	0	0	0	0
Queue Length 50th (ft)	25	36	66	0	30	0
Queue Length 95th (ft)	60	58	103	36	53	27
Internal Link Dist (ft)		182	1413		529	
Turn Bay Length (ft)						
Base Capacity (vph)	212	1840	1132	658	1098	558
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.26	0.48	0.34	0.19	0.14

Intersection Summary

Area Type: Other

Cycle Length: 50

Actuated Cycle Length: 50

Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green

Natural Cycle: 50

Control Type: Pretimed

Maximum v/c Ratio: 0.48

Intersection Signal Delay: 12.2

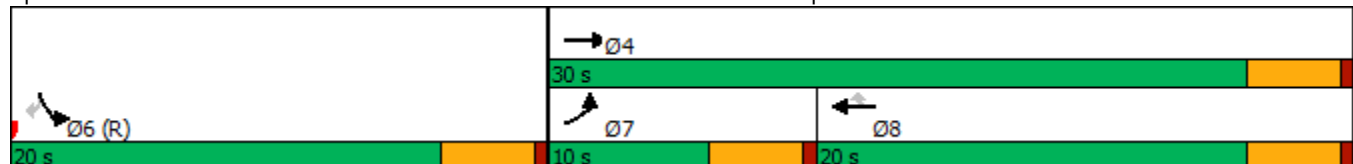
Intersection LOS: B

Intersection Capacity Utilization 34.0%

ICU Level of Service A






















Analysis Period (min) 15

Splits and Phases: 12: Thousand Oaks Boulevard/Thousand Oaks & Hodencamp



Lanes, Volumes, Timings
17: Hodencamp Road & Hilcrest/Hillcrest

01/10/2024













												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	39	365	64	34	350	158	46	186	29	146	146	37
Future Volume (vph)	39	365	64	34	350	158	46	186	29	146	146	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.953			0.979			0.970	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	3373	0	1770	3465	0	1770	3433	0
Flt Permitted	0.950			0.950			0.627			0.606		
Satd. Flow (perm)	1770	1863	1583	1770	3373	0	1168	3465	0	1129	3433	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			109		158			32			40	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1053			560			357			554	
Travel Time (s)		23.9			12.7			8.1			12.6	
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
Adj. Flow (vph)	42	397	70	37	380	172	50	202	32	159	159	40
Shared Lane Traffic (%)												
Lane Group Flow (vph)	42	397	70	37	552	0	50	234	0	159	199	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4				2			6		
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	9.0	22.0	22.0	8.0	21.0		20.0	20.0		20.0	20.0	
Total Split (%)	18.0%	44.0%	44.0%	16.0%	42.0%		40.0%	40.0%		40.0%	40.0%	
Maximum Green (s)	5.0	18.0	18.0	4.0	17.0		16.0	16.0		16.0	16.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Walk Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0	11.0		11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0		0	0		0	0	
Act Effect Green (s)	5.0	18.0	18.0	4.0	17.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.10	0.36	0.36	0.08	0.34		0.32	0.32		0.32	0.32	
v/c Ratio	0.24	0.59	0.11	0.26	0.44		0.13	0.21		0.44	0.18	
Control Delay	24.3	17.5	1.8	26.6	10.3		9.7	8.2		18.2	10.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	24.3	17.5	1.8	26.6	10.3		9.7	8.2		18.2	10.2	

Existing - PM Peak 1:40 pm 09/06/2023 Baseline

Synchro 11 Report
Page 6

Lanes, Volumes, Timings
17: Hodencamp Road & Hilcrest/Hillcrest

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	C	B	A	C	B		A	A		B	B	
Approach Delay		15.9			11.3			8.5			13.8	
Approach LOS		B			B			A			B	
Stops (vph)	38	284	5	36	261		33	123		114	98	
Fuel Used(gal)	1	9	1	1	11		1	3		2	2	
CO Emissions (g/hr)	77	655	83	68	797		43	186		126	120	
NOx Emissions (g/hr)	15	127	16	13	155		8	36		25	23	
VOC Emissions (g/hr)	18	152	19	16	185		10	43		29	28	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	12	91	0	11	44		12	26		36	16	
Queue Length 95th (ft)	35	163	11	33	77		m24	35		80	35	
Internal Link Dist (ft)		973			480			277			474	
Turn Bay Length (ft)												
Base Capacity (vph)	177	670	639	141	1251		373	1130		361	1125	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.24	0.59	0.11	0.26	0.44		0.13	0.21		0.44	0.18	

Intersection Summary

Area Type: Other

Cycle Length: 50

Actuated Cycle Length: 50

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 50

Control Type: Pretimed

Maximum v/c Ratio: 0.59

Intersection Signal Delay: 12.7

Intersection LOS: B

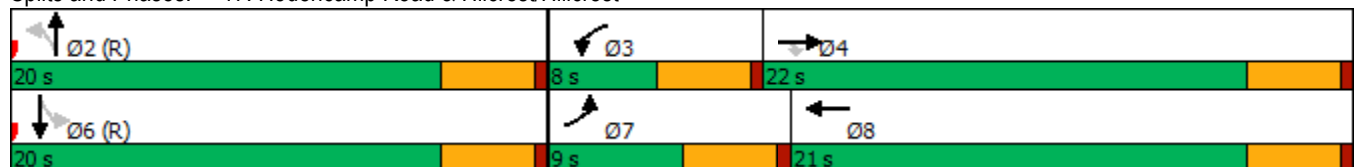
Intersection Capacity Utilization 50.0%

ICU Level of Service A

Analysis Period (min) 15























m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 17: Hodencamp Road & Hilcrest/Hillcrest















Lanes, Volumes, Timings
21: Moorpark Road & Hillcrest

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	163	233	257	141	247	167	176	849	86	118	590	65
Future Volume (vph)	163	233	257	141	247	167	176	849	86	118	590	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95	0.95	0.97	0.91	0.91	0.97	0.95	0.95
Fr't			0.850		0.939			0.986			0.985	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	1863	1583	1770	3323	0	3433	5014	0	3433	3486	0
Flt Permitted	0.950			0.602			0.950			0.950		
Satd. Flow (perm)	3433	1863	1583	1121	3323	0	3433	5014	0	3433	3486	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			279		139			16			11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		183			522			376			623	
Travel Time (s)		4.2			11.9			8.5			14.2	
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
Adj. Flow (vph)	177	253	279	153	268	182	191	923	93	128	641	71
Shared Lane Traffic (%)												
Lane Group Flow (vph)	177	253	279	153	450	0	191	1016	0	128	712	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Prot	Perm	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	4		8		5	2		1	6	
Permitted Phases				8								
Minimum Split (s)	8.0	20.0	20.0	20.0	20.0		8.0	20.0		8.0	20.0	
Total Split (s)	17.0	55.0	55.0	38.0	38.0		17.0	51.0		14.0	48.0	
Total Split (%)	14.2%	45.8%	45.8%	31.7%	31.7%		14.2%	42.5%		11.7%	40.0%	
Maximum Green (s)	13.0	51.0	51.0	34.0	34.0		13.0	47.0		10.0	44.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead			Lag	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes		Yes	Yes		Yes	Yes	
Walk Time (s)		5.0	5.0	5.0	5.0			5.0			5.0	
Flash Dont Walk (s)		11.0	11.0	11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0	0	0	0			0			0	
Act Effect Green (s)	13.0	51.0	51.0	34.0	34.0		13.0	47.0		10.0	44.0	
Actuated g/C Ratio	0.11	0.42	0.42	0.28	0.28		0.11	0.39		0.08	0.37	
v/c Ratio	0.48	0.32	0.33	0.48	0.43		0.51	0.51		0.45	0.55	
Control Delay	55.0	24.4	3.6	41.9	25.2		76.1	13.7		57.7	31.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	55.0	24.4	3.6	41.9	25.2		76.1	13.7		57.7	31.7	

Lanes, Volumes, Timings
21: Moorpark Road & Hillcrest

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	C	A	D	C		E	B		E	C	
Approach Delay		23.9			29.4			23.5			35.7	
Approach LOS		C			C			C			D	
Stops (vph)	150	151	20	116	228		174	242		110	499	
Fuel Used(gal)	3	2	1	4	11		5	10		3	10	
CO Emissions (g/hr)	202	162	47	304	752		334	678		179	711	
NOx Emissions (g/hr)	39	32	9	59	146		65	132		35	138	
VOC Emissions (g/hr)	47	38	11	71	174		77	157		42	165	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	67	128	0	98	101		79	75		49	225	
Queue Length 95th (ft)	104	193	50	168	151		120	98		81	286	
Internal Link Dist (ft)		103			442			296			543	
Turn Bay Length (ft)												
Base Capacity (vph)	371	791	833	317	1041		371	1973		286	1285	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.48	0.32	0.33	0.48	0.43		0.51	0.51		0.45	0.55	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 0.55

Intersection Signal Delay: 27.7

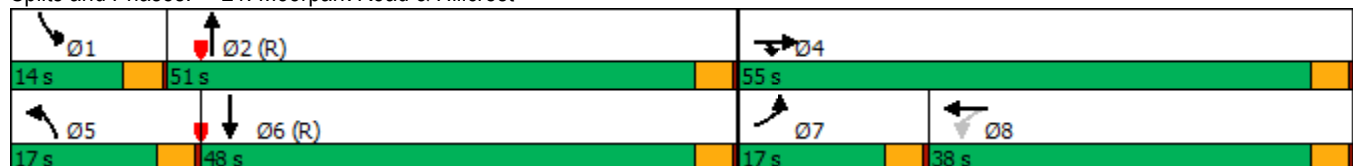
Intersection LOS: C

Intersection Capacity Utilization 56.8%

ICU Level of Service B

Analysis Period (min) 15













Splits and Phases: 21: Moorpark Road & Hillcrest



Lanes, Volumes, Timings

23: Frontage Road/Highway 23 Off-Ramp & Hillcrest













01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↵	↑						↵↵	
Traffic Volume (vph)	0	553	11	8	351	0	0	0	0	176	221	263
Future Volume (vph)	0	553	11	8	351	0	0	0	0	176	221	263
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95
Frt		0.997									0.940	
Flt Protected				0.950							0.987	
Satd. Flow (prot)	0	3529	0	1770	1863	0	0	0	0	0	3284	0
Flt Permitted				0.387							0.987	
Satd. Flow (perm)	0	3529	0	721	1863	0	0	0	0	0	3284	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6									286	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		112			455			823			414	
Travel Time (s)		2.5			10.3			18.7			9.4	
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
Adj. Flow (vph)	0	601	12	9	382	0	0	0	0	191	240	286
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	613	0	9	382	0	0	0	0	0	717	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases				8						6		
Minimum Split (s)		20.0		20.0	20.0					20.0	20.0	
Total Split (s)		20.0		20.0	20.0					20.0	20.0	
Total Split (%)		50.0%		50.0%	50.0%					50.0%	50.0%	
Maximum Green (s)		16.0		16.0	16.0					16.0	16.0	
Yellow Time (s)		3.5		3.5	3.5					3.5	3.5	
All-Red Time (s)		0.5		0.5	0.5					0.5	0.5	
Lost Time Adjust (s)		0.0		0.0	0.0						0.0	
Total Lost Time (s)		4.0		4.0	4.0						4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)		5.0		5.0	5.0					5.0	5.0	
Flash Dont Walk (s)		11.0		11.0	11.0					11.0	11.0	
Pedestrian Calls (#/hr)		0		0	0					0	0	
Act Effect Green (s)		16.0		16.0	16.0						16.0	
Actuated g/C Ratio		0.40		0.40	0.40						0.40	
v/c Ratio		0.43		0.03	0.51						0.48	
Control Delay		9.8		7.8	12.1						6.4	
Queue Delay		0.0		0.0	0.0						0.0	
Total Delay		9.8		7.8	12.1						6.4	

Lanes, Volumes, Timings

23: Frontage Road/Highway 23 Off-Ramp & Hillcrest

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		A		A	B						A	
Approach Delay		9.8			12.0						6.4	
Approach LOS		A			B						A	
Stops (vph)		366		8	247						267	
Fuel Used(gal)		13		0	7						4	
CO Emissions (g/hr)		910		12	497						313	
NOx Emissions (g/hr)		177		2	97						61	
VOC Emissions (g/hr)		211		3	115						72	
Dilemma Vehicles (#)		0		0	0						0	
Queue Length 50th (ft)		48		1	60						32	
Queue Length 95th (ft)		78		7	116						62	
Internal Link Dist (ft)		32			375			743			334	
Turn Bay Length (ft)												
Base Capacity (vph)		1415		288	745						1485	
Starvation Cap Reductn		0		0	0						0	
Spillback Cap Reductn		0		0	0						0	
Storage Cap Reductn		0		0	0						0	
Reduced v/c Ratio		0.43		0.03	0.51						0.48	

Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 40

Offset: 0 (0%), Referenced to phase 2: and 6:SBTL, Start of Green

Natural Cycle: 40

Control Type: Pretimed

Maximum v/c Ratio: 0.51

Intersection Signal Delay: 8.9

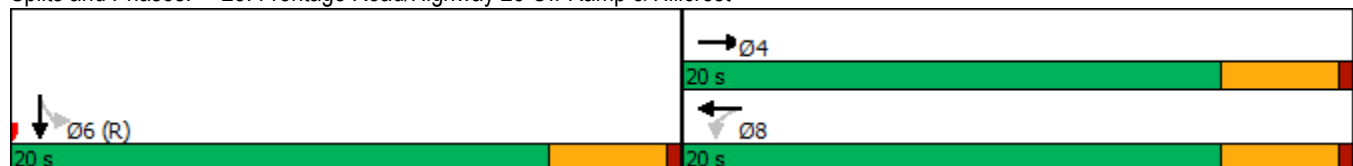
Intersection LOS: A

Intersection Capacity Utilization 44.8%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 23: Frontage Road/Highway 23 Off-Ramp & Hillcrest



Lanes, Volumes, Timings
24: Thousand Oaks & Frontage Road

01/10/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↘	↗↗
Traffic Volume (vph)	0	817	646	0	138	111
Future Volume (vph)	0	817	646	0	138	111
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	0.88
Fr _t						0.850
Fl _t Protected					0.950	
Satd. Flow (prot)	0	3539	3539	0	1770	2787
Fl _t Permitted					0.950	
Satd. Flow (perm)	0	3539	3539	0	1770	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						121
Link Speed (mph)		30	30		30	
Link Distance (ft)		251	831		823	
Travel Time (s)		5.7	18.9		18.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	888	702	0	150	121
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	888	702	0	150	121
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Minimum Split (s)		20.0	20.0		20.0	20.0
Total Split (s)		20.0	20.0		20.0	20.0
Total Split (%)		50.0%	50.0%		50.0%	50.0%
Maximum Green (s)		16.0	16.0		16.0	16.0
Yellow Time (s)		3.5	3.5		3.5	3.5
All-Red Time (s)		0.5	0.5		0.5	0.5
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)		5.0	5.0		5.0	5.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0
Act Effect Green (s)		16.0	16.0		16.0	16.0
Actuated g/C Ratio		0.40	0.40		0.40	0.40
v/c Ratio		0.63	0.50		0.21	0.10
Control Delay		12.1	10.5		14.4	7.6
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		12.1	10.5		14.4	7.6

Lanes, Volumes, Timings

24: Thousand Oaks & Frontage Road

01/10/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
LOS		B	B		B	A
Approach Delay		12.1	10.5		11.4	
Approach LOS		B	B		B	
Stops (vph)		597	439		114	52
Fuel Used(gal)		19	9		2	1
CO Emissions (g/hr)		1344	663		134	82
NOx Emissions (g/hr)		261	129		26	16
VOC Emissions (g/hr)		311	154		31	19
Dilemma Vehicles (#)		0	0		0	0
Queue Length 50th (ft)		77	57		31	0
Queue Length 95th (ft)		122	92		71	m20
Internal Link Dist (ft)		171	751		743	
Turn Bay Length (ft)						
Base Capacity (vph)		1415	1415		708	1187
Starvation Cap Reductn		0	0		0	0
Spillback Cap Reductn		0	0		0	0
Storage Cap Reductn		0	0		0	0
Reduced v/c Ratio		0.63	0.50		0.21	0.10

Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 40

Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green

Natural Cycle: 40

Control Type: Pretimed

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 11.4

Intersection LOS: B

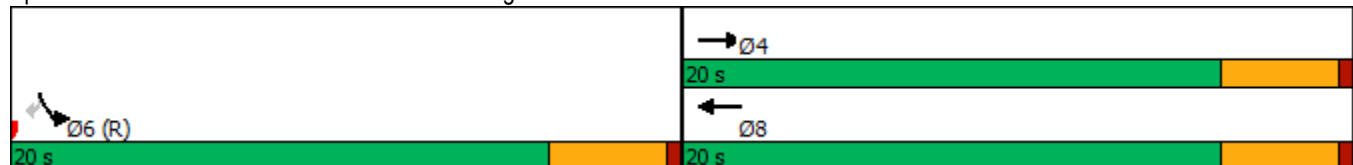
Intersection Capacity Utilization 36.9%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.
























Splits and Phases: 24: Thousand Oaks & Frontage Road



Lanes, Volumes, Timings

33: Rancho & Thousand Oaks

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	447	276	346	671	83	232	265	342	61	159	19
Future Volume (vph)	33	447	276	346	671	83	232	265	342	61	159	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Fr't			0.850		0.984				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	3433	3483	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.547			0.575		
Satd. Flow (perm)	1770	3539	1583	3433	3483	0	1019	3539	1583	1071	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			300		16				372			195
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		296			389			511			569	
Travel Time (s)		6.7			8.8			11.6			12.9	
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
Adj. Flow (vph)	36	486	300	376	729	90	252	288	372	66	173	21
Shared Lane Traffic (%)												
Lane Group Flow (vph)	36	486	300	376	819	0	252	288	372	66	173	21
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA		pm+pt	NA	Prot	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2	2	1	6	
Permitted Phases			4				2			6		6
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0		8.0	20.0	20.0	8.0	20.0	20.0
Total Split (s)	10.0	27.0	27.0	22.0	39.0		19.0	38.0	38.0	8.0	27.0	27.0
Total Split (%)	10.5%	28.4%	28.4%	23.2%	41.1%		20.0%	40.0%	40.0%	8.4%	28.4%	28.4%
Maximum Green (s)	6.0	23.0	23.0	18.0	35.0		15.0	34.0	34.0	4.0	23.0	23.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Walk Time (s)		5.0	5.0		5.0			5.0	5.0		5.0	5.0
Flash Dont Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effect Green (s)	6.0	23.0	23.0	18.0	35.0		42.0	34.0	34.0	27.0	23.0	23.0
Actuated g/C Ratio	0.06	0.24	0.24	0.19	0.37		0.44	0.36	0.36	0.28	0.24	0.24
v/c Ratio	0.32	0.57	0.49	0.58	0.63		0.44	0.23	0.46	0.20	0.20	0.04
Control Delay	50.7	34.7	6.7	39.1	26.9		20.1	21.9	4.4	18.4	29.5	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.7	34.7	6.7	39.1	26.9		20.1	21.9	4.4	18.4	29.5	0.2













Existing - PM Peak 1:40 pm 09/06/2023 Baseline

Synchro 11 Report
Page 14

Lanes, Volumes, Timings

33: Rancho & Thousand Oaks

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	C	A	D	C		C	C	A	B	C	A
Approach Delay		25.2			30.7			14.3			24.3	
Approach LOS		C			C			B			C	
Stops (vph)	33	382	31	307	588		146	178	30	43	122	0
Fuel Used(gal)	1	9	3	6	10		3	3	2	1	4	0
CO Emissions (g/hr)	57	643	208	385	675		187	225	128	92	268	19
NOx Emissions (g/hr)	11	125	40	75	131		36	44	25	18	52	4
VOC Emissions (g/hr)	13	149	48	89	156		43	52	30	21	62	4
Dilemma Vehicles (#)	0	0	0	0	0		0	0	0	0	0	0
Queue Length 50th (ft)	21	135	0	107	206		96	63	0	22	43	0
Queue Length 95th (ft)	53	187	64	154	271		154	94	58	47	72	0
Internal Link Dist (ft)		216			309			431			489	
Turn Bay Length (ft)												
Base Capacity (vph)	111	856	610	650	1293		569	1266	805	333	856	531
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.57	0.49	0.58	0.63		0.44	0.23	0.46	0.20	0.20	0.04

Intersection Summary

Area Type: Other

Cycle Length: 95

Actuated Cycle Length: 95

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 24.1









Intersection LOS: C

Intersection Capacity Utilization 55.1%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 33: Rancho & Thousand Oaks

























			
Ø1	Ø2 (R)	Ø3	Ø4
8 s	38 s	22 s	27 s
			
Ø5	Ø6 (R)	Ø7	Ø8
19 s	27 s	10 s	39 s

Existing Conditions + Project

Lanes, Volumes, Timings

3: Moorpark Road & Thousand Oaks Blvd













01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	21	42	178	62	115	149	581	435	200	512	20
Future Volume (vph)	8	21	42	178	62	115	149	581	435	200	512	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	0.97	1.00	1.00	0.97	0.91	1.00	0.97	0.91	0.91
Fr't		0.925	0.850			0.850			0.850		0.994	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3136	1441	3433	1863	1583	3433	5085	1583	3433	5055	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3136	1441	3433	1863	1583	3433	5085	1583	3433	5055	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		23	118			125			473		7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		192			672			498			415	
Travel Time (s)		4.4			15.3			11.3			9.4	
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
Adj. Flow (vph)	9	23	46	193	67	125	162	632	473	217	557	22
Shared Lane Traffic (%)			50%									
Lane Group Flow (vph)	9	46	23	193	67	125	162	632	473	217	579	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Prot	Prot	NA	Prot	Prot	NA	Prot	Prot	NA	
Protected Phases	7	4	4	3	8	8	5	2	2	1	6	
Permitted Phases												
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	
Total Split (s)	10.0	21.0	21.0	19.0	30.0	30.0	18.0	59.0	59.0	21.0	62.0	
Total Split (%)	8.3%	17.5%	17.5%	15.8%	25.0%	25.0%	15.0%	49.2%	49.2%	17.5%	51.7%	
Maximum Green (s)	6.0	17.0	17.0	15.0	26.0	26.0	14.0	55.0	55.0	17.0	58.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	
Act Effect Green (s)	6.0	17.0	17.0	15.0	26.0	26.0	14.0	55.0	55.0	17.0	58.0	
Actuated g/C Ratio	0.05	0.14	0.14	0.12	0.22	0.22	0.12	0.46	0.46	0.14	0.48	
v/c Ratio	0.10	0.10	0.08	0.45	0.17	0.28	0.41	0.27	0.48	0.45	0.24	
Control Delay	57.1	27.6	0.5	52.4	39.6	8.5	52.5	20.5	3.5	62.3	11.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	57.1	27.6	0.5	52.4	39.6	8.5	52.5	20.5	3.5	62.3	11.2	

Lanes, Volumes, Timings

3: Moorpark Road & Thousand Oaks Blvd

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	C	A	D	D	A	D	C	A	E	B	
Approach Delay		23.0			35.9			18.2			25.1	
Approach LOS		C			D			B			C	
Stops (vph)	10	22	0	162	51	17	135	346	29	195	154	
Fuel Used(gal)	0	0	0	6	2	2	3	7	2	5	5	
CO Emissions (g/hr)	11	29	2	403	127	154	204	461	151	339	374	
NOx Emissions (g/hr)	2	6	0	78	25	30	40	90	29	66	73	
VOC Emissions (g/hr)	3	7	1	93	29	36	47	107	35	79	87	
Dilemma Vehicles (#)	0	0	0	0	0	0	0	0	0	0	0	
Queue Length 50th (ft)	7	8	0	72	43	0	60	108	0	90	48	
Queue Length 95th (ft)	24	27	0	110	83	50	95	136	58	131	66	
Internal Link Dist (ft)		112			592			418			335	
Turn Bay Length (ft)												
Base Capacity (vph)	88	464	305	429	403	440	400	2330	981	486	2446	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.10	0.10	0.08	0.45	0.17	0.28	0.41	0.27	0.48	0.45	0.24	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 0.48

Intersection Signal Delay: 23.2









Intersection LOS: C

Intersection Capacity Utilization 46.0%

ICU Level of Service A

Analysis Period (min) 15




















Splits and Phases: 3: Moorpark Road & Thousand Oaks Blvd

 Ø1	 Ø2 (R)	 Ø3	 Ø4
21 s	59 s	19 s	21 s
 Ø5	 Ø6 (R)	 Ø7	 Ø8
18 s	62 s	10 s	30 s

Lanes, Volumes, Timings

10: Lombard Street/Office Dwy & Thousand Oaks Boulevard

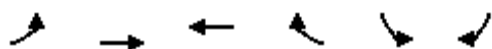
01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	384	20	46	288	13	54	0	16	3	0	11
Future Volume (vph)	20	384	20	46	288	13	54	0	16	3	0	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Fr't		0.993			0.994				0.850			0.850
Flt Protected		0.998		0.950			0.950			0.950		
Satd. Flow (prot)	0	3507	0	1770	3518	0	1770	0	1583	1770	0	1583
Flt Permitted		0.998		0.950			0.950			0.950		
Satd. Flow (perm)	0	3507	0	1770	3518	0	1770	0	1583	1770	0	1583
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1027			262			327			171	
Travel Time (s)		23.3			6.0			7.4			3.9	
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
Adj. Flow (vph)	22	417	22	50	313	14	59	0	17	3	0	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	461	0	50	327	0	59	0	17	3	0	12
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control	Free				Free				Stop			
Intersection Summary												
Area Type:	Other											
Control Type: Unsignalized												
Intersection Capacity Utilization 33.5%												
ICU Level of Service A												
Analysis Period (min) 15												

Lanes, Volumes, Timings

11: Lombard/DWY2 & Lombard Street

01/10/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↗	↘	
Traffic Volume (vph)	0	5	5	44	12	0
Future Volume (vph)	0	5	5	44	12	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		
Flt Protected					0.950	
Satd. Flow (prot)	0	1863	1863	1583	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	1863	1863	1583	1770	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				48		
Link Speed (mph)		30	30		30	
Link Distance (ft)		678	138		327	
Travel Time (s)		15.4	3.1		7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	5	5	48	13	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	5	5	48	13	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type		NA	NA	Perm	Prot	
Protected Phases		4	8		6	
Permitted Phases				8		
Minimum Split (s)		20.0	20.0	20.0	20.0	
Total Split (s)		20.0	20.0	20.0	20.0	
Total Split (%)		50.0%	50.0%	50.0%	50.0%	
Maximum Green (s)		16.0	16.0	16.0	16.0	
Yellow Time (s)		3.5	3.5	3.5	3.5	
All-Red Time (s)		0.5	0.5	0.5	0.5	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	
Total Lost Time (s)		4.0	4.0	4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)		5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0	0	0	
Act Effect Green (s)		16.0	16.0	16.0	16.0	
Actuated g/C Ratio		0.40	0.40	0.40	0.40	
v/c Ratio		0.01	0.01	0.07	0.02	
Control Delay		7.2	7.2	3.5	7.4	
Queue Delay		0.0	0.0	0.0	0.0	
Total Delay		7.2	7.2	3.5	7.4	

Lanes, Volumes, Timings

11: Lombard/DWY2 & Lombard Street

01/10/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
LOS		A	A	A	A	
Approach Delay		7.2	3.8		7.4	
Approach LOS		A	A		A	
Stops (vph)		6	6	12	9	
Fuel Used(gal)		0	0	0	0	
CO Emissions (g/hr)		5	3	10	7	
NOx Emissions (g/hr)		1	1	2	1	
VOC Emissions (g/hr)		1	1	2	2	
Dilemma Vehicles (#)		0	0	0	0	
Queue Length 50th (ft)		1	1	0	2	
Queue Length 95th (ft)		5	5	12	8	
Internal Link Dist (ft)		598	58		247	
Turn Bay Length (ft)						
Base Capacity (vph)		745	745	662	708	
Starvation Cap Reductn		0	0	0	0	
Spillback Cap Reductn		0	0	0	0	
Storage Cap Reductn		0	0	0	0	
Reduced v/c Ratio		0.01	0.01	0.07	0.02	

Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 40

Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green

Natural Cycle: 40

Control Type: Pretimed

Maximum v/c Ratio: 0.07

Intersection Signal Delay: 4.7

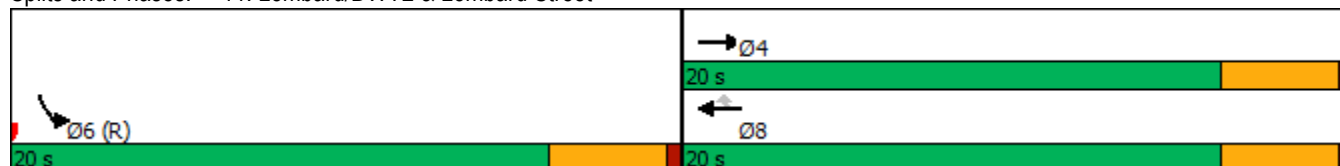
Intersection LOS: A

Intersection Capacity Utilization 13.3%

ICU Level of Service A

Analysis Period (min) 15
























Splits and Phases: 11: Lombard/DWY2 & Lombard Street



Lanes, Volumes, Timings

12: Thousand Oaks Boulevard/Thousand Oaks & Hodencamp


01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 					 		
Traffic Volume (vph)	30	370	2	26	267	129	0	0	0	130	2	80
Future Volume (vph)	30	370	2	26	267	129	0	0	0	130	2	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Fr't		0.999				0.850						0.850
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1770	3536	0	1770	3539	1583	0	0	0	3433	1863	1583
Flt Permitted	0.950			0.514						0.950		
Satd. Flow (perm)	1770	3536	0	957	3539	1583	0	0	0	3433	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1				140						109
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		262			1493			229			609	
Travel Time (s)		6.0			33.9			5.2			13.8	
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
Adj. Flow (vph)	33	402	2	28	290	140	0	0	0	141	2	87
Shared Lane Traffic (%)												
Lane Group Flow (vph)	33	404	0	28	290	140	0	0	0	141	2	87
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Perm	NA	Perm				Split	NA	Perm
Protected Phases	7	4			8					6	6	
Permitted Phases				8		8						6
Minimum Split (s)	8.0	20.0		20.0	20.0	20.0				20.0	20.0	20.0
Total Split (s)	8.0	28.0		20.0	20.0	20.0				22.0	22.0	22.0
Total Split (%)	16.0%	56.0%		40.0%	40.0%	40.0%				44.0%	44.0%	44.0%
Maximum Green (s)	4.0	24.0		16.0	16.0	16.0				18.0	18.0	18.0
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5				3.5	3.5	3.5
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5				0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0				0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0				4.0	4.0	4.0
Lead/Lag	Lead			Lag	Lag	Lag						
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Walk Time (s)		5.0		5.0	5.0	5.0				5.0	5.0	5.0
Flash Dont Walk (s)		11.0		11.0	11.0	11.0				11.0	11.0	11.0
Pedestrian Calls (#/hr)		0		0	0	0				0	0	0
Act Effect Green (s)	4.0	24.0		16.0	16.0	16.0				18.0	18.0	18.0
Actuated g/C Ratio	0.08	0.48		0.32	0.32	0.32				0.36	0.36	0.36
v/c Ratio	0.23	0.24		0.09	0.26	0.23				0.11	0.00	0.14
Control Delay	25.9	8.1		13.0	13.4	4.1				18.1	19.0	10.1
Queue Delay	0.0	0.0		0.0	0.0	0.0				0.0	0.0	0.0
Total Delay	25.9	8.1		13.0	13.4	4.1				18.1	19.0	10.1

Lanes, Volumes, Timings

12: Thousand Oaks Boulevard/Thousand Oaks & Hodencamp

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	C	A		B	B	A				B	B	B
Approach Delay		9.4			10.5						15.0	
Approach LOS		A			B						B	
Stops (vph)	32	198		22	183	23				115	4	40
Fuel Used(gal)	0	2		1	6	2				2	0	1
CO Emissions (g/hr)	28	172		44	439	170				146	3	69
NOx Emissions (g/hr)	5	34		9	85	33				28	1	13
VOC Emissions (g/hr)	6	40		10	102	39				34	1	16
Dilemma Vehicles (#)	0	0		0	0	0				0	0	0
Queue Length 50th (ft)	9	33		6	32	0				21	0	0
Queue Length 95th (ft)	30	54		20	56	29				44	m3	30
Internal Link Dist (ft)		182			1413			149			529	
Turn Bay Length (ft)												
Base Capacity (vph)	141	1697		306	1132	601				1235	670	639
Starvation Cap Reductn	0	0		0	0	0				0	0	0
Spillback Cap Reductn	0	0		0	0	0				0	0	0
Storage Cap Reductn	0	0		0	0	0				0	0	0
Reduced v/c Ratio	0.23	0.24		0.09	0.26	0.23				0.11	0.00	0.14

Intersection Summary

Area Type: Other

Cycle Length: 50

Actuated Cycle Length: 50

Offset: 0 (0%), Referenced to phase 6:SBTL, Start of Green

Natural Cycle: 50

Control Type: Pretimed

Maximum v/c Ratio: 0.26

Intersection Signal Delay: 11.0

Intersection LOS: B

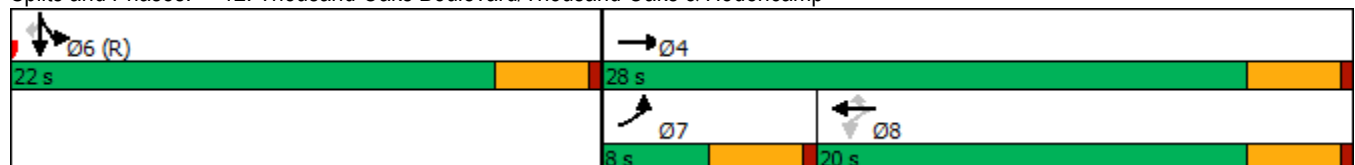
Intersection Capacity Utilization 27.3%

ICU Level of Service A

Analysis Period (min) 15























m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 12: Thousand Oaks Boulevard/Thousand Oaks & Hodencamp















Lanes, Volumes, Timings
17: Hodencamp Road & Hillcrest

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	136	38	45	292	120	31	90	20	121	154	46
Future Volume (vph)	16	136	38	45	292	120	31	90	20	121	154	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.956			0.972			0.965	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	3383	0	1770	3440	0	1770	3415	0
Flt Permitted	0.950			0.950			0.616			0.676		
Satd. Flow (perm)	1770	1863	1583	1770	3383	0	1147	3440	0	1259	3415	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			109		130			22			50	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1053			560			357			554	
Travel Time (s)		23.9			12.7			8.1			12.6	
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
Adj. Flow (vph)	17	148	41	49	317	130	34	98	22	132	167	50
Shared Lane Traffic (%)												
Lane Group Flow (vph)	17	148	41	49	447	0	34	120	0	132	217	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4				2			6		
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	8.0	20.0	20.0	9.0	21.0		21.0	21.0		21.0	21.0	
Total Split (%)	16.0%	40.0%	40.0%	18.0%	42.0%		42.0%	42.0%		42.0%	42.0%	
Maximum Green (s)	4.0	16.0	16.0	5.0	17.0		17.0	17.0		17.0	17.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Walk Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0	11.0		11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0		0	0		0	0	
Act Effect Green (s)	4.0	16.0	16.0	5.0	17.0		17.0	17.0		17.0	17.0	
Actuated g/C Ratio	0.08	0.32	0.32	0.10	0.34		0.34	0.34		0.34	0.34	
v/c Ratio	0.12	0.25	0.07	0.28	0.36		0.09	0.10		0.31	0.18	
Control Delay	23.4	14.0	0.3	25.2	9.6		8.1	6.4		14.7	9.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	23.4	14.0	0.3	25.2	9.6		8.1	6.4		14.7	9.3	

Lanes, Volumes, Timings
17: Hodencamp Road & Hillcrest

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	C	B	A	C	A		A	A		B	A	
Approach Delay		12.0			11.2			6.8			11.4	
Approach LOS		B			B			A			B	
Stops (vph)	19	95	0	44	203		20	49		86	100	
Fuel Used(gal)	0	3	1	1	9		0	1		1	2	
CO Emissions (g/hr)	33	233	48	88	638		28	87		95	126	
NOx Emissions (g/hr)	6	45	9	17	124		5	17		18	24	
VOC Emissions (g/hr)	8	54	11	20	148		6	20		22	29	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	5	31	0	14	34		8	11		28	17	
Queue Length 95th (ft)	20	66	2	39	63		14	12		62	36	
Internal Link Dist (ft)		973			480			277			474	
Turn Bay Length (ft)												
Base Capacity (vph)	141	596	580	177	1236		389	1184		428	1194	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.12	0.25	0.07	0.28	0.36		0.09	0.10		0.31	0.18	

Intersection Summary

Area Type: Other

Cycle Length: 50

Actuated Cycle Length: 50

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 50

Control Type: Pretimed

Maximum v/c Ratio: 0.36

Intersection Signal Delay: 10.8

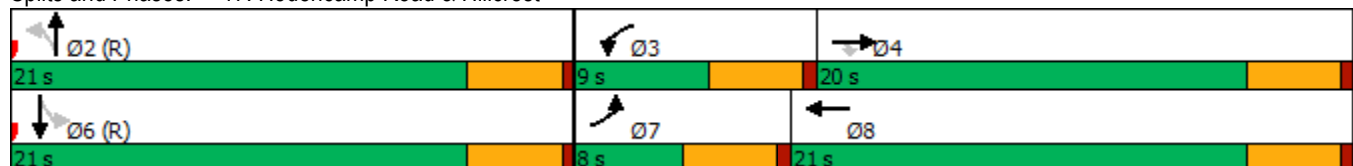
Intersection LOS: B

Intersection Capacity Utilization 38.6%

ICU Level of Service A























Analysis Period (min) 15

Splits and Phases: 17: Hodencamp Road & Hillcrest



Lanes, Volumes, Timings
21: Moorpark Road & Hillcrest













01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	98	103	78	121	74	71	540	73	91	545	27
Future Volume (vph)	44	98	103	78	121	74	71	540	73	91	545	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95	0.95	0.97	0.91	0.91	0.97	0.95	0.95
Frt			0.850		0.943			0.982			0.993	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	1863	1583	1770	3337	0	3433	4994	0	3433	3514	0
Flt Permitted	0.950			0.688			0.950			0.950		
Satd. Flow (perm)	3433	1863	1583	1282	3337	0	3433	4994	0	3433	3514	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			112		80			26			5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		183			522			376			623	
Travel Time (s)		4.2			11.9			8.5			14.2	
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
Adj. Flow (vph)	48	107	112	85	132	80	77	587	79	99	592	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	48	107	112	85	212	0	77	666	0	99	621	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Prot	Perm	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	4		8		5	2		1	6	
Permitted Phases				8								
Minimum Split (s)	8.0	20.0	20.0	20.0	20.0		8.0	20.0		8.0	20.0	
Total Split (s)	14.0	46.0	46.0	32.0	32.0		16.0	57.0		17.0	58.0	
Total Split (%)	11.7%	38.3%	38.3%	26.7%	26.7%		13.3%	47.5%		14.2%	48.3%	
Maximum Green (s)	10.0	42.0	42.0	28.0	28.0		12.0	53.0		13.0	54.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead			Lag	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes		Yes	Yes		Yes	Yes	
Walk Time (s)		5.0	5.0	5.0	5.0			5.0			5.0	
Flash Dont Walk (s)		11.0	11.0	11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0	0	0	0			0			0	
Act Effect Green (s)	10.0	42.0	42.0	28.0	28.0		12.0	53.0		13.0	54.0	
Actuated g/C Ratio	0.08	0.35	0.35	0.23	0.23		0.10	0.44		0.11	0.45	
v/c Ratio	0.17	0.16	0.18	0.28	0.25		0.22	0.30		0.27	0.39	
Control Delay	52.7	27.8	5.5	40.9	23.9		68.2	11.6		51.2	22.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	52.7	27.8	5.5	40.9	23.9		68.2	11.6		51.2	22.8	

Lanes, Volumes, Timings

21: Moorpark Road & Hillcrest

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	C	A	D	C		E	B		D	C	
Approach Delay		22.9			28.8			17.5			26.7	
Approach LOS		C			C			B			C	
Stops (vph)	40	65	13	63	98		69	140		82	366	
Fuel Used(gal)	1	1	0	2	5		2	6		2	7	
CO Emissions (g/hr)	53	74	23	167	347		126	420		129	520	
NOx Emissions (g/hr)	10	14	5	32	68		25	82		25	101	
VOC Emissions (g/hr)	12	17	5	39	80		29	97		30	121	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	18	57	0	54	43		32	43		37	163	
Queue Length 95th (ft)	38	100	39	102	77		59	61		64	211	
Internal Link Dist (ft)		103			442			296			543	
Turn Bay Length (ft)												
Base Capacity (vph)	286	652	626	299	839		343	2220		371	1584	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.17	0.16	0.18	0.28	0.25		0.22	0.30		0.27	0.39	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 0.39

Intersection Signal Delay: 23.1

Intersection LOS: C

Intersection Capacity Utilization 42.1%

ICU Level of Service A

Analysis Period (min) 15













Splits and Phases: 21: Moorpark Road & Hillcrest

 Ø1	 Ø2 (R)	 Ø4
17 s	57 s	46 s
 Ø5	 Ø6 (R)	 Ø7
16 s	58 s	14 s
		 Ø8
		32 s

Lanes, Volumes, Timings

23: Frontage Road/Highway 23 Off-Ramp & Hillcrest













01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↵	↑						↵↵	
Traffic Volume (vph)	0	372	14	7	166	0	0	0	0	263	357	367
Future Volume (vph)	0	372	14	7	166	0	0	0	0	263	357	367
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95
Fr't		0.995									0.944	
Flt Protected				0.950							0.987	
Satd. Flow (prot)	0	3522	0	1770	1863	0	0	0	0	0	3298	0
Flt Permitted				0.507							0.987	
Satd. Flow (perm)	0	3522	0	944	1863	0	0	0	0	0	3298	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11									361	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		112			455			823			414	
Travel Time (s)		2.5			10.3			18.7			9.4	
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
Adj. Flow (vph)	0	404	15	8	180	0	0	0	0	286	388	399
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	419	0	8	180	0	0	0	0	0	1073	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases				8						6		
Minimum Split (s)		20.0		20.0	20.0					20.0	20.0	
Total Split (s)		20.0		20.0	20.0					20.0	20.0	
Total Split (%)		50.0%		50.0%	50.0%					50.0%	50.0%	
Maximum Green (s)		16.0		16.0	16.0					16.0	16.0	
Yellow Time (s)		3.5		3.5	3.5					3.5	3.5	
All-Red Time (s)		0.5		0.5	0.5					0.5	0.5	
Lost Time Adjust (s)		0.0		0.0	0.0						0.0	
Total Lost Time (s)		4.0		4.0	4.0						4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)		5.0		5.0	5.0					5.0	5.0	
Flash Dont Walk (s)		11.0		11.0	11.0					11.0	11.0	
Pedestrian Calls (#/hr)		0		0	0					0	0	
Act Effect Green (s)		16.0		16.0	16.0						16.0	
Actuated g/C Ratio		0.40		0.40	0.40						0.40	
v/c Ratio		0.30		0.02	0.24						0.70	
Control Delay		8.7		7.6	9.1						9.4	
Queue Delay		0.0		0.0	0.0						0.0	
Total Delay		8.7		7.6	9.1						9.4	

Lanes, Volumes, Timings

23: Frontage Road/Highway 23 Off-Ramp & Hillcrest

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		A		A	A						A	
Approach Delay		8.7			9.0						9.4	
Approach LOS		A			A						A	
Stops (vph)		230		7	101						515	
Fuel Used(gal)		9		0	3						8	
CO Emissions (g/hr)		607		10	222						553	
NOx Emissions (g/hr)		118		2	43						108	
VOC Emissions (g/hr)		141		2	51						128	
Dilemma Vehicles (#)		0		0	0						0	
Queue Length 50th (ft)		30		1	25						59	
Queue Length 95th (ft)		52		6	54						110	
Internal Link Dist (ft)		32			375			743			334	
Turn Bay Length (ft)												
Base Capacity (vph)		1415		377	745						1535	
Starvation Cap Reductn		0		0	0						0	
Spillback Cap Reductn		0		0	0						0	
Storage Cap Reductn		0		0	0						0	
Reduced v/c Ratio		0.30		0.02	0.24						0.70	

Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 40

Offset: 0 (0%), Referenced to phase 2: and 6:SBTL, Start of Green

Natural Cycle: 40

Control Type: Pretimed

Maximum v/c Ratio: 0.70

Intersection Signal Delay: 9.1

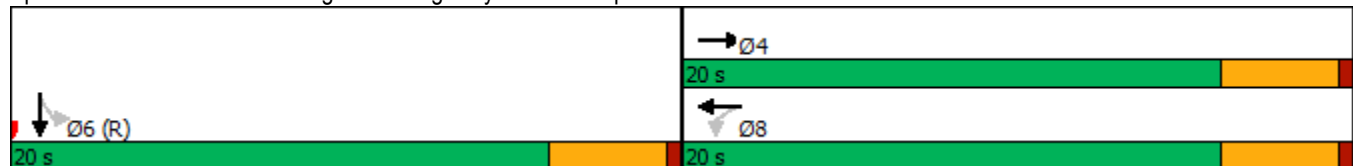
Intersection LOS: A

Intersection Capacity Utilization 46.7%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 23: Frontage Road/Highway 23 Off-Ramp & Hillcrest



Lanes, Volumes, Timings

24: Thousand Oaks & Frontage Road

01/10/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↘	↗↗
Traffic Volume (vph)	0	554	448	0	196	178
Future Volume (vph)	0	554	448	0	196	178
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	0.88
Fr _t						0.850
Fl _t Protected					0.950	
Satd. Flow (prot)	0	3539	3539	0	1770	2787
Fl _t Permitted					0.950	
Satd. Flow (perm)	0	3539	3539	0	1770	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						193
Link Speed (mph)		30	30		30	
Link Distance (ft)		251	831		823	
Travel Time (s)		5.7	18.9		18.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	602	487	0	213	193
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	602	487	0	213	193
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Minimum Split (s)		20.0	20.0		20.0	20.0
Total Split (s)		20.0	20.0		20.0	20.0
Total Split (%)		50.0%	50.0%		50.0%	50.0%
Maximum Green (s)		16.0	16.0		16.0	16.0
Yellow Time (s)		3.5	3.5		3.5	3.5
All-Red Time (s)		0.5	0.5		0.5	0.5
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)		5.0	5.0		5.0	5.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0
Act Effect Green (s)		16.0	16.0		16.0	16.0
Actuated g/C Ratio		0.40	0.40		0.40	0.40
v/c Ratio		0.43	0.34		0.30	0.16
Control Delay		9.8	9.2		15.2	7.3
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		9.8	9.2		15.2	7.3

Lanes, Volumes, Timings

24: Thousand Oaks & Frontage Road

01/10/2024

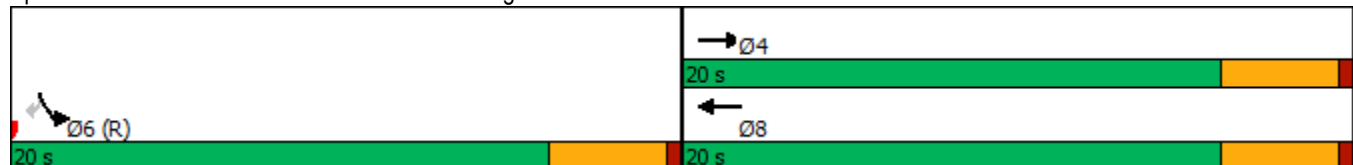


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
LOS		A	A		B	A
Approach Delay		9.8	9.2		11.5	
Approach LOS		A	A		B	
Stops (vph)		363	281		173	95
Fuel Used(gal)		13	6		3	2
CO Emissions (g/hr)		878	443		197	135
NOx Emissions (g/hr)		171	86		38	26
VOC Emissions (g/hr)		203	103		46	31
Dilemma Vehicles (#)		0	0		0	0
Queue Length 50th (ft)		47	37		47	2
Queue Length 95th (ft)		77	62		m75	m18
Internal Link Dist (ft)		171	751		743	
Turn Bay Length (ft)						
Base Capacity (vph)		1415	1415		708	1230
Starvation Cap Reductn		0	0		0	0
Spillback Cap Reductn		0	0		0	0
Storage Cap Reductn		0	0		0	0
Reduced v/c Ratio		0.43	0.34		0.30	0.16

Intersection Summary

Area Type: Other
Cycle Length: 40
Actuated Cycle Length: 40
Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green
Natural Cycle: 40
Control Type: Pretimed
Maximum v/c Ratio: 0.43
Intersection Signal Delay: 10.1
Intersection LOS: B
Intersection Capacity Utilization 32.8%
ICU Level of Service A
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.
























Splits and Phases: 24: Thousand Oaks & Frontage Road



Lanes, Volumes, Timings

33: Rancho & Thousand Oaks













01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	357	260	284	345	71	208	259	295	95	265	30
Future Volume (vph)	38	357	260	284	345	71	208	259	295	95	265	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Fr't			0.850		0.974				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	3433	3447	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.427			0.579		
Satd. Flow (perm)	1770	3539	1583	3433	3447	0	795	3539	1583	1079	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			283		28				321			195
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		296			389			511			569	
Travel Time (s)		6.7			8.8			11.6			12.9	
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
Adj. Flow (vph)	41	388	283	309	375	77	226	282	321	103	288	33
Shared Lane Traffic (%)												
Lane Group Flow (vph)	41	388	283	309	452	0	226	282	321	103	288	33
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA		pm+pt	NA	Prot	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2	2	1	6	
Permitted Phases			4				2			6		6
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0		8.0	20.0	20.0	8.0	20.0	20.0
Total Split (s)	12.0	27.0	27.0	22.0	37.0		20.0	34.0	34.0	12.0	26.0	26.0
Total Split (%)	12.6%	28.4%	28.4%	23.2%	38.9%		21.1%	35.8%	35.8%	12.6%	27.4%	27.4%
Maximum Green (s)	8.0	23.0	23.0	18.0	33.0		16.0	30.0	30.0	8.0	22.0	22.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Walk Time (s)		5.0	5.0		5.0			5.0	5.0		5.0	5.0
Flash Dont Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effect Green (s)	8.0	23.0	23.0	18.0	33.0		42.0	30.0	30.0	30.0	22.0	22.0
Actuated g/C Ratio	0.08	0.24	0.24	0.19	0.35		0.44	0.32	0.32	0.32	0.23	0.23
v/c Ratio	0.28	0.45	0.47	0.48	0.37		0.44	0.25	0.45	0.26	0.35	0.06
Control Delay	45.9	32.7	6.6	37.1	22.8		20.0	24.9	5.0	18.4	32.0	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.9	32.7	6.6	37.1	22.8		20.0	24.9	5.0	18.4	32.0	0.2

Lanes, Volumes, Timings

33: Rancho & Thousand Oaks

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	C	A	D	C		C	C	A	B	C	A
Approach Delay		23.1			28.6			15.9			26.2	
Approach LOS		C			C			B			C	
Stops (vph)	36	294	30	245	282		128	186	28	64	215	0
Fuel Used(gal)	1	7	3	4	5		2	3	2	2	7	0
CO Emissions (g/hr)	62	499	196	305	332		167	236	114	142	462	29
NOx Emissions (g/hr)	12	97	38	59	65		32	46	22	28	90	6
VOC Emissions (g/hr)	14	116	45	71	77		39	55	26	33	107	7
Dilemma Vehicles (#)	0	0	0	0	0		0	0	0	0	0	0
Queue Length 50th (ft)	24	105	0	86	98		85	66	0	36	76	0
Queue Length 95th (ft)	57	150	62	127	141		138	98	59	67	114	0
Internal Link Dist (ft)		216			309			431			489	
Turn Bay Length (ft)												
Base Capacity (vph)	149	856	597	650	1215		515	1117	719	398	819	516
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.45	0.47	0.48	0.37		0.44	0.25	0.45	0.26	0.35	0.06

Intersection Summary

Area Type: Other

Cycle Length: 95

Actuated Cycle Length: 95

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 0.48

Intersection Signal Delay: 22.9










Intersection LOS: C

Intersection Capacity Utilization 50.2%

ICU Level of Service A

Analysis Period (min) 15

























Splits and Phases: 33: Rancho & Thousand Oaks

								
Ø1	Ø2 (R)	Ø3	Ø4	Ø5	Ø6 (R)	Ø7	Ø8	
12 s	34 s	22 s	27 s	20 s	26 s	12 s	37 s	

Lanes, Volumes, Timings

3: Moorpark Road & Thousand Oaks Blvd

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	72	212	375	129	280	270	830	324	185	821	19
Future Volume (vph)	31	72	212	375	129	280	270	830	324	185	821	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	0.97	1.00	1.00	0.97	0.91	1.00	0.97	0.91	0.91
Fr't		0.911	0.850			0.850			0.850		0.997	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3088	1441	3433	1863	1583	3433	5085	1583	3433	5070	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3088	1441	3433	1863	1583	3433	5085	1583	3433	5070	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		115	155			304			352			3
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		192			672			498			415	
Travel Time (s)		4.4			15.3			11.3			9.4	
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
Adj. Flow (vph)	34	78	230	408	140	304	293	902	352	201	892	21
Shared Lane Traffic (%)			50%									
Lane Group Flow (vph)	34	193	115	408	140	304	293	902	352	201	913	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Prot	Prot	NA	Prot	Prot	NA	Prot	Prot	NA	
Protected Phases	7	4	4	3	8	8	5	2	2	1	6	
Permitted Phases												
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	
Total Split (s)	12.0	22.0	22.0	31.0	41.0	41.0	24.0	48.0	48.0	19.0	43.0	
Total Split (%)	10.0%	18.3%	18.3%	25.8%	34.2%	34.2%	20.0%	40.0%	40.0%	15.8%	35.8%	
Maximum Green (s)	8.0	18.0	18.0	27.0	37.0	37.0	20.0	44.0	44.0	15.0	39.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	
Act Effect Green (s)	8.0	18.0	18.0	27.0	37.0	37.0	20.0	44.0	44.0	15.0	39.0	
Actuated g/C Ratio	0.07	0.15	0.15	0.22	0.31	0.31	0.17	0.37	0.37	0.12	0.32	
v/c Ratio	0.29	0.34	0.33	0.53	0.24	0.44	0.51	0.48	0.44	0.47	0.55	
Control Delay	60.0	20.9	5.3	43.8	32.5	5.5	49.2	30.3	4.5	57.3	25.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	60.0	20.9	5.3	43.8	32.5	5.5	49.2	30.3	4.5	57.3	25.1	













Existing + Project - PM Peak 1:40 pm 09/06/2023 Baseline

Synchro 11 Report
Page 1

Lanes, Volumes, Timings

3: Moorpark Road & Thousand Oaks Blvd

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	C	A	D	C	A	D	C	A	E	C	
Approach Delay		19.5			28.3			28.0			30.9	
Approach LOS		B			C			C			C	
Stops (vph)	30	66	6	322	95	25	240	617	26	178	408	
Fuel Used(gal)	1	1	0	11	4	5	5	12	2	4	12	
CO Emissions (g/hr)	41	97	21	795	247	358	355	822	119	299	820	
NOx Emissions (g/hr)	8	19	4	155	48	70	69	160	23	58	160	
VOC Emissions (g/hr)	10	23	5	184	57	83	82	190	28	69	190	
Dilemma Vehicles (#)	0	0	0	0	0	0	0	0	0	0	0	
Queue Length 50th (ft)	26	29	0	144	81	0	107	195	0	81	124	
Queue Length 95th (ft)	60	66	27	195	135	64	153	237	61	119	179	
Internal Link Dist (ft)		112			592			418			335	
Turn Bay Length (ft)												
Base Capacity (vph)	118	560	347	772	574	698	572	1864	803	429	1649	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.29	0.34	0.33	0.53	0.24	0.44	0.51	0.48	0.44	0.47	0.55	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 0.55

Intersection Signal Delay: 28.2









Intersection LOS: C

Intersection Capacity Utilization 52.3%

ICU Level of Service A

Analysis Period (min) 15




















Splits and Phases: 3: Moorpark Road & Thousand Oaks Blvd

 Ø1	 Ø2 (R)	 Ø3	 Ø4
19 s	48 s	31 s	22 s
 Ø5	 Ø6 (R)	 Ø7	 Ø8
24 s	43 s	12 s	41 s

Lanes, Volumes, Timings

10: Lombard Street/Office Dwy & Thousand Oaks Boulevard

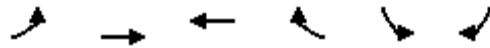
01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	474	35	38	530	5	43	1	67	11	0	23
Future Volume (vph)	6	474	35	38	530	5	43	1	67	11	0	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.990			0.999				0.850			0.850
Flt Protected		0.999		0.950			0.950			0.950		
Satd. Flow (prot)	0	3500	0	1770	3536	0	1770	0	1583	1770	0	1583
Flt Permitted		0.999		0.950			0.950			0.950		
Satd. Flow (perm)	0	3500	0	1770	3536	0	1770	0	1583	1770	0	1583
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1027			262			327			171	
Travel Time (s)		23.3			6.0			7.4			3.9	
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
Adj. Flow (vph)	7	515	38	41	576	5	47	1	73	12	0	25
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	560	0	41	581	0	47	1	73	12	0	25
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Yield	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization Err%	ICU Level of Service H											
Analysis Period (min)	15											

Lanes, Volumes, Timings

11: Lombard Street

01/10/2024

























Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↗	↘	
Traffic Volume (vph)	0	10	6	25	25	0
Future Volume (vph)	0	10	6	25	25	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.850					
Flt Protected	0.950					
Satd. Flow (prot)	0	1863	1863	1583	1770	0
Flt Permitted	0.950					
Satd. Flow (perm)	0	1863	1863	1583	1770	0
Link Speed (mph)	30		30	30		
Link Distance (ft)	678		233	327		
Travel Time (s)	15.4		5.3	7.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	11	7	27	27	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	11	7	27	27	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)	0		0	12		
Link Offset(ft)	0		0	0		
Crosswalk Width(ft)	16		16	16		
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control	Yield		Stop	Yield		
Intersection Summary						
Area Type:	Other					
Control Type: Unsignalized						
Intersection Capacity Utilization 13.3%				ICU Level of Service A		
Analysis Period (min) 15						

Lanes, Volumes, Timings

12: Thousand Oaks Boulevard/Thousand Oaks & Hodencamp













01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 					 		
Traffic Volume (vph)	84	450	0	54	505	212	0	0	0	194	0	70
Future Volume (vph)	84	450	0	54	505	212	0	0	0	194	0	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Fr't						0.850						0.850
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1770	3539	0	1770	3539	1583	0	0	0	3433	0	1583
Flt Permitted	0.950			0.474						0.950		
Satd. Flow (perm)	1770	3539	0	883	3539	1583	0	0	0	3433	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						230						109
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		262			1493			230			609	
Travel Time (s)		6.0			33.9			5.2			13.8	
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
Adj. Flow (vph)	91	489	0	59	549	230	0	0	0	211	0	76
Shared Lane Traffic (%)												
Lane Group Flow (vph)	91	489	0	59	549	230	0	0	0	211	0	76
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Perm	NA	Perm				Prot		Perm
Protected Phases	7	4			8					6		
Permitted Phases				8		8						6
Minimum Split (s)	8.0	20.0		20.0	20.0	20.0				20.0		20.0
Total Split (s)	10.0	30.0		20.0	20.0	20.0				20.0		20.0
Total Split (%)	20.0%	60.0%		40.0%	40.0%	40.0%				40.0%		40.0%
Maximum Green (s)	6.0	26.0		16.0	16.0	16.0				16.0		16.0
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5				3.5		3.5
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5				0.5		0.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0				0.0		0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0				4.0		4.0
Lead/Lag	Lead			Lag	Lag	Lag						
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Walk Time (s)		5.0		5.0	5.0	5.0				5.0		5.0
Flash Dont Walk (s)		11.0		11.0	11.0	11.0				11.0		11.0
Pedestrian Calls (#/hr)		0		0	0	0				0		0
Act Effect Green (s)	6.0	26.0		16.0	16.0	16.0				16.0		16.0
Actuated g/C Ratio	0.12	0.52		0.32	0.32	0.32				0.32		0.32
v/c Ratio	0.43	0.27		0.21	0.48	0.35				0.19		0.13
Control Delay	27.3	7.2		14.8	15.4	4.0				18.3		8.4
Queue Delay	0.0	0.0		0.0	0.0	0.0				0.0		0.0
Total Delay	27.3	7.2		14.8	15.4	4.0				18.3		8.4

Lanes, Volumes, Timings

12: Thousand Oaks Boulevard/Thousand Oaks & Hodencamp

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	C	A		B	B	A				B		A
Approach Delay		10.3			12.3						15.7	
Approach LOS		B			B						B	
Stops (vph)	78	225		41	380	31				164		29
Fuel Used(gal)	1	3		1	12	4				3		1
CO Emissions (g/hr)	75	197		92	859	277				216		56
NOx Emissions (g/hr)	15	38		18	167	54				42		11
VOC Emissions (g/hr)	17	46		21	199	64				50		13
Dilemma Vehicles (#)	0	0		0	0	0				0		0
Queue Length 50th (ft)	25	37		12	66	0				31		0
Queue Length 95th (ft)	60	59		35	103	37				55		23
Internal Link Dist (ft)		182			1413			150			529	
Turn Bay Length (ft)												
Base Capacity (vph)	212	1840		282	1132	662				1098		580
Starvation Cap Reductn	0	0		0	0	0				0		0
Spillback Cap Reductn	0	0		0	0	0				0		0
Storage Cap Reductn	0	0		0	0	0				0		0
Reduced v/c Ratio	0.43	0.27		0.21	0.48	0.35				0.19		0.13

Intersection Summary

Area Type: Other

Cycle Length: 50

Actuated Cycle Length: 50

Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green

Natural Cycle: 50

Control Type: Pretimed

Maximum v/c Ratio: 0.48

Intersection Signal Delay: 12.2

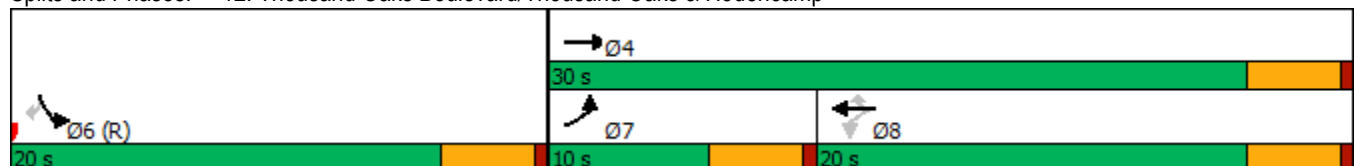
Intersection LOS: B

Intersection Capacity Utilization 34.1%

ICU Level of Service A























Analysis Period (min) 15

Splits and Phases: 12: Thousand Oaks Boulevard/Thousand Oaks & Hodencamp















Lanes, Volumes, Timings
17: Hodencamp Road & Hilcrest/Hillcrest

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	39	365	64	39	350	158	46	186	35	146	146	37
Future Volume (vph)	39	365	64	39	350	158	46	186	35	146	146	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.953			0.976			0.970	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	3373	0	1770	3454	0	1770	3433	0
Flt Permitted	0.950			0.950			0.627			0.603		
Satd. Flow (perm)	1770	1863	1583	1770	3373	0	1168	3454	0	1123	3433	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			109		158			38			40	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1053			560			357			554	
Travel Time (s)		23.9			12.7			8.1			12.6	
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
Adj. Flow (vph)	42	397	70	42	380	172	50	202	38	159	159	40
Shared Lane Traffic (%)												
Lane Group Flow (vph)	42	397	70	42	552	0	50	240	0	159	199	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4				2			6		
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	9.0	22.0	22.0	8.0	21.0		20.0	20.0		20.0	20.0	
Total Split (%)	18.0%	44.0%	44.0%	16.0%	42.0%		40.0%	40.0%		40.0%	40.0%	
Maximum Green (s)	5.0	18.0	18.0	4.0	17.0		16.0	16.0		16.0	16.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Walk Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0	11.0		11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0		0	0		0	0	
Act Effect Green (s)	5.0	18.0	18.0	4.0	17.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.10	0.36	0.36	0.08	0.34		0.32	0.32		0.32	0.32	
v/c Ratio	0.24	0.59	0.11	0.30	0.44		0.13	0.21		0.44	0.18	
Control Delay	24.3	17.5	1.8	27.5	10.3		9.7	8.0		18.3	10.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	24.3	17.5	1.8	27.5	10.3		9.7	8.0		18.3	10.2	

Lanes, Volumes, Timings
17: Hodencamp Road & Hilcrest/Hillcrest

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	C	B	A	C	B		A	A		B	B	
Approach Delay		15.9			11.5			8.3			13.8	
Approach LOS		B			B			A			B	
Stops (vph)	38	284	5	40	261		33	122		114	98	
Fuel Used(gal)	1	9	1	1	11		1	3		2	2	
CO Emissions (g/hr)	77	655	83	78	797		43	189		126	120	
NOx Emissions (g/hr)	15	127	16	15	155		8	37		25	23	
VOC Emissions (g/hr)	18	152	19	18	185		10	44		29	28	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	12	91	0	12	44		12	26		36	16	
Queue Length 95th (ft)	35	163	11	36	77		m24	35		80	35	
Internal Link Dist (ft)		973			480			277			474	
Turn Bay Length (ft)												
Base Capacity (vph)	177	670	639	141	1251		373	1131		359	1125	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.24	0.59	0.11	0.30	0.44		0.13	0.21		0.44	0.18	

Intersection Summary

Area Type: Other

Cycle Length: 50

Actuated Cycle Length: 50

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 50

Control Type: Pretimed

Maximum v/c Ratio: 0.59

Intersection Signal Delay: 12.7

Intersection LOS: B

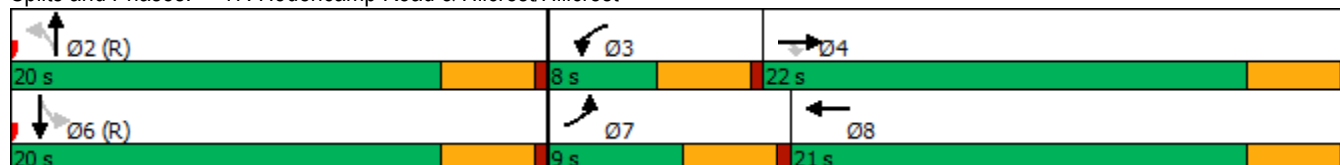
Intersection Capacity Utilization 50.2%

ICU Level of Service A

Analysis Period (min) 15























m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 17: Hodencamp Road & Hilcrest/Hillcrest



Lanes, Volumes, Timings
21: Moorpark Road & Hillcrest













01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	163	233	262	141	247	167	179	854	86	118	595	65
Future Volume (vph)	163	233	262	141	247	167	179	854	86	118	595	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95	0.95	0.97	0.91	0.91	0.97	0.95	0.95
Fr't			0.850		0.939			0.986			0.985	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	1863	1583	1770	3323	0	3433	5014	0	3433	3486	0
Flt Permitted	0.950			0.602			0.950			0.950		
Satd. Flow (perm)	3433	1863	1583	1121	3323	0	3433	5014	0	3433	3486	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			285		139			16			11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		183			522			376			623	
Travel Time (s)		4.2			11.9			8.5			14.2	
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
Adj. Flow (vph)	177	253	285	153	268	182	195	928	93	128	647	71
Shared Lane Traffic (%)												
Lane Group Flow (vph)	177	253	285	153	450	0	195	1021	0	128	718	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Prot	Perm	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	4		8		5	2		1	6	
Permitted Phases				8								
Minimum Split (s)	8.0	20.0	20.0	20.0	20.0		8.0	20.0		8.0	20.0	
Total Split (s)	17.0	55.0	55.0	38.0	38.0		18.0	51.0		14.0	47.0	
Total Split (%)	14.2%	45.8%	45.8%	31.7%	31.7%		15.0%	42.5%		11.7%	39.2%	
Maximum Green (s)	13.0	51.0	51.0	34.0	34.0		14.0	47.0		10.0	43.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead			Lag	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes		Yes	Yes		Yes	Yes	
Walk Time (s)		5.0	5.0	5.0	5.0			5.0			5.0	
Flash Dont Walk (s)		11.0	11.0	11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0	0	0	0			0			0	
Act Effect Green (s)	13.0	51.0	51.0	34.0	34.0		14.0	47.0		10.0	43.0	
Actuated g/C Ratio	0.11	0.42	0.42	0.28	0.28		0.12	0.39		0.08	0.36	
v/c Ratio	0.48	0.32	0.34	0.48	0.43		0.49	0.52		0.45	0.57	
Control Delay	55.0	24.4	3.6	41.9	25.2		74.3	14.1		57.7	32.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	55.0	24.4	3.6	41.9	25.2		74.3	14.1		57.7	32.7	

Lanes, Volumes, Timings

21: Moorpark Road & Hillcrest

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	C	A	D	C		E	B		E	C	
Approach Delay		23.7			29.4			23.8			36.5	
Approach LOS		C			C			C			D	
Stops (vph)	150	151	20	116	228		175	251		110	512	
Fuel Used(gal)	3	2	1	4	11		5	10		3	10	
CO Emissions (g/hr)	202	162	47	304	752		334	690		179	730	
NOx Emissions (g/hr)	39	32	9	59	146		65	134		35	142	
VOC Emissions (g/hr)	47	38	11	71	174		77	160		42	169	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	67	128	0	98	101		81	78		49	231	
Queue Length 95th (ft)	104	193	51	168	151		122	101		81	293	
Internal Link Dist (ft)		103			442			296			543	
Turn Bay Length (ft)												
Base Capacity (vph)	371	791	836	317	1041		400	1973		286	1256	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.48	0.32	0.34	0.48	0.43		0.49	0.52		0.45	0.57	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 0.57

Intersection Signal Delay: 28.0







Intersection LOS: C

Intersection Capacity Utilization 57.0%

ICU Level of Service B

Analysis Period (min) 15













Splits and Phases: 21: Moorpark Road & Hillcrest

 Ø1	 Ø2 (R)	 Ø4
14 s	51 s	55 s
 Ø5	 Ø6 (R)	 Ø7
18 s	47 s	17 s
		38 s

Lanes, Volumes, Timings

23: Frontage Road/Highway 23 Off-Ramp & Hillcrest

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↵	↑						↵↵	
Traffic Volume (vph)	0	559	11	13	351	0	0	0	0	176	226	263
Future Volume (vph)	0	559	11	13	351	0	0	0	0	176	226	263
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95
Fr _t		0.997									0.941	
Fl _t Protected				0.950							0.987	
Satd. Flow (prot)	0	3529	0	1770	1863	0	0	0	0	0	3287	0
Fl _t Permitted				0.383							0.987	
Satd. Flow (perm)	0	3529	0	713	1863	0	0	0	0	0	3287	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6									286	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		112			455			823			414	
Travel Time (s)		2.5			10.3			18.7			9.4	
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
Adj. Flow (vph)	0	608	12	14	382	0	0	0	0	191	246	286
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	620	0	14	382	0	0	0	0	0	723	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases				8						6		
Minimum Split (s)		20.0		20.0	20.0					20.0	20.0	
Total Split (s)		20.0		20.0	20.0					20.0	20.0	
Total Split (%)		50.0%		50.0%	50.0%					50.0%	50.0%	
Maximum Green (s)		16.0		16.0	16.0					16.0	16.0	
Yellow Time (s)		3.5		3.5	3.5					3.5	3.5	
All-Red Time (s)		0.5		0.5	0.5					0.5	0.5	
Lost Time Adjust (s)		0.0		0.0	0.0						0.0	
Total Lost Time (s)		4.0		4.0	4.0						4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)		5.0		5.0	5.0					5.0	5.0	
Flash Dont Walk (s)		11.0		11.0	11.0					11.0	11.0	
Pedestrian Calls (#/hr)		0		0	0					0	0	
Act Effect Green (s)		16.0		16.0	16.0						16.0	
Actuated g/C Ratio		0.40		0.40	0.40						0.40	
v/c Ratio		0.44		0.05	0.51						0.49	
Control Delay		9.9		8.0	12.1						6.5	
Queue Delay		0.0		0.0	0.0						0.0	
Total Delay		9.9		8.0	12.1						6.5	

Lanes, Volumes, Timings

23: Frontage Road/Highway 23 Off-Ramp & Hillcrest

01/10/2024

	↖	→	↘	↙	←	↖	↙	↑	↘	↘	↓	↙
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		A		A	B						A	
Approach Delay		9.9			12.0						6.5	
Approach LOS		A			B						A	
Stops (vph)		371		12	247						270	
Fuel Used(gal)		13		0	7						5	
CO Emissions (g/hr)		921		19	497						316	
NOx Emissions (g/hr)		179		4	97						61	
VOC Emissions (g/hr)		213		4	115						73	
Dilemma Vehicles (#)		0		0	0						0	
Queue Length 50th (ft)		48		2	60						33	
Queue Length 95th (ft)		80		9	116						63	
Internal Link Dist (ft)		32			375			743			334	
Turn Bay Length (ft)												
Base Capacity (vph)		1415		285	745						1486	
Starvation Cap Reductn		0		0	0						0	
Spillback Cap Reductn		0		0	0						0	
Storage Cap Reductn		0		0	0						0	
Reduced v/c Ratio		0.44		0.05	0.51						0.49	

Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 40

Offset: 0 (0%), Referenced to phase 2: and 6:SBTL, Start of Green

Natural Cycle: 40

Control Type: Pretimed

Maximum v/c Ratio: 0.51

Intersection Signal Delay: 8.9

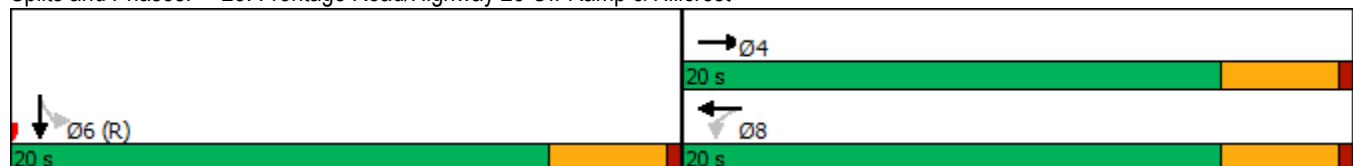
Intersection LOS: A

Intersection Capacity Utilization 44.9%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 23: Frontage Road/Highway 23 Off-Ramp & Hillcrest



Lanes, Volumes, Timings

24: Thousand Oaks & Frontage Road

01/10/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↘	↗↗
Traffic Volume (vph)	0	837	695	0	138	116
Future Volume (vph)	0	837	695	0	138	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	0.88
Fr _t						0.850
Fl _t Protected					0.950	
Satd. Flow (prot)	0	3539	3539	0	1770	2787
Fl _t Permitted					0.950	
Satd. Flow (perm)	0	3539	3539	0	1770	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						126
Link Speed (mph)		30	30		30	
Link Distance (ft)		251	831		823	
Travel Time (s)		5.7	18.9		18.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	910	755	0	150	126
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	910	755	0	150	126
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Minimum Split (s)		20.0	20.0		20.0	20.0
Total Split (s)		20.0	20.0		20.0	20.0
Total Split (%)		50.0%	50.0%		50.0%	50.0%
Maximum Green (s)		16.0	16.0		16.0	16.0
Yellow Time (s)		3.5	3.5		3.5	3.5
All-Red Time (s)		0.5	0.5		0.5	0.5
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)		5.0	5.0		5.0	5.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0
Act Effect Green (s)		16.0	16.0		16.0	16.0
Actuated g/C Ratio		0.40	0.40		0.40	0.40
v/c Ratio		0.64	0.53		0.21	0.11
Control Delay		12.3	10.9		14.3	7.6
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		12.3	10.9		14.3	7.6

Lanes, Volumes, Timings

24: Thousand Oaks & Frontage Road

01/10/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
LOS		B	B		B	A
Approach Delay		12.3	10.9		11.2	
Approach LOS		B	B		B	
Stops (vph)		617	481		114	53
Fuel Used(gal)		20	10		2	1
CO Emissions (g/hr)		1381	720		134	85
NOx Emissions (g/hr)		269	140		26	17
VOC Emissions (g/hr)		320	167		31	20
Dilemma Vehicles (#)		0	0		0	0
Queue Length 50th (ft)		81	63		30	0
Queue Length 95th (ft)		126	100		70	m21
Internal Link Dist (ft)		171	751		743	
Turn Bay Length (ft)						
Base Capacity (vph)		1415	1415		708	1190
Starvation Cap Reductn		0	0		0	0
Spillback Cap Reductn		0	0		0	0
Storage Cap Reductn		0	0		0	0
Reduced v/c Ratio		0.64	0.53		0.21	0.11

Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 40

Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green

Natural Cycle: 40

Control Type: Pretimed

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 11.6

Intersection LOS: B

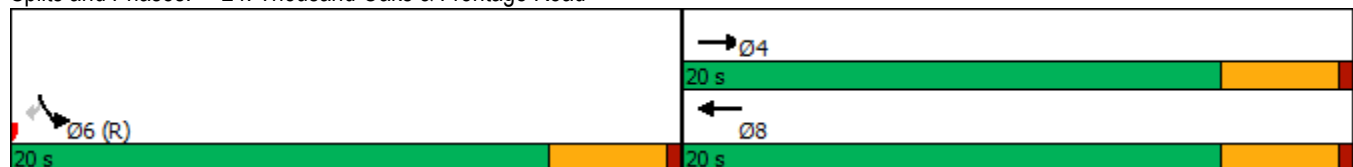
Intersection Capacity Utilization 37.4%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.
























Splits and Phases: 24: Thousand Oaks & Frontage Road



Lanes, Volumes, Timings

33: Rancho & Thousand Oaks













01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	450	287	346	676	83	276	265	342	61	159	19
Future Volume (vph)	33	450	287	346	676	83	276	265	342	61	159	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Fr't			0.850		0.984				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	3433	3483	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.535			0.575		
Satd. Flow (perm)	1770	3539	1583	3433	3483	0	997	3539	1583	1071	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			312		16				372			195
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		296			389			511			569	
Travel Time (s)		6.7			8.8			11.6			12.9	
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
Adj. Flow (vph)	36	489	312	376	735	90	300	288	372	66	173	21
Shared Lane Traffic (%)												
Lane Group Flow (vph)	36	489	312	376	825	0	300	288	372	66	173	21
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA		pm+pt	NA	Prot	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2	2	1	6	
Permitted Phases			4				2			6		6
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0		8.0	20.0	20.0	8.0	20.0	20.0
Total Split (s)	10.0	27.0	27.0	22.0	39.0		22.0	37.0	37.0	9.0	24.0	24.0
Total Split (%)	10.5%	28.4%	28.4%	23.2%	41.1%		23.2%	38.9%	38.9%	9.5%	25.3%	25.3%
Maximum Green (s)	6.0	23.0	23.0	18.0	35.0		18.0	33.0	33.0	5.0	20.0	20.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Walk Time (s)		5.0	5.0		5.0			5.0	5.0		5.0	5.0
Flash Dont Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effect Green (s)	6.0	23.0	23.0	18.0	35.0		42.0	33.0	33.0	25.0	20.0	20.0
Actuated g/C Ratio	0.06	0.24	0.24	0.19	0.37		0.44	0.35	0.35	0.26	0.21	0.21
v/c Ratio	0.32	0.57	0.50	0.58	0.64		0.51	0.23	0.47	0.21	0.23	0.04
Control Delay	50.7	34.8	6.7	39.1	27.0		21.4	22.7	4.6	18.8	32.1	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.7	34.8	6.7	39.1	27.0		21.4	22.7	4.6	18.8	32.1	0.2

Lanes, Volumes, Timings

33: Rancho & Thousand Oaks

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	C	A	D	C		C	C	A	B	C	A
Approach Delay		25.0			30.8			15.3			26.1	
Approach LOS		C			C			B			C	
Stops (vph)	33	386	32	307	594		179	181	31	43	129	0
Fuel Used(gal)	1	9	3	6	10		3	3	2	1	4	0
CO Emissions (g/hr)	57	648	216	385	682		230	229	130	92	277	19
NOx Emissions (g/hr)	11	126	42	75	133		45	45	25	18	54	4
VOC Emissions (g/hr)	13	150	50	89	158		53	53	30	21	64	4
Dilemma Vehicles (#)	0	0	0	0	0		0	0	0	0	0	0
Queue Length 50th (ft)	21	136	0	107	208		118	64	0	22	45	0
Queue Length 95th (ft)	53	189	65	154	273		184	95	59	47	75	0
Internal Link Dist (ft)		216			309			431			489	
Turn Bay Length (ft)												
Base Capacity (vph)	111	856	619	650	1293		587	1229	792	318	745	487
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.57	0.50	0.58	0.64		0.51	0.23	0.47	0.21	0.23	0.04

Intersection Summary

Area Type: Other

Cycle Length: 95

Actuated Cycle Length: 95

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 24.4









Intersection LOS: C

Intersection Capacity Utilization 57.7%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 33: Rancho & Thousand Oaks

























 Ø1	 Ø2 (R)	 Ø3	 Ø4
9 s	37 s	22 s	27 s
 Ø5	 Ø6 (R)	 Ø7	 Ø8
22 s	24 s	10 s	39 s

Future Conditions

Lanes, Volumes, Timings

3: Moorpark Road & Thousand Oaks Blvd













01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	20	45	164	50	107	159	619	451	208	546	21
Future Volume (vph)	9	20	45	164	50	107	159	619	451	208	546	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	0.97	1.00	1.00	0.97	0.91	1.00	0.97	0.91	0.91
Frt		0.920	0.850			0.850			0.850		0.994	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3119	1441	3433	1863	1583	3433	5085	1583	3433	5055	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3119	1441	3433	1863	1583	3433	5085	1583	3433	5055	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		25	118			116			490		6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		192			672			498			415	
Travel Time (s)		4.4			15.3			11.3			9.4	
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
Adj. Flow (vph)	10	22	49	178	54	116	173	673	490	226	593	23
Shared Lane Traffic (%)			50%									
Lane Group Flow (vph)	10	47	24	178	54	116	173	673	490	226	616	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Prot	Prot	NA	Prot	Prot	NA	Prot	Prot	NA	
Protected Phases	7	4	4	3	8	8	5	2	2	1	6	
Permitted Phases												
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	
Total Split (s)	9.0	21.0	21.0	19.0	31.0	31.0	19.0	59.0	59.0	21.0	61.0	
Total Split (%)	7.5%	17.5%	17.5%	15.8%	25.8%	25.8%	15.8%	49.2%	49.2%	17.5%	50.8%	
Maximum Green (s)	5.0	17.0	17.0	15.0	27.0	27.0	15.0	55.0	55.0	17.0	57.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	
Act Effect Green (s)	5.0	17.0	17.0	15.0	27.0	27.0	15.0	55.0	55.0	17.0	57.0	
Actuated g/C Ratio	0.04	0.14	0.14	0.12	0.22	0.22	0.12	0.46	0.46	0.14	0.48	
v/c Ratio	0.14	0.10	0.08	0.41	0.13	0.26	0.40	0.29	0.49	0.47	0.26	
Control Delay	59.8	26.3	0.5	51.7	38.2	8.4	51.5	20.7	3.6	63.3	11.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	59.8	26.3	0.5	51.7	38.2	8.4	51.5	20.7	3.6	63.3	11.4	

Lanes, Volumes, Timings

3: Moorpark Road & Thousand Oaks Blvd

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	C	A	D	D	A	D	C	A	E	B	
Approach Delay		22.8			35.2			18.4			25.3	
Approach LOS		C			D			B			C	
Stops (vph)	11	21	0	148	39	16	143	371	29	202	162	
Fuel Used(gal)	0	0	0	5	1	2	3	7	2	5	6	
CO Emissions (g/hr)	13	29	2	369	101	144	215	494	156	355	399	
NOx Emissions (g/hr)	2	6	0	72	20	28	42	96	30	69	78	
VOC Emissions (g/hr)	3	7	1	86	23	33	50	114	36	82	92	
Dilemma Vehicles (#)	0	0	0	0	0	0	0	0	0	0	0	
Queue Length 50th (ft)	8	8	0	66	34	0	64	116	0	93	51	
Queue Length 95th (ft)	26	27	0	103	69	48	101	146	58	136	69	
Internal Link Dist (ft)		112			592			418			335	
Turn Bay Length (ft)												
Base Capacity (vph)	73	463	305	429	419	446	429	2330	990	486	2404	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.14	0.10	0.08	0.41	0.13	0.26	0.40	0.29	0.49	0.47	0.26	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 0.49

Intersection Signal Delay: 23.0









Intersection LOS: C

Intersection Capacity Utilization 47.2%

ICU Level of Service A

Analysis Period (min) 15




















Splits and Phases: 3: Moorpark Road & Thousand Oaks Blvd

 Ø1	 Ø2 (R)	 Ø3	 Ø4
21 s	59 s	19 s	21 s
 Ø5	 Ø6 (R)	 Ø7	 Ø8
19 s	61 s	9 s	31 s

Lanes, Volumes, Timings

10: Lombard Street/Office Dwy & Thousand Oaks Boulevard

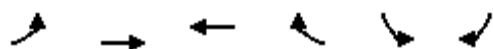
01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	407	9	49	307	14	11	0	17	3	0	12
Future Volume (vph)	21	407	9	49	307	14	11	0	17	3	0	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.997			0.994				0.850			0.850
Flt Protected		0.998		0.950			0.950			0.950		
Satd. Flow (prot)	0	3522	0	1770	3518	0	1770	0	1583	1770	0	1583
Flt Permitted		0.998		0.950			0.950			0.950		
Satd. Flow (perm)	0	3522	0	1770	3518	0	1770	0	1583	1770	0	1583
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1027			262			327			171	
Travel Time (s)		23.3			6.0			7.4			3.9	
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
Adj. Flow (vph)	23	442	10	53	334	15	12	0	18	3	0	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	475	0	53	349	0	12	0	18	3	0	13
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Yes												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Yield	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	34.4%											
Analysis Period (min)	15											
ICU Level of Service A												

Lanes, Volumes, Timings

12: Thousand Oaks Boulevard/Thousand Oaks & Hodencamp

01/10/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	32	394	285	127	139	85
Future Volume (vph)	32	394	285	127	139	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	1.00
Fr't				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	3539	3539	1583	3433	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	3539	3539	1583	3433	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				138		92
Link Speed (mph)		30	30		30	
Link Distance (ft)		262	1493		609	
Travel Time (s)		6.0	33.9		13.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	35	428	310	138	151	92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	35	428	310	138	151	92
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Minimum Split (s)	8.0	20.0	20.0	20.0	20.0	20.0
Total Split (s)	8.0	28.0	20.0	20.0	22.0	22.0
Total Split (%)	16.0%	56.0%	40.0%	40.0%	44.0%	44.0%
Maximum Green (s)	4.0	24.0	16.0	16.0	18.0	18.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Walk Time (s)		5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0	0	0	0
Act Effect Green (s)	4.0	24.0	16.0	16.0	18.0	18.0
Actuated g/C Ratio	0.08	0.48	0.32	0.32	0.36	0.36
v/c Ratio	0.25	0.25	0.27	0.23	0.12	0.15
Control Delay	26.2	8.2	13.5	4.1	18.2	11.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.2	8.2	13.5	4.1	18.2	11.4

Lanes, Volumes, Timings

12: Thousand Oaks Boulevard/Thousand Oaks & Hodencamp

01/10/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
LOS	C	A	B	A	B	B
Approach Delay		9.5	10.6		15.6	
Approach LOS		A	B		B	
Stops (vph)	34	211	198	23	122	54
Fuel Used(gal)	0	3	7	2	2	1
CO Emissions (g/hr)	30	184	471	168	156	79
NOx Emissions (g/hr)	6	36	92	33	30	15
VOC Emissions (g/hr)	7	43	109	39	36	18
Dilemma Vehicles (#)	0	0	0	0	0	0
Queue Length 50th (ft)	10	35	34	0	23	0
Queue Length 95th (ft)	31	57	59	28	46	33
Internal Link Dist (ft)		182	1413		529	
Turn Bay Length (ft)						
Base Capacity (vph)	141	1698	1132	600	1235	628
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.25	0.27	0.23	0.12	0.15

Intersection Summary

Area Type: Other

Cycle Length: 50

Actuated Cycle Length: 50

Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green

Natural Cycle: 50

Control Type: Pretimed

Maximum v/c Ratio: 0.27

Intersection Signal Delay: 11.2

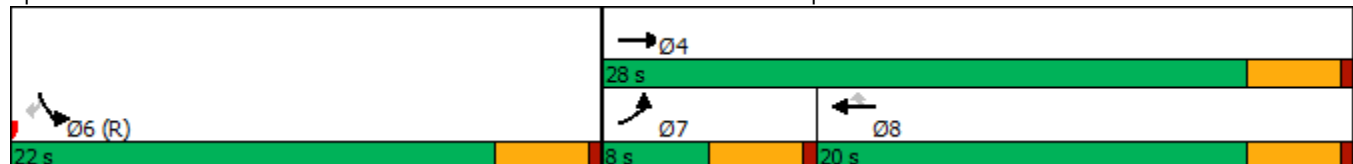
Intersection LOS: B

Intersection Capacity Utilization 25.2%

ICU Level of Service A






















Analysis Period (min) 15

Splits and Phases: 12: Thousand Oaks Boulevard/Thousand Oaks & Hodencamp



Lanes, Volumes, Timings
17: Hodencamp Road & Hillcrest

01/10/2024













												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	145	41	46	311	128	33	96	11	129	164	49
Future Volume (vph)	17	145	41	46	311	128	33	96	11	129	164	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.956			0.984			0.966	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	3383	0	1770	3483	0	1770	3419	0
Flt Permitted	0.950			0.950			0.608			0.679		
Satd. Flow (perm)	1770	1863	1583	1770	3383	0	1133	3483	0	1265	3419	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			109		135			12			53	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1053			560			357			554	
Travel Time (s)		23.9			12.7			8.1			12.6	
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
Adj. Flow (vph)	18	158	45	50	338	139	36	104	12	140	178	53
Shared Lane Traffic (%)												
Lane Group Flow (vph)	18	158	45	50	477	0	36	116	0	140	231	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4				2			6		
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	8.0	20.0	20.0	9.0	21.0		21.0	21.0		21.0	21.0	
Total Split (%)	16.0%	40.0%	40.0%	18.0%	42.0%		42.0%	42.0%		42.0%	42.0%	
Maximum Green (s)	4.0	16.0	16.0	5.0	17.0		17.0	17.0		17.0	17.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Walk Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0	11.0		11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0		0	0		0	0	
Act Effect Green (s)	4.0	16.0	16.0	5.0	17.0		17.0	17.0		17.0	17.0	
Actuated g/C Ratio	0.08	0.32	0.32	0.10	0.34		0.34	0.34		0.34	0.34	
v/c Ratio	0.13	0.27	0.08	0.28	0.38		0.09	0.10		0.33	0.19	
Control Delay	23.6	14.1	0.7	25.3	9.9		8.2	7.1		14.9	9.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	23.6	14.1	0.7	25.3	9.9		8.2	7.1		14.9	9.4	

Future - AM Peak 1:40 pm 09/06/2023 Baseline

Synchro 11 Report
Page 6

Lanes, Volumes, Timings
17: Hodencamp Road & Hillcrest

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	C	B	A	C	A		A	A		B	A	
Approach Delay		12.2			11.3			7.4			11.5	
Approach LOS		B			B			A			B	
Stops (vph)	20	102	1	45	222		20	51		91	108	
Fuel Used(gal)	0	4	1	1	10		0	1		1	2	
CO Emissions (g/hr)	35	249	52	90	685		29	87		102	135	
NOx Emissions (g/hr)	7	48	10	18	133		6	17		20	26	
VOC Emissions (g/hr)	8	58	12	21	159		7	20		24	31	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	5	34	0	14	37		8	12		30	18	
Queue Length 95th (ft)	20	70	3	39	67		15	13		66	37	
Internal Link Dist (ft)		973			480			277			474	
Turn Bay Length (ft)												
Base Capacity (vph)	141	596	580	177	1239		385	1192		430	1197	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.13	0.27	0.08	0.28	0.38		0.09	0.10		0.33	0.19	

Intersection Summary

Area Type: Other

Cycle Length: 50

Actuated Cycle Length: 50

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 50

Control Type: Pretimed

Maximum v/c Ratio: 0.38

Intersection Signal Delay: 11.1

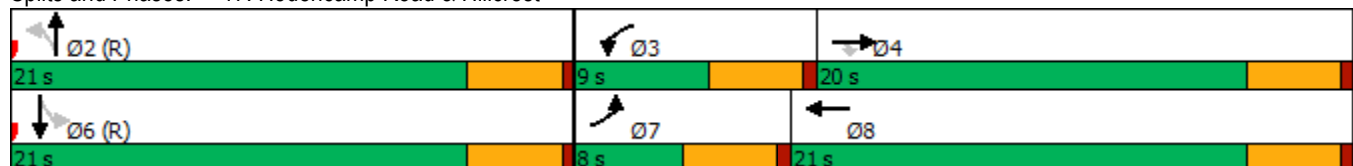
Intersection LOS: B

Intersection Capacity Utilization 39.8%

ICU Level of Service A























Analysis Period (min) 15

Splits and Phases: 17: Hodencamp Road & Hillcrest



Lanes, Volumes, Timings
21: Moorpark Road & Hillcrest













01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	104	108	83	129	79	70	565	78	97	579	29
Future Volume (vph)	47	104	108	83	129	79	70	565	78	97	579	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95	0.95	0.97	0.91	0.91	0.97	0.95	0.95
Frt			0.850		0.943			0.982			0.993	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	1863	1583	1770	3337	0	3433	4994	0	3433	3514	0
Flt Permitted	0.950			0.684			0.950			0.950		
Satd. Flow (perm)	3433	1863	1583	1274	3337	0	3433	4994	0	3433	3514	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			117		86			26			6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		183			522			376			623	
Travel Time (s)		4.2			11.9			8.5			14.2	
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
Adj. Flow (vph)	51	113	117	90	140	86	76	614	85	105	629	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	51	113	117	90	226	0	76	699	0	105	661	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Prot	Perm	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	4		8		5	2		1	6	
Permitted Phases				8								
Minimum Split (s)	8.0	20.0	20.0	20.0	20.0		8.0	20.0		8.0	20.0	
Total Split (s)	13.0	46.0	46.0	33.0	33.0		16.0	56.0		18.0	58.0	
Total Split (%)	10.8%	38.3%	38.3%	27.5%	27.5%		13.3%	46.7%		15.0%	48.3%	
Maximum Green (s)	9.0	42.0	42.0	29.0	29.0		12.0	52.0		14.0	54.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead			Lag	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes		Yes	Yes		Yes	Yes	
Walk Time (s)		5.0	5.0	5.0	5.0			5.0			5.0	
Flash Dont Walk (s)		11.0	11.0	11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0	0	0	0			0			0	
Act Effect Green (s)	9.0	42.0	42.0	29.0	29.0		12.0	52.0		14.0	54.0	
Actuated g/C Ratio	0.08	0.35	0.35	0.24	0.24		0.10	0.43		0.12	0.45	
v/c Ratio	0.20	0.17	0.19	0.29	0.26		0.22	0.32		0.26	0.42	
Control Delay	54.2	27.9	5.5	40.3	23.3		67.7	12.0		50.2	23.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	54.2	27.9	5.5	40.3	23.3		67.7	12.0		50.2	23.1	

Lanes, Volumes, Timings

21: Moorpark Road & Hillcrest

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	C	A	D	C		E	B		D	C	
Approach Delay		23.4			28.2			17.5			26.9	
Approach LOS		C			C			B			C	
Stops (vph)	42	71	13	66	102		69	148		87	395	
Fuel Used(gal)	1	1	0	3	5		2	6		2	8	
CO Emissions (g/hr)	57	79	24	177	368		124	445		136	559	
NOx Emissions (g/hr)	11	15	5	34	72		24	87		26	109	
VOC Emissions (g/hr)	13	18	6	41	85		29	103		31	130	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	19	60	0	57	45		31	46		38	176	
Queue Length 95th (ft)	40	105	40	107	80		59	64		67	226	
Internal Link Dist (ft)		103			442			296			543	
Turn Bay Length (ft)												
Base Capacity (vph)	257	652	630	307	871		343	2178		400	1584	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.20	0.17	0.19	0.29	0.26		0.22	0.32		0.26	0.42	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 0.42

Intersection Signal Delay: 23.2


Intersection LOS: C

Intersection Capacity Utilization 43.7%

ICU Level of Service A

Analysis Period (min) 15













Splits and Phases: 21: Moorpark Road & Hillcrest

 Ø1	 Ø2 (R)	 Ø4
18 s	56 s	46 s
 Ø5	 Ø6 (R)	 Ø7
16 s	58 s	13 s
		 Ø8
		33 s

Lanes, Volumes, Timings

23: Frontage Road/Highway 23 Off-Ramp & Hillcrest

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↵	↑						↵↵	
Traffic Volume (vph)	0	386	15	7	177	0	0	0	0	280	378	282
Future Volume (vph)	0	386	15	7	177	0	0	0	0	280	378	282
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95
Fr't		0.994									0.955	
Flt Protected				0.950							0.985	
Satd. Flow (prot)	0	3518	0	1770	1863	0	0	0	0	0	3329	0
Flt Permitted				0.499							0.985	
Satd. Flow (perm)	0	3518	0	930	1863	0	0	0	0	0	3329	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11									199	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		112			455			823			414	
Travel Time (s)		2.5			10.3			18.7			9.4	
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
Adj. Flow (vph)	0	420	16	8	192	0	0	0	0	304	411	307
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	436	0	8	192	0	0	0	0	0	1022	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		Perm	NA						Perm	NA
Protected Phases		4			8							6
Permitted Phases				8							6	
Minimum Split (s)		20.0		20.0	20.0					20.0	20.0	
Total Split (s)		20.0		20.0	20.0					20.0	20.0	
Total Split (%)		50.0%		50.0%	50.0%					50.0%	50.0%	
Maximum Green (s)		16.0		16.0	16.0					16.0	16.0	
Yellow Time (s)		3.5		3.5	3.5					3.5	3.5	
All-Red Time (s)		0.5		0.5	0.5					0.5	0.5	
Lost Time Adjust (s)		0.0		0.0	0.0						0.0	
Total Lost Time (s)		4.0		4.0	4.0						4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)		5.0		5.0	5.0					5.0	5.0	
Flash Dont Walk (s)		11.0		11.0	11.0					11.0	11.0	
Pedestrian Calls (#/hr)		0		0	0					0	0	
Act Effect Green (s)		16.0		16.0	16.0						16.0	
Actuated g/C Ratio		0.40		0.40	0.40						0.40	
v/c Ratio		0.31		0.02	0.26						0.70	
Control Delay		8.8		7.6	9.2						11.2	
Queue Delay		0.0		0.0	0.0						0.0	
Total Delay		8.8		7.6	9.2						11.2	

Lanes, Volumes, Timings

23: Frontage Road/Highway 23 Off-Ramp & Hillcrest

01/10/2024

	↖	→	↘	↙	←	↖	↙	↑	↘	↘	↓	↙
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		A		A	A						B	
Approach Delay		8.8			9.2						11.2	
Approach LOS		A			A						B	
Stops (vph)		241		7	109						590	
Fuel Used(gal)		9		0	3						8	
CO Emissions (g/hr)		634		10	238						589	
NOx Emissions (g/hr)		123		2	46						115	
VOC Emissions (g/hr)		147		2	55						137	
Dilemma Vehicles (#)		0		0	0						0	
Queue Length 50th (ft)		32		1	27						72	
Queue Length 95th (ft)		55		6	57						123	
Internal Link Dist (ft)		32			375			743			334	
Turn Bay Length (ft)												
Base Capacity (vph)		1413		372	745						1451	
Starvation Cap Reductn		0		0	0						0	
Spillback Cap Reductn		0		0	0						0	
Storage Cap Reductn		0		0	0						0	
Reduced v/c Ratio		0.31		0.02	0.26						0.70	

Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 40

Offset: 0 (0%), Referenced to phase 2: and 6:SBTL, Start of Green

Natural Cycle: 40

Control Type: Pretimed

Maximum v/c Ratio: 0.70

Intersection Signal Delay: 10.3

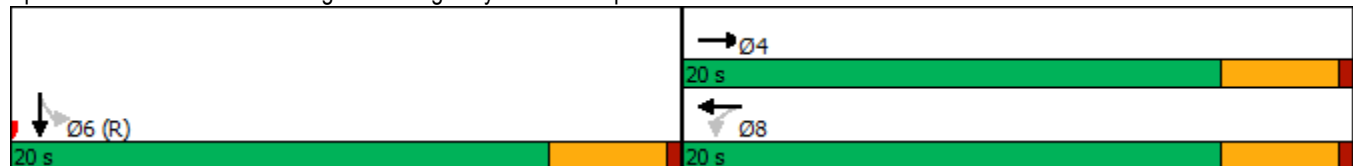
Intersection LOS: B

Intersection Capacity Utilization 45.4%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 23: Frontage Road/Highway 23 Off-Ramp & Hillcrest



Lanes, Volumes, Timings
24: Thousand Oaks & Frontage Road

01/10/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↘	↗↗
Traffic Volume (vph)	0	554	452	0	209	188
Future Volume (vph)	0	554	452	0	209	188
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	0.88
Fr _t						0.850
Fl _t Protected					0.950	
Satd. Flow (prot)	0	3539	3539	0	1770	2787
Fl _t Permitted					0.950	
Satd. Flow (perm)	0	3539	3539	0	1770	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						204
Link Speed (mph)		30	30		30	
Link Distance (ft)		251	831		823	
Travel Time (s)		5.7	18.9		18.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	602	491	0	227	204
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	602	491	0	227	204
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Minimum Split (s)		20.0	20.0		20.0	20.0
Total Split (s)		20.0	20.0		20.0	20.0
Total Split (%)		50.0%	50.0%		50.0%	50.0%
Maximum Green (s)		16.0	16.0		16.0	16.0
Yellow Time (s)		3.5	3.5		3.5	3.5
All-Red Time (s)		0.5	0.5		0.5	0.5
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)		5.0	5.0		5.0	5.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0
Act Effect Green (s)		16.0	16.0		16.0	16.0
Actuated g/C Ratio		0.40	0.40		0.40	0.40
v/c Ratio		0.43	0.35		0.32	0.16
Control Delay		9.8	9.2		16.5	8.3
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		9.8	9.2		16.5	8.3

Future - AM Peak 1:40 pm 09/06/2023 Baseline

Synchro 11 Report
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Lanes, Volumes, Timings

24: Thousand Oaks & Frontage Road

01/10/2024

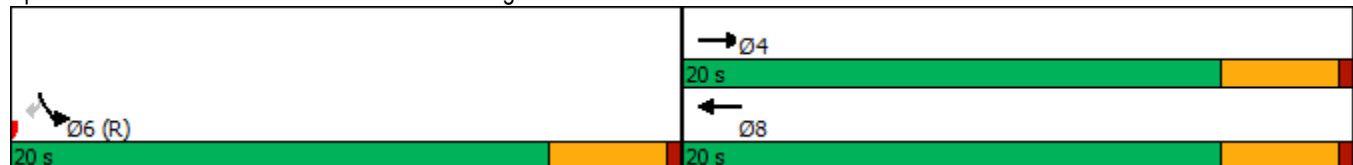


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
LOS		A	A		B	A
Approach Delay		9.8	9.2		12.6	
Approach LOS		A	A		B	
Stops (vph)		363	284		192	115
Fuel Used(gal)		13	6		3	2
CO Emissions (g/hr)		878	447		217	151
NOx Emissions (g/hr)		171	87		42	29
VOC Emissions (g/hr)		203	104		50	35
Dilemma Vehicles (#)		0	0		0	0
Queue Length 50th (ft)		47	37		54	5
Queue Length 95th (ft)		77	63		m83	m21
Internal Link Dist (ft)		171	751		743	
Turn Bay Length (ft)						
Base Capacity (vph)		1415	1415		708	1237
Starvation Cap Reductn		0	0		0	0
Spillback Cap Reductn		0	0		0	0
Storage Cap Reductn		0	0		0	0
Reduced v/c Ratio		0.43	0.35		0.32	0.16

Intersection Summary

Area Type: Other
Cycle Length: 40
Actuated Cycle Length: 40
Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green
Natural Cycle: 40
Control Type: Pretimed
Maximum v/c Ratio: 0.43
Intersection Signal Delay: 10.4 Intersection LOS: B
Intersection Capacity Utilization 33.6% ICU Level of Service A
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.
























Splits and Phases: 24: Thousand Oaks & Frontage Road



Lanes, Volumes, Timings

33: Rancho & Thousand Oaks

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	375	257	303	366	76	198	276	314	101	282	32
Future Volume (vph)	41	375	257	303	366	76	198	276	314	101	282	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Fr't			0.850		0.974				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	3433	3447	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.416			0.569		
Satd. Flow (perm)	1770	3539	1583	3433	3447	0	775	3539	1583	1060	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			279		28				341			195
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		296			389			511			569	
Travel Time (s)		6.7			8.8			11.6			12.9	
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
Adj. Flow (vph)	45	408	279	329	398	83	215	300	341	110	307	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	45	408	279	329	481	0	215	300	341	110	307	35
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA		pm+pt	NA	Prot	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2	2	1	6	
Permitted Phases			4				2			6		6
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0		8.0	20.0	20.0	8.0	20.0	20.0
Total Split (s)	12.0	26.0	26.0	23.0	37.0		19.0	34.0	34.0	12.0	27.0	27.0
Total Split (%)	12.6%	27.4%	27.4%	24.2%	38.9%		20.0%	35.8%	35.8%	12.6%	28.4%	28.4%
Maximum Green (s)	8.0	22.0	22.0	19.0	33.0		15.0	30.0	30.0	8.0	23.0	23.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Walk Time (s)		5.0	5.0		5.0			5.0	5.0		5.0	5.0
Flash Dont Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effect Green (s)	8.0	22.0	22.0	19.0	33.0		42.0	30.0	30.0	31.0	23.0	23.0
Actuated g/C Ratio	0.08	0.23	0.23	0.20	0.35		0.44	0.32	0.32	0.33	0.24	0.24
v/c Ratio	0.30	0.50	0.48	0.48	0.40		0.43	0.27	0.47	0.27	0.36	0.07
Control Delay	46.6	34.2	6.9	36.3	23.2		19.9	25.1	5.1	18.4	31.3	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.6	34.2	6.9	36.3	23.2		19.9	25.1	5.1	18.4	31.3	0.2













Future - AM Peak 1:40 pm 09/06/2023 Baseline

Synchro 11 Report
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Lanes, Volumes, Timings

33: Rancho & Thousand Oaks

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	C	A	D	C		B	C	A	B	C	A
Approach Delay		24.6			28.5			15.8			25.8	
Approach LOS		C			C			B			C	
Stops (vph)	38	317	30	260	304		122	199	31	67	227	0
Fuel Used(gal)	1	8	3	5	5		2	4	2	2	7	0
CO Emissions (g/hr)	67	535	195	321	357		158	252	122	151	488	31
NOx Emissions (g/hr)	13	104	38	63	70		31	49	24	29	95	6
VOC Emissions (g/hr)	16	124	45	74	83		37	58	28	35	113	7
Dilemma Vehicles (#)	0	0	0	0	0		0	0	0	0	0	0
Queue Length 50th (ft)	26	113	0	91	106		80	71	0	38	81	0
Queue Length 95th (ft)	61	160	63	134	151		131	105	60	71	120	0
Internal Link Dist (ft)		216			309			431			489	
Turn Bay Length (ft)												
Base Capacity (vph)	149	819	580	686	1215		499	1117	733	405	856	531
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.50	0.48	0.48	0.40		0.43	0.27	0.47	0.27	0.36	0.07

Intersection Summary

Area Type: Other

Cycle Length: 95

Actuated Cycle Length: 95

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 0.50

Intersection Signal Delay: 23.3

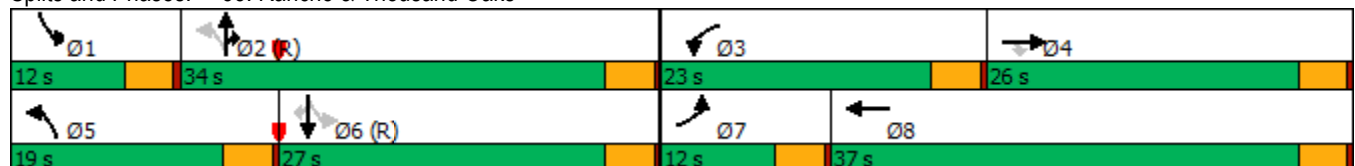
Intersection LOS: C

Intersection Capacity Utilization 51.1%

ICU Level of Service A

Analysis Period (min) 15

























Splits and Phases: 33: Rancho & Thousand Oaks



Lanes, Volumes, Timings

3: Moorpark Road & Thousand Oaks Blvd

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	71	226	385	129	290	288	885	319	187	875	20
Future Volume (vph)	33	71	226	385	129	290	288	885	319	187	875	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	0.97	1.00	1.00	0.97	0.91	1.00	0.97	0.91	0.91
Fr't		0.908	0.850			0.850			0.850		0.997	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3078	1441	3433	1863	1583	3433	5085	1583	3433	5070	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3078	1441	3433	1863	1583	3433	5085	1583	3433	5070	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		123	155			315			347		3	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		192			672			498			415	
Travel Time (s)		4.4			15.3			11.3			9.4	
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
Adj. Flow (vph)	36	77	246	418	140	315	313	962	347	203	951	22
Shared Lane Traffic (%)			50%									
Lane Group Flow (vph)	36	200	123	418	140	315	313	962	347	203	973	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Prot	Prot	NA	Prot	Prot	NA	Prot	Prot	NA	
Protected Phases	7	4	4	3	8	8	5	2	2	1	6	
Permitted Phases												
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	
Total Split (s)	12.0	22.0	22.0	29.0	39.0	39.0	25.0	51.0	51.0	18.0	44.0	
Total Split (%)	10.0%	18.3%	18.3%	24.2%	32.5%	32.5%	20.8%	42.5%	42.5%	15.0%	36.7%	
Maximum Green (s)	8.0	18.0	18.0	25.0	35.0	35.0	21.0	47.0	47.0	14.0	40.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	
Act Effect Green (s)	8.0	18.0	18.0	25.0	35.0	35.0	21.0	47.0	47.0	14.0	40.0	
Actuated g/C Ratio	0.07	0.15	0.15	0.21	0.29	0.29	0.18	0.39	0.39	0.12	0.33	
v/c Ratio	0.31	0.35	0.35	0.58	0.26	0.46	0.52	0.48	0.42	0.51	0.58	
Control Delay	60.5	20.2	6.2	46.6	34.2	5.9	48.5	28.4	4.1	57.4	24.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	60.5	20.2	6.2	46.6	34.2	5.9	48.5	28.4	4.1	57.4	24.9	













Future - PM Peak 1:40 pm 09/06/2023 Baseline

Synchro 11 Report
Page 1

Lanes, Volumes, Timings

3: Moorpark Road & Thousand Oaks Blvd

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	C	A	D	C	A	D	C	A	E	C	
Approach Delay		19.4			29.9			27.1			30.5	
Approach LOS		B			C			C			C	
Stops (vph)	32	66	7	340	97	28	255	642	25	180	432	
Fuel Used(gal)	1	1	0	12	4	5	5	12	2	4	12	
CO Emissions (g/hr)	44	98	24	836	250	373	375	846	115	303	870	
NOx Emissions (g/hr)	9	19	5	163	49	73	73	165	22	59	169	
VOC Emissions (g/hr)	10	23	6	194	58	86	87	196	27	70	202	
Dilemma Vehicles (#)	0	0	0	0	0	0	0	0	0	0	0	
Queue Length 50th (ft)	27	29	0	151	83	0	114	202	0	82	130	
Queue Length 95th (ft)	63	66	35	205	138	67	161	243	59	119	190	
Internal Link Dist (ft)		112			592			418			335	
Turn Bay Length (ft)												
Base Capacity (vph)	118	566	347	715	543	684	600	1991	831	400	1692	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.31	0.35	0.35	0.58	0.26	0.46	0.52	0.48	0.42	0.51	0.58	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 28.0









Intersection LOS: C

Intersection Capacity Utilization 54.3%

ICU Level of Service A

Analysis Period (min) 15




















Splits and Phases: 3: Moorpark Road & Thousand Oaks Blvd

 Ø1	 Ø2 (R)	 Ø3	 Ø4
18 s	51 s	29 s	22 s
 Ø5	 Ø6 (R)	 Ø7	 Ø8
25 s	44 s	12 s	39 s

Lanes, Volumes, Timings

10: Lombard Street/Office Dwy & Thousand Oaks Boulevard

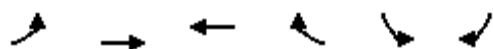
01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	500	11	41	565	5	19	1	71	12	0	25
Future Volume (vph)	6	500	11	41	565	5	19	1	71	12	0	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.997			0.999				0.850			0.850
Flt Protected		0.999		0.950			0.950			0.950		
Satd. Flow (prot)	0	3525	0	1770	3536	0	1770	0	1583	1770	0	1583
Flt Permitted		0.999		0.950			0.950			0.950		
Satd. Flow (perm)	0	3525	0	1770	3536	0	1770	0	1583	1770	0	1583
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1027			262			327			171	
Travel Time (s)		23.3			6.0			7.4			3.9	
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
Adj. Flow (vph)	7	543	12	45	614	5	21	1	77	13	0	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	562	0	45	619	0	21	1	77	13	0	27
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Yield	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization Err%	ICU Level of Service H											
Analysis Period (min)	15											

Lanes, Volumes, Timings

12: Thousand Oaks Boulevard/Thousand Oaks & Hodencamp

01/10/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	90	474	538	220	201	75
Future Volume (vph)	90	474	538	220	201	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	1.00
Fr _t				0.850		0.850
Fl _t Protected	0.950				0.950	
Satd. Flow (prot)	1770	3539	3539	1583	3433	1583
Fl _t Permitted	0.950				0.950	
Satd. Flow (perm)	1770	3539	3539	1583	3433	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				239		82
Link Speed (mph)		30	30		30	
Link Distance (ft)		262	1493		609	
Travel Time (s)		6.0	33.9		13.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	515	585	239	218	82
Shared Lane Traffic (%)						
Lane Group Flow (vph)	98	515	585	239	218	82
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Minimum Split (s)	8.0	20.0	20.0	20.0	20.0	20.0
Total Split (s)	10.0	30.0	20.0	20.0	20.0	20.0
Total Split (%)	20.0%	60.0%	40.0%	40.0%	40.0%	40.0%
Maximum Green (s)	6.0	26.0	16.0	16.0	16.0	16.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Walk Time (s)		5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0	0	0	0
Act Effect Green (s)	6.0	26.0	16.0	16.0	16.0	16.0
Actuated g/C Ratio	0.12	0.52	0.32	0.32	0.32	0.32
v/c Ratio	0.46	0.28	0.52	0.36	0.20	0.15
Control Delay	28.2	7.2	15.8	4.0	18.6	10.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.2	7.2	15.8	4.0	18.6	10.8

Lanes, Volumes, Timings

12: Thousand Oaks Boulevard/Thousand Oaks & Hodencamp

01/10/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
LOS	C	A	B	A	B	B
Approach Delay		10.6	12.4		16.4	
Approach LOS		B	B		B	
Stops (vph)	83	238	410	31	174	44
Fuel Used(gal)	1	3	13	4	3	1
CO Emissions (g/hr)	81	209	920	287	226	68
NOx Emissions (g/hr)	16	41	179	56	44	13
VOC Emissions (g/hr)	19	48	213	66	52	16
Dilemma Vehicles (#)	0	0	0	0	0	0
Queue Length 50th (ft)	27	39	71	0	32	0
Queue Length 95th (ft)	64	62	111	37	56	28
Internal Link Dist (ft)		182	1413		529	
Turn Bay Length (ft)						
Base Capacity (vph)	212	1840	1132	669	1098	562
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.28	0.52	0.36	0.20	0.15

Intersection Summary

Area Type: Other

Cycle Length: 50

Actuated Cycle Length: 50

Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green

Natural Cycle: 50

Control Type: Pretimed

Maximum v/c Ratio: 0.52

Intersection Signal Delay: 12.5

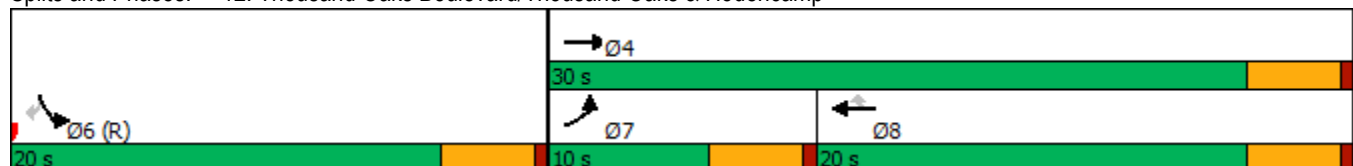
Intersection LOS: B

Intersection Capacity Utilization 35.6%

ICU Level of Service A






















Analysis Period (min) 15

Splits and Phases: 12: Thousand Oaks Boulevard/Thousand Oaks & Hodencamp



Lanes, Volumes, Timings
17: Hodencamp Road & Hillcrest

01/10/2024













												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	389	68	36	373	168	49	198	31	156	156	39
Future Volume (vph)	42	389	68	36	373	168	49	198	31	156	156	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.953			0.980			0.970	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	3373	0	1770	3468	0	1770	3433	0
Flt Permitted	0.950			0.950			0.619			0.597		
Satd. Flow (perm)	1770	1863	1583	1770	3373	0	1153	3468	0	1112	3433	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			109		158			34			42	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1053			560			357			554	
Travel Time (s)		23.9			12.7			8.1			12.6	
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
Adj. Flow (vph)	46	423	74	39	405	183	53	215	34	170	170	42
Shared Lane Traffic (%)												
Lane Group Flow (vph)	46	423	74	39	588	0	53	249	0	170	212	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4				2			6		
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	9.0	22.0	22.0	8.0	21.0		20.0	20.0		20.0	20.0	
Total Split (%)	18.0%	44.0%	44.0%	16.0%	42.0%		40.0%	40.0%		40.0%	40.0%	
Maximum Green (s)	5.0	18.0	18.0	4.0	17.0		16.0	16.0		16.0	16.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Walk Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0	11.0		11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0		0	0		0	0	
Act Effect Green (s)	5.0	18.0	18.0	4.0	17.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.10	0.36	0.36	0.08	0.34		0.32	0.32		0.32	0.32	
v/c Ratio	0.26	0.63	0.12	0.28	0.47		0.14	0.22		0.48	0.19	
Control Delay	24.8	18.4	2.1	26.9	10.7		9.8	8.3		19.2	10.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	24.8	18.4	2.1	26.9	10.7		9.8	8.3		19.2	10.3	

Future - PM Peak 1:40 pm 09/06/2023 Baseline

Synchro 11 Report
Page 6

Lanes, Volumes, Timings
17: Hodencamp Road & Hillcrest

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	C	B	A	C	B		A	A		B	B	
Approach Delay		16.7			11.7			8.6			14.3	
Approach LOS		B			B			A			B	
Stops (vph)	42	310	6	38	290		34	132		124	104	
Fuel Used(gal)	1	10	1	1	12		1	3		2	2	
CO Emissions (g/hr)	83	706	89	73	857		46	199		138	128	
NOx Emissions (g/hr)	16	137	17	14	167		9	39		27	25	
VOC Emissions (g/hr)	19	164	21	17	199		11	46		32	30	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	13	99	0	11	48		13	28		39	18	
Queue Length 95th (ft)	37	176	12	34	84		m24	36		86	37	
Internal Link Dist (ft)		973			480			277			474	
Turn Bay Length (ft)												
Base Capacity (vph)	177	670	639	141	1251		368	1132		355	1127	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.26	0.63	0.12	0.28	0.47		0.14	0.22		0.48	0.19	

Intersection Summary

Area Type: Other

Cycle Length: 50

Actuated Cycle Length: 50

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 50

Control Type: Pretimed

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 13.2

Intersection LOS: B

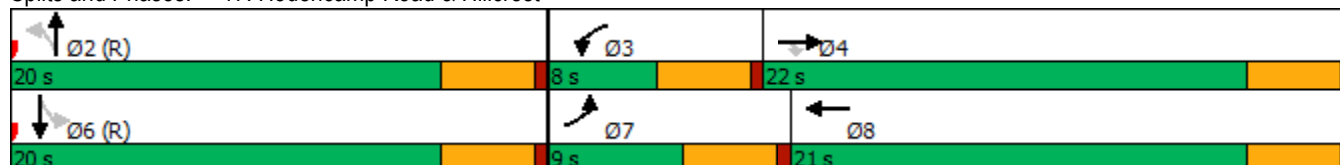
Intersection Capacity Utilization 52.2%

ICU Level of Service A

Analysis Period (min) 15





























m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 17: Hodencamp Road & Hillcrest



Lanes, Volumes, Timings
21: Moorpark Road & Hillcrest













01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 				 		 	  		 	 	
Traffic Volume (vph)	174	248	274	150	263	178	188	905	92	126	629	69
Future Volume (vph)	174	248	274	150	263	178	188	905	92	126	629	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95	0.95	0.97	0.91	0.91	0.97	0.95	0.95
Frt			0.850		0.940			0.986			0.985	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	1863	1583	1770	3327	0	3433	5014	0	3433	3486	0
Flt Permitted	0.950			0.593			0.950			0.950		
Satd. Flow (perm)	3433	1863	1583	1105	3327	0	3433	5014	0	3433	3486	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			291		137			16			11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		183			522			376			623	
Travel Time (s)		4.2			11.9			8.5			14.2	
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
Adj. Flow (vph)	189	270	298	163	286	193	204	984	100	137	684	75
Shared Lane Traffic (%)												
Lane Group Flow (vph)	189	270	298	163	479	0	204	1084	0	137	759	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Prot	Perm	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	4		8		5	2		1	6	
Permitted Phases				8								
Minimum Split (s)	8.0	20.0	20.0	20.0	20.0		8.0	20.0		8.0	20.0	
Total Split (s)	17.0	55.0	55.0	38.0	38.0		18.0	50.0		15.0	47.0	
Total Split (%)	14.2%	45.8%	45.8%	31.7%	31.7%		15.0%	41.7%		12.5%	39.2%	
Maximum Green (s)	13.0	51.0	51.0	34.0	34.0		14.0	46.0		11.0	43.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead			Lag	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes		Yes	Yes		Yes	Yes	
Walk Time (s)		5.0	5.0	5.0	5.0			5.0			5.0	
Flash Dont Walk (s)		11.0	11.0	11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0	0	0	0			0			0	
Act Effect Green (s)	13.0	51.0	51.0	34.0	34.0		14.0	46.0		11.0	43.0	
Actuated g/C Ratio	0.11	0.42	0.42	0.28	0.28		0.12	0.38		0.09	0.36	
v/c Ratio	0.51	0.34	0.35	0.52	0.46		0.51	0.56		0.44	0.60	
Control Delay	55.8	24.7	3.9	43.3	26.4		75.6	14.9		56.3	33.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	55.8	24.7	3.9	43.3	26.4		75.6	14.9		56.3	33.5	

Lanes, Volumes, Timings

21: Moorpark Road & Hillcrest

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	C	A	D	C		E	B		E	C	
Approach Delay		24.3			30.7			24.5			37.0	
Approach LOS		C			C			C			D	
Stops (vph)	161	163	23	125	254		184	272		117	550	
Fuel Used(gal)	3	3	1	5	12		5	11		3	11	
CO Emissions (g/hr)	218	175	52	328	813		354	746		189	782	
NOx Emissions (g/hr)	42	34	10	64	158		69	145		37	152	
VOC Emissions (g/hr)	50	41	12	76	189		82	173		44	181	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	72	138	3	106	113		85	85		52	247	
Queue Length 95th (ft)	111	206	56	180	164		126	109		85	313	
Internal Link Dist (ft)		103			442			296			543	
Turn Bay Length (ft)												
Base Capacity (vph)	371	791	840	313	1040		400	1931		314	1256	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.51	0.34	0.35	0.52	0.46		0.51	0.56		0.44	0.60	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 28.7








Intersection LOS: C

Intersection Capacity Utilization 59.6%

ICU Level of Service B

Analysis Period (min) 15













Splits and Phases: 21: Moorpark Road & Hillcrest

 Ø1	 Ø2 (R)	 Ø4
15 s	50 s	55 s
 Ø5	 Ø6 (R)	 Ø7
18 s	47 s	17 s
		 Ø8
		38 s

Lanes, Volumes, Timings

23: Frontage Road/Highway 23 Off-Ramp & Hillcrest/Hillcrest

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↵	↑						↵↵	
Traffic Volume (vph)	0	590	12	9	374	0	0	0	0	188	236	280
Future Volume (vph)	0	590	12	9	374	0	0	0	0	188	236	280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95
Fr't		0.997									0.940	
Flt Protected				0.950							0.987	
Satd. Flow (prot)	0	3529	0	1770	1863	0	0	0	0	0	3284	0
Flt Permitted				0.361							0.987	
Satd. Flow (perm)	0	3529	0	672	1863	0	0	0	0	0	3284	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6									291	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		112			455			823			414	
Travel Time (s)		2.5			10.3			18.7			9.4	
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
Adj. Flow (vph)	0	641	13	10	407	0	0	0	0	204	257	304
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	654	0	10	407	0	0	0	0	0	765	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases				8						6		
Minimum Split (s)		20.0		20.0	20.0					20.0	20.0	
Total Split (s)		20.0		20.0	20.0					20.0	20.0	
Total Split (%)		50.0%		50.0%	50.0%					50.0%	50.0%	
Maximum Green (s)		16.0		16.0	16.0					16.0	16.0	
Yellow Time (s)		3.5		3.5	3.5					3.5	3.5	
All-Red Time (s)		0.5		0.5	0.5					0.5	0.5	
Lost Time Adjust (s)		0.0		0.0	0.0						0.0	
Total Lost Time (s)		4.0		4.0	4.0						4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)		5.0		5.0	5.0					5.0	5.0	
Flash Dont Walk (s)		11.0		11.0	11.0					11.0	11.0	
Pedestrian Calls (#/hr)		0		0	0					0	0	
Act Effect Green (s)		16.0		16.0	16.0						16.0	
Actuated g/C Ratio		0.40		0.40	0.40						0.40	
v/c Ratio		0.46		0.04	0.55						0.51	
Control Delay		10.1		7.9	12.6						6.9	
Queue Delay		0.0		0.0	0.0						0.0	
Total Delay		10.1		7.9	12.6						6.9	

Lanes, Volumes, Timings

23: Frontage Road/Highway 23 Off-Ramp & Hillcrest/Hillcrest

01/10/2024

	↖	→	↘	↙	←	↖	↙	↑	↘	↘	↓	↙
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		B		A	B						A	
Approach Delay		10.1			12.5						6.9	
Approach LOS		B			B						A	
Stops (vph)		398		8	269						299	
Fuel Used(gal)		14		0	8						5	
CO Emissions (g/hr)		977		13	535						343	
NOx Emissions (g/hr)		190		3	104						67	
VOC Emissions (g/hr)		226		3	124						79	
Dilemma Vehicles (#)		0		0	0						0	
Queue Length 50th (ft)		52		1	65						36	
Queue Length 95th (ft)		84		7	125						67	
Internal Link Dist (ft)		32			375			743			334	
Turn Bay Length (ft)												
Base Capacity (vph)		1415		268	745						1488	
Starvation Cap Reductn		0		0	0						0	
Spillback Cap Reductn		0		0	0						0	
Storage Cap Reductn		0		0	0						0	
Reduced v/c Ratio		0.46		0.04	0.55						0.51	

Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 40

Offset: 0 (0%), Referenced to phase 2: and 6:SBTL, Start of Green

Natural Cycle: 40

Control Type: Pretimed

Maximum v/c Ratio: 0.55

Intersection Signal Delay: 9.3

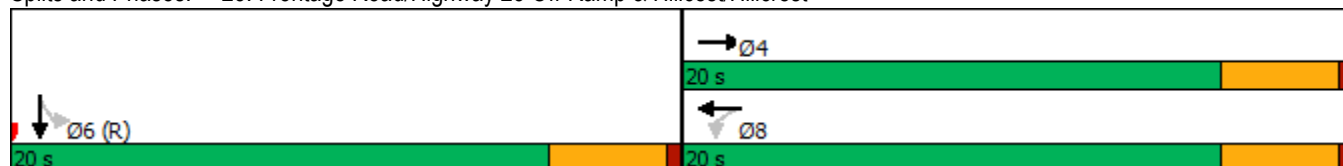
Intersection LOS: A

Intersection Capacity Utilization 47.3%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 23: Frontage Road/Highway 23 Off-Ramp & Hillcrest/Hillcrest



Lanes, Volumes, Timings
24: Thousand Oaks & Frontage Road

01/10/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↘	↗↗
Traffic Volume (vph)	0	871	689	0	147	118
Future Volume (vph)	0	871	689	0	147	118
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	0.88
Fr _t						0.850
Fl _t Protected					0.950	
Satd. Flow (prot)	0	3539	3539	0	1770	2787
Fl _t Permitted					0.950	
Satd. Flow (perm)	0	3539	3539	0	1770	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						128
Link Speed (mph)		30	30		30	
Link Distance (ft)		251	831		823	
Travel Time (s)		5.7	18.9		18.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	947	749	0	160	128
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	947	749	0	160	128
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Minimum Split (s)		20.0	20.0		20.0	20.0
Total Split (s)		20.0	20.0		20.0	20.0
Total Split (%)		50.0%	50.0%		50.0%	50.0%
Maximum Green (s)		16.0	16.0		16.0	16.0
Yellow Time (s)		3.5	3.5		3.5	3.5
All-Red Time (s)		0.5	0.5		0.5	0.5
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)		5.0	5.0		5.0	5.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0
Act Effect Green (s)		16.0	16.0		16.0	16.0
Actuated g/C Ratio		0.40	0.40		0.40	0.40
v/c Ratio		0.67	0.53		0.23	0.11
Control Delay		12.7	10.8		14.6	7.6
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		12.7	10.8		14.6	7.6

Future - PM Peak 1:40 pm 09/06/2023 Baseline

Synchro 11 Report
Page 12

Lanes, Volumes, Timings
24: Thousand Oaks & Frontage Road

01/10/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
LOS		B	B		B	A
Approach Delay		12.7	10.8		11.5	
Approach LOS		B	B		B	
Stops (vph)		652	477		123	58
Fuel Used(gal)		21	10		2	1
CO Emissions (g/hr)		1447	714		144	88
NOx Emissions (g/hr)		281	139		28	17
VOC Emissions (g/hr)		335	165		33	20
Dilemma Vehicles (#)		0	0		0	0
Queue Length 50th (ft)		85	62		33	0
Queue Length 95th (ft)		132	99		m72	m20
Internal Link Dist (ft)		171	751		743	
Turn Bay Length (ft)						
Base Capacity (vph)		1415	1415		708	1191
Starvation Cap Reductn		0	0		0	0
Spillback Cap Reductn		0	0		0	0
Storage Cap Reductn		0	0		0	0
Reduced v/c Ratio		0.67	0.53		0.23	0.11

Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 40

Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green

Natural Cycle: 40

Control Type: Pretimed

Maximum v/c Ratio: 0.67

Intersection Signal Delay: 11.8

Intersection LOS: B

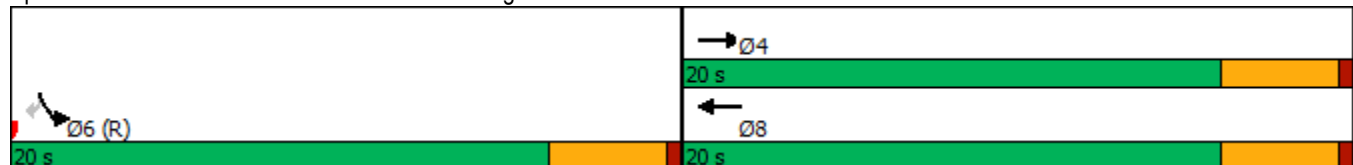
Intersection Capacity Utilization 38.9%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.
























Splits and Phases: 24: Thousand Oaks & Frontage Road



Lanes, Volumes, Timings

33: Rancho & Thousand Oaks

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	477	294	369	715	88	247	282	365	65	269	20
Future Volume (vph)	35	477	294	369	715	88	247	282	365	65	269	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Fr't			0.850		0.984				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	3433	3483	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.406			0.565		
Satd. Flow (perm)	1770	3539	1583	3433	3483	0	756	3539	1583	1052	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			320		16				397			195
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		296			389			511			569	
Travel Time (s)		6.7			8.8			11.6			12.9	
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
Adj. Flow (vph)	38	518	320	401	777	96	268	307	397	71	292	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	38	518	320	401	873	0	268	307	397	71	292	22
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA		pm+pt	NA	Prot	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2	2	1	6	
Permitted Phases			4				2			6		6
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0		8.0	20.0	20.0	8.0	20.0	20.0
Total Split (s)	10.0	27.0	27.0	23.0	40.0		21.0	36.0	36.0	9.0	24.0	24.0
Total Split (%)	10.5%	28.4%	28.4%	24.2%	42.1%		22.1%	37.9%	37.9%	9.5%	25.3%	25.3%
Maximum Green (s)	6.0	23.0	23.0	19.0	36.0		17.0	32.0	32.0	5.0	20.0	20.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Walk Time (s)		5.0	5.0		5.0			5.0	5.0		5.0	5.0
Flash Dont Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effect Green (s)	6.0	23.0	23.0	19.0	36.0		41.0	32.0	32.0	25.0	20.0	20.0
Actuated g/C Ratio	0.06	0.24	0.24	0.20	0.38		0.43	0.34	0.34	0.26	0.21	0.21
v/c Ratio	0.34	0.61	0.51	0.58	0.66		0.53	0.26	0.50	0.23	0.39	0.05
Control Delay	51.4	35.5	6.7	38.4	26.8		22.4	23.6	4.8	19.4	34.1	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.4	35.5	6.7	38.4	26.8		22.4	23.6	4.8	19.4	34.1	0.1













Future - PM Peak 1:40 pm 09/06/2023 Baseline

Synchro 11 Report
Page 14

Lanes, Volumes, Timings

33: Rancho & Thousand Oaks

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	D	A	D	C		C	C	A	B	C	A
Approach Delay		25.7			30.4			15.6			29.5	
Approach LOS		C			C			B			C	
Stops (vph)	35	411	32	326	631		159	196	33	47	225	0
Fuel Used(gal)	1	10	3	6	10		3	4	2	1	7	0
CO Emissions (g/hr)	61	693	221	406	720		209	249	140	99	479	19
NOx Emissions (g/hr)	12	135	43	79	140		41	48	27	19	93	4
VOC Emissions (g/hr)	14	161	51	94	167		48	58	32	23	111	5
Dilemma Vehicles (#)	0	0	0	0	0		0	0	0	0	0	0
Queue Length 50th (ft)	22	146	0	113	221		105	70	0	25	80	0
Queue Length 95th (ft)	55	200	66	162	288		167	103	62	51	120	0
Internal Link Dist (ft)		216			309			431			489	
Turn Bay Length (ft)												
Base Capacity (vph)	111	856	625	686	1329		507	1192	796	314	745	487
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.61	0.51	0.58	0.66		0.53	0.26	0.50	0.23	0.39	0.05

Intersection Summary

Area Type: Other

Cycle Length: 95

Actuated Cycle Length: 95

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 25.0

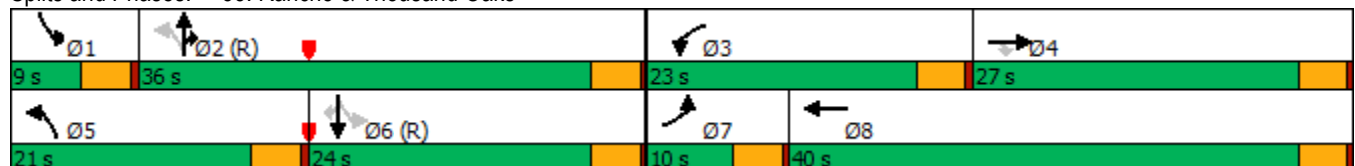
Intersection LOS: C

Intersection Capacity Utilization 60.4%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 33: Rancho & Thousand Oaks



























Future Conditions + Project

Lanes, Volumes, Timings

3: Moorpark Road & Thousand Oaks Blvd













01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	22	45	186	65	122	159	619	463	213	546	21
Future Volume (vph)	9	22	45	186	65	122	159	619	463	213	546	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	0.97	1.00	1.00	0.97	0.91	1.00	0.97	0.91	0.91
Fr't		0.923	0.850			0.850			0.850		0.994	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3129	1441	3433	1863	1583	3433	5085	1583	3433	5055	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3129	1441	3433	1863	1583	3433	5085	1583	3433	5055	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		25	118			133			503		6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		192			672			498			415	
Travel Time (s)		4.4			15.3			11.3			9.4	
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
Adj. Flow (vph)	10	24	49	202	71	133	173	673	503	232	593	23
Shared Lane Traffic (%)			50%									
Lane Group Flow (vph)	10	49	24	202	71	133	173	673	503	232	616	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Prot	Prot	NA	Prot	Prot	NA	Prot	Prot	NA	
Protected Phases	7	4	4	3	8	8	5	2	2	1	6	
Permitted Phases												
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	
Total Split (s)	9.0	21.0	21.0	20.0	32.0	32.0	19.0	58.0	58.0	21.0	60.0	
Total Split (%)	7.5%	17.5%	17.5%	16.7%	26.7%	26.7%	15.8%	48.3%	48.3%	17.5%	50.0%	
Maximum Green (s)	5.0	17.0	17.0	16.0	28.0	28.0	15.0	54.0	54.0	17.0	56.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	
Act Effect Green (s)	5.0	17.0	17.0	16.0	28.0	28.0	15.0	54.0	54.0	17.0	56.0	
Actuated g/C Ratio	0.04	0.14	0.14	0.13	0.23	0.23	0.12	0.45	0.45	0.14	0.47	
v/c Ratio	0.14	0.11	0.08	0.44	0.16	0.28	0.40	0.29	0.51	0.48	0.26	
Control Delay	59.8	27.1	0.5	51.3	38.0	7.8	51.5	21.4	3.7	63.5	11.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	59.8	27.1	0.5	51.3	38.0	7.8	51.5	21.4	3.7	63.5	11.9	

Lanes, Volumes, Timings

3: Moorpark Road & Thousand Oaks Blvd

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	C	A	D	D	A	D	C	A	E	B	
Approach Delay		23.3			34.7			18.6			26.0	
Approach LOS		C			C			B			C	
Stops (vph)	11	22	0	168	51	17	143	377	29	208	167	
Fuel Used(gal)	0	0	0	6	2	2	3	7	2	5	6	
CO Emissions (g/hr)	13	31	2	417	131	162	215	502	161	365	405	
NOx Emissions (g/hr)	2	6	0	81	25	32	42	98	31	71	79	
VOC Emissions (g/hr)	3	7	1	97	30	38	50	116	37	85	94	
Dilemma Vehicles (#)	0	0	0	0	0	0	0	0	0	0	0	
Queue Length 50th (ft)	8	8	0	75	44	0	64	118	0	96	52	
Queue Length 95th (ft)	26	28	0	113	85	50	101	148	60	138	71	
Internal Link Dist (ft)		112			592			418			335	
Turn Bay Length (ft)												
Base Capacity (vph)	73	464	305	457	434	471	429	2288	989	486	2362	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.14	0.11	0.08	0.44	0.16	0.28	0.40	0.29	0.51	0.48	0.26	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 0.51

Intersection Signal Delay: 23.5









Intersection LOS: C

Intersection Capacity Utilization 48.1%

ICU Level of Service A

Analysis Period (min) 15




















Splits and Phases: 3: Moorpark Road & Thousand Oaks Blvd

 Ø1	 Ø2 (R)	 Ø3	 Ø4
21 s	58 s	20 s	21 s
 Ø5	 Ø6 (R)	 Ø7	 Ø8
19 s	60 s	9 s	32 s

Lanes, Volumes, Timings

10: Lombard Street/Office Dwy & Thousand Oaks Boulevard

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	407	21	49	307	14	55	0	17	3	0	12
Future Volume (vph)	21	407	21	49	307	14	55	0	17	3	0	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993			0.994				0.850			0.850
Flt Protected		0.998		0.950			0.950			0.950		
Satd. Flow (prot)	0	3507	0	1770	3518	0	1770	0	1583	1770	0	1583
Flt Permitted		0.998		0.950			0.950			0.950		
Satd. Flow (perm)	0	3507	0	1770	3518	0	1770	0	1583	1770	0	1583
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1027			262			327			171	
Travel Time (s)		23.3			6.0			7.4			3.9	
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
Adj. Flow (vph)	23	442	23	53	334	15	60	0	18	3	0	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	488	0	53	349	0	60	0	18	3	0	13
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Yield	
Intersection Summary												
Area Type:	Other											
Control Type: Unsignalized												
Intersection Capacity Utilization 34.8%												
ICU Level of Service A												
Analysis Period (min) 15												

Lanes, Volumes, Timings
11: Lombard/DWY2 & Lombard Street

01/10/2024

























Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↗	↘	
Traffic Volume (vph)	0	5	5	44	12	0
Future Volume (vph)	0	5	5	44	12	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t	0.850					
Fl _t Protected	0.950					
Satd. Flow (prot)	0	1863	1863	1583	1770	0
Fl _t Permitted	0.950					
Satd. Flow (perm)	0	1863	1863	1583	1770	0
Link Speed (mph)	30		30	30		
Link Distance (ft)	678		232	327		
Travel Time (s)	15.4		5.3	7.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	5	5	48	13	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	5	5	48	13	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)	0		0	12		
Link Offset(ft)	0		0	0		
Crosswalk Width(ft)	16		16	16		
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control	Yield		Stop	Yield		
Intersection Summary						
Area Type:	Other					
Control Type: Unsignalized						
Intersection Capacity Utilization 13.3%				ICU Level of Service A		
Analysis Period (min) 15						

Lanes, Volumes, Timings

12: Thousand Oaks Boulevard/Thousand Oaks & Hodencamp













01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 					 		
Traffic Volume (vph)	32	396	0	26	285	137	0	0	0	141	0	85
Future Volume (vph)	32	396	0	26	285	137	0	0	0	141	0	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Fr't						0.850						0.850
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1770	3539	0	1770	3539	1583	0	0	0	3433	0	1583
Flt Permitted	0.950			0.502						0.950		
Satd. Flow (perm)	1770	3539	0	935	3539	1583	0	0	0	3433	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						149						109
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		262			1493			251			609	
Travel Time (s)		6.0			33.9			5.7			13.8	
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
Adj. Flow (vph)	35	430	0	28	310	149	0	0	0	153	0	92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	35	430	0	28	310	149	0	0	0	153	0	92
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Perm	NA	Perm				Prot		Perm
Protected Phases	7	4			8					6		
Permitted Phases				8		8						6
Minimum Split (s)	8.0	20.0		20.0	20.0	20.0				20.0		20.0
Total Split (s)	8.0	28.0		20.0	20.0	20.0				22.0		22.0
Total Split (%)	16.0%	56.0%		40.0%	40.0%	40.0%				44.0%		44.0%
Maximum Green (s)	4.0	24.0		16.0	16.0	16.0				18.0		18.0
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5				3.5		3.5
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5				0.5		0.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0				0.0		0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0				4.0		4.0
Lead/Lag	Lead			Lag	Lag	Lag						
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Walk Time (s)		5.0		5.0	5.0	5.0				5.0		5.0
Flash Dont Walk (s)		11.0		11.0	11.0	11.0				11.0		11.0
Pedestrian Calls (#/hr)		0		0	0	0				0		0
Act Effect Green (s)	4.0	24.0		16.0	16.0	16.0				18.0		18.0
Actuated g/C Ratio	0.08	0.48		0.32	0.32	0.32				0.36		0.36
v/c Ratio	0.25	0.25		0.09	0.27	0.25				0.12		0.14
Control Delay	26.2	8.2		13.0	13.5	4.1				18.1		10.3
Queue Delay	0.0	0.0		0.0	0.0	0.0				0.0		0.0
Total Delay	26.2	8.2		13.0	13.5	4.1				18.1		10.3

Lanes, Volumes, Timings

12: Thousand Oaks Boulevard/Thousand Oaks & Hodencamp

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	C	A		B	B	A				B		B
Approach Delay		9.6			10.6						15.2	
Approach LOS		A			B						B	
Stops (vph)	34	211		22	198	24				124		47
Fuel Used(gal)	0	3		1	7	3				2		1
CO Emissions (g/hr)	30	184		44	471	180				158		75
NOx Emissions (g/hr)	6	36		9	92	35				31		15
VOC Emissions (g/hr)	7	43		10	109	42				37		17
Dilemma Vehicles (#)	0	0		0	0	0				0		0
Queue Length 50th (ft)	10	35		6	34	0				23		0
Queue Length 95th (ft)	31	57		20	59	29				46		31
Internal Link Dist (ft)		182			1413			171			529	
Turn Bay Length (ft)												
Base Capacity (vph)	141	1698		299	1132	607				1235		639
Starvation Cap Reductn	0	0		0	0	0				0		0
Spillback Cap Reductn	0	0		0	0	0				0		0
Storage Cap Reductn	0	0		0	0	0				0		0
Reduced v/c Ratio	0.25	0.25		0.09	0.27	0.25				0.12		0.14

Intersection Summary

Area Type: Other

Cycle Length: 50

Actuated Cycle Length: 50

Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green

Natural Cycle: 50

Control Type: Pretimed

Maximum v/c Ratio: 0.27

Intersection Signal Delay: 11.1

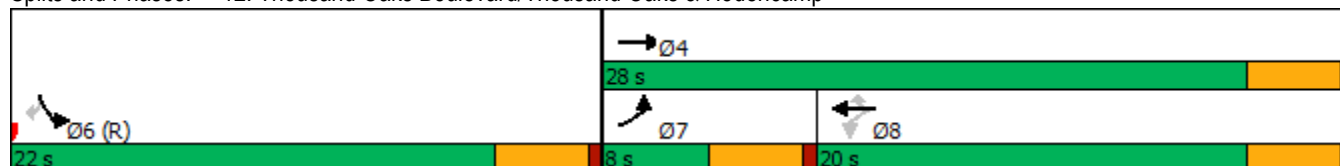
Intersection LOS: B

Intersection Capacity Utilization 28.3%

ICU Level of Service A






















Analysis Period (min) 15

Splits and Phases: 12: Thousand Oaks Boulevard/Thousand Oaks & Hodencamp















Lanes, Volumes, Timings
17: Hodencamp Road & Hillcrest

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	145	41	48	311	128	33	96	21	129	164	49
Future Volume (vph)	17	145	41	48	311	128	33	96	21	129	164	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.956			0.973			0.966	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	3383	0	1770	3444	0	1770	3419	0
Flt Permitted	0.950			0.950			0.608			0.671		
Satd. Flow (perm)	1770	1863	1583	1770	3383	0	1133	3444	0	1250	3419	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			109		135			23			53	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1053			560			357			554	
Travel Time (s)		23.9			12.7			8.1			12.6	
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
Adj. Flow (vph)	18	158	45	52	338	139	36	104	23	140	178	53
Shared Lane Traffic (%)												
Lane Group Flow (vph)	18	158	45	52	477	0	36	127	0	140	231	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4				2			6		
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	8.0	20.0	20.0	9.0	21.0		21.0	21.0		21.0	21.0	
Total Split (%)	16.0%	40.0%	40.0%	18.0%	42.0%		42.0%	42.0%		42.0%	42.0%	
Maximum Green (s)	4.0	16.0	16.0	5.0	17.0		17.0	17.0		17.0	17.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Walk Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0	11.0		11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0		0	0		0	0	
Act Effect Green (s)	4.0	16.0	16.0	5.0	17.0		17.0	17.0		17.0	17.0	
Actuated g/C Ratio	0.08	0.32	0.32	0.10	0.34		0.34	0.34		0.34	0.34	
v/c Ratio	0.13	0.27	0.08	0.29	0.38		0.09	0.11		0.33	0.19	
Control Delay	23.6	14.1	0.7	25.6	9.9		8.3	6.5		15.0	9.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	23.6	14.1	0.7	25.6	9.9		8.3	6.5		15.0	9.4	

Lanes, Volumes, Timings
17: Hodencamp Road & Hillcrest

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	C	B	A	C	A		A	A		B	A	
Approach Delay		12.2			11.4			6.9			11.5	
Approach LOS		B			B			A			B	
Stops (vph)	20	102	1	47	222		20	52		91	108	
Fuel Used(gal)	0	4	1	1	10		0	1		1	2	
CO Emissions (g/hr)	35	249	52	94	685		29	93		102	135	
NOx Emissions (g/hr)	7	48	10	18	133		6	18		20	26	
VOC Emissions (g/hr)	8	58	12	22	159		7	21		24	31	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	5	34	0	15	37		8	12		30	18	
Queue Length 95th (ft)	20	70	3	41	67		15	13		66	37	
Internal Link Dist (ft)		973			480			277			474	
Turn Bay Length (ft)												
Base Capacity (vph)	141	596	580	177	1239		385	1186		425	1197	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.13	0.27	0.08	0.29	0.38		0.09	0.11		0.33	0.19	

Intersection Summary

Area Type: Other

Cycle Length: 50

Actuated Cycle Length: 50

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 50

Control Type: Pretimed

Maximum v/c Ratio: 0.38

Intersection Signal Delay: 11.0







Intersection LOS: B

Intersection Capacity Utilization 39.8%

ICU Level of Service A























Analysis Period (min) 15

Splits and Phases: 17: Hodencamp Road & Hillcrest

 Ø2 (R)	 Ø3	 Ø4
21 s	9 s	20 s
 Ø6 (R)	 Ø7	 Ø8
21 s	8 s	21 s

Lanes, Volumes, Timings
21: Moorpark Road & Hillcrest













01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	104	110	83	129	79	75	575	78	97	581	29
Future Volume (vph)	47	104	110	83	129	79	75	575	78	97	581	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95	0.95	0.97	0.91	0.91	0.97	0.95	0.95
Frt			0.850		0.943			0.982			0.993	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	1863	1583	1770	3337	0	3433	4994	0	3433	3514	0
Flt Permitted	0.950			0.684			0.950			0.950		
Satd. Flow (perm)	3433	1863	1583	1274	3337	0	3433	4994	0	3433	3514	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			120		86			26			6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		183			522			376			623	
Travel Time (s)		4.2			11.9			8.5			14.2	
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
Adj. Flow (vph)	51	113	120	90	140	86	82	625	85	105	632	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	51	113	120	90	226	0	82	710	0	105	664	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Prot	Perm	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	4		8		5	2		1	6	
Permitted Phases				8								
Minimum Split (s)	8.0	20.0	20.0	20.0	20.0		8.0	20.0		8.0	20.0	
Total Split (s)	13.0	46.0	46.0	33.0	33.0		16.0	56.0		18.0	58.0	
Total Split (%)	10.8%	38.3%	38.3%	27.5%	27.5%		13.3%	46.7%		15.0%	48.3%	
Maximum Green (s)	9.0	42.0	42.0	29.0	29.0		12.0	52.0		14.0	54.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead			Lag	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes		Yes	Yes		Yes	Yes	
Walk Time (s)		5.0	5.0	5.0	5.0			5.0			5.0	
Flash Dont Walk (s)		11.0	11.0	11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0	0	0	0			0			0	
Act Effect Green (s)	9.0	42.0	42.0	29.0	29.0		12.0	52.0		14.0	54.0	
Actuated g/C Ratio	0.08	0.35	0.35	0.24	0.24		0.10	0.43		0.12	0.45	
v/c Ratio	0.20	0.17	0.19	0.29	0.26		0.24	0.33		0.26	0.42	
Control Delay	54.2	27.9	5.4	40.3	23.3		67.8	12.0		50.2	23.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	54.2	27.9	5.4	40.3	23.3		67.8	12.0		50.2	23.2	

Lanes, Volumes, Timings

21: Moorpark Road & Hillcrest

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	C	A	D	C		E	B		D	C	
Approach Delay		23.1			28.2			17.7			26.9	
Approach LOS		C			C			B			C	
Stops (vph)	42	71	13	66	102		74	152		87	396	
Fuel Used(gal)	1	1	0	3	5		2	6		2	8	
CO Emissions (g/hr)	57	79	25	177	368		133	451		136	562	
NOx Emissions (g/hr)	11	15	5	34	72		26	88		26	109	
VOC Emissions (g/hr)	13	18	6	41	85		31	105		31	130	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	19	60	0	57	45		34	47		38	177	
Queue Length 95th (ft)	40	105	41	107	80		62	65		67	227	
Internal Link Dist (ft)		103			442			296			543	
Turn Bay Length (ft)												
Base Capacity (vph)	257	652	632	307	871		343	2178		400	1584	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.20	0.17	0.19	0.29	0.26		0.24	0.33		0.26	0.42	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 0.42

Intersection Signal Delay: 23.2

Intersection LOS: C

Intersection Capacity Utilization 43.7%

ICU Level of Service A

Analysis Period (min) 15













Splits and Phases: 21: Moorpark Road & Hillcrest



Lanes, Volumes, Timings

23: Frontage Road/Highway 23 Off-Ramp & Hillcrest

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↵	↑						↵↵	
Traffic Volume (vph)	0	386	15	7	177	0	0	0	0	280	380	284
Future Volume (vph)	0	386	15	7	177	0	0	0	0	280	380	284
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95
Fr't		0.994									0.955	
Flt Protected				0.950							0.985	
Satd. Flow (prot)	0	3518	0	1770	1863	0	0	0	0	0	3329	0
Flt Permitted				0.499							0.985	
Satd. Flow (perm)	0	3518	0	930	1863	0	0	0	0	0	3329	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11									201	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		112			455			823			414	
Travel Time (s)		2.5			10.3			18.7			9.4	
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
Adj. Flow (vph)	0	420	16	8	192	0	0	0	0	304	413	309
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	436	0	8	192	0	0	0	0	0	1026	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases				8						6		
Minimum Split (s)		20.0		20.0	20.0					20.0	20.0	
Total Split (s)		20.0		20.0	20.0					20.0	20.0	
Total Split (%)		50.0%		50.0%	50.0%					50.0%	50.0%	
Maximum Green (s)		16.0		16.0	16.0					16.0	16.0	
Yellow Time (s)		3.5		3.5	3.5					3.5	3.5	
All-Red Time (s)		0.5		0.5	0.5					0.5	0.5	
Lost Time Adjust (s)		0.0		0.0	0.0						0.0	
Total Lost Time (s)		4.0		4.0	4.0						4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)		5.0		5.0	5.0					5.0	5.0	
Flash Dont Walk (s)		11.0		11.0	11.0					11.0	11.0	
Pedestrian Calls (#/hr)		0		0	0					0	0	
Act Effect Green (s)		16.0		16.0	16.0						16.0	
Actuated g/C Ratio		0.40		0.40	0.40						0.40	
v/c Ratio		0.31		0.02	0.26						0.71	
Control Delay		8.8		7.6	9.2						11.2	
Queue Delay		0.0		0.0	0.0						0.0	
Total Delay		8.8		7.6	9.2						11.2	

Lanes, Volumes, Timings

23: Frontage Road/Highway 23 Off-Ramp & Hillcrest

01/10/2024

	↖	→	↘	↙	←	↖	↙	↑	↘	↘	↓	↙
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		A		A	A						B	
Approach Delay		8.8			9.2						11.2	
Approach LOS		A			A						B	
Stops (vph)		241		7	109						593	
Fuel Used(gal)		9		0	3						8	
CO Emissions (g/hr)		634		10	238						592	
NOx Emissions (g/hr)		123		2	46						115	
VOC Emissions (g/hr)		147		2	55						137	
Dilemma Vehicles (#)		0		0	0						0	
Queue Length 50th (ft)		32		1	27						72	
Queue Length 95th (ft)		55		6	57						124	
Internal Link Dist (ft)		32			375			743			334	
Turn Bay Length (ft)												
Base Capacity (vph)		1413		372	745						1452	
Starvation Cap Reductn		0		0	0						0	
Spillback Cap Reductn		0		0	0						0	
Storage Cap Reductn		0		0	0						0	
Reduced v/c Ratio		0.31		0.02	0.26						0.71	

Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 40

Offset: 0 (0%), Referenced to phase 2: and 6:SBTL, Start of Green

Natural Cycle: 40

Control Type: Pretimed

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 10.3

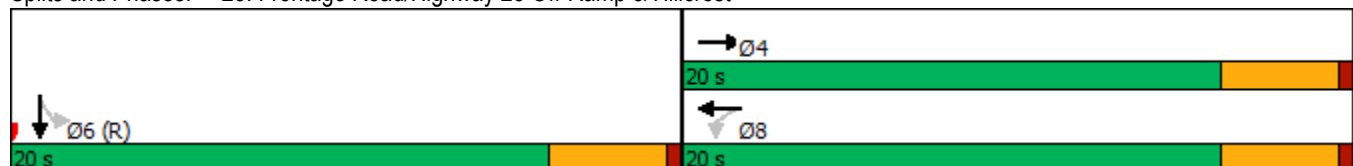
Intersection LOS: B

Intersection Capacity Utilization 45.6%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 23: Frontage Road/Highway 23 Off-Ramp & Hillcrest



Lanes, Volumes, Timings

24: Thousand Oaks & Frontage Road

01/10/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↘	↗↗
Traffic Volume (vph)	0	588	476	0	209	190
Future Volume (vph)	0	588	476	0	209	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	0.88
Flt						0.850
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	3539	0	1770	2787
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	3539	0	1770	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						207
Link Speed (mph)		30	30		30	
Link Distance (ft)		251	831		823	
Travel Time (s)		5.7	18.9		18.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	639	517	0	227	207
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	639	517	0	227	207
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Minimum Split (s)		20.0	20.0		20.0	20.0
Total Split (s)		20.0	20.0		20.0	20.0
Total Split (%)		50.0%	50.0%		50.0%	50.0%
Maximum Green (s)		16.0	16.0		16.0	16.0
Yellow Time (s)		3.5	3.5		3.5	3.5
All-Red Time (s)		0.5	0.5		0.5	0.5
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)		5.0	5.0		5.0	5.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0
Act Effect Green (s)		16.0	16.0		16.0	16.0
Actuated g/C Ratio		0.40	0.40		0.40	0.40
v/c Ratio		0.45	0.37		0.32	0.17
Control Delay		10.1	9.4		16.4	8.2
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		10.1	9.4		16.4	8.2

Lanes, Volumes, Timings

24: Thousand Oaks & Frontage Road

01/10/2024

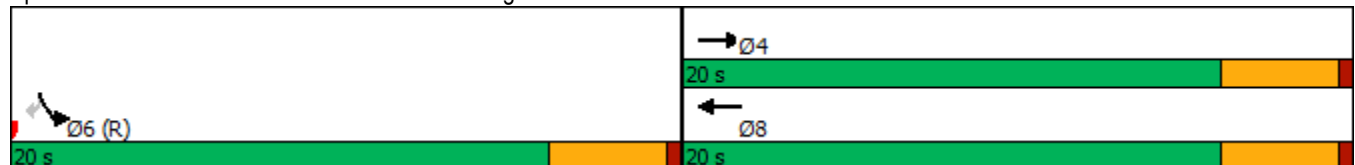


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
LOS		B	A		B	A
Approach Delay		10.1	9.4		12.5	
Approach LOS		B	A		B	
Stops (vph)		390	302		192	117
Fuel Used(gal)		13	7		3	2
CO Emissions (g/hr)		935	473		217	153
NOx Emissions (g/hr)		182	92		42	30
VOC Emissions (g/hr)		217	110		50	35
Dilemma Vehicles (#)		0	0		0	0
Queue Length 50th (ft)		51	40		54	5
Queue Length 95th (ft)		83	66		m83	m21
Internal Link Dist (ft)		171	751		743	
Turn Bay Length (ft)						
Base Capacity (vph)		1415	1415		708	1239
Starvation Cap Reductn		0	0		0	0
Spillback Cap Reductn		0	0		0	0
Storage Cap Reductn		0	0		0	0
Reduced v/c Ratio		0.45	0.37		0.32	0.17

Intersection Summary

Area Type: Other
Cycle Length: 40
Actuated Cycle Length: 40
Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green
Natural Cycle: 40
Control Type: Pretimed
Maximum v/c Ratio: 0.45
Intersection Signal Delay: 10.5 Intersection LOS: B
Intersection Capacity Utilization 34.5% ICU Level of Service A
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.
























Splits and Phases: 24: Thousand Oaks & Frontage Road



Lanes, Volumes, Timings

33: Rancho & Thousand Oaks













01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	380	276	303	368	76	220	276	314	101	282	32
Future Volume (vph)	41	380	276	303	368	76	220	276	314	101	282	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Fr't			0.850		0.974				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	3433	3447	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.416			0.569		
Satd. Flow (perm)	1770	3539	1583	3433	3447	0	775	3539	1583	1060	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			300		28				341			195
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		296			389			511			569	
Travel Time (s)		6.7			8.8			11.6			12.9	
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
Adj. Flow (vph)	45	413	300	329	400	83	239	300	341	110	307	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	45	413	300	329	483	0	239	300	341	110	307	35
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA		pm+pt	NA	Prot	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2	2	1	6	
Permitted Phases			4				2			6		6
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0		8.0	20.0	20.0	8.0	20.0	20.0
Total Split (s)	11.0	27.0	27.0	21.0	37.0		20.0	36.0	36.0	11.0	27.0	27.0
Total Split (%)	11.6%	28.4%	28.4%	22.1%	38.9%		21.1%	37.9%	37.9%	11.6%	28.4%	28.4%
Maximum Green (s)	7.0	23.0	23.0	17.0	33.0		16.0	32.0	32.0	7.0	23.0	23.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Walk Time (s)		5.0	5.0		5.0			5.0	5.0		5.0	5.0
Flash Dont Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effect Green (s)	7.0	23.0	23.0	17.0	33.0		43.0	32.0	32.0	30.0	23.0	23.0
Actuated g/C Ratio	0.07	0.24	0.24	0.18	0.35		0.45	0.34	0.34	0.32	0.24	0.24
v/c Ratio	0.35	0.48	0.49	0.54	0.40		0.46	0.25	0.45	0.28	0.36	0.07
Control Delay	49.6	33.1	6.7	39.1	23.2		19.8	23.5	4.7	18.3	31.3	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.6	33.1	6.7	39.1	23.2		19.8	23.5	4.7	18.3	31.3	0.2

Lanes, Volumes, Timings

33: Rancho & Thousand Oaks

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	C	A	D	C		B	C	A	B	C	A
Approach Delay		23.6			29.6			15.2			25.7	
Approach LOS		C			C			B			C	
Stops (vph)	39	317	31	267	305		135	192	29	69	227	0
Fuel Used(gal)	1	8	3	5	5		3	3	2	2	7	0
CO Emissions (g/hr)	69	535	208	336	359		175	243	120	151	488	31
NOx Emissions (g/hr)	13	104	40	65	70		34	47	23	29	95	6
VOC Emissions (g/hr)	16	124	48	78	83		41	56	28	35	113	7
Dilemma Vehicles (#)	0	0	0	0	0		0	0	0	0	0	0
Queue Length 50th (ft)	26	112	0	93	107		88	68	0	38	81	0
Queue Length 95th (ft)	62	159	64	137	151		142	101	58	70	120	0
Internal Link Dist (ft)		216			309			431			489	
Turn Bay Length (ft)												
Base Capacity (vph)	130	856	610	614	1215		518	1192	759	387	856	531
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.48	0.49	0.54	0.40		0.46	0.25	0.45	0.28	0.36	0.07

Intersection Summary

Area Type: Other

Cycle Length: 95

Actuated Cycle Length: 95

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 0.54

Intersection Signal Delay: 23.1











Intersection LOS: C

Intersection Capacity Utilization 52.5%

ICU Level of Service A

Analysis Period (min) 15

























Splits and Phases: 33: Rancho & Thousand Oaks

 Ø1	 Ø2 (R) 	 Ø3	 Ø4
11 s	36 s	21 s	27 s
 Ø5	 Ø6 (R) 	 Ø7	 Ø8
20 s	27 s	11 s	37 s

Lanes, Volumes, Timings

3: Moorpark Road & Thousand Oaks Blvd













01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	76	226	399	137	298	288	885	344	187	875	20
Future Volume (vph)	33	76	226	399	137	298	288	885	344	187	875	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	0.97	1.00	1.00	0.97	0.91	1.00	0.97	0.91	0.91
Fr't		0.910	0.850			0.850			0.850		0.997	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3085	1441	3433	1863	1583	3433	5085	1583	3433	5070	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3085	1441	3433	1863	1583	3433	5085	1583	3433	5070	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		123	155			324			374		3	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		192			672			498			415	
Travel Time (s)		4.4			15.3			11.3			9.4	
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
Adj. Flow (vph)	36	83	246	434	149	324	313	962	374	203	951	22
Shared Lane Traffic (%)			50%									
Lane Group Flow (vph)	36	206	123	434	149	324	313	962	374	203	973	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Prot	Prot	NA	Prot	Prot	NA	Prot	Prot	NA	
Protected Phases	7	4	4	3	8	8	5	2	2	1	6	
Permitted Phases												
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	
Total Split (s)	12.0	22.0	22.0	30.0	40.0	40.0	25.0	50.0	50.0	18.0	43.0	
Total Split (%)	10.0%	18.3%	18.3%	25.0%	33.3%	33.3%	20.8%	41.7%	41.7%	15.0%	35.8%	
Maximum Green (s)	8.0	18.0	18.0	26.0	36.0	36.0	21.0	46.0	46.0	14.0	39.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	
Act Effect Green (s)	8.0	18.0	18.0	26.0	36.0	36.0	21.0	46.0	46.0	14.0	39.0	
Actuated g/C Ratio	0.07	0.15	0.15	0.22	0.30	0.30	0.18	0.38	0.38	0.12	0.32	
v/c Ratio	0.31	0.36	0.35	0.58	0.27	0.46	0.52	0.49	0.45	0.51	0.59	
Control Delay	60.5	20.9	6.2	45.8	33.6	5.7	48.5	29.2	4.3	57.3	26.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	60.5	20.9	6.2	45.8	33.6	5.7	48.5	29.2	4.3	57.3	26.4	

Lanes, Volumes, Timings

3: Moorpark Road & Thousand Oaks Blvd

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	C	A	D	C	A	D	C	A	E	C	
Approach Delay		19.8			29.5			27.2			31.8	
Approach LOS		B			C			C			C	
Stops (vph)	32	70	7	351	102	28	255	651	26	180	445	
Fuel Used(gal)	1	1	0	12	4	5	5	12	2	4	13	
CO Emissions (g/hr)	44	103	24	861	265	382	375	860	124	303	894	
NOx Emissions (g/hr)	9	20	5	167	51	74	73	167	24	59	174	
VOC Emissions (g/hr)	10	24	6	199	61	89	87	199	29	70	207	
Dilemma Vehicles (#)	0	0	0	0	0	0	0	0	0	0	0	
Queue Length 50th (ft)	27	31	0	156	88	0	114	205	0	82	134	
Queue Length 95th (ft)	63	69	35	210	144	66	161	247	61	119	198	
Internal Link Dist (ft)		112			592			418			335	
Turn Bay Length (ft)												
Base Capacity (vph)	118	567	347	743	558	701	600	1949	837	400	1649	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.31	0.36	0.35	0.58	0.27	0.46	0.52	0.49	0.45	0.51	0.59	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 0.59

Intersection Signal Delay: 28.4









Intersection LOS: C

Intersection Capacity Utilization 54.8%

ICU Level of Service A

Analysis Period (min) 15




















Splits and Phases: 3: Moorpark Road & Thousand Oaks Blvd

 Ø1	 Ø2 (R)	 Ø3	 Ø4
18 s	50 s	30 s	22 s
 Ø5	 Ø6 (R)	 Ø7	 Ø8
25 s	43 s	12 s	40 s

Lanes, Volumes, Timings

10: Lombard Street/Office Dwy & Thousand Oaks Boulevard

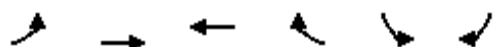
01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	505	36	41	565	5	44	1	71	12	0	25
Future Volume (vph)	6	505	36	41	565	5	44	1	71	12	0	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Fr't		0.990			0.999				0.850			0.850
Flt Protected		0.999		0.950			0.950			0.950		
Satd. Flow (prot)	0	3500	0	1770	3536	0	1770	0	1583	1770	0	1583
Flt Permitted		0.999		0.950			0.950			0.950		
Satd. Flow (perm)	0	3500	0	1770	3536	0	1770	0	1583	1770	0	1583
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1027			262			327			171	
Travel Time (s)		23.3			6.0			7.4			3.9	
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
Adj. Flow (vph)	7	549	39	45	614	5	48	1	77	13	0	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	595	0	45	619	0	48	1	77	13	0	27
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Yield	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization Err%	ICU Level of Service H											
Analysis Period (min)	15											

Lanes, Volumes, Timings

11: Lombard/DWY2 & Lombard Street

01/10/2024
























Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↗	↘	
Traffic Volume (vph)	0	10	6	25	25	0
Future Volume (vph)	0	10	6	25	25	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.850					
Flt Protected	0.950					
Satd. Flow (prot)	0	1863	1863	1583	1770	0
Flt Permitted	0.950					
Satd. Flow (perm)	0	1863	1863	1583	1770	0
Link Speed (mph)	30		30	30		
Link Distance (ft)	678		275	327		
Travel Time (s)	15.4		6.3	7.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	11	7	27	27	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	11	7	27	27	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)	0		0	12		
Link Offset(ft)	0		0	0		
Crosswalk Width(ft)	16		16	16		
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control	Yield		Stop	Yield		
Intersection Summary						
Area Type:	Other					
Control Type: Unsignalized						
Intersection Capacity Utilization 13.3%				ICU Level of Service A		
Analysis Period (min) 15						

Lanes, Volumes, Timings

12: Thousand Oaks Boulevard/Thousand Oaks & Hodencamp













01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 					 		
Traffic Volume (vph)	90	479	0	54	538	226	0	0	0	206	0	75
Future Volume (vph)	90	479	0	54	538	226	0	0	0	206	0	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Fr't						0.850						0.850
Flt Protected	0.950				0.995					0.950		
Satd. Flow (prot)	1770	3539	0	0	3522	1583	0	0	0	3433	0	1583
Flt Permitted	0.950				0.867					0.950		
Satd. Flow (perm)	1770	3539	0	0	3068	1583	0	0	0	3433	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						246						109
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		262			1493			278			609	
Travel Time (s)		6.0			33.9			6.3			13.8	
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
Adj. Flow (vph)	98	521	0	59	585	246	0	0	0	224	0	82
Shared Lane Traffic (%)												
Lane Group Flow (vph)	98	521	0	0	644	246	0	0	0	224	0	82
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Perm	NA	Perm				Prot		Perm
Protected Phases	7	4			8					6		
Permitted Phases				8		8						6
Minimum Split (s)	8.0	20.0		20.0	20.0	20.0				20.0		20.0
Total Split (s)	10.0	30.0		20.0	20.0	20.0				20.0		20.0
Total Split (%)	20.0%	60.0%		40.0%	40.0%	40.0%				40.0%		40.0%
Maximum Green (s)	6.0	26.0		16.0	16.0	16.0				16.0		16.0
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5				3.5		3.5
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5				0.5		0.5
Lost Time Adjust (s)	0.0	0.0			0.0	0.0				0.0		0.0
Total Lost Time (s)	4.0	4.0			4.0	4.0				4.0		4.0
Lead/Lag	Lead			Lag	Lag	Lag						
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Walk Time (s)		5.0		5.0	5.0	5.0				5.0		5.0
Flash Dont Walk (s)		11.0		11.0	11.0	11.0				11.0		11.0
Pedestrian Calls (#/hr)		0		0	0	0				0		0
Act Effect Green (s)	6.0	26.0			16.0	16.0				16.0		16.0
Actuated g/C Ratio	0.12	0.52			0.32	0.32				0.32		0.32
v/c Ratio	0.46	0.28			0.66	0.37				0.20		0.14
Control Delay	28.2	7.3			18.5	4.1				18.4		8.8
Queue Delay	0.0	0.0			0.0	0.0				0.0		0.0
Total Delay	28.2	7.3			18.5	4.1				18.4		8.8

Lanes, Volumes, Timings

12: Thousand Oaks Boulevard/Thousand Oaks & Hodencamp

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	C	A			B	A				B		A
Approach Delay		10.6			14.5						15.9	
Approach LOS		B			B						B	
Stops (vph)	83	243			481	32				178		34
Fuel Used(gal)	1	3			15	4				3		1
CO Emissions (g/hr)	81	212			1046	295				231		62
NOx Emissions (g/hr)	16	41			204	57				45		12
VOC Emissions (g/hr)	19	49			243	68				54		14
Dilemma Vehicles (#)	0	0			0	0				0		0
Queue Length 50th (ft)	27	40			83	0				34		0
Queue Length 95th (ft)	64	63			130	38				57		25
Internal Link Dist (ft)		182			1413			198			529	
Turn Bay Length (ft)												
Base Capacity (vph)	212	1840			981	673				1098		580
Starvation Cap Reductn	0	0			0	0				0		0
Spillback Cap Reductn	0	0			0	0				0		0
Storage Cap Reductn	0	0			0	0				0		0
Reduced v/c Ratio	0.46	0.28			0.66	0.37				0.20		0.14

Intersection Summary

Area Type: Other

Cycle Length: 50

Actuated Cycle Length: 50

Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green

Natural Cycle: 50

Control Type: Pretimed

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 13.4

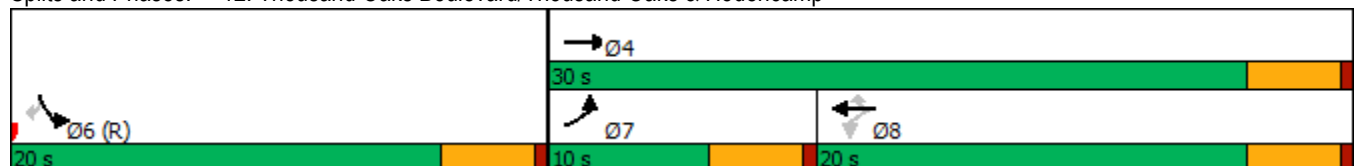
Intersection LOS: B

Intersection Capacity Utilization 45.6%

ICU Level of Service A























Analysis Period (min) 15

Splits and Phases: 12: Thousand Oaks Boulevard/Thousand Oaks & Hodencamp















Lanes, Volumes, Timings
17: Hodencamp Road & Hillcrest

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	389	68	41	373	168	49	198	37	156	156	39
Future Volume (vph)	42	389	68	41	373	168	49	198	37	156	156	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.953			0.976			0.970	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	3373	0	1770	3454	0	1770	3433	0
Flt Permitted	0.950			0.950			0.619			0.594		
Satd. Flow (perm)	1770	1863	1583	1770	3373	0	1153	3454	0	1106	3433	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			109		158			40			42	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1053			560			357			554	
Travel Time (s)		23.9			12.7			8.1			12.6	
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
Adj. Flow (vph)	46	423	74	45	405	183	53	215	40	170	170	42
Shared Lane Traffic (%)												
Lane Group Flow (vph)	46	423	74	45	588	0	53	255	0	170	212	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4				2			6		
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	9.0	22.0	22.0	8.0	21.0		20.0	20.0		20.0	20.0	
Total Split (%)	18.0%	44.0%	44.0%	16.0%	42.0%		40.0%	40.0%		40.0%	40.0%	
Maximum Green (s)	5.0	18.0	18.0	4.0	17.0		16.0	16.0		16.0	16.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Walk Time (s)		5.0	5.0		5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0	11.0		11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0		0	0		0	0	
Act Effect Green (s)	5.0	18.0	18.0	4.0	17.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.10	0.36	0.36	0.08	0.34		0.32	0.32		0.32	0.32	
v/c Ratio	0.26	0.63	0.12	0.32	0.47		0.14	0.23		0.48	0.19	
Control Delay	24.8	18.4	2.1	28.1	10.7		9.9	8.1		19.3	10.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	24.8	18.4	2.1	28.1	10.7		9.9	8.1		19.3	10.3	

Lanes, Volumes, Timings
17: Hodencamp Road & Hillcrest

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	C	B	A	C	B		A	A		B	B	
Approach Delay		16.7			12.0			8.4			14.3	
Approach LOS		B			B			A			B	
Stops (vph)	42	310	6	43	290		34	132		124	104	
Fuel Used(gal)	1	10	1	1	12		1	3		2	2	
CO Emissions (g/hr)	83	706	89	83	857		46	202		138	128	
NOx Emissions (g/hr)	16	137	17	16	167		9	39		27	25	
VOC Emissions (g/hr)	19	164	21	19	199		11	47		32	30	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	13	99	0	13	48		13	28		39	18	
Queue Length 95th (ft)	37	176	12	37	84		m25	36		86	37	
Internal Link Dist (ft)		973			480			277			474	
Turn Bay Length (ft)												
Base Capacity (vph)	177	670	639	141	1251		368	1132		353	1127	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.26	0.63	0.12	0.32	0.47		0.14	0.23		0.48	0.19	

Intersection Summary

Area Type: Other

Cycle Length: 50

Actuated Cycle Length: 50

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 50

Control Type: Pretimed

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 13.2

Intersection LOS: B

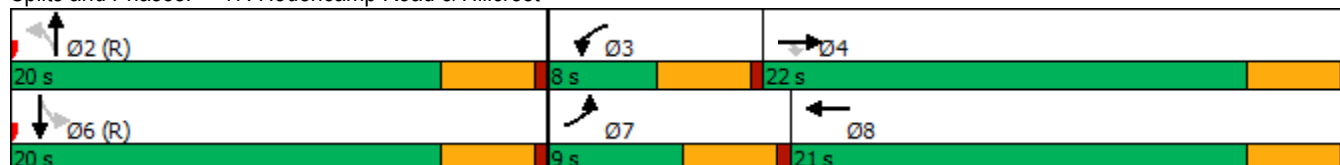
Intersection Capacity Utilization 52.4%

ICU Level of Service A

Analysis Period (min) 15























m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 17: Hodencamp Road & Hillcrest



Lanes, Volumes, Timings
21: Moorpark Road & Hillcrest













01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	174	248	279	150	263	178	191	911	92	126	634	69
Future Volume (vph)	174	248	279	150	263	178	191	911	92	126	634	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95	0.95	0.97	0.91	0.91	0.97	0.95	0.95
Fr't			0.850		0.940			0.986			0.985	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	1863	1583	1770	3327	0	3433	5014	0	3433	3486	0
Flt Permitted	0.950			0.593			0.950			0.950		
Satd. Flow (perm)	3433	1863	1583	1105	3327	0	3433	5014	0	3433	3486	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			290		137			16			11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		183			522			376			623	
Travel Time (s)		4.2			11.9			8.5			14.2	
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
Adj. Flow (vph)	189	270	303	163	286	193	208	990	100	137	689	75
Shared Lane Traffic (%)												
Lane Group Flow (vph)	189	270	303	163	479	0	208	1090	0	137	764	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Prot	Perm	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	4		8		5	2		1	6	
Permitted Phases				8								
Minimum Split (s)	8.0	20.0	20.0	20.0	20.0		8.0	20.0		8.0	20.0	
Total Split (s)	17.0	55.0	55.0	38.0	38.0		18.0	50.0		15.0	47.0	
Total Split (%)	14.2%	45.8%	45.8%	31.7%	31.7%		15.0%	41.7%		12.5%	39.2%	
Maximum Green (s)	13.0	51.0	51.0	34.0	34.0		14.0	46.0		11.0	43.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead			Lag	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes		Yes	Yes		Yes	Yes	
Walk Time (s)		5.0	5.0	5.0	5.0			5.0			5.0	
Flash Dont Walk (s)		11.0	11.0	11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0	0	0	0			0			0	
Act Effect Green (s)	13.0	51.0	51.0	34.0	34.0		14.0	46.0		11.0	43.0	
Actuated g/C Ratio	0.11	0.42	0.42	0.28	0.28		0.12	0.38		0.09	0.36	
v/c Ratio	0.51	0.34	0.36	0.52	0.46		0.52	0.56		0.44	0.61	
Control Delay	55.8	24.7	4.2	43.3	26.4		75.9	14.6		56.3	33.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	55.8	24.7	4.2	43.3	26.4		75.9	14.6		56.3	33.6	

Lanes, Volumes, Timings

21: Moorpark Road & Hillcrest

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	C	A	D	C		E	B		E	C	
Approach Delay		24.3			30.7			24.5			37.1	
Approach LOS		C			C			C			D	
Stops (vph)	161	163	26	125	254		188	271		117	554	
Fuel Used(gal)	3	3	1	5	12		5	11		3	11	
CO Emissions (g/hr)	218	175	55	328	813		361	746		189	789	
NOx Emissions (g/hr)	42	34	11	64	158		70	145		37	154	
VOC Emissions (g/hr)	50	41	13	76	189		84	173		44	183	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	72	138	6	106	113		87	84		52	250	
Queue Length 95th (ft)	111	206	59	180	164		128	108		85	316	
Internal Link Dist (ft)		103			442			296			543	
Turn Bay Length (ft)												
Base Capacity (vph)	371	791	839	313	1040		400	1931		314	1256	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.51	0.34	0.36	0.52	0.46		0.52	0.56		0.44	0.61	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 0.61

Intersection Signal Delay: 28.7

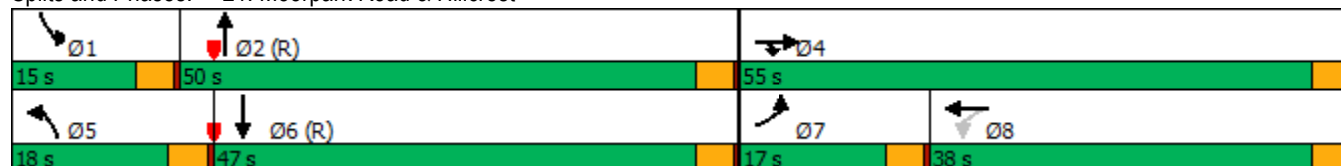
Intersection LOS: C

Intersection Capacity Utilization 59.9%

ICU Level of Service B

Analysis Period (min) 15













Splits and Phases: 21: Moorpark Road & Hillcrest



Lanes, Volumes, Timings

23: Frontage Road/Highway 23 Off-Ramp & Hillcrest/Hillcrest

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↵	↑						↵↵	
Traffic Volume (vph)	0	596	12	14	374	0	0	0	0	188	241	280
Future Volume (vph)	0	596	12	14	374	0	0	0	0	188	241	280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95
Fr't		0.997									0.941	
Flt Protected				0.950							0.987	
Satd. Flow (prot)	0	3529	0	1770	1863	0	0	0	0	0	3287	0
Flt Permitted				0.357							0.987	
Satd. Flow (perm)	0	3529	0	665	1863	0	0	0	0	0	3287	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6									291	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		112			455			823			414	
Travel Time (s)		2.5			10.3			18.7			9.4	
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
Adj. Flow (vph)	0	648	13	15	407	0	0	0	0	204	262	304
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	661	0	15	407	0	0	0	0	0	770	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases				8						6		
Minimum Split (s)		20.0		20.0	20.0					20.0	20.0	
Total Split (s)		20.0		20.0	20.0					20.0	20.0	
Total Split (%)		50.0%		50.0%	50.0%					50.0%	50.0%	
Maximum Green (s)		16.0		16.0	16.0					16.0	16.0	
Yellow Time (s)		3.5		3.5	3.5					3.5	3.5	
All-Red Time (s)		0.5		0.5	0.5					0.5	0.5	
Lost Time Adjust (s)		0.0		0.0	0.0						0.0	
Total Lost Time (s)		4.0		4.0	4.0						4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)		5.0		5.0	5.0					5.0	5.0	
Flash Dont Walk (s)		11.0		11.0	11.0					11.0	11.0	
Pedestrian Calls (#/hr)		0		0	0					0	0	
Act Effect Green (s)		16.0		16.0	16.0						16.0	
Actuated g/C Ratio		0.40		0.40	0.40						0.40	
v/c Ratio		0.47		0.06	0.55						0.52	
Control Delay		10.1		8.1	12.6						6.9	
Queue Delay		0.0		0.0	0.0						0.0	
Total Delay		10.1		8.1	12.6						6.9	

Lanes, Volumes, Timings

23: Frontage Road/Highway 23 Off-Ramp & Hillcrest/Hillcrest

01/10/2024

	↖	→	↘	↙	←	↖	↙	↑	↘	↘	↓	↙
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		B		A	B						A	
Approach Delay		10.1			12.5						6.9	
Approach LOS		B			B						A	
Stops (vph)		403		12	269						303	
Fuel Used(gal)		14		0	8						5	
CO Emissions (g/hr)		987		20	535						346	
NOx Emissions (g/hr)		192		4	104						67	
VOC Emissions (g/hr)		229		5	124						80	
Dilemma Vehicles (#)		0		0	0						0	
Queue Length 50th (ft)		53		2	65						36	
Queue Length 95th (ft)		85		9	125						68	
Internal Link Dist (ft)		32			375			743			334	
Turn Bay Length (ft)												
Base Capacity (vph)		1415		266	745						1489	
Starvation Cap Reductn		0		0	0						0	
Spillback Cap Reductn		0		0	0						0	
Storage Cap Reductn		0		0	0						0	
Reduced v/c Ratio		0.47		0.06	0.55						0.52	

Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 40

Offset: 0 (0%), Referenced to phase 2: and 6:SBTL, Start of Green

Natural Cycle: 40

Control Type: Pretimed

Maximum v/c Ratio: 0.55

Intersection Signal Delay: 9.3

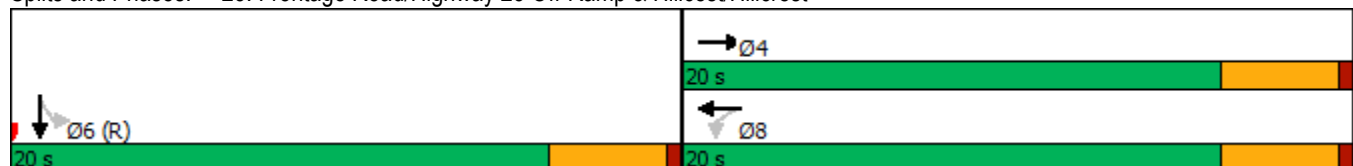
Intersection LOS: A

Intersection Capacity Utilization 47.5%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 23: Frontage Road/Highway 23 Off-Ramp & Hillcrest/Hillcrest



Lanes, Volumes, Timings
24: Thousand Oaks & Frontage Road

01/10/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↘	↗↗
Traffic Volume (vph)	0	881	738	0	147	123
Future Volume (vph)	0	881	738	0	147	123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	0.88
Fr _t						0.850
Fl _t Protected					0.950	
Satd. Flow (prot)	0	3539	3539	0	1770	2787
Fl _t Permitted					0.950	
Satd. Flow (perm)	0	3539	3539	0	1770	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						133
Link Speed (mph)		30	30		30	
Link Distance (ft)		251	831		823	
Travel Time (s)		5.7	18.9		18.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	958	802	0	160	134
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	958	802	0	160	134
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Minimum Split (s)		20.0	20.0		20.0	20.0
Total Split (s)		20.0	20.0		20.0	20.0
Total Split (%)		50.0%	50.0%		50.0%	50.0%
Maximum Green (s)		16.0	16.0		16.0	16.0
Yellow Time (s)		3.5	3.5		3.5	3.5
All-Red Time (s)		0.5	0.5		0.5	0.5
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)		5.0	5.0		5.0	5.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0
Act Effect Green (s)		16.0	16.0		16.0	16.0
Actuated g/C Ratio		0.40	0.40		0.40	0.40
v/c Ratio		0.68	0.57		0.23	0.11
Control Delay		12.8	11.3		14.5	7.6
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		12.8	11.3		14.5	7.6

Lanes, Volumes, Timings

24: Thousand Oaks & Frontage Road

01/10/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
LOS		B	B		B	A
Approach Delay		12.8	11.3		11.3	
Approach LOS		B	B		B	
Stops (vph)		664	520		123	56
Fuel Used(gal)		21	11		2	1
CO Emissions (g/hr)		1467	772		144	90
NOx Emissions (g/hr)		285	150		28	18
VOC Emissions (g/hr)		340	179		33	21
Dilemma Vehicles (#)		0	0		0	0
Queue Length 50th (ft)		86	68		33	0
Queue Length 95th (ft)		134	107		m71	m21
Internal Link Dist (ft)		171	751		743	
Turn Bay Length (ft)						
Base Capacity (vph)		1415	1415		708	1194
Starvation Cap Reductn		0	0		0	0
Spillback Cap Reductn		0	0		0	0
Storage Cap Reductn		0	0		0	0
Reduced v/c Ratio		0.68	0.57		0.23	0.11

Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 40

Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green

Natural Cycle: 40

Control Type: Pretimed

Maximum v/c Ratio: 0.68

Intersection Signal Delay: 12.0

Intersection LOS: B

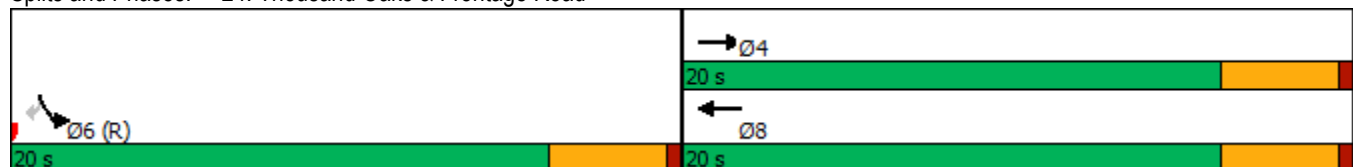
Intersection Capacity Utilization 39.2%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.
























Splits and Phases: 24: Thousand Oaks & Frontage Road



Lanes, Volumes, Timings













33: Rancho & Thousand Oaks

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	480	305	369	720	88	291	282	365	65	169	20
Future Volume (vph)	35	480	305	369	720	88	291	282	365	65	169	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Fr't			0.850		0.984				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	3433	3483	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.509			0.565		
Satd. Flow (perm)	1770	3539	1583	3433	3483	0	948	3539	1583	1052	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			332		16				397			195
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		296			389			511			569	
Travel Time (s)		6.7			8.8			11.6			12.9	
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
Adj. Flow (vph)	38	522	332	401	783	96	316	307	397	71	184	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	38	522	332	401	879	0	316	307	397	71	184	22
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA		pm+pt	NA	Prot	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2	2	1	6	
Permitted Phases			4				2			6		6
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0		8.0	20.0	20.0	8.0	20.0	20.0
Total Split (s)	10.0	27.0	27.0	23.0	40.0		23.0	36.0	36.0	9.0	22.0	22.0
Total Split (%)	10.5%	28.4%	28.4%	24.2%	42.1%		24.2%	37.9%	37.9%	9.5%	23.2%	23.2%
Maximum Green (s)	6.0	23.0	23.0	19.0	36.0		19.0	32.0	32.0	5.0	18.0	18.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Walk Time (s)		5.0	5.0		5.0			5.0	5.0		5.0	5.0
Flash Dont Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effect Green (s)	6.0	23.0	23.0	19.0	36.0		41.0	32.0	32.0	23.0	18.0	18.0
Actuated g/C Ratio	0.06	0.24	0.24	0.20	0.38		0.43	0.34	0.34	0.24	0.19	0.19
v/c Ratio	0.34	0.61	0.52	0.58	0.66		0.55	0.26	0.50	0.24	0.27	0.05
Control Delay	51.4	35.6	6.8	38.4	26.9		22.9	23.6	4.8	20.1	34.2	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.4	35.6	6.8	38.4	26.9		22.9	23.6	4.8	20.1	34.2	0.2

Lanes, Volumes, Timings
33: Rancho & Thousand Oaks

01/10/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	D	A	D	C		C	C	A	C	C	A
Approach Delay		25.5			30.5			16.1			27.9	
Approach LOS		C			C			B			C	
Stops (vph)	35	415	34	326	637		196	196	33	48	140	0
Fuel Used(gal)	1	10	3	6	10		4	4	2	1	4	0
CO Emissions (g/hr)	61	698	230	406	727		252	249	140	100	301	20
NOx Emissions (g/hr)	12	136	45	79	142		49	48	27	20	59	4
VOC Emissions (g/hr)	14	162	53	94	169		58	58	32	23	70	5
Dilemma Vehicles (#)	0	0	0	0	0		0	0	0	0	0	0
Queue Length 50th (ft)	22	147	0	113	223		128	70	0	25	50	0
Queue Length 95th (ft)	55	202	67	162	290		199	103	62	51	81	0
Internal Link Dist (ft)		216			309			431			489	
Turn Bay Length (ft)												
Base Capacity (vph)	111	856	634	686	1329		573	1192	796	292	670	457
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.61	0.52	0.58	0.66		0.55	0.26	0.50	0.24	0.27	0.05

Intersection Summary

Area Type: Other

Cycle Length: 95

Actuated Cycle Length: 95

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 60

Control Type: Pretimed

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 24.8

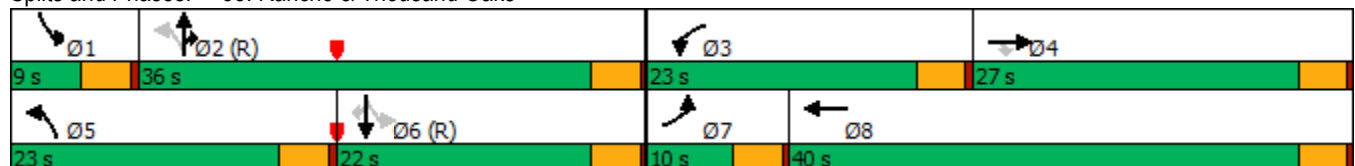
Intersection LOS: C

Intersection Capacity Utilization 60.2%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 33: Rancho & Thousand Oaks



Appendix C: Signal Warrant Analysis

Existing + Project Conditions

California MUTCD 2014 Edition
(FHWA's MUTCD 2009 Edition, including Revisions 1 & 2, as amended for use in California)

Page 850

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 1 of 5)

COUNT DATE 6/7/2023

DIST _____ CO _____ RTE _____ PM _____

Major St: Thousand Oaks Boulevard Critical Approach Speed _____ mph

Minor St: Lombard Street Critical Approach Speed _____ mph

Speed limit or critical speed on major street traffic > 40 mph..... ☐ or ☐ } **RURAL (R)**

In built up area of isolated community of < 10,000 population..... ☒ } **URBAN (U)**

WARRANT 1 - Eight Hour Vehicular Volume SATISFIED YES ☐ NO ☒
(Condition A or Condition B or combination of A and B must be satisfied)

Condition A - Minimum Vehicle Volume 100% SATISFIED YES ☐ NO ☒
80% SATISFIED YES ☐ NO ☒

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)				10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	Hour
	U	R	U	R									
APPROACH LANES	1		2 or More										
Both Approaches Major Street	500 (400)	350 (280)	600 (480)	420 (336)	1036	1215	1339	1440	1373	1228	1120	1001	
Highest Approach Minor Street	150 (120)	105 (84)	200 (160)	140 (112)	67	76	94	77	80	81	90	87	

Ex. Volume

Ex. + Proj. Volume

Condition B - Interruption of Continuous Traffic 100% SATISFIED YES ☐ NO ☒
80% SATISFIED YES ☐ NO ☒

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)				10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	Hour
	U	R	U	R									
APPROACH LANES	1		2 or More										
Both Approaches Major Street	750 (600)	525 (420)	900 (720)	630 (504)	1036	1215	1339	1440	1373	1228	1120	1001	
Highest Approach Minor Street	75 (60)	53 (42)	100 (80)	70 (56)	67	76	94	77	80	81	90	87	

Ex. Volume

Ex. + Proj. Volume

Combination of Conditions A & B SATISFIED YES ☐ NO ☒

REQUIREMENT	CONDITION	✓	FULFILLED
TWO CONDITIONS SATISFIED 80%	A. MINIMUM VEHICULAR VOLUME		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	AND, B. INTERRUPTION OF CONTINUOUS TRAFFIC		
AND, AN ADEQUATE TRIAL OF OTHER ALTERNATIVES THAT COULD CAUSE LESS DELAY AND INCONVENIENCE TO TRAFFIC HAS FAILED TO SOLVE THE TRAFFIC PROBLEMS			Yes <input type="checkbox"/> No <input type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 2 of 5)

WARRANT 2 - Four Hour Vehicular Volume

SATISFIED* YES ☐ NO ☒

Record hourly vehicular volumes for any four hours of an average day.

APPROACH LANES	One	2 or More	10 AM	11 AM	12 PM	1 PM	Hour
Both Approaches - Major Street		X	1036	1215	1339	1440	
Higher Approach - Minor Street			67	76	94	77	

*All plotted points fall above the applicable curve in Figure 4C-1. (URBAN AREAS)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<u>OR</u> , All plotted points fall above the applicable curve in Figure 4C-2. (RURAL AREAS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>

**WARRANT 3 - Peak Hour
(Part A or Part B must be satisfied)**

SATISFIED YES ☐ NO ☒

PART A

SATISFIED YES ☐ NO ☒

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; <u>AND</u>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; <u>AND</u>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes <input type="checkbox"/>	No <input type="checkbox"/>

PART B

SATISFIED YES ☐ NO ☒

APPROACH LANES	One	2 or More	Hour
Both Approaches - Major Street			
Higher Approach - Minor Street			

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<u>OR</u> , The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 3 of 5)

**WARRANT 4 - Pedestrian Volume
(Parts 1 and 2 Must Be Satisfied)**

SATISFIED YES ☐ NO ☒

Part 1 (Parts A or B must be satisfied)

Hours -->

A.

Vehicles per hour for any 4 hours				
Pedestrians per hour for any 4 hours				

**Figure 4C-5 or Figure 4C-6
SATISFIED YES ☐ NO ☒**

B.

Vehicles per hour for any 1 hour				
Pedestrians per hour for any 1 hour				

**Figure 4C-7 or Figure 4C-8
SATISFIED YES ☐ NO ☒**

Part 2

SATISFIED YES ☐ NO ☒

<u>AND</u> , The distance to the nearest traffic signal along the major street is greater than 300 ft	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<u>OR</u> , The proposed traffic signal will not restrict progressive traffic flow along the major street.	Yes <input type="checkbox"/>	No <input type="checkbox"/>

**WARRANT 5 - School Crossing
(Parts A and B Must Be Satisfied)**

SATISFIED YES ☐ NO ☒

Part A

Gap/Minutes and # of Children

SATISFIED YES ☐ NO ☒

Gaps vs Minutes	Minutes Children Using Crossing	
	Number of Adequate Gaps	
School Age Pedestrians Crossing Street / hr		

Hour

Gaps < Minutes YES ☐ NO ☒

AND Children > 20/hr YES ☐ NO ☒

<u>AND</u> , Consideration has been given to less restrictive remedial measures.	Yes <input type="checkbox"/>	No <input type="checkbox"/>
--	------------------------------	-----------------------------

Part B

SATISFIED YES ☐ NO ☒

The distance to the nearest traffic signal along the major street is greater than 300 ft	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<u>OR</u> , The proposed signal will not restrict the progressive movement of traffic.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 4 of 5)

**WARRANT 6 - Coordinated Signal System
(All Parts Must Be Satisfied)**

SATISFIED YES ☐ NO ☒

MINIMUM REQUIREMENTS	DISTANCE TO NEAREST SIGNAL	
≥ 1000 ft	N _____ ft, S _____ ft, E _____ ft, W _____ ft	Yes <input type="checkbox"/> No <input type="checkbox"/>
On a one-way street or a street that has traffic predominantly in one direction, the adjacent traffic control signals are so far apart that they do not provide the necessary degree of vehicular platooning.		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
OR, On a two-way street, adjacent traffic control signals do not provide the necessary degree of platooning and the proposed and adjacent traffic control signals will collectively provide a progressive operation.		

**WARRANT 7 - Crash Experience Warrant
(All Parts Must Be Satisfied)**

SATISFIED YES ☐ NO ☒

Adequate trial of alternatives with satisfactory observance and enforcement has failed to reduce the crash frequency.		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
REQUIREMENTS	Number of crashes reported within a 12 month period susceptible to correction by a traffic signal, and involving injury or damage exceeding the requirements for a reportable crash.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
5 OR MORE			
REQUIREMENTS	CONDITIONS	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
ONE CONDITION SATISFIED 80%	Warrant 1, Condition A - Minimum Vehicular Volume		✓
	OR, Warrant 1, Condition B - Interruption of Continuous Traffic		
	OR, Warrant 4, Pedestrian Volume Condition Ped Vol ≥ 80% of Figure 4C-5 through Figure 4C-8		

**WARRANT 8 - Roadway Network
(All Parts Must Be Satisfied)**

SATISFIED YES ☐ NO ☒

MINIMUM VOLUME REQUIREMENTS	ENTERING VOLUMES - ALL APPROACHES	✓	FULFILLED
1000 Veh/Hr	During Typical Weekday Peak Hour _____ Veh/Hr and has 5-year projected traffic volumes that meet one or more of Warrants 1, 2, and 3 during an average weekday.		Yes <input type="checkbox"/> No <input type="checkbox"/>
	OR During Each of Any 5 Hrs. of a Sat. or Sun _____ Veh/Hr		
CHARACTERISTICS OF MAJOR ROUTES		MAJOR ROUTE A	MAJOR ROUTE B
Hwy. System Serving as Principal Network for Through Traffic			
Rural or Suburban Highway Outside Of, Entering, or Traversing a City			
Appears as Major Route on an Official Plan			
Any Major Route Characteristics Met, Both Streets			Yes <input type="checkbox"/> No <input type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 5 of 5)

**WARRANT 9 - Intersection Near a Grade Crossing
(Both Parts A and B Must Be Satisfied)**

SATISFIED YES ☐ NO ☒

<p>PART A</p> <p>A grade crossing exists on an approach controlled by a STOP or YIELD sign and the center of the track nearest to the intersection is within 140 feet of the stop line or yield line on the approach. Track Center Line to Limit Line _____ ft</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>
<p>PART B</p> <p>There is one minor street approach lane at the track crossing - During the highest traffic volume hour during which rail traffic uses the crossing, the plotted point falls above the applicable curve in Figure 4C-9.</p> <p>Major Street - Total of both approaches: _____ VPH Minor Street - Crosses the track (one direction only, approaching the intersection): _____ VPH X AF (Use Tables 4C-2, 3, & 4 below to calculate AF) = _____ VPH</p> <hr/> <p>OR, There are two or more minor street approach lanes at the track crossing - During the highest traffic volume hour during which rail traffic uses the crossing, the plotted point falls above the applicable curve in Figure 4C-10.</p> <p>Major Street - Total of both approaches : _____ VPH Minor Street - Crosses the track (one direction only, approaching the intersection): _____ VPH X AF (Use Tables 4C-2, 3, & 4 below to calculate AF) = _____ VPH</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>

The minor street approach volume may be multiplied by up to three following adjustment factors (AF) as described in Section 4C.10.

- 1- Number of Rail Traffic per Day _____ Adjustment factor from table 4C-2 _____
- 2- Percentage of High-Occupancy Buses on Minor Street Approach _____ Adjustment factor from table 4C-3 _____
- 3- Percentage of Tractor-Trailer Trucks on Minor Street Approach _____ Adjustment factor from table 4C-4 _____

NOTE: If no data is available or known, then use AF = 1 (no adjustment)

Future + Project Conditions

California MUTCD 2014 Edition
(FHWA's MUTCD 2009 Edition, including Revisions 1 & 2, as amended for use in California)

Page 850

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 1 of 5)

COUNT DATE 6/7/2023

DIST _____ CO _____ RTE _____ PM _____

Major St: Thousand Oaks Boulevard Critical Approach Speed _____ mph

Minor St: Lombard Street Critical Approach Speed _____ mph

Speed limit or critical speed on major street traffic > 40 mph..... ☐ or ☐ } **RURAL (R)**

In built up area of isolated community of < 10,000 population..... ☒ } **URBAN (U)**

WARRANT 1 - Eight Hour Vehicular Volume SATISFIED YES ☐ NO ☒
(Condition A or Condition B or combination of A and B must be satisfied)

Condition A - Minimum Vehicle Volume 100% SATISFIED YES ☐ NO ☒
80% SATISFIED YES ☐ NO ☒

Ex. Volume
Fut. + Proj. Volume

APPROACH LANES	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)				10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	Hour
	U	R	U	R									
Both Approaches Major Street	500 (400)	350 (280)	600 (480)	420 (336)	1036	1215	1339	1440	1373	1228	1120	1001	
Highest Approach Minor Street	150 (120)	105 (84)	200 (160)	140 (112)	70	80	99	81	84	85	106	92	

Condition B - Interruption of Continuous Traffic 100% SATISFIED YES ☐ NO ☒
80% SATISFIED YES ☐ NO ☒

Ex. Volume
Fut. + Proj. Volume

APPROACH LANES	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)				10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	Hour
	U	R	U	R									
Both Approaches Major Street	750 (600)	525 (420)	900 (720)	630 (504)	1036	1215	1339	1440	1373	1228	1120	1001	
Highest Approach Minor Street	75 (60)	53 (42)	100 (80)	70 (56)	70	80	99	81	84	85	106	92	

Combination of Conditions A & B SATISFIED YES ☐ NO ☒

REQUIREMENT	CONDITION	✓	FULFILLED
TWO CONDITIONS SATISFIED 80%	A. MINIMUM VEHICULAR VOLUME		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	AND, B. INTERRUPTION OF CONTINUOUS TRAFFIC		
AND, AN ADEQUATE TRIAL OF OTHER ALTERNATIVES THAT COULD CAUSE LESS DELAY AND INCONVENIENCE TO TRAFFIC HAS FAILED TO SOLVE THE TRAFFIC PROBLEMS			Yes <input type="checkbox"/> No <input type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 2 of 5)

WARRANT 2 - Four Hour Vehicular Volume

SATISFIED* YES ☐ NO ☒

Record hourly vehicular volumes for any four hours of an average day.

APPROACH LANES	One	2 or More	10 AM	11 AM	12 PM	1 PM	Hour
Both Approaches - Major Street		X	1036	1215	1339	1440	
Higher Approach - Minor Street			70	80	99	81	

*All plotted points fall above the applicable curve in Figure 4C-1. (URBAN AREAS)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<u>OR</u> , All plotted points fall above the applicable curve in Figure 4C-2. (RURAL AREAS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>

**WARRANT 3 - Peak Hour
(Part A or Part B must be satisfied)**

SATISFIED YES ☐ NO ☒

PART A

SATISFIED YES ☐ NO ☒

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; <u>AND</u>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; <u>AND</u>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes <input type="checkbox"/>	No <input type="checkbox"/>

PART B

SATISFIED YES ☐ NO ☒

APPROACH LANES	One	2 or More	Hour
Both Approaches - Major Street			
Higher Approach - Minor Street			

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<u>OR</u> , The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 3 of 5)

WARRANT 4 - Pedestrian Volume
(Parts 1 and 2 Must Be Satisfied)

SATISFIED YES ☐ NO ☒

Part 1 (Parts A or B must be satisfied)

Hours -->

A.

Vehicles per hour for any 4 hours				
Pedestrians per hour for any 4 hours				

Figure 4C-5 or Figure 4C-6
SATISFIED YES ☐ NO ☒

B.

Vehicles per hour for any 1 hour				
Pedestrians per hour for any 1 hour				

Figure 4C-7 or Figure 4C-8
SATISFIED YES ☐ NO ☒

Part 2

SATISFIED YES ☐ NO ☒

<u>AND</u> , The distance to the nearest traffic signal along the major street is greater than 300 ft	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<u>OR</u> , The proposed traffic signal will not restrict progressive traffic flow along the major street.	Yes <input type="checkbox"/>	No <input type="checkbox"/>

WARRANT 5 - School Crossing
(Parts A and B Must Be Satisfied)

SATISFIED YES ☐ NO ☒

Part A

Gap/Minutes and # of Children

SATISFIED YES ☐ NO ☒

Gaps vs Minutes	Minutes Children Using Crossing	
	Number of Adequate Gaps	
School Age Pedestrians Crossing Street / hr		

Hour

Gaps < Minutes YES ☐ NO ☒

AND Children > 20/hr YES ☐ NO ☒

<u>AND</u> , Consideration has been given to less restrictive remedial measures.	Yes <input type="checkbox"/>	No <input type="checkbox"/>
--	------------------------------	-----------------------------

Part B

SATISFIED YES ☐ NO ☒

The distance to the nearest traffic signal along the major street is greater than 300 ft	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<u>OR</u> , The proposed signal will not restrict the progressive movement of traffic.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 4 of 5)

**WARRANT 6 - Coordinated Signal System
(All Parts Must Be Satisfied)**

SATISFIED YES ☐ NO ☒

MINIMUM REQUIREMENTS	DISTANCE TO NEAREST SIGNAL	
≥ 1000 ft	N _____ ft, S _____ ft, E _____ ft, W _____ ft	Yes <input type="checkbox"/> No <input type="checkbox"/>
On a one-way street or a street that has traffic predominantly in one direction, the adjacent traffic control signals are so far apart that they do not provide the necessary degree of vehicular platooning.		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
OR, On a two-way street, adjacent traffic control signals do not provide the necessary degree of platooning and the proposed and adjacent traffic control signals will collectively provide a progressive operation.		

**WARRANT 7 - Crash Experience Warrant
(All Parts Must Be Satisfied)**

SATISFIED YES ☐ NO ☒

Adequate trial of alternatives with satisfactory observance and enforcement has failed to reduce the crash frequency.		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
REQUIREMENTS	Number of crashes reported within a 12 month period susceptible to correction by a traffic signal, and involving injury or damage exceeding the requirements for a reportable crash.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
5 OR MORE			
REQUIREMENTS	CONDITIONS	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
ONE CONDITION SATISFIED 80%	Warrant 1, Condition A - Minimum Vehicular Volume		✓
	OR, Warrant 1, Condition B - Interruption of Continuous Traffic		
	OR, Warrant 4, Pedestrian Volume Condition Ped Vol ≥ 80% of Figure 4C-5 through Figure 4C-8		

**WARRANT 8 - Roadway Network
(All Parts Must Be Satisfied)**

SATISFIED YES ☐ NO ☒

MINIMUM VOLUME REQUIREMENTS	ENTERING VOLUMES - ALL APPROACHES	✓	FULFILLED
1000 Veh/Hr	During Typical Weekday Peak Hour _____ Veh/Hr and has 5-year projected traffic volumes that meet one or more of Warrants 1, 2, and 3 during an average weekday.		Yes <input type="checkbox"/> No <input type="checkbox"/>
	OR During Each of Any 5 Hrs. of a Sat. or Sun _____ Veh/Hr		
CHARACTERISTICS OF MAJOR ROUTES		MAJOR ROUTE A	MAJOR ROUTE B
Hwy. System Serving as Principal Network for Through Traffic			
Rural or Suburban Highway Outside Of, Entering, or Traversing a City			
Appears as Major Route on an Official Plan			
Any Major Route Characteristics Met, Both Streets			Yes <input type="checkbox"/> No <input type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 5 of 5)

**WARRANT 9 - Intersection Near a Grade Crossing
(Both Parts A and B Must Be Satisfied)**

SATISFIED YES ☐ NO ☒

<p>PART A</p> <p>A grade crossing exists on an approach controlled by a STOP or YIELD sign and the center of the track nearest to the intersection is within 140 feet of the stop line or yield line on the approach. Track Center Line to Limit Line _____ ft</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>
<p>PART B</p> <p>There is one minor street approach lane at the track crossing - During the highest traffic volume hour during which rail traffic uses the crossing, the plotted point falls above the applicable curve in Figure 4C-9.</p> <p>Major Street - Total of both approaches: _____ VPH Minor Street - Crosses the track (one direction only, approaching the intersection): _____ VPH X AF (Use Tables 4C-2, 3, & 4 below to calculate AF) = _____ VPH</p> <hr/> <p>OR, There are two or more minor street approach lanes at the track crossing - During the highest traffic volume hour during which rail traffic uses the crossing, the plotted point falls above the applicable curve in Figure 4C-10.</p> <p>Major Street - Total of both approaches : _____ VPH Minor Street - Crosses the track (one direction only, approaching the intersection): _____ VPH X AF (Use Tables 4C-2, 3, & 4 below to calculate AF) = _____ VPH</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>

The minor street approach volume may be multiplied by up to three following adjustment factors (AF) as described in Section 4C.10.

- 1- Number of Rail Traffic per Day _____ Adjustment factor from table 4C-2 _____
- 2- Percentage of High-Occupancy Buses on Minor Street Approach _____ Adjustment factor from table 4C-3 _____
- 3- Percentage of Tractor-Trailer Trucks on Minor Street Approach _____ Adjustment factor from table 4C-4 _____

NOTE: If no data is available or known, then use AF = 1 (no adjustment)

Appendix D: VMT Analysis

TECHNICAL MEMORANDUM

To: Michael Brust
WGZE
7812 Edinger Avenue, Suite 302
Huntington Beach, CA 92647

From: Jennifer Emerson-Martin, PE
Iteris, Inc.
801 South Grand Avenue, Suite 750
Los Angeles, CA 90017

Date: October 4, 2023

RE: 500 Thousand Oaks Blvd – CEQA Transportation Analysis

INTRODUCTION

This memorandum presents Iteris' California Environmental Quality Act (CEQA) analysis of the potential mixed-use development at 500 Thousand Oaks Boulevard in the City of Thousand Oaks. The mixed-use development consists of construction of 328 multi-family units (44 units would be low-income housing), 5,300 square feet of general commercial space, and 3,200 square feet of restaurant. The development site is located at the southeastern corner of Thousand Oaks Boulevard/Lombard Street and southwestern corner of Thousand Oaks Boulevard/Long Court.

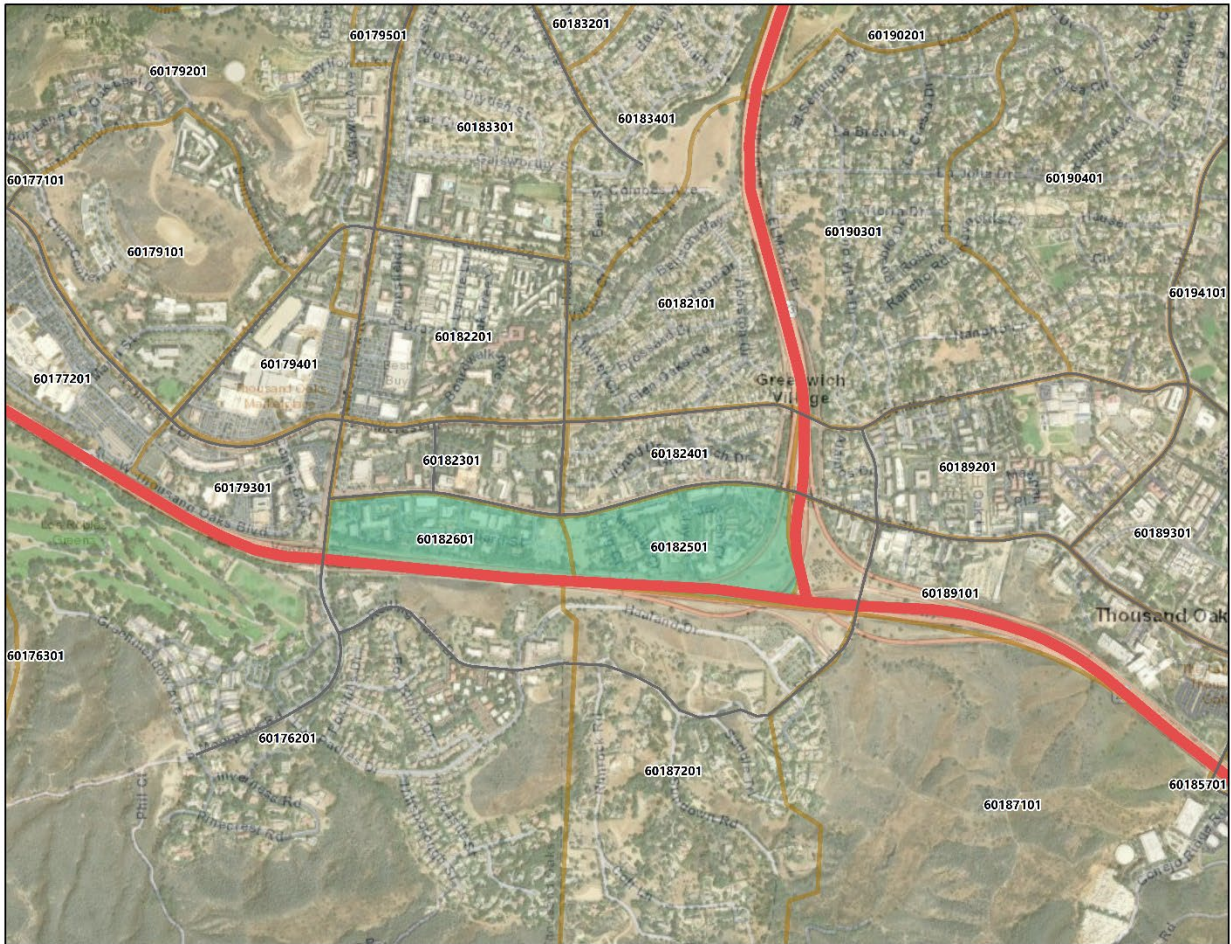
CEQA analysis for determining potential significant transportation impacts from vehicles transitioned in 2020 from an automobile delay or capacity measure to a Vehicle Miles Traveled (VMT) metric as required by Senate Bill (SB) 743. VMT is an area-wide performance measure which helps compare the overall performance of a development and is also used as a metric to ultimately assess the transportation environmental impacts. VMT is generally calculated using a travel demand model that captures the movement of all trips over a highway network. For this analysis, the time period was defined as a 24-hour period on a typical weekday.

METHODOLOGY

Iteris utilized the Ventura County Transportation Model (VCTM) to generate VMT statistics, following the City's administrative policy on CEQA transportation analysis. This land use based model, which is a subarea model of the Southern California Association of Government's (SCAG) travel demand model, is consistent with the 2016 SCAG RTP/SCS travel-demand model assumptions and inputs. The model consists of a 2016 base year scenario and 2040 future year scenario. For the purposes of this analysis, the 2016 base year scenario was utilized. It should be noted the 2016 base year is the regionwide standard for existing and baseline conditions analysis.

The VCTM consists of a detailed traffic analysis zone (TAZ) structure in the City of Thousand Oaks. The model consists of 110 TAZ's within the City. **Figure 1** illustrates the location of the proposed development's TAZs (60182501 and 60182601) in relation to the region.

Figure 1: Proposed Development TAZ Location



The following land use allocation was applied to the project TAZs:

- TAZ 60182501 (east) – 154 multi-family units, 3,200 sq ft. of restaurant, and 3,800 sq ft. of commercial.
- TAZ 60182601 (west) – 174 multi-family units and 1,500 sq ft. of commercial.

VMT ANALYSIS

This section describes the potential screening, thresholds of significance, and VMT impact evaluation for the proposed development.

Screening Criteria

The City utilizes a screening criteria in order to provide CEQA relief to projects that support the State's GHG emission goals, and those projects are presumed as less than significant. The proposed project does not meet any of the screening criteria, thus is required to undergo a CEQA Transportation Assessment.

Thresholds of Significance

The City has adopted an administrative policy stating that thresholds of significance will be determined on a case-by-case basis. For the purposes of this project, the thresholds of significance will be as follows:

- A significant impact would occur if the VMT per capita or VMT per employee exceeds the citywide average VMT per capita or per employee of the baseline.

VMT Impact Evaluation

The proposed project consists of commercial and residential use, thus the VMT will be reported as Work-Based VMT per Employee and Home-Based VMT per Resident calculated as such:

$$\text{WorkBased VMT per Employee} = \frac{\text{Total WorkBased VMT}}{\text{Total Number of Employees}}$$

$$\text{HomeBased VMT per Resident} = \frac{\text{Total HomeBased VMT}}{\text{Total Number of Residents}}$$

To determine the project's potential level of impact, a new VCTM scenario including the proposed project land use within TAZ 60182501 and 60182601 was prepared, utilizing the existing year (2016) of the model. As the project is located in two separate zones, the calculation of VMT per capita is calculated as the combined sum of metrics from both zones. From this new model scenario output, the following two metrics will be used for significant impact determination:

- Project TAZs daily residential VMT per capita;
- Citywide daily residential VMT per capita;
- Project TAZs daily employment VMT per employee;
- Citywide daily employment VMT per employee.

The project VCTM scenario resulted in the following outputs:

- The City-wide average daily VMT per resident, for use within this analysis only, is **15.32**; and the project TAZ-level daily VMT per resident is **11.05**.
- The City-wide average daily VMT per employee, for use within this analysis only, is **22.55**; and the project TAZ-level daily VMT per employee is **21.72**.

The project TAZs' daily residential VMT per capita is approximately 28% less than the Citywide average daily residential VMT per capita. The project TAZs' daily employment VMT per employee is approximately 4% less than the Citywide average daily employment VMT per employee. Neither the project's estimated residential VMT per capita nor commercial VMT per employee exceed the respective Citywide averages (for these metrics). Thus, the proposed project is not forecast to result in a significant transportation impact.

Conclusion

The mixed-use development consists of construction of 328 multi-family units (44 units would be low-income housing), 5,300 square feet of general commercial space, and 3,200 square feet of restaurant.

The project does not meet any CEQA transportation screening criteria, thus a CEQA Transportation Assessment was required. Based on the described thresholds of significance, the proposed project would not result in a significant transportation impact under CEQA Checklist XVII. Transportation b):

“Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3 subdivision (b)—the criteria for analyzing transportation impacts for land use projects: vehicle miles traveled exceeding an applicable threshold of significance?”

Arborist Report

500 Thousand Oaks Boulevard Project, City of Thousand Oaks, California

JANUARY 2024

Prepared for:

CHERRY TREE CAPITAL PARTNERS

130 Newport Center Dr., Suite 210
Newport Beach, California 92660
Contact: Tim Stanley

Prepared by:

DUDEK

38 North Marengo Avenue
Pasadena, California 91101
Contact: Chris Kallstrand
ISA Certified Arborist

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A Tree Location Exhibit

B Tree Impact Exhibit

C Tree Information Matrix

D Individual Sonic Tomograms

E Tree Protection Measures

1 Introduction

This report summarizes Dudek's evaluation and analysis of tree resources within the tree survey area at the 500 East Thousand Oaks Boulevard Project (project) site (based on the site plan dated March 1, 2023), located at 500 East Thousand Oaks Boulevard in the City of Thousand Oaks (City), California. The survey area, as discussed in this report, is defined as the project site plan limits plus a 50-foot buffer. The project site is located at 500 East Thousand Oaks Boulevard, south of Thousand Oaks Boulevard, west of Long Court, north of U.S. Route 101, and east of Lombard Street in the City of Thousand Oaks, California. The initial field inventory and assessments of the survey area's trees were conducted on April 7, 2023 and August 28, 2023. The focus of Dudek's field evaluations was to identify and inventory all on-site trees that are subject to regulation by the City Municipal Code that could be affected by the proposed development per the site plan and evaluate the structural integrity of two large oak trees using sonic tomography. This report includes a discussion of tree inventory, evaluation, and analysis methods; a summary of findings; identification of anticipated impacts; and tree protection and tree impact mitigation recommendations consistent with the City Municipal Code and the tree removal permit process specified therein.

The City requires a permit for removal, pruning, or encroachment into the protected zone of any oak tree or landmark tree, which are defined as:

- **Oak Tree:** any oak tree of the genus *Quercus* including, but not limited to, valley oak (*Quercus lobata*), coast live oak (*Quercus agrifolia*) and scrub oak (*Quercus berberidifolia*), regardless of size (Municipal Code, Title 9, Chapter 42, Oak Tree Preservation and Protection).
- **Landmark Tree:** specimens of the following species that have reached the designated maturity: *Platanus racemosa* (California sycamore) that exceed 12 inches in diameter when measured at a point 4.5 feet above the natural grade at the base of the tree, *Umbellularia californica* (California bay laurel) that exceed 8 inches in diameter when measured at a point 4.5 feet above the natural grade at the base of the tree, *Juglans californica* (California black walnut) that exceed 8 inches in diameter when measured at a point 4.5 feet above the natural grade at the base of the tree, and *Heteromeles arbutifolia* (Toyon) that exceed 8 inches in diameter when measured at a point 4.5 feet above the natural grade at the base of the tree. Trees with multiple trunks shall be deemed to have reached maturity if the sum of the diameters of the multiple trunks exceeds the required diameter plus 2 inches of a single trunked tree. Landmark trees shall also include all designated historic trees (Municipal Code, Title 9, Chapter 43, Landmark Tree Preservation and Protection).
- **Protected Zone:** a specifically defined area totally encompassing an oak, landmark, or historic tree within which work activities are strictly controlled. When depicted on a map, the outermost edge of the protected zone will appear as an irregular shaped circle that follows the contour of the dripline of the tree. Using the dripline as a point of reference, the protected zone shall commence at a point 5 feet outside of the dripline and extend inward to the trunk of the tree. In no case shall the protected zone be less than 15 feet from the trunk of a landmark tree (Municipal Code, Title 9, Chapters 42 and 43).

The analysis of potential tree impacts in this report considers the requirements outlined in the appropriate sections of the City's Municipal Code. The proposed project would remove protected oak and landmark trees and would result in encroachment into the protected zone of oak and landmark trees due to site development. Section 4 of this report recommends mitigation measures for anticipated tree removal and to mitigate impacts from construction

encroachment into the protected zone of regulated trees that would result from the proposed project. The provided measures are consistent with the provisions of the City Municipal Code.

In addition to the evaluation and analysis of tree resources within the tree survey area at the 500 East Thousand Oaks Boulevard Project, as they relate to the proposed project, the following report includes a risk assessment of two large oak trees found on the property (Tree nos. 1 and 2.). Although, this information is not a requirement of the municipal code, the City requested that these two trees be evaluated for risk and decay based on the recent failure of adjacent trees.

1.1 Summary

The field survey recorded 60 trees within the survey area, 34 of which are oak trees subject to regulation under the City's Municipal Code. The inventoried tree locations are depicted in Appendix A, Tree Locations. The proposed project's tree impacts are depicted in Appendix B, Tree Impacts. Construction of the proposed project is expected to require removal of up to 33 trees, including 22 regulated oak trees. Furthermore, the protected zone of up to 15 trees, including 9 regulated trees, will be encroached upon because of proposed grading and building construction (City-issued permits are required for pruning branches in conjunction with construction activities and will be required prior to pruning of any regulated trees).

The Thousand Oaks Oak Tree Preservation and Protection Guidelines call for one 15-gallon oak tree to be planted or donated for each dead or hazardous oak tree removed. For removal of healthy oak trees associated with commercial, industrial, and new residential development projects, the guidelines call for planting or donation of two 24-inch box trees and one 36-inch or 60-inch box tree. In the case of removal of oak trees larger than 48 inches in diameter, the applicant is required to obtain the largest nursery grown oak tree available or provide two 60-inch box trees. The City Municipal Code does not identify specific replacement requirements to mitigate for the removal of landmark trees, so this report applies the replacement requirements for the removal of oak trees to landmark tree removal. The tree replacement recommendations contained herein are based on the standards set forth in the City's Oak Tree Preservation and Protection Guidelines. Finally, Section 4 of this report provides construction-related tree protection recommendations and recommendations for long-term maintenance and care for regulated trees that will be retained on the project site.

Dudek recommends planting 64 oak trees on site to mitigate for the anticipated removal of 22 oak trees. Species composition of the planted trees should match the species removed at a ratio of one 36-inch box tree and two 24-inch box trees for each oak tree removed and two 60-inch box trees for each oak tree with a diameter greater than 48 inches removed, consistent with City Municipal Code. Planting should therefore include four 60-inch box trees, twenty 36-inch oak box trees, and forty 24-inch oak box trees. It should be noted that with the exception of two trees (no. 8 and no. 15), located to the east of the proposed project, all of the proposed tree removals are on-site tree removals. Additionally, it should be noted that the project disturbance footprint does not encroach into the Caltrans right-of-way, and no trees located within the Caltrans right-of-way will be removed or encroached upon by the proposed project. It should be noted, that in the previous version of the report, two trees (Tree nos. 18 and 20) were noted as being removed and within the Caltrans right-of-way (R.O.W). One of these two trees, tree no. 18, was misidentified as being located within the Caltrans R.O.W, and is not located within the R.O.W. The second tree, tree no. 20, is located within the R.O.W, but it is not impacted by the proposed project. Lastly, for those trees recommended for removal on the adjacent property the City will require a separate Protected Tree Permit and Report to document the specific work/impacts and the associated regulatory mitigation.

The site's two large valley oak (Tree nos. 1 and 2), which were evaluated for decay and risk, at the request of the City, were found to have an overall risk rating of low. Furthermore, the two valley oak trees were evaluated for the presence of internal decay, damaged wood, and/or cracks. Per section 3.2 of this report, the two trees were found to have very low detectable internal damage (2% or less) at the reading locations. Additional details regarding the risk evaluation can be found in section 3.2.

A long-term monitoring and maintenance program is further recommended to mitigate for encroachments into the protected zone of regulated trees that would occur with the proposed project and to maintain the health of the trees retained on site. Further details regarding mitigation for planned tree removal is provided in Section 4.1 of this report.

1.2 Assignment

Dudek's International Society of Arboriculture (ISA) Certified Arborists performed the following tasks:

- Assessed and inventoried all regulated oak and landmark trees with protected zones within the survey area and documented species, general health, general structural condition, size, appearance, and presence of pests
- Mapped the location of regulated oak and landmark trees using GPS technology as necessary to develop a tree location exhibit and for planning reference
- Performed a Level 3 tree risk analysis, using sonic tomography, of two large oaks on the northern edge of the property
- Prepared a tree information matrix that details the attributes of each regulated tree and identifies the species and landmark status
- Analyzed tree attribute data and coordinated with the project design team to promote tree retention on site to the maximum extent practicable
- Evaluated tree impacts based on the project site plans (dated March 1, 2023)
- Prepared this report to document the results of field surveys and impact analyses and provide recommendations for tree protection and impact mitigation measures in accordance with the provisions of the City's Municipal Code and Oak Tree Preservation and Protection Guidelines

1.3 Project Description

Located within the Thousand Oaks Boulevard specific plan (SP20), the project proposes a 6.09-acre mixed-use development that would provide 328 multifamily units, retail, live-work areas, and extensive public open spaces throughout the site. The residential units would be distributed along three buildings composed of two to three stories of type V-A wood construction over a two-story type I-A concrete podium. The overall bulk of and massing of the adjacent public streets would create a relatable scale with the neighborhood context. Private open spaces would be provided on each building, in addition to public open spaces with passive and active uses located along Thousand Oaks Boulevard and Lombard Street that would create a vibrant place-making project.

1.4 Setting

1.4.1 Location

The project site is in the City of Thousand Oaks, California, and is generally bounded on the north by Thousand Oaks Boulevard, on the east by private development (commercial and residential), on the south by U.S. Route 101, and on the west by Lombard Street (Figure 1, Regional Map). The survey area is within portions of Assessor's Parcel Numbers 5250-012-230, 6690-21-105, 669-201-030, 6690-21-040, and 6690-201-050, which totals 6.09 acres.

1.4.2 General Physical Characteristics

The project site is mostly flat with a slight slope on portions of the project site. The site is primarily open space consisting of a combination of non-native grasslands and herbaceous weeds. The project site is currently undeveloped. The surrounding land use consists of public roads, single-residence dwellings, and commercial land use. The site is located directly south of E Thousand Oaks Boulevard, directly north of U.S. Route 101, east of Lombard Street, and west of Long Court. Inventoried on-site trees consist primarily of oak and ornamental trees. Trees are found around the edges of the project boundaries, with occasional trees located in the eastern half of the site.

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2 Methods

The following sections describe the methods used by Dudek's ISA Certified Arborists to inventory and evaluate trees on the tree survey area.

2.1 Field Tree Inventory and Evaluation

Dudek's ISA Certified Arborists Aida Castro (No. WE-13966A) and Sarah Tian (No. WE-13677A) conducted the following tree inventories and/or tree evaluations:

- April 7, 2023 – tree inventory and evaluation to document tree locations and attribute information for all oak trees and landmark trees within the survey area
- April 7, 2023 – Level 2 and 3 Risk and Structural Assessment of two large coast live oak trees (Tree Nos 1 and 2) located on the northern edge of the property
- August 28, 2023 – updated tree crown dimensions

2.1.1 Tree Inventory

The Dudek arborists examined and mapped all oak and landmark trees with protected zones located within 50 feet of areas that would be disturbed by the proposed development. Tree attribute data collected during the field survey included species, trunk diameter, tree height, canopy spread (north, northwest, west, southwest, south, southeast, east, northeast), general health condition, structural condition, and presences of observable pests or other tree maladies. Trunk diameters were measured using a diameter tape that provides adjusted numbers for diameter measurements when wrapping the tape around the circumference of the trunk of a tree. Diameter measurements were collected using standard protocol described by the Council of Tree and Landscape Appraisers in the Guide for Plant Appraisal, published by the ISA, and in accordance with guidance given in the City's Oak Tree Preservation and Protection Guidelines and the City's Municipal Code.

Trunk diameter measurements were taken at 4.5 feet above the ground along the trunk axis, with a few common exceptions. In cases where the trunk of a tree split into multiple stems at approximately 4.5 feet above the ground, the measurement was made at the location that best represented the trunk's diameter. Tree height measurements were estimated by the arborist, and tree crown radius measurements were documented by "pacing-off" the measurement based on the arborist's knowledge of his stride length or visually estimating the canopy width.

Pursuant to the Guide for Plant Appraisal (ISA 2000), tree health and structure were evaluated with respect to five distinct tree components: roots, trunk, scaffold branches, small branches, and foliage. Health and structure were graded as *good*, *good/fair*, *fair*, *fair/poor*, and *poor*. Good condition trees exhibit acceptable vigor, healthy foliage, minor if any structural issues, and no apparent maladies. Fair condition trees are typical, with few maladies, moderate structural issues, and may exhibit less vigor in foliage and new growth. Trees assigned a poor condition rating by Dudek's arborists exhibit significant health or structural problems or damage.

The location of each individual regulated tree was mapped using a Trimble Pathfinder Pro XH GPS receiver. The Pathfinder has a horizontal accuracy of 1-meter (1-sigma) using differential code positioning techniques. Since tree

canopies can sometimes cause loss of satellite lock by blocking the line-of-sight to satellites, an electronic compass and reflectorless electronic distance measuring device was also used in mapping tree locations. The electronic distance measuring/compass combination operates in concert with the Pathfinder system to position offsets, and offset information is automatically attached to the GPS position data string. Dudek used the data collected to create a master tree inventory data set, inclusive of all regulated trees within the tree survey area.

Individual oak and landmark tree locations are presented in Appendix A and individual tree attribute data and impact determinations are presented in Appendix B and Appendix C, Tree Information Matrix.

2.1.2 Tree Risk and Structural Analysis

In addition to the tree inventory and evaluations, Dudek's arborists conducted a Level 2 and Level 3 risk and structural evaluation of two valley oak trees. The Level 2 Basic Tree Risk Assessment is a 360° visual assessment that evaluates the tree's crown, trunk and trunk flare, visible aboveground roots, and site conditions. The assessment involves inspection of the tree's crown, branches, trunk, and root collar for the presence of structural defects such as included bark, cavities, fungal fruiting bodies, and/or decay. The Level 2 assessment also evaluates the likelihood that an observed defect could fail, the likelihood of the defect impacting a specific target should failure occur, and the subsequent damage that may occur should failure and impact occur. Through this evaluation, the level of risk for a tree and/or a specific tree part is determined using ISA's Tree Risk Matrix and based on a defined time frame. The defined time frame establishes the period for which risk is being evaluated to determine the likelihood of failure during the given time frame. The defined time frame for this risk assessment is 12 months, with the assumption of normal weather conditions for the region. The Tree Risk Matrix, provided in Exhibit 1, consists of two matrices that are used to estimate the likelihood of a tree impacting a specific target (e.g., automobile, person, house), to determine the level of risk as a combination of the likelihood of the tree or tree part failing and impacting a target, and to determine the severity of the consequences from that failure. Using the Tree Risk Matrix, the qualified arborist can determine if the observed defect and/or tree has a low, moderate, high, or extreme risk of failure.

Exhibit 1. Tree Risk Matrix

Matrix 1. Likelihood matrix.

Likelihood of Failure	Likelihood of Impact			
	Very low	Low	Medium	High
Imminent	Unlikely	Somewhat likely	Likely	Very likely
Probable	Unlikely	Unlikely	Somewhat likely	Likely
Possible	Unlikely	Unlikely	Unlikely	Somewhat likely
Improbable	Unlikely	Unlikely	Unlikely	Unlikely

Matrix 2. Risk rating matrix.

Likelihood of Failure & Impact	Consequences of Failure			
	Negligible	Minor	Significant	Severe
Very likely	Low	Moderate	High	Extreme
Likely	Low	Moderate	High	High
Somewhat likely	Low	Low	Moderate	Moderate
Unlikely	Low	Low	Low	Low

A Level 3 Advanced Assessment is performed in conjunction with, or after, a Level 2 Basic Tree Risk Assessment to provide detailed information about specific tree parts, defects, targets, or site conditions. Specialized equipment, data analysis, and expertise are usually required for advanced assessments. For this assessment, sonic tomography was the specialized method used to perform a Level 3 Advanced Assessment of the lower trunk of two valley oaks. The sonic tomograph provides a detailed analysis of the structural integrity of the lower trunk and is discussed in the following section.

Sonic tomography detects decay, cavities, and **fractures** in trees by measuring the velocity of sound waves as they pass through wood. Differences in velocity help determine areas of healthy wood and areas of damaged wood, as damaged wood has less elasticity and density than healthy wood. The reduction in elasticity results in the inability of sound waves to take a direct path through the wood, thereby indicating the presence of damaged wood. The speed of sound in wood correlates with wood quality and is, therefore, a measure of the breaking safety of the trunk (i.e., acceptable level of trunk damage/hollowness) and residual wall thickness (i.e., remaining undamaged wood).

To evaluate the presence and level of potential decay, cavities, and/or fractures within trees, a series of evenly spaced measuring points (MPs) are installed. MPs consist of pins that are tapped into the tree with a hammer until they contact the wood and are past the tree's bark layer. Contact with wood allows for accurate sound transmission. Upon completion of MP placement, the geometry of each tree was recorded using PiCUS calipers and a triangulation method (Exhibits 2 and 3). During the triangulation method, the MP positions are split into triangles, and the lengths of all sides are measured. The resulting measurements provide a detailed image of the tree's geometry, which is essential for calculating the sonic tomogram of a tree.

Exhibit 2. Calculating a Tree's Geometry



Exhibit 3. Triangulation Method

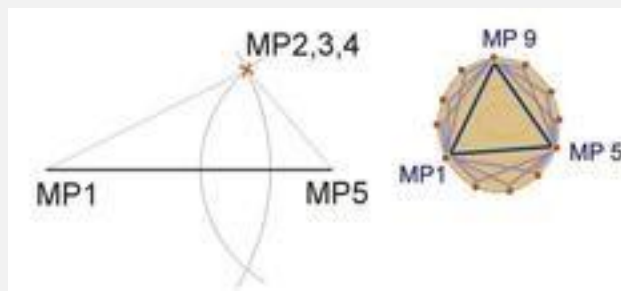
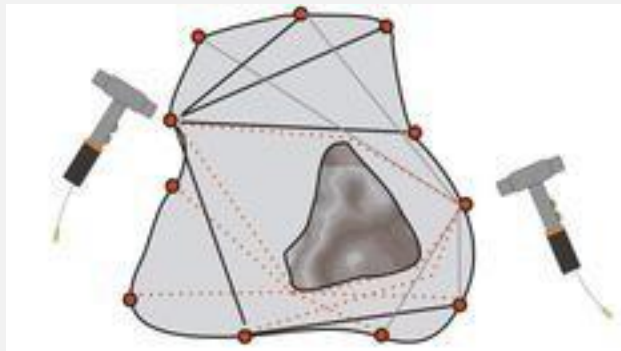


Exhibit 4. Graphic Representation of Sonic Measurement Method

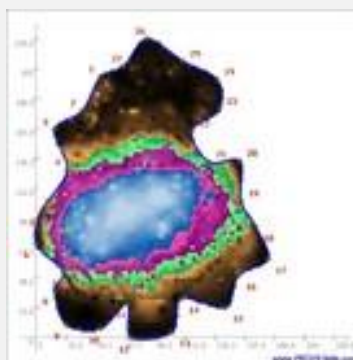


Once the tree's geometry has been calculated and recorded, sensors are attached to the MPs and sonic measurements are taken. The sonic measurements are taken by tapping each MP with an electronic hammer that creates sonic waves (Exhibit 4).

These sonic waves reverberate through the tree and the velocity of each wave is recorded at each of the MPs. This process is repeated until all MPs have been tapped and the corresponding velocities are recorded. The sonic tomograph's main unit (a computer) records and calculates the sonic tomogram when all readings have been taken. The tomogram then shows the relative and apparent ability of the wood to transmit acoustic waves. This representation displays different colors that represent the various properties of the wood (Exhibit 5). The colors displayed and their corresponding properties are as follows:

- **Dark brown** – Areas of healthy wood, where the fastest velocities occur
- **Green** – Varies, but describes the distance between healthy and damaged wood, and can be indicative of early fungus infection
- **Violets and blues** – Damaged wood

Exhibit 5. Graphic Representation of Sonic Tomogram Reading (not subject tree)



Following the sonic tomography sampling, data were electronically transferred into the PiCUS 3 software program (custom software created for the analysis and presentation of sonic tomograph data) for detailed analysis. The software calculates 2D tomograms that show the ability of wood to transmit sonic waves, which allows the user to measure residual wall thickness. During the analysis, the extent and level of decay within each tree was calculated and the structural integrity of the tree was analyzed.

Following completion of the damaged/decayed wood analysis, Dudek calculated the overall level of damaged wood at the cross-sectional plane of evaluation using PiCUS Q74 software for the evaluation of sonic tomograms. After completion of the analysis, management recommendations for each tree were made. The management recommendations are based upon the findings of the Level 2 and Level 3 evaluations. The combination of the Level 2 and Level 3 evaluations provides a comprehensive overview of each tree and the associated risk.

The failure risk described in this study is based on failure at the point of inspection and does not include failure risk associated with other tree components, such as root crown, root, and branch failure.

2.2 Tree Impact Analysis

Following data collection, processing, and analysis efforts, an impact determination was made for each tree based on proximity to the proposed disturbance area and building. Impact determinations used in this report include the following: Not Impacted (tree not affected by project), Removal (tree to be removed), and Encroachment (project disturbance would occur within the protected zone of the tree). A summary of project-related tree impacts is presented in Section 3.2, and Appendix C provides impact determination status for each tree recorded in the tree survey area.

Following completion of the impact assessment each tree proposed for removal was evaluated for its relocation potential. Specifically, Dudek evaluated each protected tree that is proposed for removal by the project for its relocation potential. The relocation potential evaluations included external observations of the general health and structure of the trees (new growth, vigor, and trunk/branching structure), overall tree size, absence or presence of trunk wounds or decay, and absence or presence of pests/diseases or other species-specific pathogens.

Furthermore, trees considered as relocation candidates must meet at least minimal requirements that will increase their survival following the boxing, storage, and replanting process. Minimal requirements include suitable size (smaller trees are more successfully transplanted) since larger trees are more difficult to relocate due to their difficulty compensating and adapting to the loss of significant root volume, and requirements for cabling to minimize the likelihood of failure. Trees with a trunk diameter less than about 10 inches perform better following transplant, and the smaller the tree, typically the higher relocation success and feasibility. An additional important consideration for relocation candidate trees is their health and structural condition. Trees must be in “good” health and structural condition (unless the species is unique or especially valuable, where a “fair” condition tree may be considered a candidate) and include an accessible location, no observable soil impediments (rockbound roots, utilities), and no observable chronic pest infestations or disease infections.

2.3 Scope of Work Limitations

This report presents tree information as observed in the field. No root crown excavations or investigations, internal probing, or aerial canopy inspections were performed during the tree assessments. Therefore, the presence or absence of internal decay or other hidden or inaccessible inferiorities in individual trees, other than those evaluated with sonic tomography, could not be confirmed.

3 Findings/Results

3.1 Inventory Summary

Dudek's arborists recorded 53 trees on and immediately adjacent to the project site. Of these 53 trees, 34 are protected oak trees. Table 1 provides a summary of the species and regulatory status of the trees mapped within the tree survey area.

Table 1. Species Summary

Scientific Name	Common Name	Tree Count
<i>Quercus agrifolia</i>	Coast live oak	24
<i>Quercus lobata</i>	Valley oak	8
<i>Quercus ilex</i>	Holly oak	2
Total Protected Oak Trees		34
<i>Pinus canariensis</i>	Canary island pine	6
<i>Pinus halepensis</i>	Aleppo pine	8
<i>Washingtonia robusta</i>	Mexican fan palm	2
<i>Eucalyptus</i> spp.	Eucalyptus	3
Total All Trees		53

As presented in Appendix C, of the 53 total trees, 13 (24.53%) of the trees exhibit above average (Rating B) health, 38 (71.70%) trees exhibit average (Rating C) health, 1 (1.89%) tree shows signs of poor (Rating D) health, and 1 (1.89%) tree is dead (Rating E). A total of 7 (13.21%) trees have above average (Rating B) structure, 40 (75.47%) trees exhibit average (Rating C) structure, 5 (9.43%) trees have poor (Rating D) structure, and 1 (1.89%) tree is dead (Rating E).

Of the 34 protected oak trees, 7 (20.59%) of the trees exhibit above average (Rating B) health, 26 (76.47%) trees exhibit average (Rating C) health, and 1 (2.94%) tree shows signs of poor health. A total of 31 (91.18%) trees exhibit average structure, and 3 (8.82%) trees have poor structure.

Trees in the survey area vary in size and stature according to species. Aggregate trunk diameters of the total 53 trees within the survey area range from 3 inches for several small coast live oaks to 76 inches for a four-stemmed eucalyptus (Tree No. 49). The largest single-stem diameter was 54 inches on a valley oak (Tree No. 1). Tree heights vary from 4 feet to 60 feet. Tree canopy extents range from 5 feet to 60 feet at their widest location. Individual attributes of each tree are presented in Appendix C.

Of the 34 protected oaks, aggregate diameters of the trees within the survey area range from 3 inches for several small coast live oaks to 55 inches for a coast live oak (Tree No. 14). Tree heights vary from 4 feet to 50 feet. Tree canopy extents range from 3 feet to 50 feet at their widest location.

3.2 Tree Risk and Structural Analysis

The following subsections detail the results from the Level 2 Basic Tree Risk Assessments and Level 3 Advanced Assessments.

3.2.1 Results – Level 2 Basic Tree Risk Assessment Summary

The Level 2 Basic Tree Risk Assessments evaluated site history, tree health and species profiles, load factors, and tree defects and conditions affecting the likelihood of failure in the crown and branches, trunk, and roots/root collar for two trees. The following subsections provide a summary of those findings.

Targets

Targets represent people and property that may be impacted should failure of the tree or tree part occur. Targets were first classified by their distance from a tree. Anything further from the tree than 1.5 times the height of the tree is not considered a target, as impact would not occur in the event of whole tree failure. For the two trees, the main targets identified were light poles, moving vehicles, pedestrians, and benches. The distance of targets from trees varied from being within the drip line to within 1.5 times tree height. Occupancy rate is the other factor used to assess targets, or how often a target is within the fall distance from the tree. For this site, frequency was identified as the following for each target:

- **Rare:** *Moving vehicles, pedestrians*– This reflects that while cars travel on a road adjacent to the trees and people walk on the sidewalk next to the trees, the actual time spent within the fall distance of an individual tree is brief.
- **Constant:** *Benches, light poles*– These structures are fixed and do not move. As such, they are constantly within the fall distance of an assessed tree.

Growing Environment

The two trees are mature and located on flat terrain directly adjacent to Thousand Oaks Boulevard. The trees are in an unmaintained undeveloped lot. Surrounding land uses include and may include, following development, roads, residential homes, and commercial development. In general, the landscaping currently consists of grasslands, weeds, and generally unmaintained trees. There is no apparent irrigation throughout the site.

Site history was evaluated and includes factors such as previous land uses, grade changes, and potentially cut/damaged roots from construction related activities, landscaping, irrigation installation, or sidewalk and street repairs. The two trees are in an unmaintained/undeveloped lot, and as such, at the time of the evaluation, had not been subject to grade changes and/or development.

In general, the prevailing wind direction in coastal Southern California is from the west/northwest, with common occurrences of high wind events from Santa Ana wind conditions and heavy winter rainstorms. Winter storm tracks can commonly produce strong winds from the easterly/southeasterly direction.

Load Factors

Load factors evaluate a tree's level of exposure to wind and the ability of the tree to disperse the force of the wind throughout the crown. Trees with a dense crown have more canopy area to buffer the impact of wind, and therefore have a lower overall load placed on limbs and branches. A lower load factor reduces the potential for limbs and branches to break during a wind event. The trees' crowns have a density described as average. Foliage could not be properly examined as the trees are deciduous and had not grown mature leaves at the time of inspection.

The wind exposure for the two trees is high, as neither tree grows near any other tree or structure to disrupt wind flow.

Tree Defects and Conditions Affecting the Likelihood of Failure

The assessment of tree defects and conditions affecting the likelihood of failure represents the arborist's visual assessment of the trees' crown and branches, trunk, and roots and root collar. Each tree part was assessed on multiple factors that reflect poor structural conditions, dead wood, pests, diseases, previous maintenance work, and other factors that may result in a defect of the tree part. For each tree, the arborist identified the defect of main concern, rated the likelihood that failure would occur within the given 12-month time frame, and rated the total load (mass) of the defect. The following section provides a review of the observed defects and conditions affecting the likelihood of failure for the trees' crown and branches, trunk, and root and root collar.

Crown and Branches

The tree crowns and branches were assessed on conditions such as crown balance, live crown ratio, and other factors that reflect weak attachments like co-dominant stems, included bark, and response growth from previous pruning. The tree crowns both reach approximately 50 feet in height and 50 feet across at their widest points. The trees exhibited weak attachment points such as co-dominant branches and dead branches/twigs. Weak attachment points and poor branch architecture can lead to crown/branch failure. Conversely, stronger attachments consist of accommodating attachment angles with no included bark and sound branch architecture. Below are the most common tree crown and branch conditions observed in the trees:

- **Weak Attachments:** Both trees were observed to have co-dominant branch unions. Additionally, both trees were observed to have dead branches/twigs in the canopies.
- **Main Concern:** The main concern for Tree No. 2 is the failure of a large, overextended branch located opposite of the targets. The main concern for Tree No. 1 is limb failure.
- **Likelihood of Failure:** The main concerns for Tree No. 2 is classified as possible, whereas the main concern for Tree No. 1 is classified as probable.

The crown and branch evaluations were limited at times by interior foliage, branches, and/or obstructions that limited viewing. Aerial crown evaluations of the trees were beyond the scope of this assessment.

Trunk

The trunk of each tree was assessed for defects that could lead to failure, including the presence of included bark, cankers/galls/burls, noticeable lean, and low live crown ratio. The trunks of Trees No. 2 and 1 were 43 and

54 inches at **diameter at standard height**, respectively. Below are the most common tree trunk conditions and defects observed in the trees:

- **Included bark:** Neither tree was observed to have included bark at the trunk.
- **Cankers/galls/burls:** Neither tree was observed to have cankers/galls/burls at the trunk.
- **Lean:** Tree No. 2 had a 0% lean whereas Tree No. 1 had a 15% lean. Leaning trees can be less stable under stress.
- **Live Crown Ratio:** Tree No. 2 had a live crown ratio of 75% whereas Tree No. 1 had a live crown ratio of 60%. Live crown ratio indicates the percentage of the total tree height that supports live foliage, and thus indicates health through the tree's ability to photosynthesize and dampen wind stress. A live crown ratio of at least 60% is preferred for urban trees.
- **Main Concern:** Tree No. 2 does not have a main concern regarding the trunk. The main concern of Tree No. 1 is a slight lean at the trunk. The likelihood of trunk failure of both trees is classified as improbable.

Roots and Root Collar

The root collars of the trees were not buried at the time of the evaluations. Root crown evaluations of the trees were limited to the visible portion of the crown. The following are the most common tree root and root collar conditions and defects observed in the trees:

- **Conks:** Neither tree was observed to have conks at the roots.
- **Main Concern:** Neither tree has a main concern.
- **Likelihood of Failure:** As neither tree has a main concern, likelihood of root failure is not applicable.

3.2.2 Results – Level 3 Advanced Assessment Summary

The following describes the findings of the Level 3 Advanced Assessment.

Sonic Tomography

Two valley oak trees were evaluated for the presence of internal decay, damaged wood, and/or cracks. Dudek found that the two trees had very low detectable internal damage (2% or less) at the reading locations. Appendix D, Individual Sonic Tomograms, presents the individual sonic tomography evaluations.

Risk Categorization

To evaluate potential risk, a Dudek Qualified Tree Risk Assessor evaluated the trees using the ISA Basic Tree Risk Assessment Form. As observed at the time of the tree inspection, potential targets should tree failure (whole tree, branch, trunk, or root) occur included, and may include in the post development landscape, light poles, moving vehicles, pedestrians, and benches. Potential targets ranged from within the trees' canopies to within 1.5 times the height of the trees. Any specific target may or may not be associated with all the trees on site and may only be associated with one individual tree. The frequency of the targets ranges from **constant** (i.e., light poles, benches) to **rare** (i.e., moving cars, pedestrians).

Risk rating is a factor of the potential for tree or tree part failure, the likelihood of impact with a target, and the **consequences of failure**. The high-risk rating is related to a probable likelihood that any specific part would fail, a high likelihood that a target would be present during the potential failure, and a severe level of consequence should failure and impact occur. Based on the findings of the Level 2 assessments, both trees were found to have a low overall risk rating.

3.3 Project-Related Impacts

There is wide variation in tolerance to construction impacts among tree species and the response of an individual tree to impacts also varies with age and condition. Impacts assessed for this project include those trees with protected zones on and immediately adjacent to the proposed improvements and identified disturbance areas, as defined in the project site plan (dated March 1, 2023). The impact discussion in this section identifies all impacts anticipated to result to regulated trees based on an evaluation of tree locations compared with the project site plan. Much of the site will need to be graded to accommodate the construction of buildings, parking lots, and the placement of necessary infrastructure (utilities, access roads, fire lanes, etc.). Following review of the impact analysis, the project applicant and their team reviewed the existing site plans for opportunities to modify the plans to accommodate the existing trees. However, based on the location of the trees in the landscape, and requirements for project related infrastructure and utilities modifications to the site plan were unable to be made. Namely, compliance with this development standard would reduce the density of the Project, "physically precluding" it from being built at its proposed and permitted density.

It should be note that the project applicant has significantly modified the original site plans to allow for the preservation and encroachment of the two largest and most significant heritage tree oak trees (Tree no. 1 and 2) on the project site. Specifically, the project was designed to preserve and protect these two large trees and incorporate them into the landscape. Trees identified for retention and removal are graphically presented in the Tree Impact Exhibit included in Appendix B.

Based on grading and development plans for the proposed project and consultation with the project engineer, of the 53 total trees, it is estimated that 33 (62.26%) trees will be removed. Project disturbance is expected to encroach on the protected zone of 15 (28.30%) trees. The percentage of encroachment into the TPZ, as shown in Appendix C, ranges from 3% to 43%. The individual crown encroachments are shown in Appendix B and individual encroachment percentages are shown in Appendix C. The project site plan preserves 5 (9.43%) trees in place with no encroachment.

Of the 34 protected oaks, it is estimated that 22 (64.70%) trees will be removed. Project disturbance is expected to encroach on the protected zone of nine (26.47%) oak trees. The project site plan preserves three (8.82%) oak trees in place with no encroachment.

Table 2 summarizes impact determinations for oak trees and landmark trees within the survey area that are subject to regulation under the City Municipal Code (Chapters 14 and 24).

Table 2. Summary of Protected Tree Impact Determinations

Species	Impact Determination			Total
	Removal	Encroachment	No Impact	
Coast live oak	17	6	1	24
Valley oak	5	2	1	8
Holly oak	0	1	1	2
Total Protected Oak Trees	22	9	3	34
Canary island pine	0	6	0	6
Aleppo pine	7	0	1	8
Mexican fan palm	1	0	1	2
Eucalyptus	3	0	0	3
Total All Trees	33	15	5	53

3.4 Tree Relocation

During the relocation evaluation process, Dudek utilized a strict set of physical attribute criteria that a tree must exhibit to be considered a candidate for the very stressful relocation process. The success rates for transplanting large oak and landmark trees are relatively low (personal observation and Dagit and Downer 1997). Transplanting large oak trees places a great deal of stress on the trees due to difficulties that mature oaks have adapting to a new site after losing a minimum of 75% of their root mass. These additional stresses make oak trees more vulnerable to pests and diseases. Although they may live for a long time, large, transplanted oaks typically do not reach equilibrium health and vitality needed for long-term survival. The trees will exist in a declining spiral. A great deal of care, time, and attention is required during boxing, moving, storing, and transplanting to increase survival probability. Just as important, they require diligent and regular monitoring and maintenance for the rest of their lives.

In summary, younger, and smaller trees typically have a higher success rate post-transplant. These trees are still vigorously growing and are more adaptable to root disturbance and the transplant process. Trees with a trunk diameter less than approximately 15 inches typically perform better following transplant, and the smaller the tree, typically the higher relocation success and feasibility. Trees exhibiting maladies including declining health, internal decay, cavities, uncorrectable branch architecture issues, co-dominant stems with included bark, and pest and/or disease infections are not considered for relocation. Trees must be in “good” health and structural condition (unless the species is unique or especially valuable where a “fair” condition tree may be considered a candidate) and include an accessible location, no observable soil impediments (rockbound roots, utilities), no overhead utilities, and no observable chronic pest infestations and/or disease infections. A full green canopy may give the appearance that a tree is healthy; however, with the potential presence of internal decay and the stress resulting from the relocation process, the trees may decline, resulting in tree loss and increased hazards, especially in an urbanized setting.

Some trees that are structurally sound and healthy, meeting all the criteria set for these attributes, may be rejected as relocation candidates based on soil issues. For instance, trees that are growing in soil that is highly sandy likely would be rejected due to the difficulty in boxing trees without “losing” the root ball as commonly happens in sandy soil. Similarly, trees in rocky soils may be rejected if “rock-bound” roots are suspected as these trees cannot be boxed cost-effectively. In these cases, the trees would be recommended for preservation in place, if possible.

Based on the above noted factors, none of the impacted (removal trees) tree are considered candidates for relocation.

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4 Mitigation and Management Recommendations

4.1 Mitigation Recommendations

Removals

The City of Thousand Oaks Oak Tree Preservation and Protection Guidelines mitigation requirements for tree removals associated with development projects are summarized as follows:

- one 15-gallon oak tree to be planted or donated for each dead or hazardous oak tree removed
- two 24-inch box trees, and one 36-inch or 60-inch box tree must be planted for each healthy oak tree removed for commercial, industrial, and new residential development projects
- in the case of removal of oak trees larger than 48 inches in diameter, the applicant is required to obtain the largest nursery grown oak tree available or plant two 60-inch box trees
- The City Code does not identify specific replacement requirements to mitigate for removal of landmark trees. Therefore, this report utilizes the City's oak replacement requirements as the recommended mitigation ratio for landmark tree removal.

The proposed project would require removal of 0 dead oak trees and 22 healthy oak trees, including two multi-stem coast live oaks with a diameter at breast height of 53 inches and 55 inches. Consistent with the City's requirements, Dudek recommends the mitigation shown in Table 3 for removals associated with the project.

Table 3. Mitigation Recommendations for Proposed Tree Removals

Species	Expected Removal	Recommended Mitigation Plantings		
		60-inch box trees	36-inch box trees	24-inch box trees
Dead Regulated Oaks	0	0	0	0
Healthy Regulated Oaks Less than 48-inch Diameter	20	0	20	40
Healthy Regulated Oaks Larger than 48-inch Diameter	2	4	0	0
Total	22	4	20	40

Encroachment into Protected Zone and Retained Trees

A long-term maintenance program is required by City Municipal Code to mitigate for encroachments into the protected zone of regulated trees that would occur with the proposed project and to maintain the health of the trees retained on the project site. In total, the proposed project will encroach into the protected zone of 15 trees including nine protected oak trees. Except for tree nos. 1 and 2 all the encroachments are associated with trees on the neighboring properties to the east and

west of the proposed project site. Based on the provided site plans, and mapped locations of the trees, no protected trees within the Caltrans right-of-way to the south will be encroached upon by the proposed project. It should be noted that prior to project authorization and commencement, authorization will be required from the adjacent property owners for encroachment into the TPZ of trees located on their property and a separate permit application will be required. Appendix E provides tree protection recommendations to mitigate impacts from construction encroachment into the protected zone of regulated trees that would result from the proposed project. The measures included in Appendix E are consistent with the provisions of the City Municipal Code and would help minimize impacts to preserved and encroached trees. Appendix E includes measures to implement prior to, during, and following construction. This includes measures such as exclusion fencing and worker training to avoid direct impacts to trees, and measures such as irrigation and monthly inspections by an arborist to promote the long-term health of retained trees. Dudek also recommends arborist monitoring during construction when encroachments into tree protection zones occur to minimize root disturbance and determine the best course of actions for root pruning, supplemental irrigation, branch trimming, or other measures that would minimize the impacts from ground disturbing or other potential impactful activities.

4.2 Tree Permits

The project applicant will need to submit a Tree Permit Application and fee to the City of Thousand Oaks Community Development Department. A copy of this report and the final project site plan should accompany the application. A Tree Permit is required for removal, pruning, or soil disturbance within the protected zone of a regulated tree. The Community Development Director may approve, deny, or conditionally approve a request for removal of any number of planted nursery grown oak trees in parking areas and the removal of three or fewer oak or five or fewer landmark trees on a single parcel without hearing or notice. Any request for removal of four or more oak trees or six or more landmark trees will be reviewed by the Planning Commission at a public hearing in conjunction with the Commission's consideration of other entitlement applications for the proposed project. The Commission may approve, conditionally approve, or deny the permit. The decision of the Commission may be appealed to the City Council. In acting on the permit application the Planning Commission will generally consider the applicant's ability to make the findings required by the Ordinance and the Tree Preservation Guidelines (see Sections 5-14.01 and 5-24.01 of the City Municipal Code and Section IV of the Oak Tree Preservation and Protection Guidelines).

5 Disclosure

This arborist report provides conclusions and recommendations based only on a visual examination of the trees within the tree survey area by International Society of Arboriculture Certified Arborists and reasonable reliance on the completeness and accuracy of the information provided to the arborist. The examination did not include subterranean or internal examination of the trees.

Arborists are tree specialists who use their education, knowledge, training, and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living near them. Although trees provide many benefits to those who live near them, they also include inherent risks from breakage or failure that can be minimized but not eliminated.

Arborists cannot detect every condition that could possibly lead to the failure of a tree. Trees are living organisms subject to attack by disease, insects, fungi, weather, and other forces of nature, and conditions that lead to failure are often hidden within trees and belowground. There are some inherent risks with trees that cannot be predicted with any degree of certainty, even by a skilled and experienced arborist. Arborists cannot predict acts of nature, including, without limitation, storms of sufficient strength, which can cause an apparently healthy tree to fail. Additionally, arborists cannot guarantee that a tree will be healthy or safe under all circumstances or for any specific period of time. A tree's condition could change over a short or long period of time due to climatic, cultural, or environmental conditions. Further, there is no guarantee or certainty that recommendations or efforts to correct unsafe conditions will prevent future breakage or failure of a tree.

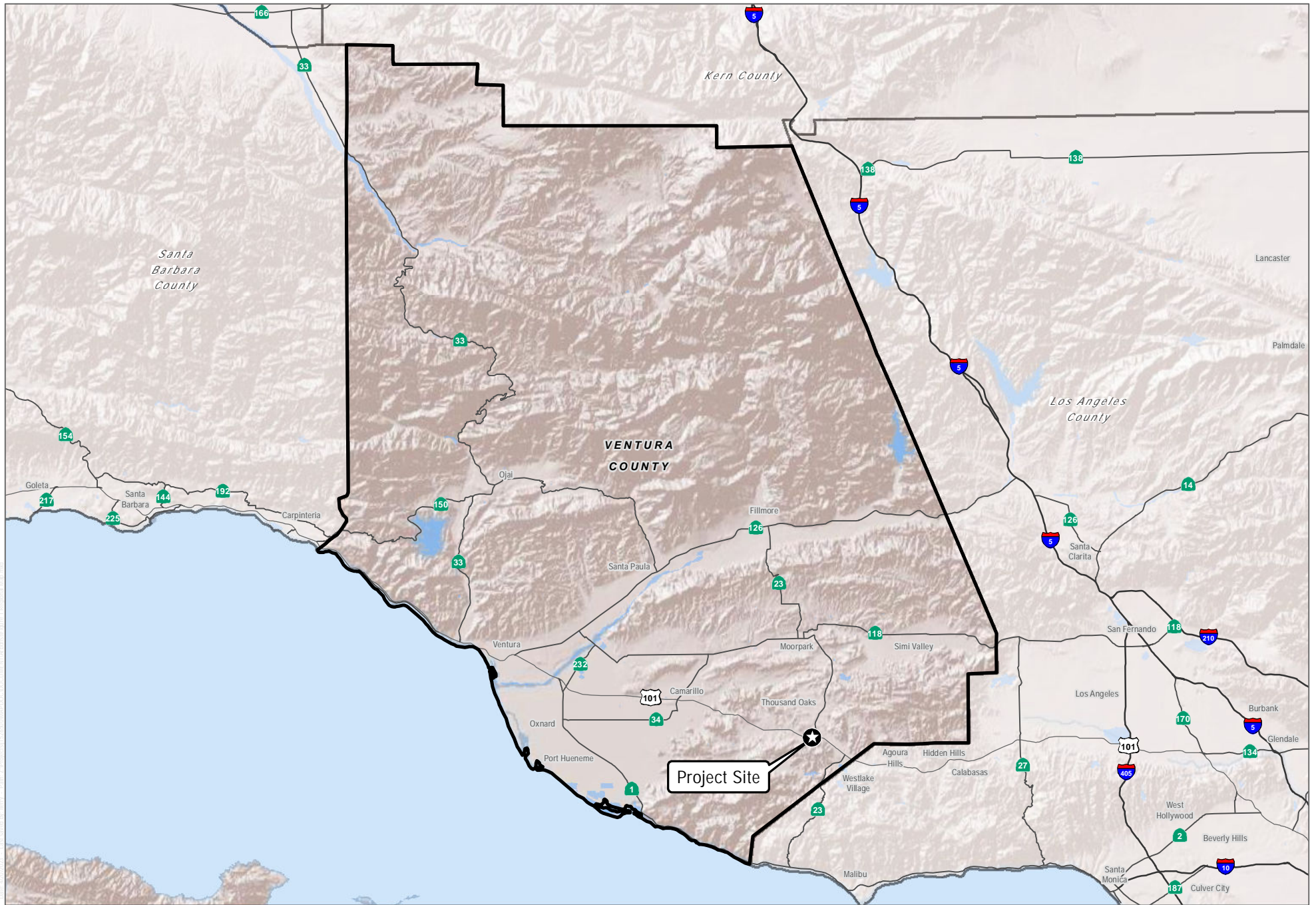
To live or work near trees is to accept some degree of risk. Neither the author of this Arborist report nor Dudek have assumed any responsibility for or will be liable for any claims, losses, or damages for damage to any tree, death or injury to any person, or any loss of or damage to any personal or real property.

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6 References

ISA (International Society of Arboriculture). 2000. Guide for Plant Appraisal (9th Edition).

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SOURCE: ESRI

DUDEK



FIGURE 1

Regional Map

Arborist Report for 500 Thousand Oaks Boulevard Project

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SOURCE: Bing Maps 2022

DUDEK



0 100 200 Feet

FIGURE 2
Vicinity Map

Arborist Report for 500 Thousand Oaks Boulevard Project

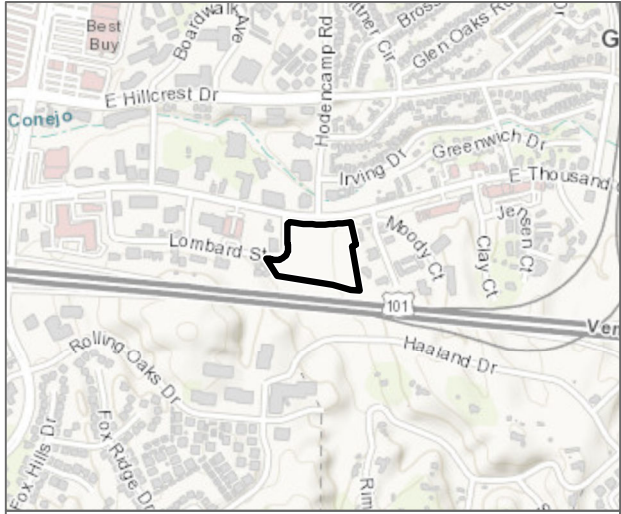
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Appendix A

Tree Location Exhibit

Appendix B

Tree Impact Exhibit



- Utilities
 - Project Boundary
 - Encroached Tree Crowns
 - Preserve and Removal Tree Crowns
 - Tree Canopy Inside Development Area
- Disposition**
- Encroached
 - Preserve
 - Removal



SOURCE: AERIAL-BING MAPPING SERVICE

Appendix C

Tree Information Matrix

Tree No.	Botanical Name	Common Name	Stems	Combined D.B.H (in.)	Individual Stem Diameters (in.)									Dripline Extent (ft.)								Height (ft.)	Crown Width (ft.)	Health	Structure	Disposition	Crown Square Footage (Encroached upon trees only)			Notes	X	Y
					1	2	3	4	5	6	7	8	9	N	NE	E	SE	S	SW	W	NW						Total	Area Encroached Upon	% of Encroachment			
1	<i>Quercus lobata</i>	Valley Oak	1	54	54	-	-	-	-	-	-	-	-	40	40	25	40	35	30	23	40	50	50	Fair	Fair	Encroached	5,161.61	146.5	2.84%		6298800.927180	1888465.287120
2	<i>Quercus lobata</i>	Valley Oak	1	42	42	-	-	-	-	-	-	-	-	22	27	20	35	35	28	17	35	50	50	Fair	Fair	Encroached	3754.54	561.8	14.96%		6298977.857340	1888446.550390
3	<i>Quercus agrifolia</i>	Coast Live Oak	2	7	5	2	-	-	-	-	-	-	-	10	12	6	5	6	4	3	6	20	10	Good	Fair	Removal	-	-	-		6299144.625680	1888473.558170
4	<i>Quercus agrifolia</i>	Coast Live Oak	2	5	3	2	-	-	-	-	-	-	-	3	4	7	6	7	7	6	4	10	8	Good	Fair	Removal	-	-	-		6299267.674310	1888328.225070
5	<i>Quercus agrifolia</i>	Coast Live Oak	1	5	5	-	-	-	-	-	-	-	-	10	10	6	4	4	4	6	8	20	10	Fair	Fair	Removal	-	-	-		6299164.411740	1888282.063900
6	<i>Quercus agrifolia</i>	Coast Live Oak	5	14	4	3	3	2	2	-	-	-	-	8	8	4	5	4	5	6	7	10	10	Fair	Fair	Removal	-	-	-		6299159.942760	1888277.328250
7	<i>Quercus agrifolia</i>	Coast Live Oak	3	9	5	2	2	-	-	-	-	-	-	8	8	10	8	10	8	8	10	15	10	Fair	Fair	Removal	-	-	-		6299142.391810	1888276.888570
8	<i>Quercus agrifolia</i>	Coast Live Oak	1	6	6	-	-	-	-	-	-	-	-	5	5	4	5	8	5	10	10	10	15	Good	Fair	Removal	-	-	-	No tag. Neighbors property	6299261.742080	1888202.943320
9	<i>Quercus agrifolia</i>	Coast Live Oak	5	10	2	2	2	2	2	-	-	-	-	5	5	7	8	5	5	5	5	10	10	Fair	Fair	Encroached	353.32	100.47	28%	No tag. Neighbors property	6299269.813470	1888175.512320
10	<i>Quercus agrifolia</i>	Coast Live Oak	3	3	1	1	1	-	-	-	-	-	-	2	2	2	2	3	3	3	2	7	4	Fair	Fair	Removal	-	-	-		6299254.879020	1888177.178010
13	<i>Quercus agrifolia</i>	Coast Live Oak	1	11	11	-	-	-	-	-	-	-	-	10	0	0	0	8	10	15	20	25	15	Fair	Fair	Removal	-	-	-	Growing between fence on property line.	6299257.234280	1888145.169750
14	<i>Quercus agrifolia</i>	Coast Live Oak	10	55	7	7	5	6	4	4	4	3	3	12	8	5	8	10	15	18	18	15	15	Fair	Fair	Removal	-	-	-	Additional Stems - 4, 3,3,2	6299234.501350	1888150.640320
15	<i>Quercus agrifolia</i>	Coast Live Oak	1	11	11	-	-	-	-	-	-	-	-	10	0	0	0	10	15	15	15	25	15	Fair	Fair	Removal	-	-	-	No tag. Neighbors property	6299262.333200	1888137.136720
16	<i>Quercus agrifolia</i>	Coast Live Oak	1	22	22	-	-	-	-	-	-	-	-	15	10	10	10	15	15	15	20	35	25	Fair	Fair	Encroached	1115.50	439.94	39%	No tag. Neighbors property	6299271.757890	1888121.559320
17	<i>Quercus agrifolia</i>	Coast Live Oak	3	3	1	1	1	-	-	-	-	-	-	3	3	3	3	1	2	2	3	6	5	Fair	Fair	Removal	-	-	-		6299240.130400	1888106.254300
18	<i>Quercus agrifolia</i>	Coast Live Oak	3	7	3	2	2	-	-	-	-	-	-	7	8	8	8	10	9	7	7	10	8	Fair	Fair	Removal	-	-	-	No tag. Freeway ROW	6299218.373570	1887957.074820
20	<i>Quercus agrifolia</i>	Coast Live Oak	1	6	6	-	-	-	-	-	-	-	-	8	6	6	8	5	10	15	10	20	10	Fair	Fair	Preserve	-	-	-	No tag. Freeway ROW	6298883.500730	1887992.989970
21	<i>Quercus lobata</i>	Valley Oak	1	15	15	-	-	-	-	-	-	-	-	10	10	25	20	20	20	20	10	45	25	Fair	Fair	Preserve	-	-	-		6298845.678020	1888013.821550
22	<i>Quercus agrifolia</i>	Coast Live Oak	3	9	6	1	2	-	-	-	-	-	-	12	13	10	7	7	7	8	10	15	15	Fair	Fair	Removal	-	-	-		6298705.264080	1888059.199170
23	<i>Quercus agrifolia</i>	Coast Live Oak	1	3	3	-	-	-	-	-	-	-	-	8	4	5	7	7	4	4	6	15	10	Fair	Fair	Removal	-	-	-		6298702.553980	1888059.509580
24	<i>Washingtonia robusta</i>	Mexican Fan Palm	1	12	12	-	-	-	-	-	-	-	-	4	5	5	5	5	5	5	5	10	15	Fair	Good	Preserve	-	-	-	No tag. Neighbors property	6298611.275300	1888073.085280
25	<i>Pinus canariensis</i>	Canary Island Pine	1	16	16	-	-	-	-	-	-	-	-	2	10	12	6	16	6	3	2	60	15	Fair	Fair	Encroached	575.89	105.77	18%	No tag. Neighbors property	6298618.964490	1888091.796130
26	<i>Pinus canariensis</i>	Canary Island Pine	1	20	20	-	-	-	-	-	-	-	-	5	12	14	14	15	2	2	3	60	15	Fair	Fair	Encroached	650.39	122.55	19%	No tag. Neighbors property	6298619.018440	1888096.995110
27	<i>Pinus canariensis</i>	Canary Island Pine	1	22	22	-	-	-	-	-	-	-	-	9	12	5	3	12	18	18	11	60	15	Fair	Fair	Encroached	871.32	64.23	7%	No tag. Neighbors property	6298616.315370	1888098.652380
28	<i>Pinus canariensis</i>	Canary Island Pine	1	22	22	-	-	-	-	-	-	-	-	8	9	14	13	13	10	18	9	60	15	Fair	Fair	Encroached	870.71	23.44	3%	No tag. Neighbors property	6298601.774480	1888127.775660
29	<i>Quercus agrifolia</i>	Coast Live Oak	2	12	6	6	-	-	-	-	-	-	-	10	14	11	11	6	3	3	6	30	20	Fair	Fair	Encroached	563.74	235.61	41%	No tag. Neighbors property	6298608.977520	1888124.093150
30	<i>Quercus agrifolia</i>	Coast Live Oak	1	3	3	-	-	-	-	-	-	-	-	4	6	7	3	3	4	3	4	15	10	Good	Fair	Encroached	268.76	27.65	10%	No tag. Neighbors property	6298607.388480	1888128.827610
31	<i>Quercus ilex</i>	Holly Oak	2	8	4	4	-	-	-	-	-	-	-	5	7	9	7	8	5	4	3	30	10	Fair	Fair	Encroached	384.76	168.26	43%	No tag. Neighbors property	6298579.449640	1888171.035080
32	<i>Quercus lobata</i>	Valley Oak	2	13	7	6	-	-	-	-	-	-	-	17	10	11	12	3	1	6	11	30	20	Fair	Fair	Removal	-	-	-		6298582.724450	1888177.047040
33	<i>Pinus canariensis</i>	Canary Island Pine	1	12	12	-	-	-	-	-	-	-	-	5	6	11	12	15	10	7	6	40	15	Fair	Fair	Encroached	636.77	203.97	32%	No tag. Neighbors property	6298574.134410	1888178.949460
34	<i>Pinus canariensis</i>	Canary Island Pine	1	12	12	-	-	-	-	-	-	-	-	6	8	6	11	10	15	10	7	60	15	Fair	Fair	Encroached	630.32	176.60	28%	No tag. Neighbors property	6298569.977060	1888186.311530

Tree No.	Botanical Name	Common Name	Stems	Combined D.B.H (in.)	Individual Stem Diameters (in.)									Dripline Extent (ft.)								Height (ft.)	Crown Width (ft.)	Health	Structure	Disposition	Crown Square Footage (Encroached upon trees only)			Notes	X	Y
					1	2	3	4	5	6	7	8	9	N	NE	E	SE	S	SW	W	NW						Total	Area Encroached Upon	% of Encroachment			
35	<i>Quercus agrifolia</i>	Coast Live Oak	1	7	7	-	-	-	-	-	-	-	-	12	9	10	8	8	8	3	7	30	15	Fair	Fair	Encroached	569.05	137.31	24%	No tag. Neighbors property	6298564.785760	1888195.767290
36	<i>Quercus agrifolia</i>	Coast Live Oak	1	6	6	-	-	-	-	-	-	-	-	17	16	15	7	5	5	6	14	30	15	Fair	Fair	Removal	-	-	-		6298590.591180	1888191.941380
37	<i>Quercus agrifolia</i>	Coast Live Oak	1	5	5	-	-	-	-	-	-	-	-	8	8	4	3	3	3	3	4	15	10	Fair	Fair	Encroached	454.75	27.08	6%		6298557.885780	1888198.359910
38	<i>Washingtonia robusta</i>	Mexican Fan Palm	1	15	15	-	-	-	-	-	-	-	-	5	5	5	5	5	5	5	5	35	10	Dead	Dead	Removal	-	-	-		6298560.372740	1888200.680620
39	<i>Quercus ilex</i>	Holly Oak	1	15	15	-	-	-	-	-	-	-	-	9	13	7	9	14	10	11	10	30	15	Good	Fair	Preserve	-	-	-	No tag. Neighbors property	6298542.183760	1888206.332270
40	<i>Quercus lobata</i>	Valley Oak	1	4	4	-	-	-	-	-	-	-	-	14	10	2	0	0	0	0	0	10	5	Poor	Fair	Removal	-	-	-		6298584.473780	1888184.117010
43	<i>Quercus lobata</i>	Valley Oak	1	4	4	-	-	-	-	-	-	-	-	12	7	6	4	3	2	4	10	20	8	Good	Fair	Removal	-	-	-		6298613.539690	1888184.082410
46	<i>Quercus agrifolia</i>	Coast Live Oak	15	15	1	1	1	1	1	1	1	1	1	4	4	4	4	4	4	4	4	5	8	Fair	Poor	Removal	-	-	-		6298653.052720	1888131.948020
47	<i>Eucalyptus spp.</i>	Eucalyptus	1	45	45	-	-	-	-	-	-	-	-	15	10	8	30	30	25	30	27	50	30	Fair	Fair	Removal	-	-	-		6299014.781640	1888009.928610
48	<i>Eucalyptus spp.</i>	Eucalyptus	1	25	25	-	-	-	-	-	-	-	-	20	17	10	12	30	10	16	10	35	20	Fair	Poor	Removal	-	-	-		6299044.707420	1888003.509390
49	<i>Eucalyptus spp.</i>	Eucalyptus	4	76	45	13	12	6	-	-	-	-	-	28	28	25	35	30	25	25	18	60	40	Fair	Poor	Removal	-	-	-		6299086.358210	1888023.167130
50	<i>Quercus agrifolia</i>	Coast Live Oak	12	53	6	6	6	6	6	4	4	3	3	15	15	8	4	10	12	12	15	25	25	Fair	Poor	Removal	-	-	-		6299019.443200	1888183.947520
51	<i>Quercus lobata</i>	Valley Oak	2	9	5	4	-	-	-	-	-	-	-	10	5	1	2	2	8	6	5	20	15	Good	Fair	Removal	-	-	-		6299016.836910	1888171.333090
52	<i>Quercus lobata</i>	Valley Oak	2	8	4	4	-	-	-	-	-	-	-	8	10	10	3	5	7	8	8	8	10	Fair	Poor	Removal	-	-	-		6299013.153160	1888178.046760
54	<i>Pinus halepensis</i>	Aleppo Pine	1	9	9	-	-	-	-	-	-	-	-	8	4	5	8	7	7	8	8	30	10	Good	Good	Removal	-	-	-		6299251.060740	1888314.244030
55	<i>Pinus halepensis</i>	Aleppo Pine	1	4	4	-	-	-	-	-	-	-	-	3	3	5	5	5	4	4	3	20	7	Good	Good	Removal	-	-	-		6299231.682110	1888329.207040
56	<i>Pinus halepensis</i>	Aleppo Pine	1	4	4	-	-	-	-	-	-	-	-	3	4	3	2	3	3	4	4	20	7	Good	Good	Removal	-	-	-		6299250.591270	1888330.586810
57	<i>Pinus halepensis</i>	Aleppo Pine	1	4	4	-	-	-	-	-	-	-	-	2	2	3	6	5	5	2	2	20	7	Good	Good	Removal	-	-	-		6299256.508050	1888332.632110
58	<i>Pinus halepensis</i>	Aleppo Pine	1	4	4	-	-	-	-	-	-	-	-	1	1	1	1	4	6	3	3	20	7	Good	Good	Removal	-	-	-		6299257.345910	1888330.259670
59	<i>Pinus halepensis</i>	Aleppo Pine	1	4	4	-	-	-	-	-	-	-	-	3	2	2	1	1	3	3	4	20	7	Good	Good	Removal	-	-	-		6299255.924100	1888327.149160
60	<i>Pinus halepensis</i>	Aleppo Pine	2	12	8	4	-	-	-	-	-	-	-	10	10	10	12	12	12	15	12	35	15	Fair	Fair	Removal	-	-	-		6299195.181910	1888462.253100
61	<i>Pinus halepensis</i>	Aleppo Pine	2	16	12	4	-	-	-	-	-	-	-	15	15	15	15	15	8	5	5	30	20	Fair	Fair	Preserve	-	-	-		6299190.759160	1888485.337670

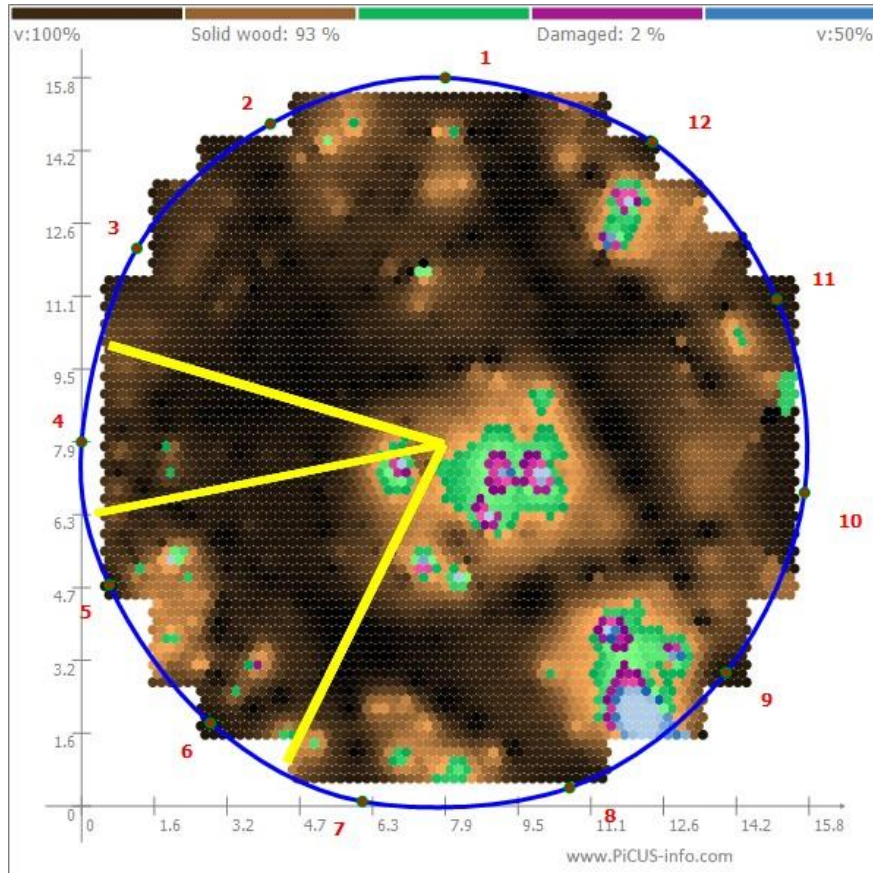
Appendix D

Individual Sonic Tomograms

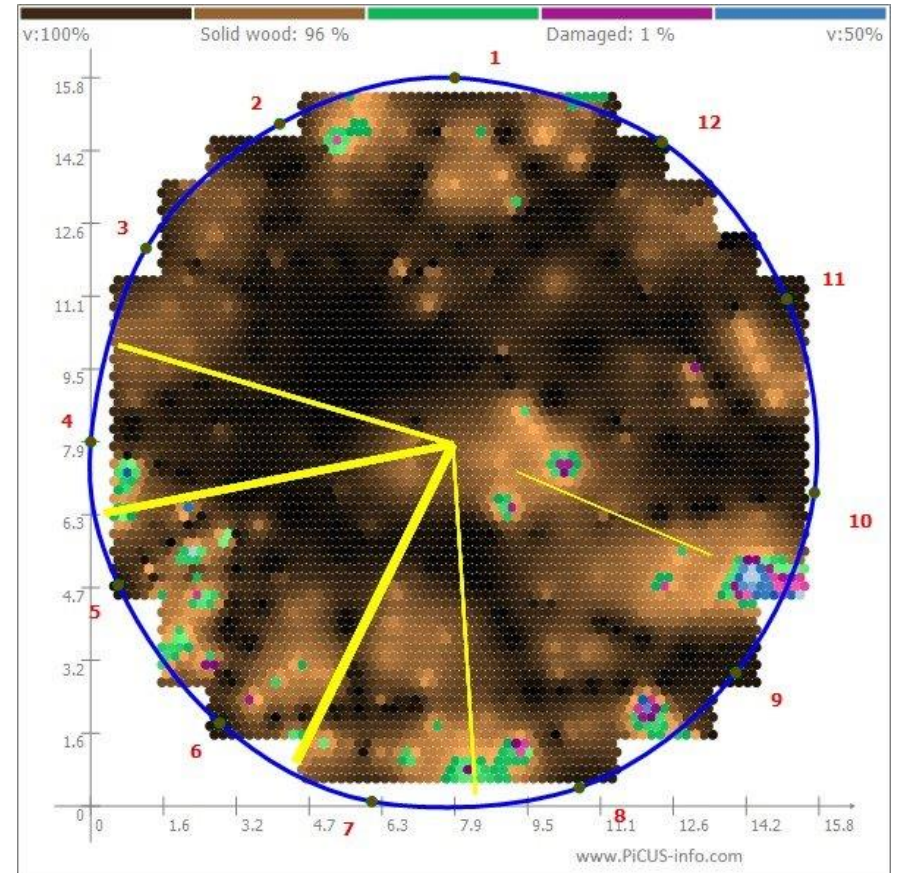
500 Thousand Oaks Boulevard

Appendix D – Individual Tomographs

500 Thousand Oaks Boulevard Individual Tomographs

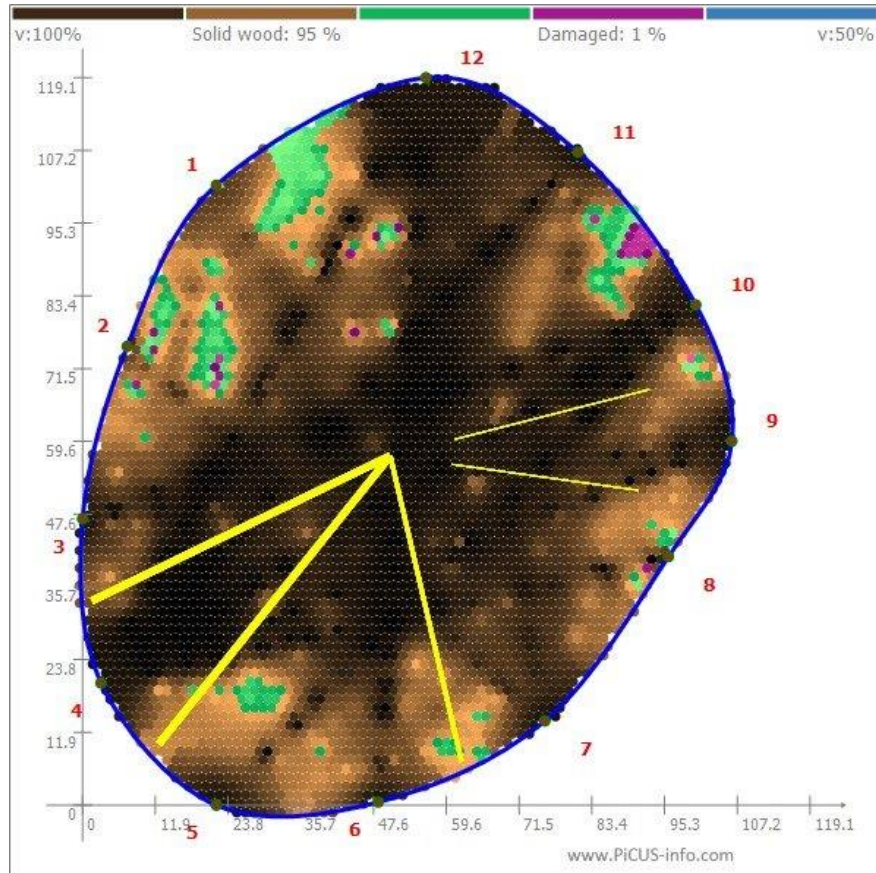


Tree no. 1; 3 inches above ground level

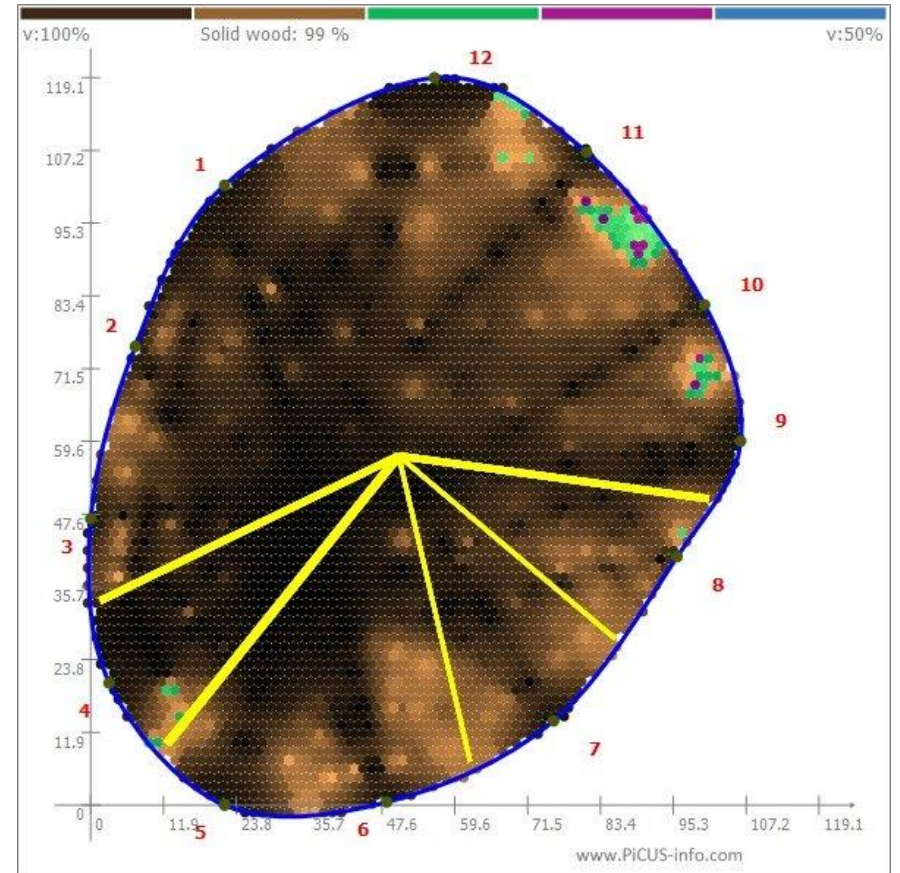


Tree no. 1; 12 inches above ground level

500 Thousand Oaks Boulevard Individual Tomographs



Tree no. 2; 3 inches above ground level



Tree no. 2; 12 inches above ground level

Appendix E

Tree Protection Measures

Tree Protection Measures

The following tree protection measures are provided as general guidelines for tree protection from construction impacts. The measures presented should be monitored by arborists and enforced by contractors and developers for maximum benefit to the trees.

Tree Protection Measures Prior to Construction

Prior to any construction activity (drainage, demolition, material removal or delivery), oak and landmark trees with canopies that fall within 30 feet of construction activity shall be protected by fencing and signage. All contractors shall be made aware of the tree protection measures. A project arborist shall be assigned to monitor tree health and construction activity near retained trees on site. The project arborist shall be an International Society of Arboriculture (ISA) Certified Arborist.

Fencing. A 6-foot high, chain link fence with tree protection signs shall be erected around all trees (or tree groups) with canopies that fall within 30 feet of construction activity. The protective fence should be installed at a distance from the trunk that is equal to the dripline radius plus 5 feet (protected tree zone). For any trees that would be encroached upon by construction activities, fencing shall be placed as far away from trunk of the tree as possible while still allowing the required construction activities to proceed. This fencing will delineate the tree protection zone and prevent unwanted activity in and around the trees in order to reduce soil compaction in the root zones of the trees and other damage from heavy equipment. Fences are to be mounted on two-inch diameter galvanized iron posts, driven into the ground to a depth of at least 2-feet at no more than 10-foot spacing. In areas where fencing is located on paving or concrete that will not be demolished, then the posts may be supported by an appropriate grade level concrete base. Tree protection signs should be attached to every fourth post. The contractor shall maintain the fence to keep it upright, taut, and aligned at all times. Fencing shall be removed only after all construction activities are complete.

Pre-Construction Meeting. A pre-construction meeting shall be held between all contractors and the arborist. The arborist will instruct the contractors on tree protection practices and answer any questions. All equipment operators and spotters, assistants, or those directing operators from the ground, shall provide written acknowledgement of their receiving tree protection training. This training shall include information on the location and marking of protected trees, the necessity of preventing damage, and the discussion of work practices that will accomplish such.

Protection and Maintenance During Construction

Once construction activities have begun, the following measures shall be adhered to:

Avoidance: Signs, ropes, cables, or any other items shall not be attached to any tree.

Equipment Operation and Storage. Operating heavy machinery around the root zones of trees will increase soil compaction, which decreases soil aeration and subsequently reduces water penetration in the soil. All heavy equipment and vehicles shall stay out of the fenced tree protection zone, unless where specifically approved in writing by the City Arborist and under the supervision of an ISA Certified Arborist

Storage and Disposal. Do not store or discard any supply or material, including paint, lumber, concrete overflow, etc. within the fenced tree protection zone. Remove all foreign debris within the fenced tree protection zone; it is

important to leave the duff, mulch, chips, and leaves around the retained trees for water retention and nutrients. Avoid draining or leakage of equipment fluids near retained trees. Fluids such as: gasoline, diesel, oils, hydraulics, brake and transmission fluids, paint, paint thinners, and glycol (anti-freeze) should be disposed of properly. Keep equipment parked outside of the fenced tree protection zone of retained trees to avoid the possibility of leakage of equipment fluids into the soil. The effect of toxic equipment fluids on the retained trees could lead to decline and death.

Moving Construction Materials. Moving Construction Materials: Care will be taken when moving equipment or supplies near the trees, especially overhead. Avoid damaging the tree(s) when transporting or moving construction materials and working around retained trees (even outside of the fenced tree protection zone). Above ground tree parts that could be damaged (e.g., low limbs, trunks) should be flagged with red ribbon. If contact with the tree crown is unavoidable, prune the conflicting branch(es) using ISA or ANSI A300 standards.

Grade Changes. Grade changes, including adding fill, are not permitted within the tree protection zone, without special written authorization and under supervision by a Certified Arborist. Lowering the grade within this area will necessitate cutting main support and feeder roots, jeopardizing the health and structural integrity of the tree(s). Adding soil, even temporarily, on top of the existing grade will compact the soil further, and decrease both water and air availability to the trees' roots.

Root Pruning. Except where specifically approved in writing, all trenching shall be outside of the fenced tree protection zone. Roots primarily extend in a horizontal direction, forming a support base to the tree similar to the base of a wineglass. Where trenching is necessary in areas that contain tree roots, prune the roots using a Dosko root pruner or equivalent. All cuts shall be clean and sharp, to minimize ripping, tearing, and fracturing the root system. The trench shall be made no deeper than necessary.

Trenching. Unless a Tree Permit has been issued for trenching activity within the fenced tree protection zone, all trenching shall be outside of the fenced tree protection zone. Roots primarily extend in a horizontal direction forming a support base to the tree similar to the base of a wineglass. Where trenching is necessary in areas that contain tree roots, prune the roots using a Dosko root pruner or equivalent. All cuts should be clean and sharp, to minimize ripping, tearing, and fracturing of the root system. The trench should be made no deeper than necessary

Irrigation. Trees that have been substantially root pruned (30% or more of their root zone) will require irrigation for the first twelve months. The first irrigation should be within 48 hours of root pruning. They should be deep watered every two to four weeks during the summer and once a month during the winter (adjust accordingly with rainfall). One irrigation cycle should thoroughly soak the root zones of the trees to a depth of 3 feet. The soil should dry out between watering; avoid keeping a consistently wet soil. Designate one person to be responsible for irrigating (deep watering) the trees. Check soil moisture with a soil probe before irrigating. Irrigation is best accomplished by installing a temporary above ground micro-spray system that will distribute water slowly (to avoid runoff) and evenly throughout the fenced tree protection zone **but never soaking the area located within 6- feet of the tree trunk.**

Pruning. Do not prune any of the trees until all construction is completed. This will help protect the tree canopies from damage. All pruning shall be completed under the direction of an ISA Certified Arborist and using ISA guidelines. Only dead wood shall be removed from tree canopies.

Washing. Periodic washing of the foliage is recommended during construction but no more than once every two weeks. Washing should include the upper and lower leaf surfaces and the tree bark. This should continue beyond the

construction period at a less frequent rate with a high-powered hose only in the early morning hours. Washing will help control dirt/dust buildup that can lead to mite and insect infestations.

Inspection. An ISA Certified Arborist shall inspect the trees on at least a monthly basis for the duration of construction activity. A summary report documenting observations and management recommendations shall be submitted to the owner following each inspection. Photographs of representative trees are to be included in each report.

Maintenance After Construction

Once construction is complete the tree protection fencing may be removed and the following measures performed to sustain and enhance the vigor of the preserved trees.

Mulch. Provide a 4-inch mulch layer of mulch under the canopy of trees. Mulch shall be clean and organic and provide long-term soil conditioning, soil moisture retention, and soil temperature control.

Pruning. Pruning should only be done to maintain clearance and remove broken, dead or diseased branches. Pruning shall only take place following a recommendation by an ISA Certified Arborist and performed under the supervision of an ISA Certified Arborist. No more than 15% of the canopy shall be removed at any one time. All pruning shall conform to ISA or ANSI A300 standards.

Watering. Retained trees on site shall be watered as they were prior to the commencement of construction activity. Supplemental irrigation may be necessary for twelve months following substantial root pruning.

Watering Adjacent Plant Material. All plants near the trees shall be compatible with water requirements of said trees. Watering regime included in the site's landscape plan shall be developed with consideration for the water needs of retained trees.

Spraying. If the trees are maintained in a healthy state, regular spraying for insect or disease control should not be necessary. If a problem does develop, an ISA Certified Arborist should be consulted; the trees may require application of insecticides to prevent the intrusion of bark-boring beetles and other invading pests. All chemical spraying should be performed by a licensed applicator under the direction of a licensed pest control advisor.

Inspection. All trees within 30 feet of construction activity shall be monitored by an ISA Certified Arborist for the first two years after construction completion. An annual monitoring report shall be submitted to the City Arborist. Each report shall summarize the inspection efforts, document observations and management actions taken, include photographs of each tree, and compare postconstruction tree conditions with the original, pre-construction baseline condition. If any retained trees die within this inspection period, they shall be replaced at a ratio approved by the City.

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Carlos Contreras

From: Carlos Contreras
Sent: Thursday, April 18, 2024 1:29 PM
To: Kristina Golem
Cc: Fabiola Zelaya Melicher; Stephen Kearns
Subject: RE: 500 E. TOB // General Plan Amendment 2022-70219 -LU
Attachments: Site Circulation Plan - project plan set 2024-02-15.pdf

Hello,

I understand that Mark Bueno with the Public Works Department contacted you and addressed your main concern regarding the added project traffic on Hodencamp Road. In summary, staff explained that the majority of project traffic is expected to travel along Thousand Oaks (TOB) to access the project site. There are two driveways proposed to access the project, one on TOB and another on Lombard Street. The driveway on TOB is proposed as full inbound access and right-turn outbound only, which is expected to reduce project traffic traveling northbound along Hodencamp Rd. There are dual southbound left-turn lanes at Hodencamp Rd./TOB, and vehicles accessing the project would need to utilize the outside left-turn lane. Accordingly, residents, patrons, and employees of the project are not expected to utilize the inside left-turn lane that the resident uses to make a U-turn.

Mark also indicated that you expressed interest in an exhibit showing the proposed project and locations of the driveways. I have attached the site access/circulation exhibit from the project plan set. Please note that the site access exhibits will be provided in the Staff Report for the project and presented at the Planning Commission hearing next Monday April 22, 2024. Should you attend the meeting, you and the public will have the opportunity to provide public comment.

Please let me know of any further questions or concerns.

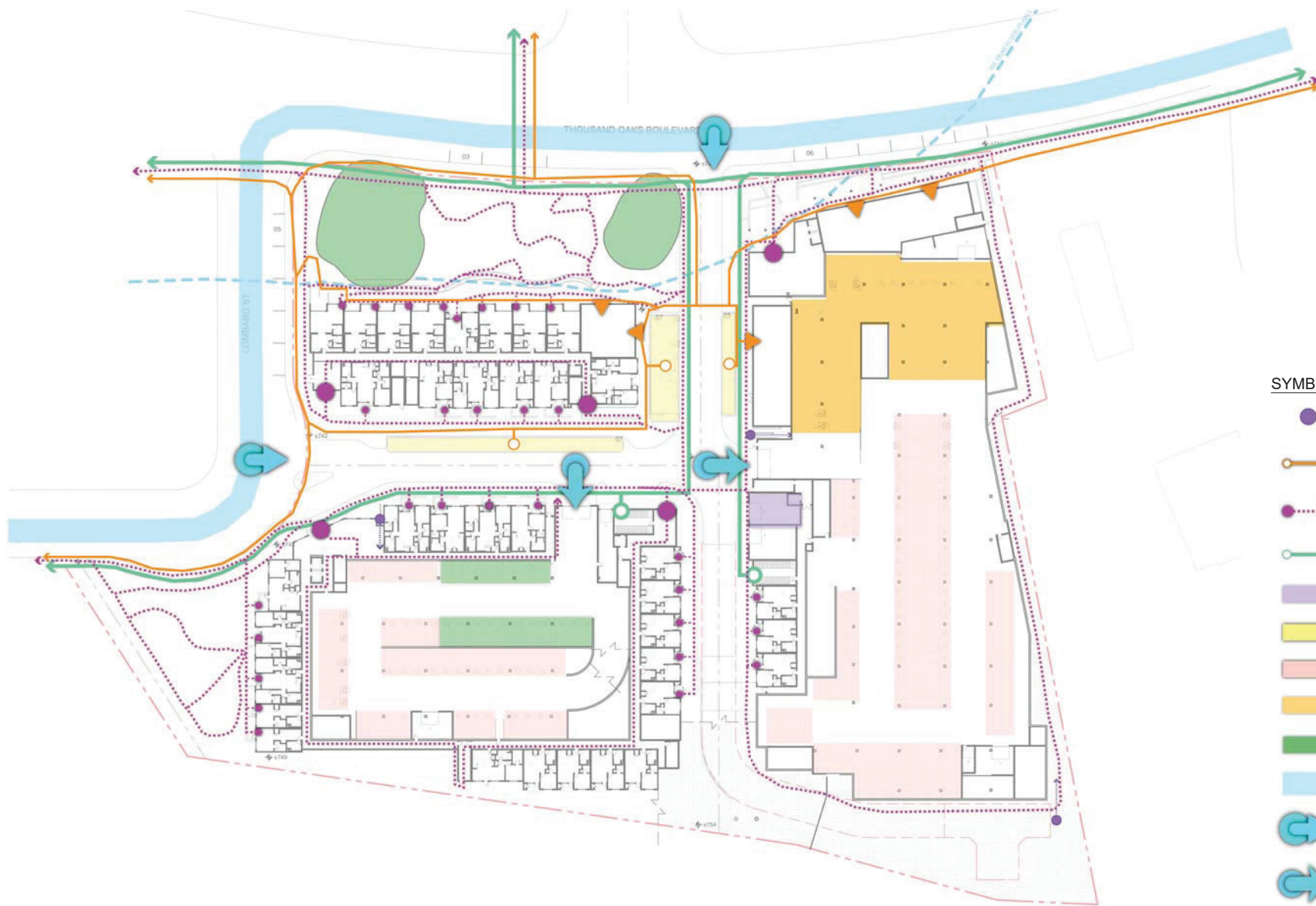
Carlos Contreras | | Senior Planner
Community Development Department
Planning Division
2100 Thousand Oaks Boulevard
Thousand Oaks, CA 91362
Email: ccontreras@toaks.org
Office: (805) 449-2317
[City of Thousand Oaks](http://www.toaks.org)



For information on services available at City Hall, visit www.toaks.org/cdd.

CITY OF THOUSAND OAKS
TO/24
VIRTUAL LAND USE SERVICE





SYMBOLS

-  GATE W/ KNOX BOX AND KEY FOB FOR RESIDENT ACCESS
-  COMMERCIAL PEDESTRIAN CIRCULATION
-  RESIDENT CIRCULATION
-  BIKE CIRCULATION
-  LOADING AREA
-  COMMERCIAL PARKING
-  RESIDENTIAL PARKING
-  SURPLUS / RESTAURANT PARKING
-  SURPLUS / GUEST PARKING
-  MAIN ARTERIAL ROAD
-  MAIN PROJECT ENTRY
-  GARAGE ENTRY

*New User Fees go into effect July 1, 2023. Applications submitted **with minimum application requirements** by June 30, 2023, will be subject to current fees. Applications invoiced on or after July 1, 2023, will be subject to new fees. Click [HERE](#) to view.*

From: Carlos Contreras
Sent: Monday, April 15, 2024 7:19 PM
To: Kristina Golem <kristinabain@hotmail.com>
Cc: Fabiola Zelaya Melicher <FZelaya@toaks.org>; Stephen Kearns <SKearns@toaks.org>
Subject: RE: 500 E. TOB // General Plan Amendment 2022-70219 -LU

Hello,

Thank you for your comments and feedback on the proposed mixed-use project at 500 Thousand Oaks Boulevard. City staff are currently reviewing your comments, questions, and concerns and will respond later this week. We appreciate your time and valuable input.

Kind regards,

Carlos Contreras | | **Senior Planner**
Community Development Department
Planning Division
2100 Thousand Oaks Boulevard
Thousand Oaks, CA 91362
Email: ccontreras@toaks.org
Office: (805) 449-2317
[City of Thousand Oaks](#)



For information on services available at City Hall, visit www.toaks.org/cdd.



*New User Fees go into effect July 1, 2023. Applications submitted **with minimum application requirements** by June 30, 2023, will be subject to current fees. Applications invoiced on or after July 1, 2023, will be subject to new fees. Click [HERE](#) to view.*

From: Kristina Golem <kristinabain@hotmail.com>
Sent: Thursday, April 11, 2024 9:57 AM
To: Mark Bueno <MBueno@toaks.org>; Carlos Contreras <CContreras@toaks.org>
Subject: 500 E. TOB // General Plan Amendment 2022-70219 -LU

Some people who received this message don't often get email from kristinabain@hotmail.com. [Learn why this is important](#)

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Hello Carlos & Mark,

As expressed in my email from the fall, I am still concerned with the traffic flow issues that are certain to arise when adding 427 residential parking spaces (and 48 commercial parking spaces) to currently open space within 500 feet of my residence.

As stated before, the homes on Irving Drive must turn right on Hodencamp to make a u-turn and double back to Thousand Oaks Blvd. You are not permitted to make a u-turn on Hodencamp at Hillcrest Drive due to limited visibility (I presume) provided by the slope of the hill.

The public hearing notice does not state anything regarding traffic changes.

Many of the residents in my neighborhood walk with dogs, babies, and children in the mornings and evenings. The additional traffic brings more risks and congestion. The public open spaces and dog park sound like lovely addition to the area, so I don't fully oppose the project. I don't see evidence of enough consideration regarding the increase of traffic. I pass this empty field on the walk to my doctor's office on Lombard Street. For residents who walk the neighborhood regularly (which is part of why we live here) this huge project will impact our daily lives.

On a final note, the Old Oaks restaurant next to the car wash is nearing the end of completion now that they have an honest contractor. This restaurant is expected to rival Mastro's and is only one block from Basta. It's great that the city wants to bring in affordable housing and wonderful restaurants to the community. I am concerned about the increase of traffic, distracted drivers, and no plan to improve traffic flow once these residences and business are up and running.

Maybe this is something being considered, but not a part of permitting?

Thank you for taking the time to consider my traffic concerns. We want to maintain the peaceful, safe environment many of us value as our community grows.

Kristina Golem

805-660-6097

535 Irving Dr. TO 91360

From: Carlos Contreras <CContreras@toaks.org>

Sent: Tuesday, October 31, 2023 11:24 AM

To: Kristina Golem <kristinabain@hotmail.com>

Cc: Mark Bueno <MBueno@toaks.org>

Subject: RE: 500 E. TOB // General Plan Amendment 2022-70219

Hello,

Thank you for providing comments on the proposed project. Your comments will be taken into consideration as we proceed with the entitlement review process. I copied Mark Bueno, Traffic Engineer, so that he is aware of your traffic and circulation comments.

Community Development Department

Planning Division

2100 Thousand Oaks Boulevard

Thousand Oaks, CA 91362

Email: ccontreras@toaks.org

Office: (805) 449-2317

[City of Thousand Oaks](http://www.toaks.org)



For information on services available at City Hall, visit www.toaks.org/cdd.



From: Kristina Golem <kristinabain@hotmail.com>

Sent: Wednesday, October 25, 2023 3:56 PM

To: Carlos Contreras <CContreras@toaks.org>

Subject: General Plan Amendment 2022-70219

You don't often get email from kristinabain@hotmail.com. [Learn why this is important](#)

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Carlos Contreras,

As a 15-year resident of the neighborhood and a lifetime (45 years) resident of Thousand Oaks, I would like to express concern for the Mixed-Use project in the planning process at 500 East Thousand Oaks Blvd.

My home is located at 535 Irving Drive. My neighbors and I already find our way to T.O. Blvd to be convoluted due to the islands on Hodencamp Rd. We cannot make a left turn, we must go right across 2 lanes and then make a U-turn. This project will add to the issue with 328 residential units 500 feet from my house.

I would like to strongly oppose this project for many reasons and would like to be informed of any open meetings at the City where concerned residents can be heard.

If the City does approve this project, I would expect the City to include modifications (making it easy to turn left onto Hodencamp Rd from Irving Dr.) to Hodencamp Road (between Thousand Oaks Blvd. & Hillcrest Dr.) to the Special Use Permit 2023-70001.

We have had an issue in the past when "no U-turn" signs were installed. Larry Tay helped resolve the issue by putting the old signs back up allowing for ease of traffic flow.

Thank you for taking the time to consider the residents who will be greatly impacted by this increase in traffic and resident volume.

Take Care,

Kristina Golem

805-660-6097

THOUSAND OAKS PLANNING COMMISSION



Supplemental Information Packet 1 April 22, 2024 Agenda Related Items Meeting of April 22, 2024

Supplemental Information:

Any agenda-related public documents received and distributed to a majority of the Planning Commission after the Agenda Packet is printed are included in Supplemental Packets. Supplemental Packets are produced as needed, typically they are distributed on the Thursday or Friday preceding the Planning Commission meeting and/or on Monday before the meeting. Supplemental Packets on Thursday or Friday are available for public inspection in the Community Development Department, 2100 East Thousand Oaks Boulevard, during normal business hours (main location pursuant to the Brown Act, G.C. 54957.5(2)). All Supplemental Packets are available for public review at the Planning Commission on the City's website www.toaks.org.

Americans with Disabilities Act (ADA)

Americans with Disabilities Act (ADA): In compliance with the ADA, if you need special assistance to participate in this meeting or other services in conjunction with this meeting, please contact the Planning Division, (805) 449-2500. Notification at least 48 hours prior to the meeting or time when services are needed will assist the City in ensuring that reasonable arrangements can be made to provide accessibility to the meeting or service.

To: Planning Commission

From: Kelvin Parker, Community Development Director

Date: April 22, 2024

Subject: **Regarding Item 07A – Proposed Mixed-Use Development (Commercial and Multi-Family Residential) - Special Use Permit (SUP) 2023-70011, Development Agreement (DAGR) 2023-70001, Protected Tree Permit (PTP) 2023-70067, and Environmental Impact Report Addendum California Environmental Quality Act (CEQA) 2023-70004**

Attached please find responses to questions received from a Commissioner (Attachment #1) and additional public correspondence received after the staff report was published (Attachment #2).

Additionally, below are proposed revisions to project Condition No. 122 regarding the Affordable Housing Covenant and also revisions to the Level of Service discussion within the Traffic Section of the staff report. It should be noted that the conclusions of the staff report regarding traffic evaluation, impacts, and improvements are not affected by the proposed changes.

AFFORDABLE HOUSING

122. **Affordable Housing Covenant** – Approval of this residential project is subject to execution of an Affordable Housing Covenant entered into between the Developer and City of Thousand Oaks. Said Affordable Housing Covenant shall incorporate the following conditions and is subject to approval by the City Attorney and Community Development Director.
- a. Affordable Housing Covenant shall be recorded prior to final building permit issuance. The covenant shall be recorded with the County of Ventura to provide notice and obligations to any future owners.
 - b. The Affordable Housing Covenant shall require 44 units as affordable units. 44 units will be preserved to households at the lower-income level of 80% of the Ventura County area median income.
 - c. Developer agrees to execute an Affordable Housing Covenant with City that provides for the on-going affordability of these 44 restricted

units for 55 years from the date of the City's issuance of the final certificate of occupancy.

- d. The City may extend the affordable period if the owner does not comply with the Affordable Housing Covenant.
- e. Affordable Housing Covenant shall include the affordable housing site plan identifying the location of the specific affordable unit, bedroom size, and restriction level.
- f. Affordable units ~~should~~shall be comparable in exterior appearance and overall quality of construction to market-rate dwelling units in the same residential development. The design and appearance of the affordable units shall be compatible with the design of the market-rate units.
- g. Affordable units shall be proportional, in number of bedrooms and gross floor area of habitable space to the market rate units, including washer and dryer, and access to all amenities.
- h. Affordable units ~~should~~shall be dispersed throughout the mixed-use and multi-family residential buildings of the development in a manner acceptable to the City. The on-site resident manager's unit shall not be counted as one of the affordable units.
- i. The operation and maintenance of the affordable residential units shall comply with applicable property maintenance and habitability codes. The deed restriction/affordable housing covenant shall address operation and maintenance performance standards and schedules to ensure parity of operation and maintenance between the affordable residential units and the market rate units at all times.
- j. The Affordable Housing Covenant shall require the Developer to create an Affirmative Fair Housing Marketing plan to ensure that fair housing laws and practices are implemented.
- k. The Affordable Housing Covenant shall require the Developer and future owners to annually verify and certify household income as well as tenant's occupancy.
- l. The Affordable Housing Covenant shall require the Developer and future owners to submit to the City an annual report. The Affordable Housing Covenant shall be in compliance with the latest California State requirements.

Traffic

As required by CEQA, a Vehicle Miles Traveled (VMT) analysis was conducted to evaluate the project's transportation impacts. The proposed project Circulation and Vehicle Miles Traveled Study dated April 2024 details the VMT analysis and is summarized in Table 10, Project VMT Analysis Summary.

Table 10 – Project VMT Analysis Summary

Project Component	VMT Calculation Methodology	Citywide Average Daily VMT	Project TAZ* Daily VMT	Project Difference
Residential	Citywide average daily VMT per resident	15.32 VMT	11.05 VMT	28% less than the City-wide average
Commercial	Citywide average daily VMT per employee	22.55 VMT	21.72 VMT	4% less than the City-wide average

* TAZ = Traffic Analysis Zone

The VMT analysis of the project determined the impacts resulting from the project would be less than significant and no mitigation measures are required (see the Transportation Section included with the Addendum to EIR No 327). As shown in Table 10, the project's daily residential VMT per capita and commercial VMT per employee would be approximately 28% and 4% less than the City-wide averages, respectively. As such, neither the VMT per capita nor VMT per employee would exceed the Citywide average VMT baselines, and the project-generated VMT impact would be less than significant. It should be noted that the study provides a conservative analysis. The VMT analysis assumed a proposed ground-floor commercial area that included 3,200 square feet of restaurant use out of the total 8,500 sq. ft of commercial area proposed. The resulting analysis is conservative in assuming more intense commercial uses would occur, and actual impacts would be reduced if general retail were to occupy the total 8,500 sq. ft of commercial area proposed.

While VMT is the metric for assessing transportation impacts under CEQA, it should be noted that staff required traffic delay to be analyzed as part of the planning review process, outside of CEQA. The project is adjacent to the intersection of Thousand Oaks Boulevard/Hodencamp Road and Thousand Oaks Boulevard/Lombard Street. The [Vehicle Miles Traveled Study](#) [circulation study](#) examined eight intersections in the project vicinity to assess the [existing](#) Level of Service (LOS) plus the proposed project (Attachment #7). [Based on the analysis,](#)

Cherry Tree Development, LLC

(SUP 2023-70011/ DAGR 2023-70001/PTP 2023-70067/CEQA 2023-70004)

April 22, 2024

Page 4

~~the study concluded that all studied intersections currently operate at LOS D or better during morning and evening peak hours, which would continue to operate at an acceptable LOS of D or better with the proposed project.~~ Per Resolution No. 2019-011, a Level of Service LOS CD is the minimum standard acceptable with the exception of specific intersections on Thousand Oaks Boulevard, Hillcrest Drive, and Moorpark Road that maintain LOS D as the minimum standard acceptable. Based on the analysis, all studied intersections currently operate at LOS C or better during morning and evening peak hours. The study concluded that all study intersections would continue to operate at LOS C or better with the proposed project. As such, the project will not cause adverse impacts related to LOS at nearby intersections. In addition, the Public Works Department has included conditions of approval requiring adequate line of sight visibility, traffic impact fees, and any necessary traffic signal, signs, and striping to accommodate the proposed project driveways. It should be noted that the proposed Thousand Oaks Boulevard driveway is designed to accommodate full inbound movements and right-turn outbound movements only. The proposed Lombard Street driveway is proposed to accommodate full inbound and outbound access.

Carlos Contreras

From: Carlos Contreras
Sent: Monday, April 22, 2024 4:44 PM
To: micfarris1@gmail.com
Cc: Stephen Kearns; Fabiola Zelaya Melicher; Patrick Hehir
Subject: RE: Questions regarding Case 7A (PC meeting of 4/22/2024)

Importance: High

Hello,

Thank you for your inquiry, Staff prepared a response to your questions in blue bold below.

(1) Commercial pedestrian circulation for Building A

On the circulation diagram (A0-16 of the project plan - pg 17 of Exhibit 6), it indicates that the commercial part of Building A has two entrances - one facing Thousand Oaks Boulevard and another facing the parking spots to the east of Building A. However, on the ground level site plan (A1-1 of the project plan - pg 21 of Exhibit 6), it appears there is only one entrance facing on the east side of Building A.

Which is correct? Also, if the site plan is correct (where the only commercial building entrance does not face Thousand Oaks Boulevard), can you opine on how this is consistent with the intent of SP-20?

- **The 1,500 s.f. commercial component of Building A provides one (1) entrance along the east elevation adjacent the proposed surface parking and is consistent with Sheet A1-1 of the project plan set. Since initial project submittal in March 2023, there have been changes to the project plans and sheet A0-16 of the project plan set does not reflect the latest iteration with one entrance along the east elevation of Building A.**
- **Further, due to the site constraints from the flood plain along the north portion of the site, Building A cannot be placed adjacent to the Thousand Oaks Boulevard frontage and so the applicant designed the project with the entrance along the east elevation to activate the frontage facing east towards the commercial component of Building B, thus complementing the village design of the mixed-use project. It should be noted that the site design and layout of Building A takes into consideration: 1) the public open space along the northwestern portion of the site and adjacent to Thousand Oaks Boulevard; 2) the ground level commercial component of the 3 live/work units adjacent to the 1,500 s.f. commercial, and 3) the ground floor commercial along the west elevation of Building B. These design considerations serve as a transition between the public and semi-public space to the proposed mixed-use buildings. As such, the proposed design complements the mixed-use design concept and in alignment with SP-20 development policies and guidelines.**

(2) Calculation of number of affordable units, density bonuses, and concessions

I wanted to understand why the "unlimited units" which is a component of SP-20 is not considered

part of the baseline for the applicant in order to gain density bonuses and concessions.

We are being asked to evaluate modifications from our objective design standards to accommodate the project, when we may not be receiving the public benefit (in the form of low income affordable units) we are entitled to receive from the development.

If the baseline were 236 units (183 from the 30 un/ac density + 53 from the proposed units above nonresidential uses), the proposed 44 units would constitute 18.6% affordable (vs the current 24%). This leads to a density bonus of 33.5% (vs 50%) or 80 units, leading to a project of 316 units (vs 328). This would also lead to a reduction to 2 concessions vs 3.

Or, if the applicant wanted to yield the 50% density bonus and 3 concessions granted for 24% low income affordable units, the applicant would need to provide 57 affordable units (vs 44). The density bonus would be larger - 118 units - leading to a project of 354 units, but there would be 57 affordable units provided. In either case, the project would yield a higher percentage of low income affordable units.

- **The baseline used to calculate density of the site for purposes of applying state density bonus law is solely based on the site acreage multiplied by the maximum allowed density per the sites Land Use designation, which is this case is 30du/ac. As mentioned in the staff report, based on the 6.09-acre lot size the maximum base density for this project is 183 dwelling units. Because the project includes 44 lower-income affordable units a 50% density bonus is applied to the project which will render 275 total units (183 base units plus the 92 density bonus units). SP-20 does not include an acreage formula for the 53 dwelling units above commercial, the 53 units are included once the project is designed and the commercial component of the project is determined. The 53 unlimited units are allowed per SP-20 and are not used to calculate the site density for purposes of obtaining a density bonus under state law.**

(3) Conditions on affordable units

Condition 122(f) states that “[a]ffordable units ***should*** be comparable in exterior appearance and overall quality of construction to market-rate dwelling units in the same residential development.” (bold and italics added)

Condition 122(h) states that “[a]ffordable units ***should*** be dispersed throughout the mixed-use and multi-family residential buildings of the development in a manner acceptable to the City.” (bold and italics added)

Can we change these to “shall” instead of “should”?

Also, these changes have been made previously in other projects, so is there a way that the default language for projects with affordable units include these changes in the future?

- **The condition of approval will be revised to include “shall” instead of “should,” as indicated and will be applied to future projects.**



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Lori Goor

From: Community Development Department
Sent: Monday, April 22, 2024 11:10 AM
To: Lori Goor
Cc: Carlos Contreras; Fabiola Zelaya Melicher
Subject: FW: Letter of Support - Planning Commission Item 7A
Attachments: Cherry Tree Capital Parterns Mixed-Use Development_Conejo Valley Chamber....pdf

Hello,

Please add to the Supplemental.

Thank you,

Community Development Department
[City of Thousand Oaks](#)
(805) 449-2500



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From: Danielle Borja <dborja@conejochamber.org>
Sent: Monday, April 22, 2024 11:06 AM
To: Community Development Department <CommunityDevelopment@toaks.org>
Subject: Letter of Support - Planning Commission Item 7A

You don't often get email from dborja@conejochamber.org. [Learn why this is important](#)

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Hello,

Please find attached the Chamber's letter of support for item 7A on the Planning Commission agenda this evening.

Thank you,

Danielle

Danielle Borja | President/CEO
Greater Conejo Valley Chamber of Commerce

600 Hampshire Road #200 | Westlake Village, CA 91361
P: 805.370.0035 | D: 805.267.7507

CHAMBER CHAMPIONS

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CONEJO VALLEY
CHAMBER OF COMMERCE

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AMR / Gold Coast Ambulance
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Selvin Property Management
Gabriella Sherman, MD
Los Robles Health System

April 22, 2024

Chair Don Lanson
City of Thousand Oaks
2100 Thousand Oaks Blvd
Thousand Oaks, CA 91362

Re: Cherry Tree Capital Partners Mixed-Use Development Proposal – Support

Dear Chair Lanson and Commissioners,

On behalf of the 700+ members of the Greater Conejo Valley Chamber of Commerce representing over 40,000 local jobs, I am writing to support the proposed mixed-use development by Cherry Tree Capital Partners that utilizes a long identified “opportunity site” to prioritize housing along Thousand Oaks Blvd.

Our Board of Directors has continuously voiced their support for projects that provide a greater diversity of housing options, appeal to young professionals and complement the future Campus Master Plan. This development is poised to be one of those projects with a thoughtfully crafted balance of “front yard” park space, affordable units, residential amenities and a strategic retail activation.

This proposal is aligned with the city’s goal of implementing high quality revitalization projects along Thousand Oaks Boulevard and continued support of affordable housing production with 44 units designated for lower-income residents. As we struggle with both housing availability and affordability for our local workforce, 328 units are a meaningful step in the right direction as we work towards reversing the trend of being the least affordable county in the United States.

We thank you for your thoughtful consideration and believe the proposal merits the Planning Commission recommend approval to City Council.

Sincerely,

Danielle Borja, MBA
President/CEO
Greater Conejo Valley Chamber of Commerce



From: [Community Development Department](#)
To: [Lori Goor](#); [Carlos Contreras](#); [Fabiola Zelaya Melicher](#)
Subject: FW: Planning Commission--Letter of Support (#7(A))
Date: Monday, April 22, 2024 12:32:13 PM
Attachments: [Letter of Support- Cherry Tree \(#7\(A\)\).pdf](#)

From: Rick Schroeder <rick@manymansions.org>
Sent: Monday, April 22, 2024 12:05 PM
To: Community Development Department <CommunityDevelopment@toaks.org>
Subject: Planning Commission--Letter of Support (#7(A))

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Rick A. Schroeder, Esq.
President & CEO | Many Mansions
1259 E. Thousand Oaks Blvd., Thousand Oaks, CA 91362
[805.496.4948](tel:805.496.4948) x227 phone | [805.497.1305](tel:805.497.1305) fax | 805.432.0862 cell
Cal. DRE #01999799
Cal. DRE (Many Mansions) #02003927
www.manymansions.org



April 22, 2024

City Planning Commission
City of Thousand Oaks
2100 Thousand Oaks Blvd.
Thousand Oaks, CA 91362

Via E-Mail

Re Item #7(A) Cherry Tree Development
Letter of Support

Dear Members of the City Planning Commission:

My name is Rick Schroeder, President & CEO of Many Mansions, a nonprofit affordable housing developer, owner, manager, and service provider headquartered in Thousand Oaks.

We support the actions sought by the applicant at tonight's hearing and as set forth in Item 7 (A).

The City of Thousand Oaks needs more affordable housing. The proposed project includes 44 units of new affordable housing – all units restricted to households at or below 80% Area Median Income ('low-income').

It is becoming increasingly difficult to develop affordable housing in this City. While state and federal affordable housing financing sources have increased, these funding sources do not favor suburban cities such as Thousand Oaks, given its high land costs, low densities, and lack of public transportation.

Therefore, the City should take advantage of the development of such affordable housing as included in larger non-affordable housing developments.

The City of Thousand Oaks simply needs more housing. The mere shortage of housing in the City places tremendous pressure on housing costs and rents and impacts overall available affordable housing. The lack of any new housing forces homeowners and renters to 'crowd

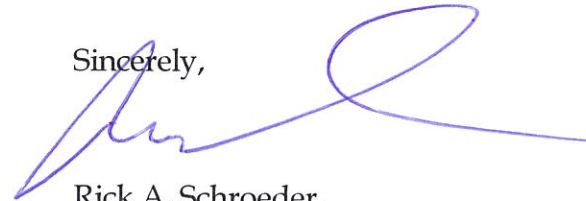
out' low-income residents and drives up rents. The average rent for a two-bedroom apartment unit in Thousand Oaks now exceeds \$2,700.

The proposed project adds 328 units of housing to the City's housing stock. This project, along with other current residential developments in the City, will help lower overall rents and thus make existing housing more affordable.

The beautiful design, proposed retail, and other amenities makes the proposed project a welcome addition to the City of Thousand Oaks.

We support the proposed action.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Rick A. Schroeder', with a long, sweeping horizontal line extending to the right.

Rick A. Schroeder,
President & CEO,
Many Mansions

Lori Goor

From: Community Development Department
Sent: Monday, April 22, 2024 2:59 PM
To: Lori Goor
Cc: Carlos Contreras; Fabiola Zelaya Melicher
Subject: FW: WSRCC - [City of Thousand Oaks, Mill Creek Mixed-Use Project, 500 E. Thousand Oaks Blvd] - Comment Letter
Attachments: 20240422_ThousandOaks_MillCreekMixedUse_PCMeeting_CL_Signed.pdf

Hello,

Please add to the Supplemental.

Thank you,

Community Development Department
[City of Thousand Oaks](#)
(805) 449-2500



*New User Fees go into effect July 1, 2023. Applications submitted **with minimum application requirements** by June 30, 2023, will be subject to current fees. Applications invoiced on or after July 1, 2023, will be subject to new fees. Click [HERE](#) to view.*

From: Christina Clifton <christina@mitshtsailaw.com>
Sent: Monday, April 22, 2024 2:53 PM
To: Community Development Department <CommunityDevelopment@toaks.org>
Cc: Mitchell M. Tsai Attorney at Law, P.C. <info@mitshtsailaw.com>; Jeremy Herwitt <jeremyh@mitshtsailaw.com>
Subject: WSRCC - [City of Thousand Oaks, Mill Creek Mixed-Use Project, 500 E. Thousand Oaks Blvd] - Comment Letter

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Good Afternoon,

Attached please find a comment letter our office is submitting for today's Planning Commission meeting regarding agenda item 7.

We would appreciate confirmation of this email and its attachment.

Thank you for your time,

Christina

--

Christina Clifton, Paralegal
Mitchell M. Tsai Law Firm - *Environmental & Land Use Litigation*
139 South Hudson Avenue Suite 200
Pasadena, CA 91101
Phone: (626) 314-3821
Fax: (626) 389-5414
Email: christina@mitchtsailaw.com
Website: <https://www.mitchtsailaw.com>

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F: (626) 389-5414
E: info@mitschtsailaw.com



Mitchell M. Tsai
Law Firm

139 South Hudson Avenue
Suite 200
Pasadena, California 91101

VIA E-MAIL

April 22, 2024

Don Lanson
Chair, Planning Commission
City of Thousand Oaks
2100 Thousand Oaks Boulevard
Thousand Oaks, CA 91362
Ph: (805) 4492151
Em: communitydevelopment@toaks.org

RE: City of Thousand Oaks' 500 E. Thousand Oaks Boulevard Mixed-Use Project (SCH#: 2010011013).

Dear Chair Lanson and Honorable Commissioners,

On behalf of the Western States Regional Council of Carpenters (“**Western Carpenters**” or “**WSRCC**”), our firm is submitting these comments in response to the City of Thousand Oaks’ (“**City**”) April 2024, Addendum to Final Environmental Impact Report (“**DEIR**”) for the 500 E. Thousand Oaks Boulevard Mixed-Use project (“**Project**”), which the City has associated with, and incorporated into, the Thousand Oaks Boulevard Specific Plan – Amended November 2022 (“**SP**”).

The Western Carpenters is a labor union representing almost 90,000 union carpenters in 12 states, including California, and has a strong interest in well-ordered land use planning and in addressing the environmental impacts of development projects.

The proposed project contemplates a 609,633 square foot mixed-use development consisting of 328 residential units with a 50% Density Bonus providing 44 lower-income affordable units, including 8,500 square feet of commercial retail and restaurant space, linear park, pocket park, dog park, plazas, seating areas, and other amenities. The Project’s 328 residential units would be distributed across one 4-story mixed-use building, one 5-story podium-style mixed-use building, and one 5-story podium-style multi-family residential building with maximum building heights ranging from 47 feet to 62 feet. The project includes 475 total parking spaces consisting of 16 surface parking spaces and two semi-subterranean parking structures comprising 32

commercial and 427 residential parking spaces. The project is comprised of five (5) parcels (Assessor's Parcel Numbers [APNs] 525-0-012-230, 669-0-201-030, 669-0-201-040, 669-0-201-050, and 669-0-201-105).

Individual members of WSRCC live, work, and recreate in the City and surrounding communities and would be directly affected by the Project's environmental impacts.

The Western States Regional Council of Carpenters expressly reserves the right to supplement these comments at or prior to hearings on the Project, and at any later hearing and proceeding related to this Project. (Gov. Code, § 65009, subd. (b); Pub. Res. Code, § 21177, subd. (a); see *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal.App.4th 1184, 1199-1203; see also *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal.App.4th 1109, 1121.)

The Western Carpenters incorporates by reference all comments raising issues regarding the Environmental Impact Report (EIR) submitted prior to certification of the EIR for the Project. See *Citizens for Clean Energy v City of Woodland* (2014) 225 Cal.App.4th 173, 191 (finding that any party who has objected to the project's environmental documentation may assert any issue timely raised by other parties).

Moreover, the Western Carpenters requests that the City provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act (**CEQA**) (Pub. Res. Code, § 21000 *et seq.*), and the California Planning and Zoning Law ("**Planning and Zoning Law**") (Gov. Code, §§ 65000–65010). California Public Resources Code Sections 21092.2, and 21167(f) and California Government Code Section 65092 require agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body.

I. THE CITY SHOULD REQUIRE THE USE OF A LOCAL WORKFORCE TO BENEFIT THE COMMUNITY'S ECONOMIC DEVELOPMENT AND ENVIRONMENT

The City should require the Project to be built using a local workers who have graduated from a Joint Labor-Management Apprenticeship Program approved by the State of California, have at least as many hours of on-the-job experience in the applicable craft which would be required to graduate from such a state-approved apprenticeship training program, or who are registered apprentices in a state-approved apprenticeship training program.

Community benefits such as local hire can also be helpful to reduce environmental impacts and improve the positive economic impact of the Project. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project site can reduce the length of vendor trips, reduce greenhouse gas emissions, and provide localized economic benefits. As environmental consultants Matt Hagemann and Paul E. Rosenfeld note:

[A]ny local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling.

Workforce requirements promote the development of skilled trades that yield sustainable economic development. As the California Workforce Development Board and the University of California, Berkeley Center for Labor Research and Education concluded:

[L]abor should be considered an investment rather than a cost—and investments in growing, diversifying, and upskilling California’s workforce can positively affect returns on climate mitigation efforts. In other words, well-trained workers are key to delivering emissions reductions and moving California closer to its climate targets.¹

Furthermore, workforce policies have significant environmental benefits given that they improve an area’s jobs-housing balance, decreasing the amount and length of job commutes and the associated greenhouse gas (GHG) emissions. In fact, on May 7, 2021, the South Coast Air Quality Management District found that the “[u]se of a local state-certified apprenticeship program” can result in air pollutant reductions.²

¹ California Workforce Development Board (2020) Putting California on the High Road: A Jobs and Climate Action Plan for 2030 at p. ii, available at <https://laborcenter.berkeley.edu/wp-content/uploads/2020/09/Putting-California-on-the-High-Road.pdf>.

² South Coast Air Quality Management District (May 7, 2021) Certify Final Environmental Assessment and Adopt Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions Program, and Proposed Rule 316 – Fees for Rule 2305, Submit Rule 2305 for Inclusion Into the SIP, and Approve

Locating jobs closer to residential areas can have significant environmental benefits. As the California Planning Roundtable noted in 2008:

People who live and work in the same jurisdiction would be more likely to take transit, walk, or bicycle to work than residents of less balanced communities and their vehicle trips would be shorter. Benefits would include potential reductions in both vehicle miles traveled and vehicle hours traveled.³

Moreover, local hire mandates and skill-training are critical facets of a strategy to reduce vehicle miles traveled (VMT). As planning experts Robert Cervero and Michael Duncan have noted, simply placing jobs near housing stock is insufficient to achieve VMT reductions given that the skill requirements of available local jobs must match those held by local residents.⁴ Some municipalities have even tied local hire and other workforce policies to local development permits to address transportation issues. Cervero and Duncan note that:

In nearly built-out Berkeley, CA, the approach to balancing jobs and housing is to create local jobs rather than to develop new housing. The city's First Source program encourages businesses to hire local residents, especially for entry- and intermediate-level jobs, and sponsors vocational training to ensure residents are employment-ready. While the program is voluntary, some 300 businesses have used it to date, placing more than 3,000 city residents in local jobs since it was launched in 1986. When needed, these carrots are matched by sticks, since the city is not shy about negotiating corporate participation in First Source as a condition of approval for development permits.

Recently, the State of California verified its commitment towards workforce development through the Affordable Housing and High Road Jobs Act of 2022,

Supporting Budget Actions, *available at* <http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2021/2021-May7-027.pdf?sfvrsn=10>.

³ California Planning Roundtable (2008) Deconstructing Jobs-Housing Balance at p. 6, *available at* <https://cprroundtable.org/static/media/uploads/publications/cpr-jobs-housing.pdf>

⁴ Cervero, Robert and Duncan, Michael (2006) Which Reduces Vehicle Travel More: Jobs-Housing Balance or Retail-Housing Mixing? Journal of the American Planning Association 72 (4), 475-490, 482, *available at* <http://reconnectingamerica.org/assets/Uploads/UTCT-825.pdf>.

otherwise known as Assembly Bill No. 2011 (“**AB2011**”). AB2011 amended the Planning and Zoning Law to allow ministerial, by-right approval for projects being built alongside commercial corridors that meet affordability and labor requirements.

The City should consider utilizing local workforce policies and requirements to benefit the local area economically and to mitigate greenhouse gas, improve air quality, and reduce transportation impacts.

II. THE CITY SHOULD IMPOSE TRAINING REQUIREMENTS FOR THE PROJECT’S CONSTRUCTION ACTIVITIES TO PREVENT COMMUNITY SPREAD OF COVID-19 AND OTHER INFECTIOUS DISEASES

Construction work has been defined as a Lower to High-risk activity for COVID-19 spread by the Occupations Safety and Health Administration. Recently, several construction sites have been identified as sources of community spread of COVID-19.⁵

Western Carpenters recommend that the Lead Agency adopt additional requirements to mitigate public health risks from the Project’s construction activities. WSRCC requests that the Lead Agency require safe on-site construction work practices as well as training and certification for any construction workers on the Project Site.

In particular, based upon Western Carpenters’ experience with safe construction site work practices, WSRCC recommends that the Lead Agency require that while construction activities are being conducted at the Project Site:

Construction Site Design:

- The Project Site will be limited to two controlled entry points.
- Entry points will have temperature screening technicians taking temperature readings when the entry point is open.

⁵ Santa Clara County Public Health (June 12, 2020) COVID-19 CASES AT CONSTRUCTION SITES HIGHLIGHT NEED FOR CONTINUED VIGILANCE IN SECTORS THAT HAVE REOPENED, *available at* <https://www.sccgov.org/sites/covid19/Pages/press-release-06-12-2020-cases-at-construction-sites.aspx>.

- The Temperature Screening Site Plan shows details regarding access to the Project Site and Project Site logistics for conducting temperature screening.
- A 48-hour advance notice will be provided to all trades prior to the first day of temperature screening.
- The perimeter fence directly adjacent to the entry points will be clearly marked indicating the appropriate 6-foot social distancing position for when you approach the screening area. Please reference the Apex temperature screening site map for additional details.
- There will be clear signage posted at the project site directing you through temperature screening.
- Provide hand washing stations throughout the construction site.

Testing Procedures:

- The temperature screening being used are non-contact devices.
- Temperature readings will not be recorded.
- Personnel will be screened upon entering the testing center and should only take 1-2 seconds per individual.
- Hard hats, head coverings, sweat, dirt, sunscreen or any other cosmetics must be removed on the forehead before temperature screening.
- Anyone who refuses to submit to a temperature screening or does not answer the health screening questions will be refused access to the Project Site.
- Screening will be performed at both entrances from 5:30 am to 7:30 am.; main gate [ZONE 1] and personnel gate [ZONE 2]
- After 7:30 am only the main gate entrance [ZONE 1] will continue to be used for temperature testing for anybody

gaining entry to the project site such as returning personnel, deliveries, and visitors.

- If the digital thermometer displays a temperature reading above 100.0 degrees Fahrenheit, a second reading will be taken to verify an accurate reading.
- If the second reading confirms an elevated temperature, DHS will instruct the individual that he/she will not be allowed to enter the Project Site. DHS will also instruct the individual to promptly notify his/her supervisor and his/her human resources (HR) representative and provide them with a copy of Annex A.

Planning

- Require the development of an Infectious Disease Preparedness and Response Plan that will include basic infection prevention measures (requiring the use of personal protection equipment), policies and procedures for prompt identification and isolation of sick individuals, social distancing (prohibiting gatherings of no more than 10 people including all-hands meetings and all-hands lunches) communication and training and workplace controls that meet standards that may be promulgated by the Center for Disease Control, Occupational Safety and Health Administration, Cal/OSHA, California Department of Public Health or applicable local public health agencies.⁶

The United Brotherhood of Carpenters and Carpenters International Training Fund has developed COVID-19 Training and Certification to ensure that Carpenter union members and apprentices conduct safe work practices. The Agency should require that

⁶ See also The Center for Construction Research and Training, North America's Building Trades Unions (April 27 2020) NABTU and CPWR COVID-19 Standards for U.S. Construction Sites, available at https://www.cpwr.com/sites/default/files/NABTU_CPWR_Standards_COVID-19.pdf; Los Angeles County Department of Public Works (2020) Guidelines for Construction Sites During COVID-19 Pandemic, available at https://dpw.lacounty.gov/building-and-safety/docs/pw_guidelines-construction-sites.pdf.

all construction workers undergo COVID-19 Training and Certification before being allowed to conduct construction activities at the Project Site.

Western Carpenters has also developed a rigorous Infection Control Risk Assessment (“**ICRA**”) training program to ensure it delivers a workforce that understands how to identify and control infection risks by implementing protocols to protect themselves and all others during renovation and construction projects in healthcare environments.⁷

ICRA protocols are intended to contain pathogens, control airflow, and protect patients during the construction, maintenance and renovation of healthcare facilities. ICRA protocols prevent cross contamination, minimizing the risk of secondary infections in patients at hospital facilities.

The City should require the Project to be built using a workforce trained in ICRA protocols.

III. THE PROJECT WOULD BE APPROVED IN VIOLATION OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT.

The California Environmental Quality Act (“CEQA”) is a California statute designed to inform decision-makers and the public about the potential significant environmental effects of a project. 14 California Code of Regulations (“**CEQA Guidelines**”), § 15002, subd. (a)(1).⁸ At its core, its purpose is to “inform the public and its responsible officials of the environmental consequences of their decisions *before* they are made.” (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564.)

A. Background Concerning Environmental Impact Reports Under CEQA.

CEQA directs public agencies to avoid or reduce environmental damage, when possible, by requiring alternatives or mitigation measures. (CEQA Guidelines, § 15002, subds. (a)(2)-(3); see also *Berkeley Keep Jets Over the Bay Committee v. Board of Port*

⁷ For details concerning Western Carpenters’ ICRA training program, *see* <https://icrahealthcare.com/>.

⁸ The CEQA Guidelines, codified in Title 14 of the California Code of Regulations, section 15000 *et seq.*, are regulatory guidelines promulgated by the state Natural Resources Agency for the implementation of CEQA. (Cal. Pub. Res. Code § 21083.) The CEQA Guidelines are given “great weight in interpreting CEQA except when . . . clearly unauthorized or erroneous.” *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 62 Cal. 4th 204, 217.

Comes (2001) 91 Cal.App.4th 1344, 1354; *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553; *Laurel Heights Improvement Assn.*, 47 Cal.3d at p. 400.) To achieve this purpose, CEQA mandates preparation of an Environmental Impact Report (“**EIR**”) for projects so that the foreseeable impacts of pursuing the project can be understood and weighed. (*Communities for a Better Environment v. Richmond* (2010) 184 Cal. App. 4th 70, 80.) The EIR requirement “is the heart of CEQA.” (CEQA Guidelines, § 15003(a).)

The EIR serves to provide public agencies and the public in general with information about the effect that a proposed project is likely to have on the environment and to “identify ways that environmental damage can be avoided or significantly reduced.” (CEQA Guidelines, § 15002, subd. (a)(2).) If the project has a significant effect on the environment, the agency may approve the project only upon finding that it has “eliminated or substantially lessened all significant effects on the environment where feasible” and that any unavoidable significant effects on the environment are “acceptable due to overriding concerns” specified in Public Resources Code section 21081. (See CEQA Guidelines, § 15092, subds. (b)(2)(A)-(B).)

While the courts review an EIR using an ‘abuse of discretion’ standard, the reviewing court is not to *uncritically* rely on every study or analysis presented by a project proponent in support of its position. (*Berkeley Jets*, 91 Cal.App.4th at p. 1355 (quoting *Laurel Heights Improvement Assn.*, 47 Cal.3d at pp. 391, 409 fn. 12) (internal quotations omitted).) A clearly inadequate or unsupported study is entitled to no judicial deference. (*Id.*) Drawing this line and determining whether the EIR complies with CEQA’s information disclosure requirements presents a question of law subject to independent review by the courts. (*Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 515; *Madera Oversight Coalition, Inc. v. County of Madera* (2011) 199 Cal.App.4th 48, 102, 131.) As the court stated in *Berkeley Jets*, prejudicial abuse of discretion occurs if the failure to include relevant information precludes informed decision-making and informed public participation, thereby thwarting the statutory goals of the EIR process. (91 Cal.App.4th at p. 1355 (internal quotations omitted).)

The preparation and circulation of an EIR is more than a set of technical hurdles for agencies and developers to overcome. (*Communities for a Better Environment v. Richmond* (2010) 184 Cal.App.4th 70, 80 (quoting *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 449-450).) The EIR’s function is to ensure that government officials who decide to build or approve a project do so with a full understanding of the environmental consequences and, equally important, that the public is assured those consequences have been considered. (*Id.*) For the EIR to serve these goals it must present information so that the foreseeable impacts of pursuing the project can be understood and weighed, and the public must be given an

adequate opportunity to comment on that presentation before the decision to go forward is made. (*Id.*)

B. The Project Requires Preparation and Circulation of Its Own Supplemental EIR.

Section 15088.5(a) of the CEQA Guidelines provides that an EIR must be recirculated whenever there is disclosure of significant new information. Significant new information includes: (1) disclosure of a new significant environmental impact resulting from the project or from a new proposed mitigation measure; (2) disclosure of a substantial increase in the severity of an environmental impact unless mitigation measures are adopted that reduce the impact to a level of insignificance; and (3) disclosure of a feasible project alternative or mitigation measure considerably different from others previously analyzed which would clearly lessen the significant environmental impacts of the project which the project proponents decline to adopt. (*Id.*)

Additionally, an EIR must be recirculated when it is so fundamentally inadequate and conclusory in nature that meaningful public review and comment is precluded. (*Id.* [citing *Mountain Lion Coalition v. Fish & Game Com.* (1989) 214 Cal.App.3d 1043].)

A lead agency must undertake supplemental CEQA review when substantial changes to a project or its circumstances require that lead agency to render new approvals that in turn require major revisions to a prior CEQA document due to new unstudied environmental impacts. (Pub. Res. Code §21166(a); CEQA Guidelines, §15162(a)(1); *Concerned Citizens of Costa Mesa v. 32nd Dist. Agricultural Association* (1986) 42 Cal.3d 929; *Fund for Environmental Defense v. County of Orange* (1988) 204 Cal.App.3d 1538. *Cf., Benton v. Board of Supervisors* (1991) 226 Cal.App.3d 1467, *Eller Media Company v. Community Redevelopment Agency* (2003) 108 Cal.App.4th 25.)

New information triggers a supplemental EIR to inform an agency's new discretionary project approval if it (1) was not known and could not have been known at the time the initial EIR was certified as complete for an original project, (2) the information shows new or substantially more severe significant impacts, or demonstrates the feasibility of important mitigation measures or alternatives previously found infeasible, or discloses important new mitigation measures or alternatives, and (3) the new information is of substantial importance to the project. §21166(c); Guidelines, §15162(a)(3).

Section 15164 of the CEQA guidelines provides: “The lead agency or a responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.” (*Id.* subd. (a).) “When there are changes in a project after the certification of a Final Report, the agency can prepare an Addendum to the Report if the changes do not substantially modify the analysis in the original Report. The Addendum is acceptable, rather than a new or Supplemental EIR, when there are only minor technical changes or additions which do not raise important new issues about the significant effects on the environment.” (*Ventura Foothill Neighbors v. County of Ventura* (2014) 232 Cal.App.4th 429, 435(citing 9 Miller & Starr, Cal. Real Estate (3d ed.2011), § 25A:19, p. 25A–107, fns. omitted.))

1. The Project Conflicts with Various Aspects of the Thousand Oaks Boulevard Specific Plan.

Here, the Project reflects substantial changes from the SP, such that the City’s provision of the Addendum is not CEQA-compliant. For example, here, the Project contemplates constructing three mixed-used buildings: one that will be four (4) stories in height and two that will be five (5) stories in height. Meanwhile, the SP provides a Special Standard for Thousand Oaks Boulevard Street Frontage projects that “[t]he maximum average building height is 50 feet, **not to exceed 3 stories**.” (See SP at pp. 60-64; emphasis added.) Additionally, the Project contemplates that 18% of frontage along Thousand Oaks Boulevard will be retail, when the SP requires any building with greater than 100 feet of frontage along Thousand Oaks Boulevard to maintain a minimum of 50% retail frontage area. (See SP at p. 65.) In these regards, the Project as proposed directly conflicts with the parameters of the SP, in that the structures being contemplated by the Project exceed the building size permitted by the SP and do not satisfy the SP’s retail frontage requirements.

Where the lead agency of a project fails to analyze “[s]ubstantial changes’ in the project, requiring ‘major revisions’ in the EIR,” courts find that such agencies have abused their discretion by failing to prepare a supplemental EIR. (*Ventura Foothill Neighbors, supra*, (2014) 232 Cal.App.4th at 436 (citing *Committee For Green Foothills v. Santa Clara County Bd. of Supervisors* (2010) 48 Cal.4th 32, 54).)

Irrespective of whether the Project has sought various concessions from the City for aspects of the Project that conflict with the SP, the City cannot credibly contend that the Project fits neatly within the SP’s scope and results in no “substantial changes” to

the Project relative to those contemplated in the FEIR for the SP. Further analysis of the Project, by way of a supplemental EIR, is required in this instance.

2. The Project's Assessment of Impacts to Biological Resources is Outdated and Inadequate.

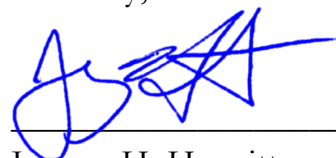
In addition to the Project's conflict with the SP, the biological survey conducted in connection with the Addendum is inadequate for CEQA purposes. The FEIR's biological mitigation measures were developed in 2011 based on site surveys taken at that time. Thus, the biological surveys on which the FEIR's mitigation measures are premised were conducted approximately 13 years ago and are now consummately outdated. The validity of those prior mitigation measures cannot be justified view a 5-hour nesting bird survey performed on a single day, as the City has attempted here. (See Appendix K to Addendum.) The site must be reevaluated for the presence of other potential special-status species, such that the efficacy of the prior mitigation measures can be analyzed.

Additionally, the Project contemplates removal of 33 trees, 22 of which are protected oak trees. The FEIR for the SP provides no indication that it contemplated removal of this quantity of protected oaks, and the proposed removal is well in excess of the City's Oak Tree Preservation and Protection Standards and Guidelines. Accordingly, the Project presents substantial new information regarding its environmental impacts, such that the Project warrants preparation of its own supplemental EIR.

IV. CONCLUSION

Western Carpenters submits that the City is required by CEQA to circulate a separate DEIR for the Project to address the aforementioned concerns. Absent doing so, any approval of this Project under the prior 2011 FEIR certified for the SP would violate CEQA and subvert the public environmental review process. If the City has any questions or concerns regarding the foregoing, please do not hesitate to contact this office.

Sincerely,



Jeremy H. Herwitt

Attorneys for Western States Regional Council of Carpenters

Attached:

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling (Exhibit A);

Air Quality and GHG Expert Paul Rosenfeld CV (Exhibit B); and

Air Quality and GHG Expert Matt Hagemann CV (Exhibit C).

EXHIBIT A



Technical Consultation, Data Analysis and
Litigation Support for the Environment

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March 8, 2021

Mitchell M. Tsai
155 South El Molino, Suite 104
Pasadena, CA 91101

Subject: Local Hire Requirements and Considerations for Greenhouse Gas Modeling

Dear Mr. Tsai,

Soil Water Air Protection Enterprise ("SWAPE") is pleased to provide the following draft technical report explaining the significance of worker trips required for construction of land use development projects with respect to the estimation of greenhouse gas ("GHG") emissions. The report will also discuss the potential for local hire requirements to reduce the length of worker trips, and consequently, reduced or mitigate the potential GHG impacts.

Worker Trips and Greenhouse Gas Calculations

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 greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects."¹ CalEEMod quantifies construction-related emissions associated with land use projects resulting from off-road construction equipment; on-road mobile equipment associated with workers, vendors, and hauling; fugitive dust associated with grading, demolition, truck loading, and on-road vehicles traveling along paved and unpaved roads; and architectural coating activities; and paving.²

The number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.³

¹ "California Emissions Estimator Model." CAPCOA, 2017, available at: <http://www.aqmd.gov/caleemod/home>.

² "California Emissions Estimator Model." CAPCOA, 2017, available at: <http://www.aqmd.gov/caleemod/home>.

³ "CalEEMod User's Guide." CAPCOA, November 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.

Specifically, the number and length of vehicle trips is utilized to estimate the vehicle miles travelled (“VMT”) associated with construction. Then, utilizing vehicle-class specific EMFAC 2014 emission factors, CalEEMod calculates the vehicle exhaust, evaporative, and dust emissions resulting from construction-related VMT, including personal vehicles for worker commuting.⁴

Specifically, in order to calculate VMT, CalEEMod multiplies the average daily trip rate by the average overall trip length (see excerpt below):

$$\text{“VMT}_d = \Sigma(\text{Average Daily Trip Rate}_i * \text{Average Overall Trip Length}_i) _n$$

Where:

n = Number of land uses being modeled.”⁵

Furthermore, to calculate the on-road emissions associated with worker trips, CalEEMod utilizes the following equation (see excerpt below):

$$\text{“Emissions}_{\text{pollutant}} = \text{VMT} * \text{EF}_{\text{running,pollutant}}$$

Where:

$\text{Emissions}_{\text{pollutant}}$ = emissions from vehicle running for each pollutant

VMT = vehicle miles traveled

$\text{EF}_{\text{running,pollutant}}$ = emission factor for running emissions.”⁶

Thus, there is a direct relationship between trip length and VMT, as well as a direct relationship between VMT and vehicle running emissions. In other words, when the trip length is increased, the VMT and vehicle running emissions increase as a result. Thus, vehicle running emissions can be reduced by decreasing the average overall trip length, by way of a local hire requirement or otherwise.

Default Worker Trip Parameters and Potential Local Hire Requirements

As previously discussed, the number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.⁷ In order to understand how local hire requirements and associated worker trip length reductions impact GHG emissions calculations, it is important to consider the CalEEMod default worker trip parameters. CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act (“CEQA”) requires that such changes be justified by substantial evidence.⁸ The default number of construction-related worker trips is calculated by multiplying the

⁴ “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14-15.

⁵ “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 23.

⁶ “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.

⁷ “CalEEMod User’s Guide.” CAPCOA, November 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.

⁸ CalEEMod User Guide, available at: <http://www.caleemod.com/>, p. 1, 9.

number of pieces of equipment for all phases by 1.25, with the exception of worker trips required for the building construction and architectural coating phases.⁹ Furthermore, the worker trip vehicle class is a 50/25/25 percent mix of light duty autos, light duty truck class 1 and light duty truck class 2, respectively.”¹⁰ Finally, the default worker trip length is consistent with the length of the operational home-to-work vehicle trips.¹¹ The operational home-to-work vehicle trip lengths are:

“[B]ased on the location and urbanization selected on the project characteristic screen. These values were supplied by the air districts or use a default average for the state. Each district (or county) also assigns trip lengths for urban and rural settings” (emphasis added).¹²

Thus, the default worker trip length is based on the location and urbanization level selected by the User when modeling emissions. The below table shows the CalEEMod default rural and urban worker trip lengths by air basin (see excerpt below and Attachment A).¹³

Worker Trip Length by Air Basin		
Air Basin	Rural (miles)	Urban (miles)
Great Basin Valleys	16.8	10.8
Lake County	16.8	10.8
Lake Tahoe	16.8	10.8
Mojave Desert	16.8	10.8
Mountain Counties	16.8	10.8
North Central Coast	17.1	12.3
North Coast	16.8	10.8
Northeast Plateau	16.8	10.8
Sacramento Valley	16.8	10.8
Salton Sea	14.6	11
San Diego	16.8	10.8
San Francisco Bay Area	10.8	10.8
San Joaquin Valley	16.8	10.8
South Central Coast	16.8	10.8
South Coast	19.8	14.7
Average	16.47	11.17
Minimum	10.80	10.80
Maximum	19.80	14.70
Range	9.00	3.90

⁹ “CalEEMod User’s Guide.” CAPCOA, November 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.

¹⁰ “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.

¹¹ “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14.

¹² “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 21.

¹³ “Appendix D Default Data Tables.” CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-84 – D-86.

As demonstrated above, default rural worker trip lengths for air basins in California vary from 10.8- to 19.8- miles, with an average of 16.47 miles. Furthermore, default urban worker trip lengths vary from 10.8- to 14.7- miles, with an average of 11.17 miles. Thus, while default worker trip lengths vary by location, default urban worker trip lengths tend to be shorter in length. Based on these trends evident in the CalEEMod default worker trip lengths, we can reasonably assume that the efficacy of a local hire requirement is especially dependent upon the urbanization of the project site, as well as the project location.

Practical Application of a Local Hire Requirement and Associated Impact

To provide an example of the potential impact of a local hire provision on construction-related GHG emissions, we estimated the significance of a local hire provision for the Village South Specific Plan (“Project”) located in the City of Claremont (“City”). The Project proposed to construct 1,000 residential units, 100,000-SF of retail space, 45,000-SF of office space, as well as a 50-room hotel, on the 24-acre site. The Project location is classified as Urban and lies within the Los Angeles-South Coast County. As a result, the Project has a default worker trip length of 14.7 miles.¹⁴ In an effort to evaluate the potential for a local hire provision to reduce the Project’s construction-related GHG emissions, we prepared an updated model, reducing all worker trip lengths to 10 miles (see Attachment B). Our analysis estimates that if a local hire provision with a 10-mile radius were to be implemented, the GHG emissions associated with Project construction would decrease by approximately 17% (see table below and Attachment C).

Local Hire Provision Net Change	
Without Local Hire Provision	
Total Construction GHG Emissions (MT CO ₂ e)	3,623
Amortized Construction GHG Emissions (MT CO ₂ e/year)	120.77
With Local Hire Provision	
Total Construction GHG Emissions (MT CO ₂ e)	3,024
Amortized Construction GHG Emissions (MT CO ₂ e/year)	100.80
% Decrease in Construction-related GHG Emissions	17%

As demonstrated above, by implementing a local hire provision requiring 10 mile worker trip lengths, the Project could reduce potential GHG emissions associated with construction worker trips. More broadly, any local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

This serves as an example of the potential impacts of local hire requirements on estimated project-level GHG emissions, though it does not indicate that local hire requirements would result in reduced construction-related GHG emission for all projects. As previously described, the significance of a local hire requirement depends on the worker trip length enforced and the default worker trip length for the project’s urbanization level and location.

¹⁴ “Appendix D Default Data Tables.” CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-85.

Disclaimer

SWAPE has received limited discovery. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,

A handwritten signature in blue ink, appearing to read "M Hagemann".

Matt Hagemann, P.G., C.Hg.

A handwritten signature in blue ink, appearing to read "Paul Rosenfeld".

Paul E. Rosenfeld, Ph.D.

Attachment A

Location Type	Location Name	Rural H-W (miles)	Urban H-W (miles)
Air Basin	Great Basin	16.8	10.8
Air Basin	Lake County	16.8	10.8
Air Basin	Lake Tahoe	16.8	10.8
Air Basin	Mojave Desert	16.8	10.8
Air Basin	Mountain	16.8	10.8
Air Basin	North Central	17.1	12.3
Air Basin	North Coast	16.8	10.8
Air Basin	Northeast	16.8	10.8
Air Basin	Sacramento	16.8	10.8
Air Basin	Salton Sea	14.6	11
Air Basin	San Diego	16.8	10.8
Air Basin	San Francisco	10.8	10.8
Air Basin	San Joaquin	16.8	10.8
Air Basin	South Central	16.8	10.8
Air Basin	South Coast	19.8	14.7
Air District	Amador County	16.8	10.8
Air District	Antelope Valley	16.8	10.8
Air District	Bay Area AQMD	10.8	10.8
Air District	Butte County	12.54	12.54
Air District	Calaveras	16.8	10.8
Air District	Colusa County	16.8	10.8
Air District	El Dorado	16.8	10.8
Air District	Feather River	16.8	10.8
Air District	Glenn County	16.8	10.8
Air District	Great Basin	16.8	10.8
Air District	Imperial County	10.2	7.3
Air District	Kern County	16.8	10.8
Air District	Lake County	16.8	10.8
Air District	Lassen County	16.8	10.8
Air District	Mariposa	16.8	10.8
Air District	Mendocino	16.8	10.8
Air District	Modoc County	16.8	10.8
Air District	Mojave Desert	16.8	10.8
Air District	Monterey Bay	16.8	10.8
Air District	North Coast	16.8	10.8
Air District	Northern Sierra	16.8	10.8
Air District	Northern	16.8	10.8
Air District	Placer County	16.8	10.8
Air District	Sacramento	15	10

Air District	San Diego	16.8	10.8
Air District	San Joaquin	16.8	10.8
Air District	San Luis Obispo	13	13
Air District	Santa Barbara	8.3	8.3
Air District	Shasta County	16.8	10.8
Air District	Siskiyou County	16.8	10.8
Air District	South Coast	19.8	14.7
Air District	Tehama County	16.8	10.8
Air District	Tuolumne	16.8	10.8
Air District	Ventura County	16.8	10.8
Air District	Yolo/Solano	15	10
County	Alameda	10.8	10.8
County	Alpine	16.8	10.8
County	Amador	16.8	10.8
County	Butte	12.54	12.54
County	Calaveras	16.8	10.8
County	Colusa	16.8	10.8
County	Contra Costa	10.8	10.8
County	Del Norte	16.8	10.8
County	El Dorado-Lake	16.8	10.8
County	El Dorado-	16.8	10.8
County	Fresno	16.8	10.8
County	Glenn	16.8	10.8
County	Humboldt	16.8	10.8
County	Imperial	10.2	7.3
County	Inyo	16.8	10.8
County	Kern-Mojave	16.8	10.8
County	Kern-San	16.8	10.8
County	Kings	16.8	10.8
County	Lake	16.8	10.8
County	Lassen	16.8	10.8
County	Los Angeles-	16.8	10.8
County	Los Angeles-	19.8	14.7
County	Madera	16.8	10.8
County	Marin	10.8	10.8
County	Mariposa	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Merced	16.8	10.8
County	Modoc	16.8	10.8
County	Mono	16.8	10.8
County	Monterey	16.8	10.8
County	Napa	10.8	10.8

County	Nevada	16.8	10.8
County	Orange	19.8	14.7
County	Placer-Lake	16.8	10.8
County	Placer-Mountain	16.8	10.8
County	Placer-	16.8	10.8
County	Plumas	16.8	10.8
County	Riverside-	16.8	10.8
County	Riverside-	19.8	14.7
County	Riverside-Salton	14.6	11
County	Riverside-South	19.8	14.7
County	Sacramento	15	10
County	San Benito	16.8	10.8
County	San Bernardino-	16.8	10.8
County	San Bernardino-	19.8	14.7
County	San Diego	16.8	10.8
County	San Francisco	10.8	10.8
County	San Joaquin	16.8	10.8
County	San Luis Obispo	13	13
County	San Mateo	10.8	10.8
County	Santa Barbara-	8.3	8.3
County	Santa Barbara-	8.3	8.3
County	Santa Clara	10.8	10.8
County	Santa Cruz	16.8	10.8
County	Shasta	16.8	10.8
County	Sierra	16.8	10.8
County	Siskiyou	16.8	10.8
County	Solano-	15	10
County	Solano-San	16.8	10.8
County	Sonoma-North	16.8	10.8
County	Sonoma-San	10.8	10.8
County	Stanislaus	16.8	10.8
County	Sutter	16.8	10.8
County	Tehama	16.8	10.8
County	Trinity	16.8	10.8
County	Tulare	16.8	10.8
County	Tuolumne	16.8	10.8
County	Ventura	16.8	10.8
County	Yolo	15	10
County	Yuba	16.8	10.8
Statewide	Statewide	16.8	10.8

Worker Trip Length by Air Basin		
Air Basin	Rural (miles)	Urban (miles)
Great Basin Valleys	16.8	10.8
Lake County	16.8	10.8
Lake Tahoe	16.8	10.8
Mojave Desert	16.8	10.8
Mountain Counties	16.8	10.8
North Central Coast	17.1	12.3
North Coast	16.8	10.8
Northeast Plateau	16.8	10.8
Sacramento Valley	16.8	10.8
Salton Sea	14.6	11
San Diego	16.8	10.8
San Francisco Bay Area	10.8	10.8
San Joaquin Valley	16.8	10.8
South Central Coast	16.8	10.8
South Coast	19.8	14.7
Average	16.47	11.17
Minimum	10.80	10.80
Maximum	19.80	14.70
Range	9.00	3.90

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

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tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

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2.1 Overall Construction**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1713	1.8242	1.1662	2.4000e-003	0.4169	0.0817	0.4986	0.1795	0.0754	0.2549	0.0000	213.1969	213.1969	0.0601	0.0000	214.6993
2022	0.6904	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.6826	1,721.6826	0.1294	0.0000	1,724.9187
2023	0.6148	3.3649	5.6747	0.0178	1.1963	0.0996	1.2959	0.3203	0.0935	0.4138	0.0000	1,627.5295	1,627.5295	0.1185	0.0000	1,630.4925
2024	4.1619	0.1335	0.2810	5.9000e-004	0.0325	6.4700e-003	0.0390	8.6300e-003	6.0400e-003	0.0147	0.0000	52.9078	52.9078	8.0200e-003	0.0000	53.1082
Maximum	4.1619	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.6826	1,721.6826	0.1294	0.0000	1,724.9187

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2.1 Overall Construction**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1713	1.8242	1.1662	2.4000e-003	0.4169	0.0817	0.4986	0.1795	0.0754	0.2549	0.0000	213.1967	213.1967	0.0601	0.0000	214.6991
2022	0.6904	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.6823	1,721.6823	0.1294	0.0000	1,724.9183
2023	0.6148	3.3648	5.6747	0.0178	1.1963	0.0996	1.2959	0.3203	0.0935	0.4138	0.0000	1,627.5291	1,627.5291	0.1185	0.0000	1,630.4921
2024	4.1619	0.1335	0.2810	5.9000e-004	0.0325	6.4700e-003	0.0390	8.6300e-003	6.0400e-003	0.0147	0.0000	52.9077	52.9077	8.0200e-003	0.0000	53.1082
Maximum	4.1619	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.6823	1,721.6823	0.1294	0.0000	1,724.9183

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2021	11-30-2021	1.4103	1.4103
2	12-1-2021	2-28-2022	1.3613	1.3613
3	3-1-2022	5-31-2022	1.1985	1.1985
4	6-1-2022	8-31-2022	1.1921	1.1921
5	9-1-2022	11-30-2022	1.1918	1.1918
6	12-1-2022	2-28-2023	1.0774	1.0774
7	3-1-2023	5-31-2023	1.0320	1.0320
8	6-1-2023	8-31-2023	1.0260	1.0260

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9	9-1-2023	11-30-2023	1.0265	1.0265
10	12-1-2023	2-29-2024	2.8857	2.8857
11	3-1-2024	5-31-2024	1.6207	1.6207
		Highest	2.8857	2.8857

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	6.8692	9.5223	30.3407	0.0914	7.7979	0.2260	8.0240	2.0895	0.2219	2.3114	236.9712	12,294.1807	12,531.1519	15.7904	0.1260	12,963.4751

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2.2 Overall Operational**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	6.8692	9.5223	30.3407	0.0914	7.7979	0.2260	8.0240	2.0895	0.2219	2.3114	236.9712	12,294.1807	12,531.1519	15.7904	0.1260	12,963.4751

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601
Total	0.0475	0.4716	0.3235	5.8000e-004	0.0496	0.0233	0.0729	7.5100e-003	0.0216	0.0291	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601

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3.2 Demolition - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7000e-004	7.5000e-004	8.5100e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	2.2251	2.2251	7.0000e-005	0.0000	2.2267
Total	2.9000e-003	0.0641	0.0233	2.0000e-004	6.4100e-003	2.1000e-004	6.6200e-003	1.7300e-003	2.0000e-004	1.9300e-003	0.0000	19.6816	19.6816	1.2800e-003	0.0000	19.7136

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600
Total	0.0475	0.4716	0.3235	5.8000e-004	0.0496	0.0233	0.0729	7.5100e-003	0.0216	0.0291	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600

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3.2 Demolition - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7000e-004	7.5000e-004	8.5100e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	2.2251	2.2251	7.0000e-005	0.0000	2.2267
Total	2.9000e-003	0.0641	0.0233	2.0000e-004	6.4100e-003	2.1000e-004	6.6200e-003	1.7300e-003	2.0000e-004	1.9300e-003	0.0000	19.6816	19.6816	1.2800e-003	0.0000	19.7136

3.3 Site Preparation - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061
Total	0.0389	0.4050	0.2115	3.8000e-004	0.1807	0.0204	0.2011	0.0993	0.0188	0.1181	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061

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3.3 Site Preparation - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-004	6.0000e-004	6.8100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7801	1.7801	5.0000e-005	0.0000	1.7814
Total	7.7000e-004	6.0000e-004	6.8100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7801	1.7801	5.0000e-005	0.0000	1.7814

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060
Total	0.0389	0.4050	0.2115	3.8000e-004	0.1807	0.0204	0.2011	0.0993	0.0188	0.1181	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060

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3.3 Site Preparation - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-004	6.0000e-004	6.8100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7801	1.7801	5.0000e-005	0.0000	1.7814
Total	7.7000e-004	6.0000e-004	6.8100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7801	1.7801	5.0000e-005	0.0000	1.7814

3.4 Grading - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776
Total	0.0796	0.8816	0.5867	1.1800e-003	0.1741	0.0377	0.2118	0.0693	0.0347	0.1040	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776

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3.4 Grading - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6400e-003	1.2700e-003	0.0144	4.0000e-005	4.1600e-003	3.0000e-005	4.2000e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.7579	3.7579	1.1000e-004	0.0000	3.7607
Total	1.6400e-003	1.2700e-003	0.0144	4.0000e-005	4.1600e-003	3.0000e-005	4.2000e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.7579	3.7579	1.1000e-004	0.0000	3.7607

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775
Total	0.0796	0.8816	0.5867	1.1800e-003	0.1741	0.0377	0.2118	0.0693	0.0347	0.1040	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775

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3.4 Grading - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6400e-003	1.2700e-003	0.0144	4.0000e-005	4.1600e-003	3.0000e-005	4.2000e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.7579	3.7579	1.1000e-004	0.0000	3.7607
Total	1.6400e-003	1.2700e-003	0.0144	4.0000e-005	4.1600e-003	3.0000e-005	4.2000e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.7579	3.7579	1.1000e-004	0.0000	3.7607

3.4 Grading - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	0.0127	0.1360	0.1017	2.2000e-004	0.0807	5.7200e-003	0.0865	0.0180	5.2600e-003	0.0233	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414

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3.4 Grading - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.1000e-004	2.4400e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6679	0.6679	2.0000e-005	0.0000	0.6684
Total	2.8000e-004	2.1000e-004	2.4400e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6679	0.6679	2.0000e-005	0.0000	0.6684

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	0.0127	0.1360	0.1017	2.2000e-004	0.0807	5.7200e-003	0.0865	0.0180	5.2600e-003	0.0233	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414

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3.4 Grading - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.1000e-004	2.4400e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6679	0.6679	2.0000e-005	0.0000	0.6684
Total	2.8000e-004	2.1000e-004	2.4400e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6679	0.6679	2.0000e-005	0.0000	0.6684

3.5 Building Construction - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881
Total	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881

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3.5 Building Construction - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.4088	0.3066	3.5305	0.0107	1.1103	8.8700e-003	1.1192	0.2949	8.1700e-003	0.3031	0.0000	966.8117	966.8117	0.0266	0.0000	967.4773
Total	0.4616	2.0027	3.9885	0.0152	1.2243	0.0121	1.2363	0.3278	0.0112	0.3390	0.0000	1,408.7952	1,408.7952	0.0530	0.0000	1,410.1208

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877
Total	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877

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3.5 Building Construction - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.4088	0.3066	3.5305	0.0107	1.1103	8.8700e-003	1.1192	0.2949	8.1700e-003	0.3031	0.0000	966.8117	966.8117	0.0266	0.0000	967.4773
Total	0.4616	2.0027	3.9885	0.0152	1.2243	0.0121	1.2363	0.3278	0.0112	0.3390	0.0000	1,408.7952	1,408.7952	0.0530	0.0000	1,410.1208

3.5 Building Construction - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814
Total	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814

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3.5 Building Construction - 2023**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.3753	0.2708	3.1696	0.0101	1.0840	8.4100e-003	1.0924	0.2879	7.7400e-003	0.2957	0.0000	909.3439	909.3439	0.0234	0.0000	909.9291
Total	0.4135	1.5218	3.5707	0.0144	1.1953	9.8700e-003	1.2051	0.3200	9.1400e-003	0.3292	0.0000	1,327.3369	1,327.3369	0.0462	0.0000	1,328.4916

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811
Total	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811

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3.5 Building Construction - 2023**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.3753	0.2708	3.1696	0.0101	1.0840	8.4100e-003	1.0924	0.2879	7.7400e-003	0.2957	0.0000	909.3439	909.3439	0.0234	0.0000	909.9291
Total	0.4135	1.5218	3.5707	0.0144	1.1953	9.8700e-003	1.2051	0.3200	9.1400e-003	0.3292	0.0000	1,327.3369	1,327.3369	0.0462	0.0000	1,328.4916

3.6 Paving - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227

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3.6 Paving - 2023**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.7000e-004	3.1200e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8963	0.8963	2.0000e-005	0.0000	0.8968
Total	3.7000e-004	2.7000e-004	3.1200e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8963	0.8963	2.0000e-005	0.0000	0.8968

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227

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3.6 Paving - 2023**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.7000e-004	3.1200e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8963	0.8963	2.0000e-005	0.0000	0.8968
Total	3.7000e-004	2.7000e-004	3.1200e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8963	0.8963	2.0000e-005	0.0000	0.8968

3.6 Paving - 2024**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073

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3.6 Paving - 2024**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.1000e-004	4.9200e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4697	1.4697	4.0000e-005	0.0000	1.4706
Total	5.9000e-004	4.1000e-004	4.9200e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4697	1.4697	4.0000e-005	0.0000	1.4706

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073

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3.6 Paving - 2024**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.1000e-004	4.9200e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4697	1.4697	4.0000e-005	0.0000	1.4706
Total	5.9000e-004	4.1000e-004	4.9200e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4697	1.4697	4.0000e-005	0.0000	1.4706

3.7 Architectural Coating - 2024**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	4.1404	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745

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3.7 Architectural Coating - 2024**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0101	6.9900e-003	0.0835	2.8000e-004	0.0307	2.3000e-004	0.0309	8.1500e-003	2.2000e-004	8.3700e-003	0.0000	24.9407	24.9407	6.1000e-004	0.0000	24.9558
Total	0.0101	6.9900e-003	0.0835	2.8000e-004	0.0307	2.3000e-004	0.0309	8.1500e-003	2.2000e-004	8.3700e-003	0.0000	24.9407	24.9407	6.1000e-004	0.0000	24.9558

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	4.1404	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745

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3.7 Architectural Coating - 2024**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0101	6.9900e-003	0.0835	2.8000e-004	0.0307	2.3000e-004	0.0309	8.1500e-003	2.2000e-004	8.3700e-003	0.0000	24.9407	24.9407	6.1000e-004	0.0000	24.9558
Total	0.0101	6.9900e-003	0.0835	2.8000e-004	0.0307	2.3000e-004	0.0309	8.1500e-003	2.2000e-004	8.3700e-003	0.0000	24.9407	24.9407	6.1000e-004	0.0000	24.9558

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Unmitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4,075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2,817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
NaturalGas Mitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478
NaturalGas Unmitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4268	1,383.4268	0.0265	0.0254	1,391.6478

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5.2 Energy by Land Use - NaturalGas**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4268	1,383.4268	0.0265	0.0254	1,391.6478

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5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
Total		2,512.6465	0.1037	0.0215	2,521.6356

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5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
Total		2,512.6465	0.1037	0.0215	2,521.6356

6.0 Area Detail**6.1 Mitigation Measures Area**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Unmitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	5.1437	0.2950	10.3804	1.6600e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	5.1437	0.2950	10.3804	1.6600e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

7.0 Water Detail**7.1 Mitigation Measures Water**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	585.8052	3.0183	0.0755	683.7567
Unmitigated	585.8052	3.0183	0.0755	683.7567

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		585.8052	3.0183	0.0755	683.7567

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		585.8052	3.0183	0.0755	683.7567

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	207.8079	12.2811	0.0000	514.8354
Unmitigated	207.8079	12.2811	0.0000	514.8354

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		207.8079	12.2811	0.0000	514.8354

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

8.2 Waste by Land Use**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		207.8079	12.2811	0.0000	514.8354

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

2.1 Overall Construction (Maximum Daily Emission)**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2769	46.4588	31.6840	0.0643	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,234.797 4	6,234.797 4	1.9495	0.0000	6,283.535 2
2022	5.3304	38.8967	49.5629	0.1517	9.8688	1.6366	10.7727	3.6558	1.5057	5.1615	0.0000	15,251.56 74	15,251.56 74	1.9503	0.0000	15,278.52 88
2023	4.8957	26.3317	46.7567	0.1472	9.8688	0.7794	10.6482	2.6381	0.7322	3.3702	0.0000	14,807.52 69	14,807.52 69	1.0250	0.0000	14,833.15 21
2024	237.1630	9.5575	15.1043	0.0244	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,361.398 9	2,361.398 9	0.7177	0.0000	2,379.342 1
Maximum	237.1630	46.4588	49.5629	0.1517	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	15,251.56 74	15,251.56 74	1.9503	0.0000	15,278.52 88

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2769	46.4588	31.6840	0.0643	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,234.7974	6,234.7974	1.9495	0.0000	6,283.5352
2022	5.3304	38.8967	49.5629	0.1517	9.8688	1.6366	10.7727	3.6558	1.5057	5.1615	0.0000	15,251.5674	15,251.5674	1.9503	0.0000	15,278.5288
2023	4.8957	26.3317	46.7567	0.1472	9.8688	0.7794	10.6482	2.6381	0.7322	3.3702	0.0000	14,807.5269	14,807.5269	1.0250	0.0000	14,833.1520
2024	237.1630	9.5575	15.1043	0.0244	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,361.3989	2,361.3989	0.7177	0.0000	2,379.3421
Maximum	237.1630	46.4588	49.5629	0.1517	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	15,251.5674	15,251.5674	1.9503	0.0000	15,278.5288

[illegible]

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
Total	41.1168	67.2262	207.5497	0.6278	45.9592	2.4626	48.4217	12.2950	2.4385	14.7336	0.0000	76,811.18 16	76,811.18 16	2.8282	0.4832	77,025.87 86

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
Total	41.1168	67.2262	207.5497	0.6278	45.9592	2.4626	48.4217	12.2950	2.4385	14.7336	0.0000	76,811.18 16	76,811.18 16	2.8282	0.4832	77,025.87 86

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419		3,747.9449	3,747.9449	1.0549		3,774.3174

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.2 Demolition - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	0.1916	4.1394	1.5644	0.0136	0.4346	0.0139	0.4485	0.1176	0.0133	0.1309		1,463.0568	1,463.0568	0.0927		1,465.3750

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174

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3.2 Demolition - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	0.1916	4.1394	1.5644	0.0136	0.4346	0.0139	0.4485	0.1176	0.0133	0.1309		1,463.0568	1,463.0568	0.0927		1,465.3750

3.3 Site Preparation - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.6569	3,685.6569	1.1920		3,715.4573

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.3 Site Preparation - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296
Total	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.3 Site Preparation - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296
Total	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296

3.4 Grading - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055,6134
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230		6,007.0434	6,007.0434	1.9428		6,055,6134

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0857	0.0589	0.8056	2.2900e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		227.7540	227.7540	6.7100e-003		227.9217
Total	0.0857	0.0589	0.8056	2.2900e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		227.7540	227.7540	6.7100e-003		227.9217

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055,6134
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.0434	6,007.0434	1.9428		6,055,6134

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0857	0.0589	0.8056	2.2900e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		227.7540	227.7540	6.7100e-003		227.9217
Total	0.0857	0.0589	0.8056	2.2900e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		227.7540	227.7540	6.7100e-003		227.9217

3.4 Grading - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.4105	6,011.4105	1.9442		6,060.0158

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0803	0.0532	0.7432	2.2100e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		219.7425	219.7425	6.0600e-003		219.8941
Total	0.0803	0.0532	0.7432	2.2100e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		219.7425	219.7425	6.0600e-003		219.8941

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0803	0.0532	0.7432	2.2100e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		219.7425	219.7425	6.0600e-003		219.8941
Total	0.0803	0.0532	0.7432	2.2100e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		219.7425	219.7425	6.0600e-003		219.8941

3.5 Building Construction - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236		3,902.138 4
Worker	3.2162	2.1318	29.7654	0.0883	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,800.685 7	8,800.685 7	0.2429		8,806.758 2
Total	3.6242	15.3350	33.1995	0.1247	9.8688	0.0949	9.9637	2.6381	0.0883	2.7263		12,697.23 39	12,697.23 39	0.4665		12,708.89 66

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236		3,902.138 4
Worker	3.2162	2.1318	29.7654	0.0883	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,800.685 7	8,800.685 7	0.2429		8,806.758 2
Total	3.6242	15.3350	33.1995	0.1247	9.8688	0.0949	9.9637	2.6381	0.0883	2.7263		12,697.23 39	12,697.23 39	0.4665		12,708.89 66

3.5 Building Construction - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

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3.5 Building Construction - 2023**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982		3,778.830 0
Worker	3.0203	1.9287	27.4113	0.0851	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		8,478.440 8	8,478.440 8	0.2190		8,483.916 0
Total	3.3229	11.9468	30.5127	0.1203	9.8688	0.0797	9.9485	2.6381	0.0738	2.7118		12,252.31 70	12,252.31 70	0.4172		12,262.74 60

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2023**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982		3,778.830 0
Worker	3.0203	1.9287	27.4113	0.0851	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		8,478.440 8	8,478.440 8	0.2190		8,483.916 0
Total	3.3229	11.9468	30.5127	0.1203	9.8688	0.0797	9.9485	2.6381	0.0738	2.7118		12,252.31 70	12,252.31 70	0.4172		12,262.74 60

3.6 Paving - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2023**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748
Total	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2023**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748
Total	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748

3.6 Paving - 2024**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2024**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458
Total	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2024**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458
Total	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458

3.7 Architectural Coating - 2024**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.7 Architectural Coating - 2024**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401		1,642.088 6
Total	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401		1,642.088 6

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.7 Architectural Coating - 2024**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401		1,642.088 6
Total	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401		1,642.088 6

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
Unmitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

6.0 Area Detail**6.1 Mitigation Measures Area**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

2.1 Overall Construction (Maximum Daily Emission)**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2865	46.4651	31.6150	0.0642	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,221.4937	6,221.4937	1.9491	0.0000	6,270.2214
2022	5.7218	38.9024	47.3319	0.1455	9.8688	1.6366	10.7736	3.6558	1.5057	5.1615	0.0000	14,630.3099	14,630.3099	1.9499	0.0000	14,657.2663
2023	5.2705	26.4914	44.5936	0.1413	9.8688	0.7800	10.6488	2.6381	0.7328	3.3708	0.0000	14,210.3424	14,210.3424	1.0230	0.0000	14,235.9160
2024	237.2328	9.5610	15.0611	0.0243	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,352.4178	2,352.4178	0.7175	0.0000	2,370.3550
Maximum	237.2328	46.4651	47.3319	0.1455	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	14,630.3099	14,630.3099	1.9499	0.0000	14,657.2663

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2865	46.4651	31.6150	0.0642	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,221.4937	6,221.4937	1.9491	0.0000	6,270.2214
2022	5.7218	38.9024	47.3319	0.1455	9.8688	1.6366	10.7736	3.6558	1.5057	5.1615	0.0000	14,630.3099	14,630.3099	1.9499	0.0000	14,657.2663
2023	5.2705	26.4914	44.5936	0.1413	9.8688	0.7800	10.6488	2.6381	0.7328	3.3708	0.0000	14,210.3424	14,210.3424	1.0230	0.0000	14,235.9160
2024	237.2328	9.5610	15.0611	0.0243	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,352.4178	2,352.4178	0.7175	0.0000	2,370.3550
Maximum	237.2328	46.4651	47.3319	0.1455	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	14,630.3099	14,630.3099	1.9499	0.0000	14,657.2663

[illegible]

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.80 05	47,917.80 05	2.1953		47,972.68 39
Total	40.7912	67.7872	202.7424	0.6043	45.9592	2.4640	48.4231	12.2950	2.4399	14.7349	0.0000	74,422.37 87	74,422.37 87	2.8429	0.4832	74,637.44 17

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.80 05	47,917.80 05	2.1953		47,972.68 39
Total	40.7912	67.7872	202.7424	0.6043	45.9592	2.4640	48.4231	12.2950	2.4399	14.7349	0.0000	74,422.37 87	74,422.37 87	2.8429	0.4832	74,637.44 17

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419		3,747.9449	3,747.9449	1.0549		3,774.3174

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.2 Demolition - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.855 5	1,269.855 5	0.0908		1,272.125 2
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
Total	0.2019	4.1943	1.5706	0.0133	0.4346	0.0141	0.4487	0.1176	0.0135	0.1311		1,430.693 2	1,430.693 2	0.0955		1,433.081 2

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.2 Demolition - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.855 5	1,269.855 5	0.0908		1,272.125 2
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
Total	0.2019	4.1943	1.5706	0.0133	0.4346	0.0141	0.4487	0.1176	0.0135	0.1311		1,430.693 2	1,430.693 2	0.0955		1,433.081 2

3.3 Site Preparation - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.656 9	3,685.656 9	1.1920		3,715.457 3

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.3 Site Preparation - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472
Total	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.3 Site Preparation - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472
Total	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472

3.4 Grading - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055,6134
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230		6,007.0434	6,007.0434	1.9428		6,055,6134

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0954	0.0652	0.7365	2.1500e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		214.4502	214.4502	6.3100e-003		214.6080
Total	0.0954	0.0652	0.7365	2.1500e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		214.4502	214.4502	6.3100e-003		214.6080

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055,6134
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.0434	6,007.0434	1.9428		6,055,6134

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0954	0.0652	0.7365	2.1500e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		214.4502	214.4502	6.3100e-003		214.6080
Total	0.0954	0.0652	0.7365	2.1500e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		214.4502	214.4502	6.3100e-003		214.6080

3.4 Grading - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.4105	6,011.4105	1.9442		6,060.0158

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0896	0.0589	0.6784	2.0800e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		206.9139	206.9139	5.7000e-003		207.0563
Total	0.0896	0.0589	0.6784	2.0800e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		206.9139	206.9139	5.7000e-003		207.0563

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0896	0.0589	0.6784	2.0800e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		206.9139	206.9139	5.7000e-003		207.0563
Total	0.0896	0.0589	0.6784	2.0800e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		206.9139	206.9139	5.7000e-003		207.0563

3.5 Building Construction - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	3.5872	2.3593	27.1680	0.0832	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,286.9013	8,286.9013	0.2282		8,292.6058
Total	4.0156	15.5266	30.9685	0.1186	9.8688	0.0957	9.9645	2.6381	0.0891	2.7271		12,075.9763	12,075.9763	0.4663		12,087.6341

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	3.5872	2.3593	27.1680	0.0832	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,286.9013	8,286.9013	0.2282		8,292.6058
Total	4.0156	15.5266	30.9685	0.1186	9.8688	0.0957	9.9645	2.6381	0.0891	2.7271		12,075.9763	12,075.9763	0.4663		12,087.6341

3.5 Building Construction - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2023**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	3.3795	2.1338	24.9725	0.0801	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		7,983.7318	7,983.7318	0.2055		7,988.8683
Total	3.6978	12.1065	28.3496	0.1144	9.8688	0.0803	9.9491	2.6381	0.0743	2.7124		11,655.1325	11,655.1325	0.4151		11,665.5099

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2023**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.400 7	3,671.400 7	0.2096		3,676.641 7
Worker	3.3795	2.1338	24.9725	0.0801	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		7,983.731 8	7,983.731 8	0.2055		7,988.868 3
Total	3.6978	12.1065	28.3496	0.1144	9.8688	0.0803	9.9491	2.6381	0.0743	2.7124		11,655.13 25	11,655.13 25	0.4151		11,665.50 99

3.6 Paving - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2023**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043
Total	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2023**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043
Total	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043

3.6 Paving - 2024**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2024**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587
Total	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2024**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587
Total	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587

3.7 Architectural Coating - 2024**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.7 Architectural Coating - 2024**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.286 0	1,545.286 0	0.0376		1,546.226 2
Total	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.286 0	1,545.286 0	0.0376		1,546.226 2

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.7 Architectural Coating - 2024**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.286 0	1,545.286 0	0.0376		1,546.226 2
Total	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.286 0	1,545.286 0	0.0376		1,546.226 2

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Unmitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4,075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2,817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

6.0 Area Detail**6.1 Mitigation Measures Area**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

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2.1 Overall Construction**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1704	1.8234	1.1577	2.3800e-003	0.4141	0.0817	0.4958	0.1788	0.0754	0.2542	0.0000	210.7654	210.7654	0.0600	0.0000	212.2661
2022	0.5865	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.6554	1,418.6554	0.1215	0.0000	1,421.6925
2023	0.5190	3.2850	4.7678	0.0147	0.8497	0.0971	0.9468	0.2283	0.0912	0.3195	0.0000	1,342.4412	1,342.4412	0.1115	0.0000	1,345.2291
2024	4.1592	0.1313	0.2557	5.0000e-004	0.0221	6.3900e-003	0.0285	5.8700e-003	5.9700e-003	0.0118	0.0000	44.6355	44.6355	7.8300e-003	0.0000	44.8311
Maximum	4.1592	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.6554	1,418.6554	0.1215	0.0000	1,421.6925

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2.1 Overall Construction**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1704	1.8234	1.1577	2.3800e-003	0.4141	0.0817	0.4958	0.1788	0.0754	0.2542	0.0000	210.7651	210.7651	0.0600	0.0000	212.2658
2022	0.5865	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.6550	1,418.6550	0.1215	0.0000	1,421.6921
2023	0.5190	3.2850	4.7678	0.0147	0.8497	0.0971	0.9468	0.2283	0.0912	0.3195	0.0000	1,342.4409	1,342.4409	0.1115	0.0000	1,345.2287
2024	4.1592	0.1313	0.2557	5.0000e-004	0.0221	6.3900e-003	0.0285	5.8700e-003	5.9700e-003	0.0118	0.0000	44.6354	44.6354	7.8300e-003	0.0000	44.8311
Maximum	4.1592	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.6550	1,418.6550	0.1215	0.0000	1,421.6921

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2021	11-30-2021	1.4091	1.4091
2	12-1-2021	2-28-2022	1.3329	1.3329
3	3-1-2022	5-31-2022	1.1499	1.1499
4	6-1-2022	8-31-2022	1.1457	1.1457
5	9-1-2022	11-30-2022	1.1415	1.1415
6	12-1-2022	2-28-2023	1.0278	1.0278
7	3-1-2023	5-31-2023	0.9868	0.9868
8	6-1-2023	8-31-2023	0.9831	0.9831

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9	9-1-2023	11-30-2023	0.9798	0.9798
10	12-1-2023	2-29-2024	2.8757	2.8757
11	3-1-2024	5-31-2024	1.6188	1.6188
		Highest	2.8757	2.8757

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	6.8692	9.5223	30.3407	0.0914	7.7979	0.2260	8.0240	2.0895	0.2219	2.3114	236.9712	12,294.1807	12,531.1519	15.7904	0.1260	12,963.4751

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2.2 Overall Operational**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	6.8692	9.5223	30.3407	0.0914	7.7979	0.2260	8.0240	2.0895	0.2219	2.3114	236.9712	12,294.1807	12,531.1519	15.7904	0.1260	12,963.4751

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601
Total	0.0475	0.4716	0.3235	5.8000e-004	0.0496	0.0233	0.0729	7.5100e-003	0.0216	0.0291	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601

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3.2 Demolition - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	5.3000e-004	6.0900e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5281	1.5281	5.0000e-005	0.0000	1.5293
Total	2.6500e-003	0.0639	0.0209	2.0000e-004	5.6200e-003	2.0000e-004	5.8200e-003	1.5300e-003	1.9000e-004	1.7200e-003	0.0000	18.9847	18.9847	1.2600e-003	0.0000	19.0161

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600
Total	0.0475	0.4716	0.3235	5.8000e-004	0.0496	0.0233	0.0729	7.5100e-003	0.0216	0.0291	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600

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3.2 Demolition - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	5.3000e-004	6.0900e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5281	1.5281	5.0000e-005	0.0000	1.5293
Total	2.6500e-003	0.0639	0.0209	2.0000e-004	5.6200e-003	2.0000e-004	5.8200e-003	1.5300e-003	1.9000e-004	1.7200e-003	0.0000	18.9847	18.9847	1.2600e-003	0.0000	19.0161

3.3 Site Preparation - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061
Total	0.0389	0.4050	0.2115	3.8000e-004	0.1807	0.0204	0.2011	0.0993	0.0188	0.1181	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061

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3.3 Site Preparation - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	4.3000e-004	4.8700e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3500e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2225	1.2225	4.0000e-005	0.0000	1.2234
Total	5.8000e-004	4.3000e-004	4.8700e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3500e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2225	1.2225	4.0000e-005	0.0000	1.2234

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060
Total	0.0389	0.4050	0.2115	3.8000e-004	0.1807	0.0204	0.2011	0.0993	0.0188	0.1181	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060

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3.3 Site Preparation - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	4.3000e-004	4.8700e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3500e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2225	1.2225	4.0000e-005	0.0000	1.2234
Total	5.8000e-004	4.3000e-004	4.8700e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3500e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2225	1.2225	4.0000e-005	0.0000	1.2234

3.4 Grading - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776
Total	0.0796	0.8816	0.5867	1.1800e-003	0.1741	0.0377	0.2118	0.0693	0.0347	0.1040	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776

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3.4 Grading - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2200e-003	9.0000e-004	0.0103	3.0000e-005	2.8300e-003	2.0000e-005	2.8600e-003	7.5000e-004	2.0000e-005	7.8000e-004	0.0000	2.5808	2.5808	8.0000e-005	0.0000	2.5828
Total	1.2200e-003	9.0000e-004	0.0103	3.0000e-005	2.8300e-003	2.0000e-005	2.8600e-003	7.5000e-004	2.0000e-005	7.8000e-004	0.0000	2.5808	2.5808	8.0000e-005	0.0000	2.5828

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775
Total	0.0796	0.8816	0.5867	1.1800e-003	0.1741	0.0377	0.2118	0.0693	0.0347	0.1040	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775

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3.4 Grading - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2200e-003	9.0000e-004	0.0103	3.0000e-005	2.8300e-003	2.0000e-005	2.8600e-003	7.5000e-004	2.0000e-005	7.8000e-004	0.0000	2.5808	2.5808	8.0000e-005	0.0000	2.5828
Total	1.2200e-003	9.0000e-004	0.0103	3.0000e-005	2.8300e-003	2.0000e-005	2.8600e-003	7.5000e-004	2.0000e-005	7.8000e-004	0.0000	2.5808	2.5808	8.0000e-005	0.0000	2.5828

3.4 Grading - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	0.0127	0.1360	0.1017	2.2000e-004	0.0807	5.7200e-003	0.0865	0.0180	5.2600e-003	0.0233	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414

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3.4 Grading - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590
Total	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	0.0127	0.1360	0.1017	2.2000e-004	0.0807	5.7200e-003	0.0865	0.0180	5.2600e-003	0.0233	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414

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3.4 Grading - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590
Total	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590

3.5 Building Construction - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881
Total	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881

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3.5 Building Construction - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.3051	0.2164	2.5233	7.3500e-003	0.7557	6.2300e-003	0.7619	0.2007	5.7400e-003	0.2065	0.0000	663.9936	663.9936	0.0187	0.0000	664.4604
Total	0.3578	1.9125	2.9812	0.0119	0.8696	9.4100e-003	0.8790	0.2336	8.7800e-003	0.2424	0.0000	1,105.9771	1,105.9771	0.0451	0.0000	1,107.1039

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877
Total	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877

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3.5 Building Construction - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.3051	0.2164	2.5233	7.3500e-003	0.7557	6.2300e-003	0.7619	0.2007	5.7400e-003	0.2065	0.0000	663.9936	663.9936	0.0187	0.0000	664.4604
Total	0.3578	1.9125	2.9812	0.0119	0.8696	9.4100e-003	0.8790	0.2336	8.7800e-003	0.2424	0.0000	1,105.9771	1,105.9771	0.0451	0.0000	1,107.1039

3.5 Building Construction - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814
Total	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814

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3.5 Building Construction - 2023**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.2795	0.1910	2.2635	6.9100e-003	0.7377	5.9100e-003	0.7436	0.1960	5.4500e-003	0.2014	0.0000	624.5363	624.5363	0.0164	0.0000	624.9466
Total	0.3177	1.4420	2.6646	0.0112	0.8490	7.3700e-003	0.8564	0.2281	6.8500e-003	0.2349	0.0000	1,042.5294	1,042.5294	0.0392	0.0000	1,043.5090

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811
Total	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811

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3.5 Building Construction - 2023**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.2795	0.1910	2.2635	6.9100e-003	0.7377	5.9100e-003	0.7436	0.1960	5.4500e-003	0.2014	0.0000	624.5363	624.5363	0.0164	0.0000	624.9466
Total	0.3177	1.4420	2.6646	0.0112	0.8490	7.3700e-003	0.8564	0.2281	6.8500e-003	0.2349	0.0000	1,042.5294	1,042.5294	0.0392	0.0000	1,043.5090

3.6 Paving - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227

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3.6 Paving - 2023**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	1.9000e-004	2.2300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6156	0.6156	2.0000e-005	0.0000	0.6160
Total	2.8000e-004	1.9000e-004	2.2300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6156	0.6156	2.0000e-005	0.0000	0.6160

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227

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3.6 Paving - 2023**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	1.9000e-004	2.2300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6156	0.6156	2.0000e-005	0.0000	0.6160
Total	2.8000e-004	1.9000e-004	2.2300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6156	0.6156	2.0000e-005	0.0000	0.6160

3.6 Paving - 2024**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073

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3.6 Paving - 2024**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	2.9000e-004	3.5100e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0094	1.0094	3.0000e-005	0.0000	1.0100
Total	4.4000e-004	2.9000e-004	3.5100e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0094	1.0094	3.0000e-005	0.0000	1.0100

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073

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3.6 Paving - 2024**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	2.9000e-004	3.5100e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0094	1.0094	3.0000e-005	0.0000	1.0100
Total	4.4000e-004	2.9000e-004	3.5100e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0094	1.0094	3.0000e-005	0.0000	1.0100

3.7 Architectural Coating - 2024**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	4.1404	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745

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3.7 Architectural Coating - 2024**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4800e-003	4.9300e-003	0.0596	1.9000e-004	0.0209	1.6000e-004	0.0211	5.5500e-003	1.5000e-004	5.7000e-003	0.0000	17.1287	17.1287	4.3000e-004	0.0000	17.1394
Total	7.4800e-003	4.9300e-003	0.0596	1.9000e-004	0.0209	1.6000e-004	0.0211	5.5500e-003	1.5000e-004	5.7000e-003	0.0000	17.1287	17.1287	4.3000e-004	0.0000	17.1394

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	4.1404	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745

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3.7 Architectural Coating - 2024**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4800e-003	4.9300e-003	0.0596	1.9000e-004	0.0209	1.6000e-004	0.0211	5.5500e-003	1.5000e-004	5.7000e-003	0.0000	17.1287	17.1287	4.3000e-004	0.0000	17.1394
Total	7.4800e-003	4.9300e-003	0.0596	1.9000e-004	0.0209	1.6000e-004	0.0211	5.5500e-003	1.5000e-004	5.7000e-003	0.0000	17.1287	17.1287	4.3000e-004	0.0000	17.1394

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Unmitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4,075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2,817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

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Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
NaturalGas Mitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478
NaturalGas Unmitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478

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5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4268	1,383.4268	0.0265	0.0254	1,391.6478

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5.2 Energy by Land Use - NaturalGas**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4268	1,383.4268	0.0265	0.0254	1,391.6478

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5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
Total		2,512.6465	0.1037	0.0215	2,521.6356

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5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
Total		2,512.6465	0.1037	0.0215	2,521.6356

6.0 Area Detail**6.1 Mitigation Measures Area**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Unmitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	5.1437	0.2950	10.3804	1.6600e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

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6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	5.1437	0.2950	10.3804	1.6600e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

7.0 Water Detail**7.1 Mitigation Measures Water**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	585.8052	3.0183	0.0755	683.7567
Unmitigated	585.8052	3.0183	0.0755	683.7567

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		585.8052	3.0183	0.0755	683.7567

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		585.8052	3.0183	0.0755	683.7567

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	207.8079	12.2811	0.0000	514.8354
Unmitigated	207.8079	12.2811	0.0000	514.8354

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		207.8079	12.2811	0.0000	514.8354

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

8.2 Waste by Land Use**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		207.8079	12.2811	0.0000	514.8354

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

2.1 Overall Construction (Maximum Daily Emission)**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2561	46.4415	31.4494	0.0636	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,163.416 6	6,163.416 6	1.9475	0.0000	6,212.103 9
2022	4.5441	38.8811	40.8776	0.1240	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,493.44 03	12,493.44 03	1.9485	0.0000	12,518.57 07
2023	4.1534	25.7658	38.7457	0.1206	7.0088	0.7592	7.7679	1.8799	0.7136	2.5935	0.0000	12,150.48 90	12,150.48 90	0.9589	0.0000	12,174.46 15
2024	237.0219	9.5478	14.9642	0.0239	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,313.180 8	2,313.180 8	0.7166	0.0000	2,331.095 6
Maximum	237.0219	46.4415	40.8776	0.1240	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	12,493.44 03	12,493.44 03	1.9485	0.0000	12,518.57 07

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2561	46.4415	31.4494	0.0636	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,163.4166	6,163.4166	1.9475	0.0000	6,212.1039
2022	4.5441	38.8811	40.8776	0.1240	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,493.4403	12,493.4403	1.9485	0.0000	12,518.5707
2023	4.1534	25.7658	38.7457	0.1206	7.0088	0.7592	7.7679	1.8799	0.7136	2.5935	0.0000	12,150.4890	12,150.4890	0.9589	0.0000	12,174.4615
2024	237.0219	9.5478	14.9642	0.0239	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,313.1808	2,313.1808	0.7166	0.0000	2,331.0955
Maximum	237.0219	46.4415	40.8776	0.1240	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	12,493.4403	12,493.4403	1.9485	0.0000	12,518.5707

[illegible]

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
Total	41.1168	67.2262	207.5497	0.6278	45.9592	2.4626	48.4217	12.2950	2.4385	14.7336	0.0000	76,811.18 16	76,811.18 16	2.8282	0.4832	77,025.87 86

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
Total	41.1168	67.2262	207.5497	0.6278	45.9592	2.4626	48.4217	12.2950	2.4385	14.7336	0.0000	76,811.18 16	76,811.18 16	2.8282	0.4832	77,025.87 86

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419		3,747.9449	3,747.9449	1.0549		3,774.3174

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.2 Demolition - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.241 3	1,292.241 3	0.0877		1,294.433 7
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0487	0.0313	0.4282	1.1800e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		117.2799	117.2799	3.5200e-003		117.3678
Total	0.1760	4.1265	1.3884	0.0131	0.3810	0.0135	0.3946	0.1034	0.0129	0.1163		1,409.521 2	1,409.521 2	0.0912		1,411.801 5

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.2 Demolition - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.241 3	1,292.241 3	0.0877		1,294.433 7
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0487	0.0313	0.4282	1.1800e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		117.2799	117.2799	3.5200e-003		117.3678
Total	0.1760	4.1265	1.3884	0.0131	0.3810	0.0135	0.3946	0.1034	0.0129	0.1163		1,409.521 2	1,409.521 2	0.0912		1,411.801 5

3.3 Site Preparation - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.656 9	3,685.656 9	1.1920		3,715.457 3

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3.3 Site Preparation - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0375	0.5139	1.4100e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		140.7359	140.7359	4.2200e-003		140.8414
Total	0.0584	0.0375	0.5139	1.4100e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		140.7359	140.7359	4.2200e-003		140.8414

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.3 Site Preparation - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0375	0.5139	1.4100e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		140.7359	140.7359	4.2200e-003		140.8414
Total	0.0584	0.0375	0.5139	1.4100e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		140.7359	140.7359	4.2200e-003		140.8414

3.4 Grading - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055,6134
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230		6,007.0434	6,007.0434	1.9428		6,055,6134

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0649	0.0417	0.5710	1.5700e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		156.3732	156.3732	4.6900e-003		156.4904
Total	0.0649	0.0417	0.5710	1.5700e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		156.3732	156.3732	4.6900e-003		156.4904

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055,6134
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.0434	6,007.0434	1.9428		6,055,6134

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0649	0.0417	0.5710	1.5700e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		156.3732	156.3732	4.6900e-003		156.4904
Total	0.0649	0.0417	0.5710	1.5700e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		156.3732	156.3732	4.6900e-003		156.4904

3.4 Grading - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.4105	6,011.4105	1.9442		6,060.0158

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0607	0.0376	0.5263	1.5100e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		150.8754	150.8754	4.2400e-003		150.9813
Total	0.0607	0.0376	0.5263	1.5100e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		150.8754	150.8754	4.2400e-003		150.9813

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0607	0.0376	0.5263	1.5100e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		150.8754	150.8754	4.2400e-003		150.9813
Total	0.0607	0.0376	0.5263	1.5100e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		150.8754	150.8754	4.2400e-003		150.9813

3.5 Building Construction - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236		3,902.138 4
Worker	2.4299	1.5074	21.0801	0.0607	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		6,042.558 5	6,042.558 5	0.1697		6,046.800 0
Total	2.8378	14.7106	24.5142	0.0971	7.0087	0.0741	7.0828	1.8799	0.0691	1.9490		9,939.106 7	9,939.106 7	0.3933		9,948.938 4

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236		3,902.138 4
Worker	2.4299	1.5074	21.0801	0.0607	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		6,042.558 5	6,042.558 5	0.1697		6,046.800 0
Total	2.8378	14.7106	24.5142	0.0971	7.0087	0.0741	7.0828	1.8799	0.0691	1.9490		9,939.106 7	9,939.106 7	0.3933		9,948.938 4

3.5 Building Construction - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2023**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982		3,778.830 0
Worker	2.2780	1.3628	19.4002	0.0584	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,821.402 8	5,821.402 8	0.1529		5,825.225 4
Total	2.5807	11.3809	22.5017	0.0936	7.0088	0.0595	7.0682	1.8799	0.0552	1.9350		9,595.279 0	9,595.279 0	0.3511		9,604.055 4

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2023**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982		3,778.830 0
Worker	2.2780	1.3628	19.4002	0.0584	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,821.402 8	5,821.402 8	0.1529		5,825.225 4
Total	2.5807	11.3809	22.5017	0.0936	7.0088	0.0595	7.0682	1.8799	0.0552	1.9350		9,595.279 0	9,595.279 0	0.3511		9,604.055 4

3.6 Paving - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2023**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0427	0.0255	0.3633	1.0900e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		109.0150	109.0150	2.8600e-003		109.0866
Total	0.0427	0.0255	0.3633	1.0900e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		109.0150	109.0150	2.8600e-003		109.0866

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2023**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0427	0.0255	0.3633	1.0900e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		109.0150	109.0150	2.8600e-003		109.0866
Total	0.0427	0.0255	0.3633	1.0900e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		109.0150	109.0150	2.8600e-003		109.0866

3.6 Paving - 2024**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2024**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0403	0.0233	0.3384	1.0600e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		105.6336	105.6336	2.6300e-003		105.6992
Total	0.0403	0.0233	0.3384	1.0600e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		105.6336	105.6336	2.6300e-003		105.6992

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2024**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0403	0.0233	0.3384	1.0600e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		105.6336	105.6336	2.6300e-003		105.6992
Total	0.0403	0.0233	0.3384	1.0600e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		105.6336	105.6336	2.6300e-003		105.6992

3.7 Architectural Coating - 2024**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.7 Architectural Coating - 2024**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,126.7583	1,126.7583	0.0280		1,127.4583
Total	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,126.7583	1,126.7583	0.0280		1,127.4583

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.7 Architectural Coating - 2024**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,126.7583	1,126.7583	0.0280		1,127.4583
Total	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,126.7583	1,126.7583	0.0280		1,127.4583

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
Unmitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

6.0 Area Detail**6.1 Mitigation Measures Area**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

2.1 Overall Construction (Maximum Daily Emission)**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2621	46.4460	31.4068	0.0635	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,154.3377	6,154.3377	1.9472	0.0000	6,203.0186
2022	4.7966	38.8851	39.6338	0.1195	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,035.3440	12,035.3440	1.9482	0.0000	12,060.6013
2023	4.3939	25.8648	37.5031	0.1162	7.0088	0.7598	7.7685	1.8799	0.7142	2.5940	0.0000	11,710.4080	11,710.4080	0.9617	0.0000	11,734.4497
2024	237.0656	9.5503	14.9372	0.0238	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,307.0517	2,307.0517	0.7164	0.0000	2,324.9627
Maximum	237.0656	46.4460	39.6338	0.1195	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	12,035.3440	12,035.3440	1.9482	0.0000	12,060.6013

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2621	46.4460	31.4068	0.0635	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,154.3377	6,154.3377	1.9472	0.0000	6,203.0186
2022	4.7966	38.8851	39.6338	0.1195	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,035.3440	12,035.3440	1.9482	0.0000	12,060.6013
2023	4.3939	25.8648	37.5031	0.1162	7.0088	0.7598	7.7685	1.8799	0.7142	2.5940	0.0000	11,710.4080	11,710.4080	0.9617	0.0000	11,734.4497
2024	237.0656	9.5503	14.9372	0.0238	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,307.0517	2,307.0517	0.7164	0.0000	2,324.9627
Maximum	237.0656	46.4460	39.6338	0.1195	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	12,035.3440	12,035.3440	1.9482	0.0000	12,060.6013

[illegible]

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.80 05	47,917.80 05	2.1953		47,972.68 39
Total	40.7912	67.7872	202.7424	0.6043	45.9592	2.4640	48.4231	12.2950	2.4399	14.7349	0.0000	74,422.37 87	74,422.37 87	2.8429	0.4832	74,637.44 17

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.80 05	47,917.80 05	2.1953		47,972.68 39
Total	40.7912	67.7872	202.7424	0.6043	45.9592	2.4640	48.4231	12.2950	2.4399	14.7349	0.0000	74,422.37 87	74,422.37 87	2.8429	0.4832	74,637.44 17

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419		3,747.9449	3,747.9449	1.0549		3,774.3174

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.2 Demolition - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.855 5	1,269.855 5	0.0908		1,272.125 2
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0532	0.0346	0.3963	1.1100e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		110.4707	110.4707	3.3300e-003		110.5539
Total	0.1835	4.1800	1.4144	0.0128	0.3810	0.0137	0.3948	0.1034	0.0131	0.1165		1,380.326 2	1,380.326 2	0.0941		1,382.679 1

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.2 Demolition - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0532	0.0346	0.3963	1.1100e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		110.4707	110.4707	3.3300e-003		110.5539
Total	0.1835	4.1800	1.4144	0.0128	0.3810	0.0137	0.3948	0.1034	0.0131	0.1165		1,380.3262	1,380.3262	0.0941		1,382.6791

3.3 Site Preparation - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.6569	3,685.6569	1.1920		3,715.4573

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.3 Site Preparation - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0415	0.4755	1.3300e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		132.5649	132.5649	3.9900e-003		132.6646
Total	0.0638	0.0415	0.4755	1.3300e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		132.5649	132.5649	3.9900e-003		132.6646

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.3 Site Preparation - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0415	0.4755	1.3300e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		132.5649	132.5649	3.9900e-003		132.6646
Total	0.0638	0.0415	0.4755	1.3300e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		132.5649	132.5649	3.9900e-003		132.6646

3.4 Grading - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055,6134
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230		6,007.0434	6,007.0434	1.9428		6,055,6134

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0709	0.0462	0.5284	1.4800e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		147.2943	147.2943	4.4300e-003		147.4051
Total	0.0709	0.0462	0.5284	1.4800e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		147.2943	147.2943	4.4300e-003		147.4051

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055,6134
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.0434	6,007.0434	1.9428		6,055,6134

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0709	0.0462	0.5284	1.4800e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		147.2943	147.2943	4.4300e-003		147.4051
Total	0.0709	0.0462	0.5284	1.4800e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		147.2943	147.2943	4.4300e-003		147.4051

3.4 Grading - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.4105	6,011.4105	1.9442		6,060.0158

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0416	0.4861	1.4300e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		142.1207	142.1207	4.0000e-003		142.2207
Total	0.0665	0.0416	0.4861	1.4300e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		142.1207	142.1207	4.0000e-003		142.2207

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0416	0.4861	1.4300e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		142.1207	142.1207	4.0000e-003		142.2207
Total	0.0665	0.0416	0.4861	1.4300e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		142.1207	142.1207	4.0000e-003		142.2207

3.5 Building Construction - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.075 0	3,789.075 0	0.2381		3,795.028 3
Worker	2.6620	1.6677	19.4699	0.0571	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		5,691.935 4	5,691.935 4	0.1602		5,695.940 8
Total	3.0904	14.8350	23.2704	0.0926	7.0087	0.0749	7.0836	1.8799	0.0699	1.9498		9,481.010 4	9,481.010 4	0.3984		9,490.969 1

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.075 0	3,789.075 0	0.2381		3,795.028 3
Worker	2.6620	1.6677	19.4699	0.0571	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		5,691.935 4	5,691.935 4	0.1602		5,695.940 8
Total	3.0904	14.8350	23.2704	0.0926	7.0087	0.0749	7.0836	1.8799	0.0699	1.9498		9,481.010 4	9,481.010 4	0.3984		9,490.969 1

3.5 Building Construction - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2023**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	2.5029	1.5073	17.8820	0.0550	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,483.7974	5,483.7974	0.1442		5,487.4020
Total	2.8211	11.4799	21.2591	0.0893	7.0088	0.0601	7.0688	1.8799	0.0557	1.9356		9,155.1981	9,155.1981	0.3538		9,164.0437

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2023**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	2.5029	1.5073	17.8820	0.0550	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,483.7974	5,483.7974	0.1442		5,487.4020
Total	2.8211	11.4799	21.2591	0.0893	7.0088	0.0601	7.0688	1.8799	0.0557	1.9356		9,155.1981	9,155.1981	0.3538		9,164.0437

3.6 Paving - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2023**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0469	0.0282	0.3349	1.0300e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		102.6928	102.6928	2.7000e-003		102.7603
Total	0.0469	0.0282	0.3349	1.0300e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		102.6928	102.6928	2.7000e-003		102.7603

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2023**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0469	0.0282	0.3349	1.0300e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		102.6928	102.6928	2.7000e-003		102.7603
Total	0.0469	0.0282	0.3349	1.0300e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		102.6928	102.6928	2.7000e-003		102.7603

3.6 Paving - 2024**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2024**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0257	0.3114	1.0000e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		99.5045	99.5045	2.4700e-003		99.5663
Total	0.0444	0.0257	0.3114	1.0000e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		99.5045	99.5045	2.4700e-003		99.5663

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2024**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0257	0.3114	1.0000e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		99.5045	99.5045	2.4700e-003		99.5663
Total	0.0444	0.0257	0.3114	1.0000e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		99.5045	99.5045	2.4700e-003		99.5663

3.7 Architectural Coating - 2024**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.7 Architectural Coating - 2024**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,061.3818	1,061.3818	0.0264		1,062.0410
Total	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,061.3818	1,061.3818	0.0264		1,062.0410

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.7 Architectural Coating - 2024**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,061.3818	1,061.3818	0.0264		1,062.0410
Total	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,061.3818	1,061.3818	0.0264		1,062.0410

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Unmitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4,075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2,817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

6.0 Area Detail**6.1 Mitigation Measures Area**

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Attachment C

Local Hire Provision Net Change	
Without Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,623
Amortized (MT CO2e/year)	120.77
With Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,024
Amortized (MT CO2e/year)	100.80
% Decrease in Construction-related GHG Emissions	17%

EXHIBIT B



Paul Rosenfeld, Ph.D.

Principal Environmental Chemist

Chemical Fate and Transport & Air Dispersion Modeling

Risk Assessment & Remediation Specialist

Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

Professional Experience

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex H₂O Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Publications:

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health*. 18:48

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Rosenfeld P. E., J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme For The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC) 2004*. New Orleans, October 2-6, 2004.

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Rosenfeld, P.E., Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office*, Publications Clearinghouse (MS-6), Sacramento, CA Publication #442-02-008.

Rosenfeld, P.E., and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.

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Rosenfeld, P.E., C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affect on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.

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Rosenfeld, P.E., and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

Chollack, T. and **P. Rosenfeld**. (1998). Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

Rosenfeld, P. E. (1992). The Mount Liamuiga Crater Trail. *Heritage Magazine of St. Kitts*, 3(2).

Rosenfeld, P. E. (1993). High School Biogas Project to Prevent Deforestation On St. Kitts. *Biomass Users Network*, 7(1).

Rosenfeld, P. E. (1998). Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

Rosenfeld, P. E. (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

Rosenfeld, P. E. (1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

Presentations:

Rosenfeld, P.E., Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society*. Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Rosenfeld, P.E. (April 19-23, 2009). Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

Rosenfeld, P.E. (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States” Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P.** (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

Rosenfeld, P. E. (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The 23rd Annual International Conferences on Soils Sediment and Water. Lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld P. E. (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

Rosenfeld P. E. (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting*. Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.**, Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.**, Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition*. Lecture conducted from Boston Massachusetts.

Paul Rosenfeld Ph.D. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference*. Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

Paul Rosenfeld Ph.D. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel in Irvine, California.

Paul Rosenfeld Ph.D. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference*. Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

Paul Rosenfeld Ph.D. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

Paul Rosenfeld, Ph.D. (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

Paul Rosenfeld, Ph.D. (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants..* Lecture conducted from Hyatt Regency Phoenix Arizona.

Paul Rosenfeld, Ph.D. (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

Paul Rosenfeld, Ph.D. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington..

Rosenfeld, P.E. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conference*. Lecture conducted from Indianapolis, Maryland.

Rosenfeld. P.E. (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation*. Lecture conducted from Anaheim California.

Rosenfeld. P.E. (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest*. Lecture conducted from Ocean Shores, California.

Rosenfeld, P.E. (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell*. Lecture conducted from Seattle Washington.

Rosenfeld, P.E., C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest*. Lecture conducted from Lake Chelan, Washington.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded:

California Integrated Waste Management Board. \$41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: \$10,000 grant awarded to San Diego State University. Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. \$100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. \$20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: \$10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: \$15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. \$500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

Deposition and/or Trial Testimony:

In the United States District Court For The District of New Jersey

Duarte et al, *Plaintiffs*, vs. United States Metals Refining Company et. al. *Defendant*.

Case No.: 2:17-cv-01624-ES-SCM

Rosenfeld Deposition. 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division

M/T Carla Maersk, *Plaintiffs*, vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS “Conti Perdido”
Defendant.

Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237

Rosenfeld Deposition. 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica

Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants

Case No.: No. BC615636

Rosenfeld Deposition, 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica

The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants

Case No.: No. BC646857

Rosenfeld Deposition, 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado

Bells et al. Plaintiff vs. The 3M Company et al., Defendants

Case: No 1:16-cv-02531-RBJ

Rosenfeld Deposition, 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District

Phillip Bales et al., Plaintiff vs. Dow Agrosiences, LLC, et al., Defendants

Cause No 1923

Rosenfeld Deposition, 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa

Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants

Cause No C12-01481

Rosenfeld Deposition, 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois

Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants

Case No.: No. 0i9-L-2295

Rosenfeld Deposition, 8-23-2017

In The Superior Court of the State of California, For The County of Los Angeles

Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC

Case No.: LC102019 (c/w BC582154)

Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division

Brenda J. Cooper, et al., *Plaintiffs*, vs. Meritor Inc., et al., *Defendants*

Case Number: 4:16-cv-52-DMB-JVM

Rosenfeld Deposition: July 2017

In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No.: No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial, March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No.: RG14711115
Rosenfeld Deposition, September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No.: LALA002187
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Jerry Dovico, et al., Plaintiffs vs. Valley View Sine LLC, et al., Defendants
Law No.: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Doug Pauls, et al., et al., Plaintiffs vs. Richard Warren, et al., Defendants
Law No.: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action NO. 14-C-30000
Rosenfeld Deposition, June 2015

In The Third Judicial District County of Dona Ana, New Mexico
Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward
DeRuyter, Defendants
Rosenfeld Deposition: July 2015

In The Iowa District Court For Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No 4980
Rosenfeld Deposition: May 2015

In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.
Case Number CACE07030358 (26)
Rosenfeld Deposition: December 2014

In the United States District Court Western District of Oklahoma
Tommy McCarty, et al., Plaintiffs, v. Oklahoma City Landfill, LLC d/b/a Southeast Oklahoma City
Landfill, et al. Defendants.
Case No. 5:12-cv-01152-C
Rosenfeld Deposition: July 2014

In the County Court of Dallas County Texas

Lisa Parr et al, *Plaintiff*, vs. Aruba et al, *Defendant*.

Case Number cc-11-01650-E

Rosenfeld Deposition: March and September 2013

Rosenfeld Trial: April 2014

In the Court of Common Pleas of Tuscarawas County Ohio

John Michael Abicht, et al., *Plaintiffs*, vs. Republic Services, Inc., et al., *Defendants*

Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)

Rosenfeld Deposition: October 2012

In the United States District Court of Southern District of Texas Galveston Division

Kyle Cannon, Eugene Donovan, Genaro Ramirez, Carol Sassler, and Harvey Walton, each Individually and on behalf of those similarly situated, *Plaintiffs*, vs. BP Products North America, Inc., *Defendant*.

Case 3:10-cv-00622

Rosenfeld Deposition: February 2012

Rosenfeld Trial: April 2013

In the Circuit Court of Baltimore County Maryland

Philip E. Cvach, II et al., *Plaintiffs* vs. Two Farms, Inc. d/b/a Royal Farms, Defendants

Case Number: 03-C-12-012487 OT

Rosenfeld Deposition: September 2013

EXHIBIT C



Technical Consultation, Data Analysis and
Litigation Support for the Environment

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Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

**Geologic and Hydrogeologic Characterization
Industrial Stormwater Compliance
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
CEQA Review**

Education:

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.

B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:

California Professional Geologist

California Certified Hydrogeologist

Qualified SWPPP Developer and Practitioner

Professional Experience:

Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2014;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt’s responsibilities have included:

- Lead analyst and testifying expert in the review of over 100 environmental impact reports since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, Valley Fever, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at industrial facilities.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shipyard under a grant from the U.S. EPA.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

With Komex H2O Science Inc., Matt’s duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.

- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, *Oxygenates in Water: Critical Information and Research Needs*.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt taught physical geology (lecture and lab and introductory geology at Golden West College in Huntington Beach, California from 2010 to 2014.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Colorado.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal representatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F.** 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

Hagemann, M. F., Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

Hagemann, M.F., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

Hagemann, M.F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examination, 2009-2011.

From: [Stephen Kearns](#)
To: [Carlos Contreras](#); [Patrick Hehir](#); [Lori Goor](#)
Subject: FW: TOBA Letter of Support - Agenda Item 7.A
Date: Monday, April 22, 2024 3:45:01 PM
Attachments: [TOBA Letter in Support of PC Agenda Item 7.A \(4.22.24\).pdf](#)

Support letter from TOBA for tonight.

From: Shawn Moradian <toba.bid@gmail.com>
Sent: Monday, April 22, 2024 3:32 PM
To: Fabiola Zelaya Melicher <FZelaya@toaks.org>
Cc: Andrew Powers <APowers@toaks.org>; Haider Alawami <HALawami@toaks.org>; Kelvin Parker <KParker@toaks.org>; Stephen Kearns <SKearns@toaks.org>
Subject: TOBA Letter of Support - Agenda Item 7.A

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

RE: Planning Commission Hearing - April 22, 2024 - Agenda Item 7.A

Dear Mrs. Melicher:

Attached, please find TOBA's letter in support of the above referenced item before the Planning Commission this evening.

Kindly confirm receipt?

Respectfully submitted,

Shawn Moradian

Chairman & President

Thousand Oaks Boulevard Association

"Dedicated to the Beautification and Revitalization of the Boulevard"

2815 Townsgate Road, Suite 200 - Westlake Village, CA 91361

website: www.thousandoaksboulevard.com

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THOUSAND OAKS BOULEVARD ASSOCIATION
Since 2005

"DEDICATED TO THE BEAUTIFICATION AND REVITALIZATION OF THE BOULEVARD"

April 22, 2024

Thousand Oaks Planning Commission
c/o Community Development Dept.

Attn: Mrs. Fabiola Z. Melicher

2100 E. Thousand Oaks Blvd.

Thousand Oaks, CA 91362

RE: Support Staff Recommendation for Agenda Item 7.A including items # 1 through 3
Applicant: Cherry Tree Development, LLC ("Applicant")
Case No's: (SUP 2023-70011, DAGR 2023-70001, PTP 2023-70067, and
CEQA 2023-70004) ("Project")
Property Address: 500 E. Thousand Oaks Blvd. ("Property")

Dear Commissioners:

On behalf of our Board of Directors of the Thousand Oaks Boulevard Association, this letter is intended to **reaffirm** our support for the above-referenced project; by providing a critical supply of housing to our community that is grossly underserved. The location of where this housing should go is equally as important in light of recent state legislation. Adoption of our 2045 General Plan Update, and the Property's classification as the largest "Opportunity Site" on Thousand Oaks Blvd.

Housing has been contemplated at this Property since the adoption of the Thousand Oaks Boulevard Specific Plan in 2011. Over the past 13 years there have been countless attempts to bring forward a project that would find a healthy balance between community needs, social wants, and economic feasibility. As we've all witnessed, the mere approval or allocation of Measure E units does not guarantee that those units will ultimately be built, or even make economic sense. This Commission need not fear what market forces have already protected.

In 2017, the City Council voted 5-0 declaring this Property one (1) of *only* six (6) "Opportunity Sites" in the City of Thousand Oaks. As part of the Thousand Oaks Economic Development Strategic Plan, with the specific intent of utilizing and activating this Property to its highest and best use to address the current and future needs of our community.

In 2021 and 2022, this City Council voted on three (3) separate occasions, **each time reaffirming** support for mixed use housing at the Property. Those took place during the January 2021 prescreen, the May 2021 General Plan land use discussion, and on March 29, 2022, for an updated prescreen.

Again, despite the City Council's allocation of Measure E units market forces prevented the project from moving forward.

There should be no delusion or denial about the need for housing in our city. As we discovered over the past several years with the comprehensive General Plan Update, there is virtually no land left to build. Therefore, we must ensure that whatever is left is built without any exception, to its highest and best use for our future.

Our housing dilemma isn't new or novel. The problem has continuously gotten worse since 2011, 2017, 2020, 2021, 2022, and 2023 and now after a pandemic; with skyrocketing inflation and interest rates. Housing costs at never-before-seen highs, the shortage of affordable units, workforce units, and market rate units at near zero percent vacancy. We do not have the luxury to say no any longer.

Setting aside the demands from Sacramento and our RHNA obligations, the mountains of economic data from CLU and other respected and trusted institutions. All have concluded we are in an economic recession; and we haven't done our part to provide the minimal amount of housing supply necessary for our community to sustain itself.

Fortunately, the request before you this evening is related to a Property that all of us are familiar with and have supported for over a decade. We know that preserving the Oak Trees, undergrounding the high voltage utilities, and ensuring a proper flow and setbacks are a must. Additionally, the inclusion of affordable units would bring great community benefit and meet one of the City Councils top goals and priorities. The contemplated Project before you delivers on that vision and gives you the opportunity to put it into action.

Notably, the Project as envisioned now offers even more affordable units and has less massing, as compared to the previous application(s) over the past 13 years. If we want to protect our open space and single-family neighborhoods from broad statewide zoning, we must take real meaningful action, in good faith. To mitigate any desire to develop in those areas by instead encouraging, incentivizing, and implementing land use policies that support and direct our managed growth along Thousand Oaks Boulevard and the 101 corridor.

The members and small businesses of our Association have political fatigue from witnessing a multitude of applications. We urge you to look for ways to support this Project, despite any reservations about its size, and ensure that the number of residences don't get reduced by a single unit. Once this Project is built, we won't have the luxury or opportunity to go back and wish we had approved additional units.

Beyond the considerations that warrant the support of this Project on its own merits, there are two (2) other reasons why this project must be supported by this commission for approval: 1710 E. Thousand Oaks Blvd and 299 E. Thousand Oaks Blvd. At the onset of these projects there was uncertainty about the precedent, demand for, and performance of these other mixed-use projects on Thousand Oaks Blvd. The "what ifs!"

As we'll all have witnessed over the past several years, both of those projects were immensely successful and nearly fully pre-leased before completion. The proof that there is an actual need, that our

residents and businesses do support and enjoy these types of pedestrian oriented projects, and the only downside is that the demand vastly outweighs the supply.

We respectfully request your recommendation of approval of the applications in accordance with staff recommendation numbers one through three, as this Project meets the goals, objectives, and intent of the Thousand Oaks Boulevard Specific Plan. We urge you to look beyond simple numerical values, rather focus on the vast communal benefits as well as social, environmental, and equitable benefits this Project will deliver to our community.

We thank the City of Thousand Oaks for its continued support and commitment to transforming the Boulevard into a premier destination for our community to enjoy for generations to come.

Respectfully submitted,

T.O.B.A.

Shawn Moradian
President

Cc: Mr. Andrew Powers – City Manager
Mr. Haider Alawami – Economic Development Manager
Mr. Kelvin Parker – Community Development Director
T.O.B.A. Board of Directors

April 22, 2024

Carlos Contreras, Senior Planner
City of Thousand Oaks
Community Development Department
Planning Division
2100 Thousand Oaks Boulevard
Thousand Oaks, CA 91362

Subject: 500 E. Thousand Oaks Boulevard Addendum
Comments from the Mitchell M. Tsai Law Firm on behalf of the Western States Regional
Council of Carpenters (“WSRCC”)

Dear Mr. Contreras:

At your request I reviewed the April 22, 2024 letter from the Mitchell M. Tsai Law Firm on behalf of the Western States Regional Council of Carpenters (“WSRCC”) on the 500 E. Thousand Oaks Boulevard Mixed Use Project (Project). Responses to the comments in this letter are provided below.

Comment 1: Use of Local Construction Workers May Reduce Environmental Impacts.

Response: Comments in this letter state that requiring the use of local construction workers will reduce the vehicle miles traveled (VMT) generated by this proposed Project. These comments reference an attached March 8, 2024 letter from Soil Water Air Protection Enterprise (“SWAPE”) addressing local hire requirements and considerations for greenhouse gas modeling. As discussed in these comments and in the SWAPE letter, the use of local construction workers may reduce the trip lengths for trips by construction workers, which would result in a marginal decrease in VMT and associated Greenhouse Gas (GHG) Emissions during construction of the proposed Project.

The Addendum analyzes the significance of the increase in GHG emissions from construction and operation of the proposed Project. The GHG impacts of the project are not significant and, for this reason, no mitigation measures, including requiring the use of local construction workers, are required.

Comment 2: The City should impose training requirements during construction to prevent community spread of COVID-19 and other infectious diseases.

Response: Control of infectious diseases, while an important from a public health perspective, is not an impact as defined by the California Environmental Quality Act (CEQA). For this reason, the

recommendations in this comment are not relevant to the Addendum to the Thousand Oaks Boulevard Specific Plan EIR prepared for this Project to meet the environmental review requirements of the California Environmental Quality Act (CEQA).

Comment 3: The project requires preparation and circulation of its own Supplemental EIR.

The comments provided state that the proposed Project conflicts with various aspects of the Thousand Oaks Boulevard Specific Plan and this reflects substantial changes from the Specific Plan that require major revisions to the Thousand Oaks Boulevard Specific Plan EIR requiring the preparation of a Supplemental EIR instead of an Addendum. These comments acknowledge that the Project includes State Density Bonus Law concessions that allow additional density than allowed by the Thousand Oaks Boulevard Specific Plan.

These comments also state that the assessment of impacts to biological resources is outdated and inadequate because this assessment relies on biological surveys conducted for the Thousand Oaks Boulevard Specific Plan EIR in 2011 and the updated information on biological resources provided in Appendix K to the Addendum prepared as required by the mitigation measures adopted for the Thousand Oaks Boulevard Specific Plan is not sufficient to support the conclusion that the Project will not result in significant impacts to sensitive species.

Additionally, the comments state that the Thousand Oaks Boulevard Specific Plan EIR did not contemplate the removal of 33 trees, 22 of which are protected oak trees.

Response: This comment does not fully reflect the standards in Sections 15162 - 15164 of the CEQA Guidelines, which state that preparation of a Supplemental EIR is required when there are circumstances requiring major revisions to the prior EIR, in this case the Thousand Oaks Boulevard Specific Plan EIR, due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

The Addendum provides comprehensive analysis of the Project that supports the conclusions in the Addendum that the Project will not result in any new significant environmental effects or a substantial increase in the severity of significant effects previously identified in the certified Thousand Oaks Boulevard Specific Plan EIR. For this reason, preparation of a Supplemental EIR is not required by CEQA or the CEQA Guidelines.

With regard to biological resources, the Arborist Report in Appendix C and the Nesting Bird Survey, Cooper's Hawk Assessment, and Roosting Bats Assessment and Emergence Survey in Appendix K of the Addendum provide current information on the conditions of the Project Site. As described in these studies, the Project Site contains highly disturbed non-native grassland habitat containing non-native

ornamental trees and native oak trees subject to regulation under the City's Oak Tree Preservation and Protection Ordinance. The Project Site is bordered by the U.S. 101 Freeway and existing developed areas and is not connected to any native open space areas. The non-native grasslands on the site have limited value as habitat for wildlife species and, as documented in the survey of the Project Site, the site does not contain any active bird nests or serve as roosting habitat for raptors or bats.

The Thousand Oaks Boulevard EIR identifies that oaks are present on properties in the Specific Plan Area and that future development allowed by the Specific Plan may result in impacts to oak trees and that these impacts would be significant. A mitigation measure adopted for the Thousand Oaks Boulevard Specific Plan Project requires that all subsequent individual development projects comply with the City's Oak Tree Preservation and Protection Ordinance, which requires that replacement oak trees be planted to mitigate for the impact of removing oak trees. The Arborist Study inventories the trees on the site, including 34 oak trees consisting of 24 Coast live oak, 8 Valley oak and 2 Holly oak trees. The Project avoids impacts to 3 of these oak trees, including 2 large oak trees on the corner of Thousand Oaks Boulevard and Lombard Street incorporated into a public park area. The Project will encroach into the protected zone of 6 oak trees that will also remain on the site and requires the removal of 22 oak trees. In accordance with the mitigation requirements in the City's ordinance, 64 24-inch and 36-inch oak trees will be planted as part of the Project to mitigate the impacts to oak trees to less than significant.

This information supports the conclusion in the Addendum that the Project will not result in any significant impacts on biological resources.

Conclusion

Please contact me with any questions or suggestions related to these responses.

Sincerely,



Tony Locacciato, AICP
Partner