

CITY OF ONTARIO DEVELOPMENT ADVISORY BOARD

AGENDA

November 18, 2024

All documents for public review are on file in the Planning Department located in City Hall at 303 East "B" St., Ontario, CA 91764 and on the city's website at ontarioca.gov/Agendas/DAB

MEETING WILL BE HELD AT 1:30 PM IN ONTARIO CITY COUNCIL CHAMBERS LOCATED AT 303 East "B" St.

Scott Ochoa, City Manager
Scott Murphy, Executive Director, Community Development Agency
Jennifer McLain Hiramoto, Executive Director, Economic Development
James Caro, Building Official
Henry Noh, Planning Director
Khoi Do, City Engineer
Chief Michael Lorenz, Police Department
Fire Marshal Paul Ehrman, Fire Department
Scott Burton, Utilities General Manager
Angela Magana, Community Improvement Manager

PUBLIC COMMENTS

Citizens wishing to address the Development Advisory Board on any matter that is not on the agenda may do so at this time. Please state your name and address clearly for the record and limit your remarks to three minutes.

Please note that while the Development Advisory Board values your comments, the members cannot respond nor take action until such time as the matter may appear on the forthcoming agenda.

AGENDA ITEMS

For each of the items listed below the public will be provided an opportunity to speak. The chairperson will open the public hearing. At that time the applicant will be allowed three (3) minutes to make a presentation on the case. Members of the public will then be allowed three (3) minutes each to speak. The Development Advisory Board may ask the speakers questions relative to the case and the testimony provided. The question period will not count against your time limit. After all persons have spoken, the applicant will be allowed three minutes to summarize or rebut any public testimony. The chairperson will then close the public hearing portion of the hearing and deliberate the matter.

CONSENT CALENDAR ITEMS

A. <u>MINUTES APPROVAL</u>

Development Advisory Board Minutes of October 7, 2024, approved as written.

PUBLIC HEARING ITEMS

B. ENVIRONMENTAL ASSESSMENT AND DEVELOPMENT PLAN REVIEW FOR FILE NO. PDEV23-020: A public hearing to consider a Development Plan to construct a 45-foot-tall mono-eucalyptus wireless telecommunication facility (AT&T Mobility) and ancillary ground-mounted equipment on 4.6 acres located at 2713 South Grove Avenue, within the LDR-5 (Low Density Residential) zoning district. The project is categorically exempt from the requirements of the California Environmental Quality Act (CEQA) pursuant to Section 15332 (Class 32, In-Fill Development Projects) of the CEQA Guidelines. The proposed project is located within the Airport Influence Area of Ontario International Airport and was evaluated and found to be consistent with the policies and criteria of the Ontario International Airport Land Use Compatibility Plan; (APN: 0216-441-61) submitted by AT&T Mobility.

1. CEQA Determination

No action necessary – Exempt: CEQA Guidelines Section § 15332

2. File No. PDEV23-020 (Development Plan)

Motion to Approve / Deny

C. ENVIRONMENTAL ASSESSMENT AND DEVELOPMENT PLAN REVIEW FOR FILE NO. PDEV24-002: A public hearing to consider a Development Plan to facilitate the construction of a new 68,421 square-foot, 3-story city services building, on approximately 1.2 acres of land generally located between B and D Streets on Sultana Avenue within the CIV (Civic) zoning district. The project is categorically exempt from the requirements of the California Environmental Quality Act (CEQA) pursuant to Section 15332 (Class 32, In-fill Development Projects) of the CEQA. The proposed project is located within the Airport Influence Area of Ontario International Airport and was evaluated and found to be consistent with the policies and criteria of the Ontario International Airport Land Use Compatibility Plan. (APN: 1048-545-16) City Initiated.

1. CEQA Determination

No action necessary – Exempt: CEQA Guidelines Section § 15332

2. File No. PDEV24-002 (Development Plan)

Motion to Approve / Deny

ENVIRONMENTAL ASSESSMENT AND TENTATIVE TRACT MAP REVIEW FOR D. FILE NO. PMTT23-002: A public hearing to consider Tentative Tract Map No. 20572 to subdivide 77.2 acres of land into seven numbered lots and fourteen lettered lots, located at the northwest corner of Archibald Avenue and Ontario Ranch Road, within the PA-5 (Low-Density Residential, Medium-Density Residential, and School) land use district of The Avenue Specific Plan. Staff is recommending the adoption of an addendum to The Ontario Plan 2050 Subsequent Environmental Impact Report (File No. PGPA20-002, State Clearinghouse No. 2021070364). which was certified by the City Council on August 16, 2022. This application introduces no new significant environmental impacts. The proposed project is located within the Airport Influence Area of Ontario International Airport and was evaluated and found to be consistent with the policies and criteria of the Ontario International Airport Land Use Compatibility Plan. The project site is also located within the Airport Influence area of Chino Airport and was evaluated and found to be consistent with the policies and criteria of the Chino Airport Land Use Compatibility Plan; (APNs: 0218-191-14, 0218-191-15, 0218-191-04, 0218-191-16 & 0218-191-05) submitted by Richland Communities. Planning Commission action is required.

1. CEQA Determination

Motion to recommend Approval/Denial of an Addendum to a previous EIR

2. File No. PMTT23-002 (TTM 20572) (Development Plan)

Motion to recommend Approval/Denial

If you wish to appeal a decision of the **Development Advisory Board**, you must do so within ten (10) days of the **Development Advisory Board** action. Please contact the **Planning Department** for information regarding the appeal process.

If you challenge any action of the **Development Advisory Board** in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the **Development Advisory Board** at, or prior to, the public hearing.

The next Development Advisory Board meets on December 2, 2024.

I, Gwen Berendsen, Administrative Assistant of the City of Ontario, or my designee, hereby certify that a true, accurate copy of the foregoing agenda was posted on or before **November 14, 2024**, at least 72 hours prior to the meeting per Government Code Section 54954.2 at 303 East "B" Street, Ontario.



Development Advisory Board

Minutes

October 7, 2024

BOARD MEMBERS PRESENT

Henry Noh, Chairman, Planning Department Raymond Lee, Engineering Department Paul Ehrman, Fire Department Christy Stevens, Municipal Utilities Company Heather Lugo, Police Department

BOARD MEMBERS ABSENT

James Caro, Building Department
David Bucholtz, Community Improvement
Charity Hernandez, Economic Development Agency

STAFF MEMBERS PRESENT

Gwen Berendsen, Planning Department Luis Batres, Planning Department David Eoff IV, Planning Department Brenda Fregoso, Engineering Department Dora Harville, Planning Department Rafael Torres, Planning Department Jeff Tang, Engineering Department

PUBLIC COMMENTS

No person from the public wished to speak.

CONSENT CALENDAR ITEMS

A. <u>APPROVAL OF MINUTES</u>: Motion to approve the minutes of the September 16, 2024, meeting of the Development Advisory Board was made by Ms. Stevens; seconded by Ms. Lugo; and approved unanimously by those present (5-0).

PUBLIC HEARING ITEMS

B. ENVIRONMENTAL ASSESSMENT AND DEVELOPMENT PLAN REVIEW FOR FILE NO. PDEV22-041: A public hearing to consider a revision to Development Plan File No. PDEV19-069 to raze an existing service station and convenience store, to construct a new 3,920 square-foot convenience store, 3,528-square foot fuel canopy, and a 1,140-square foot carwash on 0.87-acre of land located at 2156 S. Grove Avenue, within the Office/Commercial land use district of the Grove Avenue Specific Plan. The project is categorically exempt from the requirements of the California Environmental Quality Act (CEQA) pursuant to Section 15332 (Class 32, Infill Development Projects) of the CEQA Guidelines. The proposed project is located within the Airport Influence Area of Ontario International Airport and was evaluated and found to be consistent with the policies

Development Advisory Board Minutes October 7, 2024

and criteria of the Ontario International Airport Land Use Compatibility Plan; (APN: 1050-491-08). submitted by Ramila Patel.

Mr. Noh opened the public hearing.

Sunil Patel was present.

Mr. Noh stated there were revised conditions of approval for the project and asked if Mr. Patel agreed with the revised conditions of approval.

Mr. Patel stated he agreed.

Senior Planner Batres stated there is an additional revision to Item 2.46 of the Engineering Conditions of Approval, changing the in-lieu fee to \$55,273.36 with a to be determined time limit for refund, if construction is not started.

As there was no one else wishing to speak on this item, Mr. Noh closed the public hearing.

Motion to approve **File No. PDEV23-022**, subject to the revised conditions of approval, was made by Mr. Lee; seconded by Mr. Ehrman; and approved unanimously by those present (5-0).

There being no further business, the meeting was adjourned to the next meeting on October 21, 2024.

Respectfully submitted,

Huberendsen

Gwen Berendsen Recording Secretary



DEVELOPMENT ADVISORY BOARD AGENDA REPORT

November 18, 2024

303 East B Street, Ontario, California 91764 / Phone: 909.395.2036 / Email: PlanningDirector@OntarioCA.gov

FILE NO: PDEV23-020

SUBJECT: A public hearing to consider a Development Plan to construct a 45-foot-tall mono-eucalyptus wireless telecommunication facility (AT&T Mobility) and ancillary ground-mounted equipment on 4.61 acres of land located at 2713 South Grove Avenue within the LDR-5 (Low Density Residential) zoning district; (APN: 0216-441-61) submitted by AT&T Mobility.

PROPERTY OWNER: Roman Catholic Diocese of San Bernardino

RECOMMENDED ACTION: That the Development Advisory Board (DAB) approve File No. PDEV23-020, pursuant to the facts and reasons contained in the Agenda Report, the Decision, and subject to the conditions of approval appended to the Decision, as "Attachment A."

BACKGROUND: On July 28, 2023, the Applicant submitted a Development Plan application to facilitate the construction of a 45-foot-tall mono-eucalyptus wireless telecommunication facility (AT&T Mobility) and ancillary ground-mounted equipment to improve wireless telecommunication services for the surrounding area.

The Development Code establishes a 3-tier review process for all wireless telecommunication facilities. The proposed Project is a stealth wireless telecommunication facility located less than 500 feet from existing residential properties and is therefore subject to the Tier 3 Review category. Pursuant to Development Code Table 2.02-1, wireless telecommunication facilities under Tier 3 require Development Advisory Board review and approval.

PROJECT SETTING: The Project site is comprised of 4.61 acres of land located at 2713 South Grove Avenue and is depicted in Exhibit A: Project Location Map. The site is presently occupied by St. Elizabeth Ann Seton Church and 2 ancillary church buildings. The existing church and one (1) ancillary building have frontage from Grove Avenue located approximately 85 feet from the front property line with a secondary ancillary building located directly to the rear (east) of the church. The Project site is surrounded by single-family residential properties to the north, east, south, and west. The existing surrounding land uses, zoning, and Policy Plan (general plan) and specific plan land use designations are summarized in Table 1: Surrounding Zoning & Land Uses (see Technical Appendix).

PROJECT ANALYSIS:

(1) Development Plan

- (a) <u>Site Design/Building Layout</u> The Project site is developed with a religious assembly use. The proposed mono-eucalyptus wireless telecommunication facility will be located at the southeast corner of the rear ancillary building approximately 417 feet east of Grove Avenue and approximately 137 feet from the northern property line. A light pole will need to be relocated to the southern landscape planter to accommodate the proposed wireless facility at the proposed location. The proposed 336 square-foot ground mounted equipment enclosure will be located at the northeast corner of the rear ancillary building approximately 398 feet east of Grove Avenue and 9-feet from the northern property line (see Exhibit B Site Plan, attached). The proposed equipment enclosure will be located adjacent to the existing trash enclosure and will be screened from the public right-of-way. The wireless facility and the proposed equipment enclosure are located approximately 114 feet apart to provide a buffer from the adjacent residential development to the north.
- (b) <u>Site Access/Circulation</u> The proposed wireless facility will have one access point from Grove Avenue via an existing 40-foot-wide driveway centrally located on the site (see Exhibit C Enlarged Site Plan, attached). The driveway will provide connectivity to the existing parking lot located at the rear of the site and to the proposed mono-eucalyptus wireless facility. The ancillary ground mounted equipment enclosure will be accessed via an existing drive aisle located at the rear (east) of the existing northern building. Pedestrian connectively will be provided via the existing sidewalks located on the site.
- (c) <u>Parking</u> The Ontario Development Code requires 1 off-street parking space to be provided for wireless telecommunication facilities and one parking space is provided east of the rear ancillary building to allow wireless carrier personnel to be able to access and maintain the site. The Applicant has indicated that the proposed wireless facility will be maintained once every 4-6 weeks for a maximum of 3 hours during normal business hours on weekdays.
- (d) <u>Wireless Facility Design</u> The Applicant proposes to construct a monoeucalyptus wireless facility (see Exhibit D Elevations, attached). The proposed wireless facility will use faux branches and foliage to screen the equipment and facility from public view. The mono-eucalyptus wireless facility will be 45 feet in height, with branches and foliage extending a minimum of 2 feet horizontally from the antennas. The branch count will be a minimum of 3 branches per linear feet of trunk height and the trunk will be painted to match the exterior of the building. The trunk will be covered in simulated bark that will extend the entire length of the pole to ensure that the pole is not visible. Additionally, the applicant proposes to randomly disperse, utilize differing length of branches, and extend the branches above the antenna arrays to provide a natural appearance (see Exhibit E Photo Sims, attached). The proposed antennas and associated equipment will be painted and include socks (antenna covers) to match the

mono-eucalyptus. The proposed meter pedestal will be located on Grove Avenue. The proposed wireless facility will enhance the existing coverage, as shown on the attached Propagation Maps (see Exhibit F — Propagation Maps). The proposed equipment enclosure will be designed with an 8-foot-tall block wall with a decorative cap. A Condition of Approval has been added that requires the proposed block wall for the equipment enclosure to be split face with a decorative cap.

- (e) <u>Landscaping</u> The Development Code requires wireless telecommunication facilities to be landscaped and have appropriate screening trees and planting. The Applicant will provide 3 Eucalyptus trees adjacent to the wireless facility and 1 Coast Live Oak to help screen the wireless facility, as these trees are compatible with the overall visual aesthetic of the surrounding area. Additionally, vines will be staked adjacent to the ground mount equipment enclosure and shrubs will be planted at the base of the equipment enclosure. The Applicant will also be required to replace any dead or missing groundcover on the subject property (see Exhibit G Landscape Plan).
- (f) <u>Signage</u> All Project signage is required to comply with the sign regulations provided in the Ontario Development Code for wireless facilities. Wireless facilities require an informational sign (measuring 2-FT by 2-FT) to be installed outside the facility enclosure with the carrier information and emergency contact number.

PUBLIC NOTIFICATION: The subject application was advertised as a hearing in at least one newspaper of general circulation in the City of Ontario (the <u>Inland Valley Daily Bulletin</u> newspaper).

CORRESPONDENCE: As of the preparation of this Agenda Report, Planning Department staff has not received any written or verbal communications from the owners or occupants of properties surrounding the Project site or from the public in general, regarding the subject application.

AGENCY/DEPARTMENT REVIEWS: Each City agency/department has been provided the opportunity to review and comment on the subject application and recommend conditions of approval to be imposed upon the application. At the time of the Decision preparation, recommended conditions of approval were provided and are appended to the attached Decision as "Attachment A."

AlrPORT LAND USE COMPATIBILITY PLAN (ALUCP) COMPLIANCE: The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan. On April 19, 2011, the City Council of the City of Ontario approved and adopted the ONT ALUCP, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future

airport activity. As the decision-making body for the Project, the Development Advisory Board has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the Development Advisory Board, therefore, finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP.

COMPLIANCE WITH THE ONTARIO PLAN: The proposed project is consistent with the principles, goals and policies contained within the Vision, Governance, Policy Plan (general plan), and City Council Priorities components of The Ontario Plan ("TOP"). More specifically, the goals and policies of TOP that are furthered by the proposed project are as follows:

(1) City Council Goals.

- Operate in a Businesslike Manner
- Focus Resources in Ontario's Commercial and Residential Neighborhoods

(2) <u>Policy Plan (General Plan)</u>

Land Use Element:

- Goal LU-2 Compatibility: Compatibility between a wide range of uses and resultant urban patterns and forms.
- ➤ <u>LU2-6. Infrastructure Compatibility</u>. We require infrastructure to be aesthetically pleasing and in context with the community character.

Community Economics Element:

- > <u>CE-1.11 Socioeconomic Trends</u>. We continuously monitor, plan for, and respond to changing socioeconomic trends.
- ➤ <u>CE-2.5 Private Maintenance</u>. We require adequate maintenance, upkeep, and investment in private property because proper maintenance on private property protects property values.

Community Design Element:

> <u>CD-1.3 Existing Neighborhoods</u>. We require the existing character of viable residential and non-residential neighborhoods be preserved, protected, and enhanced.

- ➤ <u>CD-2.13 Entitlement Process</u>. We work collaboratively with all stakeholders to ensure a high degree of certainty in the efficient review and timely processing of all development plans and permits.
- <u>Goal CD-5 Protection of Investment</u>: A sustained level of maintenance and improvement of properties, buildings, and infrastructure that protects the property values and encourages additional public and private investments.
- ➤ <u>CD-5.1 Maintenance of Buildings and Property</u>. We require all public and privately-owned buildings and property (including trails and easements) to be properly and consistently maintained.
- ➤ <u>CD-5.2 Maintenance of Infrastructure</u>. We require the continual maintenance of infrastructure.

HOUSING ELEMENT COMPLIANCE: The project is consistent with the Housing Element of the Policy Plan (General Plan) component of The Ontario Plan, as the project site is not one of the properties in the Housing Element Sites contained in Tables B-1 and B-2 (Housing Element Sites Inventory) of the Housing Element Technical Report.

ENVIRONMENTAL REVIEW: The Project is categorically exempt from the requirements of the California Environmental Quality Act (CEQA) pursuant to Section 15332 (Class 32, In-Fill Development Projects) of the CEQA Guidelines and meets each of the following conditions: (1) the Project is consistent with the applicable general plan designation and all applicable general plan policies, as well as the applicable zoning designation and regulations, as conditioned; (2) the proposed development occurs within city limits, on a Project site of no more than five acres, and is substantially surrounded by urban uses; (3) the Project site has no value as habitat for endangered, rare, or threatened species; (4) approval of the Project will not result in any significant effects relating to traffic, noise, air quality, or water quality; and (5) the Project site is located on a site that can be adequately served by all required utilities and public services.

TECHNICAL APPENDIX:

Table 1: Surrounding Zoning and Land Uses

	Existing Land Use	Policy Plan Designation	Zoning Designation	Specific Plan Land Use
Site	Religious Assembly	(LDR) Low Density Residential (2.1 - 5.0 du/ac)	LDR-5 (Low Density Residential)	N/A
North	Single-Family Residential	(LDR) Low Density Residential (2.1 - 5.0 du/ac)	LDR-5 (Low Density Residential)	N/A
South	Single-Family Residential	(LDR) Low Density Residential (2.1 - 5.0 du/ac)	LDR-5 (Low Density Residential)	N/A
East	Single-Family Residential	(LDR) Low Density Residential (2.1 - 5.0 du/ac)	LDR-5 (Low Density Residential)	N/A
West	Single-Family Residential	(LDR) Low Density Residential (2.1 - 5.0 du/ac)	LDR-5 (Low Density Residential)	N/A

Table 2: Parking Summary

Type of Use	Parking Ratio	Spaces Required	Spaces Provided
Wireless Telecommunication Antennas	One space per facility	1	1
TOTAL		1	1

Exhibit A: PROJECT LOCATION MAP



Exhibit B: SITE PLAN

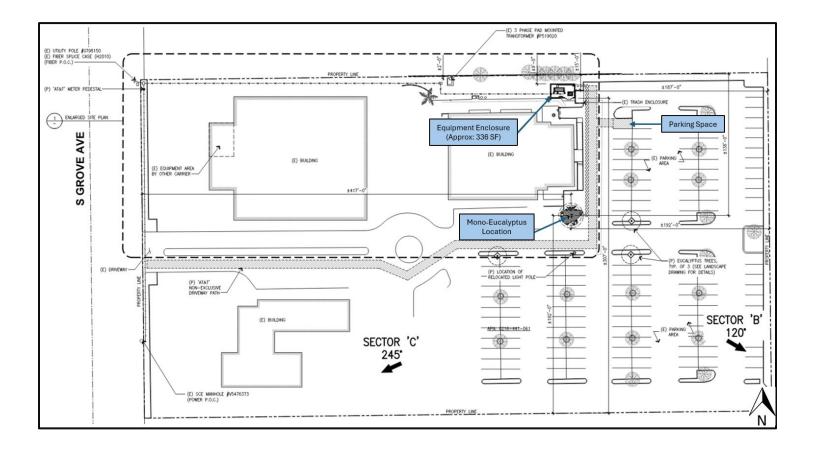


Exhibit C: ENLARGED SITE PLAN

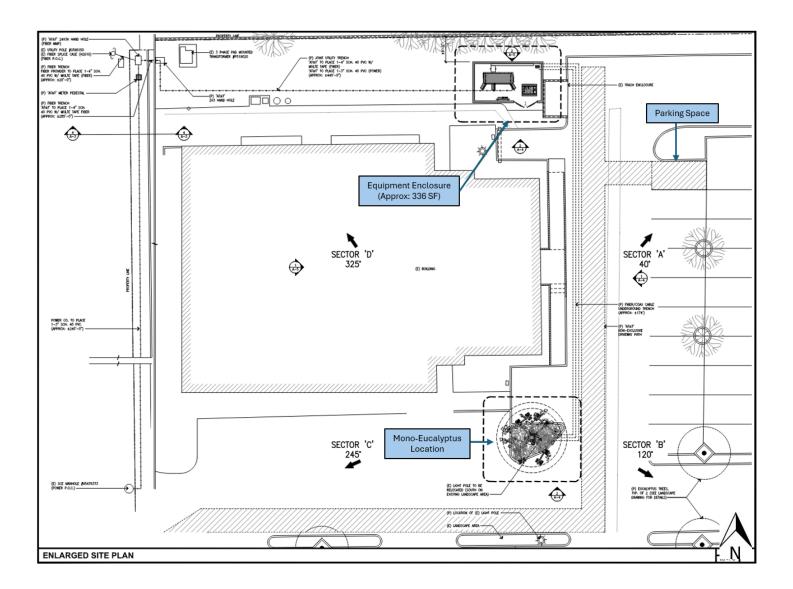
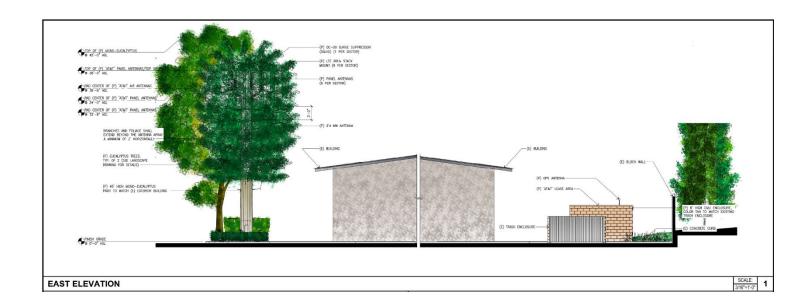


Exhibit D: ELEVATIONS



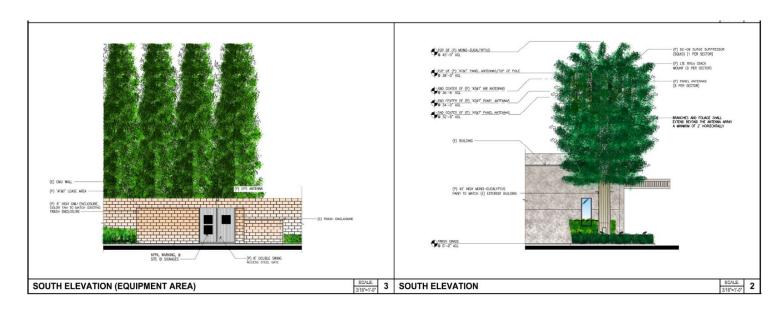
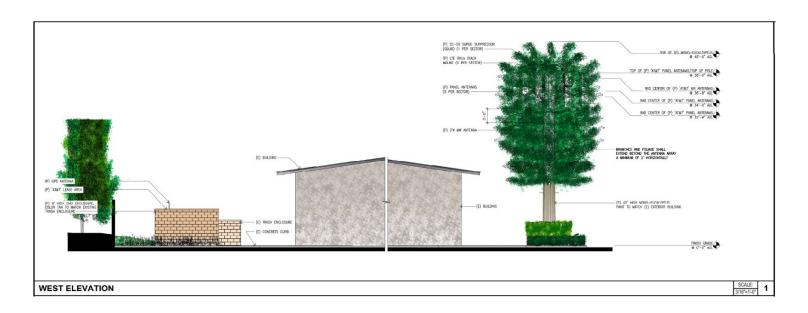


Exhibit D: ELEVATIONS



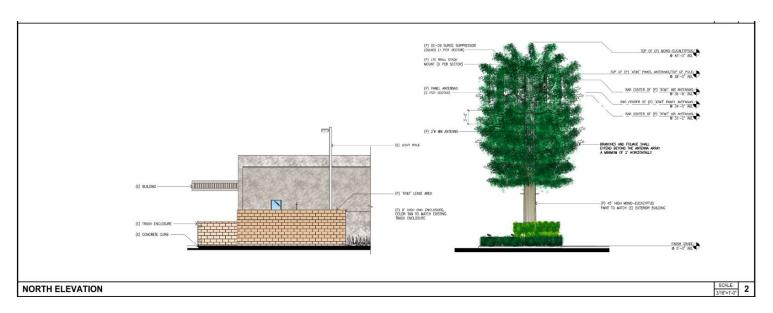


Exhibit E: PHOTO SIMS





Exhibit E: PHOTO SIMS

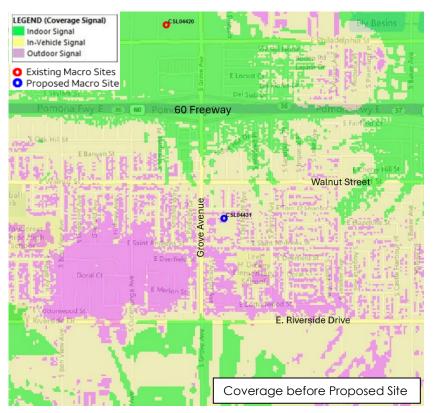




Exhibit E: PHOTO SIMS



Exhibit F: PROPOGATION MAPS



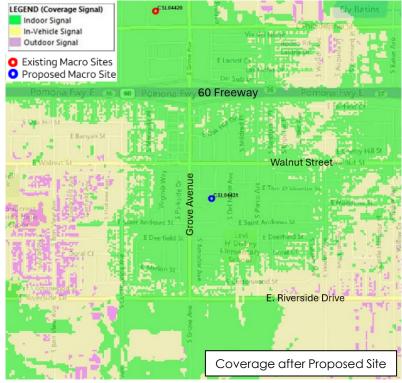
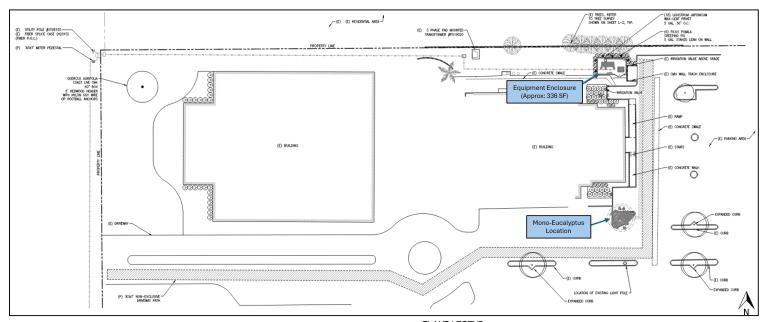


Exhibit G: LANDSCAPING PLAN



TREES BUCALYPTUS LEUCOXYLON WHITE RONBARK 24' BOX 3 NATURAL LOW LAGERSTROEMA NDICA CRAPE MYRTLE 36' BOX I STANDARD LOW PURPLE OUERCUS AGREFOLIA COAST LIVE OAK 60' BOX I NATURAL LOW SHRUBS UGUSTRUM JAPONOUM WAX-LEAF PRIVET 5 GAL 27 36' O.C. LOW PITTOSPORUM TOBRA MOCKORANGE 5 GAL 23 48' O.C. LOW WESTRINGIA FRUTICOSA COAST ROSEMARY 5 GAL 24 48' O.C. LOW	PLA	NT LEGEND					
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DECISION NO.:

FILE NO.: PDEV23-020

DAB Hearing Date: November 18, 2024

SUBJECT: A public hearing to consider a Development Plan to construct a

45-foot-tall mono-eucalyptus wireless telecommunication facility (AT&T Mobility) and ancillary ground-mounted equipment on 4.61 acres of land located at 2713 South Grove Avenue within the LDR-5

(Low Density Residential) zoning district (APN: 0216-441-61).

PART 1: RECITALS

WHEREAS, AT&T Mobility (hereinafter referred to "Applicant") has filed an Application requesting approval of a Development Plan (File No. PDEV23-020), as described in the subject of this Decision (hereinafter referred to as "Application" or "Project"); and

WHEREAS, the Project site is comprised of 4.61 acres of land generally located at 2713 South Grove Avenue, that is presently occupied by St. Elizabeth Ann Seton Church and is located within the LDR-5 (Low Density Residential — 2.1 to 5.0 Dus/Acre) zoning district; and

WHEREAS, the properties to the north, east, south, and west of the Project site are within the LDR-5 (Low Density Residential — 2.1 to 5.0 Dus/Acre) and contain single-family residential homes; and

WHEREAS, the Applicant filed a Development Plan (File No. PDEV23-020) to construct a 45-foot-tall mono-eucalyptus wireless telecommunication facility (AT&T Mobility) with ancillary ground-mounted equipment on 4.61 acres of land; and

WHEREAS, the proposed mono-eucalyptus wireless facility will be located within an existing landscape planter approximately 417 feet east from Grove Avenue and approximately 137 feet from the northern property line. The equipment enclosure will be located along the northern portion of the property approximately 398 feet east of Grove Avenue and 9 feet from the northern property line; and

WHEREAS, the mono-eucalyptus wireless facility and related equipment enclosure can be accessed via a driveway from Grove Avenue; and

WHEREAS, the Project has provided off-street parking pursuant to the "wireless telecommunication antennas" parking standards specified in the Development Code. The number of off-street parking provided meets the minimum parking requirements for the Project; and

WHEREAS, the Project as proposed falls into Tier 3 telecommunications facility review of the Development Code, as the facility is proposed to be located within 500 feet of an existing residential zoning district (approximately 137 away from the north property line); and

WHEREAS, the Applicant has proposed a "mono-eucalyptus" design for the telecommunication facility, which mimics the shape and appearance of eucalyptus trees and uses faux branches and foliage to screen the equipment and facility from public view; and

WHEREAS, three (3) Eucalyptus leucoxylon trees are proposed adjacent to the wireless facility and 1 Coast Live Oak to help screen the wireless facility; and

WHEREAS, the Application is a Project pursuant to the California Environmental Quality Act (Public Resources Code Section 21000 et seq.) ("CEQA"); and

WHEREAS, the Project is exempt from CEQA pursuant to a categorical exemption (listed in CEQA Guidelines Article 19, commencing with Section 15300) and the application of that categorical exemption is not barred by one of the exceptions set forth in CEQA Guidelines Section 15300.2; and

WHEREAS, the Project is categorically exempt from the requirements of the California Environmental Quality Act (CEQA) pursuant to Section 15332 (Class 32, In-Fill Development Projects) of the CEQA Guidelines; and

WHEREAS, Ontario Development Code Table 2.02-1 (Review Matrix) grants the Development Advisory Board (DAB) the responsibility and authority to review and act on the subject Application; and

WHEREAS, all members of the DAB of the City of Ontario were provided the opportunity to review and comment on the Application, and no comments were received opposing the proposed Project; and

WHEREAS, the Project has been reviewed for consistency with the Housing Element of the Policy Plan component of The Ontario Plan 2050, as State Housing Element law (as prescribed in Government Code Sections 65580 through 65589.8) requires that development projects must be consistent with the Housing Element, if upon consideration of all its aspects, it is found to further the purposes, principals, goals, and policies of the Housing Element; and

WHEREAS, the Project is located within the Airport Influence Area of Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and is subject to, and must be consistent with, the policies and criteria set forth in the Ontario International Airport Land Use Compatibility Plan (hereinafter referred to as "ONT ALUCP"), which applies only to jurisdictions within San

Bernardino County, and addresses the noise, safety, airspace protection, and overflight impacts of current and future airport activity; and

WHEREAS, the City of Ontario Development Code Division 2.03 (Public Hearings) prescribes the manner in which public notification shall be provided and hearing procedures to be followed, and all such notifications and procedures have been completed; and

WHEREAS, on November 18, 2024, the DAB of the City of Ontario conducted a hearing on the Application and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the adoption of this Decision have occurred.

PART 2: THE DECISION

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED AND DECIDED by the Development Advisory Board of the City of Ontario as follows:

SECTION 1: **Environmental Determination and Findings.** As the decision-making body for the Project, the DAB has reviewed and considered the information contained in the administrative record for the Project, including all written and oral evidence provided during the comment period. Based upon the facts and information contained in the administrative record, including all written and oral evidence presented to the DAB, the DAB finds as follows:

- (1) The administrative record has been completed in compliance with CEQA, the State CEQA Guidelines, and the City of Ontario Local CEQA Guidelines; and
- (2) The proposed Development Plan is categorically exempt from the requirements of the California Environmental Quality Act (CEQA) pursuant to Section 15332 (Class 32, In-Fill Development Projects) of the CEQA Guidelines and meets all of the following conditions:
- (a) The Project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations. The proposed Project is located within the LDR (Low Density Residential 2.1—5.0 Dus/Acre) land use district of the Policy Plan Land Use Map, and the LDR-5 (Low Density Residential) zoning district. The proposed Project is consistent with all applicable general plan policies, as well as with the LDR-5 (Low Density Residential) zoning designation and applicable Development Code regulations.
- (b) The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses. The Project is proposed within the established boundaries of the City of Ontario, on a site totaling 4.61 acres of land, which is surrounded by single-family residential.

- (c) The Project site has no value as habitat for endangered, rare, or threatened species. The site is presently occupied by St. Elizabeth Ann Seton Church and 2 ancillary church buildings. The surrounding development includes single-family residential homes to the north, east, south, and west of the Project site.
- (d) Approval of the Project would not result in any significant effects relating to traffic, noise, air quality, or water quality. The proposed wireless telecommunication facility is similar to, and of no greater impact than other allowed uses and development projects within the LDR-5 (Low Density Residential) zoning district; and
- (e) The site can be adequately served by all required utilities and public services. All necessary wet and dry utilities are available for the Project site.
- (3) The application of the categorical exemption is not barred by one of the exceptions set forth in CEQA Guidelines Section 15300.2; and
- (4) The determination of CEQA exemption reflects the independent judgment of the Development Advisory Board.
- SECTION 2: Housing Element Compliance. Pursuant to the requirements of California Government Code Chapter 3, Article 10.6, commencing with Section 65580, as the decision-making body for the Project, the DAB finds that based on the facts and information contained in the Application and supporting documentation, at the time of Project implementation, the Project is consistent with the Housing Element of the Policy Plan (General Plan) component of The Ontario Plan, as the Project site is not one of the properties in the Housing Element Sites inventory contained in Tables B-1 and B-2 of the Housing Element Technical Report.
- SECTION 3: Airport Land Use Compatibility Plan (ALUCP) Compliance. The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.
- (1) On April 19, 2011, the City Council of the City of Ontario approved and adopted the ONT ALUCP, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the decision-making body for the Project, the Development Advisory Board has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP

Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the Development Advisory Board, therefore, finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP.

<u>SECTION 4</u>: <u>Concluding Facts and Reasons</u>. Based upon the substantial evidence presented to the DAB during the above-referenced hearing and upon the specific finding set forth in the Sections above, the DAB hereby concludes as follows:

- (1) The proposed development at the proposed location is consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan. The proposed Project is located within the LDR (Low Density Residential 2.1 5.0 Dus/Acre) land use district of the Policy Plan Land Use Map, and the LDR-5 (Low Density Residential) zoning district. The development standards and conditions under which the proposed Project will be constructed and maintained is consistent with the goals, policies, plans, and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan; and
- (2) The proposed development is compatible with those on adjoining sites in relation to location of buildings, with particular attention to privacy, views, any physical constraint identified on the site and the characteristics of the area in which the site is located. The Project has been designed consistent with the requirements of the City of Ontario Development Code and the LDR-5 (Low Density Residential) zoning district, including standards relative to the particular land use proposed (wireless telecommunication facility), as-well-as building intensity, building and parking setbacks, building height, number of off-street parking and loading spaces, on-site and off-site landscaping, and fences, walls and obstructions; and
- (3) The proposed development will complement and/or improve upon the quality of existing development in the vicinity of the Project and the minimum safeguards necessary to protect the public health, safety and general welfare have been required of the proposed Project. The Development Advisory Board has required certain safeguards, and imposed certain conditions of approval, which have been established to ensure that: [i] the purposes of the Development Code are maintained; [ii] the project will not endanger the public health, safety or general welfare; [iii] the project will not result in any significant environmental impacts; [iv] the project will be in harmony with the area in which it is located; and [v] the project will be in full conformity with the Vision, City Council Priorities and Policy Plan components of The Ontario Plan and the Development Code; and
- (4) The proposed development is consistent with the development standards and design guidelines set forth in the Development Code, or applicable specific plan or planned unit development. The proposed Project has been reviewed for consistency with the general development standards and guidelines of the Ontario Development Code that are applicable to the proposed Project, including building intensity, building and parking setbacks, building height, amount of off-street parking and loading

spaces, parking lot dimensions, drive-thru setbacks, design and landscaping, bicycle parking, on-site landscaping, and fences and walls, as-well-as those development standards and guidelines specifically related to the particular land use being proposed (wireless telecommunication facility). As a result of this review, the Development Advisory Board has determined that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the development standards and guidelines described in the Development Code.

SECTION 5: Development Advisory Board Action. Based on the findings and conclusions set forth in Sections 1 through 4, above, the Development Advisory Board hereby APPROVES the herein described Application, subject to each and every condition set forth in the Department reports attached hereto as "Attachment A," and incorporated herein by this reference.

<u>SECTION 6</u>: <u>Indemnification</u>. The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void or annul this approval. The City of Ontario shall promptly notify the applicant of any such claim, action or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 7: Custodian of Records. The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East "B" Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario. The records are available for inspection by any interested person, upon request.

APPROVED AND ADOPTED this 18th day of November 2024.

Development Advisory Board Chairman

ATTACHMENT A:

File No. PDEV23-020 Departmental Conditions of Approval

(Departmental conditions of approval to follow this page)



LAND DEVELOPMENT DIVISION CONDITIONS OF APPROVAL

303 East B Street, Ontario, California 91764 Phone: 909.395.2036 / Fax: 909.395.2420

Date Prepared: 10/24/2024

File No: PDEV23-020

Related Files: N/A

Project Description: A Development Plan to construct a 45-foot-tall mono-eucalyptus wireless telecommunication facility (AT&T Mobility) and ancillary ground-mounted equipment on 4.61 acres of land located at 2713 South Grove Avenue within the LDR-5 (Low Density Residential) zoning district; (APNs: 0216-441-61); **submitted by submitted by AT&T Mobility.**

Prepared By: Jocelyn Torres, Associate Planner

Phone: 909.395.2424 (direct)

Email: jocelyntorres@ontarioca.gov

The Planning Department, Land Development Section, conditions of approval applicable to the above-described Project, are listed below. The Project shall comply with each condition of approval listed below:

- **1.0 Standard Conditions of Approval.** The project shall comply with the *Standard Conditions* for New Development, adopted by City Council Resolution No. 2017-027 on April 18, 2017. A copy of the *Standard Conditions* for New Development may be obtained from the Planning Department or City Clerk/Records Management Department.
- **2.0 Special Conditions of Approval.** In addition to the *Standard Conditions for New Development* identified in condition no. 1.0, above, the project shall comply with the following special conditions of approval:

2.1 Time Limits.

- (a) Development Plan approval shall become null and void 2 years following the effective date of application approval, unless a building permit is issued and construction is commenced, and diligently pursued toward completion, or a time extension has been approved by the Planning Director. This condition does not supersede any individual time limits specified herein, or any other departmental conditions of approval applicable to the Project, for the performance of specific conditions or improvements.
- **2.2** <u>General Requirements.</u> The Project shall comply with the following general requirements:
- (a) All construction documentation shall be coordinated for consistency, including, but not limited to, architectural, structural, mechanical, electrical, plumbing, landscape and irrigation, grading, utility and street improvement plans. All such plans shall be consistent with the approved entitlement plans on file with the Planning Department.

- **(b)** The project site shall be developed in conformance with the approved plans on file with the City. Any variation from the approved plans must be reviewed and approved by the Planning Department prior to building permit issuance.
- **(c)** The herein-listed conditions of approval from all City departments shall be included in the construction plan set for the project, which shall be maintained on site during project construction.

2.3 Landscaping.

- (a) The Property Owner shall provide and continuously maintain landscaping and irrigation systems in compliance with the provisions of Ontario Development Code Division 6.05 (Landscaping).
- **(b)** Comply with the conditions of approval of the Planning Department, Landscape Planning Division.
- **(c)** Landscaping shall not be installed until the Landscape and Irrigation Construction Documentation Plans required by Ontario Development Code Division 6.05 (Landscaping) have been approved by the Landscape Planning Division.
- **(d)** Changes to approved Landscape and Irrigation Construction Documentation Plans, which affect the character or quantity of the plant material or irrigation system design, shall be resubmitted for approval of the revision by the Landscape Planning Division, prior to the commencement of the changes.
- **2.4** <u>Walls and Fences</u>. All Project walls and fences shall comply with the requirements of Ontario Development Code Division 6.02 (Walls, Fences and Obstructions).

2.5 <u>Site Lighting.</u>

- (a) All off-street parking facilities shall be provided with nighttime security lighting pursuant to Ontario Municipal Code Section 4-11.08 (Special Residential Building Provisions) and Section 4-11.09 (Special Commercial/Industrial Building Provisions), designed to confine emitted light to the parking areas. Parking facilities shall be lit from sunset until sunrise, daily, and shall be operated by a photocell switch.
- **(b)** Unless intended as part of a master lighting program, no operation, activity, or lighting fixture shall create illumination on any adjacent property.
- **2.6** <u>Security Standards</u>. The Project shall comply with all applicable requirements of Ontario Municipal Code Title 4 (Public Safety), Chapter 11 (Security Standards for Buildings).

2.7 Signs.

(a) All Project signage shall comply with the requirements of Ontario Development Code Division 8.1 (Sign Regulations).

2.8 <u>Sound Attenuation</u>. The Project shall be constructed and operated in a manner so as not to exceed the maximum interior and exterior noise levels set forth in Ontario Municipal Code Title 5 (Public Welfare, Morals, and Conduct), Chapter 29 (Noise).

2.9 Environmental Requirements.

- (a) The Project is categorically exempt from the requirements of the California Environmental Quality Act (CEQA) pursuant to Section 15332 (Class 32, In-Fill Development Projects) of the CEQA Guidelines and meets each of the following conditions:
- **(i)** The Project is consistent with the applicable general plan designation and all applicable general plan policies, as well as the applicable zoning designation and regulations;
- (ii) The proposed development occurs within city limits, on a project site of no more than five acres, and is substantially surrounded by urban uses;
- (iii) The Project site has no value as habitat for endangered, rate, or threatened species;
- (iv) Approval of the Project will not result in any significant effects relating to traffic, noise, air quality, or water quality; and
- (v) The Project site can be adequately served by all required utilities and public services.
- **(b)** If human remains are found during project grading/excavation/construction activities, the area shall not be disturbed until any required investigation is completed by the County Coroner and Native American consultation has been completed (if deemed applicable).
- (c) If any archeological or paleontological resources are found during project grading/excavation/construction, the area shall not be disturbed until the significance of the resource is determined. If determined to be significant, the resource shall be recovered by a qualified archeologist or paleontologist consistent with current standards and guidelines, or other appropriate measures implemented.
- **2.10** Indemnification. The applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void or annul any approval of the City of Ontario, whether by its City Council, Planning Commission or other authorized board or officer. The City of Ontario shall promptly notify the applicant of any such claim, action or proceeding, and the City of Ontario shall cooperate fully in the defense.

2.11 Additional Fees.

("NOE") filing fee shall be provided to the Planning Department. The fee shall be paid by check, made payable to the "Clerk of the Board of Supervisors", which shall be forwarded to the San Bernardino County Clerk of the Board of Supervisors, along with all applicable environmental forms/notices, pursuant to the requirements of the California Environmental Quality Act ("CEQA"). The filing of a NOE is voluntary; however, failure to provide said fee within the time specified will result in the extension of the statute of limitations for the filing of a CEQA lawsuit from 30 days to 180 days.

(b) After the Project's entitlement approval, and prior to issuance of final building permits, the Planning Department's <u>Plan Check</u> and <u>Inspection</u> fees shall be paid at the rate established by resolution of the City Council.

2.12 Additional Requirements.

- (a) The facility shall abide by all applicable wireless telecommunication facility standards as listed in Section 5.03.420 of the Ontario Development Code.
- **(b)** The proposed block wall for the equipment enclosure shall be split face with a decorative cap.



MEMORANDUM

TO:	Scott Murphy, Community Development Director (Copy of memo only) Rudy Zeledon, Planning Director (Copy of memo only) Diane Ayala, Advanced Planning Division (Copy of memo only) Charity Hernandez, Economic Development James Caro, Building Department Raymond Lee, Engineering Department Jamie Richardson, Landscape Planning Division Dennis Mejia, Municipal Utility Company Heather Lugo, Police Department Paul Erhman, Deputy Fire Chief/Fire Marshal Jay Bautista, Traffic/Transportation Manager Lorena Mejia, Airport Planning Jeff Tang, Engineering/NPDES Angela Magana, Community Improvement (Copy of memo only) Jimmy Chang, IPA Department Blaine Ishii, Integrated Waste
FROM:	Jocelyn Torres, Associate Planner
DATE:	August 01, 2023
SUBJECT:	FILE #: PDEV23-020 Finance Acct#:
	g project has been submitted for review. Please send one (1) copy and email one (1) copy of port to the Planning Department by .
Note:	Only DAB action is required
	Both DAB and Planning Commission actions are required
	Only Planning Commission action is required
	DAB, Planning Commission and City Council actions are required
	Only Zoning Administrator action is required
stealth, 40-fo 864 square f	DESCRIPTION: A Development Plan to construct a wireless communications facility with a pot-tall mono-eucalyptus antenna and ancillary ground-mounted equipment, on approximately feet of leased space on a 4.59-acre property located at 2713 South Grove Avenue, within the Density Residential) zoning district (APN: 216-441-61)
The plai	n does adequately address the departmental concerns at this time.
) D	No comments
	Report attached (1 copy and email 1 copy)
	Standard Conditions of Approval apply
The plan	n does not adequately address the departmental concerns.
	The conditions contained in the attached report must be met prior to scheduling for Development Advisory Board.

tment Signature Fittle Date Item B - 28 of 33



MEMORANDUM

TO:	Scott Murphy, Community Development Director (Copy of memo only) Rudy Zeledon, Planning Director (Copy of memo only) Diane Ayala, Advanced Planning Division (Copy of memo only) Charity Hernandez, Economic Development James Caro, Building Department Raymond Lee, Engineering Department Jamie Richardson, Landscape Planning Division Dennis Mejia, Municipal Utility Company Heather Lugo, Police Department Paul Erhman, Deputy Fire Chief/Fire Marshal Jay Bautista, Traffic/Transportation Manager Lorena Mejia, Airport Planning Jeff Tang, Engineering/NPDES Angela Magana, Community Improvement (Copy of memo only) Jimmy Chang, IPA Department Blaine Ishii, Integrated Waste
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/Signature

Date Item B - 29 of 33



MEMORANDUM

TO:	Scott Murphy, Community Development Director (Copy of memo only) Henry Noh, Planning Director (Copy of memo only) Diane Ayala, Advanced Planning Division (Copy of memo only) Charity Hernandez, Economic Development James Caro, Building Department Raymond Lee, Engineering Department Jamie Richardson, Landscape Planning Division Dennis Mejia, Municipal Utility Company Heather Lugo, Police Department Paul Ehrman, Deputy Fire Chief/Fire Marshal Jay Bautista, Traffic/Transportation Manager Lorena Mejia, Airport Planning Nathan Pino, Engineering Angela Magana, Community Improvement (Copy of memo only) Jimmy Chang, IT Department Blaine Ishii, Integrated Waste
FROM:	Jocelyn Torres, Associate Planner
DATE:	August 09, 2024 Revision #2
SUBJECT:	FILE #: PDEV23-020 Finance Acct#:
	g project has been resubmitted for review. Please send one (1) copy and email one (1) copy report to the Planning Department by .
stealth, 45-fo 365 square i LDR-5 (Low	DESCRIPTION: A Development Plan to construct a wireless communications facility with a oot-tall mono-eucalyptus antenna and ancillary ground-mounted equipment, on approximately feet of leased space on a 4.6-acre property located at 2713 South Grove Avenue, within the Density Residential) zoning district (APN: 0216-441-61)
	in does adequately address the departmental concerns at this time.
X	
	See previous report for Conditions
	Report attached (1 copy and email 1 copy)
X	Standard Conditions of Approval apply
The pla	n does not adequately address the departmental concerns.
	The conditions contained in the attached report must be met prior to scheduling for Development Advisory Board.

09/09/2023



MEMORANDUM

TO:	Scott Murphy, Community Development Director (Copy of memo only) Henry Noh, Planning Director (Copy of memo only) Diane Ayala, Advanced Planning Division (Copy of memo only) Charity Hernandez, Economic Development James Caro, Building Department Raymond Lee, Engineering Department Jamie Richardson, Landscape Planning Division Dennis Mejia, Municipal Utility Company Heather Lugo, Police Department Paul Ehrman, Deputy Fire Chief/Fire Marshal Jay Bautista, Traffic/Transportation Manager Lorena Mejia, Airport Planning Nathan Pino, Engineering Angela Magana, Community Improvement (Copy of memo only) Jimmy Chang, IT Department Blaine Ishii, Integrated Waste
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X The plar	n does adequately address the departmental concerns at this time.
	No comments
	See previous report for Conditions
X	Report attached (1 copy and email 1 copy)
X	Standard Conditions of Approval apply
The plar	n does not adequately address the departmental concerns.
	The conditions contained in the attached report must be met prior to scheduling for Development Advisory Board.

Department Signature Title Date Item B - 31 of 33

CITY OF ONTARIO LANDSCAPE PLANNING DIVISION

303 East "B" Street, Ontario, CA 91764

PRELIMINARY PLAN CORRECTIONS

Sign Oπ				
9:2	08/27/2024			
Jamie Richardson, Sr. Landscape Architect	Date			
Jamie Richardson, Sr. Landscape Architect				

Reviewer's Name: Phone: Jamie Richardson, Sr. Landscape Architect (909) 395-2615 D.A.B. File No.: Case Planner: PDEV23-020 Jocelyn Torres Project Name and Location: Roman Catholic Church 2713 S Grove Ave Applicant/Representative: Eli Acevedo – AT&T Mobility Eliezer.acevedo@smartlinkgroup.com (619) 378-3848 32224 Zion Way Winchester, CA 92596 A Preliminary Plan (dated 08/12/2024) meets the Standard Conditions for New \boxtimes Development. Plans are approved with the consideration that the following conditions below be met upon submittal of the landscape construction documents. A Preliminary Plan (dated) has not been approved. Corrections noted below are required before Preliminary Landscape Plan approval. A RESPONSE SHEET IS REQUIRED WITH RESUBMITTAL OR PLANS WILL BE RETURNED AS

1. After a project's entitlement approval, the applicant shall pay all applicable fees at a rate established by the resolution of the City Council.

SAN BERNARDINO COUNTY FIRE PROTECTION DISTRICT



620 South "E" Street ● San Bernardino, CA 92415-0153 ● (909) 386-8401 ● Fax (909) 386-8460

Office of the Fire Marshal Hazardous Materials Section sbcfire.org

Daniel R. Munsey Fire Chief/Fire Warden

Monica S. Ronchetti Fire Marshal

DATE: August 7, 2023 **PHONE:** 909.386.8401

FROM: Alyssa Parsons, Hazardous Materials Specialist

San Bernardino County Fire Protection District 620 South E Street San Bernardino, CA 92415

TO: Jocelyn Torres, Associate Planner

City of Ontario Planning Department 303 East B Street Ontario, CA 91764

SUBJECT: PDEV23-020, APN: 216-441-61, New Cingular Wireless PCS, LLC dbd AT&T Mobility

San Bernardino County Fire Protection District, Office of the Fire Marshal, Hazardous Materials Section has the following conditions for this project:

- 1. Prior to occupancy, a business or facility that handles hazardous materials in quantities at or exceeding 55 gallons, 500 pounds, or 200 cubic feet (compressed gas) at any one time or generates any amount of hazardous waste shall obtain hazardous material permits from this department. Prior to occupancy, the <u>business operator</u> shall apply for permits (Hazardous Material Handler Permit, Hazardous Waste Generator Permit, Aboveground Petroleum Storage Tank Permit, Underground Storage Tank Permit, or other applicable permits) or apply for exemption from permitting requirements.
- Prior to occupancy, an application for one or more of these permits shall be obtained by submitting a complete hazardous materials business plan using the California Environmental Reporting System (CERS) at http://cers.calepa.ca.gov/

"Hazardous Material" means any material that because of its quantity, concentration, physical characteristics or chemical characteristics poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace. Hazardous Materials include but are not limited to, hazardous substances, hazardous waste, or any material which the administering agency has a reasonable basis for believing would be injurious to human health or the environment.

Additional information can be found at https://sbcfire.org/hazmatcupa/ or you may contact the Office of the Fire Marshal, Hazardous Materials Section at (909) 386-8401.

1 | Page | Item B - 33 of 33



DEVELOPMENT ADVISORY BOARD STAFF REPORT

November 18, 2024

303 East B Street, Ontario, California 91764 / Phone: 909.395.2036 / Email: PlanningDirector@OntarioCA.gov

FILE NO: PDEV24-002

SUBJECT: A hearing to consider a Development Plan to facilitate the construction of a new 68,421 square-foot, 3-story City Services building, on approximately 1.2 acres of land generally located between East B and D Streets on North Sultana Avenue within the CIV (Civic) zoning district. **City Initiated**

PROPERTY OWNER: City of Ontario

RECOMMENDED ACTION: That the Development Advisory Board consider and adopt a Decision and approve File No. PDEV24-002, pursuant to the facts and reasons contained in the staff report and attached Decision, and subject to the conditions of approval appended to the attached Decision as "Attachment A."

BACKGROUND: Located entirely within the central core of the Downtown, the Ontario Civic Center is considered an integral element of the urban revitalization of high-density attached housing units, restaurants, retail shops, commercial services, public commons, offices, and civic facilities. The Civic Center district is bound by D Street to the north, Holt Boulevard to the south, Sultana Avenue to the east, and Lemon Avenue to the west. The district's purpose is to fulfill the Vision of The Ontario Plan's Downtown District of creating a place-based, people-focused commercial and cultural "heart" of the City. The Civic Center district's proximity to the Euclid Avenue Entertainment District will contribute to the community character and commercial vitality of Ontario's historic downtown area. People in need of City services at City Hall, the Public Library, or the Community Center are potential shoppers and diners at downtown stores and restaurants. Furthermore, the Civic Center's significant outdoor spaces provide a link to downtown shopping, dining, streetscapes, and friendly pedestrian experiences.

On December 5, 2022, the Development Advisory Board "DAB" approved the following City initiated applications:

- (a) A Development Plan, File No. PDEV22-051, to establish a master conceptual site plan comprised of a 27,832-square-foot, 2-story fire station, a 60,000-square-foot, 4-story office building, and a 6-level parking structure on 4.83-acres of land located at the southwest corner of East D Street and North Sultana Avenue, and north of the City Hall Annex building and Fire Station No. 1 on East B Street; and
- (b) A Development Plan, File No. PDEV22-013, to construct a 23,928-suare-foot, 2-story fire station, on approximately 1.2-acres of land located at the southwest corner of

D Street and Sultana Avenue. The new fire station will replace existing Fire Station No. 1 and is currently under construction.

On March 28, 2023, the Planning Commission approved a Tentative Parcel Map, File No. PMTT22-028, subdividing the 9.11-acre Project site into 4 lots to facilitate the development of the master conceptual site plan.

On October 2, 2023, the DAB approved a Development Plan, File No. PDEV22-043, to construct a 6-level parking structure with a total of 821 parking spaces, on approximately 2.0-acres of land generally located west of Sultana Avenue at C Street. The parking structure will provide parking for both public and City use and is currently under construction.

On January 31, 2024, a Development Plan was submitted to facilitate the construction of a new 68,421-square-foot, 3-story City Services building on the Project site to complete the last phase of the Civic Center Conceptual Master Site Plan. The proposed building will provide office and support spaces for seven existing city departments currently housed in various locations around the existing Civic Center and neighboring buildings. The Ontario Employee Credit Union will also be relocated from its current downtown location to the first floor of the City Services building.

PROJECT SETTING: The Project site is comprised of approximately 1.2 acres of land generally located west of Sultana Avenue, east of N. Cherry Avenue, north of the City Hall Annex building and the existing Fire Station No. 1, within the Civic Center district and the CIV (Civic) zoning district, which is depicted in Exhibit A: Project Location Map. The Project site is currently developed with a surface parking lot and the 6-level parking structure is under construction to the north.

The Civic Center district was established several decades ago with a fire station, police station, public library, senior center, and City Hall serving as the primary services. Other developments within the district include the University of La Verne campus and an age restricted multiple-family development. The Civic Center features many common areas and prominent pedestrian walkways connecting the Civic Center retail core of the downtown to the surrounding neighborhoods. The Civic Center is bordered by established residential neighborhoods to the north and east that developed in the first decade of the 20th century and multiple-family residential units to the south constructed in the early 2000s. The existing surrounding land uses, zoning, and Policy Plan (general plan) and specific plan land use designations are summarized in Table 1: Surrounding Zoning & Land Uses.

PROJECT ANALYSIS:

(a) <u>Site Design/Building Layout</u> — The proposed 3-story City Services building is rectangular in plan and oriented north. The building is approximately 52 feet in height with the tallest projection of the building at 61 feet to accommodate a mechanical room (38' x 28' in dimension) located on the rooftop. The building is setback approximately 22

feet from Sultana Avenue, 23 feet from Cherry Avenue, 26 feet from the new parking structure, and 12 feet from the south drive aisle. At the rear (south) of the building is a paved courtyard that leads to an emergency generator. The generator is enclosed with an 11-foot-tall wall that is integrated into the southeast corner of the building. Trash enclosures to serve the building will be located on the west side of Cherry Avenue in the paved parking area.

The first floor of the building is 22,859 square feet in area and includes an elevator, lobby, Ontario Credit Union, offices, conference rooms, storage rooms, bathrooms, locker rooms and a staff gym. The second and third floors are 21,177 and 21,189 square feet in area respectively and include additional offices, workstations, break rooms, conference rooms, storage rooms and restrooms. The third floor of the building will also have a north-facing roof deck patio.

(b) <u>Site Access/Circulation</u> — The portion of Cherry Avenue that currently circulates south to north through the Project site will be vacated and replaced with a 2-way drive aisle with access from B Street, extending along the western portion through the site and connecting to D Street to the north. The portion of C Street that extends east from Cherry Avenue to Sultana Avenue has been vacated to facilitate the construction of the parking structure that will serve the City Services building. Vehicular access to the parking structure is from the north-south drive aisle across from the University of La Verne and City Hall, and from Sultana Avenue. A 16-foot-wide one-way drive aisle running west to east is on the southern edge of the site, connecting Cherry Avenue with Sultana Avenue.

The main public entrance to the building is located at the northwest corner of the building. A landscaped pedestrian paseo, running east to west along the building frontage, will connect the building to a pedestrian entrance to the parking structure, to the public sidewalk along Sultana Avenue, and to a shaded landscaped plaza located at the northwest corner of the project site.

- (c) <u>Parking</u> The City Services building requires 250 vehicle parking spaces as specified in the Development Code, and 250 spaces in the new 6-level parking structure have been allotted for the Project, which meets the minimum parking required for the Project. The off-street parking calculations for the Project are summarized in Table 3: Parking Summary.
- (d) <u>Architecture</u> The 3-story City Services building is approximately 52 feet in height, designed in the Modern style of architecture and is inspired by nearby civic center properties including City Hall and the new parking structure. The building incorporates elements typically found in the Modern style, such as square roof forms, geometrical building shapes and projections, recessed vertically stacked windows, clear glazing, vertical and horizontal aluminum sunshades, and metal canopies supported by simple square columns.

Exterior finishes include vertical metal panel siding, fiber cement siding, painted steel and perforated metal panels. Oriented towards City Hall and the under-construction parking structure, the dominant feature on the north elevation is a centrally located metal canopy that projects from the third story of the building. Vertical perforated metal panels enclose a portion of the canopy. The same perforated metal panels are proposed as vertical sunshades for the west and east facing windows. Exterior doors are glass with large metal surrounds.

(e) <u>Landscaping</u> — The landscape design will complement the Civic Center district and surrounding buildings in terms of plant materials and accent pavement and will further enhance the architectural façade treatment. The landscape design conforms to City of Ontario landscape standards, a minimum of 15 percent landscape coverage is required per the Development Code, and 23 percent landscape coverage will be provided on-site. On-site landscaping is located within the street and pedestrian paseo setback areas. A public plaza at the northwest corner of the site is envisioned as a gathering place with shade trees, fixed seating areas and opportunities for public art.

A variety of planting materials is proposed, including trees and shrubs as follows:

- Trees: Coast live oak, Arizona sycamore, bloodgood London plane, lemon tree and marina strawberry tree
- Shrubs: Coast rosemary, varigated agave, Texas privet, blue bushy, fruitland silverberry and dwarf pittosporum
- (f) <u>Signage</u> All Project signage is required to comply with sign regulations provided in Ontario Development Code Division 8.1. Prior to the issuance of a Building Permit for the installation of any new on-site signage, the Applicant is required to submit Sign Plans for Planning Department review and approval.
- (g) <u>Utilities (drainage, sewer)</u> Public utilities (water and sewer) are available to serve the Project. Furthermore, the Applicant has submitted a Preliminary Water Quality Management Plan (PWQMP), which establishes the Project's compliance with storm water discharge/water quality requirements. The PWQMP includes site design measures that capture runoff and pollutant transport by minimizing impervious surfaces and maximizes low impact development (LID) best management practices (BMPs), such as retention and infiltration, biotreatment, and evapotranspiration. The PWQMP proposes the use of stormwater drywells in detention areas and gravity separator devices for pretreatment of pollutants. Any overflow drainage will be conveyed to the public street by way of parkway drains and culverts.

PUBLIC NOTIFICATION: The subject application was advertised as a hearing in at least one newspaper of general circulation in the City of Ontario (the <u>Inland Valley Daily Bulletin</u> newspaper).

NEIGHBORHOOD MEETING: A neighborhood meeting to present the Civic Center Conceptual Master Plan, File No. PDEV22-051, including the proposed City Services

building, was held on November 21, 2022, at Ontario City Hall. Three community members were in attendance to learn more about the Project. Questions were answered by staff and no one was in opposition of the Project.

CORRESPONDENCE: As of the preparation of this Agenda Report, Planning Department staff has not received any written or verbal communications from the owners or occupants of properties surrounding the Project site or from the public in general, regarding the subject application.

AGENCY/DEPARTMENT REVIEWS: Each City agency/department has been provided the opportunity to review and comment on the subject application and recommend conditions of approval to be imposed upon the application. At the time of the Decision preparation, recommended conditions of approval were provided and are appended to the attached Decision as Attachment A.

AlrPORT LAND USE COMPATIBILITY PLAN (ALUCP) COMPLIANCE: The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

On April 19, 2011, the City Council of the City of Ontario approved and adopted the ONT ALUCP, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the decision making body for the Project, the Development Advisory Board has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the Development Advisory Board finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP.

COMPLIANCE WITH THE ONTARIO PLAN: The proposed Project is consistent with the principles, goals and policies contained within the Vision, Governance, Policy Plan (general plan), and City Council Priorities components of The Ontario Plan ("TOP"). More specifically, the goals and policies of TOP that are furthered by the proposed Project are as follows:

(1) City Council Goals

Operate in a Businesslike Manner

• Invest in the City's Infrastructure (Water, Streets, Sewers, Parks, Storm Drains and Public Facilities)

(2) <u>Vision</u>

Distinctive Development that integrates our varied and diverse focal points, districts, centers, corridors, and neighborhoods to provide a feeling of coherence without sacrificing uniqueness.

Commercial and Residential Development

 Development quality that is broadly recognized as distinctive and not exclusively tied to the general suburban character typical of much of Southern California.

Development Quality

- Unique and authentic districts, centers, and corridors of varied scales that establish Ontario as one of the most vital and diverse locales in Southern California.
- Superior quality and design of the built environment and open spaces through careful attention to detail at every scale, including public and private spaces and structures.

(3) Governance

Decision Making

<u>Goal G1</u>: Sustained decision-making that consistently moves Ontario towards its Vision by using The Ontario Plan as a framework for assessing choices.

• G1-2 Long-term Benefit. We require decisions to demonstrate and document how they add value to the community and support the Ontario Vision.

(4) Policy Plan (General Plan)

Land Use Element

<u>Goal LU-2 Compatibility</u>: Compatibility between a wide range of uses and a resultant urban patterns and forms.

 LU-2.11 Context-Aware Transitions and Connections. We require new development projects and land-planning efforts to provide context-aware and appropriate transitions and connections between existing and planned neighborhoods, blocks, sites, and buildings.

Community Economics Element:

<u>Goal CE-2 Placemaking</u>: A City of distinctive neighborhoods, districts, corridors, and centers where people choose to be.

- CE-2.1 Development Projects. We require new development and redevelopment to create unique, high-quality places that add value to the community.
- CE-2.2 Development Review. We require those proposing new development and redevelopment to demonstrate how their projects will create appropriately unique, functional, and sustainable places that will compete well with their competition within the region.
- CE-2.4 Protection of Investment. We require that new development and redevelopment protect existing investment by providing architecture and urban design of equal or greater quality.

Community Design Element

<u>Goal CD-1 Image & Identity</u>: A dynamic, progressive city containing distinct and complete places that foster a positive sense of identity and belonging among residents, visitors, and businesses.

• CD-1.1 City Identity. We take actions that are consistent with the City being a leading urban center in Southern California while recognizing, enhancing, and preserving the character of our existing viable neighborhoods.

<u>Goal CD-2 Design Quality</u>: A high level of design quality resulting in neighborhoods, public spaces, parks, and streetscapes that are attractive, safe, functional, human-scale, and distinct.

- CD-2.1 Quality Building Design and Architecture. We encourage all development projects to convey visual interest and character through:
 - 1. Building volume, massing, and height to provide contextappropriate scale and proportion;
 - 2. A true architectural style which is carried out in plan, section, and elevation through all aspects of the building and site design and appropriate for its setting; and

- 3. Exterior building materials that are articulated, high quality, durable, and appropriate for the architectural style.
- CD-2.4 Urban, Mixed Use, and Transit-oriented Areas. We establish Place Types to require mixed use, urban, and transit-oriented areas to be designed and developed as pedestrian oriented areas that are integrated with adjacent neighborhoods and promote a vibrant, comfortable, and functional environment, as defined for each Place Type.
- CD-2.8 Safe Design. We incorporate defensible space design into new and existing developments to ensure the maximum safe travel and visibility on pathways, corridors, and open space and at building entrances and parking areas by avoiding physically and visually isolated spaces, maintaining visibility and accessibility, and using lighting.
- CD-2.9 Landscape Design. We encourage durable, sustainable, and drought-tolerant landscaping materials and designs that enhance the aesthetics of structures, create and define public and private spaces, and provide shade and environmental benefits.
- CD-2.11 Entry Statements. We encourage the inclusion of amenities, signage, and landscaping at the entry to neighborhoods, commercial centers, mixed use areas, industrial developments, and public places that reinforce them as uniquely identifiable places.

Goal CD-3 Urban, Mixed Use, and Transit-Oriented Place Types: Vibrant urban environments that are organized around intense buildings, pedestrian and transit areas, public plazas, and linkages between and within developments that are conveniently located, visually appealing and safe during all hours.

- CD-3.1 Unique Identity. We promote development that heightens the unique character and identity of each Place Type by requiring compatible land uses and land planning, site design, and building design that promotes an active public realm.
- CD-3.2 Comfortable, Human-Scale Public Realm. We require that public spaces, including streets, parks, and plazas on both public and private property be designed to maximize safety, comfort and aesthetics and connect to the citywide pedestrian, vehicular, and bicycle networks.
- CD-3.5 Active Frontages. We create lively pedestrian streetscapes by requiring primary building, business, and residential entrances, outdoor dining, and storefronts be located on ground floors adjacent to sidewalks or public spaces and designed to maximize safety, comfort, aesthetics, and the intended functionality (as defined by the Place Type).

HOUSING ELEMENT COMPLIANCE: The project is consistent with the Housing Element of the Policy Plan (general plan) component of The Ontario Plan, as the project site is not one of the properties in the Housing Element Sites contained in Tables B-1 and B-2 (Housing Element Sites Inventory) of the Housing Element Technical Report.

ENVIRONMENTAL REVIEW: The proposed Development Plan is categorically exempt from the requirements of the California Environmental Quality Act (CEQA) pursuant to Section 15332 (Class 32, In-Fill Development Projects) of the CEQA Guidelines and meets all of the following conditions:

- (a) The Project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations. The proposed Project is located within the PF (Public Facility) land use district of the Policy Plan Land Use Map, and the CIV (Civic) zoning district. The proposed Project is consistent with all applicable general plan policies, as well as with the CIV (Civic) zoning designation and applicable Development Code regulations.
- (b) The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses. The Project is proposed within the established boundaries of the City of Ontario, on approximately 1.2 acres of land, which is surrounded by Civic Center facilities to the north, south and west, and residential land uses to the east.
- (c) The Project site has no value as habitat for endangered, rare, or threatened species. The subject site is currently improved with a parking lot serving City Hall, is devoid of any flora or fauna, is regularly used for passenger vehicle parking by neighboring residents, and as such is not a suitable habitat for any endangered, rare, or threatened species.
- (d) Approval of the Project would not result in any significant effects relating to traffic, noise, air quality, or water quality. The proposed office building is similar to, and of no greater impact than other allowed uses and development projects within the CIV (Civic) zoning district. The Project would not result in any significant impacts through implementation of required state, regional, and local development and performance standards, and as demonstrated in the Categorical Exemption Justification Memorandum prepared for the Project in Attachment A.
- (e) The site can be adequately served by all required utilities and public services. All necessary wet and dry utilities are available for the Project site.

TECHNICAL APPENDIX:

Table 1: Surrounding Zoning and Land Uses

	Existing Land Use	Policy Plan Designation	Zoning Designation
Site	Parking lot	Public Facility	CIV (Civic)
North	Parking Structure	Mixed Use Downtown	MU-1 (Downtown Mixed Use) and CIV (Civic)
South	City Hall Annex and fire station	Public Facility	CIV (Civic)
East	Single-family Residential	Low Density Residential	LDR-5 (Low Density Residential)
West	City Hall	Public Facility	CIV (Civic)

Table 2: General Site & Building Statistics

ltem	Required Min./Max.	Provided (Ranges)	Meets Y/N
Street setback (in FT):	Collector and Local Street – 10 FT	22 FT – 23 FT 10 IN	Y
Interior Property Line setback (in FT):	15 FT	35 FT – 47 FT 8 IN	Y
Maximum height (in FT):	65 FT	61 FT	Y

Table 3: Parking Summary

Type of Use	Building Area (in SF)	Parking Ratio	Spaces Required	Spaces Provided
Public Administration	58,194 SF	Determined by the Zoning Administrator	236	236
Credit Union	2,981 SF	4.6 per 1,000 SF (0.0046/SF) of GFA	14	14
TOTAL				250

Exhibit A: PROJECT LOCATION MAP



Exhibit B: SITE PLAN

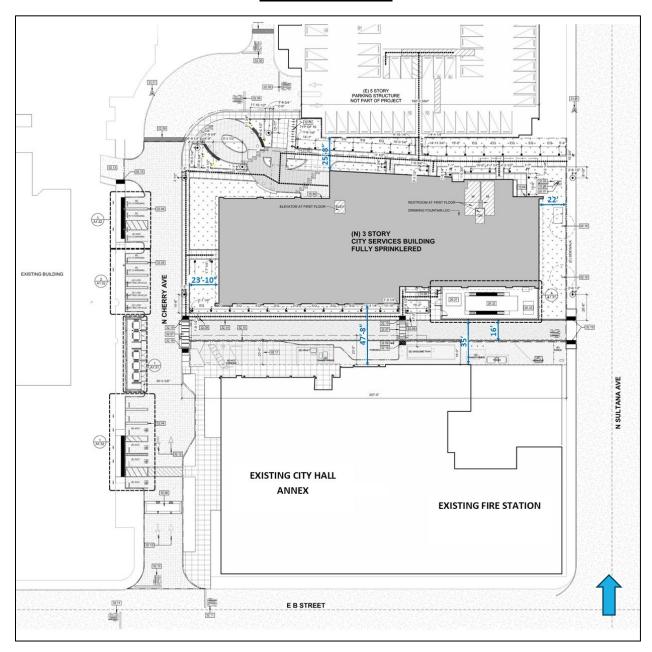
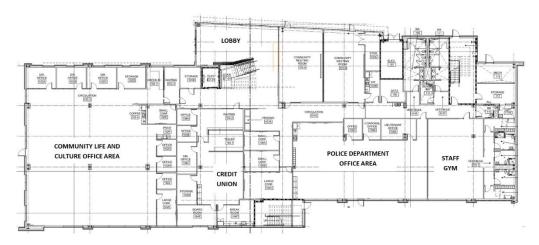


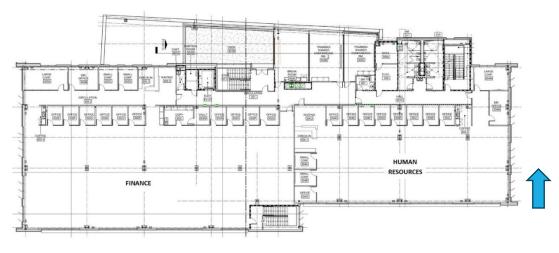
Exhibit C: FLOOR PLAN



First Floor

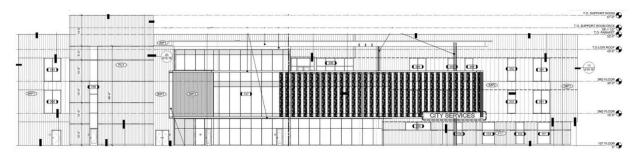


Second Floor

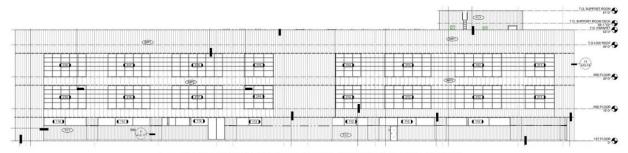


Third Floor

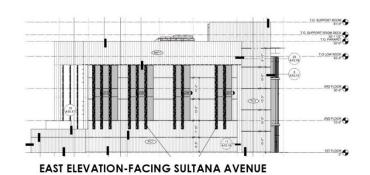
Exhibit D: ELEVATIONS



NORTH ELEVATION-FACING PARKING STRUCTURE



SOUTH ELEVATION-FACING DRIVE AISLE/CITY HALL ANNEX



PORTION

AND DESCRIPTION

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Page 14 of 18

WEST ELEVATION-FACING CITY HALL

Exhibit E: CONCEPTUAL ELEVATIONS



View looking south



View looking southeast



View looking northwest

Exhibit F: CONCEPTUAL LANDSCAPE PLAN



Exhibit G: SITE PHOTOS



Attachment A: Categorical Exemption Justification Memorandum for File No. PDEV24-002

(Document to follow this page)

MEMORANDUM

To: City of Ontario

From: Carey Fernandes, Dudek

Subject: Categorical Exemption Justification Memorandum for the Ontario City Hall Annex

Date: September 27, 2023

Attachments: A - Noise Technical Memorandum

B - Air Quality Technical Memorandum

C - Transportation Assessment

Executive Summary

This memorandum describes the proposed Ontario City Hall Annex Project (project) and provides justification that the Project is eligible for a Class 32 Exemption for Infill Development pursuant to CEQA Guideline Section 15332.a.

The Class 32 (Infill Development) categorical exemption requires projects to be consistent with applicable general plans and zoning designations, located within a city's limits on a site five acres or less, bordered by urban uses, and without significant impacts to traffic, noise, air quality, or water quality (CEQA Section 15332). The site must also be devoid of sensitive habitat and adequately served by public utilities. As detailed in this memorandum, the project qualifies for a Class 32 categorical exemption because it is consistent with the City's applicable land use regulations, proposed on an infill site that is less than 5 acres in size, and not anticipated to result in any significant environmental impacts. Further, the project does not meet any of the exceptions to categorical exemptions under CEQA Section 15300.2 (Exceptions).

The project is categorically exempt from CEQA because it meets the following requirements of CEQA Section 15332 (Infill Development):

Class 32 consists of projects characterized as in-fill development meeting the conditions described in this section.

- a) The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.
- b) The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses.
- c) The project site has no value as habitat for endangered, rare or threatened species.
- d) Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.
- e) The site can be adequately served by all required utilities and public services.

Introduction

The proposed project would consist of a new three-story civic office building of approximately 60,000 sf, with the potential of a fourth level future expansion. The building would provide office and support spaces for seven existing city departments currently housed in various locations around the existing Civic Center and neighboring buildings. The project would also include site improvements of roughly 28,500 square feet including hardscape and landscape areas, as well as a service access driveway.

The ground floor of the City Hall Annex building would consist of the Police Department, Broadband, and Community Life and Culture departments. The second floor would consist of the Information Technology and Community Improvement departments. The third floor would consist of the Finance and Human Resources departments.

Parking for the project would be provided in a new six-story, approximately 268,730 sf parking structure located just north of the City Hall Annex project site. The parking structure would contain 821 parking stalls and would be configured in three 90-degree, double-loaded parking bays. Each bay provides comfortable 9'x18' stalls with a 24' two-way drive aisle. Code-compliant EV charging and infrastructure will be provided throughout the building. The parking structure would include ingress/ egress locations to provide direct access to interior drive aisles with clear circulation to the ramping system within the parking structure. Each vehicle entry/exit would include a concrete island with infrastructure to add gate arms and parking controls in the future. Each entry/exit location would also include coiling grills to allow closure to vehicular traffic when desired. A Parking Guidance System would be provided throughout the facility notifying users of stall availability per level. This system would also include red/green indicator lights over each parking stall indicating availability. Covered and enclosed long-term bicycle parking would be provided within the parking structure on the ground level. Rooftop photovoltaic canopies over the parking stalls would generate clean energy and provide protection from the elements for parking stalls on the roof.

The site is located in the City of Ontario (City), comprised of approximately 4 acres of land located on the east edge of the existing Ontario City Hall Civic Center property, just east of Sultana Avenue and north of the existing Fire Department and City Office building to the south.

CEQA Determination - Class 32 Categorical Exemption Applies

The project qualifies for a Class 32 categorical exemption under the California Environmental Quality Act (CEQA). Pursuant to CEQA Guidelines Section 15332, Class 32 categorical exemptions can be used for projects characterized as in-fill development meeting the following conditions: (1) general plan and zoning consistency; (2) project is within city limits on a site of no more than 5 acres and is surrounded by urban uses; (3) project site has no value as habitat for endangered, rare, or threatened species; (4) project would not result in significant effects to traffic, noise, air quality, or water quality; and (5) the site can be adequately served by all required utilities and public services. Additionally, in order to qualify for a categorical exemption, a project cannot meet any of the "exceptions to exemptions" enumerated in CEQA Guidelines Section 15300.2.



Land Use Consistency: The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with the applicable zoning designation and regulations.

Land Use and Zoning Designations

The project site is located on two parcels (Assessor's Parcel Numbers 104-854-516 and 104-854-115) and is designated as Public Facility (PV) and Mixed Use (MU) in the City's General Plan and has a zoning designation of Civic (CIV) and Low Intensity Office (OL) in the City of Ontario.

City of Ontario General Plan

The City of Ontario General Plan ("The Ontario Plan" or "TOP" sets forth long-term goals, principles, and policies that guide growth and development in the City. The General Plan is comprised of a range of State-mandated elements, including, but not limited to, Land Use, Community Design, and Mobility.

Land Use Element

The Land Use Element establishes general policies and the vision for the future of the City. The City of Ontario consists of distinct neighborhoods and activity centers, corridors, and districts; diversity of residential, employment, retail, entertainment, community, and recreational services; and a world-class airport which are connected through a unified mobility system. The Land Use Element Sections include Balance, Compatibility, Flexibility, Phased Growth, and Airport Planning. The project is consistent with the relevant Land Use Element's goals and policies.

- LU-2 Compatibility Between a wide range of uses and resultant urban patterns and forms.
 - LU-2.1 Land Use Decisions. We minimize adverse impacts on adjacent properties when considering land use and zoning requests.
 - LU-2.6 Infrastructure Compatibility. We require infrastructure to be aesthetically pleasing and in context with the community character.
- LU-3 Staff, regulations and processes that support and allow flexible response to conditions and circumstances in order to achieve the Vision.
 - LU-3.1 Development Standards. We maintain clear development standards which allow flexibility to achieve our Vision and provide objective standards that ensure predictability and deliver the intended physical outcomes.

The project would be consistent with the land use designations of Public Facility and Mixed Use for the City Hall Annex and parking structure. The Public Facilities designation allows for civic centers, governmental institutions, police and fire stations, transportation facilities, museums, and public libraries. The Mixed-Use designation allows for a horizontal and/or vertical mixture of retail, service, office, restaurant, entertainment, cultural, and residential uses. The project includes a City Hall public facility building and parking structure to service the employees of the City Hall facilities, consistent with the designated uses.



Community Design Element

The Community Design Element establishes design qualities to help achieve the Vision of Ontario in the areas of economic development, land use, housing, community health, infrastructure, and transportation. The Community Design Element focuses on: Image & Identity; Design Quality; Urban, Mixed Use, and Transit-Oriented Place Types; Historic Preservation; and Protection of Investment. The project is consent with the following relevant goals and policies in the Community Design Element:

- CD-1 A dynamic, progressive city containing distinct and complete places that foster a positive sense of identity and belonging among residents, visitors, and businesses.
 - CD-1.1 City Identity. We take actions that are consistent with the City being a leading urban center in Southern California while recognizing, enhancing, and preserving the character of our existing viable neighborhoods.
 - CD-1.2 Place Types. We establish Place Types in urban, mixed use, and transit-oriented areas to foster the City's identity as a premier community and require new development within each Place Type to incorporate prescribed urban patterns, forms, and placemaking priorities.
 - CD-1.3 Existing Neighborhoods. We require the existing character of viable residential and non-residential neighborhoods be preserved, protected, and enhanced.
- CD-2 A high level of design quality resulting in neighborhoods, commercial areas, public spaces, parks, and streetscapes that are attractive, safe, functional, human-scale, and distinct.
 - CD-2.1 Quality Building Design and Architecture. We encourage all development projects to convey visual interest and character through:
 - 1. Building volume, massing, and height to provide context-appropriate scale and proportion;
 - 2. A true architectural style which is carried out in plan, section, and elevation through all aspects of the building and site design and appropriate for its setting; and
 - 3. Exterior building materials that are articulated, high quality, durable, and appropriate for the architectural style.
 - CD-2.4 Urban, Mixed Use, and Transit-oriented Areas. We establish Place Types to require mixed use, urban, and transit-oriented areas to be designed and developed as pedestrian oriented areas that are integrated with adjacent neighborhoods and promote a vibrant, comfortable, and functional environment, as defined for each Place Type.
 - CD-2.7 Sustainability. We collaborate with the development community to design and build neighborhoods, streetscapes, sites, outdoor spaces, landscaping, and buildings to reduce energy demand through solar orientation, maximum use of natural daylight, passive solar and natural ventilation, building form, mechanical and structural systems, building materials, and construction techniques.
 - CD-2.8 Safe Design. We incorporate defensible space design into new and existing developments to ensure the maximum safe travel and visibility on pathways, corridors, and open space and at



- building entrances and parking areas by avoiding physically and visually isolated spaces, maintaining visibility and accessibility, and using lighting.
- CD-2.9 Landscape Design. We encourage durable, sustainable, and drought-tolerant landscaping materials and designs that enhance the aesthetics of structures, create and define public and private spaces, and provide shade and environmental benefits.
- CD-2.10 Parking Areas. We require all development, including single-family residential, to minimize the visual impact of surface, structured, and garage parking areas visible from the public realm in an aesthetically pleasing, safe and environmentally sensitive manner. Examples include:
 - 1. Surface parking: Shade trees, pervious surfaces, urban run-off capture and infiltration, and pedestrian paths to guide users through the parking field.
 - 2. Structured parking: facade articulation, screening, appropriate lighting, and landscaping.
 - 3. Garage parking: providing access to single-family residential garages through alley access, recessing garages from the frontage to emphasize front doors or active living spaces.
- CD-2.12 Site and Building Signage. We encourage the use of sign programs that utilize complementary materials, colors, and themes. Project signage should be designed to effectively communicate and direct users to various aspects of the development and complement the character of the structures.
- CD-3 Vibrant urban environments that are organized around intense buildings, pedestrian and transit areas, public plazas, and linkages between and within developments that are conveniently located, visually appealing and safe during all hours.
 - CD-3.1 Unique Identity. We promote development that heightens the unique character and identity of each Place Type by requiring compatible land uses and land planning, site design, and building design that promotes an active public realm.
 - CD-3.2 Comfortable, Human-Scale Public Realm. We require that public spaces, including streets, parks, and plazas on both public and private property be designed to maximize safety, comfort and aesthetics and connect to the citywide pedestrian, vehicular, and bicycle networks.
 - CD-3.3 Complete and Connected Network. We require that pedestrian, vehicular, and bicycle circulation on both public and private property be coordinated to provide connections internally and externally to adjacent neighborhoods and properties (existing and planned) through a system of local roads and trails that promote walking and biking to nearby destinations (including existing and planned parks, commercial areas, and transit stops) and are designed to maximize safety, comfort, and aesthetics.
 - CD-3.4 Context-Aware and Appropriate Design. We require appropriate building and site design that complements existing development, respects the intent and identity of the Place Type, and provides appropriate transitions and connections between adjacent uses to ensure compatibility of scale, maintain an appropriate level of privacy for each use, and minimize potential conflicts.



- CD-3.5 Active Frontages. We create lively pedestrian streetscapes by requiring primary building, business, and residential entrances, outdoor dining, and storefronts be located on ground floors adjacent to sidewalks or public spaces and designed to maximize safety, comfort, aesthetics, and the intended functionality (as defined by the Place Type).
- CD-3.6 Managed Infrastructure. We collaborate with developers and property owners to facilitate development that realizes the envisioned character and functionality of the Place Type through the use of green and shared infrastructure within each Place Type.¹

The project would be located among a mixed use of building types and within a varied context of architectural precedent. The Civic Center campus to the south consists of multiple buildings such as the main City Hall building, Senior Center, and Fire Department buildings which rely heavily on concrete and CMU construction systems and finishes, while neighboring residential areas to the east and west of the project site vary from single family bungalows dating back to the early 20th century, to 3-level apartment buildings and condominiums built in the early 21st century featuring row style construction with plaster and brick finishes. To the north of the City Hall Annex project site, two new city projects represent an approach that references elements of the surrounding contextual architecture in material selections and form, while also reflecting the nature of each program and function.

The parking structure would utilize a "Pavilions in the Park" concept that creates visual diversity of forms, scale, and materiality to integrate with the local context and connect with people on a pedestrian level. The first component, called "pavilions," would take smaller architectural components within the structure, such as the staircases, elevator towers, and pedestrian entries, and articulates them as independent forms within the design. The second component, called "parks," would treat the areas between the "pavilions" with an abstract screening element to represent green space.

The City Hall Annex project would provide approximately 28,500 square feet of landscaping including the addition of shrubs, groundcover, trees, and palms. Pedestrian paving would include entry plaza paving and concrete sidewalk paving. The parking structure landscape would include a drought-tolerant, low maintenance planting pallet to match the adjacent Civic Center and surrounding buildings, along with a new irrigation system design employing the latest in drip irrigation technology for better distribution to high density decorative plantings and vines to connect the façade to natural landscapes.

Additionally, all project signage is required to comply with sign regulations provided in Ontario Development Code Division 8.1, and the project would comply to the City's development standards.

As discussed above, the project would be developed consistent with the City's General Plan and Public Facility (PF) and Mixed Use (MU) designations in the General Plan. Therefore, the proposed project would meet this criterion.

Site Size and Location/Surrounding Land Uses: The proposed development occurs within City limits on a Project site of no more than five acres substantially surrounded by urban uses.

The Project site is located entirely within the City of Ontario, on a site that is approximately 4 acres and is surrounded by established low density residential, mixed use, and public facility urban uses. The project area is served by the

¹ City of Ontario. 2022. The Ontario Plan. Approved August 16, 2022. Accessed June 6, 2023. https://www.ontarioca.gov/OntarioPlan.



15305

Omnitrans bus service; the nearest bust stop to the Project site is the Holt/Plum Eastbound (Eb) Far side (Fs), located approximately 0.1 miles to the south of the project site along E Holt Blvd which serves route 61 and 87. Further, the Project is located approximately 0.25 miles of the West Valley Connector Bus Rapid Transit.

Land uses and zoning surrounding the Project site are described as follows:

North

The project site is bordered directly to the north by an existing parking lot. Further to the north will be a future fire station. To the north of the project site is designated as Mixed Use (MU) and zoned as Low Intensity Office (OL).

East

The project site is bordered directly to the east by Sultana Avenue. Further to the east is Single Family Residential Development. To the east of the project site is designated as Low Density Residential (LDR) and zoned as Low Density Residential (LDR-5).

South

The project site is bordered directly to the south by the City HR & Finance Building and existing Fire Station. To the south of the project site is designated as Public Facility (PF) and zoned as Civic (CIV).

West

The project site is bordered to the west by the University of La Verne and Ontario City Hall. To the west of the project site is designated as Public Facility (PF) and Mixed Use (MU) and zoned as Civic (CIV) and Low Intensity Office (OL).

As demonstrated, the Project site is substantially surrounded by urban uses and therefore meets the criteria for site size and location.

Habitat: The Project site has no value as habitat for endangered, rare or threatened species.

The project site and adjacent properties are highly developed and surrounding land uses include a mix of public facility, mixed use, and residential uses. The site is almost completely covered with existing pavement; it is developed with two surface parking lots. Vegetation on the site is limited to decorative trees scattered throughout the project site that are not known to support any candidate, sensitive, or special-status species. No native habitat is located on the project site or on adjacent properties. Based on the urbanized nature of the project site and adjacent properties, in conjunction with a lack of suitable habitat for special-status species, the project site has no value as habitat for endangered, rare, or threatened species and thus meets the Class 32 categorical exemption criteria for lack of habitat.



Traffic, Noise, Air Quality, and Water Quality: Approval of the Project would not result in any significant effects relating to traffic, noise, air quality, or water quality.

Traffic

A transportation technical memorandum has been prepared by Dudek (Attachment C) assessing the potential transportation related impacts of the project. The transportation assessment was prepared consistent with the City of Ontario Traffic and Transportation Guidelines² and the City's Resolution No. 2020-071 adopting Vehicle Miles Traveled Thresholds for Determining Significance of Transportation Impacts Through CEQA in Conformance with SB 743³. The memo documents existing roadway, transit, pedestrian, and bicycle conditions, including intersection levels of service (LOS) at eight study intersections; estimates the project trip generation and distribution; analyzes the potential traffic impacts that would occur under the existing and Opening Year (2027) conditions with the project-added traffic; provides a vehicle miles traveled (VMT) screening analysis; and evaluates the proposed project site access.

Based on the intersection LOS analysis, all of the study intersections are currently and forecast to operate at satisfactory levels of service under Existing and Opening Year conditions, with and without the project-added traffic. There would be no project-related LOS impacts on the study intersections. The roadway segment LOS analysis also concluded that there would be no project-related impacts on the study roadway segments. All of the study area roadway segments are currently and forecast to operate at acceptable conditions under Existing and Opening Year conditions, with and without the project-added traffic.

Per the City's VMT screening criteria, the project would screen-out of a project-specific VMT analysis because it is within a Transit Priority Area (TPA) and also qualifies as a "Community Institution" (i.e., local government facility). Therefore, a comprehensive VMT analysis is not required and impacts to VMT can be presumed to be less than significant.

The design of the proposed project, including all egress/ingress and driveways would be designed according to all relevant City guidelines and would be reviewed by the City's Engineering Department. All driveways would be required to have adequate queue storage areas, would be perpendicular to existing roads, and would not cause hazards due to a geometric design feature.

Sidewalks are located on all streets within the project vicinity and the closest bicycle facility is a Class III bike route on G Street approximately 0.35 miles north of the site. The nearest transit route is provided along Holt Avenue, with bus stops provided near the intersection of Holt Boulevard and Plum Avenue, approximately one and half blocks southwest of the site as well as the West Valley Connector.. The Project would not interfere with existing public transit, bicycle, or pedestrian facilities, or impede the construction of new or the expansion of such facilities in the future. There would be no impacts to transit, pedestrian or bicycles access or facilities.

Therefore, based on the findings above, the transportation report concludes that project-related impacts on transportation would be less than significant.

City of Ontario. 2020. Resolution No. 2020-071 adopting Vehicle Miles Traveled Thresholds for Determining Significance of Transportation Impacts Through CEQA in Conformance with SB 743. June.



15305

² City of Ontario. 2013. City of Ontario Traffic and Transportation Guidelines. August.

Noise

A noise technical memorandum (report) has been prepared by Dudek (Attachment A). The report assesses potential noise impacts that could occur under the project. The report included the following components: documentation of existing noise conditions, discussion of noise modeling methodology and procedure, analysis of short-term noise generated by project construction, analysis of long-term noise generated by project operation, analysis of construction vibrations, and analysis of aviation noise exposure.

A Microsoft Excel-based noise prediction model emulating and using reference data from the Federal Highway Administration Roadway Construction Noise Model (RCNM) was used to estimate construction noise levels at the nearest occupied noise-sensitive land use. (Although the RCNM was funded and promulgated by the Federal Highway Administration, it is often used for non-roadway projects, because the same types of construction equipment used for roadway projects are often used for other types of construction.) Input variables for the predictive modeling consist of the equipment type, the duty cycle for each piece of equipment (e.g., percentage of time within a specific time period, such as an hour, when the equipment is expected to operate at full power or capacity and thus make noise at a level comparable to what is presented in Table 1), and the distance from the noise-sensitive receiver. The predictive model also considers how many hours that equipment may be on site and operating (or idling) within an established work shift. Conservatively, no topographical features were assumed in the modeling. The RCNM has default duty-cycle values (i.e., acoustical usage factor [AUF]) for the various pieces of equipment, which were derived from an extensive study of typical construction activity patterns. Those default duty-cycle values were used for this noise analysis, which is detailed in Attachment B, Construction Noise Prediction Model Worksheets, and produce the predicted results displayed in Table 1 for the studied scenario.

Table 1. Predicted Construction Noise Levels per Activity Phase

Construction Phase	8-Hour L _{eq} (dBA) at Nearest Residential Receptor (homes East of Sultana Ave.)	8-Hour L _{eq} (dBA) at University of La Verne Library Exterior	8-Hour L _{eq} (dBA) at Existing City of Ontario Fire Station
Demolition	79.4	80.4	77.8
Site Preparation	76.7	77.7	75.1
Grading	78.6	79.5	77.1
Building Construction	73.9	67.5	72.5
Paving	78.0	79.0	76.3
Architectural Coating	66.6	59.8	65.1

Notes: Leq = equivalent noise level; dBA = A-weighted decibels.

As presented in Table 1, estimated construction noise levels are not predicted to exceed 80 dBA L_{eq} over an 8-hour period for any of the listed activity phases at the façades of the nearest existing residential noise-sensitive receptors; hence, construction of the proposed Project would meet the FTA's 80 dBA 8-hour L_{eq} construction noise threshold. Additionally, construction noise levels would be compliant with similar FTA guidance, at 85 dBA 8-hour L_{eq} , for the exteriors of the nearest offsite non-residential (University of La Verne) and mixed-use municipal fire station land uses. Thus, potential noise impacts attributed to proposed Project construction activities would be considered less than significant.



An operational daytime scenario of the proposed Project was modeled that assumes all the HVAC equipment is operating simultaneously for a minimum period of one hour and the parking garage is active at the peak AM hour. Figure 2 of Attachment A displays the predicted noise contours associated with aggregate sound propagation from operating HVAC sound sources and the parking garage. An operational nighttime scenario was not modeled because it is assumed that the parking garage would not be active during nighttime hours in addition to reduced HVAC operations for the new Annex building, thus resulting in an expected nighttime operational level that would be compliant with City exterior noise requirements at the nearest noise-sensitive receptors.

The main concern associated with ground-borne vibration is annoyance; however, in extreme cases, vibration can cause damage to buildings, particularly those that are old or otherwise fragile. Some common sources of ground-borne vibration are trains and construction activities such as blasting, pile-driving, and heavy earth-moving equipment. The primary source of ground-borne vibration occurring as part of the Project is construction activity.

According to Caltrans, D-8 and D-9 Caterpillars, earthmovers, and trucks have not exceeded 0.10 inches/second PPV at 10 feet (Caltrans 2020). Since the closest off-site residence is located approximately 70 feet away from likely heavy construction equipment, vibration from construction activities at the closest sensitive receiver would not exceed the significance threshold of 0.20 ips PPV. The existing University of La Verne Office of Law building is closer but is still at least 65 feet from the proposed Project boundary. At such distances, predicted ground-borne vibration from the same types of earthmovers would be less than 0.012 ips PPV and thus below this annoyance-based threshold. With the building damage risk threshold of 0.5 ips PPV for new homes and modern commercial buildings that is higher than the annoyance limit, potential façade or other damage to existing nearby structures during construction of the proposed Project is not expected. Vibration-sensitive instruments and operations (such as laboratories, magnetic resonance imaging [MRI] facilities, microelectronics manufacturing) would likely require lower vibration thresholds and special consideration during construction, but no such facilities or land uses are currently apparent in the vicinity surrounding the proposed Project or at distances where such vibration effects on interior building processes might be adverse. Therefore, on these bases, proposed Project construction would not result in a significant impact associated with ground-borne vibration.

Additionally, the project site is not located within 2 miles of any airport. Therefore, the proposed project would not expose people residing or working in the project area to excessive noise levels associated with aircraft.

For these reasons, the report concludes that noise impacts related to project construction and operation would be less than significant.

Air Quality

An air quality technical memorandum has been prepared by Dudek (Attachment B). The California Emissions Estimator Model (CalEEMod) Version 2022.1.1.13 was used to estimate emissions from construction of the Project. CalEEMod input parameters, including the land use type used to represent the Project and its size, construction schedule, and anticipated use of construction equipment, were based on information provided by the applicant or default model assumptions when Project specifics were unavailable. CalEEMod was used to estimate operational emissions from area sources, including emissions from consumer product use, architectural coatings, and landscape maintenance equipment. In addition, a health risk assessment (HRA) was performed to evaluate potential health risk associated with construction and operation of the Project.

Several Project Design Features (PDFs) were accounted for in the Project modeling and analysis:



PDF-AQ-1 Prior to the commencement of construction activities for the Project, the grading and construction plan notes shall specify that all diesel-powered equipment is powered with California Air Resources Board (CARB)-certified Tier 4 Interim engines or better.

An exemption from this requirement may be granted if (1) the applicant documents equipment with Tier 4 Interim engines or better are not reasonably available, and (2) the required corresponding reductions in diesel particulate matter (DPM) emissions can be achieved for the Project from other combinations of construction equipment. Before an exemption may be granted, the applicant's construction contractor shall: (1) demonstrate that at least two construction fleet owners/operators in San Bernardino County were contacted and that those owners/operators confirmed Tier 4 Interim equipment or better could not be located within San Bernardino County during the desired construction schedule; and (2) the proposed replacement equipment has been evaluated using California Emissions Estimator Model (CalEEMod) or other industry standard emission estimation method and documentation provided to the City of Ontario to confirm that Project-generated construction emissions do not exceed the applicable South Coast Air Quality Management District (SCAQMD) cancer and non-cancer risk thresholds.

PDF-AQ-2 Prior to the commencement of construction activities at the Ontario City Hall Annex, the City shall require its construction contractor to water any exposed soils and/or soil stockpiles at least three times daily and water all demolished area at least two times per day or utilize another SCAQMD-approved dust control non-toxic agent in accordance with the manufacturer's specifications, to minimize fugitive dust during construction.

Table 2 presents the estimated maximum daily construction emissions generated during construction of the Project, which includes implementation of PDF-AQ-1 and PDF-AQ-2.

Table 2. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions

	voc	NOx	СО	SOx	PM ₁₀	PM _{2.5}	
Year	pounds p	pounds per day					
Summer							
2024	1.01	10.9	23.6	0.03	1.73	0.50	
Winter							
2024	0.96	20.6	29.3	0.08	7.97	4.09	
2025	34.8	10.9	21.2	0.03	1.73	0.50	
Maximum	34.8	20.6	29.3	0.08	7.97	4.09	
SCAQMD Threshold	75	100	550	150	150	55	
Threshold Exceeded?	No	No	No	No	No	No	

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District. Emissions include quantification of PDF-AQ-1 and PDF-AQ-2.

See Attachment B for complete results.

As shown in Table 2, the Project construction would not exceed SCAQMD's daily thresholds. Therefore, construction impacts associated with criteria air pollutant emissions would be less than significant.



Table 3 presents the Project-related emissions during operation.

Table 3. Estimated Maximum Daily Operational Criteria Air Pollutant Emissions

	voc	NOx	со	SOx	PM ₁₀	PM _{2.5}
Emissions Source	• F	ounds pe	r Day			
Summer						
Area	3.84	0.12	14.3	<0.005	0.02	0.03
Energy	0.02	0.44	0.37	<0.005	0.03	0.03
Mobile	6.37	6.34	60.4	0.15	12.6	3.27
Stationary	1.70	7.59	4.33	0.01	0.25	0.25
Subtotal	11.9	14.5	79.4	0.16	12.9	3.58
Winter						
Area	1.50					-
Energy	0.02	0.44	0.37	<0.005	0.03	0.03
Mobile	5.91	6.82	50.2	0.14	12.6	3.27
Stationary	1.70	7.59	4.33	0.01	0.25	0.25
Subtotal	9.13	14.9	54.9	0.15	12.9	3.56
Maximum	11.9	14.9	79.4	0.16	12.9	3.58
 SCAQMD Threshold 	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter; SCAQMD = South Coast Air Quality Management District. See Attachment B for complete results. Columns may not add due to rounding.

As shown in Table 3, the Project would not exceed SCAQMD's significance thresholds during operations. Therefore, operational impacts associated with criteria air pollutant emissions would be less than significant.

The maximum allowable daily emissions that would satisfy the SCAQMD localized significance criteria for SRA 33 are presented in Table 4 and compared to the maximum daily on-site construction emissions.

Table 4. Localized Significance Thresholds Analysis for Project Construction - Unmitigated

Maximum On-Site	NO ₂	со	PM ₁₀	PM _{2.5}		
Emissions	Pounds per Day					
2024	14.8	28.3	5.38	2.73		
2025	9.30	14.7	0.10	0.09		
Maximum	14.8	28.3	5.38	2.73		
SCAQMD LST	144	1,047.5	5.5	4.5		
LST Exceeded?	No	No	No	No		

Source: SCAQMD 2009.

Notes: NO_2 = nitrogen dioxide; CO = carbon monoxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District; LST = localized significance threshold.

Localized significance thresholds are shown for a 1.5-acre Project site corresponding to a distance to a sensitive receptor of 25 meters. Emissions include quantification of PDF-AQ-1 and PDF-AQ-2.



As shown in Table 4, the Project LST would not exceed the established significance thresholds, and thus would result in a less than significant impact to sensitive receptors during construction.

Results of the construction HRA are presented in Table 5. As there is no reference exposure level for acute health impacts from DPM, acute risk was not evaluated in the construction HRA.

Table 5. Summary of Maximum Cancer and Chronic Health Risks - Construction

Impact Analysis	Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Maximally Exposed Individual Resident	Cancer Risk	Per Million	8.28	10	Less than Significant
	Chronic Hazard Index	Index Value	0.0077	1.0	Less than Significant

Source: See Attachment B for complete results.

Notes: CEQA = California Environmental Quality Act; HRA = Health Risk Assessment

Emissions include quantification of PDF-AQ-1.

As shown in Table 5, Project construction activities would result in a Residential Maximum Individual Cancer Risk of 8.28 in 1 million, which is less than the significance threshold of 10 in 1 million. Project construction would result in a Residential Chronic Hazard Index of 0.0077, which is below the 1.0 significance threshold. Impacts would be less than significant.

Results of the operational HRA are presented in Table 6.

Table 6. Summary of Maximum Cancer and Chronic Health Risks - Operations

Impact Analysis	Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Maximally Exposed Individual Resident	Cancer Risk	Per Million	3.09	10	Less than Significant
	Chronic Hazard Index	Index Value	0.0008	1.0	Less than Significant

Source: See Attachment B for complete results.

Notes: CEQA = California Environmental Quality Act; HRA = Health Risk Assessment

As shown in Table 6, Project operational activities would result in a Residential Maximum Individual Cancer Risk of 3.09 in 1 million, which is less than the significance threshold of 10 in 1 million. Project operations would result in a Residential Chronic Hazard Index of 0.0008, which is below the 1.0 significance threshold. Impacts would be less than significant.

In summary, the Project would not result in any potentially significant contribution to local or regional concentrations of nonattainment pollutants and would not result in a significant contribution to the adverse health impacts associated with those pollutants. Impacts would be less than significant.

Criteria air pollutant emissions generated during construction and operation of the Project would not exceed SCAQMD's significance thresholds or result in a cumulatively considerable net increase in emissions. Similarly, the emissions would also not exceed the LST significance thresholds for sensitive receptors during construction or



operations or create a CO hotspot. Construction and operational health risk levels would also be below the applicable SCAQMD thresholds. Overall, the Project would result in less than significant air quality impacts.

Water Quality

The Project is not anticipated to have a substantial adverse effect on water quality. CEQA threshold questions pertaining to water quality (from Appendix G of the CEQA Guidelines) are addressed below.

Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Construction

Potential short-term, construction-related stormwater pollution associated with the Project may include (1) the handling, storage, and disposal of construction materials containing pollutants; (2) the maintenance and operation of construction equipment; and (3) earthmoving activities that, when not controlled, may generate soil erosion via stormwater runoff or operation of mechanical equipment.

The Project site is located within a developed urbanized area and does not contain any streams, rivers, or waterbodies. Construction activities associated with the Project are subject to implementation of stormwater BMPs. Water quality impacts could occur during construction if activities resulted in spilled or leaked petroleum products and/or entrainment of sediment, debris, or other construction-related materials into stormwater runoff. To avoid adverse impacts on water quality, the applicant and their construction contractors would be required to conduct construction activities in accordance with the statewide Construction General Permit (Order No. 2009-0009-DWQ/CAS000002, as amended). This would include compliance with the Phase I Regional Municipal Separate Storm Sewer System (MS4) Permit (National Pollutant Discharge Elimination System (NPDES) Permit No. CAS0109266), which requires regulation of surface water quality. Under the NPDES MS4 Permit, the development of an acre or more of land must file a notice of intent with the State Water Resources Control Board (SWRCB) to comply with the state NPDES Construction General Permit. Implementation of this permit would require the development of a site-specific stormwater pollution prevention plan (SWPPP) for construction activities. The SWPPP is required to identify BMPs that protect stormwater runoff and ensure avoidance of substantial degradation of water quality. Typical BMPs that could be incorporated into the SWPPP to protect water quality include the following:

- Diverting off-site runoff away from the construction site;
- Vegetating landscaped/vegetated swale areas as soon as feasible following grading activities;
- Placing perimeter straw wattles to prevent off-site transport of sediment;
- Using drop inlet protection (filters and sand bags or straw wattles), with sandbag check dams within paved areas;
- Regular watering of exposed soils to control dust during demolition and construction;
- Implementing specifications for demolition/construction waste handling and disposal;
- Using contained equipment wash-out and vehicle maintenance areas;
- Maintaining erosion and sedimentation control measures throughout the construction period;
- Stabilizing construction entrances to avoid trucks from imprinting soil and debris onto adjoining roadways; and,
- Training, including for subcontractors, on general site housekeeping.



The SWPPP would be subject to review and approval by the City. In addition, pursuant to the City's Municipal Code Chapter 6.6 Article 5⁴, a Stormwater Quality Management Plan (SWQMP) must be submitted and approved by the City prior to the issuance of any grading or building permit. The SWQMP shall identify all BMPs that will be incorporated into the project to control stormwater and non-stormwater pollutants during and after construction. Implementation of BMPs to minimize erosion and sedimentation would ensure that Project construction would not substantially degrade surface or groundwater quality.

Operation

Project operations would not introduce any significant industrial discharges, and therefore, would not violate any water quality standards or waste discharge requirements related to non-stormwater discharges. The existing Project site is developed as paved parking lots. The site is primarily impervious, and the existing drainage is a sheet flow from the parking lot (impervious area). The primary stormwater pollutants that may occur at the project site are spilled or leaked petroleum products from parked vehicles on the site, household hazardous materials used for maintenance and cleaning at the proposed building, and sediments from landscaping planters.

During redevelopment of the Project site, modern stormwater runoff design requirements and operational practices would be required pursuant to City regulatory requirements. Compliance with such requirements may reduce the volume of stormwater runoff from the site and would likely improve the quality of such runoff. The SWQMP shall accompany all development permit applications. Prior to obtaining any City-issued grading and/or construction permits the developer/owner shall provide evidence of compliance with the General Construction Permit by providing a copy of the Waste Discharger's Identification Number (WDID) to the City's Engineering Department⁴. Therefore, the Project would capture and convey stormwater consistent with applicable regulations and would not substantially degrade surface or groundwater quality.

Upon Project implementation, the site would be covered with a new three-story civic office, a new six-story parking structure, and landscaped areas. Some surface flow is expected to drain towards the paved driveways, which would then also drain into the City's stormwater system. Stormwater collected on the rooftop of the proposed commercial buildings would be directed to landscaped areas for disbursement and would comply with the City's stormwater regulations. The project site would also implement source control and site design BMPs as listed in the SWQMP or the "California Stormwater Best Management Practice Handbook."

Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

A significant impact may occur if the Project were to substantially alter drainage patterns, resulting in adverse effects. The existing development of paved surface will be removed and replaced with a new building and parking structure. The proposed parking structure requires surface reprofiling and a modification of drainage system. The

City of Ontario. 2022. City of Ontario, California Municipal Code. December 20, 2022. Accessed August 2023. https://codelibrary.amlegal.com/codes/ontarioca/latest/ontario_ca/0-0-0-35678



15305

storm drain catch basins, currently receiving flows from the subject site, are being reconstructed at this location. With the realignment of the drainage in this area, drainage from this location is extended into the structure.

The Project site does not contain any streams, rivers, or waterbodies. Upon compliance with the regulatory requirements described above, the proposed Project is not anticipated to result in substantial erosion of siltation, to increase the rate or amount of surface runoff from the site or create runoff that would exceed the capacity of the stormwater drainage system. Due to the developed nature of the Project site and required compliance with existing regulations, any alterations to the existing drainage pattern on the Project site would not result in significant, adverse impacts.

Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

In 2014, California enacted the Sustainable Groundwater Management Act (SGMA) to bring the state's groundwater basins into a more sustainable regime of pumping and recharge. The legislation provides for the sustainable management of groundwater through the formation of local groundwater sustainability agencies and the development and implementation of Groundwater Sustainability Plans (GSPs). The project site is within the Upper Santa Ana Valley – Chino Basin which is designated as very low priority and not required to develop GSPs⁵.

As noted above, the Project is not expected to violate any water quality standards, and measures would be taken both during construction and throughout operation to prevent potential contaminants from leaving the site by runoff. Although unlikely, during construction, dewatering may occur if groundwater is encountered within the proposed excavations. However, dewatering would be temporary, limited to the construction period, and would not occur in quantities that could substantially deplete groundwater supplies. Through compliance with Regional Water Quality Control Board requirements and implementation of a SWPPP (construction phase), the Project would not conflict with or obstruct implementation of the Sustainable Groundwater Management Act. Thus, the proposed Project would not result in substantial conflict nor obstruction of the implementation of a water quality control plan or sustainable groundwater management plan. Additionally, the Project site is primarily impervious under existing conditions and is not considered a significant groundwater recharge area. Therefore, no significant, adverse impacts would be caused due to conflict with a water quality control plan or sustainable groundwater management plan.

Summary

In conclusion, development of the proposed Project has been evaluated for its potential to result in significant effects relating to traffic, noise, air quality, and water quality. No significant effects were identified, as described above and further substantiated in Attachments A, B, and C to this memorandum. As such, the Project meets the Class 32 categorical exemption criteria for not having significant impacts to traffic, air quality, noise, or water quality.

Utilities and Public Services: The Project site can be adequately served by all required utilities and public services.

The project is located in an existing highly urban area served by existing public utilities and services. A considerable increase in demand for services or utilities would not be anticipated with the implementation of

Department of Water Resources (DWR). 2023. SGMA Basin Prioritization Dashboard. Accessed August 2023. https://gis.water.ca.gov/app/bp-dashboard/final/



15305

the proposed project since it is located on an existing urban infill location previously developed with parking lots and surrounded by urban development.

Public utilities are available to serve the project, provided by the Ontario Municipal Utilities Company. The City Hall Annex project would require plumbing, heating, ventilation, air conditioning, fire protection, and electrical utilities. The proposed City Hall Annex building would provide trash location for the new and existing City Hall Annex. The proposed parking structure would require domestic water and fire water. The domestic water and fire connection points are proposed along the southern portion of the site, minimizing trenching required to service the parking structure. The sewer service is designed for a short run connecting to the line to the existing sewer main in Cherry Avenue.

The Project site will be adequately served by all public utilities and services given that the construction of a Public Facility building and parking structure will be on a site which has been previously developed and is consistent with the General Plan. Therefore, there project meets this requirement.

CEQA Section 15300.2: Exceptions to the Use of Categorical Exemptions

There are five exceptions that must be considered in order to find a project exempt under Class 32:

- A. **Cumulative Impacts.** All exemptions for these classes are inapplicable when the cumulative impact of successive projects of the same type in the same place, over time is significant.
 - There is no evidence to conclude that significant impacts will occur based on past project approvals or that the proposed project's impacts are cumulatively considerable when evaluating any cumulative impacts associated with construction air quality, noise, transportation or water quality in the area surrounding the proposed project.
 - The project, and all future projects, will be required to comply with all applicable local, regional, and state laws, regulations, and guidelines, and as described above, any potential impact cause by the project's construction and operation would continue to be less than significant and would not contribute significantly to regional cumulative impact in the broader project region. Therefore, this exception does not apply.
- B. **Significant Effect Due to Unusual Circumstances.** A categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances.
 - The project proposes a new three-story City Hall Annex building and a new six-story parking in an area zoned and designated for such development. The surrounding area is developed with a mixture of surrounding land uses include a mix of public facility, mixed use, and residential uses; as such, the proposed project is not unusual in character for the area. The project site is approximately 4 acres and almost entirely covered by impervious surface. As described above, the proposed Project has been studied for its potential to cause environmental impacts in a variety of categories, including air quality, noise, traffic, and water quality. No significant effects were identified in those categories.

As indicated above, the project would not result in impacts to biological resources as none exist on the project site or surrounding area. Also, the project site not located in or near a state responsibility area or



lands classified as very high fire hazard severity zones by CALFIRE⁶. The project is located with a X Flood Zone as designated by the Federal Emergency Management Agency⁷. This designation indicates that the project area is subject to inundation by a 0.2-percent-annual-chance flood event; and the area is subject to 1-percent-annual-chance of flood with average depth less than one foot or with drainage areas of less than one square mile. This zone designation, and its implications, does not represent an unusual circumstance.

There is no substantial evidence that this project will cause a significant impact. Thus, there are no unusual circumstances which may lead to a significant effect on the environment, and this exception does not apply.

C. Scenic Highways. A categorical exemption shall not be used for a project which may result in damage to scenic resources, including but not limited to, trees, historic buildings, rock outcroppings, or similar resources, within a highway officially designated as a state scenic highway.

There are no designated State Scenic Highways in the City of Ontario. No highways are eligible for State Scenic Highway designation within the City. Therefore, the Project would not create any impacts within a designated state scenic highway, and this exception does not apply.⁸

D. Hazardous Waste Sites. A categorical exemption shall not be used for a project located on a site which is included on any list compiled pursuant to Section 65962.5 of the Government Code.

According to EnviroStor, the State of California's database of Hazardous Waste Sites, the project site is not identified as a hazardous waste site; the nearest Cleanup Site is a closed, non-operating, corrective action site, General Electric Company, located approximately 0.30 miles south of the project site.⁹ The City of Ontario Fire Department, located adjacent to the project site to the south, has a closed Cleanup Program Site. Additionally, one closed State Water Board Leaking Underground Storage Tank (LUST) Cleanup Site, Ontario Police Department, is located adjacent to the project site to the south.¹⁰ However, prior soil and groundwater contamination from these sites has been appropriately treated and did not induce significant impact to the subsurface environment of the project site.

There are no active LUST cleanup sites or other sites identified with potential environmental concern within the immediate vicinity of the project site. Therefore, the project site is not identified as a hazardous waste site and is not in the vicinity of a hazardous waste site, and this exception does not apply.

E. **Historical Resources.** A categorical exemption shall not be used for a project which may cause a substantial adverse change in the significance of a historical resource.

The project property is currently occupied by a city parking lot which will be demolished to support the proposed City Hall Annex building and six-level parking structure. The site is an existing urban infill location on previously

State Water Resources Control Board. 2023. GeoTracker. Accessed June 6, 2023. https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=320+E+D+St



⁶ CALFIRE (California Department of Forestry and Fire Protection). 2022. San Diego County – State Responsibility Area Fire Hazard Severity Zones. November 21, 2022. https://osfm.fire.ca.gov/media/vcym3avh/fhsz_county_sra_11x17_2022_sanbernardino_ada.pdf

FEMA (Federal Emergency Management Agency). 2021. FEMA's National Flood Hazard Layer (NFHL) Viewer. December 2021. https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd

Caltrans. 2018. California State Scenic Highway System Map. Accessed June 5, 2023.

Galifornia Department of Toxic Substances Control. 2023. EnviroStor. Web Mapping Application. Accessed June 6, 2023. https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=425+E+B+St+Ontario%2C+CA+91764

disturbed land. The project site is a parking lot which serves city employees and is not likely to acquire historic significance. Additionally, the City of Ontario does not designate any historic landmarks on the project site¹¹. As such, development of the Project would not cause a substantial adverse change in the significance of a historical resource, and this exception does not apply.

Conclusion

For the reasons described above, the Project meets all of the criteria for a Class 32 Categorical Exemption

City of Ontario. 2012. City of Ontario Historic Landmarks. July 2012. https://www.ontarioca.gov/sites/default/files/Ontario-Files/Planning/Historic_Preservation/designated_landmarks.pdf



15305

MEMORANDUM

To: City of Ontario

From: Cole Martin, INCE & Jim Cowan, INCE Bd. Cert., Dudek
Subject: Ontario City Hall Annex Noise Technical Memorandum

Date: May 31, 2023

cc: Mark Storm, INCE Bd. Cert., Dudek

Attachment(s): Attachment A – Field Noise Measurement Data

Attachment B - Construction Noise Prediction Model Worksheets

Attachment C - Traffic Noise Model Input/Output

Attachment D - Stationary Source Operation Noise Modeling Reference Material

1 Introduction and Purpose

The purpose of this memorandum is to present predicted noise levels from construction and operation of the Ontario City Hall Annex Project (Project) located in the City of Ontario, California (City), and evaluate potential noise impacts resulting from Project implementation under the California Environmental Quality Act (CEQA).

This memorandum is intended to support a Class 32 CEQA exemption for the Project. The Class 32 CEQA exemption consists of Projects characterized as in-fill development meeting the following conditions (*emphasis* added):

- a) The Project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.
- b) The proposed development occurs within city limits on a Project site of no more than five acres substantially surrounded by urban uses.
- c) The Project site has no value as habitat for endangered, rare or threatened species.
- d) Approval of the Project would not result in any significant effects relating to traffic, **noise**, air quality, or water quality.
- e) The site can be adequately served by all required utilities and public services.

The Class 32 exemption may be used where above-noted conditions (a) through (e) are fulfilled, where it can be seen with certainty that the proposed Project could not have a significant effect on the environment.

The contents and organization of this memorandum are as follows: (1) project description; (2) background; (3) environmental setting; (4) regulatory setting; (5) assessment methodology and results; and (6) references cited.

2 Project Description

The Project site is located west of N. Sultana Avenue near its intersections with E. Nocta Street and Lynn Haven Street. The Project would consist of a new three-story civic office building of approximately 60,000 sf, with the potential for a fourth level future expansion. The Project would also include site improvements of roughly 28,500 square feet including hardscape and landscape areas, as well as a six-story parking structure totaling approximately 268,730 square feet.

3 Environmental Setting

Due to the technical nature of noise and vibration impact assessment, a brief overview of basic noise and vibration principles and descriptors is provided below, as well as a summary of the existing noise environment.

3.1 Noise and Vibration Basics

3.1.1 Sound

Noise is defined as unwanted sound. Sound may be described in terms of level or amplitude (measured in decibels [dB]), frequency or pitch (measured in hertz or cycles per second), and duration (measured in seconds or minutes). The standard unit of measurement of the amplitude of sound is the decibel. Because the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale is used to relate noise to human sensitivity. The dBA scale performs this compensation by discriminating against low and very high frequencies in a manner approximating the sensitivity of the human ear at moderate sound levels. Several descriptors of noise (noise metrics) exist to help predict average community reactions to the adverse effects of environmental noise, including traffic-generated noise, on a community. These descriptors include the equivalent noise level over a given period (L_{eq}), the statistical sound level, the day-night average noise level (L_{dn}), and the Community Noise Equivalent Level (CNEL). Each of these descriptors uses units of dBA. Table 1 provides examples of A-weighted noise levels from common sounds. In general, human sound perception is such that a change in sound level of 3 dBA is barely noticeable, a change of 5 dBA is clearly noticeable, and a change of 10 dBA is perceived as doubling or halving the sound level.

Table 1. Typical Exterior and Interior Sound Levels in the Environment

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
_	110	Rock band
Jet flyover at 300 meters (1,000 feet)	100	_
Gas lawn mower at 1 meter (3 feet)	90	_
Diesel truck at 15 meters (50 feet), at 80		Food blender at 1 meter (3 feet)
kilometers per hour (50 mph)	80	Garbage disposal at 1 meter (3 feet)
Noisy urban area, daytime		Vacuum cleaner at 3 meters (10
gas lawn mower at 30 meters (100 feet)	70	feet)
Commercial area		
Heavy traffic at 90 meters (300 feet)	60	Normal speech at 1 meter (3 feet)
Quiet urban daytime	50	Large business office
Quiet urbair uaytime	50	Dishwasher, next room
Quiet urban nighttime	40	Theater, large conference room (background)



Table 1. Typical Exterior and Interior Sound Levels in the Environment

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Quiet suburban nighttime	30	Library
Quiet rural nighttime	20	Bedroom at night, concert hall (background)
_	10	Broadcast/recording studio
Lowest threshold of human hearing	0	Lowest threshold of human hearing

Source: Caltrans 2013.

Note: dBA = A-weighted decibel.

The L_{eq} value is a sound level energy-averaged over a specified period (typically no less than 15 minutes for environmental studies). It is a single numerical value that, if constant over time, represents the same amount of variable sound energy received by a receptor during a time interval. For example, a 1-hour L_{eq} measurement would represent the average amount of energy contained in all the noise that occurred in that hour. L_{eq} is an effective noise descriptor because of its ability to assess the total time-varying effects of noise on sensitive receptors.

Unlike the L_{eq} metric, L_{dn} and CNEL descriptors always represent 24-hour periods, often on an annualized basis. L_{dn} and CNEL also differ from L_{eq} because they apply a time-weighted dB adjustment designed to emphasize noise events that occur during the evening and nighttime hours (when speech and sleep disturbance is of more concern). "Time weighted" refers to the fact that L_{dn} and CNEL penalize noise that occurs during certain sensitive periods. In the case of CNEL, noise occurring during the daytime (7:00 a.m.–7:00 p.m.) receives no penalty. Noise during the evening (7:00 p.m.–10:00 p.m.) is penalized by adding 5 dB, while nighttime (10:00 p.m.–7:00 a.m.) noise is penalized by adding 10 dB. L_{dn} differs from CNEL in that the daytime period is defined as 7:00 a.m.–10:00 p.m., thus eliminating the evening period. L_{dn} and CNEL are the predominant criteria used to measure roadway noise affecting residential receptors. These two metrics generally differ from one another by no more than 0.5 dB to 1 dB and, as such, are often treated as equivalent to one another.

3.1.2 Vibration

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Vibration can be a serious concern, causing buildings to shake and rumbling sounds to be heard. In contrast to noise, vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of vibration are trains, buses on rough roads, and construction activities, such as blasting, pile driving, and heavy earthmoving equipment.

Several different methods are used to quantify vibration. Peak particle velocity (PPV), expressed in inches per second (ips), is defined as the maximum instantaneous peak of the vibration signal and is most frequently used to describe vibration impacts to buildings. The root mean square (RMS) amplitude is most frequently used to describe the effect of vibration on the human body and is defined as the average of the squared amplitude of the signal. Decibel notation (VdB) is commonly used to describe this RMS magnitude with respect to a reference value, which acts to compress the range of numbers required to discuss vibration in the context of impact assessment.



The calculation to determine PPV at a given distance is as follows:

$$PPV_{rcvr} = PPV_{ref}*(25/D)^n$$

Where:

PPV_{rovr} = the peak particle velocity in inches per second of the equipment adjusted for distance (i.e., at the receiver)

PPV_{ref} = the reference peak particle velocity in inches per second at 25 feet

D = the distance from the equipment to the receiver

n = an exponent, for which a value of 1.1 would be consistent with Caltrans suggestion for class III "hard soils" composed of dense compacted sand or dry consolidated clay.

The above PPV_{rcvr} value can be converted to an RMS vibration velocity level as follows, where the crest factor (CF) is assumed to be a value of 4 per FTA guidance (FTA 2018):

$$VdB_{rcvr} = 20*LOG(PPV_{rcvr}/(CF*0.000001))$$

3.1.3 Sensitive Receptors

Noise- and vibration-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas would be considered noise- and vibration-sensitive and may warrant unique measures for protection from intruding noise. Sensitive receptors in the vicinity of the Project site consist of residential uses located to the east, south, and north of the Project site, a fire station to the south of the Project site, the University of La Verne College of Law to the west of the Project site, and Conversation Park to the southwest of the Project site. These sensitive receptors represent the nearest sensitive land uses with the potential to be impacted by construction and/or operation of the Project.

3.2 Existing Noise Conditions

Sound pressure level measurements were conducted at six (6) representative positions in the vicinity of the Project site on May 22, 2023, to characterize and quantify samples of the existing outdoor ambient noise environment. The noise measurement locations are shown in Figure 1. Table 2 provides a summary of the noise measurement results as well as the locations, site description, noted noise sources, and times the noise level measurements were conducted. As shown in Table 2, short-term (10 to 15 minutes duration) noise levels ranged from approximately 53 dBA Leq (at location ST5) to 65 dBA Leq (at locations ST3 and ST6). The measurements were conducted by an attending Dudek investigator with a Rion NL-52 model sound level meter equipped with a windscreen-protected, 0.5-inch diameter pre-polarized condenser microphone with pre-amplifier. The sound level meter meets the current American National Standards Institute (ANSI) standard for a Type 1 (Precision Grade) sound level meter. The accuracy of the sound level meter was verified using a field calibrator before and after the measurements, and the measurements were conducted with the microphone positioned approximately 5 feet above the ground.



Table 2. Measured Outdoor Ambient Noise Levels

Survey Location	Description (Noted Noise Sources)	Time (hh:mm)	L _{eq} (dBA)	L _{max} (dBA)	L _{min} (dBA)
ST1	Eastern side of the Ontario City Hal (distant aircraft, distant landscaping, distant industrial, distant traffic, rustling leaves)	14:17 - 14:31	60.1	84.9	47.2
ST2	Adjacent to the residence at 364 E. B St. (birds, distant aircraft, distant dog barking, distant industrial, distant traffic, rustling leaves)	14:33 - 14:48	57.7	76.7	46.7
ST3	Southeast corner of Sultana Ave. and Nocta St. (distant aircraft, distant conversations/yelling, distant traffic, rustling leaves)	15:05 - 15:18	65.1	80.1	47.4
ST4	Adjacent to the residence at 500 Lynn Haven St. (birds, distant aircraft, distant dog barking, distant landscaping, distant industrial, distant traffic, rustling leaves)	14:53 - 15:03	59.4	65.3	59.4
ST5	Southwest corner of the University of La Verne College of Law (birds, distant conversation/yelling, distant industrial, rusting leaves)	14:00 - 14:15	48.153. 1	67.6	46.9
ST6	Adjacent to the residence at 405 E. D St. (distant conversations/yelling, distant dog barking, distant traffic, rustling leaves)	15:24 - 15:39	65.2	82.9	47.0

Note: L_{eq} = equivalent continuous sound level (time-averaged sound level); dBA = A-weighted decibels; L_{max} = maximum sound level during the measurement interval; L_{min} = minimum sound level during the measurement interval





SOURCE: Google 2023; Dudek 2023

DUDEK





FIGURE 1

Project Site and Noise Measurement Locations

Ontario City Annex Project

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Attachment A provides sample digital photographs of the field noise level survey locations, measurement data, and Dudek field investigator notes.

4 Regulatory Setting

The following subsections summarize relevant laws, ordinances, regulations, policies, standards, and guidance that establish noise and vibration impact significance assessment criteria for the proposed Project.

4.1 Federal

There are no federal noise standards that would directly regulate environmental noise during construction and operation of the Project. The following is provided because guidance summarized herein is used or pertains to the analysis.

4.1.1 Federal Transit Administration

In its Transit Noise and Vibration Impact Assessment guidance manual, the Federal Transit Administration (FTA) recommends a daytime construction noise level threshold of 80 dBA L_{eq} over an 8-hour period (FTA 2018) when "detailed" construction noise assessments are performed to evaluate potential impacts to community residences surrounding a Project. For a commercial use, the limit would be an 85 dBA 8-hour L_{eq} value. Although these FTA guidance thresholds are not regulations in the context of this Project, they can serve as a quantified standard in the absence of such limits at the state and local jurisdictional levels.

4.1.2 Federal Interagency Committee on Noise

Some guidance regarding the determination of a substantial permanent increase in ambient noise levels in the Project vicinity above existing levels is provided by the 1992 findings of the Federal Interagency Committee on Noise (FICON 1992), which assessed the annoyance effects of changes in ambient noise levels resulting from aircraft operations. The FICON recommendations are based upon studies that relate aircraft and traffic noise levels to the percentage of persons highly annoyed by the noise. Annoyance is a qualitative measure of the adverse reaction of people to noise that generates speech interference, sleep disturbance, or interference with the desire for a tranquil environment.

The rationale for the FICON recommendations is that it is possible to consistently describe the annoyance of people exposed to transportation noise in terms of L_{dn}. The changes in noise exposure that are shown below are expected to result in equal changes in annoyance at sensitive land uses. Although the FICON recommendations were specifically developed to address aircraft noise impacts, they are used in this analysis to define a substantial increase in community noise levels related to all transportation noise sources and permanent non-transportation noise sources.

- Outdoor ambient sound level without the Project is less than 60 dBA L_{dn}, then a Project-attributed increase of 5 dBA or more would be considered significant;
- Outdoor ambient sound level without the Project is between 60 and 65 dBA L_{dn}, Project-attributed increase of 3 dBA or more would be considered significant; and



 Outdoor ambient sound level without the Project is greater than 65 dBA L_{dn}, then Project-attributed increase of 2 dBA or more would be considered significant.

4.2 State of California

California Government Code Section 65302(f) mandates that the legislative body of each county and city adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines established by the State Department of Health Services. The guidelines rank noise land use compatibility in terms of "normally acceptable", "conditionally acceptable", "normally unacceptable", and "clearly unacceptable" noise levels for various land use types. Single-family homes are "normally acceptable" in exterior noise environments up to 60 dBA CNEL and "conditionally acceptable" up to 70 dBA CNEL. Multiple-family residential uses are "normally acceptable" up to 65 dBA CNEL and "conditionally acceptable" up to 70 dBA CNEL. Schools, libraries, and churches are "normally acceptable" up to 70 dBA CNEL, as are office buildings and business, commercial, and professional uses.

4.3 Local

With the proposed Project sited within the City of Ontario, its relevant municipal code requirements and general plan policies and goals represent the primary source of impact assessment standards.

4.3.1 City of Ontario Municipal Code

4.3.1.1 Noise

Operational noise impacts for projects are governed by the City of Ontario Municipal Code, Section 5-29.04 (Noise, Exterior Noise Standards). Table 3 contains the City's exterior property line noise limits.

Table 3. City of Ontario Exterior Noise Standards

Allowable Exterior Noise Level		Allowed Equivalent Noise Level, L _{eq} .		
Noise Zone	Type of Land Use	7 a.m. to 10 p.m.	10 p.m. to 7 a.m.	
	Single-Family Residential	65 dBA	45 dBA	
II	Multi-Family Residential, Mobile Home Parks	65 dBA	50 dBA	
III	Commercial Property	65 dBA	60 dBA	
IV	Residential Portion of Mixed Use	70 dBA	70 dBA	
V	Manufacturing and Industrial, Other Uses	70 dBA	70 dBA	

The City's standard goes on to state that the ambient noise level shall be the standard if the measured level exceeds those shown in Table 3.



Section 5-29.04(b) of the City's Municipal Code states that it is unlawful for any person at any location within the City to create noise, or to allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person, which noise causes the noise level, when measured at any location on any other property, to exceed either of the following:

- 1. The noise standard for the applicable zone for any 15-minute period; and
- 2. A maximum instantaneous (single instance) noise level equal to the value of the noise standard plus 20 dBA for any period of time (measured using A-weighted slow response).

Section 5-29.04(c) of the City's Municipal Code states that in the event the ambient noise level exceeds the noise standard, the maximum allowable noise level under such category shall be increased to reflect the maximum ambient noise level.

Section 5-29.06(d), Exemptions, states that construction noise sources are exempt. The City regulates noise from construction activities by regulating the hours during which construction is conducted. Section 5.29.09, Construction activity noise regulations, limits construction noise on weekdays to between the hours of 7:00 a.m. and 6:00 p.m. or on Saturday or Sunday between the hours of 9:00 a.m. and 6:00 p.m.

4.3.1.2 Vibration

The City's General Plan notes that the City has not established thresholds for vibration perception and damage.

5 Assessment Methodology and Results

Predicted proposed Project compliance assessment and evaluation of its potential noise and vibration adverse effects to the surrounding community are studied in the following subsections, per criteria summarized in the preceding Section 4. Where applicable, these assessments are also consistent with addressing potential proposed Project noise and vibration impacts per the following CEQA Appendix G impact significance questions for noise:

- a) Would the Project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standard of other agencies?
- b) Would the Project result in generation of excessive ground-borne vibration or ground-borne noise levels?
- c) For a Project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?



5.1 Short-Term Construction Noise

5.1.1 Methodology

Airborne construction noise and ground-borne construction vibration are temporary phenomena, with emission levels varying from hour to hour and day to day, depending on the equipment in use, the operations performed, and the distance between the source and receptor. Equipment that would be in use during construction would include, in part, man-lifts, excavators, backhoes, graders, loaders, cranes, flat-bed trucks, welders, pavers, rollers, and air compressors. The typical maximum noise levels at a distance of 50 feet from these various pieces of construction equipment and activities anticipated for use on the proposed Project site are presented in Table 4. Note that the equipment noise levels presented in Table 4 are maximum noise levels. Usually, construction equipment operates in alternating cycles of full power and low power, producing average noise levels over time that are less than the maximum noise level. The average sound level of construction activity also depends on the amount of time that the equipment operates and the intensity of construction activities during that time.

Table 4. Typical Construction Equipment Maximum Noise Levels

Equipment Type(s)	Maximum Noise Level (L _{max} , dBA at 50 Feet)
Grader	85
Crane; Concrete Pump Truck; Excavator	81
Roller	80
Front End Loader	79
Backhoe; Compressor (air)	78
Paver	77
Man Lift	75
Flat Bed Truck	74
Welder / Torch	73

Source: DOT 2006.

Note: L_{max} = maximum sound level; dBA = A-weighted decibels.

Aggregate noise emission from proposed Project construction activities, broken down by sequential phase, was predicted for three nearest types of sample receptors as follows:

- The single-family residences east of Sultana Avenue, (approximately 70 feet from the eastern side of the Annex Project site);
- A bench on the northeast corner of the University of La Verne College of Law building (approximately 65 feet from the western side of the future 6-level parking garage); and
- The northern façade of the fire station on the corner of Sultana Avenue and B Street (approximately 80 feet from the southern side of the Annex Project site).

For purposes of this study, and in a manner resembling the "general assessment" methodology per FTA guidance, this analysis assumes that only the loudest piece of equipment per phase would be involved in the construction activity for up to an 8-hour evaluation period at the indicated nearest possible distance shown in Table 5. This



analysis further assumes that the remainder of onsite active equipment for a given construction phase would be, on average over the course of a typical work day (i.e., since their minute-to-minute positions would be uncertain), at various distances further from a given noise-sensitive receptor than those appearing in Table 5. The nearest commercial receptor, a barber shop, would be approximately 550 feet from the proposed Project site's geographic centroid.

Table 5. Estimated Distances between Construction Activities and the Noise-sensitive Receptor Positions

		Distan	ce to Fixed Recepto Construction Phas	
Construction Phase	Equipment Type(s) Involved	Single- family homes east of Sultana Ave.	University of La Verne College of Law	Fire Station
Demolition	Concrete Saw, Excavator, Dozer	75	70	85
Site Preparation	Dozer, Tractor	75	70	85
Grading	Excavator, Grader, Dozer, Tractor	75	70	85
Building Construction	Crane, Man Lift, Generator, Tractor, Welder/Torch	85	150	95
Paving	Paver, Misc. Equipment > 5 HP, Roller	75	70	85
Architectural Coating	Air Compressor	75	150	85

5.1.2 Prediction Results

5.1.2.1 Offsite Receptors

A Microsoft Excel-based noise prediction model emulating and using reference data from the Federal Highway Administration Roadway Construction Noise Model (RCNM) was used to estimate construction noise levels at the nearest occupied noise-sensitive land use. (Although the RCNM was funded and promulgated by the Federal Highway Administration, it is often used for non-roadway projects, because the same types of construction equipment used for roadway projects are often used for other types of construction.) Input variables for the predictive modeling consist of the equipment type, the duty cycle for each piece of equipment (e.g., percentage of time within a specific time period, such as an hour, when the equipment is expected to operate at full power or capacity and thus make noise at a level comparable to what is presented in Table 4), and the distance from the noise-sensitive receiver. The predictive model also considers how many hours that equipment may be on site and operating (or idling) within an established work shift. Conservatively, no topographical features were assumed in the modeling. The RCNM has default duty-cycle values (i.e., acoustical usage factor [AUF]) for the various pieces of



equipment, which were derived from an extensive study of typical construction activity patterns. Those default duty-cycle values were used for this noise analysis, which is detailed in Attachment B, Construction Noise Prediction Model Worksheets, and produce the predicted results displayed in Table 6 for the studied scenario.

Table 6. Predicted Construction Noise Levels per Activity Phase

Construction Phase	8-Hour L _{eq} (dBA) at Nearest Residential Receptor (homes East of Sultana Ave.)	8-Hour Leq (dBA) at University of La Verne Library Exterior	8-Hour L _{eq} (dBA) at Existing City of Ontario Fire Station
Demolition	79.4	80.4	77.8
Site Preparation	76.7	77.7	75.1
Grading	78.6	79.5	77.1
Building Construction	73.9	67.5	72.5
Paving	78.0	79.0	76.3
Architectural Coating	66.6	59.8	65.1

Notes: Leq = equivalent noise level; dBA = A-weighted decibels.

As presented in Table 6, estimated construction noise levels are not predicted to exceed 80 dBA L_{eq} over an 8-hour period for any of the listed activity phases at the façades of the nearest existing residential noise-sensitive receptors; hence, construction of the proposed Project would meet the FTA's 80 dBA 8-hour L_{eq} construction noise threshold. Additionally, construction noise levels would be compliant with similar FTA guidance, at 85 dBA 8-hour L_{eq} , for the exteriors of the nearest offsite non-residential (University of La Verne) and mixed-use municipal fire station land uses. Thus, potential noise impacts attributed to proposed Project construction activities would be considered less than significant.

5.2 Long-Term Operational Noise

5.2.1 Off-Site Traffic Noise Exposure

The proposed Project is expected to generate an additional 1,527 average daily trips to the roadway system. Utilizing this information as well as additional traffic data provided in Attachment C, the FHWA's Highway Traffic Noise Model version 2.5 (TNM 2.5) was used to predict potential noise impacts at noise-sensitive uses adjacent to roadway segments expected to experience added traffic volumes attributed to the proposed Project. Information used in the model included Average Daily Traffic (ADT; City of Ontario 2019), posted traffic speeds, truck mix percentage, and trip distribution.

The modeled traffic speed was assumed to be the anticipated speed limit for the studied roads, which is 25 miles per hour (mph) for B Street and 35 mph for D Street and Sultana Avenue. The truck percentages used in the noise model for the near-term (2026) plus Project scenario were 2.0% medium trucks and 1.0% heavy trucks. This truck mix is based on vehicle surveys conducted for a number of similar roads in California that allow truck traffic. The k-factor used to convert the ADT volumes to peak hour volumes was 10%. Trip distribution was assumed to be 25% of the total new trips for B Street, 25% for D Street, and 50% for Sultana Avenue south of B Street. All other modeled roadways were conservatively assumed to be at 100% of Project trip distribution in order to predict a worst-case noise level at nearby noise-sensitive receptors.



The change in roadway noise levels was predicted for two conditions: existing (2019) and existing (2019) plus Project.

Table 7. TNM Predicted Noise Levels

Modeled Receiver	Description	Existing (2019) Noise Level (dBA)	Existing (2019) Plus Project Noise Level (dBA)	Project- Related Noise Level Increase (dBA)
R01	Northeast corner of the University of La Verne College of Law	54.1	54.6	0.5
R02	Eastern entrance of the University of La Verne College of Law	48.9	49.7	0.8
R03	Southeast corner of the University of La Verne College of Law	39.0	40.0	1.0
R04	Conservation Park	53.0	53.6	0.6
R05	360 E. B St.	56.7	57.4	0.7
R06	408 E. B St.	57.7	58.4	0.7
R07	464 E. B St.	66.5	67.8	1.3
R08	503 E. Sierra Ct.	68.9	70.5	1.6
R09	500 Lynn Haven St.	63.3	65.2	1.9
R10	504 E. D St.	66.4	68.0	1.6
R11	427 E. D St.	70.4	71.2	0.8

Source: Appendix C.

As shown in Table 7, and based upon the FICON thresholds presented in Section 4.1.2, an increase of less than 5 dBA when the ambient sound level is less than 60 dBA L_{dn} /CNEL, less than 3 dBA when the ambient sound level is between 60 and 65 dBA L_{dn} /CNEL, or less than 2 dBA when the ambient sound level is greater than 65 dBA L_{dn} /CNEL would not be substantial. Therefore, potential impacts at existing off-site noise-sensitive land uses along roadway segments identified in Table 7 and with respect to Project-generated changes to existing (2019) traffic noise would be less than significant.

5.2.2 Stationary Noise Source Emission

5.2.2.1 Methodology

The completion of the buildings on the proposed Project site will add a variety of noise-producing mechanical equipment that include those presented and discussed in the following paragraphs. Most of these noise-producing equipment or sound sources would be considered stationary or limited in mobility to a defined area.

Prediction Method and Parameters

The aggregate noise emission from these outdoor-exposed sound sources has been predicted with the Datakustik CadnaA sound propagation program. CadnaA is a commercially available software program for the calculation, presentation, assessment, and prediction of environmental noise based on algorithms and reference data per



International Organization of Standardization (ISO) Standard 9613-2, "Attenuation of Sound During Propagation Outdoors, Part 2: General Method of Calculation" (ISO 1996). The CadnaA computer software allows one to position sources of sound emission in a simulated three-dimensional (3-D) space having heights and footprints consistent with Project architectural plans and elevations. In addition to the above-mentioned sound source inputs and building-block structures that define the three-dimensional sound propagation model space, the following assumptions and parameters are included in this CadnaA-supported stationary noise source assessment:

- Ground effect acoustical absorption coefficient equal to 0.5, which intends to represent an average or blending of ground covers that are characterized largely by hard reflective pavements and existing building surfaces across the Project site and the surroundings;
- Reflection order of 1, which allows for a single reflection of sound paths on encountered structural surfaces such as the modeled building masses;
- Calm meteorological conditions (i.e., no wind) with 68 degrees Fahrenheit and 50% relative humidity; and
- All of the modeled noise sources are operating concurrently and continuously for a minimum period of 1 hour.

Project Sound Sources

Outdoor HVAC

Based on the available plans and other design information, it is assumed herein that the proposed Project buildings would be served by roof-mounted air-conditioning equipment that includes outdoor-exposed packaged air-handling units and air-cooled condensers (ACC) that provide the expected cooling demand (expressed as refrigeration "tonnage") for a building. The following are descriptions of modeled sound sources, with Table 8 exhibiting total modeled sound power level (PWL) data at octave-band center frequency (OBCF) resolution for each type of listed equipment source. Detailed information supporting these summary descriptions and quantities appear in Attachment D, Stationary Source Operation Noise Modeling Reference Material.

Table 8. Modeled Sound Power Levels (PWL) for Stationary Sources (HVAC)

		Overall L _{eq}	A-	-Weighte	ed dB at	: Octave	Band C	enter Fr	equency	(OBCF, I	Hz)
Building	Sound Source	(dBA)	31.5	63	125	250	500	1000	2000	4000	8000
	Air Handling Unit (AHU) return fans	82.8	64.0	64.0	76.0	77.0	78.0	75.0	68.0	62.0	57.0
Annex	Air-cooled Condensers (ACC)	91.6	52	65	75	81	88	84	83	82	76

The HVAC reference sound levels were calculated for use in the CadnaA model from a combination of inputs that include square footage values for the proposed Project's proposed office spaces, Project applicant response to data requests, and sample manufacturer sound power level data.



Other Stationary Noise Sources

The proposed Project buildings may feature other noise emitters, but their contributions would tend to be sporadic or otherwise occur infrequently and thus be expected to have no greater acoustic contribution to an hourly L_{eq} than the continuous-type HVAC noise studied herein.

Additionally, transportation noise sources may on occasion become "stationary", such as an idling delivery truck temporarily on the Project site. While an idling truck may exhibit a sound level magnitude of 70 dBA at 25 feet (Charles Salter 2014), its idling duration would be limited to no more than five minutes per hour (consistent with state regulations) and therefore demonstrate a corresponding hourly L_{eq} value that is eleven decibels less (i.e., a temporal adjustment that dilutes the acoustic energy over the hour per acoustic principles): 59 dBA at this distance.

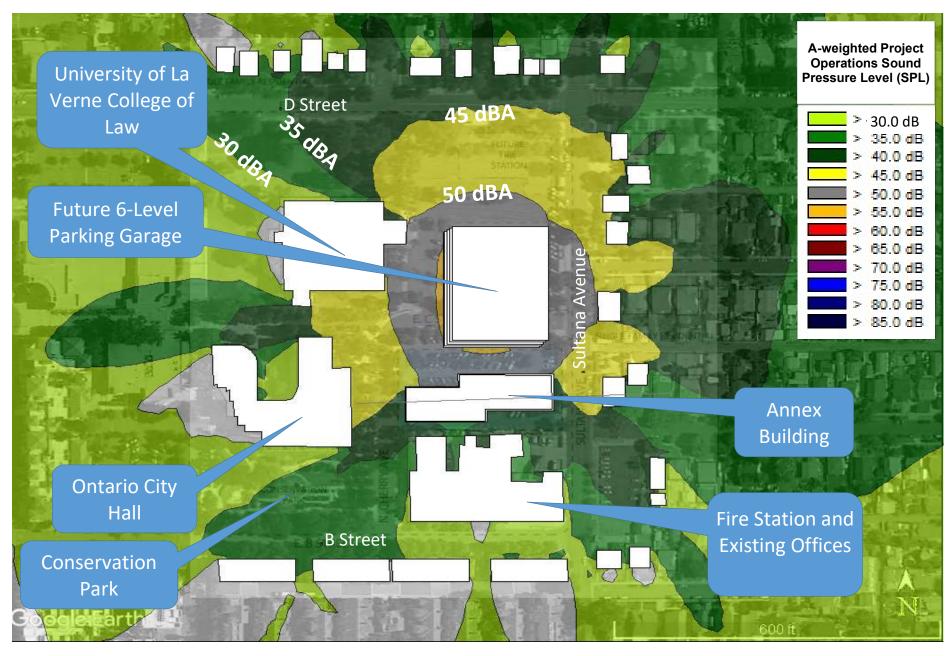
Parking Garage Noise

The proposed Project features a six-level parking garage to the north of the Annex Project site. Parking lot noise reference sound levels were calculated from a combination of inputs that include the sound power level (PWL) for one movement, the surface of the roadway, passing traffic contributions, the area of the parking garage, and the number of peak-hour Project trips (Nicol and Johnson 2011). The resulting PWL was entered into the CadnaA model for each of the six levels.

5.2.2.2 Prediction Results

An operational daytime scenario of the proposed Project was modeled that assumes all the HVAC equipment is operating simultaneously for a minimum period of one hour and the parking garage is active at the peak AM hour. Figure 2 displays the predicted noise contours associated with aggregate sound propagation from operating HVAC sound sources and the parking garage. An operational nighttime scenario was not modeled because it is assumed that the parking garage would not be active during nighttime hours in addition to reduced HVAC operations for the new Annex building, thus resulting in an expected nighttime operational level that would be compliant with City exterior noise requirements at the nearest noise-sensitive receptors.





SOURCE: Google 2023, Dudek 2023

0 94.5 189 Feet

FIGURE 2

Studied Noise Receptor Locations and Predicted Noise Contours

Ontario City Annex Project

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Figure 2 illustrates predicted aggregate SPL propagation solely from operation of the proposed Project sound sources as described herein. The color-coded annular bands of SPL are calculated across a field parallel with and five (5) feet above local grade.

Based on the noise level contours appearing in Figure 2, predicted operation noise from the proposed Project is expected to be far less than and thus comply with the City's property line daytime noise threshold of 65 dBA hourly L_{eq} for Type I (residential) and Type III (commercial) land uses and 70 dBA L_{eq} for Type IV (residential portion of mixed-use) land uses.

5.3 Construction Vibration

5.3.1 Methodology

Section 3.1.2 provides the groundborne vibration propagation expression for estimating vibration velocity (in inches per second [ips] PPV) at a receiving offsite structure. Although ignored for purposes of conservatism in this analysis, FTA guidance information suggests that coupling losses between the vibrating soil mass and that of a receiving building foundation (e.g., the apparent 1-story wood-framed residence to the south) might provide further attenuation to this estimated PPV value by an amount of -3 VdB (FTA 2018).

5.3.2 Prediction Results

The main concern associated with ground-borne vibration is annoyance; however, in extreme cases, vibration can cause damage to buildings, particularly those that are old or otherwise fragile. Some common sources of ground-borne vibration are trains and construction activities such as blasting, pile-driving, and heavy earth-moving equipment. The primary source of ground-borne vibration occurring as part of the Project is construction activity.

According to Caltrans, D-8 and D-9 Caterpillars, earthmovers, and trucks have not exceeded 0.10 inches/second PPV at 10 feet (Caltrans 2020). Since the closest off-site residence is located approximately 70 feet away from likely heavy construction equipment, vibration from construction activities at the closest sensitive receiver would not exceed the significance threshold of 0.20 ips PPV. The existing University of La Verne Office of Law building is closer but is still at least 65 feet from the proposed Project boundary. At such distances, predicted ground-borne vibration from the same types of earthmovers would be less than 0.012 ips PPV and thus below this annoyance-based threshold. With the building damage risk threshold of 0.5 ips PPV for new homes and modern commercial buildings that is higher than the annoyance limit, potential façade or other damage to existing nearby structures during construction of the proposed Project is not expected. Vibration-sensitive instruments and operations (such as laboratories, magnetic resonance imaging [MRI] facilities, microelectronics manufacturing) would likely require lower vibration thresholds and special consideration during construction, but no such facilities or land uses are currently apparent in the vicinity surrounding the proposed Project or at distances where such vibration effects on interior building processes might be adverse. Therefore, on these bases, proposed Project construction would not result in a significant impact associated with ground-borne vibration.

5.4 Aviation Noise Exposure

The Project site is not located within 2 miles of any airport. Therefore, the proposed Project would not expose people residing or working in the Project area to excessive noise levels associated with aircraft. Impacts would therefore be less than significant.

8 References Cited

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Attachment A

Field Noise Measurement Data

From: no-reply-dudek-forms@iformbuilder.com
Sent: Tuesday, May 23, 2023 11:10 AM

To: Carson Wong

Subject: New Record - Field Noise Measurement Data



Field Noise Measurement Data

ID	1649
Project Name	Ontario
Observer(s)	
Date	2023-05-22
Comments	0930
	Meteorological Conditions
ID	S1649
Temp (F)	76
Humidity % (R.H.)	55
Wind	Light
Wind Speed (MPH)	9
Wind Direction	North East
Sky	Clear
	Instrument and Calibrator Information
ID	S1649
Instrument Name List	(ENC) Rion NL-52

Instrument and Calibrator Information

ID	S1649
Instrument Name	(ENC) Rion NL-52
Instrument Name Lookup Key	(ENC) Rion NL-52
Manufacturer	Rion
Model	NL-52
Serial Number	553896
Calibrator Name	(ENC) LD CAL150
Calibrator Name	(ENC) LD CAL150
Calibrator Name Lookup Key	(ENC) LD CAL150
Calibrator Manufacturer	Larson Davis
Calibrator Model	LD CAL150
Calibrator Serial #	5152
Pre-Test (dBA SPL)	94
Weighting?	A-WTD
Slow/Fast?	Slow
	Monitoring
ID	S1649
Record #	6
Site ID	St 6

Monitoring

ID	S1649
Site Location Lat/Long	34.067142, -117.647064
Begin (Time)	15:24:00
End (Time)	15:39:00
Leq	65.2
Lmax	82.9
Lmin	47
Other Lx?	L90, L50, L10
L90	50.6
L50	61.1
L10	68.6
Other Lx (Specify Metric)	L
Primary Noise Source	Traffic
Other Noise Sources (Background)	Distant Conversations / Yelling, Distant Dog Barking, Distant Traffic, Rustling Leaves
Is the same instrument and calibrator being used as previously noted?	Yes
Are the meteorological conditions the same as previously noted?	Yes
	Description / Photos

ID \$6707

Site Photos

ID \$5033



Photo

Comments / Description

Facing east

ID \$5033



Photo

Comments / Description

Facing west

Monitoring

ID	S1649
Record #	5
Site ID	St 3
Site Location Lat/Long	34.065129, -117.645992
Begin (Time)	15:05:00
End (Time)	15:18:00
Leq	65.1
Lmax	80.1
Lmin	47.4
Other Lx?	L90, L50, L10
L90	51.4
L50	61
L10	68
Other Lx (Specify Metric)	L
Primary Noise Source	Traffic
Other Noise Sources (Background)	Distant Aircraft, Distant Conversations / Yelling, Distant Traffic, Rustling Leaves
Is the same instrument and calibrator being used as previously noted?	Yes
Are the meteorological conditions the same as previously noted?	Yes

Description / Photos

ID \$6704

Site Photos

ID \$5030



Photo

Comments / Description Facing south

ID \$5030



Photo

ID	S5030
Comments / Description	Facing north
	Monitoring
D	S1649
Record #	4
Site ID	St 4
Site Location Lat/Long	34.065825, -117.646029
Begin (Time)	14:53:00
End (Time)	15:03:00
Leq	59.4
Lmax	65.3
Lmin	59.4
Other Lx (Specify Metric)	L
Primary Noise Source	Traffic
Other Noise Sources (Background)	Birds, Distant Aircraft, Distant Dog Barking, Distant Gardener / Landscape Noise, Distant Industrial, Distant Traffic, Rustling Leaves
Is the same instrument and calibrator being used as previously noted?	Yes
Are the meteorological conditions the same as previously noted?	Yes
	Description / Photos
ID	S6701

Site Photos

ID \$5027



Photo

Comments / Description

Facing north

ID \$5027



Photo

Comments / Description

Facing south

Monitoring

ID	S1649
Record #	3
Site ID	ST 2
Site Location Lat/Long	34.064618, -117.647308
Begin (Time)	14:33:00
End (Time)	14:48:00
Leq	57.7
Lmax	76.7
Lmin	46.7
Other Lx?	L90, L50, L10
L90	48.3
L50	52.2
L10	60.9
Other Lx (Specify Metric)	L
Primary Noise Source	Traffic
Other Noise Sources (Background)	Birds, Distant Aircraft, Distant Dog Barking, Distant Industrial, Distant Traffic, Rustling Leaves
Is the same instrument and calibrator being used as previously noted?	Yes
Are the meteorological conditions the same as previously noted?	Yes

Description / Photos

ID \$6698

Site Photos

ID \$5024



Photo

Comments / Description

ID \$5024

Facing north



Photo

Photo

ID \$5024

Comments / Description Facing east

ID \$5024



Comments / Description Facing west

Monitoring

ID \$1649

Record # 2

Site ID St 1

Site Location Lat/Long 34.065317, -117.647414

Begin (Time) 14:17:00

End (Time) 14:31:00

Leq 60.1

Lmax 84.9

Monitoring

ID	S1649
Lmin	47.2
Other Lx?	L90, L50, L10
L90	48.1
L50	49.8
L10	56.3
Other Lx (Specify Metric)	L
Primary Noise Source	Traffic
Other Noise Sources (Background)	Distant Aircraft, Distant Gardener / Landscape Noise, Distant Industrial, Distant Traffic, Rustling Leaves
Is the same instrument and calibrator being used as previously noted?	Yes
Are the meteorological conditions the same as previously noted?	Yes
	Description / Photos
ID	S6695

Site Photos

ID \$5021



Photo

Comments / Description

Facing north

ID \$5021



Photo

Comments / Description

Facing south

Monitoring

ID	S1649
Record #	1
Site ID	St 5
Site Location Lat/Long	34.065940, -117.647251
Begin (Time)	14:00:00
End (Time)	14:15:00
Leq	53.1
Lmax	67.6
Lmin	46.9
Other Lx?	L90, L50, L10
L90	48.1
L50	49.3
Cthor Ly (Coorife Metric)	54.6
Other Lx (Specify Metric) Primary Noise Source	L Traffic
Other Noise Sources (Background)	Birds, Distant Conversations / Yelling, Distant Industrial, Rustling Leaves
Is the same instrument and calibrator being used as previously noted?	
Are the meteorological conditions the same as previously noted?	Yes

Description / Photos

ID \$6692

Site Photos

ID \$5018



Photo

Comments / Description Facing west

ID \$5018



Photo

ID \$5018

Comments / Description Facing east

ID \$5018



Photo

Comments / Description

Facing south

Email Report

To Unsubscribe: Email your request to dudekforms@dudek.com with Unsubscribe in the subject line or call your account administrator. Copyright (C) 2020 Dudek.

Attachment B

Construction Noise Prediction Model Worksheets

To User: bordered cells are inputs	s, unbordered cells have formulae					noise level limit for co		t residential land use, per F hours over which Leq is to		80		= tempora	ry barrier (TB) of input	height ins	erted betwe	en source	and receptor						
Construction Activity	Equipment	Total Equipment Qty		(from Reference Lmax @ 50 RCNM) ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Temporary Barrio Distance (ft.) Insertion Loss (dl	er Additional Noise B) Reduction	Distance- Allowable Adjusted Lmax (hours	Operation Time	Predicted 8- hour Leq	Source Receiver Elevation (ft) Elevation (ft)	Barrier Barr ("A")	Rcvr. to Barr. Source to ("B") Horiz. Rcvr. ("C" (ft) Horiz. (ft)	"A" (ft)	"B" (ft)	"C" (ft	t) Path Length Diff. "P" (ft)	Abarr (dB)	Heff (with barrier)	Heff (wout barrier)		G (without ILbar barrier)	rr (dB)
Demolition	Concrete saw	1	2	0 90	Concrete/Industrial Saws	75 0	1	85.6	480	79	5 5	0 5	70 7	5 7	'.1 7	0.2 7	75.0 0.00	0.1	5.0	5.0	0.7	0.7	0.1
	Excavator	1	41	0 81	Excavators	115 0	.1	71.0	480	67	5 5	0 45	70 11	5 45	i.3 7	0.2 11	15.0 0.00	0.1	5.0	5.0	0.7	0.7	0.1
	Dozer	1	41	0 82	Rubber Tired Dozers	95 0	.1	74.3	480	70	5 5	0 25	70 9	5 25	i.5 7	0.2	95.0 0.00	0.1	5.0	5.0	0.7	0.7	0.1
	•	•		_				Total for Demolition Phase	-	79.4													
Site Preparation	Dozer	1	4	0 82	Rubber Tired Dozers	95 0	.1	74.3	480	70	5 5	0 25	70 9	5 25	i.5 7	0.2	95.0 0.00	0.1	5.0	5.0	0.7	0.7	0.1
	Tractor	1	41	0 84	Tractors/Loaders/Backhoes	75 0	.1	79.6	480	76	5 5	0 5	70 7	5 7	'.1 7	0.2 7	75.0 0.00	0.1	5.0	5.0	0.7	0.7	0.1
		•	_	_				Total for Site Preparation Phase:	Ī	76.7													
Grading	Excavator	1	4	0 81 T	Exacators	135 0	.1	69.2	480	65	5 5	0 65	70 13	5 65	5.2 7	0.2 13	35.0 0.00	0.1	5.0	5.0	0.7	0.7	0.1
	Grader	1	41	0 85	Graders	75 0	.1	80.6	480	77	5 5	0 5	70 7	5 7	'.1 7	0.2 7	75.0 0.00	0.1	5.0	5.0	0.7	0.7	0.1
	Dozer	1	41	0 82	Rubber Tired Dozers	115 0	.1	72.0	480	68	5 5	0 45	70 11	5 45	i.3 7	0.2 11	15.0 0.00	0.1	5.0	5.0	0.7	0.7	0.1
	Tractor	1	41	0 84	Tractors/Loaders/Backhoes	95 0	.1	76.3	480	72	5 5	0 25	70 9	5 25	i.5 7	0.2	95.0 0.00	0.1	5.0	5.0	0.7	0.7	0.1
				_		_		Total for Grading Phase	<u>.</u>	78.6													
Building Construction	Crane	1	10	6 81	Cranes	105 0	.1	72.1 7	420	64	5 5	0 35	70 10	5 35	i.4 7	0.2 10	05.0 0.00	0.1	5.0	5.0	0.7	0.7	0.1
	Man Lift	1	2	0 75	Forklifts	125 0	.1	64.0	480	57	5 5	0 55	70 12	5 55	5.2 7	0.2 12	25.0 0.00	0.1	5.0	5.0	0.7	0.7	0.1
	Generator	1	50	0 72	Generator Sets	165 0	.1	58.0	480	55	5 5	0 95	70 16	5 95	i.1 7	0.2 16	65.0 0.00	0.1	5.0	5.0	0.7	0.7	0.1
	Tractor	1	41	0 84	Tractors/Loaders/Backhoes	85 0	.1	77.8 7	420	73	5 5	0 15	70 8	5 15	i.8 7	0.2 8	85.0 0.00	0.1	5.0	5.0	0.7	0.7	0.1
	Welder / Torch	1	41	0 73	Welders	145 0	.1	60.4	480	56	5 5	0 75	70 14	5 75	5.2 7	0.2 14	45.0 0.00	0.1	5.0	5.0	0.7	0.7	0.1
		•	-	_		_	Total	for Building Construction Phase:	Ī	73.9		•											
Paving	Paver	1	5	0 77	Pavers	115 0	.1	67.0	480	64	5 5	0 45	70 11	5 45	i.3 7	0.2 11	15.0 0.00	0.1	5.0	5.0	0.7	0.7	0.1
	All Other Equipment > 5 hp	1	51		Paving Equipment	75 0	.1	80.6	480	78	5 5	0 5	70 7	5 7	1.1 7		75.0 0.00	0.1	5.0	5.0	0.7	0.7	0.1
	Roller	1	2	0 80	Rollers	95 0	.1	72.3	480	65	5 5	0 25	70 9	5 25	i.5 7	0.2	95.0 0.00		5.0	5.0	0.7	0.7	0.1
		•	_	_				Total for Paving Phase	_	78.0		•											
Architectural Coating	Compressor (Air)	1	41	0 78	Air Compressors	85 0	.1	71.8	360	67	5 5	0 15	70 8	5 15	i.8 7	0.2 8	35.0 0.00	0.1	5.0	5.0	0.7	0.7	0.1
	/	•	_	_	,	_	Tota	I for Architectural Coating Phase		66.6	1	D											

To User: bordered cells are in	nputs, unbordered cells have formulae					noise	e level limit for cons		t residential land use, per FTA hours over which Leq is to be		85 8			= temporary barrier (TB)	of input he	ight inserted	l between	source and	l receptor						
Construction Activity	Equipment	Total Equipment Qt	AUF % (from		Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)		Additional Noise Reduction		Allowable Operation Time (minutes)	Predicted 8- hour Leq	Source Elevation (f	Receiver Barrier ft) Elevation (ft) Height (ft)	Barr. ("A") ("B") Horiz.	Source to Rcvr. ("C") Horiz. (ft)	"A" (ft)	"B" (ft)	"C" (ft)	Path Length Diff. "P" (ft)	Abarr (dB)	Heff (with barrier)	Heff (wout barrier)	G (with barrier)	G (without barrier)	ILbarr (dB)
Demolition	Concrete saw	1	20	90	Concrete/Industrial Saws	70	0.1		86.6 8	480	80		5 5 0	5 65	70	7.1	65.2	70.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	Excavator	1	40	81	Excavators	110	0.1		71.5 8	480	68		5 5 (0 45 65	110	45.3	65.2	110.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	Dozer	1	40	82	Rubber Tired Dozers	90	0.1		75.0 8	480	71		5 5 0	0 25 65	90	25.5	65.2	90.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	·	•				_			Total for Demolition Phase:		80.4														
Site Preparation	Dozer	1	40	82	Rubber Tired Dozers	90	0.1		75.0 8	480	71		5 5 0	0 25 65	90	25.5	65.2	90.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	Tractor	1	40	84	Tractors/Loaders/Backhoes	70	0.1		80.6	480	77		5 5 (5 65	70	7.1	65.2	70.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	·	-				_			Total for Site Preparation Phase:		77.7														
Grading	Excavator	1	40	81	Exacators	130	0.1		69.6	480	66		5 5 (0 65 65	130	65.2	65.2	130.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	Grader	1	40	85	Graders	70	0.1		81.6 8	480	78		5 5 (5 65	70	7.1	65.2	70.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	Dozer	1	40	82	Rubber Tired Dozers	110	0.1		72.5 8	480	69		5 5 (0 45 65	110	45.3	65.2	110.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	Tractor	1	40	84	Tractors/Loaders/Backhoes	90	0.1		77.0 8	480	73		5 5 (0 25 65	90	25.5	65.2	90.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
						_			Total for Grading Phase:		79.5														
Building Construction	Crane	1	16	81	Cranes	170	0.1		66.7 7	420	58		5 5 (0 105 65	170	105.1	65.2	170.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	Man Lift	1	20	75	Forklifts	190	0.1		59.5 8	480	53		5 5 (0 125 65	190	125.1	65.2	190.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	Generator	1	50	72	Generator Sets	230	0.1		54.6 8	480	52		5 5 0	0 165 65	230	165.1	65.2	230.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	Tractor	1	40	84	Tractors/Loaders/Backhoes	150	0.1		71.0 7	420	66		5 5 0	0 85 65	150	85.1	65.2	150.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	Welder / Torch	1	40	73	Welders	210	0.1		56.5 8	480	53		5 5 0	0 145 65	210	145.1	65.2	210.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	·	-				_		Total	for Building Construction Phase:		67.5														
Paving	Paver	1	50	77	Pavers	110	0.1		67.5 8	480	65		5 5 (0 45 65	110	45.3	65.2	110.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	All Other Equipment > 5 hp	1	50	85	Paving Equipment	70	0.1		81.6 8	480	79		5 5 0	5 65	70	7.1	65.2	70.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	Roller	1	20	80	Rollers	90	0.1		73.0 8	480	66		5 5 0	0 25 65	90	25.5	65.2	90.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
		-				_			Total for Paving Phase:		79.0		·												
Architectural Coating	Compressor (Air)	1	40	78	Air Compressors	150	0.1		65.0 6	360	60		5 5 (0 85 65	150	85.1	65.2	150.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
		-				_		Tota	I for Architectural Coating Phase:		59.8		-	р											

To User: bordered cells are input	ts, unbordered cells have formulae					noise	e level limit for cons		t residential land use, per FTA hours over which Leq is to be		85			= temporary barrier (TB)	of input he	ight inserte	d between	source and	d receptor						
Construction Activity	Equipment	Total Equipment Qt	AUF % (fr	om Reference Lmax @ 50 NM) ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)		Additional Noise Reduction	Distance- Adjusted Lmax Allowable Operation Time O (hours)	Allowable peration Time (minutes)	Predicted 8- hour Leq E	Source Elevation (ft	Receiver Barrier		Source to Rcvr. ("C") Horiz. (ft)	"A" (ft)	"B" (ft)	"C" (ft)	Path Length Diff. "P" (ft)	Abarr (dB)	Heff (with barrier)	Heff (wout barrier)	G (with barrier)	G (without barrier)	Lbarr (dB)
Demolition	Concrete saw	1	20	90	Concrete/Industrial Saws	85	0.1		83.8 8	480	77		5 5 0	5 80	85	7.1	80.2	85.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	Excavator	1	40	81	Excavators	125	0.1		70.0 8	480	66		5 5 0	45 80	125	45.3	80.2	125.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	Dozer	1	40	82	Rubber Tired Dozers	105	0.1		73.1 8	480	69		5 5 0	25 80	105	25.5	80.2	105.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
			_			-	_		Total for Demolition Phase:		77.8														
Site Preparation	Dozer	1	40	82	Rubber Tired Dozers	105	0.1		73.1 8	480	69		5 5 0	25 80	105	25.5	80.2	105.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	Tractor	1	40	84	Tractors/Loaders/Backhoes	85	0.1		77.8 8	480	74		5 5 0	5 80	85	7.1	80.2	85.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
			_			-	_		Total for Site Preparation Phase:		75.1			· · · · · · · · · · · · · · · · · · ·											
Grading	Excavator	1	40	81	Exacators	145	0.1		68.4 8	480	64		5 5 0	65 80	145	65.2	80.2	145.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
-	Grader	1	40	85	Graders	85	0.1		78.8 8	480	75		5 5 0	5 80	85	7.1	80.2	85.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	Dozer	1	40	82	Rubber Tired Dozers	125	0.1		71.0 8	480	67		5 5 0	45 80	125	45.3	80.2	125.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	Tractor	1	40	84	Tractors/Loaders/Backhoes	105	0.1		75.1 8	480	71		5 5 0	25 80	105	25.5	80.2	105.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
					•	-			Total for Grading Phase:		77.1														
Building Construction	Crane	1	16	81	Cranes	115	0.1		71.0 7	420	62		5 5 0	35 80	115	35.4	80.2	115.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	Man Lift	1	20	75	Forklifts	135	0.1		63.2 8	480	56		5 5 0	55 80	135	55.2	80.2	135.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	Generator	1	50	72	Generator Sets	175	0.1		57.4 8	480	54		5 5 0	95 80	175	95.1	80.2	175.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	Tractor	1	40	84	Tractors/Loaders/Backhoes	95	0.1		76.3 7	420	72		5 5 0	15 80	95	15.8	80.2	95.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	Welder / Torch	1	40	73	Welders	155	0.1		59.7 8	480	56		5 5 0	75 80	155	75.2	80.2	155.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
		•	_			-	_	Total	for Building Construction Phase:		72.5			·											
Paving	Paver	1	50	77	Pavers	125	0.1		66.0 8	480	63		5 5 0	45 80	125	45.3	80.2	125.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	All Other Equipment > 5 hp	1	50	85	Paving Equipment	85	0.1		78.8 8	480	76		5 5 0	5 80	85	7.1	80.2	85.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
	Roller	1	20	80	Rollers	105	0.1		71.1 8	480	64		5 5 0	25 80	105	25.5	80.2	105.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
		•	_		•	-	_		Total for Paving Phase:		76.3		-												
Architectural Coating	Compressor (Air)	1	40	78	Air Compressors	95	0.1		70.3 6	360	65		5 5 0	15 80	95	15.8	80.2	95.0	0.00	0.1	5.0	5.0	0.7	0.7	0.1
						_		Tota	I for Architectural Coating Phase:		65.1		· · · · · ·	р											

Attachment C

Traffic Noise Model Input/Output

INPUT: ROADWAYS						15305	5			
Dudek				30 May 2023						
СМ				TNM 2.5						
INPUT: ROADWAYS						Average	pavement typ	e shall be ι	used unles	S
PROJECT/CONTRACT:	15305					_	ighway agend			
RUN:	Ontario C	ity Annex	Existing Condition				rent type with	-		
Roadway		Points								
Name	Width	Name	No. Coordinates	(pavement)		Flow Cor	ntrol		Segment	
			X	Υ	Z	Control	Speed	Percent	Pvmt	On
						Device	Constraint	Vehicles	Туре	Struct?
								Affected		
	ft		ft	ft	ft		mph	%		
B EB	20.0	point1	1 6,138,152.0	2,333,850.0	0.00				Average	
		point2	2 6,138,252.0	2,333,849.2	0.00				Average	
		point3	3 6,138,352.0	2,333,848.5	0.00				Average	
		point4	4 6,138,452.0	2,333,848.0	0.00				Average	
		point5	5 6,138,552.0	2,333,847.5	0.00				Average	
		point6	6 6,138,652.0	2,333,847.0	0.00				Average	
		point7		2,333,846.5					Average	
		point8		2,333,845.2						
B WB	20.0	point16	16 6,138,816.5			Stop	5.00	100	Average	
		point15	15 6,138,752.5						Average	
		point14	14 6,138,652.5						Average	
		point13	13 6,138,552.5						Average	
		point12	12 6,138,452.5						Average	
		point11	11 6,138,352.5						Average	
		point10	10 6,138,252.5						Average	
Cultona ND I C of D	20.0	point9		2,333,863.0		Signal	0.00	50	Average	
Sultana NB S of B	20.0	point17	17 6,138,834.5 18 6,138,842.5			-	0.00	50	Average Average	
		point18 point19	19 6,138,842.5							
		point20	20 6,138,839.0						Average	
		point21	21 6,138,841.0						Average Average	
		point22	22 6,138,841.0						Average	
Sultana SB S of B	20.0		23 6,138,826.5			Stop	0.00	100	Average	
	20.0	point24	24 6,138,826.5					1.00	Average	
		point25	25 6,138,825.0						Average	

C:\TNM25\OntarioAnnex-ex 1 30 May 2023

INPUT: ROADWAYS						1530	05		
		point26	26 6,138,824.0	2,333,653.5	0.00				Average
		point88	88 6,138,823.0	2,333,507.8	0.00				Average
		point27	27 6,138,820.5	2,333,362.0	0.00				
Sultana NB B-D	20.0	point28	28 6,138,841.0	2,333,809.8	0.00	Stop	0.00	100	Average
		point29	29 6,138,842.0	2,333,909.8	0.00				Average
		point30	30 6,138,843.5	2,334,009.8	0.00				Average
		point31	31 6,138,843.5	2,334,109.8	0.00				Average
		point32	32 6,138,843.5	2,334,209.8	0.00				Average
		point33	33 6,138,843.5	2,334,309.8	0.00				Average
		point34	34 6,138,845.5	2,334,409.8	0.00				Average
		point35	35 6,138,846.5	2,334,509.8	0.00				Average
		point36	36 6,138,846.5	2,334,609.8	0.00				Average
		point37	37 6,138,847.0	2,334,712.0	0.00				
Sultana SB D-B	20.0	point38	38 6,138,833.5	2,334,716.8	0.00	Stop	0.00	100	Average
		point39	39 6,138,833.0	2,334,690.5	0.00				Average
		point40	40 6,138,833.0	2,334,609.2	0.00				Average
		point41	41 6,138,831.0	2,334,509.8	0.00				Average
		point42	42 6,138,832.5	2,334,410.2	0.00				Average
		point43	43 6,138,828.0	2,334,309.8	0.00				Average
		point44	44 6,138,828.0	2,334,209.8	0.00				Average
		point45	45 6,138,829.0	2,334,109.8	0.00				Average
		point46	46 6,138,826.5	2,334,009.8	0.00				Average
		point47	47 6,138,826.5		0.00				Average
		point48	48 6,138,826.5	2,333,895.2	0.00				
D EB E of Sultana	20.0	point49	49 6,138,801.5	2,334,725.5	0.00	Stop	0.00	100	Average
		point50	50 6,138,880.0		0.00				Average
		point51	51 6,138,995.0		0.00				Average
		point52	52 6,139,047.5		0.00				Average
		point53	53 6,139,146.5	2,334,722.5	0.00				Average
		point54	54 6,139,253.0		0.00				
D EB W of Sultana	20.0	point68	68 6,138,011.0		0.00				Average
		point69	69 6,138,111.0		0.00				Average
		point70	70 6,138,211.0		0.00				Average
		point71	71 6,138,307.5		0.00				Average
		point72	72 6,138,406.5		0.00				Average
		point73	73 6,138,505.5		0.00				Average
		point74	74 6,138,605.5		0.00				Average
		point75	75 6,138,705.5		0.00				Average
		point76	76 6,138,801.5	2,334,725.5	0.00				

C:\TNM25\OntarioAnnex-ex 2 30 May 2023

INPUT: ROADWAYS 15305

NI OI. NOADWAIO							1550	,			
Sultana NB N of D	20.0	point82	82	6,138,848.5	2,334,743.5	0.00	Stop	0.00	100	Average	
		point83	83	6,138,849.5	2,334,792.0	0.00				Average	
		point84	84	6,138,849.5	2,335,063.5	0.00					
Sultana SB N of D	20.0	point85	85	6,138,839.0	2,335,060.5	0.00				Average	
		point86	86	6,138,837.0	2,334,792.5	0.00				Average	
		point87	87	6,138,836.0	2,334,744.5	0.00					
D WB E of Sultana	20.0	point55	55	6,139,252.0	2,334,734.2	0.00				Average	
		point56	56	6,139,147.5	2,334,734.5	0.00				Average	
		point57	57	6,139,046.0	2,334,736.0	0.00				Average	
		point59	59	6,138,994.5	2,334,737.2	0.00				Average	
		point60	60	6,138,894.5	2,334,735.8	0.00				Average	
		point61	61	6,138,879.5	2,334,735.8	0.00					
D WB W of Sultana	20.0	point62	62	6,138,879.5	2,334,735.8	0.00	Stop	0.00	100	Average	
		point63	63	6,138,804.5	2,334,743.2	0.00				Average	
		point64	64	6,138,704.5	2,334,743.2	0.00				Average	
		point65	65	6,138,604.5	2,334,740.5	0.00				Average	
		point66	66	6,138,504.5	2,334,740.5	0.00				Average	
		point77	77	6,138,404.5	2,334,741.8	0.00				Average	
		point78	78	6,138,308.0	2,334,744.0	0.00				Average	
		point79	79	6,138,210.5	2,334,744.0	0.00				Average	
		point80	80	6,138,110.5	2,334,744.0	0.00				Average	
		point81	81	6,138,010.5	2,334,744.0	0.00					

C:\TNM25\OntarioAnnex-ex 3 30 May 2023

INPUT: RECEIVERS						•	15305			
Dudek					30 May 20	23				
CM					TNM 2.5					
INPUT: RECEIVERS										
PROJECT/CONTRACT:	15305			I						
RUN:	Ontario City	Annex Existin	g Condition							
Receiver										
Name	No. #DUs	Coordinates	(ground)		Height	Input Sou	nd Levels a	and Criteria	à	Active
		X	Υ	Z	above	Existing	Impact Cr	iteria	NR	in
					Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
		ft	ft	ft	ft	dBA	dBA	dB	dB	
R01	1 1	6,138,478.5	2,334,564.0	0.00	4.92	0.00	66	10.0	8.0	Y
R02	2 1	6,138,517.5	2,334,442.0	0.00	4.92	0.00	66	10.0	8.0	Y
R03	3 1	6,138,449.0	2,334,327.2	0.00	4.92	0.00	66	10.0	8.0	Υ
R04	4 1	6,138,411.0	2,333,917.8	0.00	4.92	0.00	66	10.0	8.0	Y
R05	5 1	6,138,409.0	2,333,823.2	0.00	4.92	0.00	66	10.0	8.0	Υ
R06	6 1	6,138,552.5	2,333,823.2	0.00	4.92	0.00	66	10.0	8.0	Y
R07	7 1	6,138,791.5	2,333,819.2	0.00	4.92	0.00	66	10.0	8.0	Y
R08	8 1	6,138,865.0	2,333,829.0	0.00	4.92	0.00	66	10.0	8.0	
R09	10 1	6,138,874.0	2,334,290.5	0.00	4.92	0.00	66	10.0	8.0	
R10	12 1	6,138,874.0	2,334,624.2	0.00	4.92	0.00	66	10.0	8.0	
R11	13 1	6,138,793.5	2,334,764.5	0.00	4.92	0.00	66	10.0	8.0	Y

C:\TNM25\OntarioAnnex-ex 1 30 May 2023

INPUT: BARRIERS 15305

Dudek					20 May	2022													
					30 May														
СМ					TNM 2.	5													
INDUT: DADDIEDO																			
INPUT: BARRIERS	45005																		
PROJECT/CONTRACT:	15305	- 0:4 4																	
RUN:	Ontari	o City A	nnex Ex	isting C	onaition	l 													
Barrier									Points										
Name	Type	Height		If Wall	If Berm			Add'tnl	Name	No.	Coordinates	(bottom)		Height	Segm	L			
		Min	Max	\$ per	\$ per	Тор	Run:Rise	\$ per			X	Y	Z	at		t Pertu			Important
				Unit	Unit	Width		Unit						Point		#Up	#Dn	Struct?	
				Area	Vol.			Length							ment				tions?
		ft	ft	\$/sq ft	\$/cu yd	ft	ft:ft	\$/ft			ft	ft	ft	ft	ft				
Barrier2	W	0.00	99.99	0.00				0.00	point1	1	6,138,296.0	2,334,359.0	0.00	35.00	0.00	0	0		
									point2	2	6,138,296.0	2,334,533.8	0.00	35.00	0.00	0	0		
									point3	3	6,138,473.5	2,334,533.5	0.00	35.00	0.00	0	0		
									point4	4	6,138,473.5	2,334,487.5	0.00	35.00	0.00	0	0		
									point5	5	6,138,514.0	2,334,487.5	0.00	35.00	0.00	0	0		
									point6	6	6,138,514.0	2,334,445.5	0.00	35.00	0.00	0	0		
									point7	7	6,138,473.5	2,334,445.5		35.00	0.00	0	0		
									point8	8	6,138,473.5	2,334,357.5	0.00	35.00	0.00	0	0		
									point9	9	6,138,296.0	2,334,359.0	0.00	35.00					
Barrier3	W	0.00	99.99	0.00				0.00	point10	10	6,138,804.5	2,333,979.5	0.00	25.00	0.00	0	0		
									point11	11	6,138,804.5	2,333,885.8		25.00	0.00	0	0		
									point12	12	6,138,520.0	2,333,889.0	0.00	25.00	0.00	0	0		
									point13	13	6,138,520.0	2,334,056.0		25.00	0.00	0	0		
									point14	14	6,138,721.5	2,334,058.0	0.00	25.00	0.00	0	0		
									point15	15	6,138,721.5	2,334,014.5	0.00	25.00	0.00	0	0		
									point16	16	6,138,701.5	2,334,014.5	0.00	25.00	0.00	0	0		
									point17	17	6,138,701.5	2,333,985.0	0.00	25.00	0.00	0	0		
									point18	18				25.00	0.00		0		
									point19	19		2,333,968.5		25.00			0		
									point20	20				25.00			0		
									point21	21	6,138,766.5			25.00	0.00	0	0		
									point22	22									
Barrier4	W	0.00	99.99	0.00				0.00	point23	23						0	0		
				2.30					point24	24							0		
							1		point25	25							0		
									point26	26									
Barrier5	W	0.00	99.99	0.00				0.00	· ·	27	-,,					0	0		
-				2.00				2.00	point28	28									
							+		point29	29									
									point20	30						+ 1			
Barrier6	W	0.00	99.99	0.00				0.00		31						0	0		
2400		0.00	55.56	0.00			+	0.00	point32	32		2,333,811.5		30.00					
			 				+		point33	33	-,,								
			 						point34	34		2,333,768.5		30.00		- 5			
Barrier7	W	0.00	99.99	0.00				0.00		35	-,,					0 0	0		
Daniel /	۷V	0.00	99.98	0.00				0.00	Politioo	33	0,100,001.0	2,000,109.0	0.00	30.00	0.00	, 0	U		

INPUT: BARRIERS 15305

							point36	36	6,138,801.5	2,333,810.5	0.00	30.00	0.00	0	0	
							point37	37	6,138,666.0	2,333,810.5	0.00	30.00	0.00	0	0	
							point38	38	6,138,666.0	2,333,763.5	0.00	30.00				
Barrier8	W	0.00	99.99	0.00		0.00	point39	39	6,138,739.5	2,333,467.2	0.00	30.00	0.00	0	0	
							point40	40	6,138,784.5	2,333,467.2	0.00	30.00	0.00	0	0	
							point41	41	6,138,784.5	2,333,735.5	0.00	30.00	0.00	0	0	
							point42	42	6,138,738.0	2,333,735.5	0.00	30.00				

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 2
 30 May 2023

INPUT: TRAFFIC FOR LAeq1h Volumes						15	305					
Dudek				30 May								
СМ				TNM 2	.5							
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:	15305			1								
RUN:	Ontario Cit	v Anney F	vietina (onditio	\n							
		y Ailliex L	Alsting C	onanic	/··							-
Roadway	Points	Na	C	_								
Name	Name	No.	Segmen	τ	MTwo		 		Dunne		Matara	
			Autos V	S	MTrucks	S	HTrucks	s	Buses V	S	Motorc	S
			veh/hr		veh/hr				veh/hr		veh/hr	
	1			mph		mph		mph		mph		mph
B EB	point1	1										0 0
	point2	2										0 0
	point3	3										0 0
	point4	4										0 0
	point5	5										0 0
	point6	6										0 0
	point7	7		25	2	25	1	25	0	0		0 0
	point8	8			_							
B WB	point16	16										0 0
	point15	15										0 0
	point14	14										0 0
	point13	13										0 0
	point12	12										0 0
	point11	11										0 0
	point10	10		25	2	25	1	25	0	0) (0 0
	point9	9										
Sultana NB S of B	point17	17										0 0
	point18	18										0 0
	point19	19										0 0
	point20	20										0 0
	point21	21		35	4	35	2	35	0	0		0 0
	point22	22										
Sultana SB S of B	point23	23	178	35	4	35	2	35	0	0		0 0

C:\TNM25\OntarioAnnex-ex 1 30 May 2023

INPUT: TRAFFIC FOR LAeq1h V	olumes					153	305					
	point24	24	178	35	4	35	2	35	0	0	0	0
	point25	25	178	35	4	35	2	35	0	0	0	0
	point26	26	178	35	4	35	2	35	0	0	0	0
	point88	88	178	35	4	35	2	35	0	0	0	0
	point27	27										
Sultana NB B-D	point28	28	178	35	4	35	2	35	0	0	0	0
	point29	29	178	35	4	35	2	35	0	0	0	0
	point30	30	178	35	4	35	2	35	0	0	0	0
	point31	31	178	35	4	35	2	35	0	0	0	0
	point32	32	178	35	4	35	2	35	0	0	0	0
	point33	33	178	35	4	35	2	35	0	0	0	0
	point34	34	178	35	4	35	2	35	0	0	0	0
	point35	35	178	35	4	35	2	35	0	0	0	0
	point36	36	178	35	4	35	2	35	0	0	0	0
	point37	37										
Sultana SB D-B	point38	38	178	35	4	35	2	35	0	0	0	0
	point39	39	178	35	4	35	2	35	0	0	0	0
	point40	40	178	35	4	35	2	35	0	0	0	0
	point41	41	178	35	4	35	2	35	0	0	0	0
	point42	42	178	35	4	35	2	35	0	0	0	0
	point43	43	178	35	4	35	2	35	0	0	0	0
	point44	44	178	35	4	35	2	35	0	0	0	0
	point45	45	178	35	4	35	2	35	0	0	0	0
	point46	46	178	35	4	35	2	35	0	0	0	0
	point47	47	178	35	4	35	2	35	0	0	0	0
	point48	48										
D EB E of Sultana	point49	49	271	35	6	35	3	35	0	0	0	0
	point50	50	271	35	6	35	3	35	0	0	0	0
	point51	51	271	35	6	35	3	35	0	0	0	0
	point52	52	271	35	6	35	3	35	0	0	0	0
	point53	53	271	35	6	35	3	35	0	0	0	0
	point54	54										
D EB W of Sultana	point68	68	271	35	6	35	3	35	0	0	0	0
	point69	69	271	35	6	35	3	35	0	0	0	0
	point70	70	271	35	6	35	3	35	0	0	0	0
	point71	71	271	35	6	35	3	35	0	0	0	0

C:\TNM25\OntarioAnnex-ex 2 30 May 2023

INPUT: TRAFFIC FOR LAeq1h Volu	ımes					15	305					
	point72	72	271	35	6	35	3	35	0	0	0	0
	point73	73	271	35	6	35	3	35	0	0	0	0
	point74	74	271	35	6	35	3	35	0	0	0	0
	point75	75	271	35	6	35	3	35	0	0	0	0
	point76	76										
Sultana NB N of D	point82	82	178	35	4	35	2	35	0	0	0	0
	point83	83	178	35	4	35	2	35	0	0	0	0
	point84	84										
Sultana SB N of D	point85	85	178	35	4	35	2	35	0	0	0	0
	point86	86	178	35	4	35	2	35	0	0	0	0
	point87	87										
D WB E of Sultana	point55	55	271	35	6	35	3	35	0	0	0	0
	point56	56	271	35	6	35	3	35	0	0	0	0
	point57	57	271	35	6	35	3	35	0	0	0	0
	point59	59	271	35	6	35	3	35	0	0	0	0
	point60	60	271	35	6	35	3	35	0	0	0	0
	point61	61										
D WB W of Sultana	point62	62	271	35	6	35	3	35	0	0	0	0
	point63	63	271	35	6	35	3	35	0	0	0	0
	point64	64	271	35	6	35	3	35	0	0	0	0
	point65	65	271	35	6	35	3	35	0	0	0	0
	point66	66	271	35	6	35	3	35	0	0	0	0
	point77	77	271	35	6	35	3	35	0	0	0	0
	point78	78	271	35	6	35	3	35	0	0	0	0
	point79	79	271	35	6	35	3	35	0	0	0	0
	point80	80	271	35	6	35	3	35	0	0	0	0
	point81	81										

C:\TNM25\OntarioAnnex-ex 3 30 May 2023

RESULTS: SOUND LEVELS		1				1	5305					
Dudek							30 May 20	23				
CM							TNM 2.5					
							_	d with TNM	1 2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		15305										
RUN:		Ontario	City Anne	x Existing Co	ndition							
BARRIER DESIGN:			HEIGHTS	J				Average p	avement type	shall be use	d unless	
								a State hi	ghway agency	, substantiate	s the use	
ATMOSPHERICS:		68 deg	F, 50% RH					of a differ	ent type with	approval of F	HWA.	
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over	existing	Туре	Calculated	Noise Reduc	tion	
			_	Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
R01	1	1	0.0	54.1	66	54.1	10		54.1	0.0	8	-8.0
R02	2	1	0.0	48.9	66	48.9	10		48.9	0.0	8	-8.0
R03	3	1	0.0	39.0	66	39.0	10		39.0	0.0	8	-8.0
R04	4	1	0.0	53.0	66	53.0	10		53.0	0.0	8	-8.0
R05	5	1	0.0	56.7	66	56.7	10		56.7	0.0	8	
R06	6	1	0.0				_		57.7			
R07	7	1	0.0						66.5			
R08	8		0.0						68.9			
R09	10		0.0						63.3			1
R10	12		0.0						66.4			1
R11	13		0.0	70.4	66	70.4	10	Snd Lvl	70.4	0.0	8	-8.0
Dwelling Units		# DUs	Noise Red	duction								
			Min	Avg	Max							
			dB	dB	dB							
All Selected		11	0.0	0.0	0.0)						
All Impacted		4	0.0	0.0								
All that meet NR Goal		C	0.0	0.0	0.0							

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INPUT: TRAFFIC FOR LAeq1h Volumes						15	305					
Dudek				30 May								
СМ				TNM 2	.5		1					
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:	15305			1								-
RUN:	Ontario City	ν Δnnex F	x+Pri Co	ndition								
	Points	y Ailliox L		i aitioi								-
Roadway Name	Name	No.	Caaman	 . 4								
Name	INAITIE	NO.	Segmen Autos	ı	MTrucks		HTrucks		Buses		 Motorcy	/clos
			V	S	V	S	V	s	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
D.E.D.		4				· ·		·		<u> </u>		
B EB	point1	1						25				
	point2	2						25				_
	point3	3						25				
	point4	4						25				
	point5	5						25				
	point6	6						25				
	point7	7		25	2	25	1	25	0	0	0	0
5.445	point8	8										
B WB	point16	16										
	point15	15										
	point14	14						25				
	point13	13						25				
	point12	12						25				
	point11	11	103					25				
	point10	10		25	2	25	1	25	0	0	0	0
O. II. ND LO CD	point9	9			_		_					<u> </u>
Sultana NB S of B	point17	17										
	point18	18								1		_
	point19	19										
	point20	20										
	point21	21	233	35	5	35	2	35	0	0	0	0
0.11 0.00 1.0	point22	22			_		_					<u> </u>
Sultana SB S of B	point23	23	233	35	5	35	2	35	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes	5					15	305					
•	point24	24	233	35	5	35	2	35	0	0	0	0
	point25	25	233	35	5	35	2	35	0	0	0	0
	point26	26	233	35	5	35	2	35	0	0	0	0
	point88	88	233	35	5	35	2	35	0	0	0	0
	point27	27										
Sultana NB B-D	point28	28	287	35	6	35	3	35	0	0	0	0
	point29	29	287	35	6	35	3	35	0	0	0	0
	point30	30	287	35	6	35	3	35	0	0	0	0
	point31	31	287	35	6	35	3	35	0	0	0	0
	point32	32	287	35	6	35	3	35	0	0	0	0
	point33	33	287	35	6	35	3	35	0	0	0	0
	point34	34	287	35	6	35	3	35	0	0	0	0
	point35	35	287	35	6	35	3	35	0	0	0	0
	point36	36	287	35	6	35	3	35	0	0	0	0
	point37	37										
Sultana SB D-B	point38	38	287	35	6	35	3	35	0	0	0	0
	point39	39	287	35	6	35	3	35	0	0	0	0
	point40	40	287	35	6	35	3	35	0	0	0	0
	point41	41	287	35	6	35	3	35	0	0	0	0
	point42	42	287	35	6	35	3	35	0	0	0	0
	point43	43	287	35	6	35	3	35	0	0	0	0
	point44	44	287	35	6	35	3	35	0	0	0	0
	point45	45	287	35	6	35	3	35	0	0	0	0
	point46	46	287	35	6	35	3	35	0	0	0	0
	point47	47	287	35	6	35	3	35	0	0	0	0
	point48	48										
D EB E of Sultana	point49	49	298	35	6	35	3	35	0	0	0	0
	point50	50	298	35	6	35	3	35	0	0	0	0
	point51	51	298	35	6	35	3	35	0	0	0	0
	point52	52	298	35	6	35	3	35	0	0	0	0
	point53	53	298	35	6	35	3	35	0	0	0	0
	point54	54										
D EB W of Sultana	point68	68	298	35	6	35	3	35	0	0	0	0
	point69	69	298	35	6	35	3	35	0	0	0	0
	point70	70	298	35	6	35	3	35	0	0	0	0
	point71	71	298	35	6	35	3	35	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes						1530)5					
	point72	72	298	35	6	35	3	35	0	0	0	0
	point73	73	298	35	6	35	3	35	0	0	0	0
	point74	74	298	35	6	35	3	35	0	0	0	0
	point75	75	298	35	6	35	3	35	0	0	0	0
	point76	76										
Sultana NB N of D	point82	82	287	35	6	35	3	35	0	0	0	0
	point83	83	287	35	6	35	3	35	0	0	0	0
	point84	84										
Sultana SB N of D	point85	85	287	35	6	35	3	35	0	0	0	0
	point86	86	287	35	6	35	3	35	0	0	0	0
	point87	87										
D WB E of Sultana	point55	55	298	35	6	35	3	35	0	0	0	0
	point56	56	298	35	6	35	3	35	0	0	0	0
	point57	57	298	35	6	35	3	35	0	0	0	0
	point59	59	298	35	6	35	3	35	0	0	0	0
	point60	60	298	35	6	35	3	35	0	0	0	0
	point61	61										
D WB W of Sultana	point62	62	298	35	6	35	3	35	0	0	0	0
	point63	63	298	35	6	35	3	35	0	0	0	0
	point64	64	298	35	6	35	3	35	0	0	0	0
	point65	65	298	35	6	35	3	35	0	0	0	0
	point66	66	298	35	6	35	3	35	0	0	0	0
	point77	77	298	35	6	35	3	35	0	0	0	0
	point78	78	298	35	6	35	3	35	0	0	0	0
	point79	79	298	35	6	35	3	35	0	0	0	0
	point80	80	298	35	6	35	3	35	0	0	0	0
	point81	81										

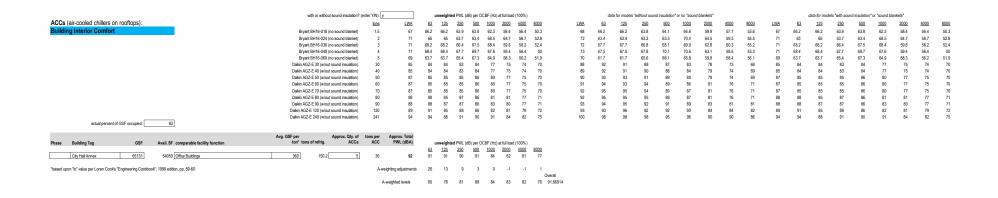
Dudek							30 May 20	23				
CM							TNM 2.5					
							Calculate	d with TNM	1 2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		15305										
RUN:		Ontario	City Anne	x Ex+Prj Cor	ndition							
BARRIER DESIGN:		INPUT	HEIGHTS					Average p	avement type	shall be use	d unless	
								a State hig	ghway agency	y substantiate	s the use	
ATMOSPHERICS:		68 deg	F, 50% RH					of a differ	ent type with	approval of F	HWA.	
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over		Туре	Calculated	Noise Reduc	tion	
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
R01	1	1	0.0						54.6	0.0		-8.0
R02	2	1	0.0	49.7					49.7	0.0		-8.0
R03	3	1	0.0						40.0			-8.0
R04	4	1	0.0						53.6			-8.0
R05	5	-	0.0						57.4			-8.0
R06	6	1	0.0						58.4			-8.0
R07	7	1	0.0						67.8			-8.0
R08	8		0.0						70.5			-8.0
R09	10	I	0.0						65.2			-8.0
R10	12		0.0						68.0			-8.0
R11	13		0.0		2 66	71.2	! 10	Snd Lvl	71.2	0.0	}	-8.0
Dwelling Units		# DUs	Noise Re									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		11	0.0	0.0								
All Impacted		4										
All that meet NR Goal		0	0.0	0.0	0.0)						

Attachment D

Stationary Source Operation Noise Modeling Reference Material

	(plenum-type return fan		condenser	units [see s	separate works	heet]):					A-weig	hting adjustments	26	13	9	3	0	-1	-1	1	
Dulluli	ig willimum ventilation)[]						average of values for the two fa	an diameter range	es. per Guver (Table 12)	plug	40	40	38	34	29	23	19	16	
								average of values for the two fa				tube	47	44	46	47	44	45	38	35	
								per Guyer (Table 12, p				prop	46	48	55	53	52	48	43	38	
percent (GSF actually occupied (and need v	ventilation):	83																		
percent (GSF actually occupied (and need v	ventilation):	83												A-we	eighted PW	L (for Cadna	A inputs)			
percent (GSF actually occupied (and need v	ventilation):	83 Avail. SF	Height (ft)	Avg. minutes to change air*	Volume (ft3)	CFM	comparable facility m ² function	Pressure (iwg)	Pressure (Pa)	Q (m ³ /s)	fantype = plug, tube, or prop	63	125	A-we	eighted PW	L (for Cadna	A inputs)	4000	8000	OA dB
Tag			83 Avail. SF 54059	Height (ft)	•	. ,	CFM 83167.2769				Q (m ³ /s)		63	125			•		4000 62	8000 57	OA dB 82.8

^{*}average from 3-10 minute range for "retail stores" per Loren Cook's "Engineering Cookbook", 1999 edition, p. 41



MEMORANDUM

To: City of Ontario

From: Shane Russett, Air Quality Specialist, Dudek

Subject: Ontario City Hall Annex Air Quality Technical Memorandum

Date: November 5, 2024 cc: Jennifer Reed, Dudek

Attachment(s): Attachment A – CalEEMod Emissions Outputs

Attachment B - Construction and Operational Health Risk Assessments

1 Introduction and Purpose

The purpose of this memorandum is to estimate criteria air pollutant emissions from construction and operation of the Ontario City Hall Annex Project (Project) located in the City of Ontario, California (City), and evaluate potential air quality impacts resulting from Project implementation under the California Environmental Quality Act (CEQA).

This memorandum is intended to support a Class 32 CEQA exemption for the Project. The Class 32 CEQA exemption consists of Projects characterized as in-fill development meeting the following conditions (*emphasis* added):

- a) The Project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.
- b) The proposed development occurs within city limits on a Project site of no more than five acres substantially surrounded by urban uses.
- c) The Project site has no value as habitat for endangered, rare or threatened species.
- d) Approval of the Project would not result in any significant effects relating to traffic, noise, *air quality*, or water quality.
- e) The site can be adequately served by all required utilities and public services.

The Class 32 exemption may be used where above-noted conditions (a) through (e) are fulfilled, where it can be seen with certainty that the proposed Project could not have a significant effect on the environment. Of relevance, the focus is on air quality impacts and greenhouse gas (GHG) emissions are therefore not evaluated herein.

The contents and organization of this memorandum are as follows: (2) project description; (3) background; (4) thresholds of significance; (5) approach and methodology; (6) impact analysis; (7) conclusions; and (8) references cited.

2 Project Description

The vacant 5.38-acre (4.83 acres net) Project site is located at the intersection between 4th Street and Hermosa Avenue. The Project would consist of a new three-story civic office building of approximately 60,000 sf, with the potential for a fourth level future expansion. The Project would also include site improvements of roughly 28,500

square feet including hardscape and landscape areas, as well as a six-story parking structure totaling approximately 268,730 square feet.

Several Project Design Features (PDFs) were accounted for in the Project modeling and analysis:

PDF-AQ-1 Prior to the commencement of construction activities for the Project, the grading and construction plan notes shall specify that all diesel-powered equipment is powered with California Air Resources Board (CARB)-certified Tier 4 Interim engines or better.

An exemption from this requirement may be granted if (1) the applicant documents equipment with Tier 4 Interim engines or better are not reasonably available, and (2) the required corresponding reductions in diesel particulate matter (DPM) emissions can be achieved for the Project from other combinations of construction equipment. Before an exemption may be granted, the applicant's construction contractor shall: (1) demonstrate that at least two construction fleet owners/operators in San Bernardino County were contacted and that those owners/operators confirmed Tier 4 Interim equipment or better could not be located within San Bernardino County during the desired construction schedule; and (2) the proposed replacement equipment has been evaluated using California Emissions Estimator Model (CalEEMod) or other industry standard emission estimation method and documentation provided to the City of Ontario to confirm that Project-generated construction emissions do not exceed the applicable South Coast Air Quality Management District (SCAQMD) cancer and non-cancer risk thresholds.

PDF-AQ-2 Prior to the commencement of construction activities at the Ontario City Hall Annex, the City shall require its construction contractor to water any exposed soils and/or soil stockpiles at least three times daily and water all demolished area at least two times per day or utilize another SCAQMD-approved dust control non-toxic agent in accordance with the manufacturer's specifications, to minimize fugitive dust during construction.

3 Background

The Project site is located within the South Coast Air Basin (SCAB) and is within the jurisdictional boundaries of the SCAQMD, which has jurisdiction over the City of Ontario, where the Project is located.

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. Criteria air pollutants that are evaluated include volatile organic compounds (VOCs; also referred to as reactive organic gases [ROGs]), oxides of nitrogen (NO $_x$), carbon monoxide (CO), sulfur oxides (SO $_x$), particulate matter with an aerodynamic diameter less than or equal to 10 microns in size (coarse particulate matter, or PM $_{10}$), and particulate matter with an aerodynamic diameter less than or equal to 2.5 microns in size (fine particulate matter, or PM $_{2.5}$). VOCs and NO $_x$ are important because they are precursors to ozone (O $_3$).

Regarding National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) attainment status, ¹ the SCAB is designated as a nonattainment area for federal and state O₃ standards, and federal

An area is designated as in attainment when it is in compliance with the NAAQS and/or the CAAQS. These standards are set by the Environmental Protection Agency (EPA) and California Air Resources Board (CARB), respectively, for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or the public welfare. Attainment

and state $PM_{2.5}$ standards (CARB 2020; EPA 2022). The SCAB is designated as a nonattainment area for state PM_{10} standards; however, it is designated as an attainment area for federal PM_{10} standards. The SCAB is designated as an attainment area for federal and state PM_{10} standards, and state PM_{10} standards are standards.

4 Thresholds of Significance

The significance criteria used to evaluate the Project impacts to air quality is based on the recommendations provided in Appendix G of the CEQA Guidelines. For the purposes of this air quality analysis, a significant impact would occur if the Project would (14 CCR 15000 et seq.):

- 1. Conflict with or obstruct implementation of the applicable air quality plan.
- 2. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.
- 3. Expose sensitive receptors to substantial pollutant concentrations.
- 4. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) indicates that, where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to determine whether the Project would have a significant impact on air quality.

SCAQMD has established air quality significance thresholds, as revised in April 2019, that set forth quantitative emission significance thresholds below which a project would not have a significant impact on ambient air quality (SCAQMD 2019). The project's "regional" emission refers to emissions that will be evaluated based on regional significance thresholds established by SCAQMD, also known as the criteria pollutant mass daily thresholds. The SCAQMD air quality significance thresholds also provide toxic air contaminant (TAC) thresholds and ambient air quality standards for criteria pollutants that are to be utilized for localized significance determination. The quantitative air quality analysis provided herein applies the SCAQMD thresholds identified in Table 1 to determine the potential for the Project to result in a significant impact under CEQA.

Table 1. SCAQMD Air Quality Significance Thresholds

Criteria Pollutants Mass Daily Thresholds									
Pollutant	Construction (Pounds per Day)	Operation (Pounds per Day)							
VOCs	75	55							
NO _x	100	55							
CO	550	550							
SO _x	150	150							
PM ₁₀	150	150							
PM _{2.5}	55	55							
Leada	3	3							

⁼ meets the standards; attainment/maintenance = achieve the standards after a nonattainment designation; nonattainment = does not meet the standards.

Table 1. SCAQMD Air Quality Significance Thresholds

Criteria Pollutants M	lass Daily Thresholds	
Pollutant	Construction (Pounds per Day)	Operation (Pounds per Day)
TACs and Odor Thres	sholds	
TACs ^b	Maximum incremental cancer risk \geq 10 in 1 m Cancer Burden > 0.5 excess cancer cases (in a Chronic and acute hazard index \geq 1.0 (Project	areas ≥ 1 in 1 million)
Odor	Project creates an odor nuisance pursuant to S	SCAQMD Rule 402
Ambient Air Quality	Standards for Criteria Pollutants ^c	
NO ₂ 1-hour average NO ₂ annual arithmetic mean	SCAQMD is in attainment; Project is significant exceedance of the following attainment standa 0.18 ppm (state) 0.030 ppm (state) and 0.0534 ppm (federal)	
CO 1-hour average CO 8-hour average	SCAQMD is in attainment; Project is significant exceedance of the following attainment standa 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state /federal)	
PM ₁₀ 24-hour average	10.4 μg/m³ (construction) ^d	
PM ₁₀ annual average	2.5 μg/m³ (operation) 1.0 μg/m³	
PM _{2.5} 24-hour average	10.4 μg/m³ (construction) ^d 2.5 μg/m³ (operation)	

Source: SCAQMD 2019.

Notes: SCAQMD = South Coast Air Quality Management District; VOCs = volatile organic compounds; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter; TAC = toxic air contaminant; NO₂ = nitrogen dioxide; ppm = parts per million; μ g/m³ = micrograms per cubic meter.

GHG emissions thresholds for industrial proposed Projects, as added in the March 2015 revision to the SCAQMD Air Quality Significance Thresholds, were not include included in Table 1 as they will be addressed within the GHG emissions analysis and not the air quality study.

- ^a The phaseout of leaded gasoline started in 1976. Since gasoline no longer contains lead, the Project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.
- b TACs include carcinogens and non-carcinogens.
- 4 Ambient air quality standards for criteria pollutants are based on SCAQMD Rule 1303, Table A-2, unless otherwise stated.
- d Ambient air quality threshold are based on SCAQMD Rule 403.

The phasing out of leaded gasoline started in 1976. As gasoline no longer contains lead, the proposed Project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.

In addition to the emission-based thresholds listed in Table 1, SCAQMD also recommends the evaluation of localized air quality impacts to sensitive receptors in the immediate vicinity of the Project as a result of construction activities. Such an evaluation is referred to as a localized significance threshold (LST) analysis. To account for truck activity, it was assumed that each truck would travel 1,000 feet on-site. For Project sites of 5 acres or less, the SCAQMD LST Methodology includes lookup tables that can be used to determine the maximum allowable daily emissions that would satisfy the localized significance criteria (i.e., the emissions would not cause an exceedance of the applicable concentration limits for NO₂, CO, PM₁₀, and PM_{2.5}) without performing Project-specific dispersion modeling (SCAQMD 2009). The Project would disturb less than 5 acres per day, so it is appropriate to use the lookup tables for the LST evaluation.

The LST significance thresholds for NO_2 and CO represent the allowable increase in concentrations above background levels in the vicinity of a Project that would not cause or contribute to an exceedance of the relevant ambient air quality standards, while the threshold for PM_{10} represents compliance with Rule 403 (Fugitive Dust). The LST significance threshold for $PM_{2.5}$ is intended to ensure that construction emissions do not contribute substantially to existing exceedances of the $PM_{2.5}$ ambient air quality standards. The allowable emission rates depend on the following parameters:

- Source-receptor area (SRA) in which the Project is located
- Size of the Project site
- Distance between the Project site and the nearest sensitive receptor (e.g., residences, schools, hospitals)

The Project site is located in SRA 33 (Southwest San Bernardino Valley). LST pollutant screening level concentration data is currently published for 1-, 2-, and 5-acre sites for varying distances. In accordance with the SCAQMD *Fact Sheet for Applying CalEEMod to Localized Significance Thresholds*, the Project would disturb a maximum of 1.5-acres per day during the grading phase. The nearest sensitive-receptor land use are residences located approximately 50 feet north and west of the Project site boundary. As such, the LST receptor distance was assumed to be 25 meters, the most conservative distance option. The LST values from the SCAQMD lookup tables for SRA 33 (Southwest San Bernardino Valley) for a 1.5-acre Project site and a receptor distance of 25 meters are shown in Table 2.

Table 2. Localized Significance Thresholds for Source-Receptor Area 33 (Southwest San Bernardino Valley)

Pollutant	Threshold (pounds/day)
Construction	
NO ₂	144
CO	1,047.5
PM ₁₀	5.5
PM _{2.5}	4.5
Operation	
NO ₂	144
CO	1,048
PM ₁₀	2
PM _{2.5}	2

Source: SCAQMD 2009.

Notes: NO_2 = nitrogen dioxide; CO = carbon monoxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter Localized significance thresholds were determined based on the values for a 1.5-acre site at a distance of 25 meters from the nearest sensitive receptor.

5 Approach and Methodology

5.1 Construction

The California Emissions Estimator Model (CalEEMod) Version 2022.1.1.13 was used to estimate emissions from construction of the Project (CAPCOA 2022). CalEEMod is a statewide computer model developed in cooperation with air districts throughout the state to quantify criteria air pollutant and GHG emissions associated with construction activities and operation of a variety of land use Projects, such as residential, commercial, and industrial

facilities. CalEEMod input parameters, including the land use type used to represent the Project and its size, construction schedule, and anticipated use of construction equipment, were based on information provided by the applicant or default model assumptions when Project specifics were unavailable. Construction was assumed to commence in January 2024 and last approximately 15 months. The first year of operation was assumed to be 2025.

The analysis contained herein is based on the following schedule assumptions (duration of phases is approximate):

- Demolition: January 2024 (20 days)
- Site Preparation: January 2024 February 2024 (10 days)
- Grading: February 2024 March 2024 (20 days)
- Building Construction: March 2024 January 2025 (230 days)
- Paving: January 2025 February 2025 (20 days)
- Architectural Coating: March 2025 (20 days)

For the analysis, it was assumed that heavy construction equipment would be operating at the site for up to 8 hours per day (depending on phase), 5 days per week (22 days per month), during the duration of Project construction. In addition to construction equipment operation, emissions from worker trips and vendor trucks (i.e., delivery trucks) were estimated based on CalEEMod defaults. During the demolition phase, approximately 160,700 square feet of existing parking lot is expected to be demolished. The Project is expected to have a net export of approximately 13,850 cubic yards of material during the grading phase.

The construction equipment mix and estimated hours of equipment operation per day used for the air emissions modeling of the Project are based on CalEEMod defaults and are shown in Table 3. Additional details regarding construction assumptions are provided in the modeling output, Attachment A.

Table 3. Construction Scenario Assumptions

			One-Way	Vehicle Trip	s	Equipment		
Construction Phase	Start Date	Finish Date	Average Daily Workers	Average Daily Vendor Trucks	Average Daily Haul Trucks	Туре	Quantity	Usage Hours
Demolition	1/1/2024	1/29/2024	16	4	94	Concrete/Industrial		
						Saws	1	8
						Excavators	3	8
						Rubber Tired		
						Dozers	2	8
Site	1/30/2024	2/13/2024	18	4	0	Rubber Tired		
Preparation						Dozers	3	8
						Tractors/Loaders/		
						Backhoes	4	8
Grading	2/14/2024	3/13/2024	16	4	88	Excavators	1	8
						Graders	1	8
						Rubber Tired		
						Dozers	1	8
						Tractors/Loaders/		
						Backhoes	3	8

Table 3. Construction Scenario Assumptions

			One-Way	Vehicle Trip	s	Equipment			
Construction Phase	Start Date	Finish Date	Average Daily Workers	Average Daily Vendor Trucks	Average Daily Haul Trucks	Туре	Quantity	Usage Hours	
Building	3/14/2024	1/30/2025	132	54	0	Cranes	1	7	
Construction						Forklifts	3	8	
						Generator Sets	1	8	
						Tractors/Loaders/			
						Backhoes	3	7	
						Welders	1	8	
Paving	1/31/2025	2/28/2025	16	4	0	Pavers	2	8	
						Paving Equipment	2	8	
						Rollers	2	8	
Architectural Coating	3/1/2025	3/29/2025	26	4	0	Air Compressors	1	6	

Notes: See Attachment A for details.

5.2 Operations

Area Sources

CalEEMod was used to estimate operational emissions from area sources, including emissions from consumer product use, architectural coatings, and landscape maintenance equipment. Emissions associated with natural gas usage in space heating and water heating are calculated in the building energy use module of CalEEMod, as described in the following text.

Consumer products are chemically formulated products used by institutional consumers, including detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. Other paint products, furniture coatings, or architectural coatings are not considered consumer products (CAPCOA 2022). Consumer product VOC emissions were estimated in CalEEMod based on the floor area of buildings and default factor of pounds of VOC per building square foot per day. The CalEEMod default values for consumer products were assumed.

VOC off-gassing emissions result from evaporation of solvents contained in surface coatings such as in paints and primers using during building maintenance. CalEEMod calculates the VOC evaporative emissions from application of surface coatings based on the VOC emission factor, building square footage, assumed fraction of surface area, and reapplication rate. The VOC emission factor is based on the VOC content of the surface coatings, and SCAQMD's Rule 1113 (Architectural Coatings) governs the VOC content for interior and exterior coatings. The model default reapplication rate of 10% of area per year is assumed. Consistent with CalEEMod defaults for non-residential uses, it is assumed that the surface area for painting equals 2.0 times the floor square footage, with 75% assumed for interior coating and 25% assumed for exterior surface coating (CAPCOA 2022). The CalEEMod defaults of 100 g/L were assumed for non-residential interior, exterior, and parking area coatings.

Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chainsaws, and hedge trimmers. The emissions associated from landscape

equipment use are estimated based on CalEEMod default values for emission factors (grams per square foot of building space per day) and number of summer days (when landscape maintenance would generally be performed) and winter days.

Energy Sources

CalEEMod default values for energy consumption for each land use were applied for the Project analysis. The energy use from non-residential land uses is calculated in CalEEMod based on the California Commercial End-Use Survey database. Energy use in buildings (both natural gas and electricity) is divided by the program into end-use categories subject to Title 24 requirements (end uses associated with the building envelope, such as the heating, ventilation, and air conditioning (HVAC) system, water heating system, and integrated lighting) and those not subject to Title 24 requirements (such as appliances, electronics, and miscellaneous "plug-in" uses).

Mobile Sources

Following the completion of construction activities, the Project would generate criteria pollutant emissions from mobile sources (vehicular traffic) as a result of employees and visitors of the Project. Based on the Dudek Trip Generation, the Project would generate 2,555 employee trips per day; however, 138 of the 343 Project employees would be relocated from an existing annex, creating a net total increase of 1,527 daily trips (Dudek 2023). CalEEMod was used to estimate emissions from proposed vehicular sources (refer to Attachment A). CalEEMod default data, including temperature, trip characteristics, variable start information, and emissions factors, were conservatively used for the model inputs. The fleet mix and trip lengths for Project vehicles were assumed consistent with CalEEMod default values.

Stationary Sources (Emergency Generators)

The Project would potentially operate one diesel-fueled 755-horsepower (hp) generator. This generator was assumed to operate one-hour a day for up to 50-hours a year for routine testing and maintenance.

5.3 Health Risk Assessments

A health risk assessment (HRA) was performed to evaluate potential health risk associated with construction and operation of the Project. The following discussion summarizes the dispersion modeling and HRA methodology; supporting HRA documentation, including detailed assumptions, is presented in Attachment B.

A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute (immediate) and/or chronic (cumulative) non-cancer health effects. A toxic substance released into the air is considered a TAC. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and noncarcinogenic effects. Noncarcinogenic effects typically affect one or more target organ systems and may be experienced on either short-term (acute) or long-term (chronic) exposure to a given TAC.

TACs are identified by federal and state agencies based on a review of available scientific evidence. In the state of California, TACs are identified through a two-step process that was established in 1983 under the Toxic Air Contaminant Identification and Control Act. This two-step process of risk identification and risk management and reduction was designed to protect residents from the health effects of toxic substances in the air. In addition, the California Air Toxics "Hot Spots" Information and Assessment Act, Assembly Bill (AB) 2588, was enacted by the legislature in 1987 to address public concern over the release of TACs into the atmosphere.

The most recent guidance from the Office of Environmental Health Hazard Assessment (OEHHA) is the 2015 Risk Assessment Guidelines Manual (OEHHA 2015). Cancer risk parameters, such as age-sensitivity factors, daily breathing rates, exposure period, fraction of time at home, and cancer potency factors were based on the values and data recommended by OEHHA as implemented in Hotspots Analysis and Reporting Program Version 2 (HARP2). SCAQMD's Modeling Guidance for American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) (SCAQMD 2022a) and Risk Assessment Procedures for Rules 1401, 1401.1, and 212 (SCAQMD 2017) provide guidance to perform dispersion modeling for use in HRAs within the SCAB.

Construction Health Risk Assessment

The dispersion modeling for the construction HRA was performed using AERMOD (Version 22112), which is the model SCAQMD requires for atmospheric dispersion of emissions. AERMOD is a steady-state Gaussian plume model that incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of surface and elevated sources, building downwash, and simple and complex terrain.

Dispersion of DPM emissions was modeled using AERMOD, then cancer risk and noncancer health impacts were subsequently modeled using CARB's HARP2. A unit emission rate (1 gram per second) was input for the AERMOD run to obtain the "X/Q" values. X/Q is a dispersion factor that is the average effluent concentration normalized by source strength and is used as a way to simplify the representation of emissions from construction. The maximum concentrations were determined for the 1-hour and Period averaging periods.

For construction, the Project's potential health impacts were evaluated assuming an exposure duration of approximately 1.2 years and starting at the third trimester of pregnancy. The LST CalEEMod run was also used for the construction HRA to estimate onsite emissions of exhaust PM_{10} , which was used as a surrogate for DPM. The predominant source of construction exhaust PM_{10} is operation of offroad diesel construction equipment. However, it was conservatively assumed that heavy-duty haul and vendor trucks would travel about 1,000-feet onsite to represent emissions from potential onsite travel and nearby local offsite travel. Consistent with SCAQMD guidance, the Risk Management Policy using the Derived Method was used to estimate cancer risk and the OEHHA Derived Method was used to estimate chronic noncancer risk (SCAQMD 2017). The cancer and noncancer risk results were then compared to SCAQMD thresholds to assess the Project impact significance. Principal parameters of the construction HRA modeling are presented in Table 4.

Table 4. American Meteorological Society/Environmental Protection Agency Regulatory Model Principal Parameters

Parameter	Details
Meteorological Data	AERMOD-specific meteorological data for the Ontario International Airport monitoring station (KONT) was used for the dispersion modeling.
Urban versus Rural Option	Urban areas typically have more surface roughness as well as structures and low- albedo surfaces that absorb more sunlight—and thus more heat—relative to rural areas. According to SCAQMD guidelines, the urban dispersion option was selected.
Terrain Characteristics	Digital elevation data were imported into AERMOD and elevations were assigned to receptors and emission sources, as necessary. Digital elevation data were obtained through the AERMOD View in the U.S. Geological Survey's National Elevation Dataset format with a resolution of 1 arc-second resolution.

Table 4. American Meteorological Society/Environmental Protection Agency Regulatory Model Principal Parameters

Parameter	Details
Source Release Characterizations	The following modeling parameters were based on the best information available at the time of analysis for construction sources.
	 Off-road equipment and on-site trucks were modeled as a line of adjacent volume sources across the Project site with a release height of 5 meters, a plume height of 10 meters, and plume width of 10 meters.
Receptors	To ensure receptors in the nearby revised Project area were adequately captured, a fine uniform Cartesian grid of receptors spaced 20 meters apart, 1-kilometer by 1-kilometer, was included in the AERMOD run.

Notes: AERMOD = American Meteorological Society/Environmental Protection Agency Regulatory Model. See Attachment B.

Operational Health Risk Assessment

As with the construction assessment, the operational HRA included dispersion modeling using AERMOD and then cancer risk and noncancer risk using CARB's HARP2. A unit emission rate (1 gram per second) was input for the AERMOD run to obtain the "X/Q" values. The maximum concentrations were determined for the 1-hour and Period averaging periods.

For operations, the Project's potential health impacts were evaluated assuming an exposure duration of 30 years and starting in the third trimester of pregnancy. The 755-horsepower diesel emergency generator would result in DPM and was assumed to operate up to 50 hours per year for routine testing and maintenance. Building heights were input into AERMOD to account for building downwash for the emergency generator point source. Consistent with SCAQMD guidance, the Risk Management Policy using the Derived Method was used to estimate cancer risk and the OEHHA Derived Method was used to estimate chronic noncancer risk (SCAQMD 2017). The cancer and noncancer risk results were then compared to SCAQMD thresholds to assess the Project impact significance. Principal parameters of the operational HRA modeling are presented in Table 5.

Table 5. American Meteorological Society/Environmental Protection Agency Regulatory Model Principal Parameters

Parameter	Details
Meteorological Data	AERMOD-specific meteorological data for the Ontario International Airport monitoring station (KONT) was used for the dispersion modeling.
Urban versus Rural Option	Urban areas typically have more surface roughness as well as structures and low- albedo surfaces that absorb more sunlight—and thus more heat—relative to rural areas. According to SCAQMD guidelines, the urban dispersion option was selected.
Terrain Characteristics	Digital elevation data were imported into AERMOD and elevations were assigned to receptors and emission sources, as necessary. Digital elevation data were obtained through the AERMOD View in the U.S. Geological Survey's National Elevation Dataset format with a resolution of 1 arc-second resolution.
Source Release Characterizations	The following modeling parameters were based on the best information available at the time of analysis.
	The 755-horsepower emergency generator was modeled as a point source and was assumed to have a vertical stack with a height of 3.1 meters, inside stack diameter of 0.19 meters, gas exhaust temperature of 747.6 degrees Kelvin, and gas exhaust velocity of 1.7 cubic meters per second.

Table 5. American Meteorological Society/Environmental Protection Agency Regulatory Model Principal Parameters

Parameter	Details
Receptors	To ensure receptors in the nearby revised Project area were adequately captured, a fine uniform Cartesian grid of receptors spaced 20 meters apart, 1-kilometer by 1-kilometer, was included in the AERMOD run.

Notes: AERMOD = American Meteorological Society/Environmental Protection Agency Regulatory Model. See Attachment B.

6 Impact Analysis

6.1 Would the Project conflict with or obstruct implementation of the applicable air quality plan?

As previously discussed, the Project is located within the SCAB under the jurisdiction of the SCAQMD, which is the local agency responsible for administration and enforcement of air quality regulations for the area. The SCAQMD has established criteria for determining consistency with the Air Quality Management Plan (AQMP), currently the 2022 AQMP, in Chapter 12, Sections 12.2 and 12.3, of the SCAQMD CEQA Air Quality Handbook (SCAQMD 1993). The criteria are as follows (SCAQMD 1993):

- Consistency Criterion No. 1: The project will not result in an increase in the frequency or severity of existing
 air quality violations or cause or contribute to new violations or delay the timely attainment of air quality
 standards of the interim emissions reductions specified in the AQMP.
- Consistency Criterion No. 2: The project will not exceed the assumptions in the AQMP, or increments based on the year of project buildout and phase.

To address the first criterion, Project-generated criteria air pollutant emissions have been estimated and analyzed for significance and are addressed under Section 6.2. Detailed results of this analysis are included in Attachment A, CalEEMod Emissions Outputs. As presented in Section 6.2, construction and operation of the Project would not generate criteria air pollutant emissions that exceed SCAQMD's thresholds.

The second criterion regarding the Project's potential to exceed the assumptions in the AQMP or increments based on the year of Project buildout and phase is primarily assessed by determining consistency between the Project's land use designations and its potential to generate population growth. Projects are considered consistent with, and would not conflict with or obstruct implementation of, the 2022 AQMP if the growth in socioeconomic factors (e.g., population, employment) is consistent with the underlying regional plans used to develop the AQMP (per Consistency Criterion No. 2 of the SCAQMD CEQA Air Quality Handbook).

The SCAQMD primarily uses demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment by industry) developed by the SCAG for its RTP/SCS (SCAG 2020), which is based on general plans for cities and counties in the SCAB, for the development of the AQMP emissions inventory (SCAQMD 2022b).²

Information necessary to produce the emission inventory for the SCAB is obtained from the SCAQMD and other governmental agencies, including CARB, the California Department of Transportation, and SCAG. Each of these agencies is responsible for collecting data (e.g., industry growth factors, socioeconomic projections, travel activity levels, emission factors, emission speciation profile, and emissions) and developing methodologies (e.g., model and demographic forecast improvements) required to generate a comprehensive emissions inventory. SCAG incorporates these data into their Travel Demand Model for

The SCAG 2020 RTP/SCS, and associated Regional Growth Forecast, are generally consistent with the local plans; therefore, the 2022 AQMP is generally consistent with local government plans.

The relevant local plan for the proposed Project is the City of Ontario General Plan, the most recent iteration of which was adopted in 2020. The City's General Plan designates the land use of the Project site as Public Facility (PV) and Mixed Use (MU) (City of Ontario 2023). The Project site has a zoning designation of Civic (CIV) and Low Intensity Office (OL) (City of Ontario 2022). The project would be consistent with the land use designations of Public Facility and Mixed Use for the City Hall Annex and parking structure. The Public Facilities designation allows for civic centers, governmental institutions, police and fire stations, transportation facilities, museums, and public libraries. The Mixed Use designation allows for a horizontal and/or vertical mixture of retail, service, office, restaurant, entertainment, cultural, and residential uses. The Project is consistent with the existing land use designation and zoning. In addition, the implementation of the Project would not generate an increase in growth demographics that would conflict with existing projections within the region. Accordingly, the Project is consistent with the SCAG RTP/SCS forecasts used in the SCAQMD AQMP development.

In summary, based on the considerations presented for the two criteria, impacts relating to the Project's potential to conflict with or obstruct implementation of the applicable AQMP would be less than significant.

6.2 Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard?

Air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and SCAQMD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, Project-level thresholds of significance for criteria pollutants are relevant in the determination of whether a Project's individual emissions would have a cumulatively significant impact on air quality. If a Project's emissions would exceed the SCAQMD significance thresholds, it would be considered to have a cumulatively considerable contribution. Conversely, Projects that do not exceed the Project-specific thresholds are generally not considered to be cumulatively significant (SCAQMD 2003).

A quantitative analysis was conducted to determine whether the proposed Project might result in emissions of criteria air pollutants that may cause exceedances of the NAAQS or CAAQS, or cumulatively contribute to existing nonattainment of ambient air quality standards. Details of the methods used to estimate emissions are discussed above in Section 5, Approach and Methodology. The following discussion summarizes the quantitative Project-generated construction emissions and impacts that would result from implementation of the proposed Project. Detailed assumptions and results of this analysis are provided in Attachment A, CalEEMod Output Files.

Construction Emissions

Proposed construction activities would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment, soil disturbance, and VOC off-gassing) and off-site sources (i.e., on-road trucks and worker vehicle trips). Construction emissions can vary substantially from day to day,

estimating/projecting vehicle miles traveled and driving speeds. SCAG's socioeconomic and transportation activities projections in their 2020 RTP/SCS are integrated in the 2022 AQMP (SCAQMD 2022b).

depending on the level of activity; the specific type of operation; and, for particulate matter, the prevailing weather conditions.

As discussed previously, CalEEMod was used to estimate emissions from construction of the Project. Internal combustion engines used by construction equipment, trucks, and worker vehicles would result in emissions of VOCs, NO_x, CO, PM₁₀, and PM_{2.5}. PM₁₀ and PM_{2.5} emissions would also be generated by entrained dust, which results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil. The Project would comply with PDF-AQ-2 to control dust emissions generated during any dust-generating activities. The CalEEMod default assumptions were used for estimating fugitive dust emissions from grading on site. The Project would involve application of architectural coating (e.g., paint and other finishes) for painting the interior and exterior of the building as well as parking lot striping. The contractor is required to procure architectural coatings from a supplier that complies with the requirements of SCAQMD's Rule 1113 (Architectural Coatings). Table 6 presents the estimated maximum daily construction emissions generated during construction of the Project, which includes implementation of PDF-AQ-1 and PDF-AQ-2. Details of the emission calculations are provided in Attachment A.

Table 6. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions

	voc	NOx	со	SOx	PM10	PM _{2.5}	
Year	pounds p	pounds per day					
Summer							
2024	1.01	10.9	23.6	0.03	1.73	0.50	
Winter							
2024	0.96	20.6	29.3	0.08	7.97	4.09	
2025	34.8	10.9	21.2	0.03	1.73	0.50	
Maximum	34.8	20.6	29.3	0.08	7.97	4.09	
SCAQMD Threshold	75	100	550	150	150	55	
Threshold Exceeded?	No	No	No	No	No	No	

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter; SCAQMD = South Coast Air Quality Management District. Emissions include quantification of PDF-AQ-1 and PDF-AQ-2. See Attachment A for complete results.

As shown in Table 6, the Project construction would not exceed SCAQMD's daily thresholds. Therefore, construction impacts associated with criteria air pollutant emissions would be less than significant.

Operational Emissions

Operational year 2025 was assumed as it would be the first year following completion of construction. Table 7 presents the Project-related emissions during operation.

Table 7. Estimated Maximum Daily Operation Criteria Air Pollutant Emissions

	voc	NOx	СО	S0x	PM ₁₀	PM _{2.5}
Emissions Source	Pounds per Day					
Summer						
Area	3.84	0.12	14.3	<0.005	0.02	0.03
Energy	0.02	0.44	0.37	<0.005	0.03	0.03
Mobile	6.37	6.34	60.4	0.15	12.6	3.27

Table 7. Estimated Maximum Daily Operation Criteria Air Pollutant Emissions

	voc	NOx	СО	S0x	PM ₁₀	PM _{2.5}			
Emissions Source	Pounds p	Pounds per Day							
Stationary	1.70	7.59	4.33	0.01	0.25	0.25			
Subtotal	11.9	14.5	79.4	0.16	12.9	3.58			
Winter									
Area	1.50								
Energy	0.02	0.44	0.37	<0.005	0.03	0.03			
Mobile	5.91	6.82	50.2	0.14	12.6	3.27			
Stationary	1.70	7.59	4.33	0.01	0.25	0.25			
Subtotal	9.13	14.9	54.9	0.15	12.9	3.56			
Maximum	11.9	14.9	79.4	0.16	12.9	3.58			
SCAQMD Threshold	55	55	550	150	150	55			
Threshold Exceeded?	No	No	No	No	No	No			

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District. See Attachment A for complete results. Columns may not add due to rounding.

As shown in Table 7, the Project would not exceed SCAQMD's significance thresholds during operations. Therefore, operational impacts associated with criteria air pollutant emissions would be less than significant.

Based on the previous considerations, the Project would not result in a cumulatively considerable increase in emissions of nonattainment pollutants, and cumulative impacts would be less than significant.

6.3 Would the Project expose sensitive receptors to substantial pollutant concentrations?

Localized Significance Thresholds

Sensitive receptors are those individuals more susceptible to the effects of air pollution than the population at large. People most likely to be affected by air pollution include children, the elderly, and people with cardiovascular and chronic respiratory diseases. According to SCAQMD, sensitive receptors include residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993). The nearest sensitive-receptor land use are residences located approximately 50 feet north and west of the Project site boundary.

Construction activities associated with the Project would result in temporary sources of on-site fugitive dust, construction equipment emissions, and on-site mobile source emissions. The maximum allowable daily emissions that would satisfy the SCAQMD localized significance criteria for SRA 33 are presented in Tables 8 and compared to the maximum daily on-site construction emissions.

Table 8. Localized Significance Thresholds Analysis for Project Construction - Unmitigated

Maximum On-Site	NO ₂ CO PM ₁₀ PM _{2.5}				
Emissions	Pounds per Day				
2024	14.8	28.3	5.38	2.73	

2025	9.30	14.7	0.10	0.09
Maximum	14.8	28.3	5.38	2.73
SCAQMD LST	144	1,047.5	5.5	4.5
LST Exceeded?	No	No	No	No

Source: SCAQMD 2009.

Notes: NO_2 = nitrogen dioxide; CO = carbon monoxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District; LST = localized significance threshold.

Localized significance thresholds are shown for a 1.5-acre Project site corresponding to a distance to a sensitive receptor of 25 meters. Emissions include quantification of PDF-AQ-1 and PDF-AQ-2.

As shown in Table 8, the Project LST would not exceed the established significance thresholds, and thus would result in a less than significant impact to sensitive receptors during construction.

CO Hotspots

Traffic-congested roadways and intersections have the potential to generate localized high levels of CO. Localized areas where ambient concentrations exceed federal and/or state standards for CO are termed "CO hotspots." The transport of CO is extremely limited, as it disperses rapidly with distance from the source. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthy levels, affecting sensitive receptors. Typically, high CO concentrations are associated with severely congested intersections operating at an unacceptable level of service (LOS) (LOS E or worse is unacceptable). Projects contributing to adverse traffic impacts may result in the formation of a CO hotspot. Additional analysis of CO hotspot impacts would be conducted if a Project would result in a significant impact or contribute to an adverse traffic impact at a signalized intersection that would potentially subject sensitive receptors to CO hotspots.

At the time that the SCAOMD Handbook (1993) was published, the SCAB was designated nonattainment under the CAAQS and NAAQS for CO. In 2007, the SCAQMD was designated in attainment for CO under both the CAAQS and NAAQS as a result of the steady decline in CO concentrations in the SCAB due to turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities. The SCAQMD conducted CO modeling for the 2003 AQMP3 (SCAQMD 2003) for the four worst-case intersections in the SCAB: (1) Wilshire Boulevard and Veteran Avenue, (2) Sunset Boulevard and Highland Avenue, (3) La Cienega Boulevard and Century Boulevard, and (4) Long Beach Boulevard and Imperial Highway. At the time the 2003 AQMP was prepared, the intersection of Wilshire Boulevard and Veteran Avenue was the most congested intersection in Los Angeles County, with an average daily traffic volume of about 100,000 vehicles per day. The 2003 AQMP also projected 8hour CO concentrations at these four intersections for 1997 and from 2002 through 2005. From years 2002 through 2005, the maximum 8-hour CO concentration was 3.8 ppm at the Sunset Boulevard and Highland Avenue intersection in 2002; the maximum 8-hour CO concentration was 3.4 ppm at the Wilshire Boulevard and Veteran Avenue in 2002. Accordingly, CO concentrations at congested intersections would not exceed the 1-hour or 8-hour CO CAAQS unless projected daily traffic would be at least over 100,000 vehicles per day. The Project's anticipated net total average daily trips (ADT) of 1,527 is minimal and is not of a magnitude expected to raise the traffic volumes at intersections within proximity of the proposed Project to the 100,000 vehicles per day that could result in a CO hotspot.

Additionally, ambient CO levels are monitored at the 1350 San Bernardino Rd., Upland air quality monitoring station, which is approximately 2.7 miles northwest of the Project site and represents ambient air quality in the Project area. Ambient CO levels monitored at this representative monitoring station indicate that the highest recorded 1-hour concentration of CO is 1.5 ppm (the State standard is 20 ppm) and highest 8-hour concentration is 1.1 ppm (the

³ SCAQMD's CO hotspot modeling guidance has not changed since 2003.

State standard is 9 ppm) during the past 3 years of available data (EPA 2022a). As discussed above, the highest CO concentrations typically occur during peak traffic hours, so CO impacts calculated under peak traffic conditions represent a worst-case analysis. Given the considerably low level of CO concentrations in the Project area, and the minimal increase in daily trips, Project-related mobile emissions are not expected to contribute significantly to CO concentrations, and a CO hotspot is not anticipated to occur. In addition, due to continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SCAB is steadily decreasing. Based on these considerations, the proposed Project would result in a less-than-significant impact to air quality with regard to potential CO hotspots.

Toxic Air Contaminants

Construction Health Risk

As discussed previously, a construction HRA was performed to estimate the potential health risk at proximate residential receptors associated with short-term construction of the Project. Notably, as there is no reference exposure level for acute health impacts from DPM, acute risk was not evaluated in the construction HRA. Results of the construction HRA are presented in Table 9.

Table 9. Summary of Maximum Cancer and Chronic Health Risks - Construction

Impact Analysis	Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Maximally Exposed	Cancer Risk	Per Million	8.28	10	Less than Significant
Individual Resident	Chronic Hazard Index	Index Value	0.0077	1.0	Less than Significant

Source: See Attachment B for complete results.

Notes: CEQA = California Environmental Quality Act; HRA = Health Risk Assessment

Emissions include quantification of PDF-AQ-1.

As shown in Table 9, Project construction activities would result in a Residential Maximum Individual Cancer Risk of 8.28 in 1 million, which is less than the significance threshold of 10 in 1 million. Project construction would result in a Residential Chronic Hazard Index of 0.0077, which is below the 1.0 significance threshold. Impacts would be less than significant.

Operational Health Risk

As discussed previously, an operational HRA was also performed to estimate the potential health risk at proximate residential receptors associated with long-term operations of the Project, specifically, the routine testing and maintenance of the diesel emergency generator. Results of the operational HRA are presented in Table 10.

Table 10. Summary of Maximum Cancer and Chronic Health Risks - Operations

Impact Analysis	Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Maximally Exposed	Cancer Risk	Per Million	3.09	10	Less than Significant
Individual Resident	Chronic Hazard Index	Index Value	0.0008	1.0	Less than Significant

Source: See Attachment B for complete results.

Notes: CEQA = California Environmental Quality Act; HRA = Health Risk Assessment

As shown in Table 10, Project operational activities would result in a Residential Maximum Individual Cancer Risk of 3.09 in 1 million, which is less than the significance threshold of 10 in 1 million. Project operations would result in a Residential Chronic Hazard Index of 0.0008, which is below the 1.0 significance threshold. Impacts would be less than significant.

Health Effects of Criteria Air Pollutants

Construction and operation of the Project would generate criteria air pollutant emissions; however, the Project would not exceed the SCAQMD mass-emission thresholds.

The SCAB is designated as nonattainment for O_3 for the NAAQS and CAAQS. Thus, existing O_3 levels in the SCAB are at unhealthy levels during certain periods. The health effects associated with O_3 generally relate to reduced lung function. Because the Project would not involve construction activities that would result in O_3 precursor emissions (VOC or NO_x) that would exceed the SCAQMD thresholds, the Project is not anticipated to substantially contribute to regional O_3 concentrations and associated health impacts. Similar to construction, no SCAQMD threshold would be exceeded during operation.

In addition to O_3 , NO_x emissions contribute to potential exceedances of the NAAQS and CAAQS for NO_2 (since NO_2 is a constituent of NO_x). Exposure to NO_2 can cause lung irritation, bronchitis, and pneumonia, and lower resistance to respiratory infections. As shown in Table 8, Project construction and operation would not exceed the SCAQMD localized thresholds for NO_2 . Thus, construction and operation of the Project are not expected to exceed the NO_2 standards or contribute to associated health effects.

CO tends to be a localized impact associated with congested intersections. CO competes with oxygen, often replacing it in the blood, reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions. CO hotspots were discussed previously as a less than significant impact. Thus, the Project's CO emissions would not contribute to the health effects associated with this pollutant.

The SCAB is designated as nonattainment for PM_{10} under the CAAQS and nonattainment for $PM_{2.5}$ under the NAAQS and CAAQS. Particulate matter contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. Particulate matter exposure has been linked to a variety of problems, including premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms such as irritation of the airways, coughing, or difficulty breathing (EPA 2016). As with O_3 and NO_x , the Project would not generate emissions of PM_{10} or $PM_{2.5}$ that would exceed SCAQMD's LSTs. Accordingly, the Project's PM_{10} and $PM_{2.5}$ emissions are not expected to cause any increase in related regional health effects for these pollutants.

In summary, the Project would not result in any potentially significant contribution to local or regional concentrations of nonattainment pollutants and would not result in a significant contribution to the adverse health impacts associated with those pollutants. Impacts would be less than significant.

6.4 Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The occurrence and severity of potential odor impacts depends on numerous factors. The nature, frequency, and intensity of the source; the wind speeds and direction; and the sensitivity of receiving location each contribute to

the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying and cause distress among the public and generate citizen complaints.

Odors would be potentially generated from vehicles and equipment exhaust emissions during construction of the Project. Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment and asphalt pavement application. Such odors would disperse rapidly from the Project site and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors during construction would be less than significant.

Land uses and operations associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting operations, refineries, landfills, dairies, and fiberglass molding facilities (SCAQMD 1993). The Project would not result in these land uses. Impacts would be less than significant.

7 Conclusions

Criteria air pollutant emissions generated during construction and operation of the Project would not exceed SCAQMD's significance thresholds or result in a cumulatively considerable net increase in emissions. Similarly, the emissions would also not exceed the LST significance thresholds for sensitive receptors during construction or operations or create a CO hotspot. Construction and operational health risk levels would also be below the applicable SCAQMD thresholds. Overall, the Project would result in less than significant air quality impacts.

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Attachment ACalEEMod Emissions Output



MAIN OFFICE 605 THIRD STREET ENCINITAS, CALIFORNIA 92024 T 800.450.1818 F 760.632.0164

MEMORANDUM

To: City of Ontario Planning Department

From: Lisa Valdez, Senior Transportation Planner; Jeanney Keo, Transportation Planner

Subject: City of Ontario City Hall Annex Transportation Assessment

Date: September 2023

cc: Carey Fernandes, Project Manager, Dudek

Attachments: A – Raw Traffic Count Data

B - Level of Service WorksheetsC - VMT Screening Evaluation Map

Dudek has prepared the following transportation assessment for the proposed Ontario City Hall Annex Extension (Project) within the City of Ontario, California. The transportation assessment has been prepared consistent with the City of Ontario Traffic and Transportation Guidelines¹ and the City's Resolution No. 2020-071 adopting Vehicle Miles Traveled Thresholds for Determining Significance of Transportation Impacts Through CEQA in Conformance with SB 743². The City requires CEQA transportation analysis and impacts to be assessed based on vehicle miles traveled (VMT); and, non-CEQA analysis and improvements to be based on the City's General Plan Mobility Element which contains local level of service (LOS) and other transportation-related policies.

The following Memo documents existing roadway, pedestrian, bicycle, and transit conditions, including intersection levels of service at eight study intersections; estimates the project trip generation and distribution; analyzes the potential traffic impacts that would occur under the Opening Year (2027) conditions with the project-added traffic; provides a VMT screening analysis; and evaluates the proposed project site access.

1.0 Project Description

The Project location and study area are shown as Figure 1 and the Project site plan is shown as Figure 2. The project site is comprised of approximately four acres of land located on the east edge of the existing Ontario City Hall Civic Center property, just east of Sultana Avenue and north of the existing Fire Department and City Office building. The project site is currently occupied by a city parking lot which will be demolished to support the proposed City Hall Annex building and a future six-level parking structure, to be located directly north of the Annex project site.

The proposed project would consist of a new three-story civic office building of approximately 60,000 square feet (SF), with the potential of a fourth level future expansion. The building would provide office and support spaces for seven existing city departments currently housed in various locations around the existing Civic Center and

¹ City of Ontario. 2013. City of Ontario Traffic and Transportation Guidelines. August.

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² City of Ontario. 2020. Resolution No. 2020-071 adopting Vehicle Miles Traveled Thresholds for Determining Significance of Transportation Impacts Through CEQA in Conformance with SB 743. June.

neighboring buildings. The project would also include site improvements of roughly 28,500 SF including hardscape and landscape areas, as well as a service access driveway.

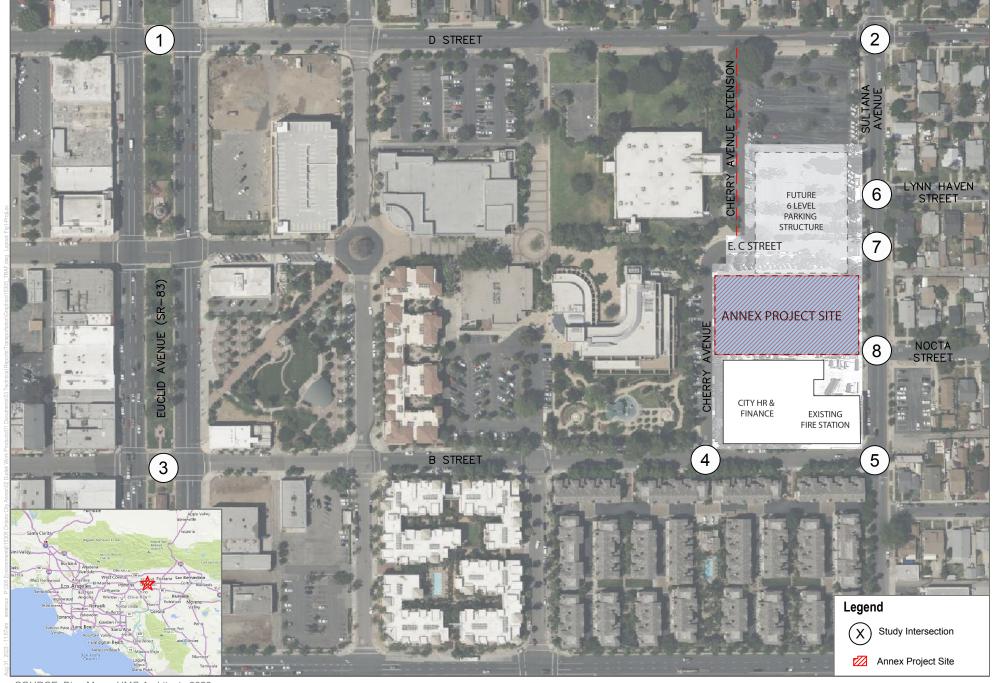
Parking

Parking for the project would be provided in a new six-story, approximately 268,730 SF parking structure located just north of the City Hall Annex project site. The parking structure would contain 835 parking stalls and would be configured in three 90-degree, double-loaded parking bays.

Site Access/Circulation

The entry to parking structure will be from Sultana Avenue (near Lynn Haven Street) and Cherry Avenue. East C Street would be vacated with the construction of the parking garage. Cherry Avenue will also be vacated and used as a two-way drive aisle that will be accessible from B Street, circulate north through the site and exit through D Street. The parking structure will have a west entrance that will be accessed from the drive aisle on Cherry Avenue. Building entry would be from a main entrance on the northern side of the proposed annex building. The existing one-way drive aisle located north of the existing Fire Station and City Hall would be widened to a two-way drive aisle and would be accessible from Sultana Avenue. Additionally, an existing cell tower located at the south edge of the project site will remain and require intermittent vehicular service access.

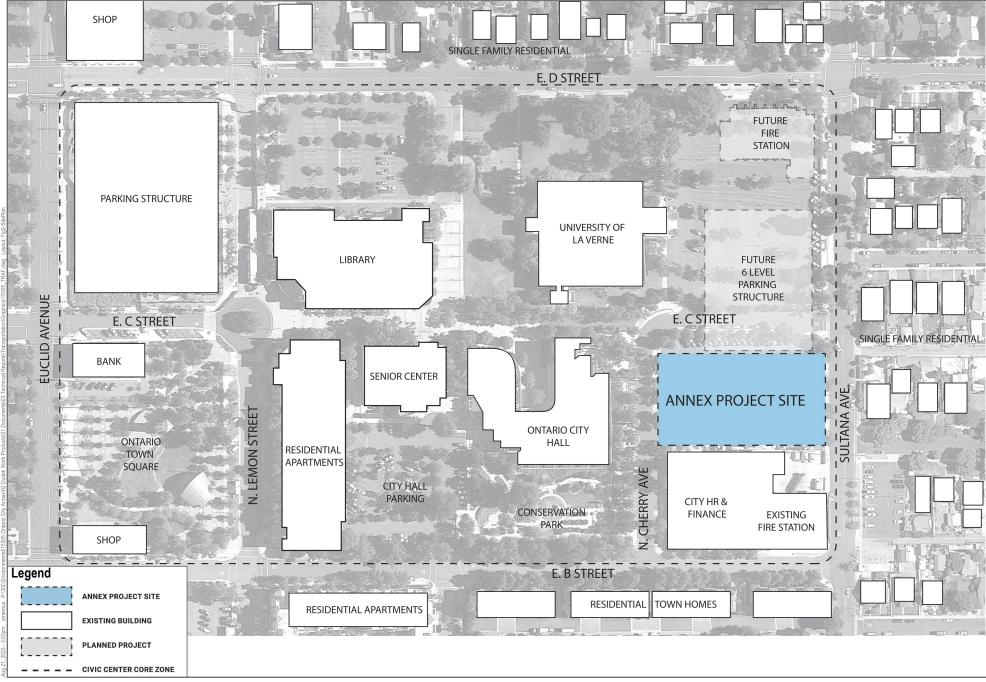




SOURCE: Bing Maps; HMC Architects 2023

Figure 1
Project Location and Study Area

City of Ontario City Hall Annex



SOURCE: HMC Architects 2023

Figure 2 Site Plan

City of Ontario City Hall Annex

2.0 Existing Transportation Network

The Project site is surrounded by residential, educational, and office and commercial uses on all sides (see Figure 1). A description of the nearby roads serving the site is provided below.

2.1 Roadway Network

Figure 1 provides a regional location map and the study area. Regional access to the project is provided by Interstate 10-(I-10) approximately $1\frac{1}{2}$ miles north of the site. The local road network near the site includes Euclid Avenue, Sultana Avenue, B Street, C Street, D Street, Lynn Haven Street, Nocta Street, and Cherry Avenue. Characteristics of the main roadways in the study area are described below.

- Euclid Avenue State Route 83 is a north-south divided four-lane principal arterial connecting to I-10 to the north and SR-60 to the south. Sidewalks are provided on both sides of the street.
- Sultana Avenue is a north-south two-lane collector. Sidewalks are provided on both sides of the street.
 Access to the parking structure would be provided from a new driveway on Sultana Avenue.
- B Street is an east-west two-lane local road located between Vine Avenue on the west and Sultana Avenue on the east. B Street borders the existing City Hall offices and existing City Fire station. Sidewalks are provided on both sides of the street.
- C Street is an east-west two-lane local road located between Vine Avenue on the west and Lemon Avenue on the east, where is terminates at an existing pedestrian corridor. Sidewalks are provided on both sides of the street. There is an existing short segment of C Street between Cherry Avenue and Sultana Avenue that would be vacated with the construction of the parking garage.
- D Street is an east-west two-lane collector located between Benson Avenue and the City limits on the west and Vineyard Avenue on the east. Sidewalks are provided on both sides of the street.
- Lynn Haven Street is a one-block long two-lane local street between Sultana Avenue on the west and Monterey Avenue on the east. Sidewalks are provided on both sides of the street.
- Nocta Street is an east-west two-lane local road located between Sultana Avenue on the west and Lassen Place on the east. Sidewalks are provided on both sides of the street.
- Cherry Avenue is a north-south two-lane local road located between El Morado Court on the north and East D Street on the south. Sidewalks are provided on both sides of the street. There is an existing short segment of Cherry Avenue between C Street and B Street that would be vacated with the construction of the parking garage. Access to the parking garage would be provided from a new driveway on Cherry Avenue.

2.2 Rail and Transit

The City of Ontario is served by bus services provided by OmniTrans, which provides regional and local services throughout San Bernardino Valley. Regionally, the City is served by passenger rail services offered by the National Railroad Passenger Corporation (Amtrak), and commuter rail service provided by Metrolink. The rail and transit providers are described below.



Omnitrans provides service on five routes within the City, with three routes operating near the project site³. The existing transit routes are shown on Figure 3 and described below.

- Route 61 connects Fontana, Ontario Mills, the Ontario International Airport, and Pomona. Near the project site, Route 61 serves Holt Boulevard, one block south of the project site. The nearest bust stop is located near the intersection of Holt Boulevard and Plum Avenue, approximately one and half blocks southwest of the site. Route 61 provides service Monday through Friday at 20-minute intervals from 4:00 am to 11:59 am, and 30-minute intervals from 5:25 am to 9:14 pm on the weekends.
- Route 83 connects Upland, Ontario, and Chino, via Euclid Avenue. Near the project site, Route 83 serves Euclid Avenue, two blocks west of the project site. The nearest bus stop is located near the intersection of Euclid Avenue and Holt Boulevard. Route 83 provides service Monday through Sunday at 60-minute intervals from 6:00 am to 8:14 pm.
- Route 87 connects Rancho Cucamonga, Ontario, and Eastvale. Near the project site, Route 87 serves Holt Boulevard, one block south of the project site and Campus Avenue, four blocks east of the site. The nearest bus stop is located near the intersection of Holt Boulevard and Plum Avenue. Route 87 provides service Monday through Saturday at 60-minute intervals from 4:35 am to 8:39 pm.

Amtrak is a national rail operator, with 21,000 route miles in 46 states, the District of Columbia, and three Canadian Provinces. Amtrak operates more than 300 trains each day to more than 500 destinations. The Amtrak station is located at 198 E Emporia Street, approximately 0.3 miles southwest of the project site.

Metrolink is a commuter rail system in southern California that connects Ontario to the greater southern California region via the Riverside Line. The Ontario East station is located approximately five and half miles southeast of the site at 3330 E. Francis Street.

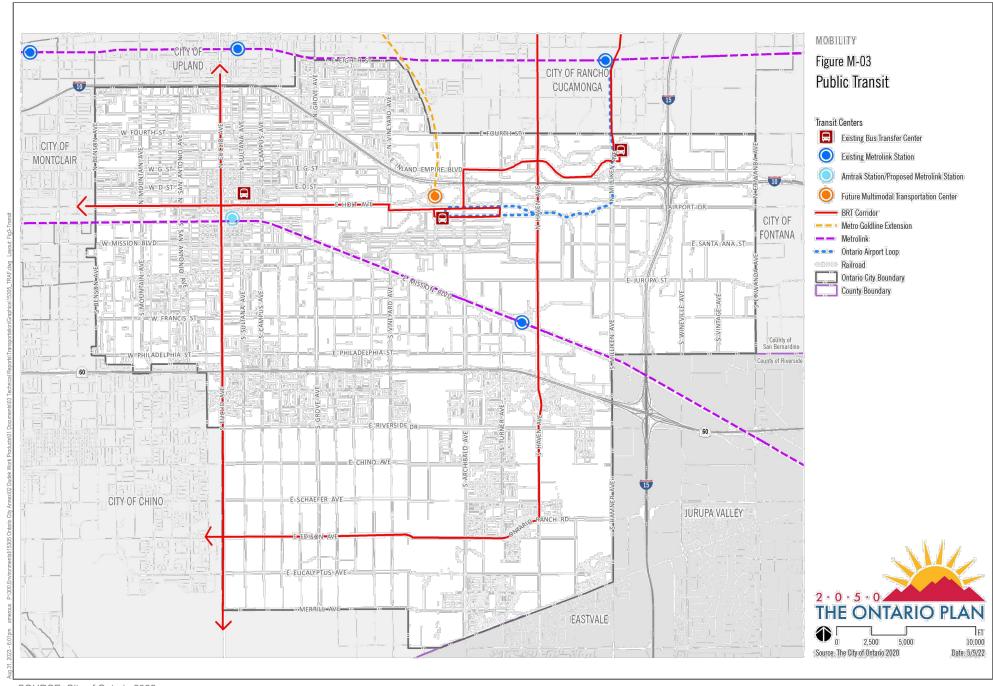
2.3 Pedestrian and Bicycle Facilities

The project site is located in the City's downtown core and is well served by pedestrian facilities, with sidewalks provided along most streets and crosswalks provided at all major intersections. Within the vicinity of the site, there is an existing Class III bike route (on-street signed bike route) on G Street, between N. Benson Avenue to the west and N. Vineyard Avenue to the east. Figure M-O3: Public Transit of the General Plan recommends numerous bicycle facilities near the project site, including Bike Boulevards (low traffic volume shared roadway bicycle facility) and Class III bike routes. Figure 4 presents the existing and proposed bicycle facilities in the project area.

Omnitrans. 2023. View Omnitrans Bus Routes, Maps, and Schedules



15305



SOURCE: City of Ontario 2022

Figure 3
Transit Routes

City of Ontario City Hall Annex

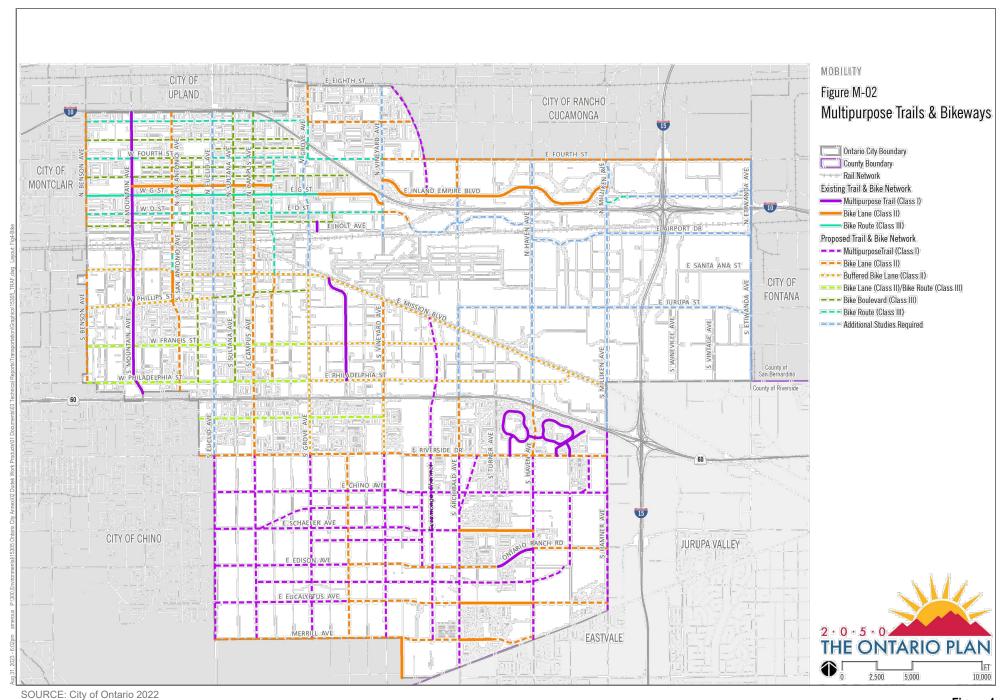


Figure 4 **Bicycle Facilities**

City of Ontario City Hall Annex

3.0 Project Trip Generation and Distribution

Trip generation estimates for the proposed project are based on daily and AM and PM peak hour trip generation rates obtained from the Institute of Transportation Engineers (ITE) *Trip Generation Handbook, 11th Edition* (2021). As shown in Table 1 below, the proposed project would generate 1,527 daily trips, 225 AM peak hour trips and 146 PM peak hour trips.

Table 1. Project Trip Generation

	ITE			AM Peak Hour		PM Peak Hour			
Land Use	Code	Size	Daily	In	Out	Total	In	Out	Total
Trip Rates ¹									
Government Office Building	730	per employee	7.45	0.83	0.28	1.10	0.14	0.57	0.71
Trip Generation	Trip Generation								
New Annex Building	730	343 employees ²	2,555	282	94	377	49	195	244
Reductions									
Employees relocated from existing Annex		-138 employees	-1,028	-114	-38	-152	-20	-78	-98
NE	T Total	205 employees	1,527	169	56	225	29	117	146

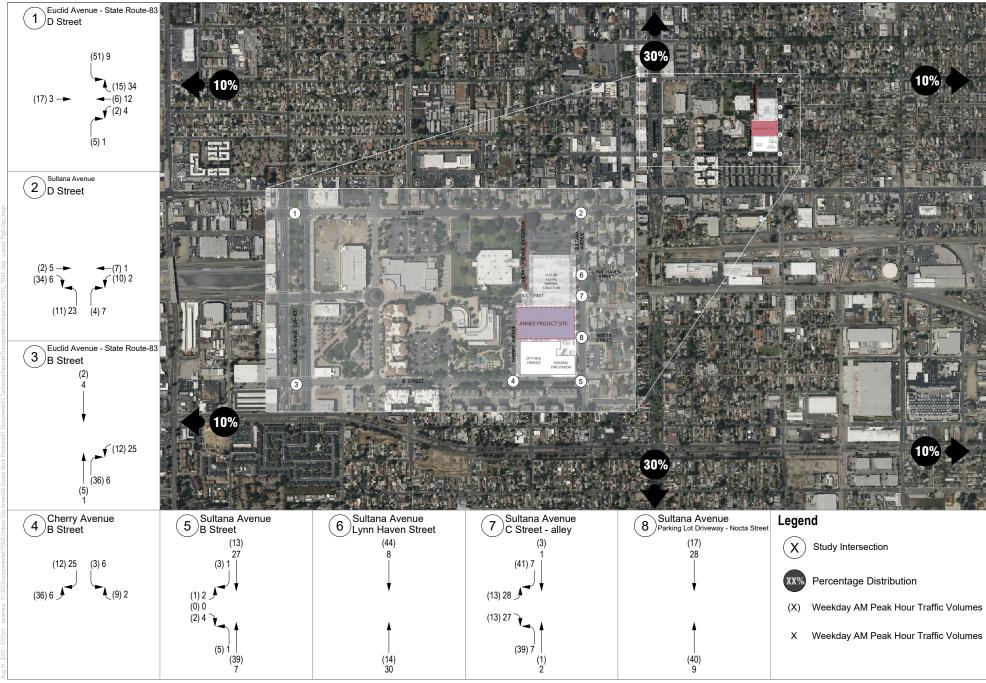
Notes: TSF = thousand square feet

Project trip distribution percentages are based on logical travel paths to and from the project site and consideration of the traffic distribution patterns in the area. Figure 5 illustrates the project trip distribution percentages and peak hour project-added trips through the study intersections.



¹ Trip rates from Trip Generation, 11th Edition, Institute of Transportation Engineers, 2021.

Employee estimates obtained from the City Hall Annex Programming Study (April 11, 2023)



SOURCE: Bing Maps; HMC Architects 2023

Figure 5
Project Trip Distribution and Volumes

City of Ontario City Hall Annex

4.0 Level of Service (LOS) Methodology and Thresholds

The City has vehicle LOS policies to ensure that proposed developments are consistent with the City's General Plan. Therefore, an LOS analysis has been prepared to evaluate the Project's consistency with the City's policies. The study intersections and roadway segments, analysis scenarios, traffic volumes, and LOS methodology and impact criteria are presented in the following section.

4.1 Study Intersections and Roadway Segments

The following intersections were selected for analysis:

- 1. Euclid Avenue/SR-38/D street
- 2. Sultana Avenue/D Street
- 3. Euclid Avenue/SR-38/B Street
- 4. Cherry Avenue/B Street
- 5. Sultana Avenue/B Street
- 6. Sultana Avenue/Lynn Haven Street
- 7. Sultana Avenue/C Street
- 8. Sultana Avenue/Nocta Street

In addition, the following road segments were selected for analysis:

- 1. Sultana Avenue, between D Street and Lynn Haven Street
- 2. Sultana Avenue, between B Street and Nocta Street

4.2 Study Scenarios

Intersection LOS analyses were prepared for the weekday AM and PM peak hours at the study intersection for the following analysis scenarios:

- Existing (2023) Conditions
- Existing (2023) Conditions Plus Project
- Project Opening Year (2027)
- Project Opening Year (2027) Plus Project

Daily, AM and PM peak hour turning movements counts were collected at the study intersection on May 16, 2023. Existing peak hour traffic volumes are shown in Figure 7. The raw traffic data is provided as Attachment A.

The 2027 Opening Year condition represents a short-term horizon period (less than 5 years) where the proposed Project is constructed and fully occupied. The peak hour traffic forecasts for the Year 2027 have been projected by increasing the traffic volumes by an annual growth rate of 2 percent, and adding traffic volumes generated by pending cumulative projects. These approved or pending projects are developments in the review process, but not



fully approved; or, projects that have been approved, but not fully constructed or occupied. A list of cumulative projects was provided by the City in July 2023, and further discussed in Section 5.2.1.

4.3 Analysis Methodology

LOS is commonly used as a qualitative description of intersection operations and roadway segments and is based on the design capacity of the intersection configuration and roadway facility, compared to the volume of traffic using the facility. The City's intersection evaluation methodology to assess transportation impacts and traffic operating conditions for intersections is based on the latest version of the Highway Capacity Manual (HCM) methodology.

The HCM analysis methodology describes the operation of an intersection using a range of LOS from LOS A (free-flow conditions) to LOS F (severely congested conditions), based on the corresponding control delay experienced per vehicle based on the worst turning movement for unsignalized intersections.

Synchro version 11 software was used to determine intersection LOS (for all scenarios), consistent with HCM 6 methodologies. Detailed LOS calculation worksheets (for all scenarios) are included in Attachment B. Table 2 shows the LOS values by delay ranges for unsignalized and signalized intersections under the HCM methodology.

Table 2. Levels of Service for Intersections using HCM Methodology

Level of Service	Unsignalized Intersections Control Delay (in seconds per vehicle)	Signalized Intersections Control Delay (in seconds per vehicle)
Α	<u>≤</u> 10.0	≤ 10.0
В	> 10.0 to < 15.0	> 10.0 to < 20.0
С	> 15.0 to < 25.0	> 20.0 to < 35.0
D	> 25.0 to < 35.0	> 35.0 to < 55.0
E	> 35.0 to < 50.0	> 55.0 to < 80.0
F	> 50.0	> 80.0

Source: HCM 6 (Transportation Research Board 2016).

Table 3 presents the daily roadway capacity values for use in the roadway segment LOS analysis. The roadway capacities are based on the values presented in the traffic analysis prepared for the Ontario Plan 2050 Draft Supplemental Environmental Impact Report⁴.

Table 3. Average Daily Roadway Capacity Values

Roadway Classification	Number of Lanes	Capacity
Principal Arterial	6	56,000
Principal Arterial	4	37,400
Minor Arterial	6	43,300
Minor Arterial	4	28,900

Fehr and Peers. 2022. The Ontario Plan Transportation Impact Assessment for the Ontario Plan 2050 Draft Supplemental Environmental Impact Report. March 2.



Table 3. Average Daily Roadway Capacity Values

Roadway Classification	Number of Lanes	Capacity
Collector	2	17,400
Local	2	12,500

Source: Ontario Plan 2050 Draft Supplemental Environmental Impact Report

4.4 General Plan Consistency Requirement

The City's Mobility Element has adopted LOS E as the minimum acceptable operating standard for intersections and LOS D for arterial streets in the City⁵. Consistent with recent traffic studies conducted in the area, to determine whether the addition of project traffic at a study intersection would result in a traffic deficiency, the following will be utilized:

 When the Without Project condition is at or better than LOS E (i.e., acceptable LOS), and project-generated traffic causes deterioration below LOS E (i.e., unacceptable LOS), a deficiency is deemed to occur.

When the Without Project condition is already below LOS E (i.e., unacceptable LOS), the Project will be responsible for improving its deficiency to acceptable levels of service. Thus, for intersections operating at unacceptable LOS during either the AM and/or PM peak hour, improvements have been identified to improve the deficiencies of the Project to an intersection LOS that is equal to or better than Without Project conditions. The Project's contribution to a deficiency can be reduced if the Project is required to implement or fund its fair share of improvements designed to alleviate its contribution to the deficient condition.

5 Level of Service Analysis

This section presents the LOS analysis for the Existing and Opening Year conditions, with and without the project-added traffic.

5.1 Existing (2023) Conditions Analysis

This section details the existing intersection and roadway segment operations within the study area, with and without the project-added traffic. Existing peak hour traffic volumes are shown in Figure 6. The Existing plus project traffic volumes are shown on Figure 7.

Table 4 summarizes the results of the intersection analysis for the AM and PM peak hours for Existing conditions. As shown in the table, all of the study intersections are currently operating at satisfactory levels of service (LOS E or better) under Existing conditions and will continue to operate at satisfactory LOS with the project-added traffic.

Table 5 shows the results of the roadway segment LOS analysis. As shown below, the study area roadway segments are operating at acceptable ADT volume-to-capacity conditions under Existing conditions, with and without the project-added traffic.

⁵ City of Ontario. 2022. The Ontario Plan Mobility Element. Mobility | City of Ontario, California (ontarioca.gov)



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Table 4. Existing Weekday Peak Hour Intersection LOS (with and without Project)

	Т	Existing					Existing	roject		Change in		Inconsistent w/City		
		Traffic	AM Peak		PM Peak		AM Peak		PM Peak		Avg. Delay		Standards?	
No.	Intersection	Control	Delay ¹	LOS	Delay ¹	LOS	Delay ¹	LOS	Delay ¹	LOS	AM	РМ	AM	PM
1	Euclid Ave SR-83/D St. ²	Signal ²	11.3	В	15.0	В	12.0	В	17.3	В	0.7	2.3	No	No
2	Sultana Ave./D St.	AWSC	12.5	В	11.8	В	13.8	В	12.5	В	1.3	0.7	No	No
3	Euclid Ave SR-83/B St.	Signal	5.3	Α	6.7	Α	5.7	Α	7.6	Α	0.4	0.9	No	No
4	Cherry Ave./B St.	TWSC	0.0	Α	0.0	Α	0.0	Α	0.0	Α	0.0	0.0	No	No
5	Sultana Ave./B St.	AWSC	8.7	Α	8.8	Α	9.1	Α	9.0	Α	0.4	0.2	No	No
6	Sultana Ave./Lynn Haven St.	TWSC	10.4	В	9.9	Α	10.7	В	10.1	В	0.3	0.2	No	No
7	Sultana Ave./C St Alley	TWSC	11.7	В	11.0	В	13.0	В	11.7	В	1.3	0.7	No	No
8	Sultana Ave./Parking Lot Driveway - Nocta St.	TWSC	11.4	В	11.2	В	11.9	В	11.5	В	0.5	0.3	No	No

Source: Attachment B

Notes: AWSC = all-way stop control; TWSC = two-way stop control; LOS = Level of Service

Table 5. Existing ADT Roadway Segment Level of Service

		No. of		Existing			Existing	Plus Proje	ect	Exceeds		
Roadway Segment		Classification	Lanes	Capacity ¹	ADT ²	V/C	LOS	ADT ²	V/C	LOS	Threshold?	
Su	Itana Ave.											
1	Between D St. and Lynn Haven S	Collector	2U	17,400	4501	0.26	Α	4899	0.28	Α	No	
2	Between B St. and Nocta St.	Collector	2U	17,400	4469	0.26	Α	4865	0.28	А	No	

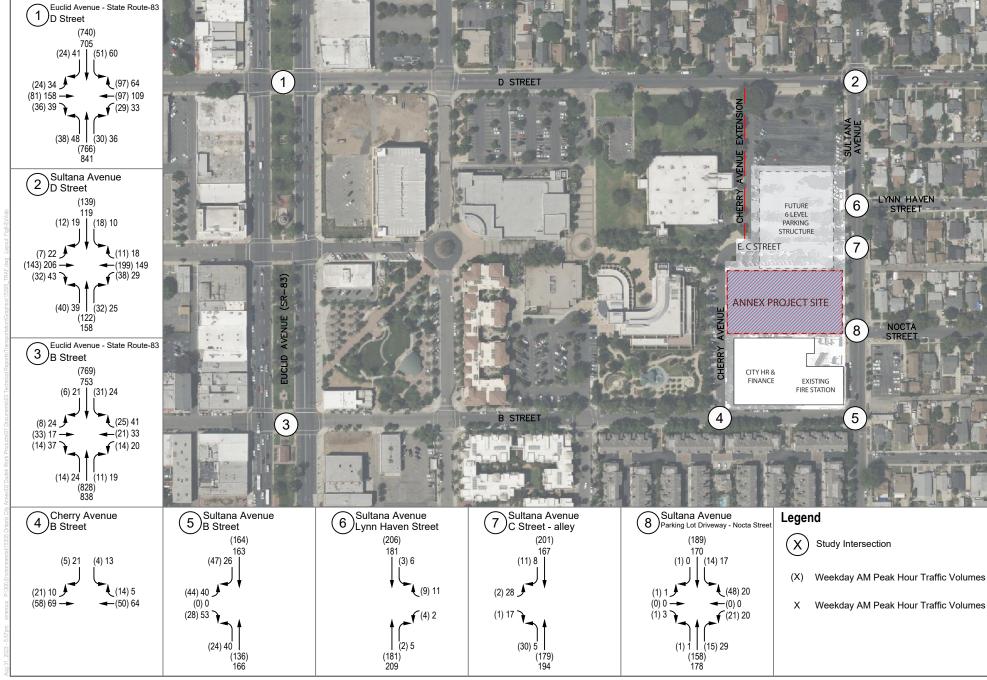
Notes: XU = # of lanes Undivided; XD = # of lanes Divided



Delay in seconds per vehicle; highest movement delay is reported for TWSC intersections

Capacity determined from Table 3 in Section 4.3, Analysis Methodology.

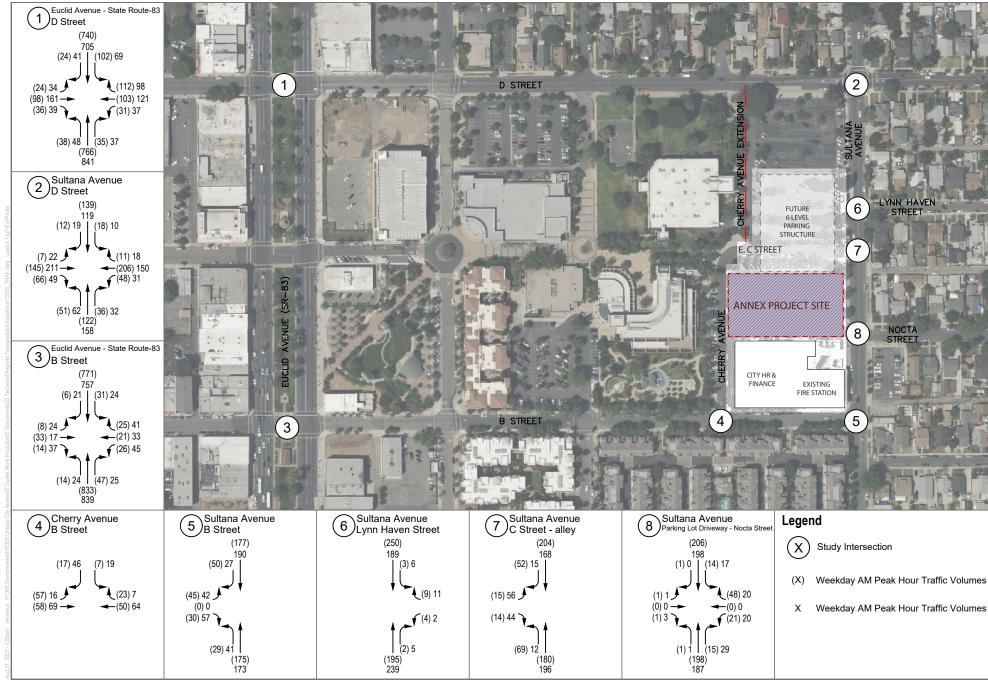
Volume provided from average daily traffic (ADT) counts conducted on May 16, 2023



SOURCE: Bing Maps; HMC Architects 2023

Figure 6
Existing Intersection Volumes

City of Ontario City Hall Annex



SOURCE: Bing Maps; HMC Architects 2023

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Figure 7
Existing + Project Intersection Volumes

5.2 Opening Year (2027) Analysis

This section presents the results of a cumulative condition analysis that was conducted for a short-term horizon year (Year 2027) assuming the proposed Project is constructed and fully occupied.

5.2.1 Cumulative Projects

Cumulative projects are projects that are proposed and in the development review process, but not yet fully approved; or projects that have been approved, but not fully constructed or occupied. The projects listed in Table 6 were provided per communication with City staff and are included in the Opening Year analysis.

Table 6. Cumulative Projects

No	Name	Location	Description
1	PDEV21-009	221 North Mountain Avenue	Multi-family Residential
2	PDEV21-008	SWC of Emporia and Palm Avenue	Multi-family Residential
3	PDEV20-020	NEC of C Street and Euclid Avenue	Mixed-use
4	PDEV22-031	NEC of D Street and Euclid Avenue	Mixed-use
5	PDEV22-023	NEC of Laurel Avenue and D Street	Multi-family Residential
6	PDEV23-001	SWC of D Street and Sultana Avenue	Fire-station
7	PDEV20-009	549 West Holt Boulevard	Mixed-use
8	PDEV19-002	1055 West Mission Boulevard	Multi-family Residential
9	PDEV19-027	SWC of State Street and San Antonio Avenue	Warehousing
10	PDEV21-003	1486 East Holt Boulevard	Brewery/Tap Room
11	PDEV21-026	1030 and 1042 East Holt Boulevard	General Light Industrial
12	PDEV22-009	SEC of Sultana Avenue and Mission Boulevard	General Light Industrial
13	PDEV21-035	SEC of Sultana Avenue and Belmont Street	General Light Industrial
14	PDEV21-037	1516 South Bon View Avenue	Warehousing
15	PDEV21-034	621 South Mountain Avenue	General Light Industrial

Source: Email correspondence with the City of Ontario, July 2023

Project trip generation estimates for the cumulative projects were derived using ITE *Trip Generation, 11th Edition* (2021) trip rates. As shown in Table 7, the cumulative projects are forecast to generate approximately 6,333 daily trips, 422 AM peak hour trips, and 700 PM peak hour trips. The trips generated by the cumulative projects were distributed through the study area network, and were based on logical commute corridors. Figure 8 shows the location of the cumulative projects.

Table 7. Cumulative Trip Generation

	ITE			AM Pe	eak Hou	ır	PM Peak Hour		
Land Use		Size	Daily	In	Out	Total	In	Out	Total
Trip Rates ¹									
General Light Industrial	110	per TSF	4.87	0.65	0.09	0.74	0.09	0.56	0.65
Warehousing	150	per TSF	1.71	0.13	0.04	0.17	0.05	0.13	0.18
Multifamily Housing (Low-Rise)	220	per DU	6.74	0.1	0.3	0.4	0.32	0.19	0.51



Table 7. Cumulative Trip Generation

		ITE			AM Pe	eak Ho	ır	PM Peak Hour		
Lan	d Use	Code	Size	Daily	In	Out	Total	In	Out	Total
Mult	ifamily Housing (Mid-Rise)	221	per DU	4.54	0.09	0.28	0.37	0.24	0.15	0.39
Mult	rifamily Housing (High-Rise)	222	per DU	4.45	0.09	0.18	0.27	0.18	0.14	0.32
Fire	and Rescue Station	575	per TSF	_	_	_	_	0	0.48	0.48
Brev	very Tap Room	971	per TSF	61.69	0.6	0.08	0.68	5.8	4.03	9.83
Trip	Generation ²									
1	Multifamily Housing - High-rise	222	39 DU	263	4	12	16	13	7	20
2	Multifamily Housing - Mid-rise	221	50 DU	337	5	15	20	16	9	25
3	Multifamily Housing - Mid-rise	221	144 DU	971	14	44	58	46	27	73
4	Multifamily Housing - Mid-rise	221	109 DU	735	10	33	43	35	21	56
5	Multifamily Housing - Low-rise	220	28 DU	189	3	9	12	9	5	14
6	Fire Station ³	575	18.000 TSF	_	_	_	0	0	9	9
7	Multifamily Housing - Low-rise	220	59 DU	398	6	18	24	19	11	30
8	Multifamily Housing - Mid-rise	221	68 DU	309	6	19	25	16	10	26
9	Warehousing	150	104.078 TSF	178	14	4	18	5	14	19
10	Beer Room	971	26.000 TSF	1604	16	2	18	151	105	256
11	General Light Industrial	110	44.885 TSF	219	29	4	33	4	25	29
12	General Light Industrial	110	79.323 TSF	386	52	7	59	7	44	52
13	General Light Industrial	110	59.984 TSF	292	39	5	44	5	34	39
14	Warehousing ⁴	150	167.600 TSF	290	20	7	27	11	20	31
15	General Light Industrial	110	33.363 TSF	162	22	3	25	3	19	22
	Total Cumulative	Project	Trip Generation	6,333	239	182	422	341	359	700

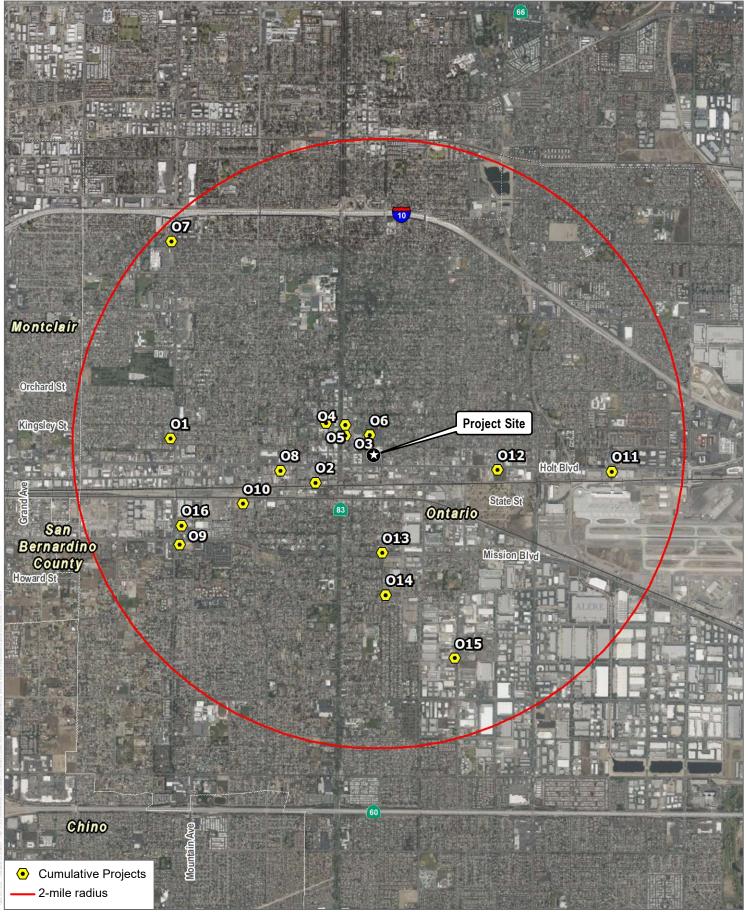
Notes: TSF = thousand square feet; DU = dwelling unit

Trip rates from Trip Generation, 11th Edition, Institute of Transportation Engineers, 2021.

² Cumulative projects provided by email correspondence and public records request with the City of Ontario, 2023.

Trip rates provided by email correspondence with the City of Ontario, Planning Department, 2023.

⁴ Trip rates from Urban Crossroads, ISMND Report, 2022.



SOURCE: Bing Maps

DUDEK

1,650

Figure 8
Cumulative Project Locations

5.2.2 Intersection and Roadway Operations

The existing intersection configurations have been assumed to be preserved under the Opening Year (2027) conditions. Figure 9 illustrates the Opening Year (2027) (no project) traffic volumes for the peak hour conditions and Figure 10 illustrates the Opening Year (2027) (with project) traffic volumes for the peak hour conditions.

Table 8 summarizes the results of the Opening Year (2027) intersection analysis for the AM and PM peak hours, with and without the project. As shown in the table, all study area intersections are forecast to operate at satisfactory levels of service (LOS E or better) under Opening Year (2027) conditions with and without the project-added traffic.

Table 9 shows the results of the roadway segment LOS analysis. As shown below, the study area roadway segments are forecast to operate at acceptable conditions under Opening Year (2027) conditions, with and without the project traffic.



Table 8. Opening Year Weekday Peak Hour Intersection LOS (with and without Project)

			Opening Year (2027)				Openin	(2027) PI	us Proj	j Change in Avg. Delay		Inconsistent w/City Standards?		
		Traffic	AM Peak		PM Peak		AM Peak		PM Peak					
No.		Control	Delay ¹	LOS	Delay1	LOS	Delay ¹	LOS	Delay ¹	LOS	AM	РМ	AM	PM
1	Euclid Ave SR-83/D St. ²	Signal	15.2	В	18.7	В	16.8	В	21.2	С	1.7	2.5	No	No
2	Sultana Ave./D St.	AWSC	14.7	В	13.4	В	16.5	С	14.6	С	1.8	1.2	No	No
3	Euclid Ave SR-83/B St.	Signal	5.5	Α	7.0	Α	5.6	Α	7.4	Α	0.1	0.4	No	No
4	Cherry Ave./B St.	TWSC	0.0	Α	0.0	Α	0.0	Α	0.0	Α	0.0	0.0	No	No
5	Sultana Ave./B St.	AWSC	9.1	Α	9.1	Α	9.4	Α	9.4	Α	0.3	0.3	No	No
6	Sultana Ave./Lynn Haven St.	TWSC	10.6	В	10.1	В	11.0	В	10.3	В	0.4	0.2	No	No
7	Sultana Ave./C St Alley	TWSC	12.4	В	11.5	В	13.8	В	12.3	В	1.4	8.0	No	No
8	Sultana Ave./Parking Lot Driveway - Nocta St.	TWSC	12.0	В	11.7	В	12.6	В	12.0	В	0.6	0.3	No	No

Source: Attachment B

Notes: AWSC = all-way stop control; TWSC = two-way stop control; LOS = Level of Service

Table 9. Opening Year (2027) ADT Roadway Segment Level of Service

			No. of		Opening \	Year (20)	27)	Opening Yea	Exceeds			
Ro	adway Segment	Classification	Lanes	Capacity ¹	ADT ²	V/C	LOS	ADT ²	V/C	LOS	Threshold?	
Su	Sultana Ave.											
1	Between D St. and Lynn Haven St.	Collector	2U	17,400	5432	0.31	А	5830	0.34	А	No	
2	Between B St. and Nocta St.	Collector	2U	17,400	5374	0.31	Α	5770	0.33	Α	No	

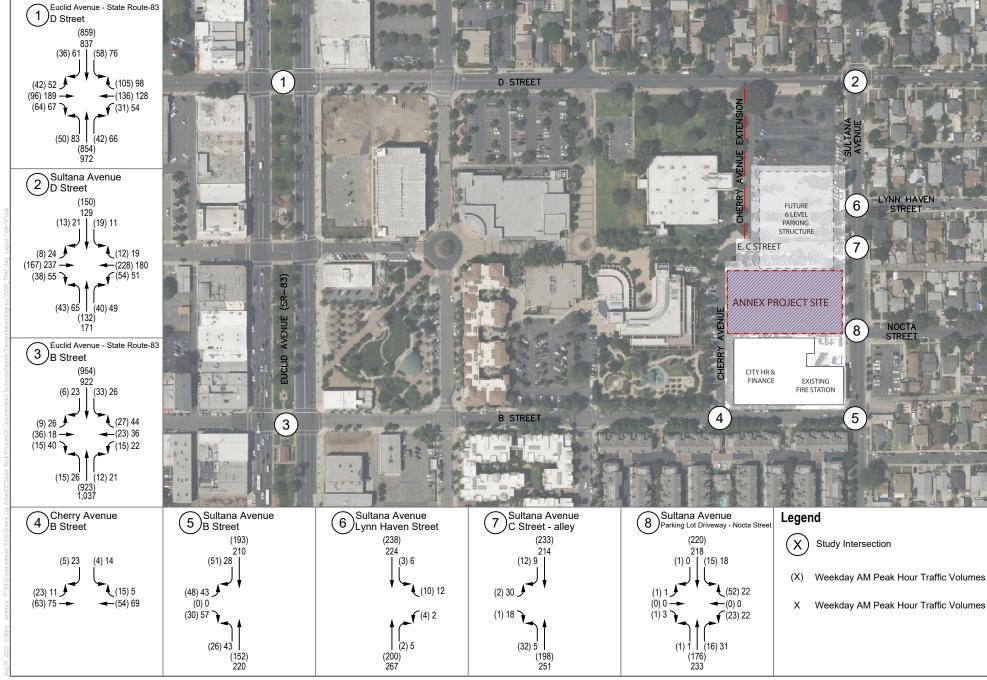
Notes: XU = # of lanes Undivided; XD = # of lanes Divided



Delay in seconds per vehicle; highest movement delay is reported for TWSC intersections

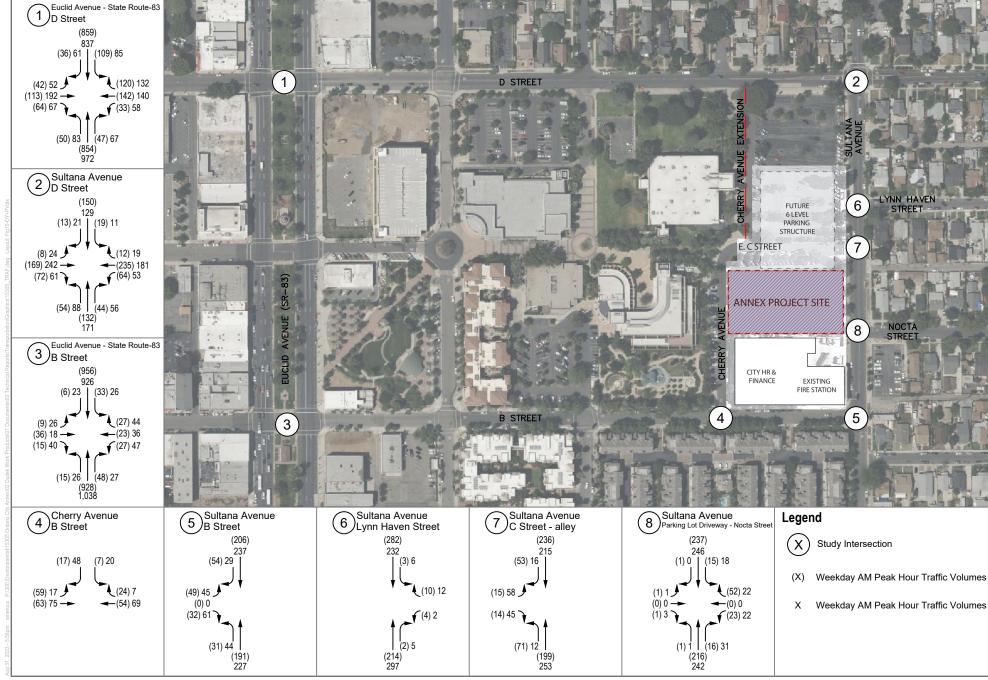
Capacity determined from Table 3 in Section 4.3, Analysis Methodology.

Volume provided from average daily traffic (ADT) counts conducted on May 16, 2023



SOURCE: Bing Maps; HMC Architects 2023

Figure 9
Opening Year (2027) Intersection Volumes



SOURCE: Bing Maps; HMC Architects 2023

Figure 10
Opening Year + Project Intersection Volumes

6.0 Site Access

The site of the new City Hall Annex would serve as both a destination as well as a pathway, with vehicular traffic running adjacent to the east and west boundaries of the site along Sultana Avenue and Cherry Avenue. Cherry Avenue will be utilized as a two-way drive aisle that will be accessible from B Street, circulate north through the site and exit through D Street. Vehicular access to the new parking garage would be provided from driveway on both Cherry Avenue and Sultana Avenue.

Building entry would be from a main entrance on the northern side of the proposed Annex building. Enhanced pedestrian circulation would be provided along Cherry Avenue and between the proposed parking structure and the new Annex building. Pedestrian pathways would also connect to existing sidewalks north of City Hall and on Sultana Avenue. Covered and enclosed long-term bicycle parking would be provided within the parking structure on the ground level.

The design of the proposed project, including all egress/ingress and driveways would be designed according to all relevant City guidelines and would be reviewed by the City's Public Works/Engineering Department. All driveways would be required to have adequate queue storage areas, would be perpendicular to existing roads, and would not cause hazards due to a geometric design feature.

Sidewalks are located on all streets within the project vicinity and the closest bicycle facility is a Class III bike route on G Street approximately 0.35 miles north of the site. The nearest transit route is provided along Holt Avenue, with bus stops provided near the intersection of Holt Boulevard and Plum Avenue, approximately one and half blocks southwest of the site. The Project would not interfere with existing public transit, bicycle, or pedestrian facilities, or impede the construction of new or the expansion of such facilities in the future. There would be no impacts to transit, pedestrian or bicycles access or facilities.

7.0 Vehicle Miles Traveled Analysis Screening Analysis

On September 27, 2013, Governor Brown signed SB 743, with the purpose of streamlining the California Environmental Quality Act (CEQA) review process for several categories of development projects. A key element of SB 743, is the elimination of automobile delay and level of service (LOS) as the sole basis of determining CEQA impacts. The most recent CEQA guidelines, released in December 2018, recommend VMT as the most appropriate measure of project transportation impacts. In accordance with SB 743, the City of Ontario has adopted guidelines, impact thresholds, and mitigation requirements for evaluating VMT.

Based on the City's VMT Thresholds⁶, a project may be screened from conducting a detailed project-level VMT assessment if it meets the screening criteria identified below.

■ Transit Priority Area Screening: Projects located within a ½ mile of an existing "major transit stop" or an "existing stop along a high-quality transit corridor may be presumed to have a less than significant impact absent substantial evidence to the contrary. In addition to its proximity to transit, the project must also

⁶ City of Ontario. 2020. Resolution No. 2020-071 adopting Vehicle Miles Traveled Thresholds for Determining Significance of Transportation Impacts Through CEQA in Conformance with SB 743. June.



15305

have a minimum Floor Area Ratio of 0.75; provide no more parking than City Development code mandates; and be consistent with the applicable Sustainable Communities Strategy; and not replace affordable housing units with a smaller number of moderate or high-income residential units. If the project meets these additional considerations, further analysis is not required, and a less than significant determination can be made. Based on the San Bernardino County Transportation Authority (SBCTA) Transportation Analysis Model (SBTAM) VMT evaluation tool (Attachment C), the project is located within a TPA and meets this screening criterion.

- Low VMT Area Screening: Presumed less than significant VMT for projects located in low VMT-generating model traffic analysis zones (TAZs). These TAZs generate total daily VMT per Service Population that is 15% less than the baseline level for the County. Based on the evaluation tool, the project is not in a low VMT generating area and would not meet this screening criterion.
- Low Trip Generating Uses: Projects below 110 Average Daily Trips (ADT) are presumed to be less than significant, such as:
 - 11 single family homes
 - 16 multi-family, condominiums or townhouse housing units;
 - 10,000 SF of office;
 - 15,000 SF of light industrial;
 - 63,000 SF of warehousing; and 79,000 SF of high-cube transload and short-term storage warehouse

The proposed project is anticipated to generate more than 110 ADT and therefore would not meet this screening criterion.

- Project Type Screening: Projects that meet the criteria described below can be screened from further VMT review and are presumed to have a less than significant impact:
 - Residential, office, retail or a mix of these land uses within ½ mile of an existing major transit stop;
 - Local-serving retail uses not greater than 50,000 square feet in size; Projects with a Neighborhood Commercial TOP Land Use designation;
 - Certain Transportation projects that do not add vehicle capacity;
 - Local-serving K-12 Public Schools;
 - Local/Neighborhood parks;
 - Daycare/Childcare/Pre-Kindergarten;
 - Affordable or supportive housing;
 - Student housing projects on or adjacent to a college campus;
 - Community institutions (public libraries, fire stations, local government facilities);
 - Senior housing (as defined by HUD) or Assisted living facilities;
 - Redevelopment of a site to a residential or office that would generate fewer VMT than the existing use; and
 - Non-destination small hotels (with 150 or fewer rooms and no Banquet facilities)

The proposed project would consist of a new three-story civic office building to house seven existing city departments and therefore meets the Community Institution land use.



Based on the City's VMT screening criteria above, the project would screen-out of a project-specific VMT analysis because it is within a TPA and also qualifies as a "Community Institution" (i.e., local government facility). Therefore, a comprehensive VMT analysis is not required and impacts to VMT can be presumed to be less than significant.

8.0 Summary

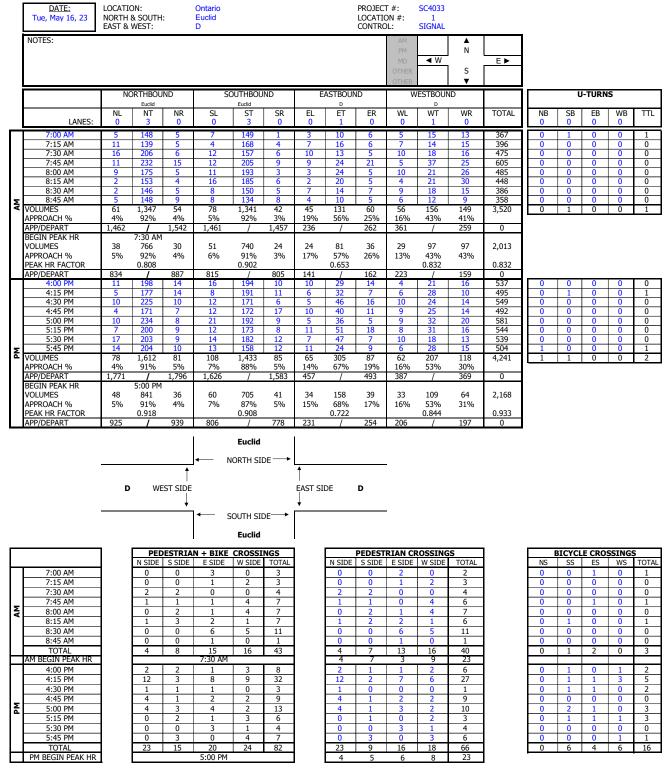
The key findings of the transportation analysis in this memo are summarized below:

- The proposed project would generate 1,527 daily trips, 225 AM peak hour trips and 146 PM peak hour trips.
- Based on the intersection LOS analysis, all of the study intersections are currently and forecast to operate at satisfactory levels of service (LOS E or better) under Existing and Opening Year (2027) conditions with and without the project-added traffic. There would be no project-related LOS impacts on the study intersections.
- Based on the roadway segment LOS analysis, the study area roadway segments are currently and forecast to operate at acceptable ADT volume-to-capacity conditions under Existing and Opening Year (2027) conditions, with and without the project-added traffic. There would be no project-related LOS impacts on the study road segments.
- The Project would have no impact on the transit, pedestrian and bicycle facilities in the area.
- Per the City's VMT screening criteria, the project would screen-out of project-specific VMT analysis because it is within a TPA and also qualifies as a "Community Institution" (i.e., local government facility). Therefore, a comprehensive VMT analysis is not required and impacts to VMT can be presumed to be less than significant.

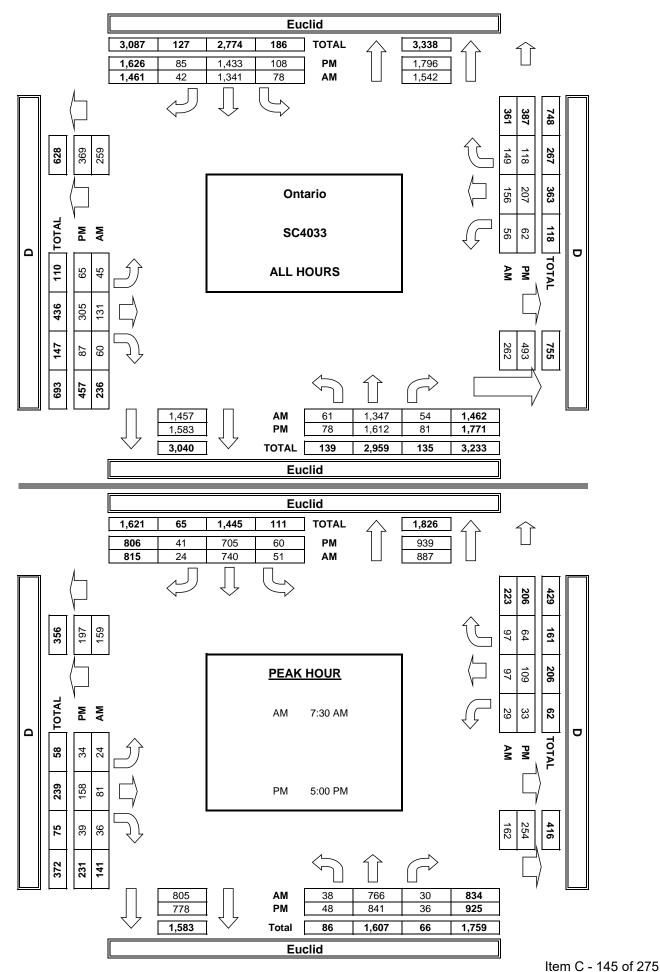


Attachment ARaw Traffic Count Data

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com



AimTD LLC
TURNING MOVEMENT COUNTS



PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

<u>DATE:</u> Tue, May 16, 23
 LOCATION:
 Ontario
 PROJECT #:
 SC4033

 NORTH & SOUTH:
 Sultana
 LOCATION #:
 2

 EAST & WEST:
 D
 CONTROL:
 STOP ALL

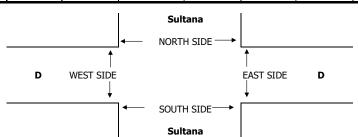
NOTES:

AM
PM
MD
✓ W
OTHER
OTHER

		NO	ORTHBOU	ND	SC	OUTHBOU	ND	Е	ASTBOUN	ID	W	ESTBOUN	ND	
			Sultana			Sultana			D			D		
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	LANES:	0	1	0	0	1	0	1	1	0	1	1	0	
	7:00 AM	6	18	3	1	16	2	0	19	2	6	30	0	103
	7:15 AM	5	25	3	1	22	1	0	30	4	9	34	0	134
	7:30 AM	5	27	4	1	28	1	1	25	6	12	43	0	153
	7:45 AM	13	50	9	5	41	4	3	38	15	7	52	4	241
	8:00 AM	10	19	9	6	42	6	2	40	6	12	52	2	206
	8:15 AM	12	26	10	6	28	1	1	40	5	7	52	5	193
	8:30 AM	7	16	5	4	17	3	5	20	6	6	34	1	124
Ψ	8:45 AM	9	15	2	0	20	2	2	14	5	7	21	1	98
₹	VOLUMES	67	196	45	24	214	20	14	226	49	66	318	13	1,252
	APPROACH %	22%	64%	15%	9%	83%	8%	5%	78%	17%	17%	80%	3%	
	APP/DEPART	308		223	258	/	330	289	/	295	397	/	404	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	40	122	32	18	139	12	7	143	32	38	199	11	793
	APPROACH %	21%	63%	16%	11%	82%	7%	4%	79%	18%	15%	80%	4%	
	PEAK HR FACTOR		0.674			0.782			0.813			0.939		0.823
	APP/DEPART	194		140	169	/	209	182	- /	193	248	- /	251	0
	4:00 PM	8	32	7	4	25	4	2	56	12	3	33	5	191
	4:15 PM	8	36	3	4	20	1	3	48	13	5	42	0	183
	4:30 PM	10	48	7	3	36	8	3	58	9	5	33	6	226
	4:45 PM	8	41	7	0	34	5	7	36	7	6	33	3	187
	5:00 PM	9	35	7	4	28	4	5	51	16	9	50	3	221
	5:15 PM	12	34	4	3	21	2	7	61	11	9	33	6	203
	5:30 PM	10	43	11	2	30	4	6	58	13	4	27	2	210
Σ	5:45 PM	9	38	7	3	20	3	5	37	10	6	44	1	183
۵	VOLUMES	74	307	53	23	214	31	38	405	91	47	295	26	1,604
	APPROACH %	17%	71%	12%	9%	80%	12%	7%	76%	17%	13%	80%	7%	
	APP/DEPART	434	1	371	268	/	353	534	/	481	368	/	399	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	39	158	25	10	119	19	22	206	43	29	149	18	837
	APPROACH %	18%	71%	11%	7%	80%	13%	8%	76%	16%	15%	76%	9%	
	PEAK HR FACTOR		0.854			0.787			0.858			0.790		0.926
	APP/DEPART	222	7	198	148	7	191	271	1	241	196	1	207	0

	U-TURNS								
NB	SB	EB	WB	TTL					
0	0	0	0						
0	0	0	0	0					
0	0	0	0	0					
0	0	0	0	0					
0	0	0	0	0					
0	0	0	0	0					
0	0	0	0	0					
0	0	0	0	0					
1	0	0	0	1					
1	0	0	0	1					

_				
0	0	0	0	0
1	0	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
				•



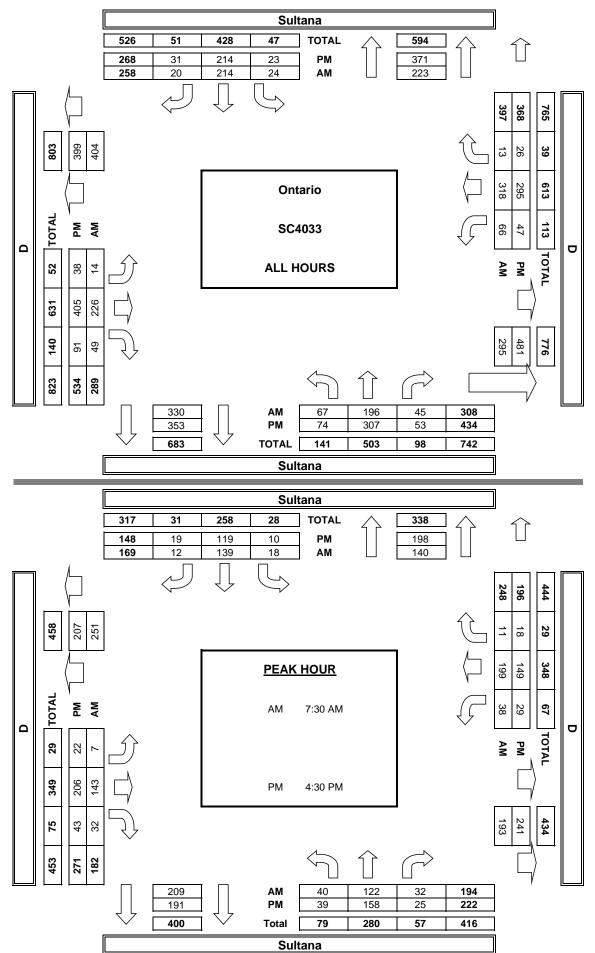
	7:00 AM
	7:15 AM
	7:30 AM
l_	7:45 AM
AΜ	8:00 AM
_	8:15 AM
	8:30 AM
	8:45 AM
	TOTAL
	am begin peak hr
	4:00 PM
	4:15 PM
	4:30 PM
	4:45 PM
Σ	5:00 PM
-	5:15 PM
	5:30 PM
	5:45 PM
	TOTAL
	PM BEGIN PEAK HR

PED	ESTRIA	N + BIKE	CROSSI	NGS
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
1	0	0	2	3
0	2	1	0	3
4	0	6	0	10
2	1	2	1	6
3	1	3	2	9
1	1	0	2	4
3	0	3	1	7
1	1	0	1	3
15	6	15	9	45
		7:30 AM		
2	1	1	0	4
3	4	1	1	9
3	0	1	1	5
0	1	0	0	1
0	3	3	2	8
0	2	5	3	10
2	1	0	1	4
0	3	3	0	6
10	15	14	8	47
		4:30 PM		

	PEDESTRIAN CROSSINGS							
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL				
1	0	0	2	3				
0	2	1	0	3				
4	0	6	0	10				
2	1	2	0	5				
3	1	2	2	8				
1	1	0	2	4				
2	0	3	0	5				
0	1	0	1	2				
13	6	14	7	40				
10	3	10	4	27				
2	1	1	0	4				
3	3	1	1	8				
3	0	1	0	4				
0	1	0	0	1				
0	3	3	2	8				
0	2	4	0	6				
2	1	0	1	4				
0	2	1	0	3				
10	13	11	4	38				
3	6	8	2	19				

В	ICYCL	E CROS	SSING	5
NS	SS	ES	WS	TOTAL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	1	0	1
0	0	0	0	0
1	0	0	1	2
1	0	0	0	1
2	0	1	2	5
0	0	0	0	0
0	1	0	0	1
0	0	0	1	1
0	0	0	0	0
0	0	0	0	0
0	0	1	3	4
0	0	0	0	0
0	1	2	0	3
0	2	3	4	9

AimTD LLC
TURNING MOVEMENT COUNTS



PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

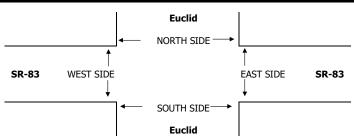
<u>DATE:</u> Tue, May 16, 23 LOCATION:OntarioPROJECT #:SC4033NORTH & SOUTH:EuclidLOCATION #:3EAST & WEST:SR-83CONTROL:SIGNAL

NOTES:	AM		
	PM N		
	MD ◀ W	E	: ▶
	OTHER S		
	OTHER		

		NO	ORTHBOU	ND	S	OUTHBOU	ND	E	ASTBOUN	ID.	W	ESTBOUN	ID	
			Euclid			Euclid			SR-83			SR-83		
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	LANES:	0	3	0	0	3	0	0	1	0	0	1	0	
	7:00 AM	0	169	2	4	166	1	0	1	0	2	0	3	348
	7:15 AM	1	171	1	7	167	2	1	2	4	2	2	6	366
	7:30 AM	3	223	6	4	167	2	4	8	4	4	6	8	439
	7:45 AM	5	250	4	11	218	2	2	14	1	5	9	5	526
	8:00 AM	5	184	0	9	217	0	1	9	5	3	4	6	443
	8:15 AM	6	135	2	7	169	4	4	9	3	2	4	5	350
	8:30 AM	2	165	2	2	148	3	1	7	2	5	5	6	348
¥	8:45 AM	13	173	7	6	131	3	2	7	1	4	3	3	353
⋖	VOLUMES	35	1,470	24	50	1,383	17	15	57	20	27	33	42	3,173
	APPROACH %	2%	96%	2%	3%	95%	1%	16%	62%	22%	26%	32%	41%	
	APP/DEPART	1,529	/	1,528	1,450	/	1,431	92	/	130	102	/	84	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	14	828	11	31	769	6	8	33	14	14	21	25	1,774
	APPROACH %	2%	97%	1%	4%	95%	1%	15%	60%	25%	23%	35%	42%	
	PEAK HR FACTOR		0.823			0.872			0.809			0.789		0.843
	APP/DEPART	853		861	806	1	798	55		75	60	/	40	0
	4:00 PM	3	221	2	5	126	0	10	14	9	2	3	9	404
	4:15 PM	3	185	5	2	205	5	5	8	12	3	5	5	443
	4:30 PM	2	214	3	4	193	3	7	9	4	4	6	8	457
	4:45 PM	9	200	1	7	181	3	6	11	6	6	4	8	442
	5:00 PM	3	208	1	7	203	1	6	15	10	6	10	13	483
	5:15 PM	6	225	3	1	208	5	8	4	12	4	7	7	490
	5:30 PM	8	181	9	10	182	6	5	14	7	8	10	12	452
Σ	5:45 PM	7	224	6	6	160	9	5	8	8	2	6	9	450
I٩	VOLUMES	41	1,658	30	42	1,458	32	52	83	68	35	51	71	3,621
	APPROACH %	2%	96%	2%	3%	95%	2%	26%	41%	33%	22%	32%	45%	
	APP/DEPART	1,729	/	1,782	1,532		1,561	203		154	157		124	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	24	838	19	24	753	21	24	41	37	20	33	41	1,875
	APPROACH %	3%	95%	2%	3%	94%	3%	24%	40%	36%	21%	35%	44%	
	PEAK HR FACTOR		0.929			0.932			0.823			0.783		0.957
	APP/DEPART	881		903	798		810	102		84	94	/	78	0

	U-TURNS							
NB 0	SB 0	EB 0	WB 0	TTL				
U	U	U	U					
0	1	0	0	1				
0	0	0	0	0				
0	0	0	0	0				
1	0	0	0	1				
0	0	0	0	0				
0	0	0	0	0				
0	0	0	0	0				
0	0	0	0	0				
1	1	0	0	2				

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1



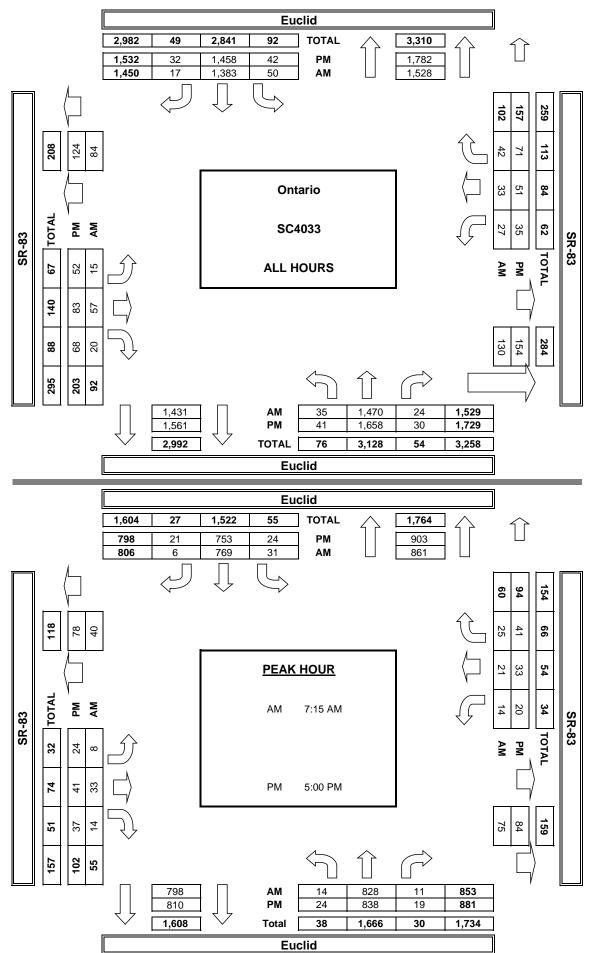
	7:00 AM
	7:15 AM
	7:30 AM
_	7:45 AM
ΑM	8:00 AM
	8:15 AM
	8:30 AM
	8:45 AM
	TOTAL
	am begin peak hr
	4:00 PM
	4:15 PM
	4:30 PM
	4:45 PM
Σ	5:00 PM
-	5:15 PM
	5:30 PM
	5:45 PM
	TOTAL
	PM BEGIN PEAK HR

PED	ESTRIA	N + BIKE	CROSSI	NGS
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
0	0	2	0	2
2	0	2	5	9
1	4	4	1	10
0	0	0	4	4
0	0	1	0	1
1	0	2	0	3
4	1	6	5	16
0	0	0	0	0
8	5	17	15	45
		7:15 AM		
0	1	5	3	9
1	0	2	1	4
1	0	1	3	5
0	0	0	0	0
0	2	2	1	5
2	0	1	3	6
3	3	2	1	9
0	1	1	4	6
7	7	14	16	44
		5:00 PM		

	PEDEST	RIAN CR	OSSING	iS		
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL		
0	0	1	0	1		
2	0	2	5	9		
1	4	4	1	10		
0	0	0	4	4		
0	0	1	0	1		
1	0	2	0	3		
4	1	6	5	16		
0	0	0	0	0		
8	5	16	15	44		
3	4	7	10	24		
0	0	4	3	7		
1	0	1	0	<u>2</u> 5		
1	0	1	3			
0	0	0	0	0		
0	1	2	1	4		
2	0	0	1	3		
3	2	2	0	7		
0	0	1	3	4		
7	3	11	11	32		
5	3	5	5	18		

E	BICYCL	E CROS	SSING	5
NS	SS	ES	WS	TOTAL
0	0	1	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	1	0	1
0	1	1	0	2
0	0	1	1	2
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	0	1	2	3
0	1	0	1	2
0	1	0	1	2
0	4	3	5	12

AimTD LLC
TURNING MOVEMENT COUNTS



PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

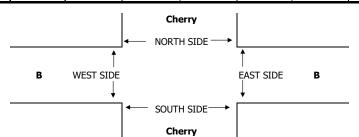
DATE: Tue, May 16, 23 LOCATION: NORTH & SOUTH: EAST & WEST: Ontario Cherry B PROJECT #: SC4033 LOCATION #: 4 CONTROL: STOP S

NOTES:	AM		A	
	PM		N	
	MD	⋖ W	•	E►
	OTHER		S	
	OTHER		▼	

		NORTHBOUND		SC	SOUTHBOUND		EASTBOUND		WESTBOUND					
			Cherry		Cherry			В				В		
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	LANES:	X	X	X	0	X	0	0	1	X	X	1	0	
	7:00 AM	0	0	0	1	0	0	3	5	0	0	6	5	20
	7:15 AM	0	0	0	0	0	0	11	6	0	0	12	2	31
	7:30 AM	0	0	0	1	0	2	11	19	0	0	11	6	50
	7:45 AM	0	0	0	1	0	0	6	16	0	0	12	2	37
	8:00 AM	0	0	0	0	0	0	3	11	0	0	12	0	26
	8:15 AM	0	0	0	2	0	3	1	12	0	0	15	6	39
	8:30 AM	0	0	0	1	0	0	0	6	0	0	12	0	19
¥	8:45 AM	0	0	0	2	0	2	4	5	0	0	9	3	25
Į₹	VOLUMES	0	0	0	8	0	7	39	80	0	0	89	24	250
	APPROACH %	0%	0%	0%	50%	0%	44%	33%	67%	0%	0%	78%	21%	
	APP/DEPART	0	- 1	64	16	- /	0	120	- /	89	114	- /	97	0
	BEGIN PEAK HR		7:30 AM						•			•		
	VOLUMES	0	0	0	4	0	5	21	58	0	0	50	14	153
	APPROACH %	0%	0%	0%	44%	0%	56%	26%	73%	0%	0%	78%	22%	
	PEAK HR FACTOR		0.000			0.450			0.667			0.762		0.765
	APP/DEPART	0	- 1	35	9	/	0	80	- /	62	64	- /	56	0
	4:00 PM	0	0	0	3	0	1	0	10	0	0	11	3	28
	4:15 PM	0	0	0	2	0	4	2	11	0	0	9	1	29
	4:30 PM	0	0	0	2	0	1	1	29	0	0	12	1	46
	4:45 PM	0	0	0	2	0	4	0	14	0	0	13	2	35
	5:00 PM	0	0	0	3	0	6	3	18	0	0	20	2	52
	5:15 PM	0	0	0	2	0	5	2	18	0	0	19	1	47
	5:30 PM	0	0	0	5	0	6	1	16	0	0	16	2	46
Σ	5:45 PM	0	0	0	3	0	4	4	17	0	0	9	0	37
□	VOLUMES	0	0	0	22	0	31	13	133	0	0	109	12	323
	APPROACH %	0%	0%	0%	42%	0%	58%	9%	90%	0%	0%	89%	10%	
	APP/DEPART	0	- 1	25	53	/	0	148	/	156	122	/	142	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	0	5:00 PM 0	0	13	0	21	10	69	0	0	64	5	183
		0 0%		0 0%	13 38%	0 0%	21 62%	10 13%	69 86%	0 0%	0 0%	64 93%	5 7%	183
	VOLUMES	-	0	•				-			_			183 0.863

		TUBN	_	
	U	-TURN	5	
NB 0	SB 0	EB 0	WB 0	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	1	0	1
0	0	0	1	1
0	1	0	0	1
0	1	1	1	3

_				
0	0	1	0	1
0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	2	1	3



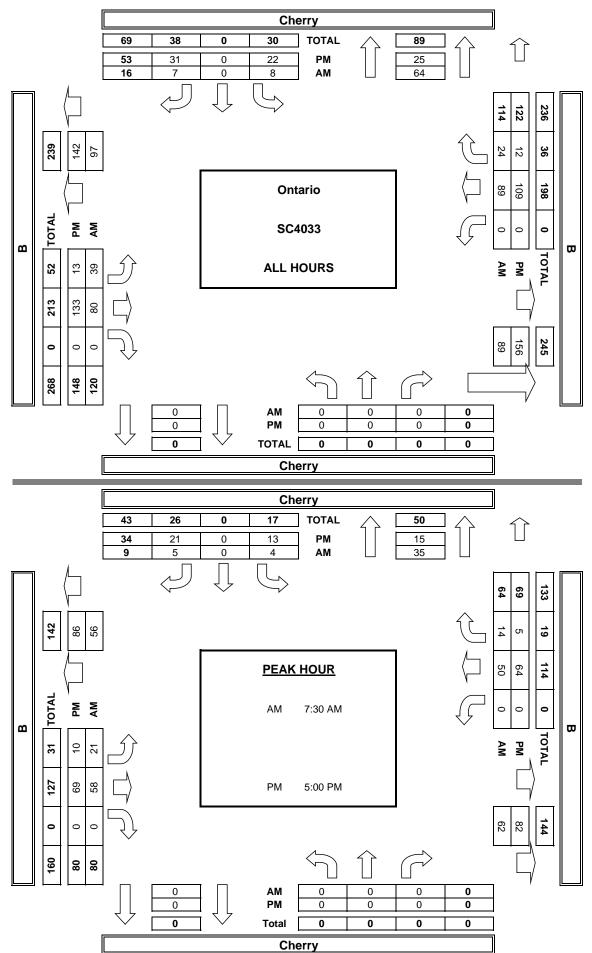
	7:00 AM
	7:15 AM
	7:30 AM
l_	7:45 AM
¥	8:00 AM
	8:15 AM
	8:30 AM
	8:45 AM
	TOTAL
	am begin peak hr
	4:00 PM
	4:15 PM
	4:30 PM
l_	4:45 PM
Σ	5:00 PM
	5:15 PM
	5:30 PM
	5:45 PM
	TOTAL
	PM BEGIN PEAK HR

PEDI	ESTRIAN	I + BIKE	CROSS	INGS	
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	
0	0	0	0	0	
1	0	0	1	2	
0	0	0	0	0	
1	0	1	1	3	
0	0	0	0	0	
0	0	0	1	1	
1	0	0	0	1	
7	0	0	1	8	
10	0	1	4	15	
		7:30 AM			
0	0	0	4	4	
5	0	0	0	5	
0	0	2	1	3	
0	0	2	0	2	
2	0	1	0	3	
2	0	0	2	4	
5	0	5	0	10	
4	0	2	0	6	
18	0	12	7	37	
		5:00 PM			

	PEDEST	RIAN CR	OSSING	iS
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
0	0	0	0	0
1	0	0	1	2
0	0	0	0	0
1	0	1	1	3
0	0	0	0	0
0	0	0	1	1
1	0	0	0	1
6	0	0	1	7
9	0	1	4	14
1	0	1	2	4
0	0	0	4	4
5	0	0	0	5
0	0	2	1	3
0	0	2	0	2
2	0	1	0	3
1	0	0	1	2
3	0	5	0	8
3	0	1	0	4
14	0	11	6	31
9	0	7	1	17

В	ICYCL	E CRO	SSING	5
NS	SS	ES	WS	TOTAL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
1	0	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	1	2
2	0	0	0	2 2 2
1	0	1	0	2
4	0	1	1	6

AimTD LLC
TURNING MOVEMENT COUNTS



PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

<u>DATE:</u> Tue, May 16, 23
 LOCATION:
 Ontario
 PROJECT #:
 SC4033

 NORTH & SOUTH:
 Sultana
 LOCATION #:
 5

 EAST & WEST:
 B
 CONTROL:
 STOP ALL

NOTES:

AM
PM
MD

W

OTHER

S

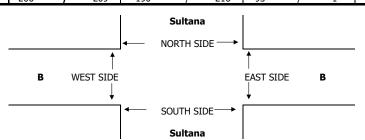
OTHER

V

	NORTHBOUND		S	SOUTHBOUND EA			EASTBOUND		W	ESTBOUN	ID			
			Sultana			Sultana			В			В		
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	LANES:	0	1	0	0	1	0	0	1	0	0	1	0	
	7:00 AM	7	34	0	0	22	3	4	0	6	1	0	0	77
	7:15 AM	6	37	0	0	23	2	3	0	6	0	0	0	77
	7:30 AM	6	31	0	0	39	12	7	0	9	2	0	0	106
	7:45 AM	4	43	0	0	39	12	22	0	5	0	1	0	126
	8:00 AM	4	30	0	0	59	11	6	0	3	1	0	0	114
	8:15 AM	10	32	1	1	27	12	9	0	11	0	0	0	103
	8:30 AM	10	21	0	0	26	8	2	0	8	0	0	0	75
¥	8:45 AM	5	28	0	0	25	5	4	0	7	0	0	0	74
₹	VOLUMES	52	256	1	1	260	65	57	0	55	4	1	0	752
	APPROACH %	17%	83%	0%	0%	80%	20%	51%	0%	49%	80%	20%	0%	
	APP/DEPART	309		313	326	/	321	112	/	2	5	/	116	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	24	136	1	1	164	47	44	0	28	3	1	0	449
	APPROACH %	15%	84%	1%	0%	77%	22%	61%	0%	39%	75%	25%	0%	
	PEAK HR FACTOR		0.856			0.757			0.667			0.500		0.891
	APP/DEPART	161	1	180	212	/	196	72	/	2	4	/	71	0
	4:00 PM	5	42	0	2	41	2	5	0	11	1	0	0	109
	4:15 PM	13	36	0	0	32	4	5	0	8	0	1	0	99
	4:30 PM	9	42	0	1	40	5	9	0	11	0	0	1	118
	4:45 PM	7	45	0	0	39	5	14	0	13	0	0	0	123
	5:00 PM	9	37	0	0	42	9	9	0	7	0	0	1	114
	5:15 PM	17	43	0	0	39	6	7	0	12	0	1	1	126
	5:30 PM	7	41	0	1	43	6	10	0	21	0	0	1	130
Σ	5:45 PM	9	43	0	0	42	7	4	0	10	2	0	1	118
۵	VOLUMES	76	329	0	4	318	44	63	0	93	3	2	5	937
	APPROACH %	19%	81%	0%	1%	87%	12%	40%	0%	60%	30%	20%	50%	
	APP/DEPART	405	1	398	366	/	415	156	/	3	10	/	121	0
1	BEGIN PEAK HR		4:45 PM	-			-			-				
1	VOLUMES	40	166	0	1	163	26	40	0	53	0	1	3	493
	APPROACH %	19%	81%	0%	1%	86%	14%	43%	0%	57%	0%	25%	75%	
1	PEAK HR FACTOR		0.858			0.931			0.750			0.500		0.948
I	APP/DEPART	206	1	209	190	1	216	93	/	1	4	- /	67	0

U-TURNS						
NB 0	SB 0	EB 0	WB 0	TTL		
U	U	U	U			
0	0	0	0	0		
0	0	0	0	0		
0	0	0	0	0		
0	0	0	0	0		
0	0	0	0	0		
1	0	0	0	1		
0	0	0	0	0		
1	0	0	0	1		
2	0	0	0	2		

_				
0	0	0	0	0
1	0	0	0	1
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	1	0	0	2



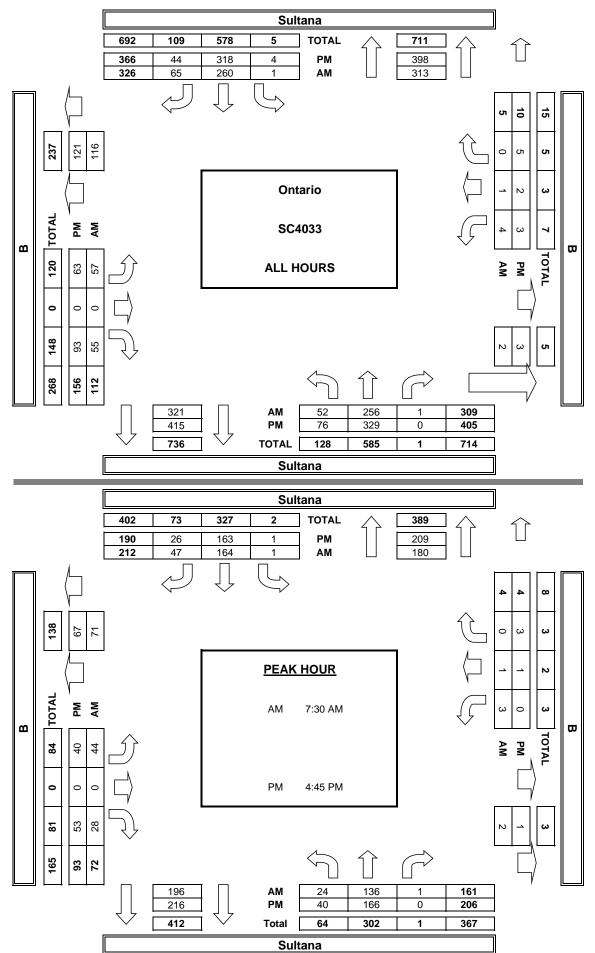
	7:00 AM
	7:15 AM
	7:30 AM
 _	7:45 AM
ΑM	8:00 AM
_	8:15 AM
	8:30 AM
	8:45 AM
	TOTAL
	am begin peak hr
	4:00 PM
	4:15 PM
	4:30 PM
	4:45 PM
Μ	5:00 PM
-	5:15 PM
	5:30 PM
	5:45 PM
	TOTAL
	PM BEGIN PEAK HR

PED	ESTRIA	N + BIKE	CROSSI	NGS		
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL		
0	2	1	0	3		
0	0	0	0	0		
0	1	0	0	1		
0	1	0	2	3		
1	0	4	2	7		
0	0	1	1	2		
1	0	0	0	1		
1	1	1	2	5		
3	5	7	7	22		
		7:30 AM				
1	0	0	1	2		
0	0	0	0	0		
0	1	2	4	7		
1	1	0	0	2		
1	0	0	1	2		
0	1	1	0	2		
0	2	1	0	3		
0	0	2	1	3		
3	5	6	7	21		
4:45 PM						

PEDESTRIAN CROSSINGS							
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL			
0	1	1	0	2			
0	0	0	0	0			
0	1	0	0	1			
0	1	0	1	2			
1	0	3	2	6			
0	0	0	1	1			
1	0	0	0	1			
1	1	1	0	3			
3	4	5	4	16			
1	2	3	4	10			
1	0	0	1	2			
0	0	0	0	0			
0	1	2	3	6			
1	1	0	0	2			
0	0	0	0	0			
0	1	0	0	1			
0	2	0	0	2			
0	0	2	0	2			
2	5	4	4	15			
1	4	0	0	5			

В	ICYCL	E CROS	SSINGS	5
NS	SS	ES	WS	TOTAL
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	1	0	1
0	0	1	0	1
0	0	0	0	0
0	0	0	2	2
0	1	2	3	6
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
1	0	0	1	2
0	0	1	0	1
0	0	1	0	1
0	0	0	1	1
1	0	2	3	6
				·

AimTD LLC
TURNING MOVEMENT COUNTS



PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, May 16, 23 LOCATION:OntarioPROJECT #:SC4033NORTH & SOUTH:SultanaLOCATION #:6EAST & WEST:Lynn HavenCONTROL:STOP W

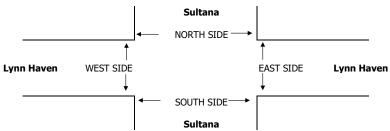
NOTES:

AM
PM
MD
✓ W
OTHER
OTHER

		N	ORTHBOU	ND	SC	OUTHBOU	ND	E	ASTBOUN	ID	W	/ESTBOUN	ID	
			Sultana			Sultana			Lynn Haven			Lynn Haven		
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	LANES:	X	1	0	0	1	X	X	X	X	0	X	0	
	7:00 AM	0	24	0	0	24	0	0	0	0	0	0	0	48
	7:15 AM	0	29	0	0	35	0	0	0	0	1	0	2	67
	7:30 AM	0	36	1	1	45	0	0	0	0	0	0	2	85
	7:45 AM	0	65	0	1	62	0	0	0	0	1	0	2	131
	8:00 AM	0	34	1	0	58	0	0	0	0	2	0	3	98
	8:15 AM	0	46	0	1	41	0	0	0	0	1	0	2	91
	8:30 AM	0	26	0	1	27	0	0	0	0	1	0	1	56
Ā	8:45 AM	0	23	3	0	31	0	0	0	0	1	0	2	60
₹	VOLUMES	0	283	5	4	323	0	0	0	0	7	0	14	636
	APPROACH %	0%	98%	2%	1%	99%	0%	0%	0%	0%	33%	0%	67%	
	APP/DEPART	288	- 1	297	327	/	330	0	/	9	21	/	0	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	0	181	2	3	206	0	0	0	0	4	0	9	405
	APPROACH %	0%	99%	1%	1%	99%	0%	0%	0%	0%	31%	0%	69%	
	PEAK HR FACTOR		0.704			0.829			0.000			0.650		0.773
	APP/DEPART	183		190	209	/	210	0	- /	5	13		0	0
	4:00 PM	0	49	1	1	39	0	0	0	0	2	0	0	92
	4:15 PM	0	44	2	2	38	0	0	0	0	0	0	1	87
	4:30 PM	0	61	2	2	46	0	0	0	0	1	0	4	116
	4:45 PM	0	53	2	0	46	0	0	0	0	0	0	3	104
	5:00 PM	0	49	1	4	49	0	0	0	0	0	0	2	105
	5:15 PM	0	46	0	0	40	0	0	0	0	1	0	2	89
	5:30 PM	0	63	2	0	46	0	0	0	0	0	0	0	111
Σ	5:45 PM	0	52	0	0	34	0	0	0	0	1	0	1	88
۵	VOLUMES	0	417	10	9	338	0	0	0	0	5	0	13	792
	APPROACH %	0%	98%	2%	3%	97%	0%	0%	0%	0%	28%	0%	72%	
	APP/DEPART	427	1	430	347	/	343	0	1	19	18	1	0	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	0	209	5	6	181	0	0	0	0	2	0	11	414
	APPROACH %	0%	98%	2%	3%	97%	0%	0%	0%	0%	15%	0%	85%	
	PEAK HR FACTOR		0.849			0.882			0.000			0.650		0.892
	APP/DEPART	214	\overline{I}	220	187	/	183	0		11	13	/	0	0

U-TURNS						
NB	SB	EB	WB	TTL		
0	0	0	0			
0	0	0	0	0		
0	0	0	0	0		
0	0	0	0	0		
0	0	0	0	0		
0	0	0	0	0		
0	0	0	0	0		
0	0	0	0	0		
0	0	0	0	0		
0	0	0	0	0		

_				
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0



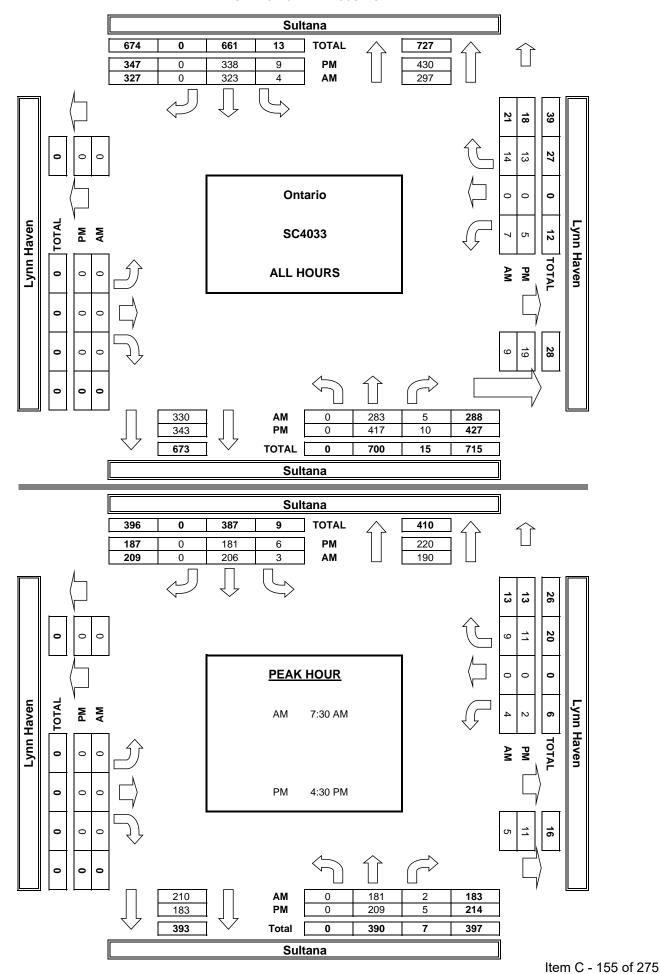
	7:00 AM
	7:15 AM
	7:30 AM
_	7:45 AM
AM	8:00 AM
	8:15 AM
	8:30 AM
	8:45 AM
	TOTAL
	am begin peak hr
	4:00 PM
	4:15 PM
	4:30 PM
_	4:45 PM
PΜ	5:00 PM
	5:15 PM
	5:30 PM
	5:45 PM
	TOTAL
	PM BEGIN PEAK HR

PED	ESTRIA	N + BIKE	CROSSI	NGS
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
0	0	0	0	0
0	0	0	0	0
0	0	5	0	5
0	0	1	0	1
0	0	2	0	2
0	0	0	0	0
0	0	2	1	3
0	0	0	0	0
0	0	10	1	11
		7:30 AM		
0	0	1	0	1
0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
0	0	1	1	2
0	2	5	1	8
0	0	0	0	0
0	0	3	0	3
0	2	10	3	15
		4:30 PM		

	PEDESTRIAN CROSSINGS							
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL				
0	0	0	0	0				
0	0	0	0	0				
0	0	5	0	5				
0	0	1	0	1				
0	0	1	0	1				
0	0	0	0	0				
0	0	2	0	2				
0	0	0	0	0				
0	0	9	0	9				
0	0	7	0	7				
0	0	1	0	1				
0	0	0	0	0				
0	0	0	0	0				
0	0	0	0	0				
0	0	1	0	1				
0	2	4	0	6				
0	0	0	0	0				
0	0	1	0	1				
0	2	7	0	9				
0	2	5	0	7				

E	BICYCL	E CROS	SSING	5
NS	SS	ES	WS	TOTAL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
0	0	1	1	2
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
0	0	0	1	1
0	0	1	1	2
0	0	0	0	0
0	0	2	0	2
0	0	3	3	6

AimTD LLC
TURNING MOVEMENT COUNTS



PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

<u>DATE:</u> Tue, May 16, 23
 LOCATION:
 Ontario
 PROJECT #:
 SC4033

 NORTH & SOUTH:
 Sultana
 LOCATION #:
 7

 EAST & WEST:
 C
 CONTROL:
 STOP E

NOTES:

AM
PM
MD

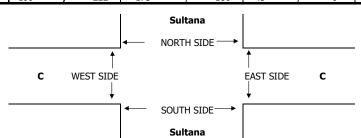
W
OTHER
S
OTHER

V

		N	ORTHBOU	ND	SO	OUTHBOU	ND	E	ASTBOUN	ID	V	/ESTBOUN	ND	
			Sultana			Sultana			С			С		
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	LANES:	0	1	X	X	1	0	0	X	0	X	X	X	
	7:00 AM	8	26	0	0	19	4	1	0	0	0	0	0	58
	7:15 AM	17	26	0	0	27	10	0	0	0	0	0	0	80
	7:30 AM	14	30	0	0	39	5	2	0	0	0	0	0	90
	7:45 AM	9	67	0	0	54	5	0	0	1	0	0	0	136
	8:00 AM	6	39	0	0	67	0	0	0	0	0	0	0	112
	8:15 AM	1	43	0	0	41	1	0	0	0	0	0	0	86
	8:30 AM	2	25	0	0	27	0	1	0	3	0	0	0	58
Ā	8:45 AM	2	27	0	0	29	1	1	0	3	0	0	0	63
⋖	VOLUMES	59	283	0	0	303	26	5	0	7	0	0	0	683
	APPROACH %	17%	83%	0%	0%	92%	8%	42%	0%	58%	0%	0%	0%	
	APP/DEPART	342	- /	288	329	/	310	12	/	0	0	/	85	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	30	179	0	0	201	11	2	0	1	0	0	0	424
	APPROACH %	14%	86%	0%	0%	95%	5%	67%	0%	33%	0%	0%	0%	
	PEAK HR FACTOR		0.688			0.791			0.375			0.000		0.779
	APP/DEPART	209		181	212	/	202	3	- /	0	0		41	0
	4:00 PM	4	45	0	0	42	0	1	0	1	0	0	0	93
	4:15 PM	0	45	0	0	34	2	4	0	3	0	0	0	88
	4:30 PM	0	51	0	0	46	4	7	0	2	0	0	0	110
	4:45 PM	3	54	0	0	45	1	3	0	0	0	0	0	106
	5:00 PM	0	45	0	0	43	5	6	0	2	0	0	0	101
	5:15 PM	0	42	0	0	41	2	4	0	3	0	0	0	92
	5:30 PM	2	53	0	0	38	0	15	0	12	0	0	0	120
Σ	5:45 PM	0	45	0	0	38	2	6	0	5	0	0	0	96
۵	VOLUMES	9	380	0	0	327	16	46	0	28	0	0	0	806
	APPROACH %	2%	98%	0%	0%	95%	5%	62%	0%	38%	0%	0%	0%	
	APP/DEPART	389	1	426	343	/	357	74	/	0	0	1	23	0
	BEGIN PEAK HR		4:45 PM											
	VOLUMES	5	194	0	0	167	8	28	0	17	0	0	0	419
1	APPROACH %	3%	97%	0%	0%	95%	5%	62%	0%	38%	0%	0%	0%	
1	PEAK HR FACTOR		0.873			0.911			0.417			0.000		0.873
I	APP/DEPART	199	1	222	175	/	186	45	/	0	0	- /	11	0

U-TURNS							
NB 0	SB 0	EB 0	WB 0	TTL			
0	0	0	0	0			
0	0	0	0	0			
0	0	0	0	0			
0	0	0	0	0			
0	0	0	0	0			
0	0	0	0	0			
0	0	0	0	0			
0	0	0	0	0			
0	0	0	0	0			
•	•	•					

_				
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
2	0	0	0	2
0	0	0	0	0
2	0	0	0	2



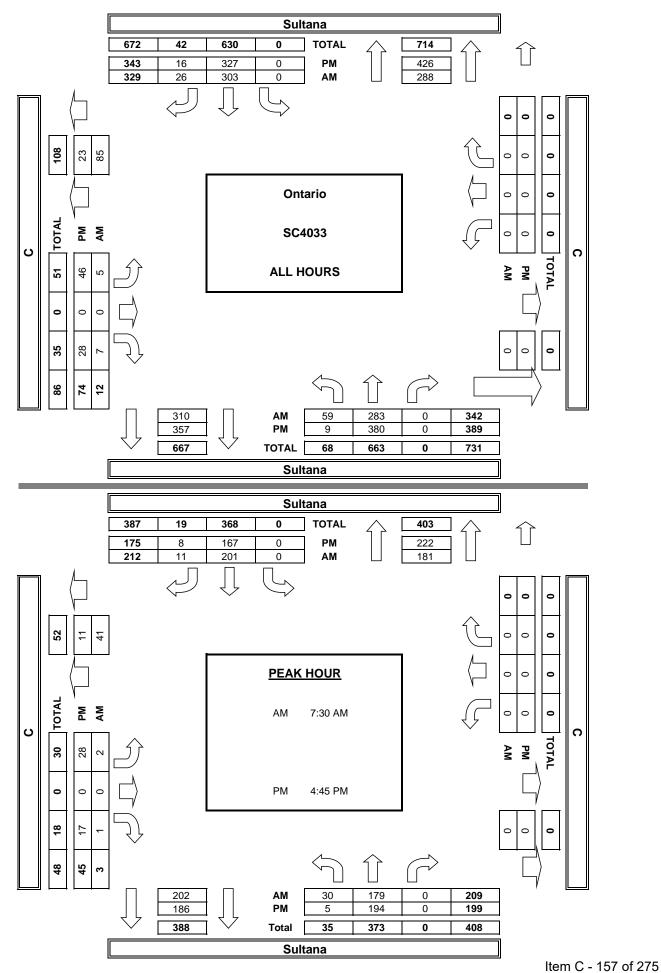
	7.00.414
	7:00 AM
	7:15 AM
	7:30 AM
_	7:45 AM
AM	8:00 AM
_	8:15 AM
	8:30 AM
	8:45 AM
	TOTAL
	am begin peak hr
	4:00 PM
	4:15 PM
	4:30 PM
	4:45 PM
PΜ	5:00 PM
_	5:15 PM
	5:30 PM
	5:45 PM
	TOTAL
	PM BEGIN PEAK HR

PED	ESTRIA	N + BIKE	CROSSI	NGS		
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL		
1	1	0	1	3		
0	0	0	0	0		
0	0	0	0	0		
0	0	0	1	1		
0	0	0	3	3		
0	0	1	2	3		
0	0	0	0	0		
0	0	0	3	3		
1	1	1	10	13		
		7:30 AM				
0	1	0	2	3		
0	0	0	2	7		
0	2	0	5	7		
0	0	0	0	0		
0	0	0	1	1		
2	0	1	3	6		
0	0	0	0	0		
0	0	2	2	4		
2	3	3	15	23		
4:45 PM						

	PEDEST	RIAN CR	OSSING	iS
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
1	1	0	1	3
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	2	2
0	0	0	1	1
0	0	0	0	0
0	0	0	2	2
1	1	0	6	8
0	0	0	3	3
0	1	0	2	3
0	0	0	2	2
0	2	0	1	3
0	0	0	0	0
0	0	0	0	0
2	0	0	1	3
0	0	0	0	0
0	0	0	2	2
2	3	0	8	13
2	0	0	1	3

В	SICYCL	E CROS	SSING	5
NS	SS	ES	WS	TOTAL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	0	1	1
0	0	1	1	2
0	0	0	0	0
0	0	0	1	1
0	0	1	4	5
0	0	0	0	0
0	0	0	0	0
0	0	0	4	4
0	0	0	0	0
0	0	0	1	1
0	0	1	2	3
0	0	0	0	0
0	0	2	0	2
0	0	3	7	10

AimTD LLC
TURNING MOVEMENT COUNTS



PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

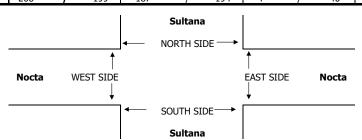
<u>DATE:</u> Tue, May 16, 23 LOCATION: Ontario PROJECT #: SC4033
NORTH & SOUTH: Sultana LOCATION #: 8
EAST & WEST: Nocta CONTROL: STOP W

NOTES:	AM		
	PM N		
	MD ◀ W	E	: ▶
	OTHER S		
	OTHER		

		NO	ORTHBOU	ND	SC	OUTHBOU	ND	E	ASTBOUN	ID	W	ESTBOUN	ND	
			Sultana			Sultana			Nocta			Nocta		
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	LANES:	0	1	0	0	1	0	0	1	0	0	1	0	
	7:00 AM	1	28	4	3	18	0	1	0	0	7	0	3	65
	7:15 AM	0	41	2	0	27	0	0	0	1	1	0	4	76
	7:30 AM	0	33	3	2	39	0	0	0	0	12	0	11	100
	7:45 AM	0	59	4	6	50	0	0	0	1	0	0	19	139
	8:00 AM	1	33	2	3	64	0	1	0	0	6	0	8	118
	8:15 AM	0	33	6	3	36	1	0	0	0	3	0	10	92
	8:30 AM	0	24	4	3	24	0	1	0	0	8	0	4	68
Ψ	8:45 AM	0	27	2	2	30	0	0	0	0	0	0	2	63
⋖	VOLUMES	2	278	27	22	288	1	3	0	2	37	0	61	721
	APPROACH %	1%	91%	9%	7%	93%	0%	60%	0%	40%	38%	0%	62%	
	APP/DEPART	307		342	311	/	327	5	/	49	98	/	3	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	1	158	15	14	189	1	1	0	1	21	0	48	449
	APPROACH %	1%	91%	9%	7%	93%	0%	50%	0%	50%	30%	0%	70%	
	PEAK HR FACTOR		0.690			0.761			0.500			0.750		0.808
	APP/DEPART	174		207	204	/	211	2	- /	29	69	- /	2	0
	4:00 PM	0	34	5	4	31	0	1	0	1	5	0	3	84
	4:15 PM	1	40	3	7	31	0	0	0	0	7	0	7	96
	4:30 PM	0	51	4	4	42	0	0	0	0	4	0	4	109
	4:45 PM	0	50	5	4	41	0	0	0	1	2	0	6	109
	5:00 PM	0	40	8	4	42	0	0	0	2	7	0	5	108
	5:15 PM	1	39	8	3	40	0	0	0	0	4	0	3	98
	5:30 PM	0	49	8	6	47	0	1	0	0	7	0	6	124
Σ	5:45 PM	1	43	6	7	35	0	0	0	5	6	0	5	108
	VOLUMES	3	346	47	39	309	0	2	0	9	42	0	39	836
	APPROACH %	1%	87%	12%	11%	89%	0%	18%	0%	82%	52%	0%	48%	
	APP/DEPART	396		387	348	/	361	11	/	86	81	/	2	0
	BEGIN PEAK HR		4:45 PM											
	VOLUMES	1	178	29	17	170	0	1	0	3	20	0	20	439
	APPROACH %	0%	86%	14%	9%	91%	0%	25%	0%	75%	50%	0%	50%	
	PEAK HR FACTOR		0.912			0.882			0.500			0.769		0.885
	APP/DEPART	208		199	187	/	194	4	/	46	40	/	0	0

	U-TURNS							
NB 0	SB	EB 0	WB	TTL				
U	0	U	0					
0	0	0	0	0				
0	0	0	0	0				
0	0	0	0	0				
0	0	0	0	0				
0	0	0	0	0				
0	0	0	0	0				
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1	0	0	0	1



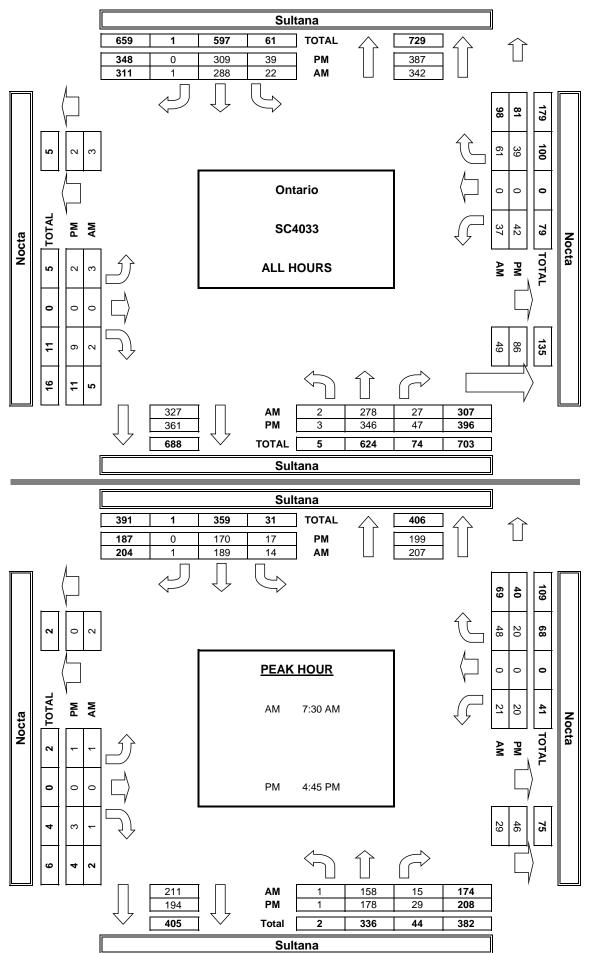
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_	7:00 AM
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	am begin peak hr
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_	5:15 PM
	5:30 PM
	5:45 PM
	TOTAL
	PM BEGIN PEAK HR

PED	ESTRIA	N + BIKE	CROSSI	NGS
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
0	3	0	0	3
1	2	0	1	4
0	5	3	4	12
0	3	0	4	7
1	3	3	5	12
1	2	0	4	7
1	1	1	0	3
0	0	0	3	3
4	19	7	21	51
		7:30 AM		
0	0	1	0	1
0	1	0	3 2	4
2	0	9		13
0	0	0	2	2
0	0	0	1	1
0	0	3	3	6
1	2	0	1	4
0	0	1	2	3
3	3	14	14	34
	•	4:45 PM	•	·

	PEDEST	RIAN CR	OSSING	iS
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
0	3	0	0	3
1	2	0	1	4
0	5	3	4	12
0	3	0	4	7
0	3	2	5	10
0	2	0	4	6
1	1	1	0	3
0	0	0	2	2
2	19	6	20	47
0	13	5	17	35
0	0	1	0	1
0	1	0	3	4
2	0	8	1	11
0	0	0	2	2
0	0	0	0	0
0	0	2	3	5
0	1	0	1	2
0	0	1	2	3
2	2	12	12	28
0	1	2	6	9

E	BICYCL	E CROS	SSING	5
NS	SS	ES	WS	TOTAL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	1	0	2
1	0	0	0	1
0	0	0	0	0
0	0	0	1	1
2	0	1	1	4
0	0	0	0	0
0	0	0	0	0
0	0	1	1	2
0	0	0	0	0
0	0	0	1	1
0	0	1	0	1
1	1	0	0	2
0	0	0	0	0
1	1	2	2	6
·			•	•

AimTD LLC
TURNING MOVEMENT COUNTS



Attachment B

Level of Service Worksheets

	٠	-	•	•	—	•	4	†	~	-	ţ	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		1			र्स						414	_
Traffic Volume (vph)	0	105	36	29	97	0	0	0	0	51	740	24
Future Volume (vph)	0	105	36	29	97	0	0	0	0	51	740	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						0.91	
Frt		0.97			1.00						1.00	
Flt Protected		1.00			0.99						1.00	
Satd. Flow (prot)		1799			1842						5047	
FIt Permitted		1.00			0.81						1.00	
Satd. Flow (perm)		1799			1506						5047	
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	0	127	43	35	117	0	0	0	0	61	892	29
RTOR Reduction (vph)	0	19	0	0	0	0	0	0	0	0	3	0
Lane Group Flow (vph)	0	151	0	0	152	0	0	0	0	0	979	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		5			5						6	
Permitted Phases				5						6		
Actuated Green, G (s)		12.5			12.5						57.5	
Effective Green, g (s)		12.5			12.5						57.5	
Actuated g/C Ratio		0.16			0.16						0.72	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		3.0			3.0						3.0	
Lane Grp Cap (vph)		281			235						3627	
v/s Ratio Prot		0.08										
v/s Ratio Perm					c0.10						0.19	
v/c Ratio		0.54			0.65						0.27	
Uniform Delay, d1		31.1			31.7						3.9	
Progression Factor		1.00			0.51						1.00	
Incremental Delay, d2		7.2			11.3						0.2	
Delay (s)		38.3			27.3						4.1	
Level of Service		D			С						Α	
Approach Delay (s)		38.3			27.3			0.0			4.1	
Approach LOS		D			С			Α			Α	
Intersection Summary												
HCM 2000 Control Delay			11.3	H	CM 2000	Level of S	Service		В			
HCM 2000 Volume to Capacity	/ ratio		0.34									
Actuated Cycle Length (s)			80.0	Sı	um of lost	time (s)			10.0			
Intersection Capacity Utilization	n		42.8%	IC	U Level	of Service			Α			
Analysis Period (min)			15									

Intersection Delay, s/veh12.5 Intersection LOS B	
Movement EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT SBR	
Lane Configurations 7 1 1 4	
Traffic Vol, veh/h 7 143 32 38 199 11 40 122 32 18 139 12	
Future Vol, veh/h 7 143 32 38 199 11 40 122 32 18 139 12	
Peak Hour Factor 0.82 0.82 0.82 0.82 0.82 0.82 0.82 0.82	
Heavy Vehicles, % 0 0 0 0 0 0 0 0 0 0 0	
Mvmt Flow 9 174 39 46 243 13 49 149 39 22 170 15	
Number of Lanes 1 1 0 1 1 0 0 1 0 0 1 0	
Approach EB WB NB SB	
Opposing Approach WB EB SB NB	
Opposing Lanes 2 2 1 1	
Conflicting Approach Left SB NB EB WB	
Conflicting Lanes Left 1 1 2 2	
Conflicting Approach RightNB SB WB EB	
Conflicting Lanes Right 1 1 2 2	
HCM Control Delay 12.4 13.1 12.4 11.9	
HCM LOS B B B B	
Lane NBLn1 EBLn1 EBLn2WBLn1WBLn2 SBLn1	
Vol Left, % 21% 100% 0% 100% 0% 11%	
Vol Thru, % 63% 0% 82% 0% 95% 82%	
Vol Right, % 16% 0% 18% 0% 5% 7%	
Sign Control Stop Stop Stop Stop Stop	
Traffic Vol by Lane 194 7 175 38 210 169	
LT Vol 40 7 0 38 0 18	
Through Vol 122 0 143 0 199 139	
RT Vol 32 0 32 0 11 12	
Lane Flow Rate 237 9 213 46 256 206	
Geometry Grp 2 7 7 7 2	
Degree of Util (X) 0.38 0.016 0.366 0.086 0.437 0.336	
Departure Headway (Hd) 5.777 6.818 6.178 6.686 6.14 5.872	
Convergence, Y/N Yes Yes Yes Yes Yes Yes	
Cap 620 523 578 534 584 608	
Service Time 3.848 4.591 3.951 4.453 3.907 3.947	
HCM Lane V/C Ratio 0.382 0.017 0.369 0.086 0.438 0.339	
HCM Control Delay 12.4 9.7 12.5 10.1 13.6 11.9	
HCM Lane LOS B A B B B	

	۶	-	•	•	•	•	1	†	~	-	ļ	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		f)			र्स						414	_
Traffic Volume (vph)	0	41	14	14	21	0	0	0	0	31	769	6
Future Volume (vph)	0	41	14	14	21	0	0	0	0	31	769	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						0.91	
Frt		0.97			1.00						1.00	
Flt Protected		1.00			0.98						1.00	
Satd. Flow (prot)		1798			1826						5070	
Flt Permitted		1.00			0.84						1.00	
Satd. Flow (perm)		1798			1562						5070	
Peak-hour factor, PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	0	49	17	17	25	0	0	0	0	37	915	7
RTOR Reduction (vph)	0	15	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	51	0	0	42	0	0	0	0	0	959	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		5			5						6	
Permitted Phases				5						6		
Actuated Green, G (s)		7.8			7.8						62.2	
Effective Green, g (s)		7.8			7.8						62.2	
Actuated g/C Ratio		0.10			0.10						0.78	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		3.0			3.0						3.0	
Lane Grp Cap (vph)		175			152						3941	
v/s Ratio Prot		c0.03										
v/s Ratio Perm					0.03						0.19	
v/c Ratio		0.29			0.28						0.24	
Uniform Delay, d1		33.5			33.5						2.4	
Progression Factor		1.00			0.61						0.85	
Incremental Delay, d2		4.1			4.4						0.1	
Delay (s)		37.7			25.0						2.2	
Level of Service		D			С						Α	
Approach Delay (s)		37.7			25.0			0.0			2.2	
Approach LOS		D			С			А			Α	
Intersection Summary												
HCM 2000 Control Delay			5.3	H	CM 2000	Level of S	Service		Α			
HCM 2000 Volume to Capacity	ratio		0.25									
Actuated Cycle Length (s)			80.0	Sı	um of lost	time (s)			10.0			
Intersection Capacity Utilization			32.5%	IC	U Level o	of Service			Α			
Analysis Period (min)			15									

Intersection						
Int Delay, s/veh	0					
			14/5-	14/5-	0=:	055
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		4	1		N.	
Traffic Vol, veh/h	21	58	50	14	4	5
Future Vol, veh/h	21	58	50	14	4	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage	e,# -	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	27	75	65	18	5	6
N. 1. (N. 4)						
	Major1		Minor2			
Conflicting Flow All	0	0	129	0		
Stage 1	-	-	0	-		
Stage 2	-	-	129	-		
Critical Hdwy	4.12	-	6.52	6.22		
Critical Hdwy Stg 1	-	-	-	-		
Critical Hdwy Stg 2	-	-	5.52	-		
Follow-up Hdwy	2.218	-	4.018	3.318		
Pot Cap-1 Maneuver	-	-	762	-		
Stage 1	-	-	-	-		
Stage 2	-	-	789	-		
Platoon blocked, %		-				
Mov Cap-1 Maneuver	-	_	0	-		
Mov Cap-2 Maneuver	_	_	0	_		
Stage 1	_	_	0	_		
Stage 2	_	_	0	<u>-</u>		
Olage 2			J			
Approach	EB		WB			
HCM Control Delay, s						
HCM LOS			-			
N. 1 (0.1 5.1		E5.		MDL 4		
Minor Lane/Major Mvn	nt	EBL	FRI	VBLn1		
Capacity (veh/h)		_	-	-		
HCM Lane V/C Ratio		-	-	-		
HCM Lane V/C Ratio HCM Control Delay (s)		-	-	-		
HCM Lane V/C Ratio		- -	- - -	- -		

Intersection						
Intersection Delay, s/veh	8.7					
Intersection LOS	A					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
	Y CDL	EDI	INDL			SDR
Lane Configurations		00	0.4	ब	104	47
Traffic Vol, veh/h	44	28	24	136	164	47
Future Vol, veh/h	44	28	24	136	164	47
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	49	31	27	153	184	53
Number of Lanes	1	0	0	1	1	0
Approach	EB		NB		SB	
Opposing Approach			SB		NB	
Opposing Lanes	0		1		1	
Conflicting Approach Left	SB		EB			
Conflicting Lanes Left	1		1		0	
Conflicting Approach Right	NB				EB	
Conflicting Lanes Right	1		0		1	
HCM Control Delay	8.3		8.7		8.8	
HCM LOS	Α		Α.		Α	
TIOWI LOO			Α.			
Lane		NBLn1	EBLn1	SBLn1		
Vol Left, %		15%	61%	0%		
Vol Left, % Vol Thru, %		15% 85%	61% 0%	0% 78%		
Vol Left, %		15%	61%	0%		
Vol Left, % Vol Thru, %		15% 85%	61% 0%	0% 78%		
Vol Left, % Vol Thru, % Vol Right, %		15% 85% 0%	61% 0% 39%	0% 78% 22%		
Vol Left, % Vol Thru, % Vol Right, % Sign Control		15% 85% 0% Stop	61% 0% 39% Stop	0% 78% 22% Stop		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol		15% 85% 0% Stop 160	61% 0% 39% Stop 72	0% 78% 22% Stop 211		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol		15% 85% 0% Stop 160 24	61% 0% 39% Stop 72 44	0% 78% 22% Stop 211 0		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol		15% 85% 0% Stop 160 24 136	61% 0% 39% Stop 72 44 0 28	0% 78% 22% Stop 211 0 164 47		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate		15% 85% 0% Stop 160 24 136	61% 0% 39% Stop 72 44 0	0% 78% 22% Stop 211 0		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp		15% 85% 0% Stop 160 24 136 0 180	61% 0% 39% Stop 72 44 0 28 81	0% 78% 22% Stop 211 0 164 47 237		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X)		15% 85% 0% Stop 160 24 136 0 180 1	61% 0% 39% Stop 72 44 0 28 81 1 0.106	0% 78% 22% Stop 211 0 164 47 237 1 0.276		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd)		15% 85% 0% Stop 160 24 136 0 180 1 0.22 4.401	61% 0% 39% Stop 72 44 0 28 81 1 0.106 4.726	0% 78% 22% Stop 211 0 164 47 237 1 0.276 4.189		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N		15% 85% 0% Stop 160 24 136 0 180 1 0.22 4.401 Yes	61% 0% 39% Stop 72 44 0 28 81 1 0.106 4.726 Yes	0% 78% 22% Stop 211 0 164 47 237 1 0.276 4.189 Yes		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap		15% 85% 0% Stop 160 24 136 0 180 1 0.22 4.401 Yes 818	61% 0% 39% Stop 72 44 0 28 81 1 0.106 4.726 Yes 759	0% 78% 22% Stop 211 0 164 47 237 1 0.276 4.189 Yes 861		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time		15% 85% 0% Stop 160 24 136 0 180 1 0.22 4.401 Yes 818 2.416	61% 0% 39% Stop 72 44 0 28 81 1 0.106 4.726 Yes 759 2.75	0% 78% 22% Stop 211 0 164 47 237 1 0.276 4.189 Yes 861 2.202		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio		15% 85% 0% Stop 160 24 136 0 180 1 0.22 4.401 Yes 818 2.416 0.22	61% 0% 39% Stop 72 44 0 28 81 1 0.106 4.726 Yes 759 2.75 0.107	0% 78% 22% Stop 211 0 164 47 237 1 0.276 4.189 Yes 861 2.202 0.275		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio HCM Control Delay		15% 85% 0% Stop 160 24 136 0 180 1 0.22 4.401 Yes 818 2.416 0.22 8.7	61% 0% 39% Stop 72 44 0 28 81 1 0.106 4.726 Yes 759 2.75 0.107 8.3	0% 78% 22% Stop 211 0 164 47 237 1 0.276 4.189 Yes 861 2.202 0.275 8.8		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio		15% 85% 0% Stop 160 24 136 0 180 1 0.22 4.401 Yes 818 2.416 0.22	61% 0% 39% Stop 72 44 0 28 81 1 0.106 4.726 Yes 759 2.75 0.107	0% 78% 22% Stop 211 0 164 47 237 1 0.276 4.189 Yes 861 2.202 0.275		

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y	W DIX	1>	HOIL	ODL	4
Traffic Vol, veh/h	4	9	181	2	3	206
Future Vol, veh/h	4	9	181	2	3	206
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	_		-	None
Storage Length	0	_	_	_	_	_
Veh in Median Storage		-	0	_	_	0
Grade, %	0	_	0	_	-	0
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	12	235	3	4	268
		•=		¥	•	
	Minor1		Major1		Major2	
Conflicting Flow All	513	237	0	0	238	0
Stage 1	237	-	-	-	-	-
Stage 2	276	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518		-	-	2.218	-
Pot Cap-1 Maneuver	521	802	-	-	1329	-
Stage 1	802	-	-	-	-	-
Stage 2	771	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	519	802	-	-	1329	-
Mov Cap-2 Maneuver	519	-	-	-	-	-
Stage 1	802	-	-	_	-	-
Stage 2	768	-	-	-	-	-
A mara a a b	MD		ND		O.D.	
Approach	WB		NB		SB	
HCM Control Delay, s	10.4		0		0.1	
HCM LOS	В					
Minor Lane/Major Mvm	nt	NBT	NBRV	WBLn1	SBL	SBT
Capacity (veh/h)		_	-		1329	_
HCM Lane V/C Ratio		_		0.025		_
HCM Control Delay (s)		-	_		7.7	0
HCM Lane LOS		-	-	В	Α	A
HCM 95th %tile Q(veh))	-	-	0.1	0	-
222 37500 24(101)						

Intersection Int Delay, s/veh 0.6
Movement EBL EBR NBL NBT SBT SBR Lane Configurations ↑
Lane Configurations ↑ ↑ Traffic Vol, veh/h 2 1 30 179 201 11 Future Vol, veh/h 2 1 30 179 201 11 Conflicting Peds, #/hr 0 0 0 0 0 0 0 Sign Control Stop Stop Free
Traffic Vol, veh/h 2 1 30 179 201 11 Future Vol, veh/h 2 1 30 179 201 11 Conflicting Peds, #/hr 0 0 0 0 0 0 Sign Control Stop Stop Free <
Future Vol, veh/h Conflicting Peds, #/hr O O O O O O O O O O O O O O O O O O O
Conflicting Peds, #/hr 0 0 0 0 0 0 Sign Control Stop Stop Free
Sign Control Stop Stop Free Free Free Free Free Free Free Free Free Rea Free Free Free Free Free Rea Free Free Free Rea Free Free Free Free Rea Rea None Path Path All None Path Path All Path Path <t< td=""></t<>
RT Channelized - None - None - None Storage Length 0 0 0 - Veh in Median Storage, # 0 0 0 - - 0 0 - Grade, % 0 0 0 - - 0 0 - Peak Hour Factor 78
Storage Length 0 -
Weh in Median Storage, # 0 - - 0 0 - Grade, % 0 - - 0 0 - Peak Hour Factor 78 78 78 78 78 78 Heavy Vehicles, % 2 <td< td=""></td<>
Grade, % 0 - - 0 0 - Peak Hour Factor 78
Peak Hour Factor 78
Major/Minor Minor2 Major1 Major2
Mvmt Flow 3 1 38 229 258 14 Major/Minor Minor2 Major1 Major2 Conflicting Flow All 570 265 272 0 - 0 Stage 1 265 -
Major/Minor Minor2 Major1 Major2 Conflicting Flow All 570 265 272 0 - 0 Stage 1 265 -
Conflicting Flow All 570 265 272 0 - 0 Stage 1 265 -
Conflicting Flow All 570 265 272 0 - 0 Stage 1 265 -
Conflicting Flow All 570 265 272 0 - 0 Stage 1 265 -
Stage 1 265 -
Stage 2 305 -
Critical Hdwy 6.42 6.22 4.12 - - - Critical Hdwy Stg 1 5.42 - - - - - Critical Hdwy Stg 2 5.42 - - - - - Follow-up Hdwy 3.518 3.318 2.218 - - - Pot Cap-1 Maneuver 483 774 1291 - - - Stage 1 779 - - - - - Stage 2 748 - - - - Platoon blocked, % - - - - Mov Cap-1 Maneuver 467 774 1291 - - Mov Cap-2 Maneuver 467 - - - - Stage 1 753 - - - -
Critical Hdwy Stg 1 5.42 - - - - - Critical Hdwy Stg 2 5.42 - - - - - Follow-up Hdwy 3.518 3.318 2.218 - - - - Pot Cap-1 Maneuver 483 774 1291 - - - - Stage 1 779 - - - - - - Stage 2 748 - - - - - - Platoon blocked, % - - - - - - - Mov Cap-1 Maneuver 467 774 1291 - - - Mov Cap-2 Maneuver 467 - - - - - Stage 1 753 - - - - - -
Critical Hdwy Stg 2 5.42 - - - - - Follow-up Hdwy 3.518 3.318 2.218 - - - - Pot Cap-1 Maneuver 483 774 1291 - - - Stage 1 779 - - - - - Stage 2 748 - - - - - Platoon blocked, % - - - - - Mov Cap-1 Maneuver 467 774 1291 - - Mov Cap-2 Maneuver 467 - - - - Stage 1 753 - - - -
Follow-up Hdwy 3.518 3.318 2.218
Pot Cap-1 Maneuver 483 774 1291 Stage 1 779
Stage 1 779 -
Stage 2 748 - - - - - Platoon blocked, % - - - - - Mov Cap-1 Maneuver 467 774 1291 - - - Mov Cap-2 Maneuver 467 - - - - - - Stage 1 753 - - - - - -
Platoon blocked, % Mov Cap-1 Maneuver
Mov Cap-1 Maneuver 467 774 1291 - - - Mov Cap-2 Maneuver 467 - - - - - - Stage 1 753 - - - - -
Mov Cap-2 Maneuver 467 Stage 1 753
Mov Cap-2 Maneuver 467 Stage 1 753
Stage 1 753
otage 2
Approach EB NB SB
HCM Control Delay, s 11.7 1.1 0
HCM LOS B
Minor Lane/Major Mvmt NBL NBT EBLn1 SBT SBR
Capacity (veh/h) 1291 - 538
HCM Lane V/C Ratio 0.03 - 0.007
HCM Control Delay (s) 7.9 0 11.7
HCM Lane LOS A A B HCM 95th %tile Q(veh) 0.1 - 0

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	EDL		EDI	WDL		WDN	NDL		NDI	SDL	3B1 ♣	SDN
Traffic Vol, veh/h	1	4	1	21	4	48	1	45 158	15	14	189	1
Future Vol, veh/h	1	0	1	21	0	48	1	158	15	14	189	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	- Otop	- Clop	None	-	-	None	-	-	None	-	-	None
Storage Length	_	_	-	_	_	-	_	_	-	_	_	-
Veh in Median Storage	e.# -	0	_	-	0	-	_	0	_	-	0	_
Grade, %	-, "	0	_	_	0	_	_	0	_	-	0	_
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	1	26	0	59	1	195	19	17	233	1
Major/Minor I	Minor2			Minor1			Major1		ı	Major2		
Conflicting Flow All	504	484	234	475	475	205	234	0	0	214	0	0
Stage 1	268	268	-	207	207	200	-	-	-	-	-	-
Stage 2	236	216	_	268	268	_	_	_	_	_	_	_
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	_	_	4.12	_	_
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	_	_		_	_
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	_	-	-	-	_	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	_	2.218	-	-
Pot Cap-1 Maneuver	478	483	805	500	488	836	1333	-	-	1356	_	-
Stage 1	738	687	-	795	731	-	-	_	-	-	-	-
Stage 2	767	724	-	738	687	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	439	476	805	494	481	836	1333	-	-	1356	-	-
Mov Cap-2 Maneuver	439	476	-	494	481	-	-	-	-	-	-	-
Stage 1	737	677	-	794	730	-	-	-	-	-	-	-
Stage 2	712	723	-	727	677	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	11.4			10.9			0			0.5		
HCM LOS	В			В						3.0		
Minor Lane/Major Mvm	nt	NBL	NBT	NRR	EBLn1V	VRI n1	SBL	SBT	SBR			
Capacity (veh/h)	IL.	1333	-	-	568	691	1356	001	ODIN			
HCM Lane V/C Ratio		0.001	-		0.004			_	_			
HCM Control Delay (s)		7.7	0	<u>-</u>	11.4	10.9	7.7	0	_			
HCM Lane LOS		Α.	A	_	В	В	Α.	A	_			
HCM 95th %tile Q(veh))	0	-	_	0	0.4	0		_			
TOW OUT TOUR QUEEN		J			J	∪.⊣r	-					

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		र्स			1			414				
Traffic Volume (vph)	24	81	0	0	126	97	38	766	30	0	0	0
Future Volume (vph)	24	81	0	0	126	97	38	766	30	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		1.00			1.00			0.91				
Frt		1.00			0.94			0.99				
Flt Protected		0.99			1.00			1.00				
Satd. Flow (prot)		1842			1753			5046				
Flt Permitted		0.67			1.00			1.00				
Satd. Flow (perm)		1246			1753			5046				
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	29	98	0	0	152	117	46	923	36	0	0	0
RTOR Reduction (vph)	0	0	0	0	37	0	0	4	0	0	0	0
Lane Group Flow (vph)	0	127	0	0	232	0	0	1001	0	0	0	0
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		1			1			2				
Permitted Phases	1						2					
Actuated Green, G (s)		15.0			15.0			55.0				
Effective Green, g (s)		15.0			15.0			55.0				
Actuated g/C Ratio		0.19			0.19			0.69				
Clearance Time (s)		5.0			5.0			5.0				
Vehicle Extension (s)		3.0			3.0			3.0				
Lane Grp Cap (vph)		233			328			3469				
v/s Ratio Prot					c0.13							
v/s Ratio Perm		0.10						0.20				
v/c Ratio		0.55			0.71			0.29				
Uniform Delay, d1		29.4			30.5			4.9				
Progression Factor		0.56			1.00			0.77				
Incremental Delay, d2		8.6			12.2			0.2				
Delay (s)		25.2			42.7			4.0				
Level of Service		С			D			Α				
Approach Delay (s)		25.2			42.7			4.0			0.0	
Approach LOS		С			D			Α			Α	
Intersection Summary												
HCM 2000 Control Delay			13.3	H	CM 2000	Level of	Service		В			
HCM 2000 Volume to Capacit	y ratio		0.38									
Actuated Cycle Length (s)			80.0	Sı	um of lost	time (s)			10.0			
Intersection Capacity Utilization	n		46.9%	IC	U Level o	of Service			Α			
Analysis Period (min)			15									

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		ર્ન			ĵ.			414				
Traffic Volume (vph)	8	33	0	0	35	25	14	828	11	0	0	0
Future Volume (vph)	8	33	0	0	35	25	14	828	11	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		1.00			1.00			0.91				
Frt		1.00			0.94			1.00				
Flt Protected		0.99			1.00			1.00				
Satd. Flow (prot)		1844			1758			5071				
Flt Permitted		0.92			1.00			1.00				
Satd. Flow (perm)		1708			1758			5071				
Peak-hour factor, PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	10	39	0	0	42	30	17	986	13	0	0	0
RTOR Reduction (vph)	0	0	0	0	27	0	0	1	0	0	0	0
Lane Group Flow (vph)	0	49	0	0	45	0	0	1015	0	0	0	0
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		1			1			2				
Permitted Phases	1						2					
Actuated Green, G (s)		7.8			7.8			62.2				
Effective Green, g (s)		7.8			7.8			62.2				
Actuated g/C Ratio		0.10			0.10			0.78				
Clearance Time (s)		5.0			5.0			5.0				
Vehicle Extension (s)		3.0			3.0			3.0				
Lane Grp Cap (vph)		166			171			3942				
v/s Ratio Prot					0.03							
v/s Ratio Perm		c0.03						0.20				
v/c Ratio		0.30			0.26			0.26				
Uniform Delay, d1		33.5			33.4			2.5				
Progression Factor		0.64			1.00			1.00				
Incremental Delay, d2		4.4			3.7			0.2				
Delay (s)		25.8			37.1			2.6				
Level of Service		С			D			Α				
Approach Delay (s)		25.8			37.1			2.6			0.0	
Approach LOS		С			D			Α			Α	
Intersection Summary												
HCM 2000 Control Delay			5.8	H	CM 2000	Level of	Service		Α			
HCM 2000 Volume to Capacity	y ratio		0.26									
Actuated Cycle Length (s)			80.0	Sı	um of lost	time (s)			10.0			
Intersection Capacity Utilizatio	n		33.5%	IC	U Level o	of Service			Α			
Analysis Period (min)			15									

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		1			र्स						414	_
Traffic Volume (vph)	0	192	39	33	109	0	0	0	0	60	705	41
Future Volume (vph)	0	192	39	33	109	0	0	0	0	60	705	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						0.91	
Frt		0.98			1.00						0.99	
Flt Protected		1.00			0.99						1.00	
Satd. Flow (prot)		1820			1842						5028	
Flt Permitted		1.00			0.68						1.00	
Satd. Flow (perm)		1820			1270						5028	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	206	42	35	117	0	0	0	0	65	758	44
RTOR Reduction (vph)	0	9	0	0	0	0	0	0	0	0	6	0
Lane Group Flow (vph)	0	239	0	0	152	0	0	0	0	0	861	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		5			5						6	
Permitted Phases				5						6		
Actuated Green, G (s)		16.0			16.0						59.0	
Effective Green, g (s)		16.0			16.0						59.0	
Actuated g/C Ratio		0.19			0.19						0.69	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		3.0			3.0						3.0	
Lane Grp Cap (vph)		342			239						3490	
v/s Ratio Prot		c0.13										
v/s Ratio Perm					0.12						0.17	
v/c Ratio		0.70			0.64						0.25	
Uniform Delay, d1		32.2			31.8						4.8	
Progression Factor		1.00			0.45						1.00	
Incremental Delay, d2		11.3			11.1						0.2	
Delay (s)		43.5			25.4						5.0	
Level of Service		D			С						Α	
Approach Delay (s)		43.5			25.4			0.0			5.0	
Approach LOS		D			С			А			Α	
Intersection Summary												
HCM 2000 Control Delay			15.0	Н	CM 2000	Level of S	Service		В			
HCM 2000 Volume to Capacity	ratio		0.34									
Actuated Cycle Length (s)			85.0	Sı	um of lost	time (s)			10.0			
Intersection Capacity Utilization			48.3%			of Service			Α			
Analysis Period (min)			15									

Intersection												
Intersection Delay, s/ve	eh11.8											
Intersection LOS	В											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	
Lane Configurations	*	1		*	1			4			4	
Traffic Vol, veh/h	22	206	43	29	149	18	39	158	25	10	119	1
Future Vol, veh/h	22	206	43	29	149	18	39	158	25	10	119	19
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	24	222	46	31	160	19	42	170	27	11	128	20
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	2			2			1			1		
Conflicting Approach L				NB			EB			WB		
Conflicting Lanes Left	1			1			2			2		
Conflicting Approach R	Righ t NB			SB			WB			EB		
Conflicting Lanes Right				1			2			2		
HCM Control Delay	12.8			11.2			11.9			10.7		
HCM LOS	В			В			В			В		
Lane	1	NBLn1	EBLn1 I	EBLn2V	VBLn1V	VBLn2	SBLn1					
Vol Left, %			100%		100%	0%	7%					
Vol Thru, %		71%	0%	83%	0%	89%	80%					
Vol Right, %		11%	0%	17%	0%	11%	13%					
Sign Control		Stop	Stop	Stop	Stop	Stop	Stop					
Traffic Vol by Lane		222	22	249	29	167	148					
LT Vol		39	22	0	29	0	10					
Through Vol		158	0	206	0	149	119					
RT Vol		25	0	43	0	18	19					
Lane Flow Rate		239	24	268	31	180	159					
Geometry Grp		2	7	7	7	7	2					
Degree of Util (X)		0.371	0.043		0.057	0.3	0.252					
Departure Headway (H	ld)	5.589	6.487	5.857	6.604	6.019	5.711					
Convergence, Y/N		Yes	Yes	Yes	Yes	Yes	Yes					
Сар		642	551	613	541	596	625					
Service Time				3.603								
HCM Lane V/C Ratio				0.437								
HCM Control Delay		11.9	9.5	13.1	9.8	11.4	10.7					
HCM Lane LOS		В	Α	В	Α	В	В					
HCM 95th-tile Q		1.7	0.1	2.2	0.2	1.3	1					

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		1			4						414	
Traffic Volume (vph)	0	41	37	20	33	0	0	0	0	24	753	21
Future Volume (vph)	0	41	37	20	33	0	0	0	0	24	753	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5						4.5	
Lane Util. Factor		1.00			1.00						0.91	
Frt		0.94			1.00						1.00	
Flt Protected		1.00			0.98						1.00	
Satd. Flow (prot)		1743			1828						5057	
FIt Permitted		1.00			0.84						1.00	
Satd. Flow (perm)		1743			1573						5057	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	43	39	21	34	0	0	0	0	25	784	22
RTOR Reduction (vph)	0	35	0	0	0	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	47	0	0	55	0	0	0	0	0	829	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		5			5						6	
Permitted Phases				5						6		
Actuated Green, G (s)		8.3			8.3						67.7	
Effective Green, g (s)		8.3			8.3						67.7	
Actuated g/C Ratio		0.10			0.10						0.80	
Clearance Time (s)		4.5			4.5						4.5	
Vehicle Extension (s)		3.0			3.0						3.0	
Lane Grp Cap (vph)		170			153						4027	
v/s Ratio Prot		0.03										
v/s Ratio Perm					c0.03						0.16	
v/c Ratio		0.28			0.36						0.21	
Uniform Delay, d1		35.6			35.9						2.1	
Progression Factor		1.00			0.66						0.85	
Incremental Delay, d2		4.0			6.4						0.1	
Delay (s)		39.5			29.9						1.9	
Level of Service		D			С						Α	
Approach Delay (s)		39.5			29.9			0.0			1.9	
Approach LOS		D			С			Α			Α	
Intersection Summary												
HCM 2000 Control Delay			6.7	H	CM 2000	Level of S	Service		Α			
HCM 2000 Volume to Capaci	ty ratio		0.22									
Actuated Cycle Length (s)			85.0		um of lost				9.0			
Intersection Capacity Utilization	on		32.5%	IC	U Level o	of Service			Α			
Analysis Period (min)			15									

Analysis Period (min)
c Critical Lane Group

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		4	7		Y	
Traffic Vol, veh/h	10	69	64	5	13	21
Future Vol, veh/h	10	69	64	5	13	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage	e,# -	0	0	_	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	80	74	6	15	24
N.A ' (N.A.	N4		4: 0			
	Major1		Minor2			
Conflicting Flow All	0	0	104	0		
Stage 1	-	-	0	-		
Stage 2	-	-	104	-		
Critical Hdwy	4.12	-	6.52	6.22		
Critical Hdwy Stg 1	-	-	-	-		
Critical Hdwy Stg 2	-	-	5.52	-		
Follow-up Hdwy	2.218	-	4.018	3.318		
Pot Cap-1 Maneuver	-	-	786	-		
Stage 1	-	-	-	-		
Stage 2	-	-	809	-		
Platoon blocked, %		-				
Mov Cap-1 Maneuver	_	-	0	_		
Mov Cap-2 Maneuver	_	_	0	_		
Stage 1	_	_	0	_		
Stage 2	_		0	_		
Staye 2	_	-	U	<u>-</u>		
Approach	EB		WB			
HCM Control Delay, s						
HCM LOS			-			
1		EDI		MDL 4		
Minor Lane/Major Mvn	nt	EBL	FBL/	WBLn1		
Capacity (veh/h)		-	-	_		
HCM Lane V/C Ratio		-	-	-		
HCM Control Delay (s)		-	-	-		
HCM Lane LOS		-	-	-		
HCM 95th %tile Q(veh)	-	-	-		
<u> </u>						

Intersection						
Intersection Delay, s/veh	8.8					
Intersection LOS	Α					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	¥			र्स	1>	
Traffic Vol, veh/h	40	53	40	166	163	26
Future Vol, veh/h	40	53	40	166	163	26
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	56	42	175	172	27
Number of Lanes	1	0	0	1	1	0
Approach	EB		NB		SB	
Opposing Approach			SB		NB	
Opposing Lanes	0		1		1	
Conflicting Approach Left	SB		EB			
Conflicting Lanes Left	1		1		0	
Conflicting Approach Right	NB				EB	
Conflicting Lanes Right	1		0		1	
HCM Control Delay	8.3		9		8.7	
HCM LOS	Α		Α		Α	
Lane		NBLn1	EBLn1	SBLn1		
Vol Left, %		NBLn1 19%	EBLn1 43%	SBLn1 0%		
Vol Left, %		19%	43%	0%		
Vol Left, % Vol Thru, %		19% 81%	43% 0%	0% 86%		
Vol Left, % Vol Thru, % Vol Right, %		19% 81% 0%	43% 0% 57% Stop 93	0% 86% 14%		
Vol Left, % Vol Thru, % Vol Right, % Sign Control		19% 81% 0% Stop	43% 0% 57% Stop	0% 86% 14% Stop		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane		19% 81% 0% Stop 206	43% 0% 57% Stop 93	0% 86% 14% Stop 189		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol		19% 81% 0% Stop 206 40	43% 0% 57% Stop 93 40	0% 86% 14% Stop 189		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol		19% 81% 0% Stop 206 40 166	43% 0% 57% Stop 93 40	0% 86% 14% Stop 189 0		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol		19% 81% 0% Stop 206 40 166	43% 0% 57% Stop 93 40 0	0% 86% 14% Stop 189 0 163 26		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X)		19% 81% 0% Stop 206 40 166 0 217 1	43% 0% 57% Stop 93 40 0 53 98 1	0% 86% 14% Stop 189 0 163 26 199 1		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp		19% 81% 0% Stop 206 40 166 0 217	43% 0% 57% Stop 93 40 0 53 98	0% 86% 14% Stop 189 0 163 26 199		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X)		19% 81% 0% Stop 206 40 166 0 217 1 0.266 4.413 Yes	43% 0% 57% Stop 93 40 0 53 98 1 0.125 4.594 Yes	0% 86% 14% Stop 189 0 163 26 199 1 0.238 4.315 Yes		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap		19% 81% 0% Stop 206 40 166 0 217 1 0.266 4.413 Yes 815	43% 0% 57% Stop 93 40 0 53 98 1 0.125 4.594 Yes 781	0% 86% 14% Stop 189 0 163 26 199 1 0.238 4.315 Yes 834		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time		19% 81% 0% Stop 206 40 166 0 217 1 0.266 4.413 Yes 815 2.43	43% 0% 57% Stop 93 40 0 53 98 1 0.125 4.594 Yes 781 2.617	0% 86% 14% Stop 189 0 163 26 199 1 0.238 4.315 Yes 834 2.333		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio		19% 81% 0% Stop 206 40 166 0 217 1 0.266 4.413 Yes 815 2.43 0.266	43% 0% 57% Stop 93 40 0 53 98 1 0.125 4.594 Yes 781 2.617 0.125	0% 86% 14% Stop 189 0 163 26 199 1 0.238 4.315 Yes 834 2.333 0.239		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio HCM Control Delay		19% 81% 0% Stop 206 40 166 0 217 1 0.266 4.413 Yes 815 2.43 0.266 9	43% 0% 57% Stop 93 40 0 53 98 1 0.125 4.594 Yes 781 2.617 0.125 8.3	0% 86% 14% Stop 189 0 163 26 199 1 0.238 4.315 Yes 834 2.333 0.239 8.7		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio		19% 81% 0% Stop 206 40 166 0 217 1 0.266 4.413 Yes 815 2.43 0.266	43% 0% 57% Stop 93 40 0 53 98 1 0.125 4.594 Yes 781 2.617 0.125	0% 86% 14% Stop 189 0 163 26 199 1 0.238 4.315 Yes 834 2.333 0.239		

Intersection						
Int Delay, s/veh	0.4					
		14/55		NEE	00/	00=
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	N.		Þ			र्स
Traffic Vol, veh/h	2	11	209	5	6	181
Future Vol, veh/h	2	11	209	5	6	181
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage	, # 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	12	235	6	7	203
IVIVIIILI IUW		12	200	U	I	203
Major/Minor	Minor1	N	Major1		Major2	
Conflicting Flow All	455	238	0	0	241	0
Stage 1	238	-	-	-		-
Stage 2	217	_	_	_	_	_
Critical Hdwy	6.42	6.22			4.12	_
Critical Hdwy Stg 1	5.42	0.22			7.12	
Critical Hdwy Stg 2	5.42	-	_	-	-	
		3.318	-	-		-
Follow-up Hdwy	3.518		-			-
Pot Cap-1 Maneuver	563	801	-	-	1326	-
Stage 1	802	-	-	-	-	-
Stage 2	819	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	560	801	-	-	1326	-
Mov Cap-2 Maneuver	560	-	-	-	-	-
Stage 1	802	-	-	-	-	-
Stage 2	814	-	-	-	-	-
Δ	MAID		NE		0.0	
Approach	WB		NB		SB	
HCM Control Delay, s	9.9		0		0.2	
HCM LOS	Α					
Minor Lane/Major Mvm	nt	NBT	NRRV	VBLn1	SBL	SBT
	IC .	-	- INDIX		1326	- 100
Capacity (veh/h) HCM Lane V/C Ratio				0.019		
		-				-
HCM Control Delay (s)		-	-	9.9	7.7	0
HCM Lane LOS		-	-	A	A	Α
HCM 95th %tile Q(veh)	1	-	-	0.1	0	-

Intersection						
Int Delay, s/veh	1.3					
		E55	ND	NDT	ODT	000
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	A			र्स	1€	
Traffic Vol, veh/h	28	17	5	194	167	8
Future Vol, veh/h	28	17	5	194	167	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storag	e,# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	32	20	6	223	192	9
				_		
	Minor2		Major1		/lajor2	
Conflicting Flow All	432	197	201	0	-	0
Stage 1	197	-	-	-	-	-
Stage 2	235	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	_	-	_	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	581	844	1371	-	-	-
Stage 1	836	-	-	-	-	-
Stage 2	804	_	_	_	_	_
Platoon blocked, %				_	_	_
Mov Cap-1 Maneuver	578	844	1371	_	_	_
Mov Cap-1 Maneuver		-	10/ 1	_	_	
Stage 1	832	_	<u>-</u>	_	-	_
	804	-	-	-	-	-
Stage 2	004	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	11		0.2		0	
HCM LOS	В					
3222						
Minor Lane/Major Mvr	nt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)		1371	-		-	-
HCM Lane V/C Ratio		0.004	-	0.079	-	-
HCM Control Delay (s)	7.6	0	11	-	-
HCM Lane LOS		Α	Α	В	-	-
HCM 95th %tile Q(veh	1)	0	-	0.3	-	-
-1	,					

Int Delay, s/veh	Intersection												
Traffic Vol, veh/h		1.4											
Traffic Vol, veh/h	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	Lane Configurations		4			4			4			4	
Future Vol, veh/h Conflicting Peds, #hh O O O O O O O O O O O O O O O O O O		1		3	20		20	1		29	17		0
Conflicting Peds, #hr Stop Stop Stop Stop Stop Stop Stop Stop Stop Free Free		1	0			0							
Sign Control Stop	·	0											
RT Channelized	•												
Storage Length			•		•								
Veh in Median Storage, # - 0		_	-	_	_	-	_	_	-	-	_	-	-
Grade, % - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - 0 - - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 0 - 0 - 0 0 - 0 0 - 0<		e.# -	0	-	-	0	-	_	0	-	_	0	-
Peak Hour Factor		-,	0	-	-		-	_		_	_		_
Heavy Vehicles, %		89		89	89		89	89	89	89	89		89
Mymit Flow													
Major/Minor Minor2 Minor1 Major1 Major2 Major2													
Conflicting Flow All								-					
Conflicting Flow All	Major/Minor	Minor2			Minor1			Major1		ı	Major2		
Stage 1 229 229 - 219 219 -			464			448			0			0	n
Stage 2 230 235 - 231 229	•												
Critical Hdwy 7.12 6.52 6.22 7.12 6.52 6.22 4.12 - 4.12 -								_	_	_	_		
Critical Hdwy Stg 1 6.12 5.52 - 6.12 5.52 -								4 12	_	_	4 12		
Critical Hdwy Stg 2 6.12 5.52 - 6.12 5.52 - <t< td=""><td>•</td><td></td><td></td><td></td><td></td><td></td><td></td><td>- 1.12</td><td>_</td><td>_</td><td></td><td></td><td></td></t<>	•							- 1.12	_	_			
Follow-up Hdwy 3.518 4.018 3.318 3.518 4.018 3.318 2.218 2.218 2.218 Pot Cap-1 Maneuver 512 495 851 519 506 823 1383 1335 Stage 1 774 715 - 783 722 Stage 2 773 710 - 772 715													
Pot Cap-1 Maneuver							3 318	2 218					
Stage 1 774 715 - 783 722 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -													
Stage 2 773 710 - 772 715 -							- UZU	1000		_	1000		
Platoon blocked, %							<u>-</u>	<u>-</u>	-	<u>-</u>	<u>-</u>		
Mov Cap-1 Maneuver 492 487 851 510 497 823 1383 - - 1335 - - Mov Cap-2 Maneuver 492 487 - 510 497 -		113	110		112	113				_	-		
Mov Cap-2 Maneuver 492 487 - 510 497 - </td <td></td> <td>402</td> <td>/127</td> <td>851</td> <td>510</td> <td>⊿07</td> <td>823</td> <td>1383</td> <td>-</td> <td>-</td> <td>1335</td> <td></td> <td></td>		402	/ 127	851	510	⊿ 07	823	1383	-	-	1335		
Stage 1 773 704 - 782 721 -	•							1000	-				
Stage 2 751 709 - 757 704 -							-	<u>-</u>	-	<u>-</u>			
Approach EB WB NB SB HCM Control Delay, s 10 11.2 0 0.7 HCM LOS B B B B Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBLn1 SBL SBT SBR Capacity (veh/h) 1383 - - 720 630 1335 - - HCM Lane V/C Ratio 0.001 - - 0.006 0.071 0.014 - - HCM Control Delay (s) 7.6 0 - 10 11.2 7.7 0 - HCM Lane LOS A A - B B A A	•			-			-	-	-	_	-		
HCM Control Delay, s 10 11.2 0 0.7 HCM LOS B B B B Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBLn1 SBL SBT SBR Capacity (veh/h) 1383 - - 720 630 1335 - - HCM Lane V/C Ratio 0.001 - - 0.006 0.071 0.014 - - HCM Control Delay (s) 7.6 0 - 10 11.2 7.7 0 - HCM Lane LOS A A - B B A A	Staye 2	751	109	-	101	104	-	<u>-</u>	-	-	<u>-</u>	-	-
HCM Control Delay, s 10	Annragah	ED			MD			ND			CD		
Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBLn1 SBL SBT SBR Capacity (veh/h) 1383 - - 720 630 1335 - - HCM Lane V/C Ratio 0.001 - - 0.006 0.071 0.014 - - HCM Control Delay (s) 7.6 0 - 10 11.2 7.7 0 - HCM Lane LOS A A - B B A A -													
Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBLn1 SBL SBT SBR Capacity (veh/h) 1383 - - 720 630 1335 - - HCM Lane V/C Ratio 0.001 - - 0.006 0.071 0.014 - - HCM Control Delay (s) 7.6 0 - 10 11.2 7.7 0 - HCM Lane LOS A A - B B A A -								0			0.7		
Capacity (veh/h) 1383 - - 720 630 1335 - - HCM Lane V/C Ratio 0.001 - - 0.006 0.071 0.014 - - HCM Control Delay (s) 7.6 0 - 10 11.2 7.7 0 - HCM Lane LOS A A - B B A A -	HCM LOS	В			В								
Capacity (veh/h) 1383 720 630 1335 HCM Lane V/C Ratio 0.001 0.006 0.071 0.014 HCM Control Delay (s) 7.6 0 - 10 11.2 7.7 0 - HCM Lane LOS A A - B B A A -													
HCM Lane V/C Ratio 0.001 - - 0.006 0.071 0.014 - - HCM Control Delay (s) 7.6 0 - 10 11.2 7.7 0 - HCM Lane LOS A A - B B A A -		nt		NBT	NBR				SBT	SBR			
HCM Control Delay (s) 7.6 0 - 10 11.2 7.7 0 - HCM Lane LOS A A - B B A A -	. , ,			-	-				-	-			
HCM Lane LOS A A - B B A A -					-					-			
					-					-			
HCM 95th %tile Q(veh) 0 0 0.2 0				Α	-				Α	-			
,	HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-			

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		ર્ન			1→			414				_
Traffic Volume (vph)	34	158	0	0	142	64	48	841	36	0	0	0
Future Volume (vph)	34	158	0	0	142	64	48	841	36	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		1.00			1.00			0.91				
Frt		1.00			0.96			0.99				
Flt Protected		0.99			1.00			1.00				
Satd. Flow (prot)		1846			1785			5042				
Flt Permitted		0.73			1.00			1.00				
Satd. Flow (perm)		1366			1785			5042				
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	37	170	0	0	153	69	52	904	39	0	0	0
RTOR Reduction (vph)	0	0	0	0	21	0	0	4	0	0	0	0
Lane Group Flow (vph)	0	207	0	0	202	0	0	991	0	0	0	0
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		1			1			2				
Permitted Phases	1						2					
Actuated Green, G (s)		15.3			15.3			59.7				
Effective Green, g (s)		15.3			15.3			59.7				
Actuated g/C Ratio		0.18			0.18			0.70				
Clearance Time (s)		5.0			5.0			5.0				
Vehicle Extension (s)		3.0			3.0			3.0				
Lane Grp Cap (vph)		245			321			3541				
v/s Ratio Prot					0.11							
v/s Ratio Perm		c0.15						0.20				
v/c Ratio		0.84			0.63			0.28				
Uniform Delay, d1		33.7			32.2			4.7				
Progression Factor		0.41			1.00			0.81				
Incremental Delay, d2		26.1			9.0			0.2				
Delay (s)		39.9			41.2			4.0				
Level of Service		D			D			Α				
Approach Delay (s)		39.9			41.2			4.0			0.0	
Approach LOS		D			D			Α			Α	
Intersection Summary												
HCM 2000 Control Delay			15.0	H	CM 2000	Level of	Service		В			
HCM 2000 Volume to Capacity	y ratio		0.39									
Actuated Cycle Length (s)			85.0	Sı	um of lost	time (s)			10.0			
Intersection Capacity Utilization	n		52.1%	IC	CU Level of	of Service			Α			
Analysis Period (min)			15									

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			1			414				
Traffic Volume (vph)	24	41	0	0	53	41	24	838	19	0	0	0
Future Volume (vph)	24	41	0	0	53	41	24	838	19	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5			4.5				
Lane Util. Factor		1.00			1.00			0.91				
Frt		1.00			0.94			1.00				
Flt Protected		0.98			1.00			1.00				
Satd. Flow (prot)		1829			1752			5062				
Flt Permitted		0.84			1.00			1.00				
Satd. Flow (perm)		1569			1752			5062				
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	25	43	0	0	55	43	25	873	20	0	0	0
RTOR Reduction (vph)	0	0	0	0	39	0	0	2	0	0	0	0
Lane Group Flow (vph)	0	68	0	0	59	0	0	916	0	0	0	0
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		1			1			2				
Permitted Phases	1						2					
Actuated Green, G (s)		8.8			8.8			67.2				
Effective Green, g (s)		8.8			8.8			67.2				
Actuated g/C Ratio		0.10			0.10			0.79				
Clearance Time (s)		4.5			4.5			4.5				
Vehicle Extension (s)		3.0			3.0			3.0				
Lane Grp Cap (vph)		162			181			4001				
v/s Ratio Prot					0.03							
v/s Ratio Perm		c0.04						0.18				
v/c Ratio		0.42			0.33			0.23				
Uniform Delay, d1		35.7			35.4			2.3				
Progression Factor		0.69			1.00			1.00				
Incremental Delay, d2		7.8			4.8			0.1				
Delay (s)		32.3			40.1			2.4				
Level of Service		С			D			Α				
Approach Delay (s)		32.3			40.1			2.4			0.0	
Approach LOS		С			D			Α			Α	
Intersection Summary												
HCM 2000 Control Delay			7.7	H	CM 2000	Level of	Service		Α			
HCM 2000 Volume to Capacity	y ratio		0.25									
Actuated Cycle Length (s)			85.0	Sı	um of lost	time (s)			9.0			
Intersection Capacity Utilizatio	n		34.8%	IC	U Level o	of Service			Α			
Analysis Period (min)			15									

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		1			र्स						4143	
Traffic Volume (vph)	0	122	36	31	103	0	0	0	0	102	740	24
Future Volume (vph)	0	122	36	31	103	0	0	0	0	102	740	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						0.91	
Frt		0.97			1.00						1.00	
Flt Protected		1.00			0.99						0.99	
Satd. Flow (prot)		1806			1842						5034	
Flt Permitted		1.00			0.75						0.99	
Satd. Flow (perm)		1806			1405						5034	
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	0	147	43	37	124	0	0	0	0	123	892	29
RTOR Reduction (vph)	0	16	0	0	0	0	0	0	0	0	3	0
Lane Group Flow (vph)	0	174	0	0	161	0	0	0	0	0	1041	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		5			5						6	
Permitted Phases				5						6		
Actuated Green, G (s)		13.0			13.0						57.0	
Effective Green, g (s)		13.0			13.0						57.0	
Actuated g/C Ratio		0.16			0.16						0.71	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		3.0			3.0						3.0	
Lane Grp Cap (vph)		293			228						3586	
v/s Ratio Prot		0.10										
v/s Ratio Perm					c0.11						0.21	
v/c Ratio		0.59			0.71						0.29	
Uniform Delay, d1		31.1			31.7						4.2	
Progression Factor		1.00			0.52						1.00	
Incremental Delay, d2		8.6			14.1						0.2	
Delay (s)		39.6			30.6						4.4	
Level of Service		D			С						Α	
Approach Delay (s)		39.6			30.6			0.0			4.4	
Approach LOS		D			С			Α			Α	
Intersection Summary												
HCM 2000 Control Delay			12.2	H	CM 2000	Level of S	Service		В			
HCM 2000 Volume to Capacity	ratio		0.37									
Actuated Cycle Length (s)			80.0		um of lost				10.0			
Intersection Capacity Utilization	n		45.1%	IC	U Level o	of Service			Α			
Analysis Period (min)			15									

Intersection												
Intersection Delay, s/ve	h13.8											
Intersection LOS	В											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	₽		*	1			4			4	
Traffic Vol, veh/h	7	145	66	48	206	11	51	122	36	18	139	12
Future Vol., veh/h	7	145	66	48	206	11	51	122	36	18	139	12
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	9	177	80	59	251	13	62	149	44	22	170	15
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	2			2			1			1		
Conflicting Approach Le	eft SB			NB			EB			WB		
Conflicting Lanes Left	1			1			2			2		
Conflicting Approach Ri	igh t NB			SB			WB			EB		
Conflicting Lanes Right				1			2			2		
HCM Control Delay	14.2			14			13.8			12.8		
HCM LOS	В			В			В			В		
Lane	1	NBLn1	EBLn1	EBLn2V	VBLn1V	VBLn2	SBLn1					
Vol Left, %		24%	100%	0%	100%	0%	11%					
Vol Thru, %		58%	0%	69%	0%	95%	82%					
Vol Right, %		17%	0%	31%	0%	5%	7%					
Sign Control		Stop	Stop	Stop	Stop	Stop	Stop					
Traffic Vol by Lane		209	7	211	48	217	169					
LT Vol		51	7	0	48	0	18					
Through Vol		122	0	145	0	206	139					
RT Vol		36	0	66	0	11	12					
Lane Flow Rate		255	9	257	59	265	206					
Geometry Grp		2	7	7	7	7	2					
Degree of Util (X)		0.433	0.017	0.454	0.114	0.473	0.358					
Departure Headway (He	d)	6.117	7.087	6.352	6.983	6.436	6.253					
Convergence, Y/N		Yes	Yes	Yes	Yes	Yes	Yes					
Сар		589	506	569	515	561	575					
Service Time				4.078								
HCM Lane V/C Ratio				0.452								
HCM Control Delay		13.8	9.9	14.3	10.6	14.8	12.8					
HCM Lane LOS		В	Α	В	В	В	В					
HCM 95th-tile Q		2.2	0.1	2.4	0.4	2.5	1.6					

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		f)			र्स						414	_
Traffic Volume (vph)	0	41	14	26	21	0	0	0	0	31	771	6
Future Volume (vph)	0	41	14	26	21	0	0	0	0	31	771	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						0.91	
Frt		0.97			1.00						1.00	
Flt Protected		1.00			0.97						1.00	
Satd. Flow (prot)		1798			1813						5070	
Flt Permitted		1.00			0.79						1.00	
Satd. Flow (perm)		1798			1474						5070	
Peak-hour factor, PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	0	49	17	31	25	0	0	0	0	37	918	7
RTOR Reduction (vph)	0	15	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	51	0	0	56	0	0	0	0	0	962	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		5			5						6	
Permitted Phases				5						6		
Actuated Green, G (s)		8.3			8.3						61.7	
Effective Green, g (s)		8.3			8.3						61.7	
Actuated g/C Ratio		0.10			0.10						0.77	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		3.0			3.0						3.0	
Lane Grp Cap (vph)		186			152						3910	
v/s Ratio Prot		0.03										
v/s Ratio Perm					c0.04						0.19	
v/c Ratio		0.27			0.37						0.25	
Uniform Delay, d1		33.1			33.4						2.6	
Progression Factor		1.00			0.61						0.84	
Incremental Delay, d2		3.6			6.7						0.1	
Delay (s)		36.7			27.2						2.3	
Level of Service		D			С						Α	
Approach Delay (s)		36.7			27.2			0.0			2.3	
Approach LOS		D			С			Α			Α	
Intersection Summary												
HCM 2000 Control Delay			5.7	H	CM 2000	Level of S	Service		А			
HCM 2000 Volume to Capacity	ratio		0.26									
Actuated Cycle Length (s)			80.0	Sı	um of lost	time (s)			10.0			
Intersection Capacity Utilization	n		33.2%	IC	U Level o	of Service			Α			
Analysis Period (min)			15									

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	LDL	4	♣	WDIX	¥	ODIX
Traffic Vol, veh/h	57	58	50	23	T	17
•						
Future Vol, veh/h	57	58	50	23	7	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storag	e,# -	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	74	75	65	30	9	22
		, 0	00	00	•	
Major/Minor	Major1	1	Minor2			
Conflicting Flow All	0	0	223	0		
Stage 1	-	-	0	-		
Stage 2	-	-	223	_		
Critical Hdwy	4.12	_	6.52	6.22		
Critical Hdwy Stg 1	-	_	-	-		
Critical Hdwy Stg 2	_		5.52	_		
Follow-up Hdwy	2.218		4.018			
Pot Cap-1 Maneuver	-	-	676	-		
Stage 1	-	-	-	-		
Stage 2	-	-	719	-		
Platoon blocked, %		-				
Mov Cap-1 Maneuver	-	-	0	-		
Mov Cap-2 Maneuver		-	0	-		
Stage 1	-	-	0	_		
Stage 2	_	_	0	_		
Clago L						
Approach	EB		WB			
HCM Control Delay, s						
HCM LOS			-			
Minor Lane/Major Mvr	nt	EBL	EBT\	VBLn1		
Capacity (veh/h)		-	-	-		
HCM Lane V/C Ratio		-	-	-		
HCM Control Delay (s)	-	-	-		
HCM Lane LOS	,	-	-	_		
HCM 95th %tile Q(veh	1)	_	_	_		
HOW JOHN JUNIO Q(VEI	'/					

Intersection						
Intersection Delay, s/veh	9.1					
Intersection LOS	Α					
Management	EDI	EDD	NDI	NDT	ODT	000
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	¥			र्स	f)	
Traffic Vol, veh/h	45	30	29	175	177	50
Future Vol, veh/h	45	30	29	175	177	50
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	51	34	33	197	199	56
Number of Lanes	1	0	0	1	1	0
Approach	EB		NB		SB	
Opposing Approach			SB		NB	
Opposing Lanes	0		1		1	
Conflicting Approach Left	SB		EB			
Conflicting Lanes Left	1		1		0	
Conflicting Approach Right	NB				EB	
Conflicting Lanes Right	1		0		1	
HCM Control Delay	8.5		9.2		9.1	
HCM LOS	A		A		A	
110111 200	, ,		, ,		, ,	
Lane		NBLn1	EBLn1	SBLn1		
Vol Left, %		14%	60%	0%		
Vol Thru, %		86%	0%	78%		
Vol Right, %		0%	40%	22%		
Sign Control		Stop	Stop	Stop		
Traffic Vol by Lane		204	75	227		
LT Vol		29	45	0		
Through Vol		175	0	177		
RT Vol		0	30	50		
Lane Flow Rate		229	84	255		
Geometry Grp		1	1	1		
Degree of Util (X)		0.282	0.114	0.301		
Departure Headway (Hd)		4.432	4.864	4.255		
Convergence, Y/N		Yes	Yes	Yes		
Сар		811	737	847		
Service Time		2.453	2.894	2.275		
HCM Lane V/C Ratio		0.282	0.114	0.301		
HCM Control Delay		9.2	8.5	9.1		
HCM Lane LOS		Α	Α	Α		
HCM Lane LOS HCM 95th-tile Q		A 1.2	A 0.4	A 1.3		

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WDL.	ופייי	1\D1	NON	ODL	- SD1
Traffic Vol, veh/h		9	195	2	3	250
	4			2	3	
Future Vol, veh/h	4	9	195	0	0	250
Conflicting Peds, #/hr	0		0			0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage		-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	12	253	3	4	325
Major/Mingr	Mineral		Anie 1		Mais 2	
	Minor1		Major1		Major2	
Conflicting Flow All	588	255	0	0	256	0
Stage 1	255	-	-	-	-	-
Stage 2	333	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy		3.318	-	-	2.218	-
Pot Cap-1 Maneuver	471	784	_	-	1309	_
Stage 1	788	-	_	_	-	_
Stage 2	726	_	_	_	_	_
Platoon blocked, %	120		_	_		_
Mov Cap-1 Maneuver	469	784		-	1309	-
Mov Cap-2 Maneuver	469	-	-	-	-	-
Stage 1	788	-	-	-	-	-
Stage 2	723	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	10.7		0		0.1	
HCM LOS	10.7 B		U		0.1	
I IOIVI LOO	ט					
Minor Lane/Major Mvm	nt	NBT	NBRV	VBLn1	SBL	SBT
Capacity (veh/h)		-	-	650	1309	-
HCM Lane V/C Ratio		-	_	0.026		_
HCM Control Delay (s)		_	-	10.7	7.8	0
HCM Lane LOS		_	_	В	Α	A
HCM 95th %tile Q(veh))	_	_	0.1	0	-
TOM COULT JULIO CE VOIT				J. 1		

Intersection						
Int Delay, s/veh	1.8					
		E55	NE	NET	057	055
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	A			4	\$	
Traffic Vol, veh/h	15	14	69	180	204	52
Future Vol, veh/h	15	14	69	180	204	52
Conflicting Peds, #/hr	0	0	_ 0	_ 0	_ 0	_ 0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	
Storage Length	0	-	-	-	-	-
Veh in Median Storage		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	19	18	88	231	262	67
Major/Minor	Minor2		Major1	N	/lajor2	
Conflicting Flow All	703	296	329	0	- najoiz	0
Stage 1	296		329			
		-	-	-	-	-
Stage 2	407	6.00	1.40	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy		3.318		-	-	-
Pot Cap-1 Maneuver	404	743	1231	-	-	-
Stage 1	755	-	-	-	-	-
Stage 2	672	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	371	743	1231	-	-	-
Mov Cap-2 Maneuver	371	-	-	-	-	-
Stage 1	693	-	-	-	-	-
Stage 2	672	-	-	-	-	-
Annroach	EB		NB		SB	
Approach			2.3			
HCM Control Delay, s	13		2.3		0	
HCM LOS	В					
Minor Lane/Major Mvm	nt	NBL	NBT I	EBLn1	SBT	SBR
Capacity (veh/h)		1231	_		-	-
HCM Lane V/C Ratio		0.072		0.076	_	-
HCM Control Delay (s)		8.2	0	13	_	-
HCM Lane LOS		A	A	В	_	-
HCM 95th %tile Q(veh)	0.2	-	0.2	-	-
2 222. 70 2(1011						

Intersection												
Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4	LDIT	1102	4	TTDIT.	HUL	4	TIDIT.	ODL	4	ODIT
Traffic Vol, veh/h	1	0	1	21	0	48	1	198	15	14	206	1
Future Vol, veh/h	1	0	1	21	0	48	1	198	15	14	206	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	1	26	0	59	1	244	19	17	254	1
Major/Minor I	Minor2			Minor1			Major1		ľ	Major2		
Conflicting Flow All	574	554	255	545	545	254	255	0	0	263	0	0
Stage 1	289	289	-	256	256	-	-	-	-	-	-	-
Stage 2	285	265	-	289	289	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	_
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	430	440	784	449	446	785	1310	-	-	1301	-	-
Stage 1	719	673	-	749	696	-	-	-	-	-	-	-
Stage 2	722	689	-	719	673	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	393	433	784	443	439	785	1310	-	-	1301	-	-
Mov Cap-2 Maneuver	393	433	-	443	439	-	-	-	-	-	-	-
Stage 1	718	663	-	748	695	-	-	-	-	-	-	-
Stage 2	667	688	-	707	663	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	11.9			11.5			0			0.5		
HCM LOS	В			В								
Minor Lane/Major Mvm	nt	NBL	NBT	NBR	EBLn1V	VBI n1	SBL	SBT	SBR			
Capacity (veh/h)		1310	-	-		636	1301	-	-			
HCM Lane V/C Ratio		0.001	_		0.005			_	_			
HCM Control Delay (s)		7.8	0	_	11.9	11.5	7.8	0	_			
HCM Lane LOS		Α.	A	_	В	В	Α.	A	_			
HCM 95th %tile Q(veh))	0	-	-	0	0.5	0	-	-			
						- 0.5						

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		र्स			1			414				
Traffic Volume (vph)	24	98	0	0	134	112	38	766	35	0	0	0
Future Volume (vph)	24	98	0	0	134	112	38	766	35	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		1.00			1.00			0.91				
Frt		1.00			0.94			0.99				
Flt Protected		0.99			1.00			1.00				
Satd. Flow (prot)		1845			1748			5042				
Flt Permitted		0.64			1.00			1.00				
Satd. Flow (perm)		1191			1748			5042				
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	29	118	0	0	161	135	46	923	42	0	0	0
RTOR Reduction (vph)	0	0	0	0	39	0	0	5	0	0	0	0
Lane Group Flow (vph)	0	147	0	0	257	0	0	1006	0	0	0	0
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		1			1			2				
Permitted Phases	1						2					
Actuated Green, G (s)		15.7			15.7			54.3				
Effective Green, g (s)		15.7			15.7			54.3				
Actuated g/C Ratio		0.20			0.20			0.68				
Clearance Time (s)		5.0			5.0			5.0				
Vehicle Extension (s)		3.0			3.0			3.0				
Lane Grp Cap (vph)		233			343			3422				
v/s Ratio Prot					c0.15							
v/s Ratio Perm		0.12						0.20				
v/c Ratio		0.63			0.75			0.29				
Uniform Delay, d1		29.5			30.3			5.2				
Progression Factor		0.75			1.00			0.77				
Incremental Delay, d2		11.9			13.9			0.2				
Delay (s)		33.9			44.2			4.2				
Level of Service		С			D			Α				
Approach Delay (s)		33.9			44.2			4.2			0.0	
Approach LOS		С			D			Α			Α	
Intersection Summary												
HCM 2000 Control Delay			15.3	H	CM 2000	Level of	Service		В			
HCM 2000 Volume to Capacit	y ratio		0.39									
Actuated Cycle Length (s)			80.0	Sı	um of lost	time (s)			10.0			
Intersection Capacity Utilization	n		49.2%	IC	U Level o	of Service	;		Α			
Analysis Period (min)			15									

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			f			414				
Traffic Volume (vph)	8	33	0	0	35	25	14	833	47	0	0	0
Future Volume (vph)	8	33	0	0	35	25	14	833	47	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		1.00			1.00			0.91				
Frt		1.00			0.94			0.99				
Flt Protected		0.99			1.00			1.00				
Satd. Flow (prot)		1844			1758			5041				
Flt Permitted		0.92			1.00			1.00				
Satd. Flow (perm)		1708			1758			5041				
Peak-hour factor, PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	10	39	0	0	42	30	17	992	56	0	0	0
RTOR Reduction (vph)	0	0	0	0	27	0	0	5	0	0	0	0
Lane Group Flow (vph)	0	49	0	0	45	0	0	1060	0	0	0	0
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		1			1			2				
Permitted Phases	1						2					
Actuated Green, G (s)		7.8			7.8			62.2				
Effective Green, g (s)		7.8			7.8			62.2				
Actuated g/C Ratio		0.10			0.10			0.78				
Clearance Time (s)		5.0			5.0			5.0				
Vehicle Extension (s)		3.0			3.0			3.0				
Lane Grp Cap (vph)		166			171			3919				
v/s Ratio Prot					0.03							
v/s Ratio Perm		c0.03						0.21				
v/c Ratio		0.30			0.26			0.27				
Uniform Delay, d1		33.5			33.4			2.5				
Progression Factor		0.64			1.00			1.00				
Incremental Delay, d2		4.4			3.7			0.2				
Delay (s)		25.9			37.1			2.7				
Level of Service		С			D			Α				
Approach Delay (s)		25.9			37.1			2.7			0.0	
Approach LOS		С			D			Α			Α	
Intersection Summary												
HCM 2000 Control Delay			5.7	H	CM 2000	Level of	Service		Α			
HCM 2000 Volume to Capacity	y ratio		0.27									
Actuated Cycle Length (s)			80.0	Sı	um of lost	time (s)			10.0			
Intersection Capacity Utilizatio	n		34.4%	IC	U Level o	of Service			Α			
Analysis Period (min)			15									

Movement EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT	SBR
Lane Configurations 🕻 🚓	
Traffic Volume (vph) 0 195 39 37 121 0 0 0 69 705	41
Future Volume (vph) 0 195 39 37 121 0 0 0 69 705	41
Ideal Flow (vphpl) 1900 1900 1900 1900 1900 1900 1900 190	1900
Total Lost time (s) 5.0 5.0 5.0	
Lane Util. Factor 1.00 1.00 0.91	
Frt 0.98 1.00 0.99	
Fit Protected 1.00 0.99 1.00	
Satd. Flow (prot) 1821 1841 5026	
Flt Permitted 1.00 0.65 1.00	
Satd. Flow (perm) 1821 1207 5026	
Peak-hour factor, PHF 0.93 0.93 0.93 0.93 0.93 0.93 0.93 0.93	0.93
Adj. Flow (vph) 0 210 42 40 130 0 0 0 74 758	44
RTOR Reduction (vph) 0 9 0 0 0 0 0 0 0 6	0
Lane Group Flow (vph) 0 243 0 0 170 0 0 0 0 870	0
Turn Type NA Perm NA Perm NA	
Protected Phases 5 5 6	
Permitted Phases 5	
Actuated Green, G (s) 16.2 16.2 58.8	
Effective Green, g (s) 16.2 16.2 58.8	
Actuated g/C Ratio 0.19 0.19 0.69	
Clearance Time (s) 5.0 5.0 5.0	
Vehicle Extension (s) 3.0 3.0	
Lane Grp Cap (vph) 347 230 3476	
v/s Ratio Prot 0.13	
v/s Ratio Perm c0.14 0.17	
v/c Ratio 0.70 0.74 0.25	
Uniform Delay, d1 32.1 32.4 4.9	
Progression Factor 1.00 0.44 1.00	
Incremental Delay, d2 11.2 16.2 0.2	
Delay (s) 43.3 30.5 5.1	
Level of Service D C A	
Approach Delay (s) 43.3 30.5 0.0 5.1	
Approach LOS D C A A	
Intersection Summary	
HCM 2000 Control Delay 15.8 HCM 2000 Level of Service B	
HCM 2000 Volume to Capacity ratio 0.36	
Actuated Cycle Length (s) 85.0 Sum of lost time (s) 10.0	
Intersection Capacity Utilization 49.5% ICU Level of Service A	
Analysis Period (min) 15	

Intersection													
Intersection Delay, s/veh	າ12.5												
Intersection LOS	В												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	7	1		ň	f.			4			4		
Traffic Vol, veh/h	22	211	49	31	150	18	62	158	32	10	119	19	
Future Vol, veh/h	22	211	49	31	150	18	62	158	32	10	119	19	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0	
Mvmt Flow	24	227	53	33	161	19	67	170	34	11	128	20	
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0	
Approach	EB			WB			NB			SB			
Opposing Approach	WB			EB			SB			NB			
Opposing Lanes	2			2			1			1			
Conflicting Approach Le				NB			EB			WB			
Conflicting Lanes Left	1			1			2			2			
Conflicting Approach Rig	ahNB			SB			WB			EB			
Conflicting Lanes Right	1			1			2			2			
HCM Control Delay	13.6			11.4			12.9			11			
HCM LOS	В			В			В			В			
Lane	N	IBLn1 I	EBLn1	EBLn2V	VBLn1V	VBLn2	SBLn1						
Vol Left, %		25%	100%	0%	100%	0%	7%						
Vol Thru, %		63%	0%	81%	0%	89%	80%						
Vol Right, %		13%	0%	19%	0%	11%	13%						
Sign Control		Stop	Stop	Stop	Stop	Stop	Stop						
Traffic Vol by Lane		252	22	260	31	168	148						
LT Vol		62	22	0	31	0	10						
Through Vol		158	0	211	0	150	119						
RT Vol		32	0	49	0	18	19						
Lane Flow Rate		271	24	280	33	181	159						
Geometry Grp		2	7	7	7	7	2						
Degree of Util (X)		0.427	0.044	0.464	0.063	0.31	0.259						
Departure Headway (Hd	l)	5.67	6.62	5.977	6.757	6.171	5.855						
Convergence, Y/N		Yes	Yes	Yes	Yes	Yes	Yes						
Сар		631	539	601	528	580	610						
Service Time		3.734	4.38	3.737	4.524	3.937	3.929						
HCM Lane V/C Ratio		0.429	0.045	0.466	0.063	0.312	0.261						
HCM Control Delay		12.9	9.7	13.9	10	11.7	11						
HCM Lane LOS		В	Α	В	Α	В	В						
HCM 95th-tile Q		2.1	0.1	2.4	0.2	1.3	1						

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		1			सी						414	
Traffic Volume (vph)	0	41	37	45	33	0	0	0	0	24	757	21
Future Volume (vph)	0	41	37	45	33	0	0	0	0	24	757	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5						4.5	
Lane Util. Factor		1.00			1.00						0.91	
Frt		0.94			1.00						1.00	
Flt Protected		1.00			0.97						1.00	
Satd. Flow (prot)		1743			1810						5058	
FIt Permitted		1.00			0.77						1.00	
Satd. Flow (perm)		1743			1443						5058	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	43	39	47	34	0	0	0	0	25	789	22
RTOR Reduction (vph)	0	35	0	0	0	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	47	0	0	81	0	0	0	0	0	834	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		5			5						6	
Permitted Phases				5						6		
Actuated Green, G (s)		9.8			9.8						66.2	
Effective Green, g (s)		9.8			9.8						66.2	
Actuated g/C Ratio		0.12			0.12						0.78	
Clearance Time (s)		4.5			4.5						4.5	
Vehicle Extension (s)		3.0			3.0						3.0	
Lane Grp Cap (vph)		200			166						3939	
v/s Ratio Prot		0.03										
v/s Ratio Perm					c0.06						0.16	
v/c Ratio		0.24			0.49						0.21	
Uniform Delay, d1		34.2			35.2						2.5	
Progression Factor		1.00			0.68						0.81	
Incremental Delay, d2		2.8			9.8						0.1	
Delay (s)		37.0			33.7						2.1	
Level of Service		D			С						Α	
Approach Delay (s)		37.0			33.7			0.0			2.1	
Approach LOS		D			С			Α			Α	
Intersection Summary												
HCM 2000 Control Delay			7.5	Н	CM 2000	Level of S	Service		Α			
HCM 2000 Volume to Capacity	ratio		0.25									
Actuated Cycle Length (s)			85.0	Sı	um of lost	time (s)			9.0			
Intersection Capacity Utilization	1		34.0%			of Service			Α			
Analysis Period (min)			15									

Intersection						
Int Delay, s/veh	0					
		FDT	MOT	WED	ODI	000
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	40	4	1	-	Y	.10
Traffic Vol, veh/h	16	69	64	7	19	46
Future Vol, veh/h	16	69	64	7	19	46
Conflicting Peds, #/hr	_ 0	0	0	0	_ 0	_ 0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-		-		-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage		0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	19	80	74	8	22	53
Major/Minor I	Major1	I	Minor2			
Conflicting Flow All	0	0	118	0		
Stage 1	_	-	0	_		
Stage 2	_	_	118	_		
Critical Hdwy	4.12	_	6.52	6.22		
Critical Hdwy Stg 1	-	_	-	-		
Critical Hdwy Stg 2	_	_	5.52	_		
Follow-up Hdwy	2.218		4.018			
Pot Cap-1 Maneuver	-	_	772	-		
Stage 1	_	-	-	_		
Stage 2	_	_	798	_		
Platoon blocked, %		_	100			
Mov Cap-1 Maneuver	_	_	0	_		
Mov Cap-2 Maneuver	_	_	0	_		
Stage 1	_	_	0	_		
Stage 2	_	<u>-</u>	0	_		
Olage 2			U			
Approach	EB		WB			
HCM Control Delay, s						
HCM LOS			-			
Minor Lane/Major Mvm	nt	EBL	FRTV	VBLn1		
Capacity (veh/h)		LDL	LDIV	VDLIII		
HCM Lane V/C Ratio		_	_	_		
HCM Control Delay (s)			_			
HCM Lane LOS		_	_	<u>-</u>		
HCM 95th %tile Q(veh)		<u>-</u>	-	-		
HOW JOHN JOHNE Q(VEII)			_			

Intersection						
Intersection Delay, s/veh	9					
Intersection LOS	A					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	¥			र्स	1>	
Traffic Vol, veh/h	42	57	41	173	190	27
Future Vol, veh/h	42	57	41	173	190	27
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	44	60	43	182	200	28
Number of Lanes	1	0	0	1	1	0
Approach	EB		NB		SB	
Opposing Approach			SB		NB	
Opposing Lanes	0		1		1	
Conflicting Approach Left	SB		EB			
Conflicting Lanes Left	1		1		0	
Conflicting Approach Right	NB				EB	
Conflicting Lanes Right	1		0		1	
HCM Control Delay	8.4		9.2		9	
HCM LOS	Α		Α		Α	
Lane		NBLn1	EBLn1	SBLn1		
		NBLn1 19%	EBLn1 42%	SBLn1 0%		
Vol Left, % Vol Thru, %						
Vol Left, %		19%	42%	0%		
Vol Left, % Vol Thru, %		19% 81%	42% 0%	0% 88%		
Vol Left, % Vol Thru, % Vol Right, %		19% 81% 0%	42% 0% 58%	0% 88% 12%		
Vol Left, % Vol Thru, % Vol Right, % Sign Control		19% 81% 0% Stop	42% 0% 58% Stop	0% 88% 12% Stop		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane		19% 81% 0% Stop 214	42% 0% 58% Stop 99	0% 88% 12% Stop 217		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol		19% 81% 0% Stop 214 41	42% 0% 58% Stop 99 42	0% 88% 12% Stop 217		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol		19% 81% 0% Stop 214 41 173	42% 0% 58% Stop 99 42 0	0% 88% 12% Stop 217 0		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol		19% 81% 0% Stop 214 41 173	42% 0% 58% Stop 99 42 0	0% 88% 12% Stop 217 0 190		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X)		19% 81% 0% Stop 214 41 173 0 225 1	42% 0% 58% Stop 99 42 0 57 104 1	0% 88% 12% Stop 217 0 190 27 228 1		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp		19% 81% 0% Stop 214 41 173 0 225	42% 0% 58% Stop 99 42 0 57 104	0% 88% 12% Stop 217 0 190 27 228		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X)		19% 81% 0% Stop 214 41 173 0 225 1 0.279 4.463 Yes	42% 0% 58% Stop 99 42 0 57 104 1 0.135 4.675 Yes	0% 88% 12% Stop 217 0 190 27 228 1 0.276 4.352 Yes		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap		19% 81% 0% Stop 214 41 173 0 225 1 0.279 4.463 Yes 806	42% 0% 58% Stop 99 42 0 57 104 1 0.135 4.675 Yes 767	0% 88% 12% Stop 217 0 190 27 228 1 0.276 4.352 Yes 827		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time		19% 81% 0% Stop 214 41 173 0 225 1 0.279 4.463 Yes 806 2.485	42% 0% 58% Stop 99 42 0 57 104 1 0.135 4.675 Yes 767 2.703	0% 88% 12% Stop 217 0 190 27 228 1 0.276 4.352 Yes 827 2.374		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio		19% 81% 0% Stop 214 41 173 0 225 1 0.279 4.463 Yes 806 2.485 0.279	42% 0% 58% Stop 99 42 0 57 104 1 0.135 4.675 Yes 767 2.703 0.136	0% 88% 12% Stop 217 0 190 27 228 1 0.276 4.352 Yes 827 2.374 0.276		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio HCM Control Delay		19% 81% 0% Stop 214 41 173 0 225 1 0.279 4.463 Yes 806 2.485 0.279 9.2	42% 0% 58% Stop 99 42 0 57 104 1 0.135 4.675 Yes 767 2.703 0.136 8.4	0% 88% 12% Stop 217 0 190 27 228 1 0.276 4.352 Yes 827 2.374 0.276 9		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio		19% 81% 0% Stop 214 41 173 0 225 1 0.279 4.463 Yes 806 2.485 0.279	42% 0% 58% Stop 99 42 0 57 104 1 0.135 4.675 Yes 767 2.703 0.136	0% 88% 12% Stop 217 0 190 27 228 1 0.276 4.352 Yes 827 2.374 0.276		

Intersection						
Int Delay, s/veh	0.4					
Movement	\\/DI	\M/DD	NDT	NIDD	CDI	CDT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	M		∱	_		4
Traffic Vol, veh/h	2	11	239	5	6	189
Future Vol, veh/h	2	11	239	5	6	189
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage		-	0	-	-	0
Grade, %	0	_	0	_	_	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	12	269	6	7	212
IVIVIIIL FIOW		12	209	Ö	1	212
Major/Minor	Minor1	N	Major1		Major2	
Conflicting Flow All	498	272	0	0	275	0
Stage 1	272	-	-	-	-	-
Stage 2	226	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	532	767	-	-	1288	-
Stage 1	774	-	-	-	-	-
Stage 2	812	-	-	-	_	_
Platoon blocked, %	_ J _		_	_		_
Mov Cap-1 Maneuver	529	767	_	_	1288	_
Mov Cap-1 Maneuver	529	- 101		_	1200	_
			-			
Stage 1	774	-	-	-	-	-
Stage 2	807	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	10.1		0		0.2	
HCM LOS	В					
Minor Lane/Major Mvn	nt	NBT	NRRV	VBLn1	SBL	SBT
		1101	-		1288	- 100
Capacity (veh/h)		-	-	717		
HCM Lane V/C Ratio		-	-		0.005	-
HCM Control Delay (s)		-	-	10.1	7.8	0
HCM Lane LOS		-	-	В	Α	Α
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection						
Int Delay, s/veh	2.6					
		EDD	NDI	NDT	CDT	CDD
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y	4.4	40	4 10€	169	45
Traffic Vol, veh/h	56 56	44	12	196	168	15 15
Future Vol, veh/h	56	44	12	196	168	15
Conflicting Peds, #/hr	0 Stop	0 Stop	0 Eroo	0 Eroo	0 Eroo	0 Eroo
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	
Storage Length	0	-	-	_	-	-
Veh in Median Storage		-	-	0	0	-
Grade, %	0	- 07	- 07	0	0	- 07
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	102	2
Mvmt Flow	64	51	14	225	193	17
Major/Minor I	Minor2		Major1	N	Major2	
Conflicting Flow All	455	202	210	0	-	0
Stage 1	202	-	-	-	-	-
Stage 2	253	-	-	_	_	_
Critical Hdwy	6.42	6.22	4.12	_	_	_
Critical Hdwy Stg 1	5.42	J.ZZ	- 1.12	-	-	_
Critical Hdwy Stg 2	5.42		_	_	_	
Follow-up Hdwy		3.318	2 212	-	-	_
Pot Cap-1 Maneuver	563	839	1361	_	_	_
Stage 1	832	- 300	- 1001	_	-	_
Stage 2	789			_	_	_
Platoon blocked, %	109	-	-	-	-	-
Mov Cap-1 Maneuver	556	839	1361	-	-	-
Mov Cap-1 Maneuver	556	039	1001	-	-	-
Stage 1	822	-	-	-	-	-
	789	-	-	-	-	-
Stage 2	109	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	11.7		0.4		0	
HCM LOS	В				•	
Minor Lana/Maior M	ı.t	NDI	NIDT	EDI p1	CDT	CDD
Minor Lane/Major Mvm	IL	NBL		EBLn1	SBT	SBR
Capacity (veh/h)		1361	-		-	-
HCM Lane V/C Ratio		0.01		0.176	-	-
HCM Control Delay (s)		7.7	0	11.7	-	-
HOM1 = 100			-	-		
HCM Lane LOS HCM 95th %tile Q(veh)		A 0	A -	0.6	-	-

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4	LDIN	1.02	4	1,51	1,00	4	, is	UDL	4	USIN
Traffic Vol, veh/h	1	0	3	20	0	20	1	187	29	17	198	0
Future Vol, veh/h	1	0	3	20	0	20	1	187	29	17	198	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	_	-	-	_	-	-	_	-	-	_	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	3	22	0	22	1	210	33	19	222	0
Major/Minor	Minor2			Minor1			Major1		ı	Major2		
Conflicting Flow All	500	505	222	491	489	227	222	0	0	243	0	0
Stage 1	260	260		229	229	-		-	-		-	-
Stage 2	240	245	_	262	260	_	_	_	_	_	_	_
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	_	_	-	_	_
Critical Hdwy Stg 2	6.12	5.52	_	6.12	5.52	_	_	_	_	_	_	_
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	481	470	818	488	480	812	1347	-	-	1323	-	-
Stage 1	745	693	-	774	715	_	-	_	-	-	-	-
Stage 2	763	703	-	743	693	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	462	462	818	480	472	812	1347	-	-	1323	-	-
Mov Cap-2 Maneuver	462	462	-	480	472	-	-	-	-	-	-	-
Stage 1	744	682	-	773	714	-	-	-	-	-	-	-
Stage 2	741	702	-	728	682	-	-	-	-	-	-	-
, in the second second												
Approach	EB			WB			NB			SB		
HCM Control Delay, s	10.3			11.5			0			0.6		
HCM LOS	В			В								
Minor Lane/Major Mvn	nt	NBL	NBT	NBR	EBLn1V	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)		1347	-	-	686	603	1323	-	_			
HCM Lane V/C Ratio		0.001	_	-		0.075		_	-			
HCM Control Delay (s)		7.7	0	_	10.3	11.5	7.8	0	-			
HCM Lane LOS		Α	A	-	В	В	Α	A	-			
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-			
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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		ર્ન			1			414				_
Traffic Volume (vph)	34	161	0	0	158	98	48	841	37	0	0	0
Future Volume (vph)	34	161	0	0	158	98	48	841	37	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		1.00			1.00			0.91				
Frt		1.00			0.95			0.99				
Flt Protected		0.99			1.00			1.00				
Satd. Flow (prot)		1846			1767			5041				
Flt Permitted		0.63			1.00			1.00				
Satd. Flow (perm)		1181			1767			5041				
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	37	173	0	0	170	105	52	904	40	0	0	0
RTOR Reduction (vph)	0	0	0	0	27	0	0	5	0	0	0	0
Lane Group Flow (vph)	0	210	0	0	248	0	0	991	0	0	0	0
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		1			1			2				
Permitted Phases	1						2					
Actuated Green, G (s)		16.5			16.5			58.5				
Effective Green, g (s)		16.5			16.5			58.5				
Actuated g/C Ratio		0.19			0.19			0.69				
Clearance Time (s)		5.0			5.0			5.0				
Vehicle Extension (s)		3.0			3.0			3.0				
Lane Grp Cap (vph)		229			343			3469				
v/s Ratio Prot					0.14							
v/s Ratio Perm		c0.18						0.20				
v/c Ratio		0.92			0.72			0.29				
Uniform Delay, d1		33.6			32.1			5.1				
Progression Factor		0.44			1.00			0.80				
Incremental Delay, d2		38.4			12.4			0.2				
Delay (s)		53.2			44.5			4.3				
Level of Service		D			D			Α				
Approach Delay (s)		53.2			44.5			4.3			0.0	
Approach LOS		D			D			Α			Α	
Intersection Summary												
HCM 2000 Control Delay			18.7	H	CM 2000	Level of	Service		В			
HCM 2000 Volume to Capacity	y ratio		0.42									
Actuated Cycle Length (s)			85.0	Sı	um of lost	time (s)			10.0			
Intersection Capacity Utilizatio	n		55.2%	IC	U Level o	of Service			В			
Analysis Period (min)			15									

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			ĵ.			414				
Traffic Volume (vph)	24	41	0	0	53	41	24	839	25	0	0	0
Future Volume (vph)	24	41	0	0	53	41	24	839	25	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5			4.5				
Lane Util. Factor		1.00			1.00			0.91				
Frt		1.00			0.94			1.00				
Flt Protected		0.98			1.00			1.00				
Satd. Flow (prot)		1829			1752			5057				
Flt Permitted		0.84			1.00			1.00				
Satd. Flow (perm)		1569			1752			5057				
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	25	43	0	0	55	43	25	874	26	0	0	0
RTOR Reduction (vph)	0	0	0	0	39	0	0	2	0	0	0	0
Lane Group Flow (vph)	0	68	0	0	59	0	0	923	0	0	0	0
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		1			1			2				
Permitted Phases	1						2					
Actuated Green, G (s)		8.8			8.8			67.2				
Effective Green, g (s)		8.8			8.8			67.2				
Actuated g/C Ratio		0.10			0.10			0.79				
Clearance Time (s)		4.5			4.5			4.5				
Vehicle Extension (s)		3.0			3.0			3.0				
Lane Grp Cap (vph)		162			181			3998				
v/s Ratio Prot					0.03							
v/s Ratio Perm		c0.04						0.18				
v/c Ratio		0.42			0.33			0.23				
Uniform Delay, d1		35.7			35.4			2.3				
Progression Factor		0.71			1.00			1.00				
Incremental Delay, d2		7.8			4.8			0.1				
Delay (s)		32.9			40.1			2.4				
Level of Service		С			D			Α				
Approach Delay (s)		32.9			40.1			2.4			0.0	
Approach LOS		С			D			Α			Α	
Intersection Summary												
HCM 2000 Control Delay			7.7	H	CM 2000	Level of	Service		Α			
HCM 2000 Volume to Capacity	y ratio		0.25									
Actuated Cycle Length (s)			85.0	Sı	um of lost	time (s)			9.0			
Intersection Capacity Utilizatio	n		34.9%	IC	CU Level of	of Service			Α			
Analysis Period (min)			15									

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		1			ર્ન						4143	
Traffic Volume (vph)	0	138	64	31	136	11	0	0	0	58	859	36
Future Volume (vph)	0	138	64	31	136	11	0	0	0	58	859	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						0.91	
Frt		0.96			0.99						0.99	
Flt Protected		1.00			0.99						1.00	
Satd. Flow (prot)		1783			1832						5041	
Flt Permitted		1.00			0.72						1.00	
Satd. Flow (perm)		1783			1337						5041	
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	0	166	77	37	164	13	0	0	0	70	1035	43
RTOR Reduction (vph)	0	24	0	0	3	0	0	0	0	0	4	0
Lane Group Flow (vph)	0	219	0	0	211	0	0	0	0	0	1144	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		5			5						6	
Permitted Phases				5						6		
Actuated Green, G (s)		15.2			15.2						54.8	
Effective Green, g (s)		15.2			15.2						54.8	
Actuated g/C Ratio		0.19			0.19						0.68	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		3.0			3.0						3.0	
Lane Grp Cap (vph)		338			254						3453	
v/s Ratio Prot		0.12										
v/s Ratio Perm					c0.16						0.23	
v/c Ratio		0.65			0.83						0.33	
Uniform Delay, d1		29.9			31.2						5.1	
Progression Factor		1.00			0.48						1.00	
Incremental Delay, d2		9.2			20.5						0.3	
Delay (s)		39.1			35.5						5.4	
Level of Service		D			D						Α	
Approach Delay (s)		39.1			35.5			0.0			5.4	
Approach LOS		D			D			Α			Α	
Intersection Summary												
HCM 2000 Control Delay			14.5	Н	CM 2000	Level of S	Service		В			
HCM 2000 Volume to Capacity	y ratio		0.44									
Actuated Cycle Length (s)			80.0	Sı	um of lost	time (s)			10.0			
Intersection Capacity Utilizatio	n		51.8%			of Service			Α			
Analysis Period (min)			15									

Intersection													
Intersection Delay, s/vel	h14.7												
Intersection LOS	В												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	7	1		ħ	1			4			4		
Traffic Vol, veh/h	8	167	38	54	228	12	43	132	40	19	150	13	
Future Vol, veh/h	8	167	38	54	228	12	43	132	40	19	150	13	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0	
Mvmt Flow	10	204	46	66	278	15	52	161	49	23	183	16	
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0	
Approach	EB			WB			NB			SB			
Opposing Approach	WB			EB			SB			NB			
Opposing Lanes	2			2			1			1			
Conflicting Approach Le	ft SB			NB			EB			WB			
Conflicting Lanes Left	1			1			2			2			
Conflicting Approach Ri	ghtNB			SB			WB			EB			
Conflicting Lanes Right	1			1			2			2			
HCM Control Delay	14.8			15.6			14.5			13.6			
HCM LOS	В			С			В			В			
Lane	N	NBLn1	EBLn1	EBLn2V	VBLn1V	WBLn2	SBLn1						
Vol Left, %		20%	100%	0%	100%	0%	10%						
Vol Thru, %		61%	0%	81%	0%	95%	82%						
Vol Right, %		19%	0%	19%	0%	5%	7%						
Sign Control		Stop	Stop	Stop	Stop	Stop	Stop						
Traffic Vol by Lane		215	8	205	54	240	182						
LT Vol		43	8	0	54	0	19						
Through Vol		132	0	167	0	228	150						
RT Vol		40	0	38	0	12	13						
Lane Flow Rate		262	10	250	66	293	222						
Geometry Grp		2	7	7	7	7	2						
Degree of Util (X)		0.457	0.02	0.461	0.13	0.533	0.396						
Departure Headway (Ho	d)	6.276		6.634	7.104	6.557	6.423						
Convergence, Y/N		Yes	Yes	Yes	Yes	Yes	Yes						
Cap		574	492	543	504	550	559						
Service Time		4.322	5.024	4.379	4.848	4.301	4.47						
Service Time HCM Lane V/C Ratio		4.322 0.456	5.024 0.02	4.379 0.46	4.848 0.131	4.301 0.533	4.47 0.397						
Service Time HCM Lane V/C Ratio HCM Control Delay		4.322 0.456 14.5	5.024 0.02 10.2	4.379 0.46 15	4.848 0.131 10.9	4.301 0.533 16.6	4.47 0.397 13.6						
Service Time HCM Lane V/C Ratio		4.322 0.456	5.024 0.02	4.379 0.46	4.848 0.131	4.301 0.533	4.47 0.397						

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		1			र्स						414	
Traffic Volume (vph)	0	44	15	15	23	0	0	0	0	33	954	6
Future Volume (vph)	0	44	15	15	23	0	0	0	0	33	954	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						0.91	
Frt		0.97			1.00						1.00	
Flt Protected		1.00			0.98						1.00	
Satd. Flow (prot)		1798			1826						5072	
FIt Permitted		1.00			0.84						1.00	
Satd. Flow (perm)		1798			1562						5072	
Peak-hour factor, PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	0	52	18	18	27	0	0	0	0	39	1136	7
RTOR Reduction (vph)	0	16	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	54	0	0	45	0	0	0	0	0	1182	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		5			5						6	
Permitted Phases				5						6		
Actuated Green, G (s)		7.9			7.9						62.1	
Effective Green, g (s)		7.9			7.9						62.1	
Actuated g/C Ratio		0.10			0.10						0.78	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		3.0			3.0						3.0	
Lane Grp Cap (vph)		177			154						3937	
v/s Ratio Prot		c0.03										
v/s Ratio Perm					0.03						0.23	
v/c Ratio		0.30			0.29						0.30	
Uniform Delay, d1		33.5			33.5						2.6	
Progression Factor		1.00			0.62						0.82	
Incremental Delay, d2		4.4			4.7						0.2	
Delay (s)		37.9			25.3						2.3	
Level of Service		D			С						Α	
Approach Delay (s)		37.9			25.3			0.0			2.3	
Approach LOS		D			С			Α			Α	
Intersection Summary												
HCM 2000 Control Delay			5.0	Н	CM 2000	Level of	Service		Α			
HCM 2000 Volume to Capacity r	atio		0.30									
Actuated Cycle Length (s)			80.0	Sı	um of lost	time (s)			10.0			
Intersection Capacity Utilization			36.3%	IC	U Level o	of Service			Α			
Analysis Period (min)			15									

Intersection						
Int Delay, s/veh	0					
		- CDT	WDT	WDD	CDI	ODD
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	-00	4	1	45	Y	-
Traffic Vol, veh/h	23	63	54	15	4	5
Future Vol, veh/h	23	63	54	15	4	5
Conflicting Peds, #/hr	_ 0	_ 0	0	0	_ 0	_ 0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-		-		-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage		0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	82	70	19	5	6
Major/Minor	Major1		Minor2			
	0	0	142	0		
Conflicting Flow All Stage 1	-	-	0	-		
9			142			
Stage 2	4.40	-		-		
Critical Hdwy	4.12	-	6.52	6.22		
Critical Hdwy Stg 1	-	-	-	-		
Critical Hdwy Stg 2	-	-	5.52	-		
Follow-up Hdwy	2.218	-	4.018			
Pot Cap-1 Maneuver	-	-	749	-		
Stage 1	-	-	-	-		
Stage 2	-	-	779	-		
Platoon blocked, %		-				
Mov Cap-1 Maneuver	-	-	0	-		
Mov Cap-2 Maneuver	-	-	0	-		
Stage 1	-	-	0	-		
Stage 2	-	-	0	-		
Approach	EB		WB			
	EB		VVD			
HCM Control Delay, s						
HCM LOS			-			
Minor Lane/Major Mvn	nt	EBL	EBTV	VBLn1		
Capacity (veh/h)		_	_	_		
HCM Lane V/C Ratio		_	_	-		
HCM Control Delay (s)		_	_	_		
HCM Lane LOS		_	_	_		
HCM 95th %tile Q(veh)	_	_	_		
	1	-	_			

Intersection						
Intersection Delay, s/veh	9.1					
Intersection LOS	Α					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			ર્ન	f >	
Traffic Vol, veh/h	48	30	26	152	193	51
Future Vol, veh/h	48	30	26	152	193	51
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	34	29	171	217	57
Number of Lanes	1	0	0	1	1	0
Approach	EB		NB		SB	
Opposing Approach			SB		NB	
Opposing Lanes	0		1		1	
Conflicting Approach Left	SB		EB			
Conflicting Lanes Left	1		1		0	
Conflicting Approach Right	NB				EB	
Conflicting Lanes Right	1		0		1	
HCM Control Delay	8.5		9		9.3	
HCM LOS	Α		Α		Α	
Lane		NBLn1	EBLn1	SBLn1		
Vol Left, %		15%	62%	0%		
Vol Thru, %		85%	0%	79%		
Vol Right, %		0%				
Sign Control			38%	21%		
•		Stop	38% Stop	21% Stop		
Traffic Vol by Lane						
Traffic Vol by Lane LT Vol		Stop	Stop	Stop		
		Stop 178	Stop 78	Stop 244		
LT Vol		Stop 178 26	Stop 78 48	Stop 244 0		
LT Vol Through Vol		Stop 178 26 152	Stop 78 48 0	Stop 244 0 193		
LT Vol Through Vol RT Vol		Stop 178 26 152	Stop 78 48 0 30	Stop 244 0 193 51		
LT Vol Through Vol RT Vol Lane Flow Rate		Stop 178 26 152 0 200	Stop 78 48 0 30 88	Stop 244 0 193 51 274		
LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp		Stop 178 26 152 0 200	Stop 78 48 0 30 88	Stop 244 0 193 51 274		
LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X)		Stop 178 26 152 0 200 1 0.248	Stop 78 48 0 30 88 1 0.118	Stop 244 0 193 51 274 1 0.323		
LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd)		Stop 178 26 152 0 200 1 0.248 4.46	Stop 78 48 0 30 88 1 0.118 4.854	Stop 244 0 193 51 274 1 0.323 4.24		
LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N		Stop 178 26 152 0 200 1 0.248 4.46 Yes	Stop 78 48 0 30 88 1 0.118 4.854 Yes	Stop 244 0 193 51 274 1 0.323 4.24 Yes		
LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap		Stop 178 26 152 0 200 1 0.248 4.46 Yes 806	Stop 78 48 0 30 88 1 0.118 4.854 Yes 738	Stop 244 0 193 51 274 1 0.323 4.24 Yes 850		
LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time		Stop 178 26 152 0 200 1 0.248 4.46 Yes 806 2.481	Stop 78 48 0 30 88 1 0.118 4.854 Yes 738 2.886	Stop 244 0 193 51 274 1 0.323 4.24 Yes 850 2.26		
LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio		Stop 178 26 152 0 200 1 0.248 4.46 Yes 806 2.481 0.248	Stop 78 48 0 30 88 1 0.118 4.854 Yes 738 2.886 0.119	Stop 244 0 193 51 274 1 0.323 4.24 Yes 850 2.26 0.322		

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		1			ની
Traffic Vol, veh/h	4	10	200	2	3	238
Future Vol, veh/h	4	10	200	2	3	238
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage	e, # 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	5	13	260	3	4	309
	- 0	10	200		7	000
Major/Minor	Minor1	N	Major1	<u> </u>	Major2	
Conflicting Flow All	579	262	0	0	263	0
Stage 1	262	-	-	-	-	-
Stage 2	317	-	-	_	_	-
Critical Hdwy	6.42	6.22	_	-	4.12	_
Critical Hdwy Stg 1	5.42	-	_	_		_
Critical Hdwy Stg 2	5.42				_	
Follow-up Hdwy		3.318	_	_	2.218	_
Pot Cap-1 Maneuver	477	777	-	-	1301	-
	782	111	-	-	1301	-
Stage 1		-	-	-	-	-
Stage 2	738	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	475	777	-	-	1301	-
Mov Cap-2 Maneuver	475	-	-	-	-	-
Stage 1	782	-	-	-	-	-
Stage 2	735	-	-	-	-	-
, in the second						
A mara a ab	\A/D		ND		OD	
Approach	WB		NB		SB	
HCM Control Delay, s	10.6		0		0.1	
HCM LOS	В					
Minor Lane/Major Mvn	nt	NBT	NRDV	VBLn1	SBL	SBT
	ıt	INDI				וטט
Capacity (veh/h)		-	-		1301	-
HCM Cantrol Dalay (a)		-			0.003	-
HCM Control Delay (s))	-	-	10.6	7.8	0
HCM Lane LOS HCM 95th %tile Q(veh		-	-	B 0.1	A 0	A

Intersection						
Int Delay, s/veh	0.6					
Movement	□ DI	EDD	NDI	NDT	CDT	CDD
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	¥			4	4	40
Traffic Vol, veh/h	2	1	32	198	233	12
Future Vol, veh/h	2	1	32	198	233	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage	e, # 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	3	1	41	254	299	15
IVIVIIIL FIOW	3		41	204	299	15
Major/Minor	Minor2	ı	Major1	N	/lajor2	
	643	307	314	0		0
Conflicting Flow All					-	
Stage 1	307	-	-	-	-	-
Stage 2	336	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	438	733	1246	-	-	-
Stage 1	746	-	-	-	-	-
Stage 2	724	_	_	_	_	-
Platoon blocked, %	-			_	_	_
Mov Cap-1 Maneuver	421	733	1246	_	_	_
	421	100	1240	_		
Mov Cap-2 Maneuver			-		-	-
Stage 1	718	-	-	-	-	-
Stage 2	724	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	12.4		1.1		0	
HCM LOS	В					
Minor Lane/Major Mvn	nt	NBL	NRT	EBLn1	SBT	SBR
Capacity (veh/h)		1246	-		-	ODIK
HCM Lane V/C Ratio						-
		0.033		0.008	-	-
HCM Control Delay (s)		8	0	12.4	-	-
HCM Lane LOS		A	Α	В	-	-
HCM 95th %tile Q(veh)	0.1	-	0	-	-

Intersection												
Int Delay, s/veh	2											
		EST	E25	14/51	14/5-	14/55	NE	Not	NES	0.51	057	055
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	1	0	1	23	0	52	1	176	16	15	220	1
Future Vol, veh/h	1	0	1	23	0	52	1	176	16	15	220	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	1	28	0	64	1	217	20	19	272	1
Major/Minor	Minor2			Minor1			Major1		ı	Major2		
Conflicting Flow All	572	550	273	540	540	227	273	0	0	237	0	0
	311	311	213	229	229	221	213	-	U		-	U
Stage 1	261	239		311	311	-		-	-	-		-
Stage 2	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy						0.22	4.12	-	-		-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	2 240	6.12	5.52	2 240	0.040	-	-	0.040	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	431	443	766	453	449	812	1290	-	-	1330	-	-
Stage 1	699	658	-	774	715	-	-	-	-	-	-	-
Stage 2	744	708	-	699	658	-	-	-	-	-	-	-
Platoon blocked, %	004	/o=	=00	110	,,,	0.10	4000	-	-	4000	-	-
Mov Cap-1 Maneuver		435	766	446	441	812	1290	-	-	1330	-	-
Mov Cap-2 Maneuver		435	-	446	441	-	-	-	-	-	-	-
Stage 1	698	647	-	773	714	-	-	-	-	-	-	-
Stage 2	684	707	-	686	647	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	12			11.5			0			0.5		
HCM LOS	В			В						3.0		
Minor Long/Major M.		NDI	NDT	NDD	EDL ~ 4)	MDL = 4	CDI	CDT	CDD			
Minor Lane/Major Mvr	III	NBL	NBT	NBK	EBLn1V		SBL	SBT	SBR			
Capacity (veh/h)		1290	-	-	518	649	1330	-	-			
HCM Lane V/C Ratio	,	0.001	-	-		0.143		-	-			
HCM Control Delay (s	5)	7.8	0	-	12	11.5	7.7	0	-			
HCM Lane LOS	,	Α	Α	-	В	В	A	Α	-			
HCM 95th %tile Q(veh	1)	0	-	-	0	0.5	0	-	-			

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		र्स			1			414				
Traffic Volume (vph)	42	96	0	23	144	105	50	854	42	0	0	0
Future Volume (vph)	42	96	0	23	144	105	50	854	42	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		1.00			1.00			0.91				
Frt		1.00			0.95			0.99				
Flt Protected		0.98			1.00			1.00				
Satd. Flow (prot)		1835			1758			5038				
Flt Permitted		0.62			0.97			1.00				
Satd. Flow (perm)		1162			1706			5038				
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	51	116	0	28	173	127	60	1029	51	0	0	0
RTOR Reduction (vph)	0	0	0	0	29	0	0	6	0	0	0	0
Lane Group Flow (vph)	0	167	0	0	299	0	0	1134	0	0	0	0
Turn Type	Perm	NA		Perm	NA		Perm	NA				
Protected Phases		1			1			2				
Permitted Phases	1			1			2					
Actuated Green, G (s)		17.2			17.2			52.8				
Effective Green, g (s)		17.2			17.2			52.8				
Actuated g/C Ratio		0.21			0.21			0.66				
Clearance Time (s)		5.0			5.0			5.0				
Vehicle Extension (s)		3.0			3.0			3.0				
Lane Grp Cap (vph)		249			366			3325				
v/s Ratio Prot												
v/s Ratio Perm		0.14			c0.18			0.23				
v/c Ratio		0.67			0.82			0.34				
Uniform Delay, d1		28.8			29.9			6.0				
Progression Factor		0.55			1.00			0.73				
Incremental Delay, d2		12.6			18.0			0.3				
Delay (s)		28.5			47.9			4.7				
Level of Service		С			D			Α				
Approach Delay (s)		28.5			47.9			4.7			0.0	
Approach LOS		С			D			Α			Α	
Intersection Summary												
HCM 2000 Control Delay			15.8	Н	CM 2000	Level of	Service		В			
HCM 2000 Volume to Capacit	y ratio		0.46									
Actuated Cycle Length (s)			80.0	Sı	um of lost	time (s)			10.0			
Intersection Capacity Utilization	n		44.5%	IC	U Level o	of Service			Α			
Analysis Period (min)			15									

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		ર્ન			1			414				_
Traffic Volume (vph)	9	36	0	0	38	27	15	923	12	0	0	0
Future Volume (vph)	9	36	0	0	38	27	15	923	12	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		1.00			1.00			0.91				
Frt		1.00			0.94			1.00				
Flt Protected		0.99			1.00			1.00				
Satd. Flow (prot)		1844			1758			5072				
Flt Permitted		0.92			1.00			1.00				
Satd. Flow (perm)		1706			1758			5072				
Peak-hour factor, PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	11	43	0	0	45	32	18	1099	14	0	0	0
RTOR Reduction (vph)	0	0	0	0	29	0	0	1	0	0	0	0
Lane Group Flow (vph)	0	54	0	0	48	0	0	1130	0	0	0	0
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		1			1			2				
Permitted Phases	1						2					
Actuated Green, G (s)		8.0			8.0			62.0				
Effective Green, g (s)		8.0			8.0			62.0				
Actuated g/C Ratio		0.10			0.10			0.78				
Clearance Time (s)		5.0			5.0			5.0				
Vehicle Extension (s)		3.0			3.0			3.0				
Lane Grp Cap (vph)		170			175			3930				
v/s Ratio Prot					0.03							
v/s Ratio Perm		c0.03						0.22				
v/c Ratio		0.32			0.28			0.29				
Uniform Delay, d1		33.5			33.3			2.6				
Progression Factor		0.62			1.00			1.00				
Incremental Delay, d2		4.8			3.9			0.2				
Delay (s)		25.6			37.2			2.8				
Level of Service		С			D			Α				
Approach Delay (s)		25.6			37.2			2.8			0.0	
Approach LOS		С			D			Α			Α	
Intersection Summary												
HCM 2000 Control Delay			5.9	H	CM 2000	Level of	Service		Α			
HCM 2000 Volume to Capacity	/ ratio		0.29									
Actuated Cycle Length (s)			80.0	Sı	um of lost	time (s)			10.0			
Intersection Capacity Utilizatio	n		35.8%	IC	CU Level o	of Service			Α			
Analysis Period (min)			15									

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		1→			र्स						414	
Traffic Volume (vph)	0	232	67	36	149	11	0	0	0	68	821	54
Future Volume (vph)	0	232	67	36	149	11	0	0	0	68	821	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						0.91	
Frt		0.97			0.99						0.99	
FIt Protected		1.00			0.99						1.00	
Satd. Flow (prot)		1806			1832						5024	
FIt Permitted		1.00			0.58						1.00	
Satd. Flow (perm)		1806			1073						5024	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	249	72	39	160	12	0	0	0	73	883	58
RTOR Reduction (vph)	0	13	0	0	2	0	0	0	0	0	7	0
Lane Group Flow (vph)	0	308	0	0	209	0	0	0	0	0	1007	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		5			5						6	
Permitted Phases				5						6		
Actuated Green, G (s)		18.3			18.3						56.7	
Effective Green, g (s)		18.3			18.3						56.7	
Actuated g/C Ratio		0.22			0.22						0.67	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		3.0			3.0						3.0	
Lane Grp Cap (vph)		388			231						3351	
v/s Ratio Prot		0.17										
v/s Ratio Perm					c0.19						0.20	
v/c Ratio		0.79			0.90						0.30	
Uniform Delay, d1		31.6			32.5						5.9	
Progression Factor		1.00			0.47						1.00	
Incremental Delay, d2		15.4			33.3						0.2	
Delay (s)		47.0			48.7						6.1	
Level of Service		D			D						Α	
Approach Delay (s)		47.0			48.7			0.0			6.1	
Approach LOS		D			D			Α			Α	
Intersection Summary												
HCM 2000 Control Delay			20.4	H	CM 2000	Level of S	Service		С			
HCM 2000 Volume to Capacity r	atio		0.45									
Actuated Cycle Length (s)			85.0	Sı	um of lost	time (s)			10.0			
Intersection Capacity Utilization			57.7%	IC	U Level o	of Service			В			
Analysis Period (min)			15									

Intersection													
Intersection Delay, s/veh	113.4												
Intersection LOS	В												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	*	4		1	1			4			4		
Traffic Vol, veh/h	24	235	49	44	174	19	42	171	32	11	129	21	
Future Vol, veh/h	24	235	49	44	174	19	42	171	32	11	129	21	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0	
Mvmt Flow	26	253	53	47	187	20	45	184	34	12	139	23	
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0	
Approach	EB			WB			NB			SB			
Opposing Approach	WB			EB			SB			NB			
Opposing Lanes	2			2			1			1			
Conflicting Approach Le				NB			EB			WB			
Conflicting Lanes Left	1			1			2			2			
Conflicting Approach Rig	ahtNB			SB			WB			EB			
Conflicting Lanes Right	1			1			2			2			
HCM Control Delay	15			12.3			13.5			11.7			
HCM LOS	В			В			В			В			
Lane	١	NBLn1 I	EBLn1	EBLn2V	VBLn1V	VBLn2	SBLn1						
Vol Left, %		17%	100%	0%	100%	0%	7%						
Vol Thru, %		70%	0%	83%	0%	90%	80%						
Vol Right, %		13%	0%	17%	0%	10%	13%						
Sign Control		Stop	Stop	Stop	Stop	Stop	Stop						
Traffic Vol by Lane		245	24	284	44	193	161						
LT Vol		42	24	0	44	0	11						
Through Vol		171	0	235	0	174	129						
RT Vol		32	0	49	0	19	21						
Lane Flow Rate		263	26	305	47	208	173						
Geometry Grp		2	7	7	7	7	2						
Degree of Util (X)		0.433	0.048	0.52	0.09	0.364	0.293						
Departure Headway (Hd	l)	5.913	6.763		6.886	6.306	6.089						
Convergence, Y/N		Yes	Yes	Yes	Yes	Yes	Yes						
Сар		603	526	583	517	567	585						
Service Time				3.909			4.185						
HCM Lane V/C Ratio				0.523			0.296						
HCM Control Delay		13.5	9.9	15.4	10.4	12.7	11.7						
HCM Lane LOS		В	Α	С	В	В	В						
HCM 95th-tile Q		2.2	0.2	3	0.3	1.7	1.2						

Movement EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT SBR Lane Configurations Image: Configuration of the co
Traffic Volume (vph) 0 44 40 22 36 0 0 0 0 26 936 23 Future Volume (vph) 0 44 40 22 36 0 0 0 0 26 936 23 Ideal Flow (vphpl) 1900
Traffic Volume (vph) 0 44 40 22 36 0 0 0 0 26 936 23 Future Volume (vph) 0 44 40 22 36 0 0 0 0 26 936 23 Ideal Flow (vphpl) 1900
Ideal Flow (vphpl) 1900
Total Lost time (s) 4.5 4.5 Lane Util. Factor 1.00 1.00 Frt 0.94 1.00 Fit Protected 1.00 0.98 1.00
Lane Util. Factor 1.00 1.00 0.91 Frt 0.94 1.00 1.00 Fit Protected 1.00 0.98 1.00
Frt 0.94 1.00 1.00 Flt Protected 1.00 0.98 1.00
Flt Protected 1.00 0.98 1.00
Satd. Flow (prot) 1743 1828 5061
Flt Permitted 1.00 0.84 1.00
Satd. Flow (perm) 1743 1570 5061
Peak-hour factor, PHF 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96
Adj. Flow (vph) 0 46 42 23 38 0 0 0 27 975 24
RTOR Reduction (vph) 0 38 0 0 0 0 0 0 0 1 0
Lane Group Flow (vph) 0 50 0 0 61 0 0 0 0 1025 0
Turn Type NA Perm NA Perm NA
Protected Phases 5 5
Permitted Phases 5 6
Actuated Green, G (s) 8.5 8.5 67.5
Effective Green, g (s) 8.5 8.5 67.5
Actuated g/C Ratio 0.10 0.10 0.79
Clearance Time (s) 4.5 4.5
Vehicle Extension (s) 3.0 3.0
Lane Grp Cap (vph) 174 157 4019
v/s Ratio Prot 0.03
v/s Ratio Perm c0.04 0.20
v/c Ratio 0.29 0.39 0.25
Uniform Delay, d1 35.4 35.8 2.3
Progression Factor 1.00 0.65 0.81
Incremental Delay, d2 4.1 7.0 0.1
Delay (s) 39.6 30.3 2.0
Level of Service D C A
Approach Delay (s) 39.6 30.3 0.0 2.0
Approach LOS D C A A
Intersection Summary
HCM 2000 Control Delay 6.3 HCM 2000 Level of Service A
HCM 2000 Volume to Capacity ratio 0.27
Actuated Cycle Length (s) 85.0 Sum of lost time (s) 9.0
Intersection Capacity Utilization 36.4% ICU Level of Service A
Analysis Period (min) 15

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
	CDL			WDK	SBL	ODK
Lane Configurations	11	ન	1 → 69	5	14	23
Traffic Vol, veh/h		75 75		5		
Future Vol, veh/h	11	75	69	5	14	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None		None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage	e,# -	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	87	80	6	16	27
Major/Minor	Major1		Minor2			
				^		
Conflicting Flow All	0	0	113	0		
Stage 1	-	-	0	-		
Stage 2	- 4.40	-	113	-		
Critical Hdwy	4.12	-	6.52	6.22		
Critical Hdwy Stg 1	-	-	-	-		
Critical Hdwy Stg 2	-	-	5.52	-		
Follow-up Hdwy	2.218	-	4.018	3.318		
Pot Cap-1 Maneuver	-	-	777	-		
Stage 1	-	-	-	-		
Stage 2	-	-	802	-		
Platoon blocked, %		-				
Mov Cap-1 Maneuver	-	-	0	-		
Mov Cap-2 Maneuver	-	-	0	-		
Stage 1	-	-	0	-		
Stage 2	-	-	0	_		
A	FD		MP			
Approach	EB		WB			
HCM Control Delay, s						
HCM LOS			-			
Minor Lane/Major Mvn	nt	EBL	FRTV	VBLn1		
Capacity (veh/h)		LUL	LDIV	VDLIII		
HCM Lane V/C Ratio		-	-	_		
	١					
HCM Control Delay (s))	-	-	-		
		-	-	-		

Intersection						
Intersection Delay, s/veh	9.1					
Intersection LOS	Α					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	¥			र्स	1→	
Traffic Vol, veh/h	43	57	43	184	192	28
Future Vol, veh/h	43	57	43	184	192	28
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	45	60	45	194	202	29
Number of Lanes	1	0	0	1	1	0
Approach	EB		NB		SB	
Opposing Approach			SB		NB	
Opposing Lanes	0		1		1	
Conflicting Approach Left	SB		EB			
Conflicting Lanes Left	1		1		0	
Conflicting Approach Right	NB				EB	
Conflicting Lanes Right	1		0		1	
HCM Control Delay	8.5		9.4		9.1	
HCM LOS	Α		Α		Α	
Lane		NBLn1	EBLn1	SBLn1		
			LDLIII	ODLITI		
Vol Left, %		19%	43%	0%		
Vol Left, % Vol Thru, %						
		19%	43%	0%		
Vol Thru, %		19% 81%	43% 0%	0% 87%		
Vol Thru, % Vol Right, %		19% 81% 0%	43% 0% 57%	0% 87% 13%		
Vol Thru, % Vol Right, % Sign Control		19% 81% 0% Stop	43% 0% 57% Stop	0% 87% 13% Stop		
Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane		19% 81% 0% Stop 227	43% 0% 57% Stop 100	0% 87% 13% Stop 220		
Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol		19% 81% 0% Stop 227 43	43% 0% 57% Stop 100 43	0% 87% 13% Stop 220		
Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol		19% 81% 0% Stop 227 43 184	43% 0% 57% Stop 100 43	0% 87% 13% Stop 220 0		
Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol		19% 81% 0% Stop 227 43 184	43% 0% 57% Stop 100 43 0	0% 87% 13% Stop 220 0 192 28		
Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X)		19% 81% 0% Stop 227 43 184 0 239 1	43% 0% 57% Stop 100 43 0 57 105 1	0% 87% 13% Stop 220 0 192 28 232 1 0.281		
Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp		19% 81% 0% Stop 227 43 184 0 239	43% 0% 57% Stop 100 43 0 57 105	0% 87% 13% Stop 220 0 192 28 232		
Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X)		19% 81% 0% Stop 227 43 184 0 239 1 0.297 4.47 Yes	43% 0% 57% Stop 100 43 0 57 105 1 0.138 4.716 Yes	0% 87% 13% Stop 220 0 192 28 232 1 0.281 4.37 Yes		
Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap		19% 81% 0% Stop 227 43 184 0 239 1 0.297 4.47 Yes 805	43% 0% 57% Stop 100 43 0 57 105 1 0.138 4.716 Yes 760	0% 87% 13% Stop 220 0 192 28 232 1 0.281 4.37 Yes 822		
Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time		19% 81% 0% Stop 227 43 184 0 239 1 0.297 4.47 Yes 805 2.495	43% 0% 57% Stop 100 43 0 57 105 1 0.138 4.716 Yes 760 2.748	0% 87% 13% Stop 220 0 192 28 232 1 0.281 4.37 Yes 822 2.394		
Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap		19% 81% 0% Stop 227 43 184 0 239 1 0.297 4.47 Yes 805 2.495 0.297	43% 0% 57% Stop 100 43 0 57 105 1 0.138 4.716 Yes 760 2.748 0.138	0% 87% 13% Stop 220 0 192 28 232 1 0.281 4.37 Yes 822 2.394 0.282		
Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio HCM Control Delay		19% 81% 0% Stop 227 43 184 0 239 1 0.297 4.47 Yes 805 2.495 0.297 9.4	43% 0% 57% Stop 100 43 0 57 105 1 0.138 4.716 Yes 760 2.748 0.138 8.5	0% 87% 13% Stop 220 0 192 28 232 1 0.281 4.37 Yes 822 2.394 0.282 9.1		
Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio		19% 81% 0% Stop 227 43 184 0 239 1 0.297 4.47 Yes 805 2.495 0.297	43% 0% 57% Stop 100 43 0 57 105 1 0.138 4.716 Yes 760 2.748 0.138	0% 87% 13% Stop 220 0 192 28 232 1 0.281 4.37 Yes 822 2.394 0.282		

Intersection						
Int Delay, s/veh	0.4					
		MDD	NET	NDD	ODI	ODT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	M	40	}	_	0	4
Traffic Vol, veh/h	2	12	231	5	6	211
Future Vol, veh/h	2	12	231	5	6	211
Conflicting Peds, #/hr	0	0	_ 0	_ 0	_ 0	_ 0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-		-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage		-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	13	260	6	7	237
Major/Minor	Minor1	N	Major1		Major2	
		263				0
Conflicting Flow All	514		0	0	266	
Stage 1	263	-	-	-	-	-
Stage 2	251	-	-	-	4 40	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518		-	-	2.218	-
Pot Cap-1 Maneuver	521	776	-	-	1298	-
Stage 1	781	-	-	-	-	-
Stage 2	791	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	518	776	-	-	1298	-
Mov Cap-2 Maneuver	518	-	-	-	-	-
Stage 1	781	-	-	-	-	-
Stage 2	786	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	10.1		0		0.2	
HCM LOS	В					
Minor Lane/Major Mvm	nt	NBT	NBRV	VBLn1	SBL	SBT
Capacity (veh/h)		-	_		1298	-
HCM Lane V/C Ratio		-	_	0.022		-
HCM Control Delay (s)		-	_		7.8	0
HCM Lane LOS		-	-	В	A	A
HCM 95th %tile Q(veh)	-	_	0.1	0	-
Jili Jour Jour Selvon	,			0.1	•	

Intersection						
Int Delay, s/veh	1.3					
	EBL	EDD	NDI	NDT	CDT	SBR
Movement Configurations		EBR	NBL	NBT	SBT	SBK
Lane Configurations	Y	40	-	વ	100	0
Traffic Vol, veh/h	30	18	5	215	196	9
Future Vol, veh/h	30	18	5	215	196	9
Conflicting Peds, #/hr	0	0	_ 0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-		-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	21	6	247	225	10
Major/Minor N	Minor2		Major1	N	/lajor2	
Conflicting Flow All	489	230	235	0	-	0
Stage 1	230	-	-	-	_	-
Stage 2	259	_	_	_	_	_
Critical Hdwy	6.42	6.22	4.12	_	_	_
Critical Hdwy Stg 1	5.42	0.22	7.12	_	_	_
Critical Hdwy Stg 2	5.42					
Follow-up Hdwy		3.318	2 218	_	_	_
Pot Cap-1 Maneuver	538	809	1332		_	
Stage 1	808	003	1002	_	_	_
Stage 2	784	-	-			_
Platoon blocked, %	704	-	-	-	_	-
Mov Cap-1 Maneuver	535	809	1332	-		-
Mov Cap- i Maneuver						
			1002	-	-	-
Mov Cap-2 Maneuver	535	-	-	-	-	-
Mov Cap-2 Maneuver Stage 1	535 804		-	- -	-	- -
Mov Cap-2 Maneuver	535			- - -		- - -
Mov Cap-2 Maneuver Stage 1	535 804			- - -	-	- - -
Mov Cap-2 Maneuver Stage 1	535 804		- - - - NB	-	-	-
Mov Cap-2 Maneuver Stage 1 Stage 2 Approach	535 804 784 EB		- - - NB	-	- - - SB	-
Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s	535 804 784		- - -	-	- - -	-
Mov Cap-2 Maneuver Stage 1 Stage 2 Approach	535 804 784 EB 11.5		- - - NB	-	- - - SB	-
Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS	535 804 784 EB 11.5 B	-	- - - NB 0.2	- - -	- - - SB 0	-
Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvm	535 804 784 EB 11.5 B	- - - NBL	NB 0.2	EBLn1	- - - SB	SBR
Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvm Capacity (veh/h)	535 804 784 EB 11.5 B	- - - NBL 1332	- - NB 0.2	613	- - - SB 0	SBR
Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvm Capacity (veh/h) HCM Lane V/C Ratio	535 804 784 EB 11.5 B	- - - NBL 1332 0.004	NB 0.2	613 0.09	- - - SB 0	SBR
Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvm Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)	535 804 784 EB 11.5 B	NBL 1332 0.004 7.7	NB 0.2 NBT I	613 0.09 11.5	SB 0 SBT -	- - - SBR - -
Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvm Capacity (veh/h) HCM Lane V/C Ratio	535 804 784 EB 11.5 B	- - - NBL 1332 0.004	NB 0.2	613 0.09	- - - SB 0	SBR

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		1102	4	· · · · · · · · · · · · · · · · · · ·	IIDL	4	TTDIT	052	4	OBIT
Traffic Vol, veh/h	1	0	3	22	0	22	1	197	31	18	200	0
Future Vol, veh/h	1	0	3	22	0	22	1	197	31	18	200	0
Conflicting Peds, #/hr	0	0	0		0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	<u> </u>	-	None	_	_	None	-	-	None	-	_	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	3	25	0	25	1	221	35	20	225	0
Major/Minor I	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	518	523	225	508	506	239	225	0	0	256	0	0
Stage 1	265	265	-	241	241	-	-	-	-	-	-	-
Stage 2	253	258	-	267	265	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	_
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	468	459	814	475	469	800	1344	-	-	1309	-	-
Stage 1	740	689	-	762	706	-	-	-	-	-	-	-
Stage 2	751	694	-	738	689	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	447	451	814	466	461	800	1344	-	-	1309	-	-
Mov Cap-2 Maneuver	447	451	-	466	461	-	-	-	-	-	-	-
Stage 1	739	677	-	761	705	-	-	-	-	-	-	-
Stage 2	727	693	-	722	677	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	10.4			11.7			0			0.6		
HCM LOS	В			В								
Minor Lane/Major Mvm	nt	NBL	NBT	NBR	EBLn1V	VBI n1	SBL	SBT	SBR			
Capacity (veh/h)		1344	-	-		589	1309	-	-			
HCM Lane V/C Ratio		0.001	_			0.084		_	_			
HCM Control Delay (s)		7.7	0	_	10.4	11.7	7.8	0	_			
HCM Lane LOS		Α.	A	_	В	В	Α.	A	_			
HCM 95th %tile Q(veh))	0	-	-	0	0.3	0	-	-			
						- 0.5						

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		ર્ન			₽			414				
Traffic Volume (vph)	53	180	0	23	161	69	61	935	49	0	0	0
Future Volume (vph)	53	180	0	23	161	69	61	935	49	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		1.00			1.00			0.91				
Frt		1.00			0.96			0.99				
Flt Protected		0.99			1.00			1.00				
Satd. Flow (prot)		1842			1786			5035				
FIt Permitted		0.72			0.94			1.00				
Satd. Flow (perm)		1340			1688			5035				
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	57	194	0	25	173	74	66	1005	53	0	0	0
RTOR Reduction (vph)	0	0	0	0	16	0	0	6	0	0	0	0
Lane Group Flow (vph)	0	251	0	0	256	0	0	1118	0	0	0	0
Turn Type	Perm	NA		Perm	NA		Perm	NA				
Protected Phases		1			1			2				
Permitted Phases	1			1			2					
Actuated Green, G (s)		17.8			17.8			57.2				
Effective Green, g (s)		17.8			17.8			57.2				
Actuated g/C Ratio		0.21			0.21			0.67				
Clearance Time (s)		5.0			5.0			5.0				
Vehicle Extension (s)		3.0			3.0			3.0				
Lane Grp Cap (vph)		280			353			3388				
v/s Ratio Prot												
v/s Ratio Perm		c0.19			0.15			0.22				
v/c Ratio		0.90			0.73			0.33				
Uniform Delay, d1		32.7			31.3			5.8				
Progression Factor		0.46			1.00			0.78				
Incremental Delay, d2		27.7			12.3			0.3				
Delay (s)		42.8			43.6			4.8				
Level of Service		D			D			Α				
Approach Delay (s)		42.8			43.6			4.8			0.0	
Approach LOS		D			D			Α			Α	
Intersection Summary												
HCM 2000 Control Delay			17.0	H	CM 2000	Level of	Service		В			
HCM 2000 Volume to Capacity	ratio		0.46									
Actuated Cycle Length (s)			85.0	Sı	um of lost	time (s)			10.0			
Intersection Capacity Utilization	1		52.6%	IC	U Level o	of Service			Α			
Analysis Period (min)			15									

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		ર્ન			7			444				
Traffic Volume (vph)	26	44	0	0	57	44	26	934	21	0	0	0
Future Volume (vph)	26	44	0	0	57	44	26	934	21	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5			4.5				
Lane Util. Factor		1.00			1.00			0.91				
Frt		1.00			0.94			1.00				
Flt Protected		0.98			1.00			1.00				
Satd. Flow (prot)		1829			1753			5062				
FIt Permitted		0.84			1.00			1.00				
Satd. Flow (perm)		1562			1753			5062				
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	27	46	0	0	59	46	27	973	22	0	0	0
RTOR Reduction (vph)	0	0	0	0	39	0	0	2	0	0	0	0
Lane Group Flow (vph)	0	73	0	0	66	0	0	1020	0	0	0	0
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		1			1			2				
Permitted Phases	1						2					
Actuated Green, G (s)		9.1			9.1			66.9				
Effective Green, g (s)		9.1			9.1			66.9				
Actuated g/C Ratio		0.11			0.11			0.79				
Clearance Time (s)		4.5			4.5			4.5				
Vehicle Extension (s)		3.0			3.0			3.0				
Lane Grp Cap (vph)		167			187			3984				
v/s Ratio Prot					0.04							
v/s Ratio Perm		c0.05						0.20				
v/c Ratio		0.44			0.35			0.26				
Uniform Delay, d1		35.6			35.2			2.4				
Progression Factor		0.69			1.00			1.00				
Incremental Delay, d2		8.0			5.1			0.2				
Delay (s)		32.6			40.3			2.6				
Level of Service		С			D			Α				
Approach Delay (s)		32.6			40.3			2.6			0.0	
Approach LOS		С			D			Α			Α	
Intersection Summary												
HCM 2000 Control Delay			7.7	H	CM 2000	Level of	Service		Α			
HCM 2000 Volume to Capacity	ratio		0.28									
Actuated Cycle Length (s)			85.0	Sı	um of lost	time (s)			9.0			
Intersection Capacity Utilization	n		37.0%	IC	U Level o	of Service			Α			
Analysis Period (min)			15									

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		1			4						414	
Traffic Volume (vph)	0	155	64	33	142	11	0	0	0	109	859	36
Future Volume (vph)	0	155	64	33	142	11	0	0	0	109	859	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						0.91	
Frt		0.96			0.99						0.99	
Flt Protected		1.00			0.99						0.99	
Satd. Flow (prot)		1789			1832						5031	
Flt Permitted		1.00			0.68						0.99	
Satd. Flow (perm)		1789			1263						5031	
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	0	187	77	40	171	13	0	0	0	131	1035	43
RTOR Reduction (vph)	0	21	0	0	3	0	0	0	0	0	4	0
Lane Group Flow (vph)	0	243	0	0	221	0	0	0	0	0	1205	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		5			5						6	
Permitted Phases				5						6		
Actuated Green, G (s)		16.0			16.0						54.0	
Effective Green, g (s)		16.0			16.0						54.0	
Actuated g/C Ratio		0.20			0.20						0.68	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		3.0			3.0						3.0	
Lane Grp Cap (vph)		357			252						3395	
v/s Ratio Prot		0.14										
v/s Ratio Perm					c0.17						0.24	
v/c Ratio		0.68			0.88						0.36	
Uniform Delay, d1		29.6			31.0						5.6	
Progression Factor		1.00			0.49						1.00	
Incremental Delay, d2		10.1			24.6						0.3	
Delay (s)		39.7			39.7						5.8	
Level of Service		D			D						Α	
Approach Delay (s)		39.7			39.7			0.0			5.8	
Approach LOS		D			D			Α			Α	
Intersection Summary												
HCM 2000 Control Delay			15.6	H	CM 2000	Level of S	Service		В			
HCM 2000 Volume to Capac	ity ratio		0.47									
Actuated Cycle Length (s)			80.0		um of lost				10.0			
Intersection Capacity Utilizati	on		54.1%	IC	U Level o	of Service			Α			
Analysis Period (min)			15									

Analysis Period (min)
c Critical Lane Group

Intersection												
Intersection Delay, s/ve	h16.5											
Intersection LOS	С											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	f		*	ĵ.			4			4	
Traffic Vol, veh/h	8	169	72	64	235	12	54	132	44	19	150	13
Future Vol, veh/h	8	169	72	64	235	12	54	132	44	19	150	13
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	206	88	78	287	15	66	161	54	23	183	16
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	2			2			1			1		
Conflicting Approach Le				NB			EB			WB		
Conflicting Lanes Left	1			1			2			2		
Conflicting Approach R	igh t NB			SB			WB			EB		
Conflicting Lanes Right				1			2			2		
HCM Control Delay	17.4			16.9			16.3			14.6		
HCM LOS	С			С			С			В		
Lane	ı	NBLn1	EBLn1	EBLn2V	VBLn1V	VBLn2	SBLn1					
Vol Left, %				0%	100%	0%	10%					
Vol Thru, %		57%	0%	70%	0%	95%	82%					
Vol Right, %		19%	0%	30%	0%	5%	7%					
Sign Control		Stop	Stop	Stop	Stop	Stop	Stop					
Traffic Vol by Lane		230	8	241	64	247	182					
LT Vol		54	8	0	64	0	19					
Through Vol		132	0	169	0	235	150					
RT Vol		44	0	72	0	12	13					
Lane Flow Rate		280	10	294	78	301	222					
Geometry Grp		2	7	7	7	7	2					
Degree of Util (X)		0.511	0.02	0.552	0.159	0.57	0.417					
Departure Headway (H	d)	6.561			7.356							
Convergence, Y/N		Yes	Yes	Yes	Yes	Yes	Yes					
Cap		547	477	532	486	527	530					
Service Time				4.523			4.833					
HCM Lane V/C Ratio			0.021			0.571						
HCM Control Delay		16.3	10.4	17.6	11.5	18.3	14.6					
HCM Lane LOS		С	В	C	В	C	В					
HCM 95th-tile Q		2.9	0.1	3.3	0.6	3.5	2					

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		1			4						414	
Traffic Volume (vph)	0	44	15	27	23	0	0	0	0	33	956	6
Future Volume (vph)	0	44	15	27	23	0	0	0	0	33	956	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						0.91	
Frt		0.97			1.00						1.00	
Flt Protected		1.00			0.97						1.00	
Satd. Flow (prot)		1798			1814						5072	
Flt Permitted		1.00			0.79						1.00	
Satd. Flow (perm)		1798			1477						5072	
Peak-hour factor, PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	0	52	18	32	27	0	0	0	0	39	1138	7
RTOR Reduction (vph)	0	16	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	54	0	0	59	0	0	0	0	0	1184	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		5			5						6	
Permitted Phases				5						6		
Actuated Green, G (s)		8.4			8.4						61.6	
Effective Green, g (s)		8.4			8.4						61.6	
Actuated g/C Ratio		0.11			0.11						0.77	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		3.0			3.0						3.0	
Lane Grp Cap (vph)		188			155						3905	
v/s Ratio Prot		0.03										
v/s Ratio Perm					c0.04						0.23	
v/c Ratio		0.29			0.38						0.30	
Uniform Delay, d1		33.0			33.4						2.8	
Progression Factor		1.00			0.61						0.80	
Incremental Delay, d2		3.8			6.9						0.2	
Delay (s)		36.8			27.4						2.4	
Level of Service		D			С						Α	
Approach Delay (s)		36.8			27.4			0.0			2.4	
Approach LOS		D			С			Α			Α	
Intersection Summary												
HCM 2000 Control Delay			5.4	H	CM 2000	Level of	Service		Α			
HCM 2000 Volume to Capaci	ity ratio		0.31									
Actuated Cycle Length (s)			80.0	Sı	um of lost	time (s)			10.0			
Intersection Capacity Utilizati	ion		37.0%	IC	U Level o	of Service			Α			
Analysis Period (min)			15									

Analysis Period (min)
c Critical Lane Group

Intersection						
Int Delay, s/veh	0					
Movement	EDI	EDT	WDT	WPD	CDI	CDD
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		€	ĵ.		Y	
Traffic Vol, veh/h	59	63	54	24	7	17
Future Vol, veh/h	59	63	54	24	7	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage	e,# -	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	77	82	70	31	9	22
IVIVIIIL I IOVV	11	UZ	10	J I	- 3	LL
Major/Minor	Major1	ľ	Minor2			
Conflicting Flow All	0	0	236	0		
Stage 1	-	-		-		
Stage 2	_	_	236	<u>-</u>		
Critical Hdwy	4.12	-		6.22		
Critical Hdwy Stg 1	-	-		-		
Critical Hdwy Stg 2	-	-	5.52	-		
Follow-up Hdwy	2.218		4.018			
Pot Cap-1 Maneuver	-	-	665	-		
Stage 1	-	-	-	-		
Stage 2	-	-	710	-		
Platoon blocked, %		-				
Mov Cap-1 Maneuver	-	-	0	-		
Mov Cap-2 Maneuver	-	-	0	-		
Stage 1	-	-	0	-		
Stage 2	_	_	0	_		
			<u> </u>			
Approach	EB		WB			
HCM Control Delay, s						
HCM LOS			_			
Minor Lane/Major Mvn	nt	EBL	EBT	VBLn1		
Capacity (veh/h)		-	-	-		
HCM Lane V/C Ratio		-	-	-		
HCM Control Delay (s)		-	-	-		
HCM Lane LOS		-	-	_		
HCM 95th %tile Q(veh)		_	_		
HOW JOHN JUHIC Q VOIL	,					

Intersection						
Intersection Delay, s/veh	9.4					
Intersection LOS	Α					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
	EDL.	EDK	INDL			אמט
Lane Configurations		20	24	વ	200	ΕΛ
Traffic Vol, veh/h	49	32	31	191	206	54 54
Future Vol, veh/h	49	32	31	191	206 0.89	
Peak Hour Factor	0.89	0.89	0.89	0.89		0.89
Heavy Vehicles, % Mvmt Flow	2	2	2	2	2 231	2
	55	36	35	215		61
Number of Lanes	1	0	0	1	1	0
Approach	EB		NB		SB	
Opposing Approach			SB		NB	
Opposing Lanes	0		1		1	
Conflicting Approach Left	SB		EB			
Conflicting Lanes Left	1		1		0	
Conflicting Approach Right	NB				EB	
Conflicting Lanes Right	1		0		1	
HCM Control Delay	8.8		9.5		9.6	
HCM LOS	Α		Α		Α	
Lane		NBLn1	EBLn1	SBLn1		
Vol Left, %		. 10411		ODLIII		
VOI LUIL. /U		14%	60%	በ%		
		14% 86%	60% 0%	0% 79 %		
Vol Thru, %		86%	0%	79%		
Vol Thru, % Vol Right, %		86% 0%	0% 40%	79% 21%		
Vol Thru, % Vol Right, % Sign Control		86% 0% Stop	0% 40% Stop	79% 21% Stop		
Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane		86% 0% Stop 222	0% 40% Stop 81	79% 21% Stop 260		
Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol		86% 0% Stop 222 31	0% 40% Stop 81 49	79% 21% Stop 260		
Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol		86% 0% Stop 222 31 191	0% 40% Stop 81 49	79% 21% Stop 260 0 206		
Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol		86% 0% Stop 222 31 191	0% 40% Stop 81 49 0	79% 21% Stop 260 0 206 54		
Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate		86% 0% Stop 222 31 191 0 249	0% 40% Stop 81 49 0 32 91	79% 21% Stop 260 0 206 54 292		
Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp		86% 0% Stop 222 31 191 0 249	0% 40% Stop 81 49 0 32 91	79% 21% Stop 260 0 206 54 292		
Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X)		86% 0% Stop 222 31 191 0 249 1	0% 40% Stop 81 49 0 32 91 1 0.126	79% 21% Stop 260 0 206 54 292 1 0.35		
Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd)		86% 0% Stop 222 31 191 0 249 1 0.311 4.495	0% 40% Stop 81 49 0 32 91 1 0.126 4.996	79% 21% Stop 260 0 206 54 292 1 0.35 4.309		
Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N		86% 0% Stop 222 31 191 0 249 1 0.311 4.495 Yes	0% 40% Stop 81 49 0 32 91 1 0.126 4.996 Yes	79% 21% Stop 260 0 206 54 292 1 0.35 4.309 Yes		
Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap		86% 0% Stop 222 31 191 0 249 1 0.311 4.495 Yes 801	0% 40% Stop 81 49 0 32 91 1 0.126 4.996 Yes 716	79% 21% Stop 260 0 206 54 292 1 0.35 4.309 Yes 836		
Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time		86% 0% Stop 222 31 191 0 249 1 0.311 4.495 Yes 801 2.521	0% 40% Stop 81 49 0 32 91 1 0.126 4.996 Yes 716 3.034	79% 21% Stop 260 0 206 54 292 1 0.35 4.309 Yes 836 2.333		
Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio		86% 0% Stop 222 31 191 0 249 1 0.311 4.495 Yes 801 2.521 0.311	0% 40% Stop 81 49 0 32 91 1 0.126 4.996 Yes 716 3.034 0.127	79% 21% Stop 260 0 206 54 292 1 0.35 4.309 Yes 836 2.333 0.349		
Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio HCM Control Delay		86% 0% Stop 222 31 191 0 249 1 0.311 4.495 Yes 801 2.521 0.311 9.5	0% 40% Stop 81 49 0 32 91 1 0.126 4.996 Yes 716 3.034 0.127 8.8	79% 21% Stop 260 0 206 54 292 1 0.35 4.309 Yes 836 2.333 0.349 9.6		
Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio		86% 0% Stop 222 31 191 0 249 1 0.311 4.495 Yes 801 2.521 0.311	0% 40% Stop 81 49 0 32 91 1 0.126 4.996 Yes 716 3.034 0.127	79% 21% Stop 260 0 206 54 292 1 0.35 4.309 Yes 836 2.333 0.349		

Intersection						
Int Delay, s/veh	0.4					
		WDD	NDT	NDD	CDI	SBT
Movement	WBL	WBR	NBT	NBR	SBL	
Lane Configurations	Y	10	7	2	2	4
Traffic Vol, veh/h	4	10	214	2	3	282
Future Vol, veh/h	4	10	214	2	3	282
Conflicting Peds, #/hr	0	0	0	_ 0	0	_ 0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage		-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	13	278	3	4	366
Major/Minor N	Minor1	N	Major1		Major2	
Conflicting Flow All	654	280	0	0	281	0
Stage 1	280	-	-	-	-	-
Stage 2	374	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
	3.518		-	-	2.218	-
Pot Cap-1 Maneuver	431	759	-	-	1282	-
Stage 1	767	-	-	-	-	-
Stage 2	696	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	429	759	-	-	1282	-
Mov Cap-2 Maneuver	429	-	-	-	-	-
Stage 1	767	-	-	-	-	-
Stage 2	693	-	-	-	-	-
Ŭ						
A	\A/D		МВ		O.P.	
Approach	WB		NB		SB	
HCM Control Delay, s	11		0		0.1	
HCM LOS	В					
Minor Lane/Major Mvm	t	NBT	NBRV	VBLn1	SBL	SBT
Capacity (veh/h)	<u> </u>	-	-		1282	-
HCM Lane V/C Ratio		_		0.029		<u>-</u>
				11	7.8	0
HCM Control Delay (s)		-	-			
		-	-	B 0.1	A 0	A -

Intersection						
Int Delay, s/veh	1.7					
		EDD	NDI	NDT	CDT	CDD
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	¥	4.1	74	4100	∱	
Traffic Vol, veh/h	15	14	71	199	236	53
Future Vol, veh/h	15	14	71	199	236	53
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	
Storage Length	0	-	-	-	-	-
Veh in Median Storage		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	19	18	91	255	303	68
Major/Minor	Minor2		Major1	N	/lajor2	
Conflicting Flow All	774	337	371	0	- -	0
Stage 1	337	-	-	-	_	-
Stage 2	437			_		
Critical Hdwy	6.42	6.22	4.12	<u>-</u>	_	
Critical Hdwy Stg 1	5.42	0.22	4.12	-	-	-
	5.42	-	-	-	-	-
Critical Hdwy Stg 2	3.518	3.318	2 240	-	-	-
Follow-up Hdwy				-	-	-
Pot Cap-1 Maneuver	367	705	1188	-	-	-
Stage 1	723	-	-	-	-	-
Stage 2	651	-	-	-	-	-
Platoon blocked, %			1100	-	-	-
Mov Cap-1 Maneuver	334	705	1188	-	-	-
Mov Cap-2 Maneuver	334	-	-	-	-	-
Stage 1	659	-	-	-	-	-
Stage 2	651	-	-	-	-	-
Approach	EB		NB		SB	
	13.8		2.2		0	
HCM Control Delay, s HCM LOS	13.6 B		2.2		U	
TION LOS	В					
Minor Lane/Major Mvn	nt	NBL	NBT I	EBLn1	SBT	SBR
Capacity (veh/h)		1188	-	448	-	-
HCM Lane V/C Ratio		0.077	-	0.083	-	-
HCM Control Delay (s)		8.3	0	13.8	-	-
HCM Lane LOS		Α	A	В	_	-
HCM 95th %tile Q(veh)	0.2	-	0.3	-	-
211 - 21112 - 2111	,					

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	LDL	4	LDIN	VVDL	4	VVDIX	NDL	4	NUIN	ODL	4	ODIN
Traffic Vol, veh/h	1	0	1	23	0	52	1	216	16	15	237	1
Future Vol, veh/h	1	0	1	23	0	52	1	216	16	15	237	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	Olop -	Olop -	None	- Olop	- Olop	None	-	-	None	-	-	None
Storage Length	_	_	-	_	_	-	_	_	-	_	_	-
Veh in Median Storage	e.# -	0	_	_	0	_	_	0	_	_	0	_
Grade, %	·,	0	_	_	0	_	_	0	_	_	0	_
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	1	28	0	64	1	267	20	19	293	1
						U-T		201	20	- 10	200	- 1
Major/Minor	Minor2			Minor1			Major1			Majora		
		604		Minor1	C44		Major1	^		Major2	^	^
Conflicting Flow All	643	621	294	611	611	277	294	0	0	287	0	0
Stage 1	332	332	-	279	279	-	-	-	-	-	-	-
Stage 2	311	289	- 00	332	332	6.00	4.40	-	-	4.40	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	2 240	6.12	5.52	2 240	2 240	-	-	2 240	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518		3.318		-	-	2.218	-	-
Pot Cap-1 Maneuver	386	403	745	406	409	762	1268	-	-	1275	-	-
Stage 1	681	644	-	728	680	-	-	-	-	-	-	-
Stage 2	699	673	-	681	644	-	-	-	-	-	-	-
Platoon blocked, %	240	205	745	400	101	760	1000	-	-	1075	-	-
Mov Cap-1 Maneuver	348	395	745	400	401	762	1268	-	-	1275	-	-
Mov Cap-2 Maneuver	348	395	-	400	401	-	-	-	-	-	-	-
Stage 1	680	632 672	-	727 668	679	-	-	-	-	-	-	-
Stage 2	639	0/2	-	000	632	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	12.6			12.1			0			0.5		
HCM LOS	В			В								
Minor Lane/Major Mvm	nt	NBL	NBT	NBR	EBLn1V	VBLn1	SBL	SBT	SBR			
Capacity (veh/h)		1268	-	-	474	596	1275	_	-			
HCM Lane V/C Ratio		0.001	-	-				_	-			
HCM Control Delay (s)		7.8	0	-	12.6	12.1	7.9	0	-			
HCM Lane LOS		Α	A	-	В	В	Α	A	-			
HCM 95th %tile Q(veh))	0	-	-	0	0.5	0	-	-			

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		र्स			1→			414				_
Traffic Volume (vph)	42	113	0	23	152	120	50	854	47	0	0	0
Future Volume (vph)	42	113	0	23	152	120	50	854	47	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		1.00			1.00			0.91				
Frt		1.00			0.95			0.99				
Flt Protected		0.99			1.00			1.00				
Satd. Flow (prot)		1838			1753			5034				
Flt Permitted		0.63			0.97			1.00				
Satd. Flow (perm)		1169			1704			5034				
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	51	136	0	28	183	145	60	1029	57	0	0	0
RTOR Reduction (vph)	0	0	0	0	32	0	0	7	0	0	0	0
Lane Group Flow (vph)	0	187	0	0	324	0	0	1139	0	0	0	0
Turn Type	Perm	NA		Perm	NA		Perm	NA				
Protected Phases		1			1			2				
Permitted Phases	1			1			2					
Actuated Green, G (s)		17.8			17.8			52.2				
Effective Green, g (s)		17.8			17.8			52.2				
Actuated g/C Ratio		0.22			0.22			0.65				
Clearance Time (s)		5.0			5.0			5.0				
Vehicle Extension (s)		3.0			3.0			3.0				
Lane Grp Cap (vph)		260			379			3284				
v/s Ratio Prot												
v/s Ratio Perm		0.16			c0.19			0.23				
v/c Ratio		0.72			0.86			0.35				
Uniform Delay, d1		28.8			29.9			6.2				
Progression Factor		0.70			1.00			0.73				
Incremental Delay, d2		14.6			21.2			0.3				
Delay (s)		34.7			51.0			4.8				
Level of Service		С			D			Α				
Approach Delay (s)		34.7			51.0			4.8			0.0	
Approach LOS		С			D			Α			Α	
Intersection Summary												
HCM 2000 Control Delay			17.9	H	CM 2000	Level of	Service		В			
HCM 2000 Volume to Capacit	ty ratio		0.48									
Actuated Cycle Length (s)			80.0	Sı	um of lost	time (s)			10.0			
Intersection Capacity Utilization	on		45.9%	IC	U Level o	of Service			Α			
Analysis Period (min)			15									

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		ર્ન			1			414				_
Traffic Volume (vph)	9	36	0	0	38	27	15	928	48	0	0	0
Future Volume (vph)	9	36	0	0	38	27	15	928	48	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		1.00			1.00			0.91				
Frt		1.00			0.94			0.99				
Flt Protected		0.99			1.00			1.00				
Satd. Flow (prot)		1844			1758			5045				
Flt Permitted		0.92			1.00			1.00				
Satd. Flow (perm)		1706			1758			5045				
Peak-hour factor, PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	11	43	0	0	45	32	18	1105	57	0	0	0
RTOR Reduction (vph)	0	0	0	0	29	0	0	5	0	0	0	0
Lane Group Flow (vph)	0	54	0	0	48	0	0	1176	0	0	0	0
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		1			1			2				
Permitted Phases	1						2					
Actuated Green, G (s)		8.0			8.0			62.0				
Effective Green, g (s)		8.0			8.0			62.0				
Actuated g/C Ratio		0.10			0.10			0.78				
Clearance Time (s)		5.0			5.0			5.0				
Vehicle Extension (s)		3.0			3.0			3.0				
Lane Grp Cap (vph)		170			175			3909				
v/s Ratio Prot					0.03							
v/s Ratio Perm		c0.03						0.23				
v/c Ratio		0.32			0.28			0.30				
Uniform Delay, d1		33.5			33.3			2.6				
Progression Factor		0.62			1.00			1.00				
Incremental Delay, d2		4.8			3.9			0.2				
Delay (s)		25.5			37.2			2.8				
Level of Service		С			D			Α				
Approach Delay (s)		25.5			37.2			2.8			0.0	
Approach LOS		С			D			Α			Α	
Intersection Summary												
HCM 2000 Control Delay			5.8	H	CM 2000	Level of	Service		Α			
HCM 2000 Volume to Capacity	y ratio		0.30									
Actuated Cycle Length (s)			80.0	Sı	um of lost	time (s)			10.0			
Intersection Capacity Utilizatio	n		36.7%	IC	U Level o	of Service			Α			
Analysis Period (min)			15									

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		1			सी						414	
Traffic Volume (vph)	0	235	67	40	161	11	0	0	0	77	821	54
Future Volume (vph)	0	235	67	40	161	11	0	0	0	77	821	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						0.91	
Frt		0.97			0.99						0.99	
Flt Protected		1.00			0.99						1.00	
Satd. Flow (prot)		1807			1832						5022	
FIt Permitted		1.00			0.57						1.00	
Satd. Flow (perm)		1807			1055						5022	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	253	72	43	173	12	0	0	0	83	883	58
RTOR Reduction (vph)	0	12	0	0	2	0	0	0	0	0	7	0
Lane Group Flow (vph)	0	313	0	0	226	0	0	0	0	0	1017	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		5			5						6	
Permitted Phases				5						6		
Actuated Green, G (s)		18.8			18.8						56.2	
Effective Green, g (s)		18.8			18.8						56.2	
Actuated g/C Ratio		0.22			0.22						0.66	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		3.0			3.0						3.0	
Lane Grp Cap (vph)		399			233						3320	
v/s Ratio Prot		0.17										
v/s Ratio Perm					c0.21						0.20	
v/c Ratio		0.78			0.97						0.31	
Uniform Delay, d1		31.2			32.8						6.1	
Progression Factor		1.00			0.45						1.00	
Incremental Delay, d2		14.2			42.4						0.2	
Delay (s)		45.4			57.3						6.4	
Level of Service		D			Е						Α	
Approach Delay (s)		45.4			57.3			0.0			6.4	
Approach LOS		D			E			Α			Α	
Intersection Summary												
HCM 2000 Control Delay			21.8	Н	CM 2000	Level of S	Service		С			
HCM 2000 Volume to Capacity	ratio		0.47									
Actuated Cycle Length (s)			85.0	Sı	um of lost	time (s)			10.0			
Intersection Capacity Utilization	1		58.9%			of Service			В			
Analysis Period (min)			15									

Intersection													
Intersection Delay, s/veh	า14.6												
Intersection LOS	В												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	*	1		*	1			4			4		
Traffic Vol, veh/h	24	240	55	46	175	19	65	171	39	11	129	21	
Future Vol, veh/h	24	240	55	46	175	19	65	171	39	11	129	21	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0	
Mvmt Flow	26	258	59	49	188	20	70	184	42	12	139	23	
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0	
Approach	EB			WB			NB			SB			
Opposing Approach	WB			EB			SB			NB			
Opposing Lanes	2			2			1			1			
Conflicting Approach Le				NB			EB			WB			
Conflicting Lanes Left	1			1			2			2			
Conflicting Approach Rig	ah N B			SB			WB			EB			
Conflicting Lanes Right	1			1			2			2			
HCM Control Delay	16.5			12.8			15.2			12.2			
HCM LOS	С			В			С			В			
Lane	N	IBLn1 I	EBLn1	EBLn2V	VBLn1V	VBLn2	SBLn1						
Vol Left, %		24%	100%	0%	100%	0%	7%						
Vol Thru, %		62%	0%	81%	0%	90%	80%						
Vol Right, %		14%	0%	19%	0%	10%	13%						
Sign Control		Stop	Stop	Stop	Stop	Stop	Stop						
Traffic Vol by Lane		275	24	295	46	194	161						
LT Vol		65	24	0	46	0	11						
Through Vol		171	0	240	0	175	129						
RT Vol		39	0	55	0	19	21						
Lane Flow Rate		296	26	317	49	209	173						
Geometry Grp		2	7	7	7	7	2						
Degree of Util (X)		0.502	0.05	0.561	0.098	0.382	0.306						
Departure Headway (Hd	1)	6.11		6.369	7.158		6.369						
Convergence, Y/N		Yes	Yes	Yes	Yes	Yes	Yes						
Сар		591	512	568	501	547	564						
Service Time		4.139		4.096									
HCM Lane V/C Ratio				0.558									
HCM Control Delay		15.2	10.1	17	10.7	13.3	12.2						
HCM Lane LOS		С	В	С	В	В	В						
HCM 95th-tile Q		2.8	0.2	3.4	0.3	1.8	1.3						

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		f)			स्						414	
Traffic Volume (vph)	0	44	40	47	36	0	0	0	0	26	940	23
Future Volume (vph)	0	44	40	47	36	0	0	0	0	26	940	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5						4.5	
Lane Util. Factor		1.00			1.00						0.91	
Frt		0.94			1.00						1.00	
Flt Protected		1.00			0.97						1.00	
Satd. Flow (prot)		1743			1812						5061	
FIt Permitted		1.00			0.78						1.00	
Satd. Flow (perm)		1743			1447						5061	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	46	42	49	38	0	0	0	0	27	979	24
RTOR Reduction (vph)	0	37	0	0	0	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	51	0	0	87	0	0	0	0	0	1028	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		5			5						6	
Permitted Phases				5						6		
Actuated Green, G (s)		10.2			10.2						65.8	
Effective Green, g (s)		10.2			10.2						65.8	
Actuated g/C Ratio		0.12			0.12						0.77	
Clearance Time (s)		4.5			4.5						4.5	
Vehicle Extension (s)		3.0			3.0						3.0	
Lane Grp Cap (vph)		209			173						3917	
v/s Ratio Prot		0.03										
v/s Ratio Perm					c0.06						0.20	
v/c Ratio		0.24			0.50						0.26	
Uniform Delay, d1		33.9			35.0						2.7	
Progression Factor		1.00			0.67						0.77	
Incremental Delay, d2		2.8			9.9						0.2	
Delay (s)		36.7			33.5						2.3	
Level of Service		D			С						Α	
Approach Delay (s)		36.7			33.5			0.0			2.3	
Approach LOS		D			С			А			Α	
Intersection Summary												
HCM 2000 Control Delay			7.0	H	CM 2000	Level of S	Service		А			
HCM 2000 Volume to Capacity	ratio		0.29									
Actuated Cycle Length (s)			85.0	Sı	um of lost	time (s)			9.0			
Intersection Capacity Utilization	n		37.9%			of Service			Α			
Analysis Period (min)			15									

Intersection	_					
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
	CDL			WDK		אמט
Lane Configurations	47	<u>4</u>	1	7	Y	40
Traffic Vol, veh/h	17	75	69	7	20	48
Future Vol, veh/h	17	75	69	7	20	48
Conflicting Peds, #/hr	0	_ 0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage	e,# -	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	87	80	8	23	56
			- 00			
Major/Minor	Major1	N	Minor2			
Conflicting Flow All	0	0	127	0		
Stage 1	-	-	0	-		
Stage 2	-	-	127	-		
Critical Hdwy	4.12	-	6.52	6.22		
Critical Hdwy Stg 1		_	- 0.02	-		
Critical Hdwy Stg 2	_	_	5.52	_		
Follow-up Hdwy	2.218		4.018			
Pot Cap-1 Maneuver	2.210	-	764	3.310		
			704			
Stage 1	-	-		-		
Stage 2	-	-	791	-		
Platoon blocked, %		-				
Mov Cap-1 Maneuver	-	-	0	-		
Mov Cap-2 Maneuver	-	-	0	-		
Stage 1	-	-	0	-		
Stage 2	-	-	0	-		
A			\A/D			
Approach	EB		WB			
HCM Control Delay, s						
HCM LOS			-			
Minor Long/Major Mar		EDI	EDT	N/DI ∽1		
Minor Lane/Major Mvn	IL	EBL	FRIA	VBLn1		
Capacity (veh/h)		-	-	-		
HCM Lane V/C Ratio		-	-	-		
HCM Control Delay (s)		-	-	-		
HCM Lane LOS		-	-	-		
HCM 95th %tile Q(veh)	-	-	-		

Intersection						
Intersection Delay, s/veh	9.4					
Intersection LOS	Α					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y	LDI	HOL	4	1≯	ODIT
Traffic Vol, veh/h	45	61	44	191	219	29
Future Vol, veh/h	45	61	44	191	219	29
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0.93	2	2	2	2	2
Mymt Flow	47	64	46	201	231	31
Number of Lanes	1	0	0	1	1	0
		0		'	•	0
Approach	EB		NB		SB	
Opposing Approach			SB		NB	
Opposing Lanes	0		1		1	
Conflicting Approach Left	SB		EB			
Conflicting Lanes Left	1		1		0	
Conflicting Approach Right	NB				EB	
Conflicting Lanes Right	1		0		1	
HCM Control Delay	8.7		9.6		9.5	
HCM LOS	Α		Α		Α	
Lane		NBLn1	EBLn1	SBLn1		
Vol Left, %		19%	42%	0%		
Vol Thru, %		81%	0%	88%		
Vol Right, %		0%	58%	12%		
Sign Control		Stop	Stop	Stop		
Traffic Vol by Lane		235	106	248		
LT Vol		44	45	0		
Through Vol		191	0	219		
RT Vol		0	61	29		
Lane Flow Rate		247	112	261		
Geometry Grp		1	1	1		
Degree of Util (X)		0.311	0.149	0.32		
Departure Headway (Hd)		4.523	4.796	4.407		
Convergence, Y/N		Yes	Yes	Yes		
Сар		794	746	814		
Service Time		2.552	2.836	2.436		
HCM Lane V/C Ratio		0.311	0.15	0.321		
		0.511	0.10	0.021		
HCM Control Delay		9.6	8.7	9.5		
HCM Control Delay HCM Lane LOS						

Intersection						
Int Delay, s/veh	0.4					
		14/5-5			0=:-	05-
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		1>			4
Traffic Vol, veh/h	2	12	261	5	6	219
Future Vol, veh/h	2	12	261	5	6	219
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage	e, # 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	13	293	6	7	246
	_				•	
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	556	296	0	0	299	0
Stage 1	296	-	-	-	-	-
Stage 2	260	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	_	-	-
Critical Hdwy Stg 2	5.42	-	_	_	_	-
Follow-up Hdwy	3.518	3.318	_	_	2.218	_
Pot Cap-1 Maneuver	492	743	_	_	1262	_
Stage 1	755	-	_	_	-	_
Stage 2	783	_	_	_	_	_
Platoon blocked, %	100		_			
	489	743	_	_	1262	-
Mov Cap-1 Maneuver				-		
Mov Cap-2 Maneuver	489	-	-	-	-	-
Stage 1	755	-	-	-	-	-
Stage 2	778	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	10.3		0		0.2	
HCM LOS	В		U		0.2	
TICIVI LOS	D					
Minor Lane/Major Mvm	nt	NBT	NBRV	VBLn1	SBL	SBT
Capacity (veh/h)		-	_	692	1262	_
HCM Lane V/C Ratio		-	-	0.023	0.005	-
HCM Control Delay (s)		-	-	10.3	7.9	0
HCM Lane LOS		-	-	В	A	A
HCM 95th %tile Q(veh))	_	-	0.1	0	-
TOW COULT TOUTO W(VOIL)	,			J. 1	-	

Intersection						
Int Delay, s/veh	2.5					
<u> </u>		EDD	ND	NDT	ODT	000
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			4	1	
Traffic Vol, veh/h	58	45	12	217	197	16
Future Vol, veh/h	58	45	12	217	197	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage		_	_	0	0	_
Grade, %	0	_	_	0	0	_
Peak Hour Factor	87	87	87	87	87	87
	2	2	2	2	2	2
Heavy Vehicles, %	67	52	14			18
Mvmt Flow	6/	52	14	249	226	Ίŏ
Major/Minor	Minor2		Major1	Λ	/lajor2	
Conflicting Flow All	512	235	244	0	-	0
Stage 1	235	233	244	-	-	-
•	277			-		
Stage 2		- 6.00	1.40	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318		-	-	-
Pot Cap-1 Maneuver	522	804	1322	-	-	-
Stage 1	804	-	-			-
Stage 2	770	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	516	804	1322	-	-	-
Mov Cap-2 Maneuver	516	-	-	_	_	_
Stage 1	794	_	_	_	_	_
Stage 2	770	_	_	_		_
Staye 2	110	_	-	-	-	<u>-</u>
Approach	EB		NB		SB	
HCM Control Delay, s	12.3		0.4		0	
HCM LOS	12.3 B		J.7		U	
I IOWI LOO	ט					
Minor Lane/Major Mvn	nt	NBL	NBT I	EBLn1	SBT	SBR
Capacity (veh/h)		1322	_		_	_
HCM Lane V/C Ratio		0.01		0.193	_	_
HCM Control Delay (s)		7.8	0	12.3	_	_
HCM Lane LOS		Α.	A	В	_	_
HCM 95th %tile Q(veh	\	0	-	0.7		_
HOW JOHN JOHN WILLIAM	1	U	_	0.1	_	_

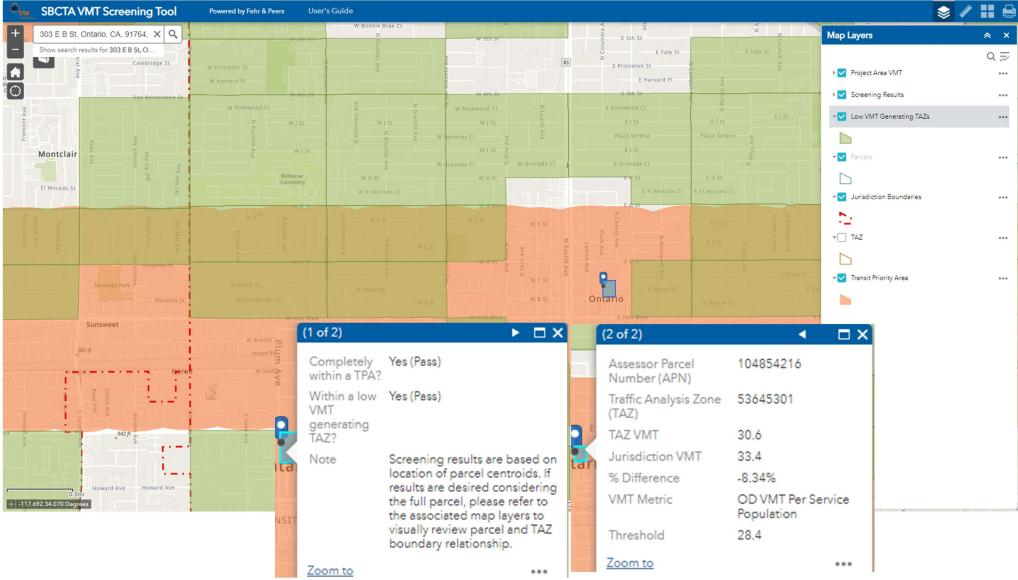
Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4	LDIN	1.02	4	1,51	1,00	4	, LOIK	UDL	4	USIN
Traffic Vol, veh/h	1	0	3	22	0	22	1	206	31	18	228	0
Future Vol, veh/h	1	0	3	22	0	22	1	206	31	18	228	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	_	-	-	_	-	-	_	-	-	_	-	-
Veh in Median Storage	e.# -	0	_	-	0	_	-	0	_	-	0	-
Grade, %	-	0	-	_	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	3	25	0	25	1	231	35	20	256	0
Major/Minor	Minor2			Minor1			Major1		- 1	Major2		
Conflicting Flow All	559	564	256	549	547	249	256	0	0	266	0	0
Stage 1	296	296	-	251	251	-		-	-		-	-
Stage 2	263	268	_	298	296	_	_	_	_	_	_	_
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	_
Critical Hdwy Stg 2	6.12	5.52	_	6.12	5.52	_	_	_	_	_	_	_
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	440	435	783	446	445	790	1309	-	-	1298	-	-
Stage 1	712	668	-	753	699	-	-	-	-	-	-	-
Stage 2	742	687	-	711	668	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	420	427	783	438	437	790	1309	-	-	1298	-	-
Mov Cap-2 Maneuver	420	427	-	438	437	-	-	-	-	-	-	-
Stage 1	711	656	-	752	698	-	-	-	-	-	-	-
Stage 2	718	686	-	695	656	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	10.6			12			0			0.6		
HCM LOS	В			В								
Minor Lane/Major Mvm	nt	NBL	NBT	NBR	EBLn1V	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)		1309	-	-	644	564	1298	-	-			
HCM Lane V/C Ratio		0.001	_	_	0.007			_	_			
HCM Control Delay (s)		7.8	0	_	10.6	12	7.8	0	-			
HCM Lane LOS		Α	A	_	В	В	A	A	-			
HCM 95th %tile Q(veh)	0	-	-	0	0.3	0	-	-			
	,						_					

	•	-	•	•	•	•	4	†	~	-	ļ	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		र्स			₽			414				
Traffic Volume (vph)	53	183	0	23	177	103	61	935	50	0	0	0
Future Volume (vph)	53	183	0	23	177	103	61	935	50	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		1.00			1.00			0.91				
Frt		1.00			0.95			0.99				
Flt Protected		0.99			1.00			1.00				
Satd. Flow (prot)		1842			1770			5034				
Flt Permitted		0.67			0.95			1.00				
Satd. Flow (perm)		1242			1695			5034				
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	57	197	0	25	190	111	66	1005	54	0	0	0
RTOR Reduction (vph)	0	0	0	0	22	0	0	6	0	0	0	0
Lane Group Flow (vph)	0	254	0	0	304	0	0	1119	0	0	0	0
Turn Type	Perm	NA		Perm	NA		Perm	NA				
Protected Phases		1			1			2				
Permitted Phases	1			1			2					
Actuated Green, G (s)		18.6			18.6			56.4				
Effective Green, g (s)		18.6			18.6			56.4				
Actuated g/C Ratio		0.22			0.22			0.66				
Clearance Time (s)		5.0			5.0			5.0				
Vehicle Extension (s)		3.0			3.0			3.0				
Lane Grp Cap (vph)		271			370			3340				
v/s Ratio Prot												
v/s Ratio Perm		c0.20			0.18			0.22				
v/c Ratio		0.94			0.82			0.33				
Uniform Delay, d1		32.6			31.6			6.2				
Progression Factor		0.50			1.00			0.77				
Incremental Delay, d2		35.1			18.3			0.3				
Delay (s)		51.3			49.9			5.0				
Level of Service		D			D			Α				
Approach Delay (s)		51.3			49.9			5.0			0.0	
Approach LOS		D			D			Α			Α	
Intersection Summary												
HCM 2000 Control Delay			20.5	H	CM 2000	Level of	Service		С			
HCM 2000 Volume to Capacity	ratio		0.48									
Actuated Cycle Length (s)			85.0	Sı	um of lost	time (s)			10.0			
Intersection Capacity Utilization	n		54.6%	IC	U Level o	of Service			Α			
Analysis Period (min)			15									

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		ન			1			414				
Traffic Volume (vph)	26	44	0	0	57	44	26	935	27	0	0	0
Future Volume (vph)	26	44	0	0	57	44	26	935	27	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5			4.5				
Lane Util. Factor		1.00			1.00			0.91				
Frt		1.00			0.94			1.00				
Flt Protected		0.98			1.00			1.00				
Satd. Flow (prot)		1829			1753			5058				
FIt Permitted		0.84			1.00			1.00				
Satd. Flow (perm)		1562			1753			5058				
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	27	46	0	0	59	46	27	974	28	0	0	0
RTOR Reduction (vph)	0	0	0	0	39	0	0	2	0	0	0	0
Lane Group Flow (vph)	0	73	0	0	66	0	0	1027	0	0	0	0
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		1			1			2				
Permitted Phases	1						2					
Actuated Green, G (s)		9.1			9.1			66.9				
Effective Green, g (s)		9.1			9.1			66.9				
Actuated g/C Ratio		0.11			0.11			0.79				
Clearance Time (s)		4.5			4.5			4.5				
Vehicle Extension (s)		3.0			3.0			3.0				
Lane Grp Cap (vph)		167			187			3980				
v/s Ratio Prot					0.04							
v/s Ratio Perm		c0.05						0.20				
v/c Ratio		0.44			0.35			0.26				
Uniform Delay, d1		35.6			35.2			2.4				
Progression Factor		0.71			1.00			1.00				
Incremental Delay, d2		8.0			5.1			0.2				
Delay (s)		33.2			40.3			2.6				
Level of Service		С			D			Α				
Approach Delay (s)		33.2			40.3			2.6			0.0	
Approach LOS		С			D			Α			Α	
Intersection Summary												
HCM 2000 Control Delay			7.7	H	CM 2000	Level of	Service		Α			
HCM 2000 Volume to Capacity	ratio		0.28									
Actuated Cycle Length (s)			85.0		um of lost				9.0			
Intersection Capacity Utilization	1		37.1%	IC	U Level o	of Service			Α			
Analysis Period (min)			15									

Attachment C VMT Screening Evaluation Map

ATTACHMENT A
Ontario City Hall Annex Vehicle Miles Traveled Assessment, SBTAM VMT Screening Results



^{*} Although the screening tool states in box (1 of 2) that the project is located in a low VMT generating TAZ, the results shown in box (2 of 2) show that the TAZ VMT is not 15% below the threshold. Therefore, for the purposes of this screening analysis, it is assumed that the project is not located in a low VMT generating TAZ. This is also consistent with the shading shown on the map.

DECISION NO.:

FILE NO.: PDEV24-002

DAB Hearing Date: November 18, 2024

SUBJECT: A Development Plan to facilitate the construction of a new 68,421

square-foot, 3-story City Services building on 1.2 acres of land generally located between East B and D Streets on North Sultana Avenue within the CIV (Civic) zoning district; (APN: 1048-545-16)

PART 1: RECITALS

WHEREAS, City of Ontario ("Applicant") filed an Application for the approval of a Development Plan, File No. PDEV24-002, as described in the title of this Decision (hereinafter referred to as "Application" or "Project"); and

WHEREAS, the Application applies to 1.2 acres of land generally located between East B and D Streets on North Sultana Avenue, at 311 North Sultana Avenue within the CIV (Civic) zoning district, and is presently improved with a surface parking lot; and

WHEREAS, the property to the north of the Project site is within the MU-1 (Downtown Mixed Use) zoning district, and is developed with a parking structure. The property to the east is within the LDR-5 (Low Density Residential-2.1 to 5.0 DU/Acre) zoning district and is developed with single-family residential. The property to the south is within the CIV (Civic) zoning district and is developed with the City Hall Annex and a fire station. The property to the west is within the CIV (Civic) zoning district, and is developed with City Hall; and

WHEREAS, the proposed 68,421 square foot three-story City Services building is rectangular in plan and oriented north. The first floor of the building is 22,859 square feet in area and includes an elevator, lobby, the Ontario Credit Union, offices, conference rooms, storage rooms, bathrooms, locker rooms and a staff gym. The second and third floors are 21,177 and 21,189 square feet in area respectively and include additional offices, workstations, break rooms, conference rooms, storage rooms and restrooms. The third floor of the building will also have a north-facing roof deck patio; and

WHEREAS, the portion of Cherry Avenue that currently circulates south to north through the Project site will be vacated and replaced with a 2-way drive aisle with access from B Street, extending along the western portion through the site and connecting to D Street to the north. The portion of C Street that extends east from Cherry Avenue to Sultana Avenue has been vacated to facilitate the construction of the parking structure that will serve the City Services building. Vehicular access to the parking structure is from the north-south drive aisle across from the University of La Verne and City Hall, and from Sultana Avenue. A 16-foot-wide one-way drive aisle running west to east is on the southern edge of the site, connecting Cherry Avenue with Sultana Avenue; and

WHEREAS, the main public entrance to the building is located at the northwest corner of the building. A landscaped pedestrian paseo, running east to west along the building frontage, will connect the building to a pedestrian entrance to the parking structure, to the public sidewalk along Sultana Avenue, and to a shaded landscaped plaza located at the northwest corner of the project site; and

WHEREAS, the City Services building requires 250 vehicle parking spaces as specified in the Development Code, and 250 spaces in the new 6-level parking structure have been allotted for the Project; and

WHEREAS, the 3-story City Services building is approximately 52 feet in height, designed in the Modern style of architecture and is inspired by nearby civic center properties including City Hall and the new parking structure. The building incorporates elements typically found in the Modern style, such as square roof forms, geometrical building shapes and projections, recessed vertically stacked windows, clear glazing, vertical and horizontal aluminum sunshades, and metal canopies supported by simple square columns; and

WHEREAS, the Project requires a minimum of 15 percent landscape coverage which has been provided; and

WHEREAS, public utilities (water and sewer) are available to serve the Project. Furthermore, the Applicant has submitted a Preliminary Water Quality Management Plan (PWQMP), which establishes the Project's compliance with storm water discharge/water quality requirements. The PWQMP includes site design measures that capture runoff and pollutant transport by minimizing impervious surfaces and maximizes low impact development (LID) best management practices (BMPs), such as retention and infiltration, biotreatment, and evapotranspiration. The PWQMP proposes the use of stormwater drywells in detention areas and gravity separator devices for pretreatment of pollutants. Any overflow drainage will be conveyed to the public street by way of parkway drains and culverts; and

WHEREAS, the Application is a project pursuant to the California Environmental Quality Act, commencing with Public Resources Code Section 21000 (hereinafter referred to as "CEQA"); and

WHEREAS, the Project is exempt from CEQA pursuant to a categorical exemption (listed in CEQA Guidelines Article 19, commencing with Section 15300) and the application of that categorical exemption is not barred by one of the exceptions set forth in CEQA Guidelines Section 15300.2; and

WHEREAS, Ontario Development Code Table 2.02-1 (Review Matrix) grants the Development Advisory Board (DAB) the responsibility and authority to review and act on the subject Application; and

WHEREAS, all members of the DAB of the City of Ontario were provided the opportunity to review and comment on the Application, and no comments were received opposing the proposed development; and

WHEREAS, the Project has been reviewed for consistency with the Housing Element of the Policy Plan component of The Ontario Plan 2050, as State Housing Element law (as prescribed in Government Code Sections 65580 through 65589.8) requires that development projects must be consistent with the Housing Element, if upon consideration of all its aspects, it is found to further the purposes, principals, goals, and policies of the Housing Element; and

WHEREAS, the Project is located within the Airport Influence Area of Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and is subject to, and must be consistent with, the policies and criteria set forth in the Ontario International Airport Land Use Compatibility Plan (hereinafter referred to as "ALUCP"), which applies only to jurisdictions within San Bernardino County, and addresses the noise, safety, airspace protection, and overflight impacts of current and future airport activity; and

WHEREAS, City of Ontario Development Code Division 2.03 (Public Hearings) prescribes the manner in which public notification shall be provided and hearing procedures to be followed, and all such notifications and procedures have been completed; and

WHEREAS, on November 18, 2024, the DAB of the City of Ontario conducted a hearing to consider the Project, and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

PART 2: THE DECISION

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED AND DECIDED by the Development Advisory Board of the City of Ontario as follows:

<u>SECTION 1</u>: **Environmental Determination and Findings.** As the decision-making body for the Project, the DAB has reviewed and considered the information contained in the administrative record for the Project, including all written and oral evidence provided during the comment period. Based upon the facts and information contained in the administrative record, including all written and oral evidence presented to the DAB, the DAB finds as follows:

(1) The administrative record has been completed in compliance with CEQA, the State CEQA Guidelines, and the City of Ontario Local CEQA Guidelines; and

- (2) The proposed Development Plan is categorically exempt from the requirements of the California Environmental Quality Act (CEQA) pursuant to Section 15332 (Class 32, In-Fill Development Projects) of the CEQA Guidelines and meets all of the following conditions:
- (a) The Project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations. The proposed Project is located within the PF (Public Facility) land use district of the Policy Plan Land Use Map, and the CIV (Civic) zoning district. The proposed Project is consistent with all applicable general plan policies, as well as with the CIV (Civic) zoning designation and applicable Development Code regulations.
- (b) The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses. The Project is proposed within the established boundaries of the City of Ontario, on approximately 1.2 acres of land, which is surrounded by Civic Center facilities to the north, south and west, and residential land uses to the east.
- (c) The Project site has no value as habitat for endangered, rare, or threatened species. The subject site is currently improved with a parking lot serving City Hall, is devoid of any flora or fauna, is regularly used for passenger vehicle parking by neighboring residents, and as such is not a suitable habitat for any endangered, rare, or threatened species.
- (d) Approval of the Project would not result in any significant effects relating to traffic, noise, air quality, or water quality. The proposed office building is similar to, and of no greater impact than other allowed uses and development projects within the CIV (Civic) zoning district. The Project would not result in any significant impacts through implementation of required state, regional, and local development and performance standards, and as demonstrated in the Categorical Exemption Justification Memorandum prepared for the Project in Attachment B.
- (e) The site can be adequately served by all required utilities and public services. All necessary wet and dry utilities are available for the Project site; and
- (3) The application of the categorical exemption is not barred by one of the exceptions set forth in CEQA Guidelines Section 15300.2; and
- (4) The determination of CEQA exemption reflects the independent judgment of the Development Advisory Board.
- <u>SECTION 2:</u> **Housing Element Compliance.** Pursuant to the requirements of California Government Code Chapter 3, Article 10.6, commencing with Section 65580, as the decision-making body for the Project, the DAB finds that based on the facts and

information contained in the Application and supporting documentation, at the time of Project implementation, the project is consistent with the Housing Element of the Policy Plan (General Plan) component of The Ontario Plan, as the project site is not one of the properties in the Housing Element Sites Inventory contained in Tables B-1 and B-2 of the Housing Element Technical Report.

- SECTION 3: Airport Land Use Compatibility Plan ("ALUCP") Compliance. The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.
- (1) On April 19, 2011, the City Council of the City of Ontario approved and adopted the Ontario International Airport Land use Compatibility Plan, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the decision-making body for the Project, the DAB has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the DAB therefore finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP; and
- <u>SECTION 4</u>: **Concluding Facts and Reasons.** Based upon the substantial evidence presented to the DAB during the above-referenced hearing and upon the specific finding set forth in the Sections above, the DAB hereby concludes as follows:
- (1) The proposed development at the proposed location is consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan. The proposed Project is located within the PF (Public Facility) land use district of the Policy Plan Land Use Map, and the CIV (Civic) zoning district. The development standards and conditions under which the proposed Project will be constructed and maintained is consistent with the goals, policies, plans, and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan.
- (2) The proposed development is compatible with those on adjoining sites in relation to location of buildings, with particular attention to privacy, views, any physical constraint identified on the site and the characteristics of the area in which the site is

located. The Project has been designed consistent with the requirements of the City of Ontario Development Code and the CIV (Civic) zoning district, including standards relative to the particular land use proposed (office), as-well-as building intensity, building and parking setbacks, building height, number of off-street parking and loading spaces, on-site and off-site landscaping, and fences, walls and obstructions.

- (3) The proposed development will complement and/or improve upon the quality of existing development in the vicinity of the project and the minimum safeguards necessary to protect the public health, safety and general welfare have been required of the proposed project. The Development Advisory Board has required certain safeguards, and imposed certain conditions of approval, which have been established to ensure that: [i] the purposes of the Development Code are maintained; [ii] the project will not endanger the public health, safety or general welfare; [iii] the project will not result in any significant environmental impacts; [iv] the project will be in harmony with the area in which it is located; and [v] the project will be in full conformity with the Vision, City Council Priorities and Policy Plan components of The Ontario Plan.
- (4) The proposed development is consistent with the development standards and design guidelines set forth in the Development Code, or applicable specific plan or planned unit development. The proposed Project has been reviewed for consistency with the general development standards and guidelines of the Development Code that are applicable to the proposed Project, including building intensity, building and parking setbacks, building height, amount of off-street parking and loading spaces, parking lot dimensions, design and landscaping, bicycle parking, on-site landscaping, and fences and walls, as-well-as those development standards and guidelines specifically related to the particular land use being proposed (office). As a result of this review, the Development Advisory Board has determined that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the development standards and guidelines described in the Development Code.
- SECTION 5: **Development Advisory Board Action.** Based upon the findings and conclusions set forth in Sections 1 through 4, above, the Development Advisory Board hereby APPROVES the herein described Application, subject to each and every condition set forth in the Department reports attached hereto as "Attachment A," and incorporated herein by this reference.
- <u>SECTION 6</u>: **Indemnification.** The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void, or annul this approval. The City of Ontario shall promptly notify the applicant of any such claim, action, or proceeding, and the City of Ontario shall cooperate fully in the defense.

<u>SECTION 7</u>: **Custodian of Records.** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East "B" Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario. The records are available for inspection by any interested person, upon request.

<u>SECTION 8</u>: **Certification to Adoption.** The DAB Chairman shall certify to the adoption of the Resolution.

APPROVED AND ADOPTED this 18th day of November 2024.

Development Advisory Board Chairman

ATTACHMENT A:

File No. PDEV24-002 Departmental Conditions of Approval

(Departmental conditions of approval to follow this page)



LAND DEVELOPMENT DIVISION CONDITIONS OF APPROVAL

303 East B Street, Ontario, California 91764 Phone: 909.395.2036 / Fax: 909.395.2420

Date Prepared: 11/18/2024

File No: PDEV24-002

Related Files: PDEV22-051 and PMTT22-028

Project Description: A hearing to consider a Development Plan to facilitate the construction of a new 68,421 square-foot, 3-story City Services building, on approximately 1.2 acres of land generally located between East B and D Streets on North Sultana Avenue within the CIV (Civic) zoning district; (APN: 1048-545-16); **City initiated.**

Prepared By: Elly Antuna, Associate Planner

<u>Phone</u>: 909.395.2414 (direct) <u>Email</u>: eantuna@ontarioca.gov

The Planning Department, Land Development Section, conditions of approval applicable to the above-described Project, are listed below. The Project shall comply with each condition of approval listed below:

- **1.0 Standard Conditions of Approval.** The project shall comply with the *Standard Conditions* for New Development, adopted by City Council Resolution No. 2017-027 on April 18, 2017. A copy of the *Standard Conditions* for New Development may be obtained from the Planning Department or City Clerk/Records Management Department.
- **2.0 Special Conditions of Approval.** In addition to the *Standard Conditions for New Development* identified in condition no. 1.0, above, the project shall comply with the following special conditions of approval:

2.1 Time Limits.

- (a) Development Plan approval shall become null and void 2 years following the effective date of application approval, unless a building permit is issued and construction is commenced, and diligently pursued toward completion, or a time extension has been approved by the Planning Director. This condition does not supersede any individual time limits specified herein, or any other departmental conditions of approval applicable to the Project, for the performance of specific conditions or improvements.
- **2.2** <u>General Requirements.</u> The Project shall comply with the following general requirements:
- (a) All construction documentation shall be coordinated for consistency, including, but not limited to, architectural, structural, mechanical, electrical, plumbing, landscape and irrigation, grading, utility and street improvement plans. All such plans shall be consistent with the approved entitlement plans on file with the Planning Department.

- **(b)** The project site shall be developed in conformance with the approved plans on file with the City. Any variation from the approved plans must be reviewed and approved by the Planning Department prior to building permit issuance.
- **(c)** The herein-listed conditions of approval from all City departments shall be included in the construction plan set for the project, which shall be maintained on site during project construction.

2.3 Landscaping.

- (a) The Project shall provide and continuously maintain landscaping and irrigation systems in compliance with the provisions of Ontario Development Code Division 6.05 (Landscaping).
- **(b)** Comply with the conditions of approval of the Planning Department, Landscape Planning Division.
- **(c)** Landscaping shall not be installed until the Landscape and Irrigation Construction Documentation Plans required by Ontario Development Code Division 6.05 (Landscaping) have been approved by the Landscape Planning Division.
- **(d)** Changes to approved Landscape and Irrigation Construction Documentation Plans, which affect the character or quantity of the plant material or irrigation system design, shall be resubmitted for approval of the revision by the Landscape Planning Division, prior to the commencement of the changes.
- **2.4** <u>Walls and Fences</u>. All Project walls and fences shall comply with the requirements of Ontario Development Code Division 6.02 (Walls, Fences and Obstructions).

2.5 <u>Site Lighting.</u>

- (a) All off-street parking facilities shall be provided with nighttime security lighting pursuant to Ontario Municipal Code Section 4-11.08 (Special Residential Building Provisions) and Section 4-11.09 (Special Commercial/Industrial Building Provisions), designed to confine emitted light to the parking areas. Parking facilities shall be lit from sunset until sunrise, daily, and shall be operated by a photocell switch.
- **(b)** Unless intended as part of a master lighting program, no operation, activity, or lighting fixture shall create illumination on any adjacent property.
- **(c)** Up-lighting of the building and lighting of landscape planters are encouraged.

2.6 Mechanical and Rooftop Equipment.

(a) All exterior roof-mounted mechanical, heating and air conditioning equipment, and all appurtenances thereto, shall be completely screened from public view by parapet walls or roof screens that are architecturally treated so as to be consistent with the building architecture. Adequacy of screening will be determined upon final inspection.

- **(b)** All ground-mounted utility equipment and structures, such as tanks, transformers, HVAC equipment, and backflow prevention devices, shall be located out of view from a public street, or adequately screened through the use of landscaping and/or decorative low garden walls.
- **2.7** <u>Security Standards</u>. The Project shall comply with all applicable requirements of Ontario Municipal Code Title 4 (Public Safety), Chapter 11 (Security Standards for Buildings).

2.8 Signs.

- (a) All Project signage shall comply with the requirements of Ontario Development Code Division 8.1 (Sign Regulations).
- **2.9** <u>Sound Attenuation</u>. The Project shall be constructed and operated in a manner so as not to exceed the maximum interior and exterior noise levels set forth in Ontario Municipal Code Title 5 (Public Welfare, Morals, and Conduct), Chapter 29 (Noise).

2.10 Environmental Requirements.

- (a) If human remains are found during project grading/excavation/construction activities, the area shall not be disturbed until any required investigation is completed by the County Coroner and Native American consultation has been completed (if deemed applicable).
- **(b)** If any archeological or paleontological resources are found during project grading/excavation/construction, the area shall not be disturbed until the significance of the resource is determined. If determined to be significant, the resource shall be recovered by a qualified archeologist or paleontologist consistent with current standards and guidelines, or other appropriate measures implemented.

2.11 Additional Fees.

- ("NOE") filing fee shall be provided to the Planning Department. The fee shall be paid by check, made payable to the "Clerk of the Board of Supervisors", which shall be forwarded to the San Bernardino County Clerk of the Board of Supervisors, along with all applicable environmental forms/notices, pursuant to the requirements of the California Environmental Quality Act ("CEQA"). The filing of a NOE is voluntary; however, failure to provide said fee within the time specified will result in the extension of the statute of limitations for the filing of a CEQA lawsuit from 30 days to 180 days.
- **2.12** Final Occupancy. The Project Architect of record will certify that construction of each building site and the exterior elevations of each structure shall be completed in compliance with the approved plans. Any deviation to approved plans shall require a resubmittal to the Planning Department for review and approval prior to construction. The Occupancy Release Request Form/Architect Certificate of Compliance shall be provided prior to final occupancy. After the receipt of this Certification, the Planning Department will conduct a final site and exterior elevations inspection. The Owner's Representative and Contractor shall be present.



CITY OF ONTARIO MEMORANDUM

ENGINEERING DEPARTMENT CONDITIONS OF APPROVAL

(Land Development Division, Environmental Section, Traffic & Transportation Division, Ontario Municipal Utilities Company and Information Technology & Management Services Department Conditions incorporated)

PROJECT ENGINEER:	Henry Pham, Associate Engineer	(909) 395-2141
PROJECT PLANNER:	Elly Antuna, Associate Planner	(909) 395-2414
DAB MEETING DATE:	November 18 th , 2024	
PROJECT NAME/DESCRIPTION:	PDEV24-002, a Development Plan to City Services Building totaling 67,00	
LOCATION:	305 N. Sultana Avenue (APN: 1048-5	45-16)
APPLICANT:	City of Ontario	
REVIEWED BY:	Raymond Lee, P.E.	10/31/24.
APPROVED BY:	Assistant City Engineer Khoi Do, P.E.	10 -31 - 24 Date
	City Engineer	Duto

THIS PROJECT SHALL COMPLY WITH THE REQUIREMENTS SET FORTH IN THE GENERAL STANDARD CONDITIONS OF APPROVAL ADOPTED BY THE CITY COUNCIL (RESOLUTION NO. 2017-027) AND THE PROJECT SPECIFIC CONDITIONS OF APPROVAL SPECIFIED IN HEREIN. ONLY APPLICABLE CONDITIONS OF APPROVAL ARE LISTED BELOW. THE APPLICANT SHALL BE RESPONSIBLE FOR THE COMPLETION OF ALL APPLICABLE CONDITIONS OF APPROVAL PRIOR TO ISSUANCE OF PERMITS AND/OR OCCUPANCY CLEARANCE, AS SPECIFIED IN THIS REPORT. SEE ATTACHED EXHIBIT 'A' FOR PLAN CHECK SUBMITTAL REQUIREMENTS.

- All the required improvements for this development plan shall be subject to completion of the required public improvements, including improvements beyond the project limits, as specified in the Conditions of Approval for PM-20683
- The applicant/developer shall design and construct the following public improvements in accordance with the City of Ontario Municipal Code, current City standards and specifications, and master plan:
 - a. Driveway approach along Sultana Avenue at the east end of the Alley.
 - b. Abandon and remove the existing catch basin along Sultana Avenue.
- Submit a Water Quality Management Plan (WQMP). This plan shall be approved by the Engineering Department
 prior to approval of any grading plan. The WQMP shall be submitted, utilizing the current San Bernardino County
 Stormwater Program template, available at: http://www.sbcounty.gov/dpw/land/npdes.asp.
- 4. See attached Traffic Engineering Conditions of Approval.
- 5. See attached OMUC Utilities Engineering Conditions of Approval.
- 6. See attached Broadband Conditions of Approval.

Last Revised: 9/26/2023 1 of 2

Project File No. <u>PDEV24-002</u> Project Engineer: <u>Henry Pham</u> DAB Date: 11/18/2024

EXHIBIT 'A'

ENGINEERING DEPARTMENTFirst Plan Check Submittal Checklist

Project Number: PDEV24-002

All plan check submittals are to be done digitally through the City Of Ontario Citizen Portal Access. The following items are to be included with the first plan check submittal:

1.	□ A copy of this check list
2.	☐ Payment of fee for Plan Checking
3.	☑ One (1) copy of Engineering Cost Estimate (on City form) with engineer's wet signature and stamp.
4.	☑ One (1) copy of project Conditions of Approval
5.	☐ Include a PDF (electronic submittal) of each required improvement plan at every submittal.
6.	☐ Two (2) sets of Potable and Recycled Water demand calculations (include water demand calculations showing low, average and peak water demand in GPM for the proposed development and proposed water meter size).
7.	☐ Three (3) sets of Public Street improvement plan with street cross-sections
8.	Four (4) sets of Public Water improvement plan (include water demand calculations showing low, average and peak water demand in GPM for the proposed development and proposed water meter size)
9.	Four (4) sets of Recycled Water improvement plan (include recycled water demand calculations showing low, average and peak water demand in GPM for the proposed development and proposed water meter size and an exhibit showing the limits of areas being irrigated by each recycled water meter)
10.	☐ Four (4) sets of Public Sewer improvement plan
11.	Five (5) sets of Public Storm Drain improvement plan
12.	☐ Three (3) sets of Public Street Light improvement plan
13.	☐ Three (3) sets of Signing and Striping improvement plan
14.	☐ Three (3) sets of Fiber Optic plan (include Auto CAD electronic submittal)
15.	☐ Three (3) sets of HOA Landscape improvement plans. Show corner sight line distance per engineering standard drawing 1309.
16.	☐ Five (5) sets of CFD Landscape improvement plans. Show corner sight line distance per engineering standard drawing 1309.
17.	☐ Three (3) sets of Dry Utility plans within public right-of-way (at a minimum the plans must show existing and ultimate right-of-way, curb and gutter, proposed utility location including centerline dimensions, wall to wall clearances between proposed utility and adjacent public line, street work repaired per Standard Drawing No. 1306. Include Auto CAD electronic submittal)
18.	☐ Three (3) sets of Traffic Signal improvement plan and One (1) copy of Traffic Signal Specifications with modified Special Provisions. Please contact the Traffic Division at (909) 395-2154 to obtain Traffic Signal Specifications.
19.	☐ Two (2) copies of Water Quality Management Plan (WQMP), including one (1) copy of the approved Preliminary WQMP (PWQMP).
20.	☐ One (1) copy of Hydrology/Drainage study

Project File No. <u>PDEV24-002</u> Project Engineer: <u>Henry Pham</u> DAB Date: 11/18/2024

21.	One (1) copy of Soils/Geology report
22.	☐ Payment for Final Map/Parcel Map processing fee
23.	☐ Three (3) copies of Final Map/Parcel Map
24.	One (1) copy of approved Tentative Map
25.	One (1) copy of Preliminary Title Report (current within 30 days)
26.	☐ One (1) copy of Traverse Closure Calculations
27.	☐ One (1) set of supporting documents and maps (legible copies): referenced improvement plans (full size), referenced record final maps/parcel maps (full size, 18"x26"), Assessor's Parcel map (full size, 11"x17"), recorded documents such as deeds, lot line adjustments, easements, etc.
28.	Two (2) copies of Engineering Report and an electronic file (include PDF format electronic submittal) for recycled water use.
29.	Other:

Last Revised: 9/26/2023

3 of 2



CITY OF ONTARIO MEMORANDUM

DEVELOPMENT PLAN REVIEW CONDITIONS OF APPROVAL Broadband Operations Section

DATE: 08-15-24

PROJECT: PDEV24-002

LOCATION: Sultana Ave

PROJECT ENGINEER: Henry

BROADBAND PLAN CHECKER: Cameron Chadwick - CChadwick@ontarioca.gov

The following Conditions of Approval requirements must be incorporated prior to the Development Advisory Board and/or Zoning Administrator Hearing.

- Project shall be designed and constructed to provide access to the City's conduit and fiber optic system per
 the City's Fiber Optic Master Plan. Building entrance conduits shall start from the closest OntarioNet hand
 hole in the Right-of-Way (ROW) and shall terminate in the main telecommunications room for each building.
 Conduit infrastructure shall interconnect with the primary and/or secondary backbone fiber optic conduit
 system at the nearest OntarioNet hand hole.
- Contractor is responsible for locating and connecting conduit to existing OntarioNet hand holes on adjacent
 properties within a reasonable distance. There should be no "Gaps" in conduit between the contractor's
 development and the adjacent property. OntarioNet hand holes are typically located in the ROW at the
 extreme edge of a property.
- 3. Where a joint telecom or street light street crossing is required, include (2) 2" HDPE SDR-11 conduits or (1) 4" schedule 80 conduit sleeve. Terminate the street crossing conduit(s) in a new HH-3/22 OntarioNet hand hole in the right of way
- 4. The City requires a public utility easement for fiber optics on all private aisles/alley ways.
- 5. Hand holes Design and install OntarioNet fiber optic hand hole HH-FP (10x00x10), HH-1 (13x24x18), HH-2 (17x30x24), HH-2A (24x36x30), HH-3 (30x48x36) and/or HH-4 (36x60x36) as needed. Respectively, Newbasis Part # PLA100010T-00002, PCA132418-00006, PCA-173024-90116, PCA-243630-90064, PCA-304836-90244 and PCA-366036-90146 or equivalent as specified per City Standard 1316. Conduits sweeping into hand holes shall enter in flush with the cut-out mouse holes aligned parallel to the bottom of the box and come in perpendicular to the wall of the box. Conduits shall not enter at any angle other than parallel. Provide 5-foot minimum clearance from existing/proposed utilities. All hand holes will have ¼-inch galvanized wire between the hand holes and the gravel it is placed on.
- 6. ROW Conduit Design and install fiber optic conduit at a minimum depth of 36-inch. Trenching shall be per City Standard 1306. Install (1) 2-inch HDPE SDR-11 (Smoothwall) roll pipe (Orange) duct and (1) 2-inch HDPE SDR-11 (Smoothwall) roll pipe (Orange with Black Stripe) duct. Conduit(s) between ROW hand holes and hand holes on private property shall be 2-inch HDPE SDR-11 (Smoothwall) roll pipe (Orange) duct.
- 7. Building Entrance (Single Family) Design and install 0.75-inch HDPE SDR-11 (Smoothwall) roll pipe (Orange) duct from hand holes on property or hand holes in the ROW. Consult City's Fiber Team for design assistance.
- 8. Building Entrance (Multi-family and Commercial) From the nearest handhole to the building entrance, design and install fiber optic conduit at a minimum depth of 36-inches. Trenching shall be per City Standard for Commercial Buildings. (1) 2-inch HDPE SDR-11 (Smoothwall) roll pipe (Orange) duct. Install

- locate/tracer wires minimum 12AWG within conduit bank and fiber warning tape 18-inch above the uppermost duct
- 9. Multi-family and commercial properties shall terminate conduit in an electrical room adjacent to the wall no less than five inches above the finished floor. A 20" width X length 36" space shall be reserved on the plywood wall for OntarioNet equipment. This space shall be labeled "OntarioNet Only". Ontario Conduit shall be labeled "OntarioNet"
- 10. A minimum 13/16 millimeter microduct joint use telecommunications conduit with pull-rope from the single-family, multi-family or commercial building communal telecom/electrical room/closet to each multi-family or commercial building unit shall be installed. See Structured Wiring Checklist on City's website for additional details.
- 11. Warning Tape Contractor shall supply and install an approved non-detectable warning tape 18-inch above the uppermost conduit when backfilling trenches, pits or excavations greater than 10' in length. Warning Tape shall be non-detectable, Orange in color, 4-inch minimum width, 4 mil, 500% minimum elongation, with bold printed black letters "CAUTION - BURIED FIBER OPTIC CABLE BELOW" printed in bold black lettering no less than 2-inch high.
- 12. All hand holes, conduits, conduit banks, materials and installations are per the City's Fiber Optic Master Plan and City Fiber Optic Cable and Duct Standards. All hand holes, conduits and ducts shall be placed in the public right of way.
- 13. All unused conduits/ducts/microducts shall be protected with duct plugs that provide a positive seal. Ducts that are occupied shall be protected with industry accepted duct seal compound.
- 14. Locate/Tracer Wire Conduit bank requires (1) 12AWG high strength (minimum break load 452#) copperclad steel with 30mil HDPE orange insulation for locate/tracer wire. Contact City's Fiber Team for tracer wire specifications and see note 8.
- 15. Multi-family dwellings are considered commercial property.
- Refer to the In-tract Fiber Network Design guideline on the City's website for additional in-tract conduit guidelines.



CITY OF ONTARIO MEMORANDUM

Development Plan Review

Engineering Department: Transportation Section

Project: PDEV24-002 Date: May 30, 2024

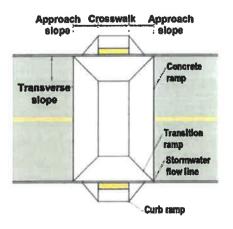
Location: 425 East B Street (3-Story City Service Building)

By: Diego Tapia

The Transportation Division recommends the following to be incorporated into the Project's Conditions-of-Approval:

Conditions:

- 1. If at the time of the development of PDEV24-002, PDEV22-043 (City Hall Parking Structure) has not constructed the following improvements, the Applicant/Developer shall be responsible to design and construct the following (see attached):
 - a. The Applicant/Developer shall install all-way stop improvements at the intersection of B Street and Cherry Avenue.
 - b. The Applicant/Developer shall install raised crosswalks along the drive aisle at Cherry Avenue and between Sultana Avene and Cherry Avenue. Utilize a sloping raised crosswalk, as depicted below, to provide proper drainage. The height of the raised crosswalk should not surpass the curb height to effectively manage surface runoff. See example below form the City of Los Angeles Supplemental Street Design Guidelines. The raised crosswalk shall be designed by the Applicant's design engineer.



- c. The Applicant/Developer shall install speed bumps along Cherry Avenue/drive aisle between B Street and future parking structure entrance.
- d. The Applicant/Developer shall install ADA ramps for pedestrian crossings at the intersection of Cherry Avenue/drive aisle and the parking structure entrance/exit.
- 2. The Applicant/Developer shall be responsible to design and reconstruct the existing driveway onto Sultana Avenue in accordance with City of Ontario Standard Drawing No. 1204 for Commercial Driveway.
- 3. The Applicant/Developer shall be responsible to remove all existing street light fixtures along the project frontage on Sultana Avenue and install new King street light standards per City of Ontario Standard Drawing No. 5103. Street lighting shall be LED-type and in accordance with City's Approved Material List LED Luminaires. The Applicant/Developer shall also install smart nodes on all new street light fixtures along project frontage.
- 4. The Applicant/Developer shall be responsible to design and construct street improvements along the property frontage of Sultana Avenue in accordance with conditions issued by City's Land Development Division. These, and all other street improvements required herein, shall include, but not be limited to, concrete curb and gutter, sidewalk, LED street lights, signing and striping, and parkway landscaping.
- 5. The Applicant/Developer shall be responsible to restripe the existing parking stalls along Cherry Avenue.
- 6. Existing parking restrictions along project frontage shall remain in place on Sultana Avenue.
- 7. All landscaping, block walls, and other obstructions shall be compatible with the stopping sight distance requirements per City of Ontario Standard Drawing No. 1309.
- 8. The Applicant/Developer's engineer-of-record shall meet with City Engineering staff prior to designing and submitting for plan check the signing/striping and street lighting design plans to define limits of improvements.

dt;



CITY OF ONTARIO MEMORANDUM



DATE:

October 8, 2024

TO:

Henry Pham, Engineering Department

CC:

Elly Antuna, Planning Department

FROM:

Eric Woosley, Utilities Engineering (QC: CS)

SUBJECT:

DPR #4 - Utilities Engineering Conditions of Approval (#10592)

PROJECT NO.:

PDEV24-002

BRIEF DESCRIPTION

A Development Plan to construct one 3-story city services building totaling approximately 67,000 square feet on 2.569 acres of land located at 425 East B Street, within the Civic (CIV) zoning district. (APNs: 1048-545-16).

UTILITIES ENGINEERING CONDITIONS OF APPROVAL

CONDITIONS OF APPROVAL: The Ontario Municipal Utilities Company (OMUC) recommends this application for approval subject to the conditions outlined below and compliance with the City's Design Development Guidelines, Specifications Design Criteria, and City Standards.

 Standard Conditions of Approval: Project shall comply with the requirements as set forth in the Amendment to the Standard Conditions of Approval for New Development Projects adopted by the City Council (Resolution No. 2017-027) on April 18, 2017; as well as project-specific conditions/requirements as outlined below.

Prior to Issuance of Any Permits (Grading, Building, Demolition and Encroachment), unless other timeline milestones are specified by individual conditions below, the Applicant Shall:

General Conditions (Section 2.A, Other conditions): The Applicant shall comply with the following:

- 2. <u>Final Utilities Systems Map (USM)</u>: Submit a Final Utilities Systems Map (USM) as part of the precise grading plan submittal that meets all the City's USM requirements. These requirements include showing and labeling all existing and proposed utilities (including all appurtenances such as backflow devices, DCDAs, etc.), sizes, points of connection, and any easements. The final utility design shall comply with all Division of Drinking Water (CCR §64572) Separation Requirements. See *Utility Systems Map (USM) Requirements document* for details.
 - a. The proposed utilities, utility alignments, and Public Rights-of-Way (ROW)/Public Utility Easements (PUE) shown on the Conceptual Utilities Systems Map (CUSM) and other Entitlement documents are not considered final and shall be revised during Final Design to meet all City Design Guidelines, Standards, City Requirements, and all the Conditions of Approval contained in this document.
- 3. Note the following definitions and concepts for Public Utility Improvements and Private Utility Improvements: Public Improvements shall be designed per City Public Design Guidelines and City Standards and constructed through a City Encroachment Permit; and Private Onsite Improvements shall be designed per Building Code and Plumbing Code and constructed through a City Building Permit.
 - a. Public Utility Improvements include the following: water main pipelines and sewer main pipelines; sewer laterals connecting to a Public Sewer Main up to the Cleanout (or Manhole) at PL/ROW; water services and connected appurtenances (Meters/Meter Boxes, Fire Hydrants, Airvacs, Blowoffs, etc.) connecting to a Public Water Main per City Standards; and Fire Services connecting to a Public Water Main from the Main up to the DCDA. Public Water Improvements and Public Sewer Improvements are required to be designed and constructed through Public Improvement Plans with Plan View and Profile View per City Standards, Guidelines, and Requirements.
 - b. Private Utility Improvements include the following: onsite water plumbing lines after a Public Meter, or after the Fire DCDA and including the DCDA; Backflow Devices and other Cross-Connection Prevention; onsite sewer upstream of the Public Sewer Lateral, including the Cleanout (or Manhole) at PL/ROW/PUE Edge; Monitoring Manholes and other Wastewater Pretreatment Facilities. Private Onsite Utility Improvements are

required to be designed and constructed per Building and Plumbing Plans with: the Backflows, DCDAs, Cleanout (or Manhole) at PL/ROW/PUE Edge, and Monitoring Manholes being designed and constructed through a Precise Grading Plan; and, the other Pretreatment Devices (Grease Interceptor, Sand, Oil Interceptors, etc.) and the connections to the buildings and structures through a building Plumbing Plan.

- 4. Public Utilities and Public Right-of-Way including Public Utility Easements (PUE): All City of Ontario Public Utilities shall be installed within a Public Right-of-Way (ROW), or within a Public Utility Easements (PUE), or within a combination of ROW and PUE. In this case, Public Utilities is referring to the mains and connected appurtenances of the following City of Ontario/OMUC Utilities: Public Potable Water; Public Recycled Water; and Public Sanitary Sewer. Public Utilities shall be subject to the Minimum ROW/PUE Area Requirements and PUE Restrictions:
 - a. <u>Minimum ROW Area Requirements:</u> Public Utilities shall be installed within in existing ROW/PUE in alignments/locations that meet the following minimum ROW/PUE areas surrounding the Public Utilities, and/or additional ROW/PUE shall be dedicated/granted to the City to provide the following minimum ROW/PUE areas surrounding the Public Utilities:
 - i. For each main, the ROW/PUE Area shall be a minimum of 20 feet wide, centered on the utility main with a minimum of 10 feet of ROW/PUE on each side of the main and this minimum area shall extend a minimum of 10 feet past the end of a main, except for the existing sewer within the existing 6-foot wide easement:
 - ii. For each Service/Lateral, the ROW/PUE Area shall be a minimum of 10 feet wide, centered on the service/lateral with a minimum of 5 feet of ROW on each side of each service/lateral;
 - iii. For each water meter box, the ROW/PUE Area shall be a minimum of 5 feet behind and 5 feet on each side of a water meter box;
 - iv. For each water appurtenance (fire hydrants, blowoffs, airvacs, etc.), the ROW/PUE Area shall be a minimum of 5 feet on each side surrounding the water appurtenances (fire hydrants, blowoffs, airvacs, etc.);
 - v. The ROW/PUE minimum areas for separate Public Utilities may overlap, provide that all minimum separations and PUE Restrictions are met.
 - b. <u>PUE Restrictions:</u> The Minimum PUE Area required surrounding Public Utilities shall be subject to the following restrictions:
 - i. The Minimum PUE Area required surrounding Public Utilities shall not contain:
 - A. Any storm water quality improvements (infiltration, detention, retention, bioswale, etc.);
 - B. Landscaping with thick or intrusive root structures,
 - C. Any trees;
 - D. Any private utilities, plumbing lines, private fire system, or irrigation lines; or,
 - E. Any permanent structures or overhangs of permanent structures.
 - ii. The PUE surface shall be designed to allow vehicle access over and along the full length of the utility main by any City maintenance vehicle.
 - iii. Minimum Separations: Within a PUE, all Department of Drinking Water (DDW) Water Main Separations per California Code of Regulations (CCR) §64572 shall be met for all Public Potable Water Mains and Services between: all Public City Utilities; Non-City Utilities; and Private Utilities. Additionally, the following Minimum Separations shall be met:
 - A. At minimum there shall be a 4 feet horizontal separation between each utility as measured between the outside walls of the utility pipelines, or in the case of a Joint Utility Trench, between the outside edge of the Joint Utility Trench and the outside wall of the Utility Pipeline.
 - B. Public Utility mains shall not be located behind curb or under curb and gutter and shall be located a minimum of 5 feet from curbface.

Sewer Conditions (Section 2.C): The Applicant shall comply with the following:

- 5. <u>Public Sewer Improvements:</u> Design and construct the following required public sewer mains in accordance with City of Ontario Standards and Design Guidelines and Specifications:
 - a. An 8-inch sewer main in the east-west drive aisle/alley south of the proposed city services building. The new sewer main shall connect to the downstream manhole in the intersection of Sultana Avenue and Nocta Street (per M-1447 Sewer Improvement Plans) and extend west to the point of connection required for the proposed building, or for the existing city hall annex building, whichever is further west.
- 6. <u>Existing Public Sewer Mains:</u> Abandon by cutting and capping the existing 8-inch sewer main located in the east-west alley south of the proposed city services building. The limits of the 8-inch sewer main abandonment shall be from the manhole located in Sultana Avenue to the manhole located in Cherry Avenue. The existing sewer mains shall only be

abandoned following the completion and approval of the new public sewer main in the alley. The existing sewer main shall remain active until the required new sewer main is constructed and operational.

- 7. Sewer Laterals: Per City of Ontario Standard Drawing No. 2003:
 - a. Install sewer laterals connected to the new public sewer main in the alley for the proposed city services building, as well as for the existing fire station and the existing city hall annex currently connected to the existing 8-inch sewer main. The proposed city services building shall utilize a single sewer lateral connection, if feasible, to limit the connections required to the new sewer main. The existing city hall annex and existing fire station have separate sewer laterals connected to the existing sewer main. Each sewer lateral shall be connected to the new sewer main in the alley.
 - b. No storm water quality improvements (infiltration, detention, retention, bioswale, etc.) shall be installed above or within 5 feet of any Public Sewer Lateral.

8. Existing Sewer Laterals:

- a. Existing sewer laterals to remain active and in use shall be abandoned following the installation of the new sewer laterals, connection to, and activation of, the proposed public sewer main in the alley.
- b. All existing unused sewer laterals shall be abandoned to the sewer main connection.
- 9. <u>Private Onsite Sewer System and Plumbing:</u> The Onsite Sewer System shall be privately maintained by the property owner.
 - a. No storm water quality improvements (infiltration, detention, retention, bioswale, etc.) shall be installed above or within 5 feet of any Private Onsite Sewer pipes.

Potable Water Conditions (Section 2.D): The Applicant shall comply with the following:

- 10. <u>Public Water Improvements:</u> Design and construct the following required public water mains in accordance with City of Ontario Standards and Design Guidelines and Specifications:
 - a. N/A
- 11. <u>Fire Service with Fire System Double Check Detector Assembly (DCDA):</u> Per City of Ontario Standard Drawing No. 4208:
 - a. If an onsite private fire system is required, then a separate Fire Service equipped with a DCDA connected to the Public Potable Water System is required, to serve the onsite private fire system. The onsite fire system shall be separate from the onsite domestic water plumbing system and the onsite landscape irrigation system.
- 12. Water Service with a Meter and Backflow Prevention Assembly Reduced Pressure Device:
 - a. Install a water service and meter connected to the existing potable water main (W16065) in Sultana Avenue per City of Ontario Standards. The water service shall be equipped with a backflow prevention device. The water meter shall be located within the ROW.
- 13. Existing Water Services:
 - a. All existing unused water services shall be abandoned to the main water connection.

Recycled Water Conditions (Section 2.E): The Applicant shall comply with the following:

- 14. <u>Public Recycled Water Improvements:</u> Design and construct the following required public recycled water mains in accordance with City of Ontario Standards and Design Guidelines and Specifications:
 - a. N/A
- 15. <u>City Ordinance 2689</u>: This development shall comply with City Ordinance 2689 and make use of recycled water for all approved uses, including but not limited to landscape irrigation.
- 16. Irrigation Water Service with Meter and Backflow Prevention Assembly Reduced Pressure Device:
 - a. Install a water service and meter for irrigation purposes connected to the existing recycled water main (P10109) in B Street per City of Ontario Standards. The irrigation water service shall be equipped with a backflow prevention device as the recycled water main is currently charged with potable water. The irrigation water meter shall be located within the ROW west of Cherry Avenue. The lateral shall run along the west side of Cherry Avenue due north to the point of connection required for this project. The lateral shall only cross once perpendicular across Cherry Avenue.

- 17. Recycled Water Program Requirements: In order to receive recycled water service, the applicant shall comply with each of the following:
 - a. Prior to Precise Grading Plan Approval and Building Permits Issuance:
 - Submit one (1) electronic copy, in PDF format, of the Landscape Plans (on-site & off-site) to OMUC's Water Quality Programs at OMUCWQPlanCheck@ontarioca.gov for review and approval.
 - ii. Submit one (1) electronic copy, in PDF format, of the Supplemental Engineering Report (ER), for the use of recycled water to OMUC's Water Quality Programs at OMUCWQPlanCheck@ontarioca.gov for review and subsequent submittal to the California State Water Board (Division of Drinking Water) for final approval.

Note: The Division of Drinking Water review and approval process may take up to four (4) months. Contact the OMUC's Water Quality Programs at (909) 395-2678 or email OMUCWQPlanCheck@ontarioca.gov regarding this requirement. Failure to obtain an approval letter from the Division of Drinking Water authorizing the use of recycled water will delay meter installation and if applicable, occupancy release for new developments.

- b. Prior to Occupancy Release/Finalizing:
 - Procure from OMUC a copy of the letter of confirmation from the California State Water Board (Division of Drinking Water) that the Engineering Report (ER) has been reviewed and the subject site is approved for the use of recycled water.
 - ii. Obtain clearance from the OMUC confirming completion of recycled water improvements and passing of shutdown tests and cross connection inspection, upon availability/usage of recycled water.
 - iii. Complete Site Supervisor training of on-site personnel in the use of recycled water, in accordance with the ER, upon availability/usage of recycled water.



CITY OF ONTARIO

MEMORANDUM

TO:	Scott Murphy, Community Development Director (Copy of memo only) Henry Noh, Planning Director (Copy of memo only) Diane Ayala, Advanced Planning Division (Copy of memo only) Charity Hernandez, Economic Development James Caro, Building Department Raymond Lee, Engineering Department Jamie Richardson, Landscape Planning Division Dennis Mejia, Municipal Utility Company Heather Lugo, Police Department Paul Erhman, Deputy Fire Chief/Fire Marshal Jay Bautista, Traffic/Transportation Manager Lorena Mejia, Airport Planning Nathan Pino, Engineering Angela Magana, Community Improvement (Copy of memo only) Jimmy Chang, IPA Department Blaine Ishii, Integrated Waste
FROM:	Elly Antuna, Associate Planner
DATE:	May 01, 2024
SUBJECT:	FILE #: PDEV24-002 Finance Acct#:
-	project has been resubmitted for review. Please send one (1) copy and email one (1) copy report to the Planning Department by .
approximatel	ESCRIPTION: A Development Plan to construct one 3-story city services building totaling y 67,000 square feet on 2.569 acres of land located at 425 East B Street, within the Civic district (APN(s): 1048-545-16).
☑ The plan	n does adequately address the departmental concerns at this time.
	No comments
	See previous report for Conditions
\square	Report attached (1 copy and email 1 copy)
\square	Standard Conditions of Approval apply
The plan	n does not adequately address the departmental concerns.
	The conditions contained in the attached report must be met prior to scheduling for Development Advisory Board.

Landscape Planning Division Jamie Richardson

Sr. Landscape Architect 05/20/2024

CITY OF ONTARIO

LANDSCAPE PLANNING DIVISION

303 East "B" Street, Ontario, CA 91764

CONDITIONS OF APPROVAL		
Sign Off		
9.7	005/20/2024	
Jamie Richardson, Sr. Landscape Architect	Date	

Revie	wer's Name:	Phone:
Jam	ie Richardson, Sr. Landscape Architect	(909) 395-2615
	8. File No.:	Case Planner:
PDE	V24-002	Diane Ayala
Proje	ct Name and Location:	
City	Services Building	
425	East B Street	
Applio	cant/Representative:	
HMC	C Architects – Brandon Gullotti Brandon.Gullotti@hmcarchitects.com (909) 989-9979
	Concours Street	•
Onta	ario, CA 91764	
Onto	110, CA 31704	
	Preliminary Plans (dated 05/03/2024) meet the Standard Condition Development and have been approved considering that the following below be met upon submittal of the landscape construction documents.	owing conditions
	Preliminary Plans (dated 05/03/2024) meet the Standard Condition Development and have been approved considering that the follows:	owing conditions cuments.
A REINCO	Preliminary Plans (dated 05/03/2024) meet the Standard Condition Development and have been approved considering that the following below be met upon submittal of the landscape construction documents. Preliminary Plans (dated) have not been approved. Corrections	owing conditions cuments. noted below are

Civil/ Site Plans

- 1. An arborist report has been prepared for the site. Coordinate to show trees along Sultana Avenue per the report. Identify to protect in place or if any require removal. Add to civil, site, and landscape plans.
- 2. Locate catch basins a minimum 24" away from paving edge.
- 3. Adjust any newly proposed utilities out of the center of landscape areas to allow for require tree locations and to avoid future maintenance concerns.
- 4. Show backflow devices set back 4' from paving on all sides. Locate on level grade.
- 5. Before permit issuance, stormwater infiltration devices located in landscape areas shall be reviewed and plans approved by the Landscape Planning Division. Any stormwater devices in parkway areas shall not displace street trees.
- 6. Show enhanced paving at pedestrian crossings.
- 7. Where transformers cannot be relocated 5' from vehicular paving and SCE will require bollards, note on plans that a decorative permanent bollard will be provided. The Planning Department will require cut sheets and details during the plan check.
- 8. Locate utilities including light standards, fire hydrants, water, drain, and sewer lines to not conflict with required tree locations—coordinate civil plans with landscape plans.
- 9. Provide landscape calculations for the site not to include the ROW or paving areas.
- 10. Note for compaction to be no greater than 85% in landscape areas. All finished grades at 1 ½" below finished surfaces. Slopes to be maximum 3:1.
- 11. Add Note to Grading and Landscape Plans: Landscape areas where compaction has occurred due to grading activities and where trees or stormwater infiltration areas are located shall be loosened by soil fracturing. For trees, a 12'x12'x18" deep area; for stormwater infiltration, the entire area shall be loosened. Add the following information on the plans: The

backhoe method of soil fracturing shall be used to break up compaction. A 4" layer of Compost is spread over the soil surface before fracturing is begun. The backhoe shall dig into the soil lifting and then drop the soil immediately back into the hole. The bucket then moves to the adjacent soil and repeats. The Compost falls into the spaces between the soil chunks created. Fracturing shall leave the soil surface quite rough with large soil clods. These must be broken by additional tilling. Tilling in more Compost to the surface after fracturing per the soil report will help create an A horizon soil. Imported or reused Topsoil can be added on top of the fractured soil as needed for grading. The Landscape Architect shall be present during this process and provide certification of the soil fracturing. For additional reference, see Urban Tree Foundation – Planting Soil Specifications.

Landscape Plans

- 12. See number 1.
- 13. Show the overall pedestrian connections to and through this space. Carry out similar themes, paving, patterns, connections.
- 14. Show the enhanced crossing and how they connect to the University, City Hall, Parking Structure, and Sultana Avenue.
- 15. Provide details for furnishings, site amenities, lighting, paving materials, colors, patterns, etc.
- 16. Replace Magnolia (City Council directive); show Quercus suber or englemanii.
- 17. During plan check recommendations may be made on planting palette to coordinate adjacent sites and existing landscape to provide consistency.
- 18. Show poured in place concrete planter walls to match and enhance the building.
- 19. Show backflow devices with 36" high strappy leaf shrub screening and trash enclosures and transformers, a 4'-5' high evergreen hedge screening. Do not encircle utility; show as masses and duplicate masses in other locations at regular intervals.
- 20. Locate light standards, fire hydrants, water, and sewer lines to not conflict with required tree locations. Coordinate civil plans with landscape plans
- 21. Show all utilities on the landscape plans. Coordinate so utilities are clear of tree locations.
- 22. Show any easements and identify.
- 23. Provide landscape calculations for the site not to include the ROW or paving areas.
- 24. Show 8' diameter of mulch only at new trees, 12' min. at existing trees. Detail irrigation dripline outside of mulched root zone.
- 25. Overhead spray systems shall be designed for plant material less than the height of the spray head.
- 26. Landscape construction plans shall meet the requirements of the Landscape Development Guidelines. See http://www.ontarioca.gov/landscape-planning/standards



CITY OF ONTARIO MEMORANDUM

TO: Elly Antuna, Asociate Planner

Planning Department

FROM: Paul Ehrman, Sr. Deputy Fire Chief/Fire Marshal

Fire Department

DATE: November 6, 2024

SUBJECT: PDEV24-002 - A Development Plan to construct one 3-story city services

building totaling approximately 67,000 square feet on 2.569 acres of land located at 425 East B Street, within the Civic (CIV) zoning district (APN(s):

1048-545-16). (Rev. 2)

☐ The plan <u>does</u> adequately address Fire Department requirements at this time.

☐ Conditions of Approval apply, as stated below.

SITE AND BUILDING FEATURES:

A. 2022 CBC Type of Construction: Not listed, assumed II-B

B. Type of Roof Materials: Ordinary, Panelized

C. Ground Floor Area(s): 24,490 Sq. Ft.

D. Number of Stories: 3

E. Total Square Footage: 67,106 Sq. Ft.

F. 2022 CBC Occupancy Classification(s): B

CONDITIONS OF APPROVAL:

1.0 GENERAL

- I.1 The following are the Ontario Fire Department ("Fire Department") requirements for this development project, based on the current edition of the California Fire Code (CFC), and the current versions of the Fire Prevention Standards ("Standards.") It is recommended that the applicant or developer transmit a copy of these requirements to the on-site contractor(s) and that all questions or concerns be directed to the Bureau of Fire Prevention, at (909) 395-2029. For copies of Ontario Fire Department Standards please access the City of Ontario web site at www.ontarioca.gov/Fire/Prevention.

2.0 FIRE DEPARTMENT ACCESS

- ∑ 2.1 Fire Department vehicle access roadways shall be provided to within one hundred and fifty feet (150') of all portions of the exterior walls of the first story of any building, unless specifically approved. Roadways shall be paved with an all-weather surface and shall be a minimum of twenty-four (24) ft. wide. See Standard #B-004.
- ≥ 2.3 Fire Department access roadways that exceed one hundred and fifty feet (150') in length shall have an approved turn-around per <u>Standard #B-002</u>.

- ∑ 2.6 Security gates or other barriers on fire access roadways shall be provided with a Knox brand key switch or padlock to allow Fire Department access. See <u>Standards #B-003</u>, <u>B-004</u> and <u>H-001</u>.

3.0 WATER SUPPLY

4.0 FIRE PROTECTION SYSTEMS

- ☑ 4.2 Underground fire mains which cross property lines shall be provided with CC & R, easements, or reciprocating agreements, and shall be recorded on the titles of affected properties, and copies of same shall be provided at the time of fire department plan check. The shared use of private fire mains or fire pumps is allowable only between immediately adjacent properties and shall not cross any public street.
- 4.3 An automatic fire sprinkler system is required. The system design shall be in accordance with National Fire Protection Association (NFPA) Standard 13. All new fire sprinkler systems, except those in single family dwellings, which contain twenty (20) sprinkler heads or more shall be monitored by an approved listed supervising station. An application along with detailed plans shall be submitted, and a construction permit shall be issued by the Fire Department, prior to any work being done.
- △ 4.4 Wood frame buildings that are to be sprinkled shall have these systems in service (but not necessarily finaled) <u>before</u> the building is enclosed.

- submitted, and a construction permit shall be issued by the Fire Department, prior to any work being done.
- ✓ 4.7 Portable fire extinguishers are required to be installed prior to occupancy per <u>Standard #C-001</u>. Please contact the Fire Prevention Bureau to determine the exact number, type and placement required.

5.0 BUILDING CONSTRUCTION FEATURES

- ∑ 5.1 The developer/general contractor is to be responsible for reasonable periodic cleanup of the development during construction to avoid hazardous accumulations of combustible trash and debris both on and off the site.
- ∑ 5.6 Knox ® brand key-box(es) shall be installed in location(s) acceptable to the Fire Department.
 All Knox boxes shall be monitored for tamper by the building fire alarm system. See <u>Standard #H-001</u> for specific requirements.
- ∑ 5.7 Placards shall be installed in acceptable locations on buildings that store, use or handle hazardous materials in excess of the quantities specified in the CFC. Placards shall meet the requirements of National Fire Protection Association (NFPA) Standard 704.

6.0 OTHER SPECIAL USES

7.0 PROJECT SPECIFIC CONDITIONS

NOTE:

1) It's been agreed that the access road to the South side of the project be used for 1-way traffic only.



CITY OF ONTARIO MEMORANDUM

TO: Elly Antuna, Associate Planner

FROM: Heather Lugo, MA, PD CET

DATE: January 31, 2024

SUBJECT: PDEV24-002 - A Development Plan to construct one 3-story city services

building totaling approximately 67,000 square feet on 2.569 acres of land located at 425 East B Street, within the Civic (CIV) zoning district (APN(s):

1048-545-16).

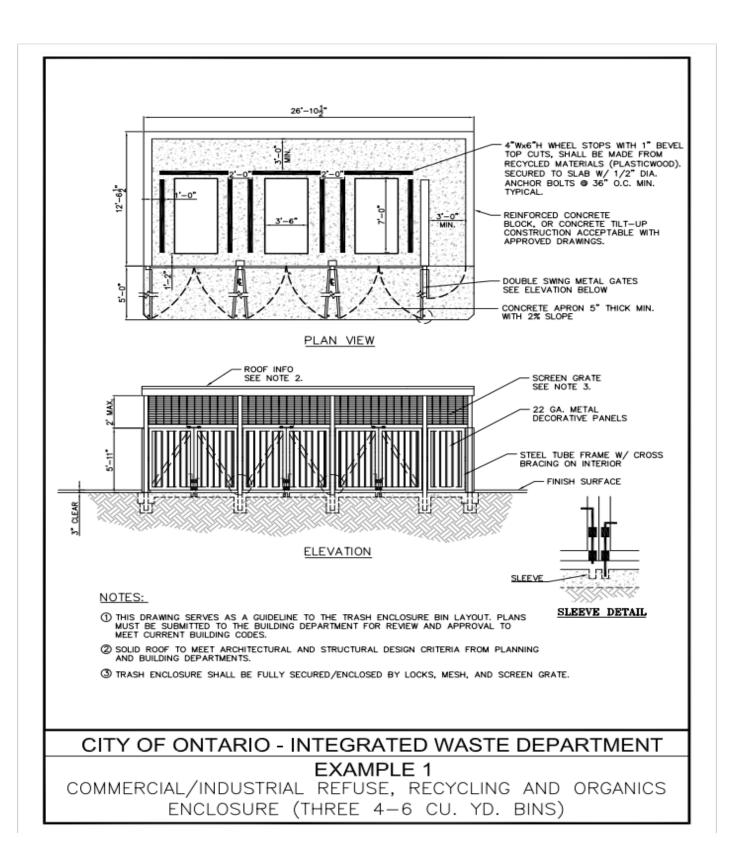
The "Standard Conditions of Approval" contained in Resolution No. 2017-027 apply. The applicant shall read and be thoroughly familiar with these conditions, including but not limited to, the requirements listed below.

- Required lighting for all walkways, driveways, doorways, parking areas, and other areas used by the public shall be provided and operate on photosensor at the prescribed foot-candle levels. This includes but is not limited to areas such as parks, community centers, recreation centers/play areas and paseos. LED lighting will be required for all lighting fixtures. Optimal lighting for visibility and video color rendering is approximately 3000 degrees Kelvin. The lighting shall be as close to 3000 degrees Kelvin as possible. Photometrics shall be provided to the Police Department. Photometrics shall include the types of fixtures proposed and demonstrate that such fixtures meet the vandal-resistant requirement. Planned landscaping shall not obstruct lighting.
- Stairwells shall be constructed to either allow for visibility through the stairwell risers or to prohibit public access to the areas behind stairwells.
- Parking garages, stairwells, elevators, blind spots, and any hidden areas shall have adequate lighting, and Convex mirrors to allow for visibility to the areas.
- The Applicant shall install a video surveillance system on the site. Cameras shall cover at a minimum all entry doors, all cash registers, outdoor utility/trash enclosures, and at least one camera shall capture any parking lots/structures. Cameras shall be positioned to maximize the coverage of patrons and vehicles in these areas. Cameras shall record at least 15 frames per second and at a minimum of 640x480 lines of resolution. Recordings shall be stored for a

minimum of 30 days and made available upon request to any member of the Ontario Police Department.

- The Applicant shall comply with all construction site security requirements as stated in the Standard Conditions. This includes the provisions for perimeter lighting, site lighting, fencing and/or uniformed security.
- Rooftop addresses shall be installed on the buildings as stated in the Standard Conditions. The
 numbers shall be at a minimum 3 feet tall and 1 foot wide, in reflective white paint on a flat
 black background, and oriented with the bottom of the numbers towards the addressed street.
 Associated letters shall also be included.
- Graffiti abatement by the business owner/licensee, or management shall be immediate and ongoing on the premises, but in no event shall graffiti be allowed unabated on the premises for more than 72 hours. Abatement shall take the form of removal or shall be covered/painted over with a color reasonably matching the color of the existing building, structure, or other surface being abated. Additionally, the business owner/licensee, or management shall notify the City within 24 hours at (909) 395-2626 (graffiti hotline) of any graffiti elsewhere on the property not under the business owner/licensee's or management control so that it may be abated by the property owner and/or the City's graffiti team.
- All exterior electrical outlets, accessible to the public, shall be secured and locked.
- All exterior water spigots / water supply sources, accessible to the public, shall be secured and locked.
- Trash enclosures, if accessible to the public, shall be fully secured/enclosed by locks, mesh, and screen grate to reduce crime and encampment opportunities for homeless persons.

The Applicant is invited to contact Heather Lugo at (909) 408-1074 with any questions or concerns regarding these conditions.



AIRPORT LAND USE COMPATIBILITY PLANNING CONSISTENCY DETERMINATION REPORT



Project File No.:	oject File No.: PDEV24-002			Reviewed By:	
Address:	425 East B Street			Lorena Mejia	
APN:	1048-545-16			Contact Info:	
Existing Land Use:				909-395-2276	
				Project Planner:	
Proposed Land Use:	A Development	t Plan to construct a 3-story 67,000 SF	City office building	Elly Antuna	
Site Acreage:	2.5	Proposed Structure Heig	ght: 57 FT	Date: 11/7/2024	
ONT-IAC Project	t Review:	n/a		CD No.: 2024-006	
Airport Influence	-	ONT		PALU No.: n/a	
	_				
Th	ie project i	is impacted by the follow	ving ONT ALUCP Compa	tibility Zones:	
Safe	ty	Noise Impact	Airspace Protection	Overflight Notification	
Zone 1		75+ dB CNEL	High Terrain Zone	Avigation Easement Dedication	
Zone 1A		70 - 75 dB CNEL	FAA Notification Surfaces	Recorded Overflight Notification	
Zone 2		65 - 70 dB CNEL	Airspace Obstruction	Real Estate Transaction	
Zone 3		√ 60 - 65 dB CNEL	Surfaces	Disclosure	
Zone 4		V	Airspace Avigation Easement Area		
Zone 5			Allowable 80 FT		
	The proje	ect is impacted by the fol	lowing Chino ALUCP Sa	fety Zones:	
Zone 1		Zone 2 Zone 3	Zone 4 Zone	Zone 6	
Allowable Heig	ıht:				
		CONSISTENCY	DETERMINATION		
This proposed Pro	oject is: OEx	kempt from the ALUCP Cor	nsistent	nditions	
	The proposed project is located within the Airport Influence Area of Ontario International Airport (ONT) and was evaluated and found to be consistent with the policies and criteria of the Airport Land Use Compatibility Plan (ALUCP) for ONT.				
	An FAA Obstruction Evaluation/Airport Airspace Analysis (FAA Form 7460-1) will need to be filed for any temporary construction equipment such as cranes that are over 80 feet in height and receive a Determination of No Hazard.				
Airport Planner S	Signature:	Lanur	Mejre		



DEVELOPMENT ADVISORY BOARD STAFF REPORT

November 18, 2024

303 East B Street, Ontario, California 91764 Phone: 909.395.2036 / Email: PlanningDirector@OntarioCA.gov

FILE NO: PMTT23-002 (TM 20572)

SUBJECT: Tentative Tract Map No. 20572 to subdivide 77.2 acres of land into seven numbered lots and fourteen lettered lots, located at the northwest corner of Archibald Avenue and Ontario Ranch Road, within the PA-5 (Low-Density Residential, Medium-Density Residential, and School) land use district of The Avenue Specific Plan. Submitted by Richland Developers, Inc.

PROPERTY OWNER: Richland Developers, Inc.

RECOMMENDED ACTION: That the Development Advisory Board recommend the Planning Commission: 1) consider and recommend the City Council adopt a resolution approving the use of an Addendum to The Ontario Plan 2050 Certified Supplemental Environmental Impact Report (File No. PGPA20-002, State Clearinghouse No. 2021070364), and 2) consider and approve File No. PMTT23-002, pursuant to the facts and reasons contained in the staff report and attached Decisions, and subject to the conditions of approval appended to the attached PMTT23-002 Decision as "Attachment A."

BACKGROUND: On January 27, 2010, the Ontario City Council certified The Ontario Plan Environmental Impact Report in conjunction with File No. PGPA06-001 (City Council Resolution No. 2010-006), and on August 16, 2022, the Ontario City Council certified The Ontario Plan 2050 Update Supplemental Environmental Impact Report in conjunction with File No. PGPA20-002 (City Council Resolution No. 2022-129). The Ontario Plan and associated Environmental Impact Report analyzed the Project site and established guidelines for development, including but not limited to, general land use and assumed densities/development intensities (LDR Low Density Residential – 4.5 du/ac, MDR Medium Density Residential – 22 du/ac, and PS Public School – 614 total acres).

On January 17, 2023, the Applicant applied for Tentative Tract Map No. 20572 (File No. PMTT23-002) to subdivide 77.2 acres of land into seven numbered lots and fourteen lettered lots. The Applicant also submitted two other related applications - an Amendment to The Avenue Specific Plan (File No. PSPA22-005) to bring the Project site's zoning into conformance with The Ontario Plan 2050's Land Use Plan, and a Development Agreement (File No. PDA23-003) to establish the terms for development of the Project site. These applications are under separate review and will require review and approval from the Planning Commission and City Council. The DAB recommended action for the subject project is applicable to the proposed Tentative Tract Map only.

PROJECT SETTING: The Project site consists of 77.2 acres of land located at the northwest corner of Archibald Avenue and Ontario Ranch Road, within the PA-5 (Low-Density Residential, Medium-Density Residential, and School) land use district of The Avenue Specific Plan, which is depicted in Exhibit A: Project Location Map. The site is mostly vacant, unimproved agricultural land with a plant nursery sited along Archibald Avenue.

The Project site is surrounded by agricultural and dairy uses to the north, the Cucamonga Creek Channel to the west, residential land uses to the east, and vacant land to the south. The existing surrounding land uses, zoning, and Policy Plan (general plan) and specific plan land use designations are summarized in Table 1: Surrounding Zoning & Land Uses.

PROJECT ANALYSIS:

(1) <u>Tentative Tract Map 20572 (File No. PMTT23-002)</u>

The Project proposes an "A Map" to subdivide PA-5 of The Avenue Specific Plan into seven numbered lots and fourteen lettered lots to facilitate future subdivision and development (See Exhibit B – Tentative Tract Map 20572). The seven numbered lots will facilitate future development of residential and school land uses and will range in size from 1.9 to 13.6 acres. The fourteen lettered lots will facilitate more immediate development of backbone public streets, major utilities, and neighborhood edges along Archibald Avenue and Ontario Ranch Road, as well as the future development of the centralized park. The lettered lots will range in size from 0.2 to 4.2 acres of land.

Subsequent to A Maps, developers are expected to prepare "B Map" applications, which will enable developers to further subdivide the larger seven numbered lots for development of residential, school, landscape, and other associated recreational land uses. A conceptual site plan has been provided in this report to demonstrate that the proposed A Map subdivision can result in feasible future development of these large lots (see Exhibit C: Conceptual Site Plan). The products and plotting shown on this site plan are subject to change based on market demands and are for illustrative purposes only.

- (a) <u>Site Access/Circulation</u> The proposed Project will establish backbone streets to serve future communities within PA-5. One major and one secondary access point will be provided along Archibald Avenue, and one secondary access point will be provided along Ontario Ranch Road. These access points lead to a central loop that circulates throughout the tract, surrounding the major community park and serving each large A Map lot. The Project is required to design and build a pedestrian bridge across the Cucamonga Creek Channel and is contingent on future residential occupancy numbers. Additionally, the project is required to widen the northern part of the Ontario Ranch Road bridge at the Cucamonga Creek Channel to the ultimate right-of-way width. The southerly portion of the bridge is currently under construction.
- (b) <u>Landscaping, Open Space, and Amenities</u> The Project proposes landscaped neighborhood edges along Archibald Avenue and Ontario Ranch Road,

which will be designed and constructed in accordance with the Streetscape Master Plan, The Avenue Specific Plan, and Development Code requirements. A centralized 4.2-acre park is also proposed and will be designed and constructed in accordance with The Avenue Specific Plan, Development Code, and Development Agreement. Any additional required parkland resulting from fluctuations in proposed densities at the time of residential development will be provided as part of the future B Maps. Lastly, a 10-footwide trail will be designed and constructed along the west property boundary, adjacent to the Cucamonga Creek Channel. This will provide a pedestrian path from the northern boundary of the tract south to Ontario Ranch Road.

- (c) <u>Signage</u> All Project signage is required to comply with sign regulations provided in Ontario Development Code Division 8.1, The Avenue Specific Plan, and the Streetscape Master Plan. Prior to the issuance of a Building Permit for the installation of any new on-site signage, the Applicant is required to submit Sign Plans for Planning Department review and approval.
- Utilities (drainage, sewer) Public utilities (water and sewer) are available to serve the Project and are included as part of the backbone infrastructure intended to serve future development of the Project site. Furthermore, the Applicant has submitted a sewer report and water supply assessment to ensure availability of both utilities. A Preliminary Water Quality Management Plan (PWQMP), which establishes the Project's compliance with storm water discharge/water quality requirements, was also submitted for this Project and will be submitted with each subsequent development/subdivision proposal as more development details become available. The PWQMP for the Project includes site design measures that capture runoff and pollutant transport by minimizing impervious surfaces and maximizes low impact development (LID) best management practices (BMPs), such as retention and infiltration, biotreatment, evapotranspiration. The PWQMP proposes the use of regional LID BMP facilities which are installed off-site and have reserved capacity allocation credits to serve the Project until future development occurs with on-site improvements. Any overflow drainage will be conveyed to the public street by way of parkway drains and culverts.

(2) <u>Specific Plan Amendment (File No. PSPA22-005) and Development Agreement (File No. PDA23-003)</u>

The Project was submitted in relation to an amendment to The Avenue Specific Plan and a Development Plan. The Specific Plan Amendment would modify land use designations on the Project site for conformance with The Ontario Plan 2050's Land Use Plan and provide exhibit and textual updates throughout the document to accommodate the changes. The Development Agreement application would establish various terms of development for the project between the City and the developer. The Specific Plan Amendment and Development Agreement are not part of the Development Advisory Board's purview and are referenced in this report as a courtesy. The Amendment and Agreement will be considered by the Planning Commission and recommended to City Council for consideration and decision.

(3) Addendum to The Ontario Plan 2050 Certified Subsequent EIR (SEIR)

An addendum to The Ontario Plan 2050 Certified SEIR was submitted in conjunction with the Project and includes the Amendment to The Avenue Specific Plan to bring the Project site into zoning conformance with the General Plan Land Use Plan. The addendum analyzed the following environmental categories: aesthetics, agriculture and forestry resources, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, wildfire, and mandatory findings of significance. The addendum compared Project impacts with those identified in the Certified SEIR and found that the Project would not result in: 1) substantially different or increased impacts when compared to those in the Certified SEIR; 2) any new significant impacts not already considered and addressed in the Certified SEIR; or 3) any substantial increase in the severity of, or substantial change in a previously-identified environmental impacts considered and addressed in the Certified SEIR. The Project was found to be consistent with the Certified SEIR and does not necessitate preparation of an additional subsequent or supplemental EIR.

PUBLIC NOTIFICATION: Public notification is not required, as the Development Advisory Board is acting in its capacity as an advisory body to the Planning Commission. Public notification is required prior to the Planning Commission hearing on the Project.

CORRESPONDENCE: As of the preparation of this Agenda Report, Planning Department staff has not received any written or verbal communications from the owners or occupants of properties surrounding the Project site or from the public in general, regarding the subject application.

AGENCY/DEPARTMENT REVIEWS: Each City agency/department has been provided the opportunity to review and comment on the subject application and recommend conditions of approval to be imposed upon the application. At the time of the Decision preparation, recommended conditions of approval were provided and are appended to the attached Tentative Tract Map File No. PMTT23-002 Decision as Attachment A.

AlrPORT LAND USE COMPATIBILITY PLAN (ALUCP) COMPLIANCE: The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

On April 19, 2011, the City Council of the City of Ontario approved and adopted the ONT ALUCP, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the recommending body for the Project, the Development Advisory

Board has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the Development Advisory Board finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP.

On August 2, 2022, the City Council of the City of Ontario approved and adopted a Development Code Amendment to establish the Chino Airport ("CNO") Overlay Zoning District ("OZD") and Reference I, Chino Airport Land Use Compatibility Plan ("CNO ALUCP"). The CNO OZD and CNO ALUCP established the Airport Influence Area for Chino Airport, solely within the City of Ontario, and limits future land uses and development within the Airport Influence Area, as they relate to safety, airspace protection, and overflight impacts of current and future airport activity. The CNO ALUCP is consistent with policies and criteria set forth within the Caltrans 2011 California Airport Land Use Planning Handbook. The proposed Project is located within the Airport Influence Area of Chino Airport and was evaluated and found to be consistent with the California Airport Land Use Planning Handbook and the CNO ALUCP. As the recommending body for the Project, the Development Advisory Board has reviewed and considered the facts and information contained in the Application and supporting documentation against the CNO ALUCP compatibility factors, including Safety, Airspace Protection, Overflight. As a result, the Development Advisory Board finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the California Airport Land Use Planning Handbook and the Chino ALUCP.

COMPLIANCE WITH THE ONTARIO PLAN: The proposed Project is consistent with the principles, goals and policies contained within the Vision, Governance, Policy Plan (general plan), and City Council Priorities components of The Ontario Plan ("TOP"). More specifically, the goals and policies of TOP that are furthered by the proposed Project are as follows:

(1) <u>City Council Goals</u>

- Operate in a Businesslike Manner
- Focus Resources in Ontario's Commercial and Residential Neighborhoods
- Invest in the City's Infrastructure (Water, Streets, Sewers, Parks, Storm Drains and Public Facilities)
- Ensure the Development of a Well Planned, Balanced, and Self-Sustaining Community in Ontario Ranch

(2) <u>Governance</u>

Decision Making

<u>Goal G1</u>: Sustained decision-making that consistently moves Ontario towards its Vision by using The Ontario Plan as a framework for assessing choices.

- G1-1 Consistency with Policies. We require that staff recommendations to the City Council be consistent with adopted City Council Priorities (Goals and Objectives) and The Policy Pan.
- G1-2 Long-term Benefit. We require decisions to demonstrate and document how they add value to the community and support the Ontario Vision.

(3) <u>Policy Plan (General Plan)</u>

Land Use Element

<u>Goal LU-1 Balance</u>: A community that has a spectrum of housing types and price ranges that match the jobs in the City and that make it possible for people to live and work in Ontario and maintain a quality of life.

- LU-1.1 Strategic Growth. We concentrate growth in strategic locations that help create place and identity, maximize available and planned infrastructure, foster the development of transit, and support the expansion of the active and multimodal transportation networks throughout the City.
- LU-1.6 Complete Community. We incorporate a variety of land uses and building types in our land use planning efforts that result in a complete community where residents at all stages of life, employers, workers, and visitors have a wide spectrum of choices of where they can live, work, shop and recreate within Ontario.

Housing Element

<u>Goal H-1 Neighborhoods & Housing:</u> Stable neighborhoods of quality housing, ample community services, and public facilities, well-maintained infrastructure, and public safety that foster a positive sense of identity.

 H-1.2 Neighborhood Conditions. We direct efforts to improve the long-term sustainability of neighborhoods through comprehensive planning, provision of neighborhood amenities, rehabilitation and maintenance of housing, and community building efforts. <u>Goal H-2 Housing Supply & Diversity</u>: Diversity of types of quality housing that are affordable to a range of household income levels, accommodate changing demographics, and support and reinforce the economic sustainability of Ontario.

• H-2.4 Ontario Ranch. We support a premier lifestyle community in the Ontario Ranch, distinguished by diverse housing, highest design quality, and cohesive and highly amenitized neighborhoods.

Community Economics Element:

<u>Goal CE-1 Complete Community</u>: A complete community that provides for all incomes and stages of life.

- CE-1.1 Jobs-Housing Balance. We pursue improvement to the Inland Empire's balance between jobs and housing by promoting job growth that reduces the regional economy's reliance on out-commuting.
- CE-1.6 Diversity of Housing. We collaborate with residents, housing providers, and the development community to provide housing opportunities for every stage of life; we plan for a variety of housing types and price points to encourage the development of housing supportive of our efforts to attract business in growing sectors of the community while being respectful of existing viable uses.

<u>Goal CE-2 Placemaking</u>: A City of distinctive neighborhoods, districts, corridors, and centers where people choose to be.

• CE-2.2 Development Review. We require those proposing new development and redevelopment to demonstrate how their projects will create appropriately unique, functional, and sustainable places that will compete well with their competition within the region.

Community Design Element

<u>Goal CD-2 Design Quality</u>: A high level of design quality resulting in neighborhoods, public spaces, parks, and streetscapes that are attractive, safe, functional, human-scale, and distinct.

• CD-2.13 Entitlement Process. We work collaboratively with all stakeholders to ensure a high degree of certainty in the efficient review and timely processing of all development plans and permits.

<u>Goal CD-5 Protection of Investment</u>: A sustained level of maintenance and improvement of properties, buildings, and infrastructure that protects property values and encourages additional public and private investments.

- CD-5.1 Maintenance of Buildings and Property. We require all public and privately-owned buildings and property (including trails and easements) to be properly and consistently maintained.
- CD-5.2 Maintenance of Infrastructure. We require the continual maintenance of infrastructure.

HOUSING ELEMENT COMPLIANCE: The project is consistent with the Housing Element of the Policy Plan (general plan) component of The Ontario Plan, as the project site is not one of the properties in the Housing Element Sites contained in Tables B-1 and B-2 (Housing Element Sites Inventory) of the Housing Element Technical Report.

ENVIRONMENTAL REVIEW: The application is a project pursuant to the California Environmental Quality Act (Public Resources Code Section 21000 et seq.) (CEQA") and an addendum to The Ontario Plan 2050 Certified SEIR (SCH #2021070364, File No. PGPA20-002) has been prepared to determine possible environmental impacts. The addendum concluded that no new substantial environmental impacts would result from the Project. All previous mitigation measures of the Certified SEIR remain in implementation. The environmental documentation for this Project is available for review at the Planning Department public counter.

TECHNICAL APPENDIX:

Table 1: Surrounding Zoning and Land Uses

	Existing Land Use	Policy Plan Designation	Zoning Designation	Specific Plan Land Use
Site	Vacant, agricultural, plant nursery	Low-Density Residential (LDR; 2.1-5.0 du/ac), Medium-Density Residential (MDR; 11.1- 25.0 du/ac), and Public School (PS)	The Avenue Specific Plan	PA-5 (Low-Density Residential, Medium- Density Residential, and School)
North	Agricultural, dairy	General Commercial (GC; 0.40 FAR)	The Avenue Specific Plan	Retail/Commercial
South	Vacant	Medium-Density Residential (MDR; 11.1- 25.0 du/ac)	Parkside Specific Plan	PA-27 (Multi-Family Attached) and PA-21 (Commercial)
East	Single-family residential, townhomes	Low-Density Residential (LDR; 2.1-5.0 du/ac)	The Avenue Specific Plan	PA-5A (Low-Density Residential) and PA-7 (Low-Medium Density Residential)
West	Cucamonga Creek Channel	Open Space – Non- Recreation (OS-NR)	The Avenue Specific Plan	N/A

Exhibit A: PROJECT LOCATION MAP



Exhibit B: TENTATIVE TRACT MAP NO. 20572

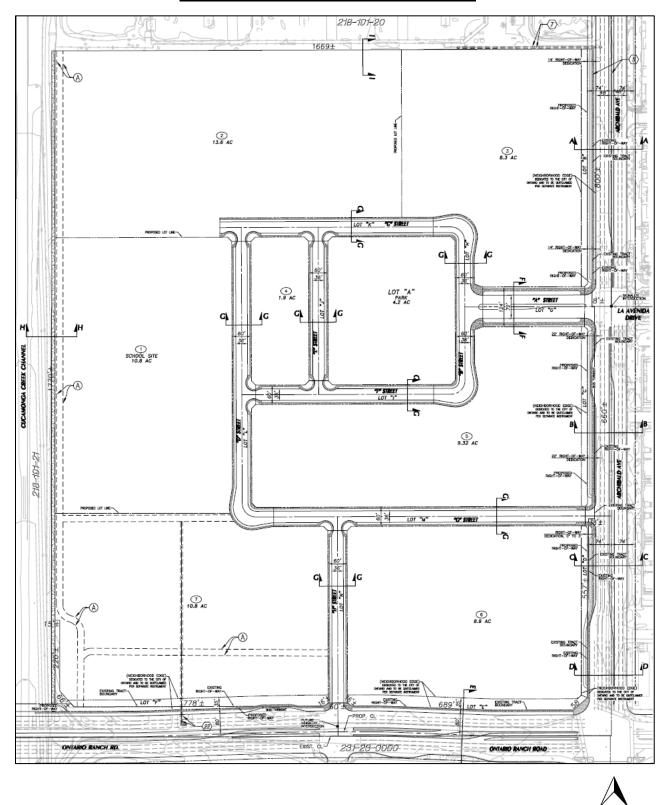
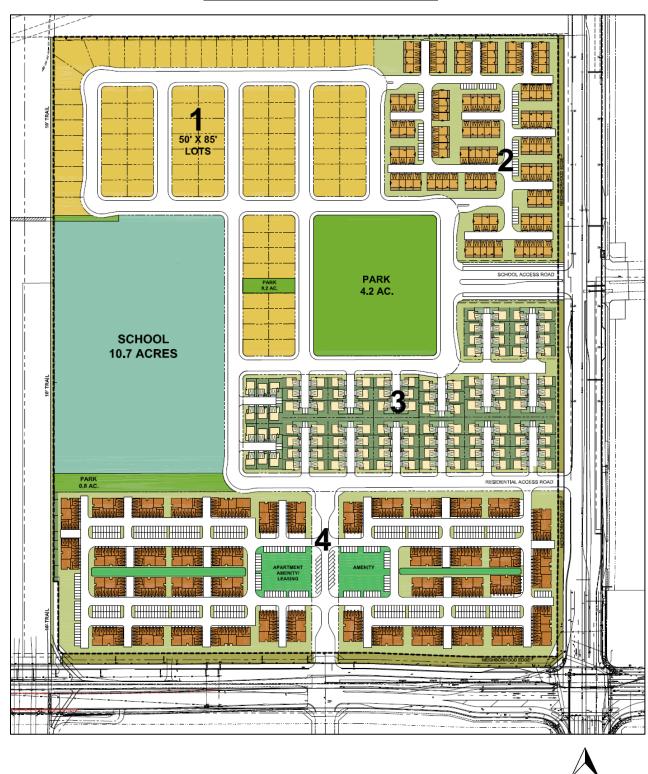


Exhibit C: CONCEPTUAL SITE PLAN



Attachment A: Decision for the Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report

(Document to follow this page)

Attachment B: Decision for File No. PMTT23-002

(Document to follow this page)

DECISION NO.:

FILE NO.: PMTT23-002

DAB Hearing Date: November 18, 2024

SUBJECT: An Addendum to The Ontario Plan 2050 Certified Supplemental

Environmental Impact Report (State Clearinghouse No. 2021070364), pursuant to the requirements of the California Environmental Quality

Act, as amended, for File No. PMTT23-002.

PART 1: RECITALS

WHEREAS, RICHLAND COMMUNITIES ("Applicant") filed an Application for the approval of Tentative Tract Map No. 20572, File No. PMTT23-002, which consists of an "A Map" to subdivide 77.2 acres of land into seven numbered lots and fourteen lettered lots, located at the northwest corner of Archibald Avenue and Ontario Ranch Road, within the PA-5 (Low-Density Residential, Medium-Density Residential, and School) land use district of The Avenue Specific Plan (hereinafter referred to as "Application" or "Project"); and

WHEREAS, the City of Ontario certified the Environmental Impact Report prepared for The Ontario Plan and associated Statement of Overriding Considerations on January 27, 2010, and issued Resolution No. 2010-003; and

WHEREAS, the City of Ontario adopted the Policy Plan (General Plan) as part of the component framework for The Ontario Plan on January 27, 2010, and issued Resolution No. 2010-004; and

WHEREAS, The Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364) was certified on August 16, 2022 (hereinafter referred to as "Certified EIR"), in which development and use of the Project site was discussed; and

WHEREAS, the City of Ontario adopted a Technical Update to the Policy Plan as part of the component framework for The Ontario Plan 2050 on August 16, 2022, and issued Resolution No. 2022-131; and

WHEREAS, the Planning Director of the City of Ontario has prepared and approved for attachment to the certified Environmental Impact Report, an Addendum to the Certified EIR (hereinafter referred to as "EIR Addendum") in accordance with the requirements of the California Environmental Quality Act of 1970, together with State and local guidelines implementing said Act, all as amended to date (collectively referred to as CEQA); and

WHEREAS, the EIR Addendum concluded that implementation of the Project could result in a number of significant effects on the environment that were previously analyzed in the Certified EIR, and that the Certified EIR identified mitigation measures that would reduce each of those significant effects to a less-than-significant level; and

WHEREAS, pursuant to State CEQA Guidelines Section 15164(a), a lead agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary to a project, but the preparation of a subsequent or supplemental EIR is not required; and

WHEREAS, the City determined that none of the conditions requiring preparation of a subsequent or supplemental EIR would occur from the Project, and that preparation of an Addendum to the Certified EIR was appropriate; and

WHEREAS, Ontario Development Code Table 2.02-1 (Review Matrix) grants the Development Advisory Board (hereinafter referred to as DAB) the responsibility and authority to review and make recommendation to the Planning Commission on the subject Application; and

WHEREAS, the DAB has reviewed and considered the EIR Addendum for the Project, has concluded that none of the conditions requiring preparation of a subsequent of supplemental EIR have occurred, and intends to take actions on the Project in compliance with CEQA and state and local guidelines implementing CEQA; and

WHEREAS, the EIR Addendum for the Project and related documents are on file in the Planning Department, located at 303 East B Street, Ontario, CA 91764, are available for inspection by any interested person at that location and are, by this reference, incorporated into this Decision as if fully set forth herein; and

WHEREAS, all members of the DAB of the City of Ontario were provided the opportunity to review and comment on the Application, and no comments were received opposing the proposed development; and

WHEREAS, the Project has been reviewed for consistency with the Housing Element of the Policy Plan component of The Ontario Plan, as State Housing Element law (as prescribed in Government Code Sections 65580 through 65589.8) requires that development projects must be consistent with the Housing Element, if upon consideration of all its aspects, it is found to further the purposes, principals, goals, and policies of the Housing Element; and

WHEREAS, the Project is located within the Airport Influence Area of Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and is subject to, and must be consistent with, the policies and criteria set forth in the Ontario International Airport Land Use Compatibility Plan

(hereinafter referred to as "ONT ALUCP"), which applies only to jurisdictions within San Bernardino County, and addresses the noise, safety, airspace protection, and overflight impacts of current and future airport activity; and

WHEREAS, the Project is located within the Chino Airport Overlay Zoning District (hereinafter referred to as "CNO OZD" and Reference I, Chino Airport Land Use Compatibility Plan (hereinafter referred to as CNO ALUCP) established in the City of Ontario Development Code. As the recommending body for the Subdivision, the DAB has considered and reviewed the facts and information contained in the Application and supporting documentation against the ONT ALUCP and CNO ALUCP compatibility factors, including safety, Airspace Protection, Overflight. As a result, the DAB therefore finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP and the CNO ALUCP.

WHEREAS, City of Ontario Development Code Division 2.03 (Public Hearings) prescribes the manner in which public notification shall be provided and hearing procedures to be followed, and all such notifications and procedures have been completed; and

WHEREAS, on November 18, 2024, the DAB of the City of Ontario conducted a hearing on the Application and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the adoption of this Decision have occurred.

PART 2: THE DECISION

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED AND DECIDED by the DAB of the City of Ontario as follows:

<u>SECTION 1</u>: **Environmental Determination and Findings.** As the recommending body for the Project, the DAB has reviewed and considered the information contained in the administrative record for the Project, including all written and oral evidence provided during the comment period. Based upon the facts and information contained in the administrative record, including all written and oral evidence presented to the DAB, the DAB finds as follows:

(1) The environmental impacts of the Project were reviewed in conjunction with an Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364), certified by the Ontario City Council on August 16, 2022, in conjunction with File No. PGPA20-002; and

- (2) The EIR Addendum and administrative record have been completed in compliance with CEQA, the State CEQA Guidelines, and the City of Ontario Local CEQA Guidelines; and
- (3) The City's "Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed. This Application introduces no new significant environmental impacts; and
- (4) All previously adopted mitigation measures shall be a condition of Project approval, as they are applicable to the Project, and are incorporated herein by this reference; and
- (5) The EIR Addendum contains a complete and accurate reporting of the environmental impacts associated with the Project, and reflects the independent judgment of the DAB; and
- (6) There is no substantial evidence in the administrative record supporting a fair argument that the Project may result in significant environmental impacts.
- <u>SECTION 2</u>: <u>Subsequent or Supplemental Environmental Review Not Required</u>. Based on the EIR Addendum, all related information presented to the DAB, and the specific findings set forth in Section 1, above, the DAB finds that the preparation of a subsequent or supplemental Certified EIR is not required for the Project, as the Project:
- (1) Does not constitute substantial changes to the Certified EIR that will require major revisions to the Certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and
- (2) Does not constitute substantial changes with respect to the circumstances under which the Certified EIR was prepared, that will require major revisions to the Certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of the previously identified significant effects; and
- (3) Does not contain new information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the Certified EIR was certified/adopted, that shows any of the following:
- (a) The Project will have one or more significant effects not discussed in the Certified EIR; or
- (b) Significant effects previously examined will be substantially more severe than shown in the Certified EIR; or

- (c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the City declined to adopt such measures; or
- (d) Mitigation measures or alternatives considerably different from those analyzed in the Certified EIR would substantially reduce one or more significant effects on the environment, but which the City declined to adopt.
- SECTION 3: **Development Advisory Board Action.** Based upon the findings and conclusions set forth in Sections 1 and 2, above, the DAB hereby recommends the Planning Commission finds that based upon the entire record of proceedings before it, and all information received, that there is no substantial evidence that the Project will constitute substantial changes to the Certified EIR, and does hereby approve the EIR Addendum, attached hereto as "Attachment A," and incorporated herein by this reference.
- SECTION 4: **Indemnification.** The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void, or annul this approval. The City of Ontario shall promptly notify the applicant of any such claim, action, or proceeding, and the City of Ontario shall cooperate fully in the defense.
- <u>SECTION 5</u>: **Custodian of Records.** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East "B" Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario. The records are available for inspection by any interested person, upon request.

<u>SECTION 6</u> :	Certification	to	Adoption.	The	Development	Advisory	Board
Chairman shall cert	tify to the adop	otior	n of the Dec	ision.			

APPROVED AND ADOPTED this 18th day	of November 2024.
	Development Advisory Board Chairman

ATTACHMENT A:

Addendum to The Ontario Plan 2050 Certified Supplemental Environmental Impact Report

(Document to follow this page)

The Avenue Specific Plan 2024 Amendment

Addendum to The Ontario Plan Certified EIR (SCH No. 2021070364)



Prepared for: City of Ontario 303 East B Street Ontario, CA 91764

Prepared by: Applied Planning, Inc. 11762 De Palma Road 1C-310 Corona, CA 92883

May 2024



1.0 INTRODUCTION

1.0 INTRODUCTION

1.1 OVERVIEW

The Avenue Specific Plan was approved by the City of Ontario (City) in 2007, with subsequent Specific Plan Amendments approved in 2010, 2014, 2017, and 2020. The current (2020) The Avenue Specific Plan (2020 Specific Plan, Original Project) encompasses approximately 568.1 gross acres located within the City of Ontario. The Original Project site (the Specific Plan Area) is bound by Schaefer Avenue to the north, Haven Avenue to the east, Ontario Ranch Road to the south, and Carpenter Avenue to the west. Location and boundaries of the Original Project are presented at Figures 1.1-1 and 1.1-2, respectively.

Subsequent to approval of the Original Project, the City of Ontario adopted and implemented The Ontario Plan 2050 (TOP 2050) and TOP 2050 Policy Plan (the City General Plan). The Original Project Land Use designations are inconsistent with TOP 2050 Policy Plan Land Use designations for the subject site. The proposed Avenue Specific Plan, 2024 Amendment (Modified Project) evaluated herein brings the Original Project Land Uses into conformance with TOP 2050 Policy Plan Land Use Plan. Land Use designations for the subject site under the Original Project, TOP 2050 Policy Plan, and the proposed Modified Project are compared at Figure 1.1-3.

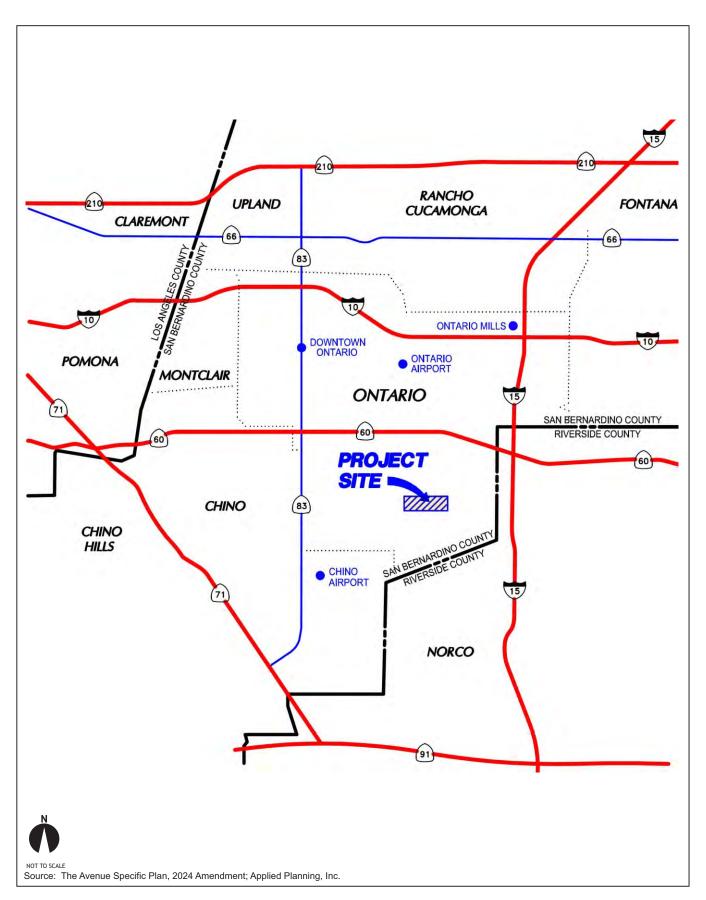




Figure 1.1-1 Regional Location





Source: Google Earth; Applied Planning, Inc.

---- Specific Plan Boundary



Figure 1.1-2 Location - Aerial View

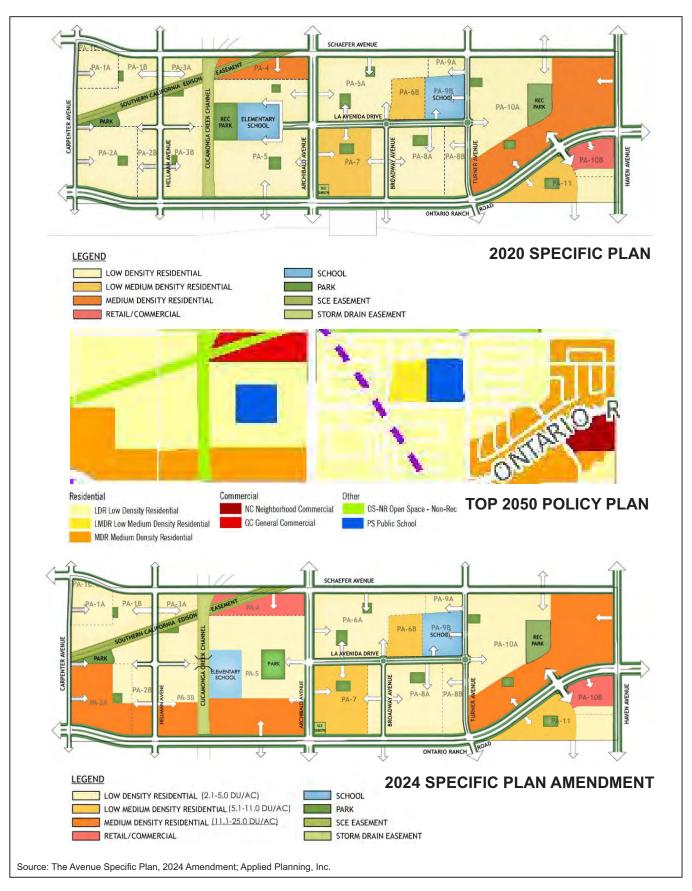




Figure 1.1-3 Land Use Plan Comparison

The Modified Project land uses and development concepts have been designed to be consistent with land uses and development concepts for the subject site reflected in TOP 2050. Impacts of TOP 2050 have been evaluated and addressed in *The Ontario Plan 2050 Certified SEIR* (TOP 2050 SEIR, Certified SEIR, SCH No. 2021070364). This Addendum compares and contrasts impacts of the Modified Project with impacts identified in the Certified SEIR. As substantiated herein, the Modified Project would not result in substantially different or substantially increased impacts when compared to impacts considered and addressed in the Certified SEIR.

This Addendum to the Certified SEIR substantiates that the proposed Modified Project evaluated herein would not result in any new significant impacts not considered and addressed in the Certified SEIR; nor would there be any substantial increase in the severity of, or substantial change in any previously-identified environmental impacts considered and addressed in the Certified SEIR.

1.1.2 Original Project and Modified Project Development Concepts Compared

The primary effect of the proposed Modified Project would be to increase the intensity, and total amount, of residential and commercial/retail development within the Specific Plan Area. More specifically:

- Under the Original Project, maximum residential development would total 2,981 dwelling units (all types). Under the Modified Project, maximum residential development would total 3,753 dwelling units¹ (all types), an increase of 772 dwelling units or approximately 26 percent.
- Under the Original Project, maximum commercial development would total 130,680 square feet (all types). Under the Modified Project, maximum commercial

The Avenue Specific Plan, 2024 Amendment Addendum to The Ontario Plan Certified SEIR (SCH No. 2021070364)

¹ There is the potential for the 10.89-acre school site portion of Planning Area 5 to transition to residential uses, should the school district determine that this site is not needed for school development. If this is the case, these 10.89 acres would be developed with up to 50 residential units, bringing the total Specific Plan residential unit count to 3,803.

development would total 335,176 square feet (all types), an increase of 204,496 square feet or approximately 156 percent.²

It is noted here that the proposed Modified Project land use revisions and resulting residential and commercial development would affect only those portions of the Specific Plan Area located west of Archibald Avenue. East of Archibald Avenue, properties within the Specific Plan Area are fully developed or are currently under development.

Within this Addendum, the Modified Project is assumed to be completed and fully occupied by 2025 – the Modified Project Opening Year. This Addendum in all instances evaluates likely maximum impact scenarios. Should future development proposed within the Modified Project area differ substantially from the development concept analyzed herein, the Lead Agency would comply with CEQA in consideration of those proposals. Ultimate scope and configuration of the Modified Project uses would be as approved by the City.

1.2 CALIFORNIA ENVIRONMENTAL QUALITY ACT DOCUMENTATION

California Environmental Quality Act (CEQA) documentation for the Original Project is presented in *The Ontario Plan 2050* [TOP 2050] *Supplemental Environmental Impact Report,* State Clearinghouse No. 2021070364 (TOP 2050 SEIR, Certified SEIR). This Addendum to the Certified SEIR (Addendum) compares the impacts that were identified in the Certified SEIR with the anticipated impacts of the proposed Modified Project. This Addendum substantiates that the proposed Modified Project would not result in new significant impacts, substantially different impacts, or impacts that would be substantially more severe than those evaluated and addressed in the Certified SEIR.

1.3 ADDENDUM PURPOSE AND SUMMARY

The focus and purpose of this document is to determine if the Modified Project described herein would result in new or substantially different environmental impacts than those considered and addressed in the Certified SEIR. To these ends, this Addendum defines,

² For the purposes of analysis, all commercial uses are assumed to be operational 24 hours per day, 7 days per week.

describes, compares, and contrasts potential environmental impacts of the Modified Project in the context of the environmental impacts assessed in the Certified SEIR. In so doing, this Addendum substantiates consistency with applicable California Environmental Quality Act Guidelines (*CEQA Guidelines*) provisions addressing preparation of an Addendum to a previously-Certified EIR.

As presented at *CEQA Guidelines* Section 15164, an Addendum to a Certified EIR may be prepared if only minor technical changes or additions are necessary and none of the conditions described in Section 15162, calling for the preparation of a subsequent or supplemental EIR, have occurred. Further, Public Resources Code Section 21166 prohibits preparation of a subsequent or supplemental EIR for a Certified EIR unless substantial project changes are proposed requiring major revisions to the Certified EIR; a substantial change in circumstances has occurred requiring major revisions to the Certified EIR; or new information becomes available requiring major revisions to the Certified EIR. As supported by the information provided here, none of these conditions apply to the Modified Project. This Addendum to the Certified SEIR fulfills CEQA documentation requirements for the Modified Project.

1.4 INTENDED USE OF THIS ADDENDUM

The City of Ontario (City) is the Lead Agency for the purposes of CEQA because it has the principal responsibility and authority for consideration of discretionary actions and permitting for the Modified Project. As the Lead Agency, the City is also responsible for analyzing the Modified Project's potential environmental impacts.

The Lead Agency will employ this Addendum in its evaluation of potential environmental impacts resulting from, or associated with, approval and implementation of the Modified Project. This Addendum may also be used by various Responsible Agencies, e.g., Air Quality Management District(s), Regional Water Quality Control Board(s), et al.; as well as utilities and service providers when such entities issue discretionary permits necessary to carry out the Modified Project.

For example, if the Modified Project would require discretionary permits from the South Coast Air Quality Management District (SCAQMD), this Addendum would serve as the environmental assessment for such permits (please refer to California Code of Regulations, Section 15050).

This Addendum in all instances evaluates likely maximum impact scenarios. Should future development proposals within the Modified Project area differ substantially from the development concepts analyzed herein, the Lead Agency would comply with CEQA in consideration of those proposals. Ultimate scope and configuration of the Modified Project uses would be as approved by the City through the City development review processes.

1.5 DOCUMENT ORGANIZATION

This Addendum is presented in five sections, as follows:

- **Section 1.0**, *Introduction*, provides an overview of the Modified Project, its context, and environmental documentation applicable to the proposed development.
- **Section 2.0**, *Modified Project Description*, presents the proposed Modified Project in greater detail.
- **Section 3.0**, *Environmental Checklist*, presents the analysis of potential environmental impacts of the Modified Project. The analysis considers potential environmental impacts of the Modified Project relative to impacts identified in the Certified SEIR.
- **Section 4.0**, *Determination*, presents the determination regarding the appropriate environmental document for the Modified Project.
- **Section 5.0**, *Mitigation Summary*, summarizes mitigation from the Certified SEIR, and presents any newly required mitigation or modified mitigation.

1.6 CONCLUSION

This Addendum substantiates that implementation and operation of the proposed Modified Project described and evaluated herein would not result in any significant new, different, additional, or substantially increased environmental impacts than were previously considered and addressed in the Certified SEIR.

2.0 MODIFIED PROJECT - DESCRIPTION

2.0 MODIFIED PROJECT - DESCRIPTION

2.1 OVERVIEW

2.1.1 Original Project, Modified Project, and TOP 2050

The Avenue Specific Plan was approved by the City of Ontario (City) in 2007, with subsequent Specific Plan Amendments approved in 2010, 2014, 2017, and 2020. The current (2020) The Avenue Specific Plan (2020 Specific Plan, Original Project) encompasses approximately 568.1 gross acres located within the City of Ontario. The Original Project site (the Specific Plan Area) is bound by Schaefer Avenue to the north, Haven Avenue to the east, Ontario Ranch Road to the south, and Carpenter Avenue to the west. Location and boundaries of the Project are presented at Figures 2.1-1 and 2.1-2, respectively.

Subsequent to approval of the Original Project, the City of Ontario adopted and implemented The Ontario Plan 2050 (TOP 2050) and TOP 2050 Policy Plan (the City General Plan). The Original Project Land Use designations are inconsistent with TOP 2050 Policy Plan Land Use designations for the subject site. The proposed Modified Project evaluated herein brings the Original Project Land Uses into conformance with TOP 2050 Policy Plan Land Use Plan. Land Use designations for the subject site under the Original Project, TOP 2050 Policy Plan, and the proposed Modified Project are compared at Figure 2.1-3.

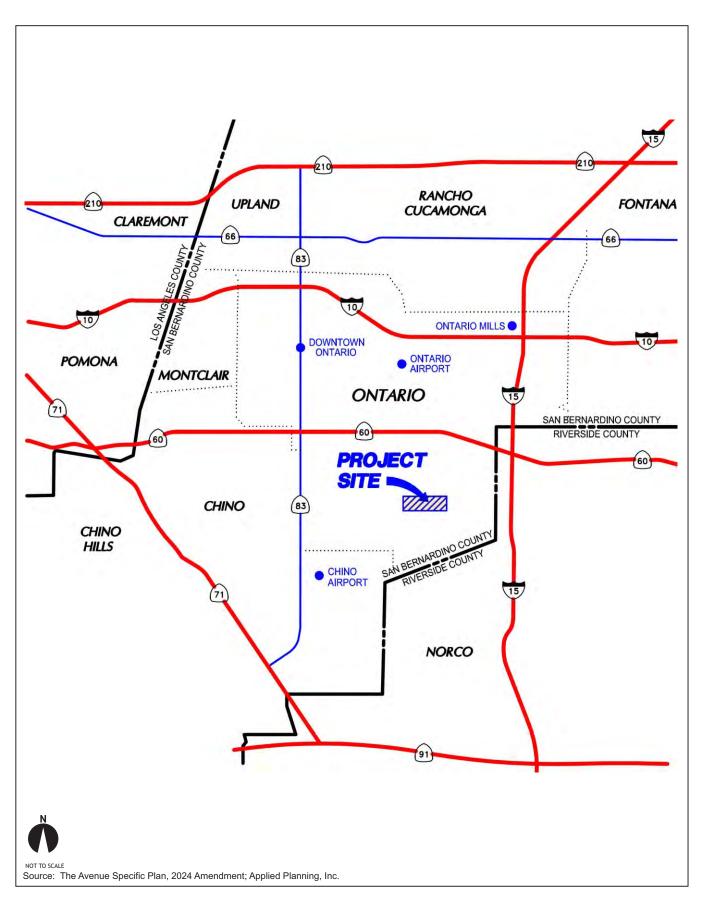




Figure 2.1-1 Regional Location





Source: Google Earth; Applied Planning, Inc.

---- Specific Plan Boundary



Figure 2.1-2 Location - Aerial View

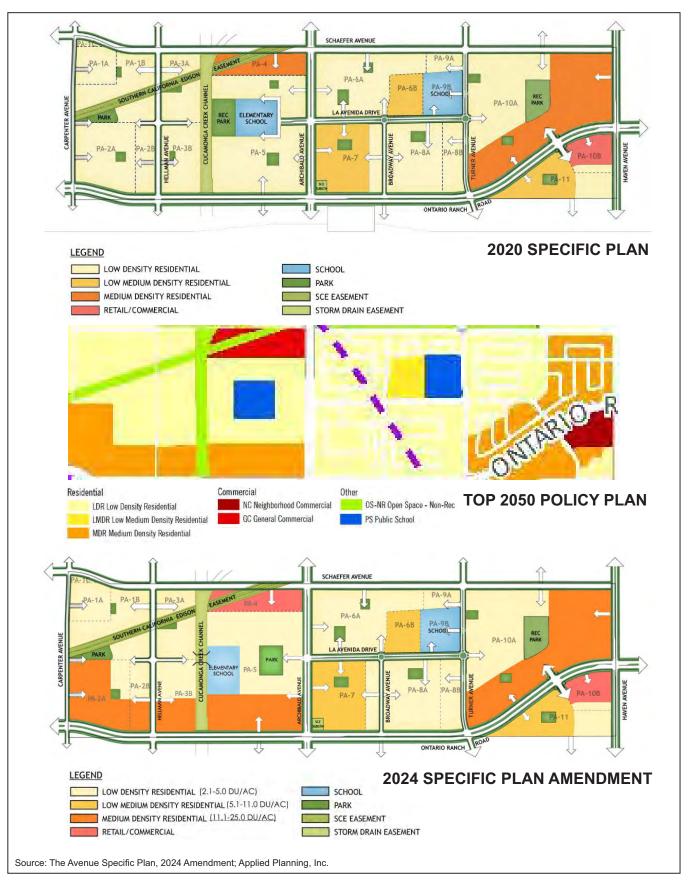




Figure 2.1-3 Land Use Plan Comparison

2.1.2 Original Project and Modified Project Development Concepts Compared

A comparison of the Original Project and Modified Project development concepts is presented at subsequent Table 2.1-1. As indicated at Table 2.1-1, the primary effect of the proposed Modified Project would be to increase the intensity, and total amount, of residential and commercial/retail development within the Specific Plan Area. More specifically:

- Under the Original Project, maximum residential development would total 2,981 dwelling units (all types). Under the Modified Project, maximum residential development would total 3,753 dwelling units (all types), an increase of 772 dwelling units or approximately 26 percent.
- Under the Original Project, maximum commercial development would total 130,680 square feet (all types). Under the Modified Project, maximum commercial development would total 335,176 square feet (all types), an increase of 204,496 square feet or approximately 156 percent.²

It is noted here that the proposed Modified Project land use revisions and resulting residential and commercial development would affect only those portions of the Specific Plan Area located west of Archibald Avenue. East of Archibald Avenue, properties within the Specific Plan Area are fully developed or are currently under development.

2.1.3 Opening Year

For the purposes of this analysis, buildout of the Modified Project is assumed to be completed and fully occupied by 2026 – the Modified Project Opening Year.

¹ There is the potential for the 10.89-acre school site portion of Planning Area 5 to transition to residential uses, should the school district determine that this site is not needed for school development. If this is the case, these 10.89 acres would be developed with up to 50 residential units, bringing the total Specific Plan residential unit count to 3,803.

² For the purposes of analysis, all commercial uses are assumed to be operational 24 hours per day, 7 days per week.

2.1.4 TOP 2050 SEIR as Basis for Addendum Analysis

The Modified Project land uses and development concepts have been designed to be consistent with land uses and development concepts for the subject site reflected in TOP 2050. Impacts of TOP 2050 have been evaluated and addressed in *The Ontario Plan 2050 Certified SEIR* (TOP 2050 SEIR, Certified SEIR, SCH No. 2021070364). By extension, impacts of The Avenue Specific Plan as amended under the Modified Project would be consistent with impacts considered and addressed in TOP 2050 SEIR. As substantiated herein, development of The Avenue Specific Plan as amended under the Modified Project would not result in substantially different or substantially increased impacts when compared to impacts considered addressed in TOP 2050 SEIR. This analysis of potential environmental impacts of The Avenue Specific Plan, 2024 Amendment appropriately comprises an Addendum to TOP 2050 SEIR.

This Addendum in all instances evaluates likely maximum impact scenarios. Should future development proposals within the Modified Project area differ substantially from the development concepts analyzed herein, the Lead Agency would comply with CEQA in consideration of those proposals. Ultimate scope and configuration of the Modified Project uses would be as approved by the City through the City development review processes.

Table 2.1-1 Comparison of Original Project and Modified Project Development Concepts (Revisions are Indicated in *Bold Red Italics*)

Plannir Desigi		Gro Acı			let cres	Dwelli	ng Units	Den	Density		Density		Density		Density		Commercial Square Footage		Land Use	
Original Project	Modified Project	Original Project	Modified Project																	
1A	1A	11.1	11.1	11.1	9.2	51	41	4.6	4.5			LDR	LDR							
1B	1B	33.5	33.5	33.5	24.54	127	110	4.5	4.5			LDR	LDR							
10	10	2.2			5.4			2.0	2.2			1.00	SCE Easement							
1C	1C	2.2	2.2	2.2	2.2	5	5	2.3	2.3			LDR	LDR							
2A	2A	32.0	32.0	32.0	5.00	147	23	4.6	4.5			LDR	LDR							
ZA	ZA	32.0	32.0	32.0	25.06	14/	551	4.0	22.0			LDK	MDR							
O.D.	ap.	10.5	10.5	10.5	6.64	FO	30	4.6	4.5 22.0			LDR	LDR							
2B	2B	12.5	12.5	12.5	5.43	58	119	4.6					MDR							
2.4	2.4	04.5	24.5	24.5	19.15	0.6	86	4.5	4.5			LDR	LDR							
3A	3A	21.7	21.7	21.7	2.60	86							SCE Easement							
ap.	ap.	21.5	21.5	21.5	12.22	0.17	55	4.5	4.5			LDR	LDR							
3B	3B	21.5	21.5	21.5	8.59	97	189	4.5	22.0				MDR							
4	4	19.9	19.9	19.9	15.04	218	0	11		0	204,496	LDR	Retail							
4	4	19.9	19.9	19.9	4.00	216	U	11	0	U		LDK	SCE Easement							
					46.85		211		4.5				LDR							
5*	5	82.6	82.6	72.6	22.54	334	496	4.6	22.0			LDR/OS/ Elem. Sch.	MDR							
					10.89								Elem. Sch.							
6A	6A	49.9	49.9	49.9	49.90	230	229	4.6	4.6			LDR	LDR							
6B	6B	10.0	10.0	10.0	10.00	106	110	10.6	11.0			LMDR	LMDR							
7	7	28.9	28.9	28.9	28.90	287	265	9.5	9.2			LMDR	LMDR							

Table 2.1-1 Comparison of Original Project and Modified Project Development Concepts (Revisions are Indicated in *Bold Red Italics*)

Planning Area Designation		Gross Acres		Net Acres		Dwelling Units		Density		Commercial Square Footage		Land Use	
		1.2	1.2	1.2	1.20							SCE Substation	SCE Substation
8A	8A	39.9	39.9	39.9	39.90	180	176	4.5	4.4			LDR	LDR
8B	8B	9.7	9.7	9.7	9.70	44	44	4.5	4.5			LDR	LDR
9A	9A	10.6	10.6	10.6	10.60	20	20	2.0	1.9			LDR	LDR
9B	9B	10.0	10.0	10.00	10.00	0	0					School	School
10.4	10.4	1147	114.7	114.7	100.40	766	452	(7	4.5			LDR/MDR	LDR
10A	10A	114.7			14.30		314	6.7	22.0				MDR
10B	10B	10.0	10.0	10.0	10.00	0	0			130,680	130,680	Retail	Retail
11	11	22.4	14.73	22.4	14.73	225	67		4.5			I DD A CD	LDR
11	11	33.4	18.67	33.4	18.67	225	160	6.7	8.6			LDR/MDR	LMDR
Cucamor	nga Creek	12.8	12.8	12.8	12.8	0	0					Non- Recreational Open Space	Non- Recreational Open Space
Tot	als	568.1	568.1	558.1	556.44	2,981	3,753	Not Quantified	6.7	130,680	335,176		

Sources: The Avenue Specific Plan, 2024 Amendment; City of Ontario Planning Department.

Notes: * There is the potential for the 10.89-acre school site portion of Planning Area 5 to transition to residential uses, should the school district determine that this site is not needed for school development. If this is the case, these 10.89 acres would be developed with up to 50 residential units, bringing the total Specific Plan residential unit count to 3,803.

2.2 Existing Conditions

2.2.1 Existing Land Uses and Land Use Designations

Existing land uses and land use designations for the Modified Project site and adjacent properties are summarized at Table 2.2-1. Existing land uses are illustrated at Figure 2.2-1. Existing Policy Plan Land Use and Zoning designations are illustrated at Figures 2.2-2 and 2.2-3, respectively.

Table 2.2-1
Existing Land Uses and Land Use Designations

	Existing Land Use	Policy Plan Designation(s)	Zoning Designation
Modified Project Site	East of Archibald Avenue: Developed/developing Specific Plan residential uses. West of Archibald Avenue: Agricultural and dairy farming uses; vacant disturbed property. Additionally, this area is traversed by the Cucamonga Creek flood channel (N – S alignment) and a Southern California Edison (SCE) easement (NE – SW alignment).	Low Density Residential, Low Medium Density Residential, Medium Density Residential, Public School, Commercial, Open Space-Parkland, Open Space: Non-Recreation	The Avenue Specific Plan (November 2020)
North	East of Archibald Avenue: Developed/developing Specific Plan residential uses. West of Archibald Avenue: Stormwater detention/groundwater recharge basins; Industrial uses; Cucamonga Creek flood channel (N – S alignment), Deer Creek flood control channel (NE – SW).	Low Density Residential, Open Space: Non-Recreation	West Haven Specific Plan, Countryside Specific Plan
East	Residential uses (existing and under construction); vacant/disturbed properties.	Mixed-Use	Rich Haven Specific Plan
South	Residential uses (existing and under construction); vacant/disturbed properties.	Low Density Residential, Medium Density Residential, Public School, Open Space: Non-Recreation	Parkside Specific Plan, Grand Park Specific Plan
West	Agricultural, dairy farming, and vacant disturbed properties.	Low Density Residential, Medium Density Residential, Open Space: Non-Recreation	Specific Plan with Agricultural and Affordable Housing Overlays

Sources: The Avenue Specific Plan (2024), TOP 2050 Policy Plan, City of Ontario Zoning Map.

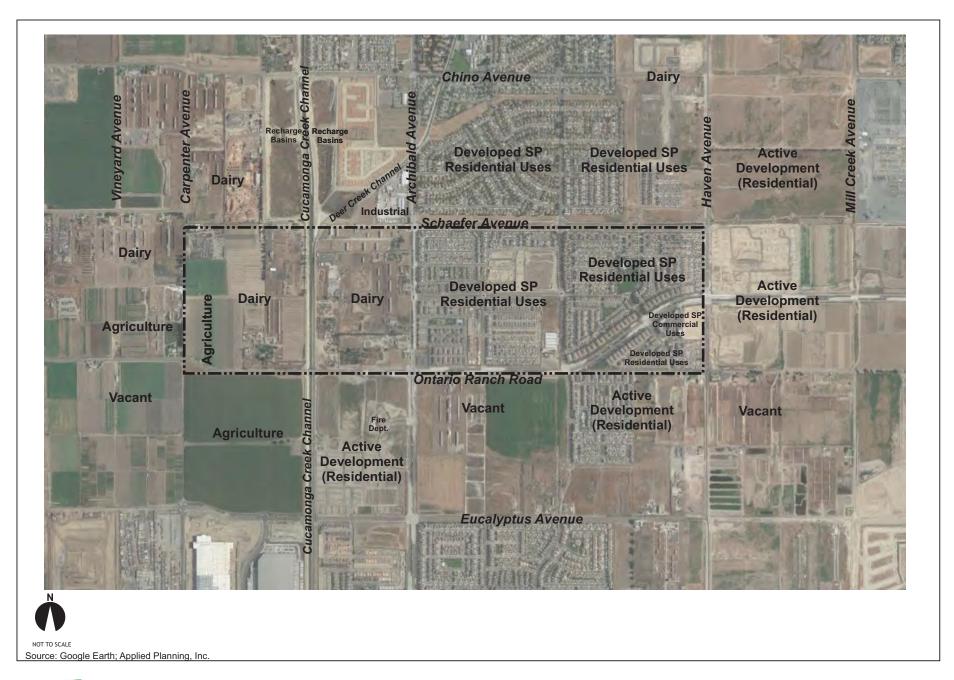




Figure 2.2-1 Existing Land Uses

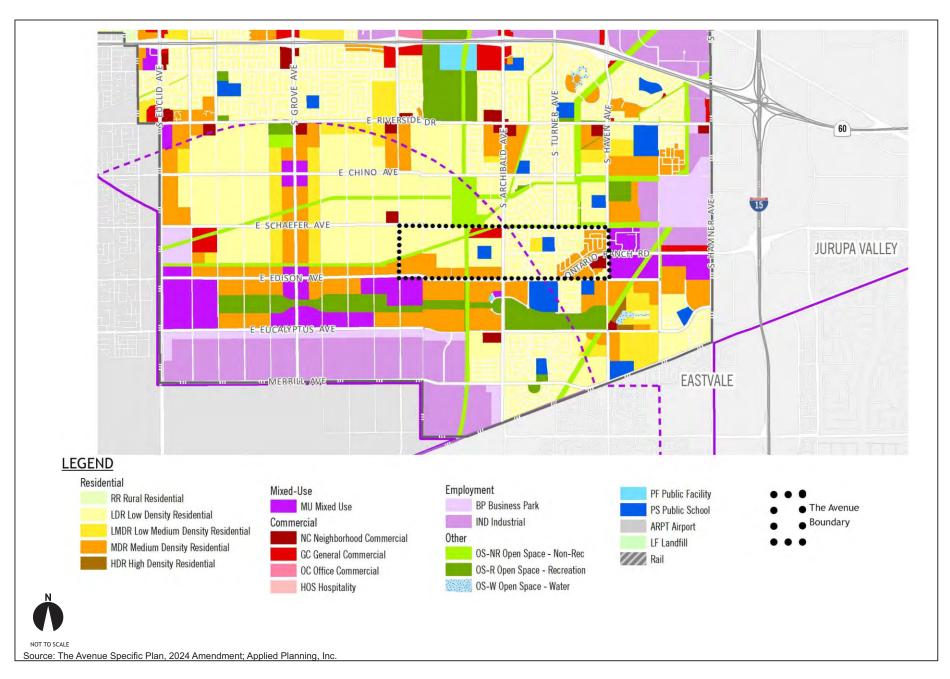




Figure 2.2-2 Existing Policy Plan Land Use Designations

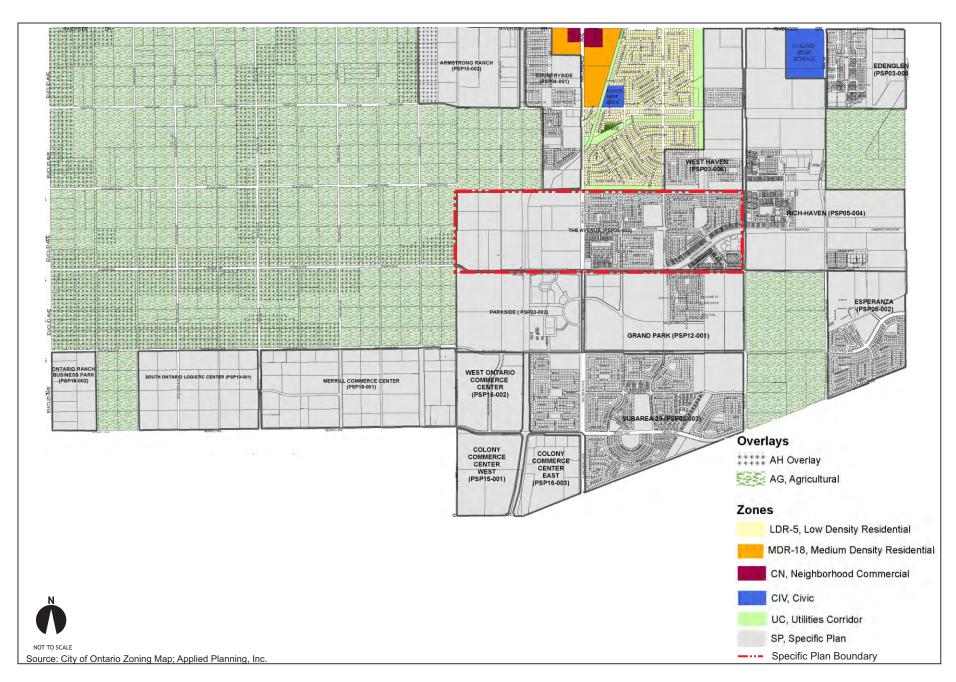




Figure 2.2-3 Existing Zoning Designations

2.3 DEVELOPMENT CONCEPT

Development implemented under the Modified Project would be required to conform to provisions of The Avenue Specific Plan, 2024 Amendment document (2024 SPA). The 2024 SPA is provided at Appendix A of this Addendum. In instances where the 2024 SPA is silent, development proposals would be required to conform to applicable provisions of the City Development Code.

2.3.1 Site Design/Architectural Concepts

The Modified Project considered herein would implement residential, commercial/retail parks/open space, and public school uses. All Modified Project development proposals would be required to conform to requirements and implement guidance articulated at 2024 SPA Section 5, *Development Regulations*; and Section 6, *Design Guidelines*. All Modified Project final site plans and building designs would be subject to City review and approval, to include consistency analysis with applicable provisions of the 2024 SPA.

2.3.2 Access and Circulation

2.3.2.1 Area Roadways and Site Access

Regional access to the City and the Modified Project area is provided by State Route 60 (E – W) and Interstate 15 (N – S). State Route 60 (SR-60) interchanges with Interstate 15 (I-15) approximately 2.0 miles northeast of the Modified Project site. The Modified Project site is bounded by Schaefer Avenue to the north, Haven Avenue to the east, Ontario Ranch Road to the south, and Carpenter Avenue (alignment) to the west. Archibald Avenue traverses the western portion of the site along a north – south alignment.

Access within the Modified Project site would be provided by internal roads connecting the various land uses. Roadways providing access to and within the Modified Project would be constructed pursuant to the 2024 SPA specifications and consistent with City Conditions of Approval. The Modified Project Access and Circulation Concept is presented at Figure 2.3-1. For illustrative purposes, the Original Project and Modified Project Access and Circulation Concepts are compared at Figure 2.3-2. Please refer also to 2024 SPA Section 4.1, *Master Plan of Circulation*.

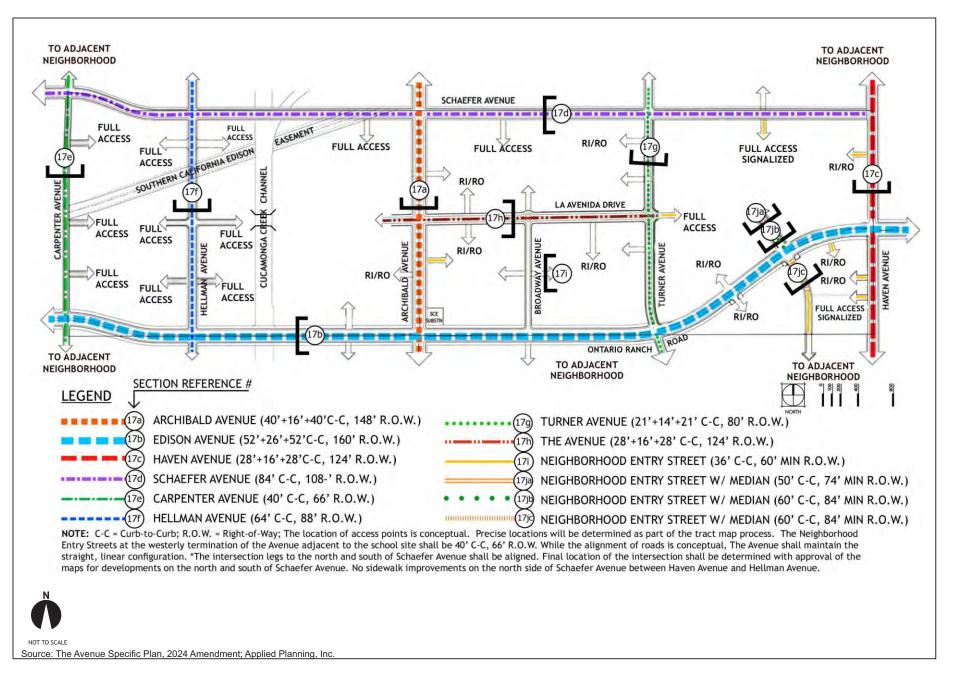




Figure 2.3-1 Circulation Plan

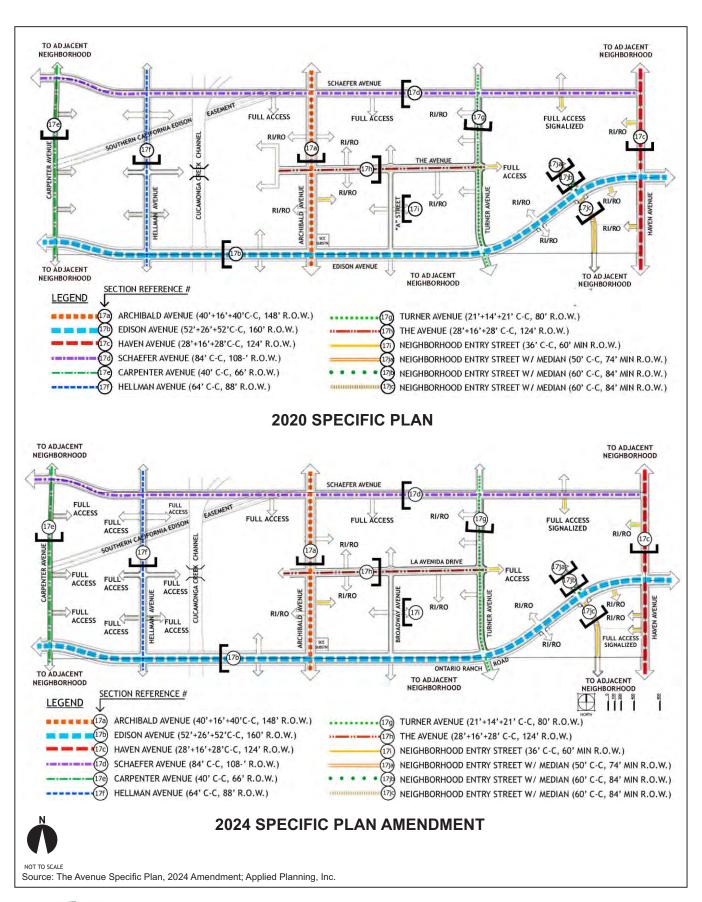




Figure 2.3-2 Circulation Plan Comparison

2.3.2.2 Alternative Transportation Modes

Bicycle and Pedestrian Access

The Modified Project would construct multipurpose trail improvements consistent with improvements proposed under the City of Ontario Multipurpose Trails and Bikeway Corridor Plan (Multipurpose Trails Plan). The Modified Project improvements would connect with the encompassing Multipurpose Trails Plan system.

Within the Modified Project site, enhanced pedestrian sidewalks would provide internal connection between land uses. Additionally, streets would be constructed with sidewalks, facilitating pedestrian access and inter-connectivity between land uses. Trails and pedestrian access improvements that would be constructed by the Modified Project are illustrated at Figure 2.3-3. For illustrative purposes, the Original Project and Modified Project Multipurpose Trails and Pedestrian Access Plans are compared at Figure 2.3-4. Please refer also to 2024 SPA Section 4.1, *Pedestrian/Bicycle Trails Connectivity*.

Bus Service

Bus service is available to the City via Omnitrans and the Riverside Transit Authority (RTA). Bus routes currently do not provide proximate service (within one-quarter mile) of the Modified Project site.

Transit service providers periodically review and update schedules and routes to address ridership, budget, and community demands. The Applicant and City would coordinate Project final designs with Omnitrans and RTA to evaluate the potential for provision of bus services and bus amenities serving the Modified Project site. Omnitrans bus routes and schedules can be accessed at: https://omnitrans.org/plan-a-trip/routes-schedules. RTA bus routes and schedules can be accessed at: https://www.riversidetransit.com/index.php/riding-the-bus/maps-schedules.

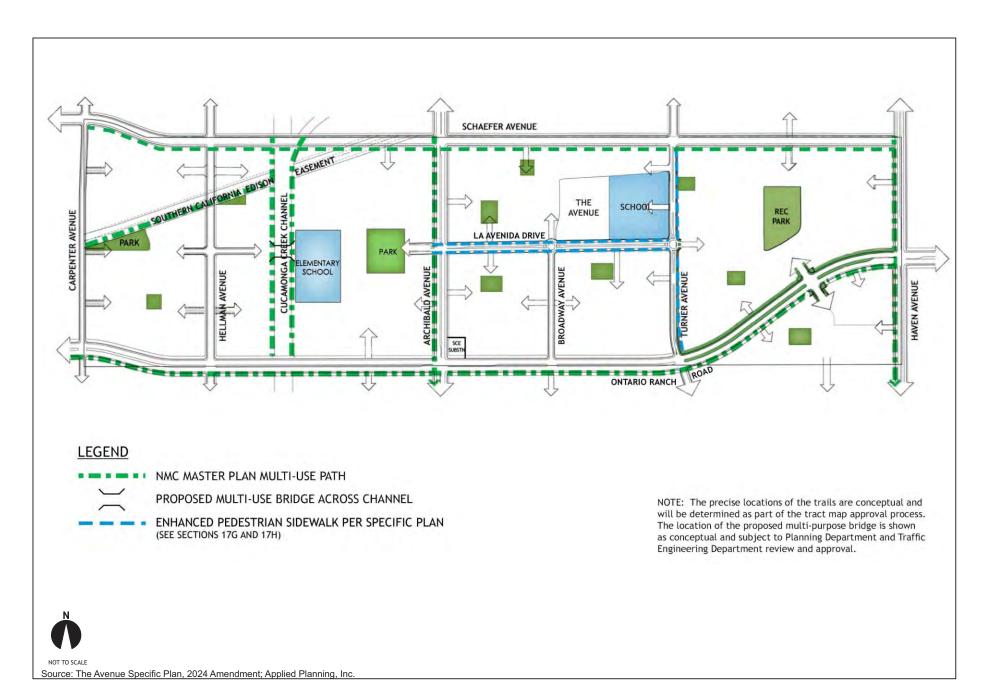




Figure 2.3-3 Trail Master Plan

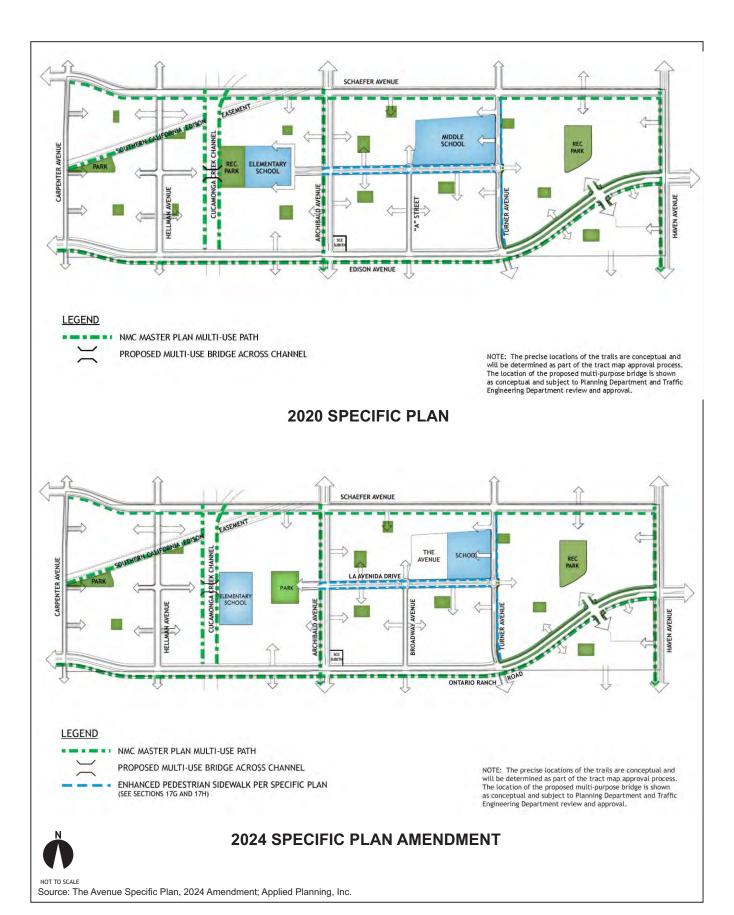




Figure 2.3-4 Trail Master Plan Comparison

2.3.3 Parking

The Modified Project would be required to adhere to parking requirements established under the 2024 SPA and the City of Ontario Development Code. Parking assignments and design of parking areas within the site would be subject to City review and approval.

2.3.4 Landscape/Streetscape

All landscaping/streetscaping implemented under the Modified Project would be required to comply with applicable provisions of the 2024 SPA and the City Municipal Code. Landscape and streetscape elements would provide shade and visual interest, define entry/access points, and accentuate site and architectural features. Please refer also to 2024 SPA Section 6.6, Landscape Design Guidelines.

2.3.5 Infrastructure/Utilities

2.3.5.1 Water Service

Potable (Domestic) Water

Potable water would be provided by the Ontario Municipal Utilities Company (OMUC). The Modified Project would be served by existing and planned OMUC Master Planned domestic water system facilities.

Within the Modified Project site, water service would be provided by a system of 8-inch to 12-inch water mains constructed within the backbone roadway system. The on-site public water system sizing would be required to comply with provisions of a Cityapproved hydraulic analysis to be conducted at the project-level design stage. The hydraulic analysis would be required to demonstrate that the proposed water system would meet peak demands including maximum day plus fire demand and peak hour demand.

The Modified Project Domestic Water Plan Concept is illustrated at Figure 2.3-5. For illustrative purposes, the Original Project and Modified Project Domestic Water Plan Concepts are compared at Figure 2.3-6. Please refer also to 2024 SPA Section 4.2.1, *Water*.

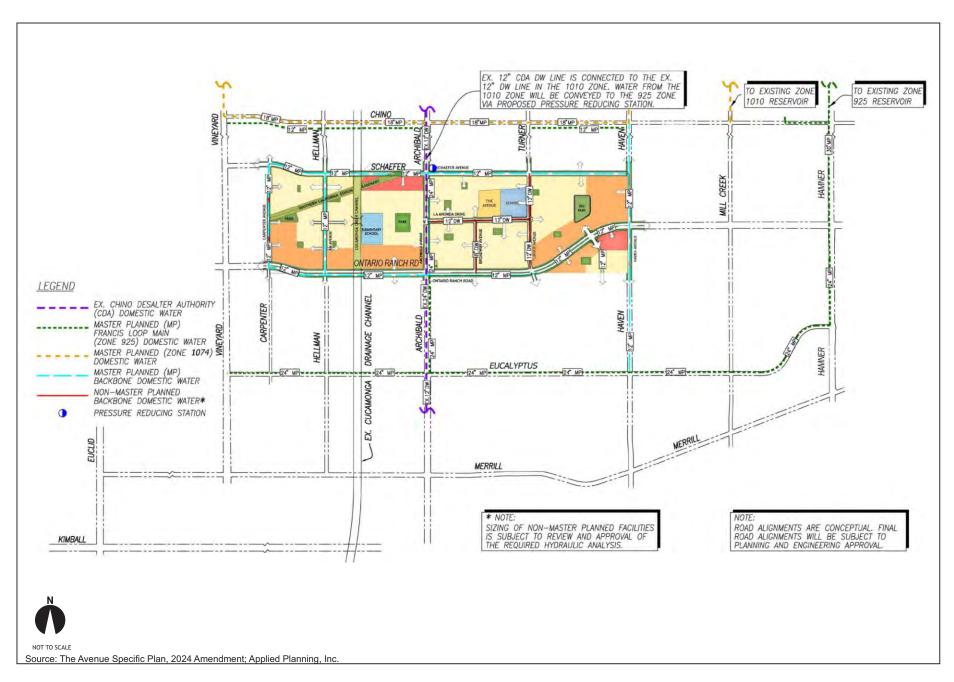




Figure 2.3-5 Domestic Water Master Plan

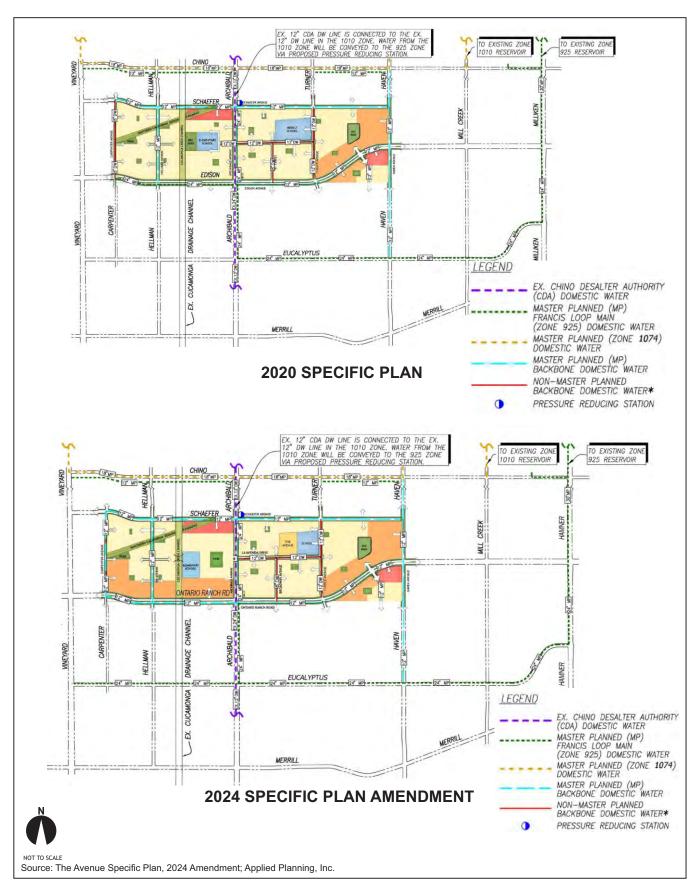




Figure 2.3-6 Domestic Water Master Plan Comparison

Recycled Water

Recycled water would be provided to the Modified Project by the Inland Empire Utility Agency (IEUA). The Modified Project would be required to comply with applicable provisions of City Municipal Code Chapter 8c: *Recycled Water Use*.³ Recycled water would be used for all approved applications including, but not limited to, irrigation of parks, schools, street landscaping, recreational trails, HOA-maintained common areas, and landscaping. An engineering report approved by the City and the California Department of Public Health is required prior to the use of recycled water.

All recycled water improvements implemented to serve the Modified Project would be required to conform to the incumbent City Recycled Water Master Plan. Within the Modified Project site, the backbone recycled water system would comprise 8-inch lines and would be located in the backbone street system. In-tract recycled water system design would be provided at the time of subdivision.

The Modified Project Recycled Water Plan Concept is illustrated at Figure 2.3-7. For illustrative purposes, the Original Project and Modified Project Recycled Water Plan Concepts are compared at Figure 2.3-8. Please refer also to 2024 SPA Section 4.2.2, *Recycled Water*.

³ See also: https://codelibrary.amlegal.com/codes/ontarioca/latest/ontario_ca/0-0-0-44580#JD_6-8.714

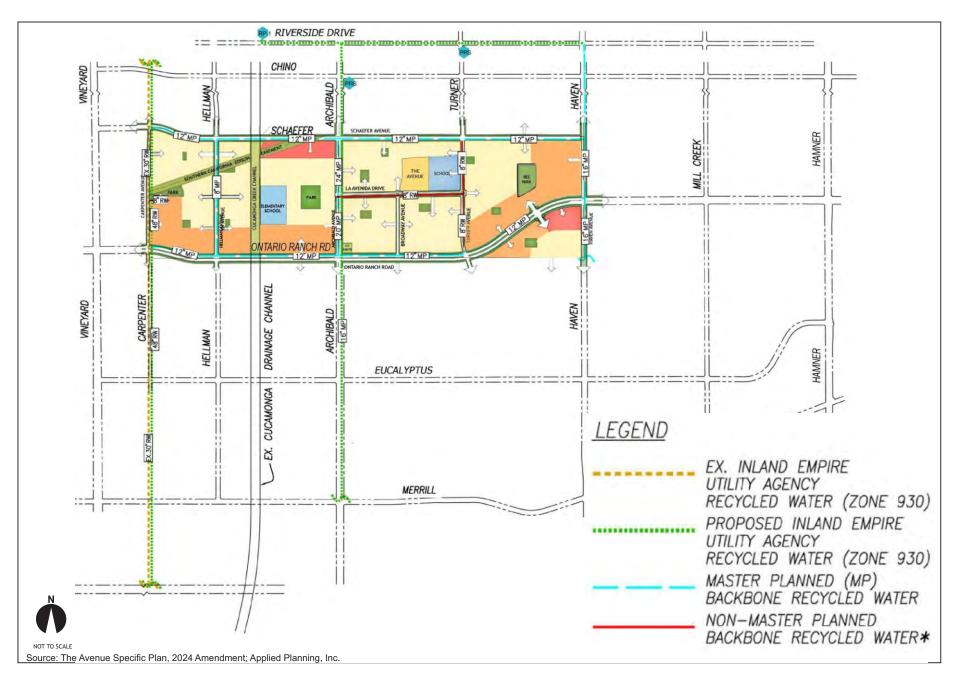




Figure 2.3-7 Recycled Water Master Plan





Figure 2.3-8 Recycled Water Master Plan Comparison

2.3.5.2 Sewer Services

Sewer service to the Modified Project would be provided by the City of Ontario. All Master Plan sewer improvements implemented to serve the Modified Project would be required to conform to the incumbent City Sewer System Master Plan.

Within the Modified Project site, wastewater conveyance would be provided by a system of 10-inch to 12-inch sewer mains constructed within the backbone roadway system. Connecting service lines (minimum 8-inch) would be provided to individual developments. The on-site public sewer system sizing would be required to comply with provisions of a City-approved hydraulic analysis to be conducted at the project-level design stage. In-tract sewer system design would be provided at the time of subdivision. Final designs of sewer systems serving the Modified Project site would be required to conform to City and OMUC requirements. The Modified Project Sewer Plan Concept is presented at Figure 2.3-9. For illustrative purposes, the Original Project and Modified Project Sewer Plan Concepts are compared at Figure 2.3-10. Please refer also to 2024 SPA Section 4.2.3, Sewer.

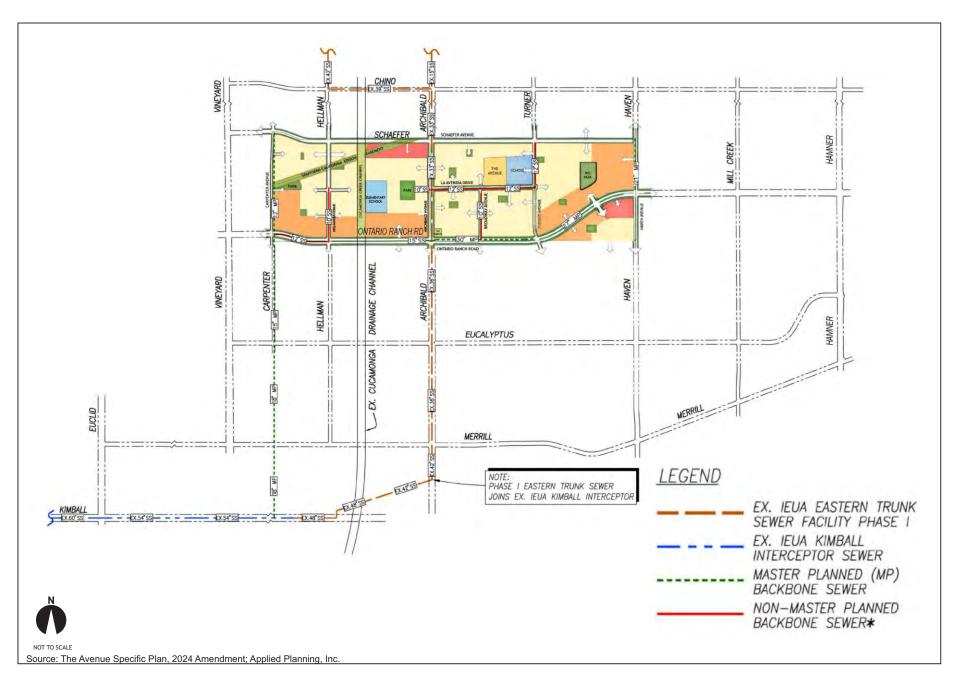




Figure 2.3-9 Sewer Master Plan





Figure 2.3-10 Sewer Master Plan Comparison

2.3.5.3 Stormwater Management System

Storm Drains

Multiple City Master Plan of Drainage storm drain facilities would serve the Modified Project site. All Master Plan stormwater management system improvements implemented to serve the Modified Project would be required to conform to the incumbent City Master Plan of Drainage.

Under post-development conditions, existing southerly trending on-site drainage patterns would be maintained. Within the Modified Project site, minimum 18-inch storm drain laterals would be constructed to convey stormwater runoff from developed areas to the Master Plan storm drain system. In-tract storm drain system designs would be provided at the time of subdivision. Final designs of stormwater management systems serving the Modified Project would be required to conform to City requirements. The Modified Project Stormwater Management System Concept is presented at Figure 2.3-11. For illustrative purposes, the Original Project and Modified Project Storm Drain System Concepts are compared at Figure 2.3-12. Please refer also to 2024 SPA Section 4.2.4, *Drainage*.

Water Quality Management Plan

The Modified Project would implement on-site stormwater management systems to detain and treat stormwater discharges. Stormwater discharges from the Modified Project would be required to comply with requirements and performance standards established under the incumbent San Bernardino County National Pollutant Discharge Elimination System (NPDES) Stormwater Program MS4 Permit and Water Quality Management Plan (WQMP). To these ends, developments within the Modified Project site would implement Low Impact Development (LID) Site Design Best Management Practices (BMPs) to reduce pollutant transport and increase on-site stormwater infiltration. Additionally, all Priority Land Use (PLU) areas within the Modified Project site would be required to comply with the statewide Trash Provisions adopted by the State Water Resources Control Board (SWRCB) and trash requirements in the most current San Bernardino County Area-Wide MS4 Permit.

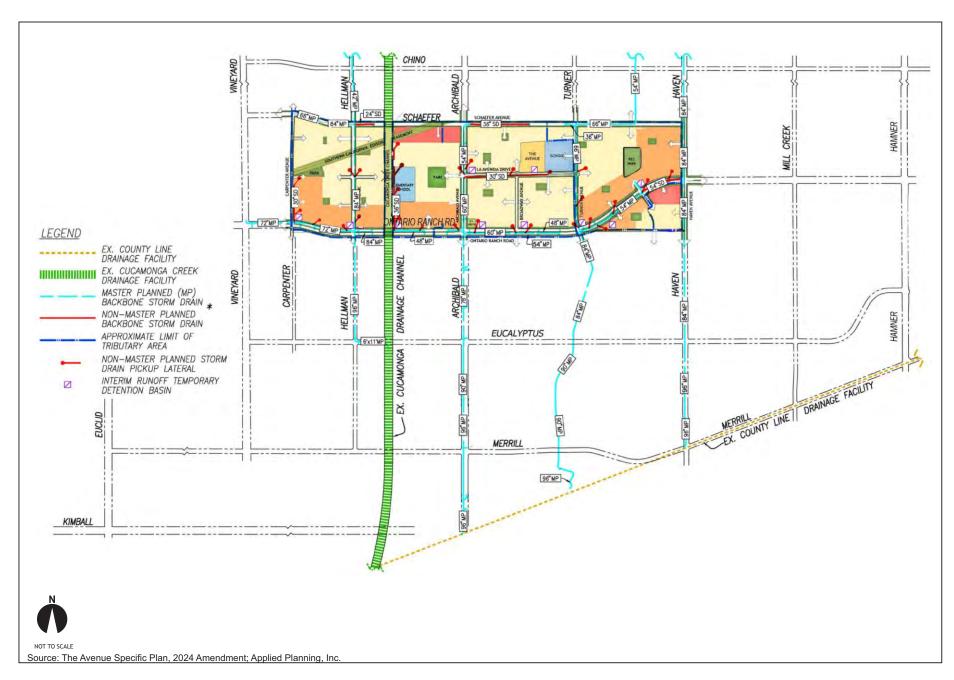




Figure 2.3-11 Storm Drain Master Plan

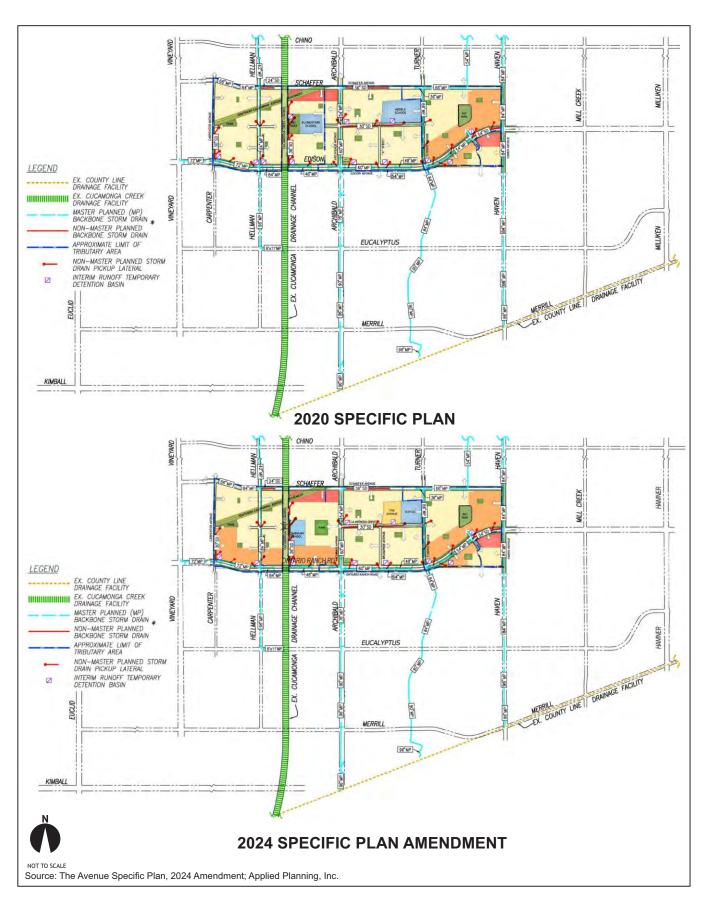




Figure 2.3-12 Storm Drain Master Plan Comparison

Non-structural and structural Source Control BMPs would be documented in the Modified Project WQMPs. Final WQMPs, as approved by the City, would ensure that the Modified Project stormwater management systems have been designed to convey and treat stormwater discharges and limit the post-development peak flows consistent with available storm drain capacities.

Please refer also to 2024 SPA Section 4.2.6, NPDES Compliance.

2.3.5.4 Solid Waste Management

The City of Ontario provides solid waste collection services for the City and would service the Modified Project. Under the 2024 SPA, an integrated waste management plan for each subdivision is required prior to Development Advisory Board (DAB) approval. All developments within Modified Project would be required to comply with waste reduction and recycling standards and identified in the City Municipal Code and as specified in the incumbent *City of Ontario Solid Waste Department Refuse and Recycling Planning Manual*. Please refer also to 2024 SPA Section 4.2.7, *Solid Waste*.

2.3.5.5 Electricity

SCE would provide electricity to the site from existing vicinity facilities. Facilities less than 34.5kV would be located underground if they are located adjacent to any streets proposed to be improved in conjunction with site improvements. All proposed connections and modifications to SCE facilities would conform to SCE and City requirements.

2.3.5.6 Natural Gas

The Gas Company would provide natural gas service to the site. All proposed connections and modifications to Gas Company facilities would be required to conform to Gas Company and City requirements.

2.3.5.7 Fiber Optics System

A backbone fiber optics system (conduits and fiber) would be constructed within the Modified Project street system. Backbone fiber optic components (conduits and fiber) would be placed underground within a duct and structure system to be installed in a joint trench. In-tract fiber and conduit would be installed per the City's in-tract fiber optic design guidelines (see: https://www.ontarioca.gov/sites/default/files/Ontario-Files/Information-Technology/2014-12-16 in-tract designguidelines.pdf). The Modified Project Fiber Optic Plan is presented at Figure 2.3-13. For illustrative purposes, the Original Project and Modified Project Fiber Optic Plan Concepts are compared at Figure 2.3-14.

2.3.5.8 Communications Services

Communications services, including wired and wireless telephone and internet services, are available through numerous private providers and would be provided on an asneeded basis. To the extent practical and consistent with City Conditions of Approval, existing and proposed wires, conductors, conduits, raceways, and similar communications improvements within the Modified Project site would be installed underground. Any necessary surface-mounted equipment, e.g., terminal boxes, transformers, meters, service cabinets, etc., would be screened and would conform to City building setback requirements.

2.3.6 Energy Efficiency/Sustainability

Energy-saving and sustainable design features and operational programs would be incorporated in all facilities developed pursuant to the Modified Project. The Modified Project would be required to comply with incumbent energy efficiency and performance standards established under the CALGreen Code and the City of Ontario Community Climate Action Plan (CCAP).

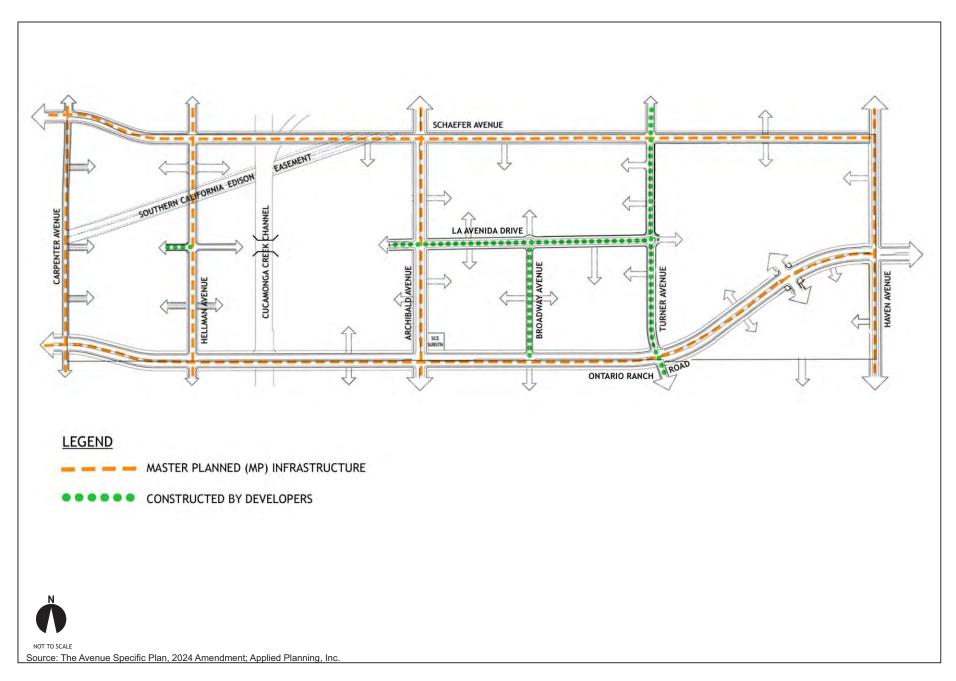




Figure 2.3-13 Fiber Optics

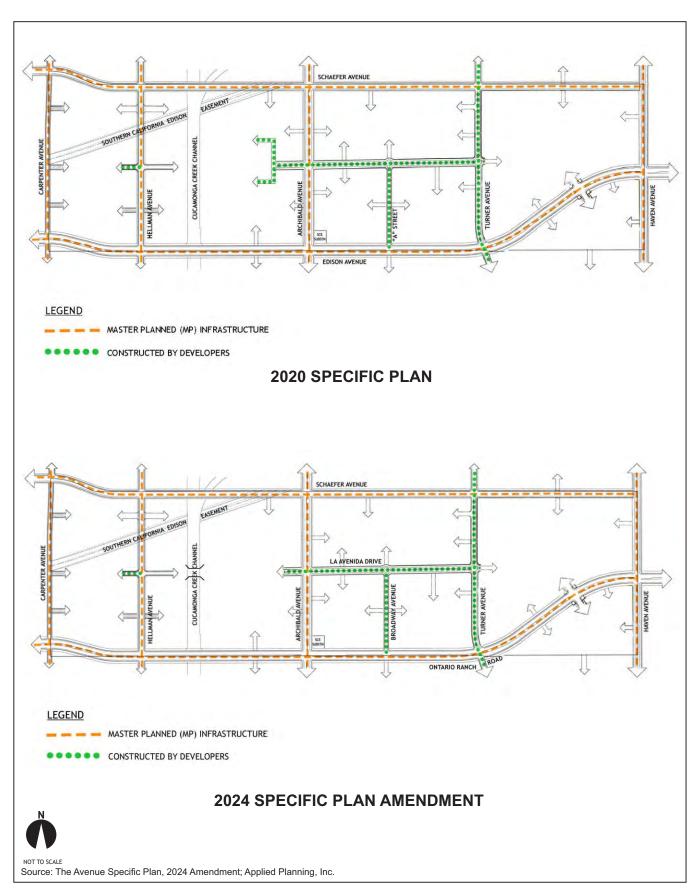




Figure 2.3-14 Fiber Optics Comparison

2.3.7 Site Preparation

As an initial action, the Modified Project site would be cleared of vegetation and all onsite improvements associated with, or supporting, the existing on-site land uses would be demolished or removed. Debris generated by site preparation and demolition activities would be disposed of/recycled consistent with provisions of the California Integrated Waste Management Plan Act (AB 939) and the City's Integrated Waste Department *Refuse and Recycling Planning Manual*.⁴

Additionally, a total of 20 water wells are located within the Modified Project site. Locations of these wells are identified at Figure 2.3-15. All existing water wells within the Modified Project site would be destroyed consistent with San Bernardino County Health Department and California Department of Water Resources (DWR) requirements. See also: https://water.ca.gov/Programs/Groundwater-Management/Wells/Well-Standards/Combined-Well-Standards/Water-Destruction.

The natural topography of the Project site is relatively flat. No unusual grading conditions are present and substantial import or export of earth materials is not expected. Project grading would provide stable development pads for construction; balance cut and fill grading quantities on-site; and meet City of Ontario building standards and acceptable infrastructure gradient requirements.

2.3.8 Construction Area Traffic Management Plan

To avoid or minimize temporary construction-related traffic impacts throughout site preparation and construction activities, the Project Applicant would be required to prepare and implement a City-approved Construction Traffic Management Plan (Plan). Typical elements and information incorporated in the Plan would include, but not be limited to:

Name of on-site construction superintendent and contact phone number.

The Avenue Specific Plan, 2024 Amendment Addendum to The Ontario Plan Certified SEIR (SCH No. 2021070364)

⁴ City of Ontario, California: *Solid Waste Department* [Integrated Waste Department] *Refuse and Recycling Manual*, Updated March 17, 2016. https://www.ontarioca.gov/omuc/integrated-waste.





Figure 2.3-15 Existing Wells

- Identification of Construction Contract Responsibilities For example, for
 excavation and grading activities, describe the approximate depth of excavation,
 and quantity of soil import/export (if any).
- Identification and Description of Truck Routes to include the number of trucks and their staging location(s) (if any).
- Identification and Description of Material Storage Locations (if any).
- Location and Description of Construction Trailer (if any).
- Identification and Description of Traffic Controls Traffic controls shall be provided per the Manual of Uniform Traffic Control Devices (MUTCD) if the occupation or closure of any traffic lanes, parking lanes, parkways or any other public right-of-way is required. If the right-of-way occupation requires configurations or controls not identified in the MUTCD, a separate traffic control plan must be submitted to the City for review and approval. All right-of-way encroachments would require permitting through the City.
- Identification and Description of Parking Estimate the number of workers and identify parking areas for their vehicles.
- Identification and Description of Maintenance Measures Identify and describe
 measures taken to ensure that the work site and public right-of-way would be
 maintained (including dust control).

The Plan would be reviewed and approved by the City prior to the issuance of the first building permit. The Plan and its requirements would also be required to be provided to all contractors as one component of building plan/contract document packages.

2.3.9 Opening Year

For the purposes of this analysis, the Project Opening Year is defined as 2026, by which time all proposed uses are assumed to be complete, occupied, and operational.

2.4 PROJECT OBJECTIVES

The stated vision of the 2024 SPA is to establish "a truly walkable community, featuring pedestrian amenities that encourage walking and biking to schools, parks and basic commercial needs—all within five minutes, for the majority of residents" (2024 SPA, p. 1-1.) Supporting 2024 Specific Plan Amendment Objectives are listed below.

General

- Implement TOP 2050 Policy Plan Land Use Plan.
- Support TOP 2050 vision for urbanization of the Ontario Ranch area of the City.
- Implement Specific Plan developments providing additional long-term employment opportunities.
- Implement Specific Plan developments providing additional construction employment opportunities.
- Establish new development that would further the City's near-term and longrange fiscal goals.

Residential Land Uses

- Development of a variety of housing types into the land use plan addressing a wide variety of lifestyles and economic segments.
- Provide for both single family attached and detached housing in low density and low medium density residential districts.
- Plan for seamless transitions between housing product types in order to create cohesive neighborhoods that include a range of types and styles.
- Plan residential neighborhoods around a series of parks and open space areas, promoting outdoor activity and interaction among neighbors.
- Provide for connectivity between residential neighborhoods, recreational areas, and adjacent commercial land uses, as well as to the schools, by means of pedestrian and bicycle trail linkages along The Avenue and trails incorporated into

both the Southern California Edison Easement and the Cucamonga Creek Channel. Create a strong functional relationship between homes and schools.

- Create a hierarchy of parks, providing for active and passive recreation.
- Create residential neighborhoods with diverse architectural styles and traditional design elements reflecting some of the characteristics of older established Ontario neighborhoods.

Commercial Land Uses

- Develop retail and commercial uses to meet the needs of the residential community and larger surrounding market area, as well as implement Policy Plan policies.
- Provide trails and sidewalks to connect the residential community with the retail and commercial area.
- Consider the development of plazas and other public space amenities within the retail and commercial area providing space for social interaction.
- Orient retail and commercial buildings to the street, wherever possible, to create an urban edge and sense of arrival.

2.5 DISCRETIONARY APPROVALS and PERMITS

Discretionary actions, permits, and related consultation(s) necessary to approve and implement the Project include, but are not limited to, the following.

2.5.1 Lead Agency Discretionary Actions and Permits

- CEQA Compliance;
- Adoption of this Addendum;
- Approval of a Specific Plan Amendment;
- Approval of Tentative Parcel Maps;
- Approval of a Development Agreement; and
- Approval of Development Plans.

2.5.2 Other Consultation and Permits

Anticipated consultation and permits necessary to realize the Modified Project would or may include the following:

- Permitting by/through the Regional Water Quality Control Board (RWQCB) pursuant to requirements of the City's National Pollutant Discharge Elimination System (NPDES) Permit.
- Permitting by/through the South Coast Air Quality Management District (SCAQMD) for certain equipment or land uses that may be implemented pursuant to the Modified Project.
- Permitting (i.e., utility construction and connection permits) from affected utility purveyors, notably the City of Ontario, IEUA, and SCE.
- Permitting for destruction of on-site wells per San Bernardino County Health Department and Department of Water Resources requirements.
- Other ministerial permits necessary to realize all on- and off-site improvements related to the development of the site.

3.0 ENVIRONMENTAL CHECKLIST

ENVIRONMENTAL CHECKLIST

The Avenue Specific Plan, 2024 Amendment

Addendum to The Ontario Plan 2050 Certified SEIR (SCH No. 2021070364)

General Notes: *The Avenue Specific Plan, 2024 Amendment* (Modified Project, Project) land uses and development concepts have been designed to be consistent with land uses and development concepts for the subject site reflected in The Ontario Plan 2050 (TOP 2050). Impacts of TOP 2050 have been evaluated and addressed in *The Ontario Plan 2050 Certified SEIR* (TOP 2050 SEIR, Certified SEIR). This Addendum compares and contrasts impacts of the Modified Project with impacts identified in the Certified SEIR. As substantiated herein, the Modified Project would not result in substantially different or substantially increased impacts when compared to impacts considered and addressed in the Certified SEIR. The CEQA Initial Study Checklist categories and topics presented below conform to the suggested content presented at *CEQA Guidelines*, Appendix G. Certain of the Addendum Technical Studies are dated 2023. These Studies were prepared prior to the latest refinements reflected in the 2024 Specific Plan Addendum (2024 SPA). Findings and conclusions of these Studies are not affected by the 2024 SPA refinements.

1. **AESTHETICS**

Co	cept as provided in Public Resources de Section 21099, would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a)	Have a substantial adverse effect on a scenic vista?					X	
b)	Substantially damage visible scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?					Х	
c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?					Х	
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?					Х	

Substantiation:

a-d) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The Certified SEIR recognizes that buildout of the City would alter the visual character of the City. The Certified SEIR concludes that compliance with the City Municipal Code and applicable TOP 2050 Policies would ensure that potential aesthetics impacts of development anticipated under TOP 2050 would be less-than-significant (Certified SEIR, pp. 5.1-4 – 5.1-10).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. Final designs of the Modified Project facilities including, but not limited to, the proposed buildings, landscape/hardscape features, and lighting configurations would be required to conform to the 2024 Specific Plan Development Regulations and Design Guidelines, and applicable provisions of the City Municipal Code. Final designs of all uses would be subject to City review and approval. Conformance with the 2024 Specific Plan Development Regulations and Design Guidelines and City Municipal Code requirements would ensure that the Modified Project would not substantially degrade scenic vistas, substantially degrade scenic resources, adversely alter the existing visual character or quality of the area, or create a new source of substantial light or glare which would adversely affect day or nighttime views. Impacts of the Modified Project in these regards would be less-than-significant. On this basis, when compared to the Certified SEIR findings, no new or substantially increased aesthetic impacts would result from the Modified Project.

Modified Project Conditions of Approval: None.

The Avenue Specific Plan, 2024 Amendment Addendum to The Ontario Plan Certified SEIR (SCH No. 2021070364)

¹ The 2024 Specific Plan Development Regulations and Design Guidelines have been amended to address new or revised uses proposed by the Modified Project.

Summary

When compared to the impacts identified in the Certified SEIR, no new significant, substantially increased, or substantially different aesthetics or light/glare impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan, 2024 Amendment.

2. AGRICULTURE AND FORESTRY RESOURCES

W	ould the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?					Х	
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?					Х	
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 1220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?					Х	
d)	Result in the loss of forest land or conversion of forest land to non-forest use?					X	
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use, or conversion of forest land to non-forest use?					Х	

Substantiation:

a) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: Under TOP 2050, the City Ontario no longer has land designated for agricultural uses. Because TOP 2050 is the baseline for the Certified SEIR, TOP 2050 would not result in the conversion of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance to nonagricultural uses. TOP 2050 would therefore have no impact on land zoned for agricultural purposes (Certified SEIR, p. 5.2-12).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. As noted above, TOP 2050 would have no impact on land zoned for agricultural purposes. Because the Modified Project Land Uses are consistent with TOP 2050 land use designations, by extension, the Modified Project would similarly have no impact on land zoned for agricultural purposes.

Modified Project Conditions of Approval: None.

b) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions:

Agricultural Zoning

The Certified SEIR concluded that implementation of the Land Use Plan would not adversely affect agriculturally-zoned properties (Certified SEIR, p. 5.2-12).

Williamson Act Contracts

Implementation of TOP 2050 would affect all active Williamson Act contracts within the City. The Certified SEIR concluded, however, that impacts to Williamson Act contract properties under TOP 2050 would not be greater than, or different than, would result

from TOP 2009. On this basis, the Certified SEIR concluded that TOP 2050 impacts to Williamson Act Contract properties would be less-than-significant (Certified SEIR, p. 5.2-13).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. Agricultural resources impacts discussed below are consistent with impacts of TOP 2050 as evaluated in the Certified SEIR.

Agricultural Zoning

The Modified Project site is Zoned "Specific Plan." The Modified Project does not propose or require uses or activities that would result in potentially adverse effects at agriculturally-zoned properties. Based on the preceding, the Modified Project's potential impacts related to a conflict with agricultural zoning would be less-than-significant.

Williamson Act Contracts

The California Land Conservation Act of 1965 (the Williamson Act, Government Code Sections 51200 through 51297.4) encourages the preservation of agricultural lands through tax incentives due to the increasing trend toward the conversion of agricultural lands to urban uses. The Act enables counties and cities to designate agricultural preserves (Williamson Act lands) and within these preserves offer preferential taxation to agricultural landowners based on the agricultural income-producing value of the property.

One active Williamson Act Contract property (Williamson Act Contract No 71-338) is located within the Modified Project site. The location of the subject Williamson Act Contract property is indicated at Figure 2-1. Contract No 71-338 will expire in 2026 and will not be renewed or extended. No development of the subject property would occur prior to expiration of Contract No 71-338. As such, the Modified Project would have no impact on an active Williamson Act Contract property.

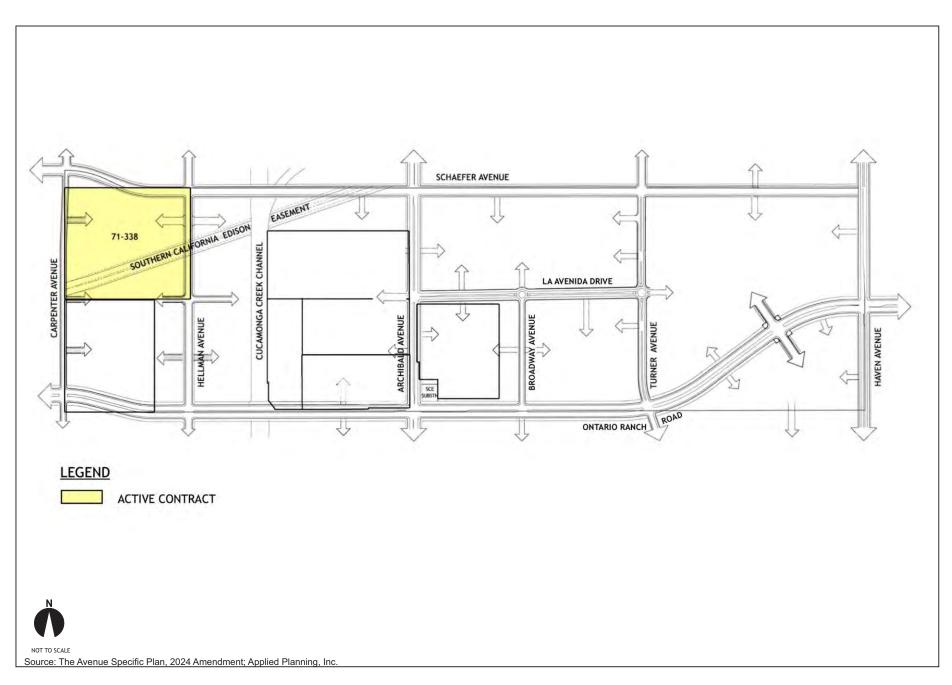




Figure 2-1 Williamson Act Contracts

Under TOP 2050, the entire 2024 Specific Plan Area is anticipated to be developed with urban uses. The Certified SEIR concluded that under TOP 2050 buildout conditions, impacts to Williamson Act properties would be less-than-significant. The Modified Project land uses are consistent with TOP 2050 as evaluated in the Certified SEIR. Because the Modified Project Land Uses are consistent with TOP 2050 land use designations, by extension, the Modified Project would similarly have a less-than-significant impact on Williamson Act contract properties.

Based on the preceding, the potential for the Modified Project to conflict with a Williamson Act Contract would be less-than-significant.

Modified Project Conditions of Approval: None.

c) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: There are no City land uses zoned for forest land, timberland, or timberland zoned Timberland Production. There are no properties in the City considered to be forestland. As such, implementation of TOP 2050 would have no impact on land uses zoned for forest land, timberland, or timberland zoned Timberland Production; nor would TOP 2050 result in the loss or conversion of timberland or forest land to non-forest uses (Certified SEIR, p. 5.2-13).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. The Modified Project site is not zoned for forest land, timberland, or timberland zoned Timberland Production. There is no timberland or forest land within the Modified Project site. The Modified Project Land Uses are consistent with TOP 2050 land use designations. As noted above, TOP 2050 would have no impact on forest land, timberland, or timberland zoned Timberland Production; nor would TOP 2050 result in the loss or conversion of timberland or forest land to non-forest uses. Because the Modified Project Land Uses are consistent with TOP 2050 land use designations, by extension, the Modified Project

would similarly have no impact on forest land, timberland, or timberland zoned Timberland Production; nor would the Modified Project result in the loss or conversion of timberland or forest land to non-forest uses.

Modified Project Conditions of Approval: None.

d, e) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: Under TOP 2050, the City Ontario no longer has land designated for agricultural uses. Because TOP 2050 is the baseline for the Certified SEIR, TOP 2050 would not result in the conversion of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance to nonagricultural uses. TOP 2050 would therefore have no impact on land zoned for agricultural purposes (Certified SEIR, p. 5.2-12). See also Checklist Item 2 a.

There are no City land uses zoned for forest land, timberland, or timberland zoned Timberland Production. There are no properties in the City considered to be forestland. As such, implementation of TOP 2050 would have no impact on land uses zoned for forest land, timberland, or timberland zoned Timberland Production; nor would TOP 2050 result in the loss or conversion of timberland or forest land to non-forest uses (Certified SEIR, p. 5.2-13). See also Checklist Item 2 c.

TOP 2050 does not propose or require uses that would otherwise result in conversion of Farmland to nonagricultural use or conversion of forest land to non-forest use.

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. No forest land or farmland is located within the Modified Project site or in its vicinity. The Modified Project does not propose or require uses that would otherwise result in conversion of Farmland to nonagricultural use, or conversion of forest land to non-forest use. The Modified Project Land Uses are consistent with TOP 2050 land use designations. As noted above,

TOP 2050 would have no impact on forest land or farmland, nor would TOP 2050 result in the loss or conversion of timberland or forest land to non-forest uses. Because the Modified Project Land Uses are consistent with TOP 2050 land use designations, the Modified Project would similarly not result in the conversion of Farmland to nonagricultural use, or conversion of forest land to non-forest use.

Modified Project Conditions of Approval: None.

Summary

When compared to impacts considered and addressed in the Certified SEIR, no new significant, substantially increased, or substantially different agriculture and forestry resources impacts would result from the Modified Project. No changed or new information has been identified to indicate that any impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan, 2024 Amendment.

3. AIR QUALITY

	Substantial Change in Project	Substantial Change in Circumstances	New Information Showing Greater	New Information Showing Ability to Reduce but not Eliminate	No Changes or New Information Requiring	
	Requiring Major EIR	Requiring Major EIR	Significant Effects than	Significant Effects in	Preparation of an MND or	No
Would the project:	Revisions	Revisions	Previous EIR	Previous EIR	EIR	Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?					Х	
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?					Х	
c) Expose sensitive receptors to substantial pollutant concentrations?					Х	

				New		
				Information		
			New	Showing	No Changes	
	Substantial	Substantial	Information	Ability to	or New	
	Change in	Change in	Showing	Reduce but	Information	
	Project	Circumstances	Greater	not Eliminate	Requiring	
	Requiring	Requiring	Significant	Significant	Preparation	
*** ***	Major EIR	Major EIR	Effects than	Effects in	of an MND or	No
Would the project:	Revisions	Revisions	Previous EIR	Previous EIR	EIR	Impact
d) Result in other emissions (such as those						
leading to odors) adversely affecting a					X	
substantial number of people?						

Substantiation:

a) No Changes or New Information Requiring Preparation of an MND or EIR.

General Note: The technical analyses referenced in this section reflect likely maximum impacts. Subsequent to preparation of these analyses, total residential development intensities allowed under the Modified Project have been reduced consistent with direction. Specifically, the technical analyses referenced herein assume residential development of the Modified Project totaling up to 3,807 dwelling units (see Project Traffic Analysis, p. 2 et al.). As subsequently modified, maximum allowed residential development under the Modified Project would not exceed 3,753 dwelling units (see Section 2.0, Project Description, Table 2.1-1).

Certified SEIR Conclusions: Because air pollutant emissions associated with buildout of the City would cumulatively contribute to nonattainment conditions affecting the South Coast Air Basin (SoCAB), the Certified SEIR determined that TOP 2050 would be inconsistent with the Air Quality Management Plan (AQMP). For these reasons, the Certified SEIR concluded that TOP 2050 would result in significant AQMP consistency impacts (Certified SEIR, p. 5.3-40).

Certified SEIR Mitigation Measures: The Certified SEIR includes mitigation (listed below) that would generally reduce criteria pollutant emissions associated with buildout of TOP 2050. These measures include mitigation from the previous (2010) TOP EIR and new mitigation implemented under TOP 2050.

3-1 Prior to discretionary approval by the City of Ontario for development projects subject to CEQA (California Environmental Quality Act) review (i.e., nonexempt projects), project

applicants shall prepare and submit a technical assessment evaluating potential project construction-related air quality impacts to the City of Ontario Planning Department for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology for assessing air quality impacts. If construction-related criteria air pollutants are determined to have the potential to exceed the South Coast AQMD-adopted thresholds of significance, the City of Ontario building department shall require feasible mitigation measures to reduce air quality emissions. Potential measures shall be incorporated as conditions of approval for a project and may include:

- Require fugitive dust control measures that exceed South Coast Air Quality Management District's Rule 403, such as:
 - Requiring use of nontoxic soil stabilizers to reduce wind erosion.
 - o Applying water every four hours to active soil disturbing activities.
 - o Tarping and/or maintaining a minimum of 24 inches of freeboard on trucks hauling dirt, sand, soil, or other loose materials.
 - o Using construction equipment rated by the United States Environmental Protection Agency as having Tier 4 interim or higher exhaust emission limits.
- Ensuring construction equipment is properly serviced and maintained to the manufacturer's standards.
- Limiting nonessential idling of construction equipment to no more than five consecutive minutes.
- Using Super-Compliant VOC paints for coating architectural surfaces whenever possible. A list of Super-Compliant architectural coating manufactures can be found on the South Coast Air Quality Management District's website at: http://www.aqmd.gov/prdas/brochures/Super-Compliant_AIM.pdf.

These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City's Planning Department.

3-2 The City of Ontario shall evaluate new development proposals within the City and require all developments to include access or linkages to alternative modes of transportation, such as transit stops, bike paths, and/or pedestrian paths (e.g., sidewalks).

New Mitigation

- AQ-1 Prior to discretionary approval by the City of Ontario for development projects subject to CEQA (California Environmental Quality Act) review (i.e., nonexempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project operation-phase-related air quality impacts to the City of Ontario Planning Department for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology in assessing air quality impacts. If operation-related air pollutants are determined to have the potential to exceed the South Coast AQMD—adopted thresholds of significance, the City of Ontario Planning Department shall require that applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions during operational activities. The identified measures shall be included as part of the conditions of approval. Possible mitigation measures to reduce long-term emissions could include, but are not limited to the following:
 - For site-specific development that requires refrigerated vehicles, the construction documents shall demonstrate an adequate number of electrical service connections at loading docks for plug-in of the anticipated number of refrigerated trailers to reduce idling time and emissions.
 - Applicants for manufacturing and light industrial uses shall consider energy storage and combined heat and power in appropriate applications to optimize renewable energy generation systems and avoid peak energy use.
 - Site-specific developments with truck delivery and loading areas and truck parking spaces shall include signage as a reminder to limit idling of vehicles while parked for loading/unloading in accordance with California Air Resources Board Rule 2845 (13 CCR Chapter 10 sec. 2485).
 - Provide changing/shower facilities as specified in Section A5.106.4.3 of CALGreen (Nonresidential Voluntary Measures).
 - Provide bicycle parking facilities per Section A4.106.9 of CALGreen (Residential Voluntary Measures).
 - Provide preferential parking spaces for low-emitting, fuel-efficient, and carpool/van vehicles per Section A5.106.5.1 of CALGreen (Nonresidential Voluntary Measures).
 - Provide facilities to support electric charging stations per Section A5.106.5.3 and

Section A5.106.8.2 of CALGreen (Nonresidential Voluntary Measures; Residential Voluntary Measures).

Applicant-provided appliances shall be Energy Star-certified appliances or appliances of equivalent energy efficiency (e.g., dishwashers, refrigerators, clothes washers, and dryers). Installation of Energy Star-certified or equivalent appliances shall be verified by the City during plan check.

[TOP 2050] Policy ER4-9, Health Risk Assessments, would ensure mobile sources of TACs not covered under South Coast AQMD permits are considered during subsequent project-level environmental review by the City of Ontario; however, implementation of TOP 2050 would generate TACs that could contribute to elevated levels in the air basin (cumulative).

The Certified SEIR concluded however that no mitigation measures are available that would substantially reduce AQMP inconsistency impacts. On this basis, the Certified EIR concluded that even with application of mitigation, TOP 2050 inconsistency with the AQMP would be significant and unavoidable (Certified SEIR, p. 5.3-54).

Level of Significance After Mitigation: Significant and Unavoidable.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. In this respect, the Modified Project would not substantively increase aggregate development intensities beyond that currently anticipated for the subject site as reflected in the Certified SEIR analysis of AQMP consistency.

Based on the preceding, when compared to the Certified SEIR findings, no new or substantially increased AQMP consistency impacts would occur under the Modified Project.

Modified Project Conditions of Approval: The Modified Project would implement applicable Certified SEIR mitigation measures.

b) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The Certified SEIR concluded that buildout of TOP 2050 would generate short-term and long-term air pollutant emissions exceeding SCAQMD regional significance thresholds for VOC, CO, NOx, PM₁₀, and PM_{2.5}. These exceedances would cumulatively contribute to the SCAB nonattainment designations for O₃, PM₁₀ and PM_{2.5}. Even with the implementation of mitigation measures, nonattainment air quality impacts resulting from buildout of TOP 2050 would be significant and unavoidable (Certified SEIR, pp. 5.3-54 – 5.3-57).

Certified SEIR Mitigation Measures: Please refer to previous Certified SEIR air quality mitigation measures listed at Checklist item 3 a).

Modified Project:

Construction-Source Emissions

Construction-source emissions resulting from the Modified Project are quantified in *The Avenue Specific Plan,* 2023 *Amendment - Air Quality & Energy Assessment* (Urban Crossroads, Inc.) May 8, 2024 (Modified Project AQIA, Addendum Appendix B). Modified Project construction activities would comprise site preparation, grading, building construction, paving, and architectural coating. Construction-source emissions would also be generated by construction worker commutes, heavy equipment transport, and construction material(s) vendor trips. Modified Project construction activities would generate emissions of carbon monoxide (CO), Volatile Organic Compounds (VOCs), Nitrogen Oxides (NOX), Sulfur Oxides (SOX), particulate matter \leq 10 microns (PM10), and particulate matter \leq 2.5 microns (PM25). Table 3-1 summarizes Modified Project maximum daily construction-source emissions.

As presented at Table 3-1, with the exception of VOC emissions, Modified Project construction-source emissions would not exceed applicable SCAQMD regional thresholds. Project construction-source VOC exceedances would represent a cumulatively considerable net increase in SCAB nonattainment conditions for O₃ (VOC is an Ozone precursor). Because the Project is consistent with land uses and development

evaluated in the Certified SEIR, Project construction-source VOC exceedances are already acknowledged and accounted for in the Certified SEIR.

Table 3-1
Maximum Daily Construction-Source Emissions

Washian Barry Construction Source Emissions								
S		Emissions (lbs./day)						
Source	VOC	NOx	СО	SOx	PM ₁₀	PM _{2.5}		
	Summer							
2024	7.04	39.79	140.03	0.13	19.75	4.92		
2025	6.63	31.64	132.00	0.10	19.75	4.92		
	W	inter						
2024	6.65	39.85	114.31	0.13	19.75	5.70		
2025	119.91	51.12	148.37	0.13	23.90	6.07		
Total Maximum Daily Emissions	119.91	51.12	148.37	0.13	23.90	6.07		
SCAQMD Regional Threshold	75	100	550	150	150	55		
Threshold Exceeded?	YES	NO	NO	NO	NO	NO		

Source: The Avenue Specific Plan, 2023 Amendment - Air Quality & Energy Assessment (Urban Crossroads, Inc.) May 8, 2024.

Operational-Source Emissions

Modified Project operational-source emissions would derive primarily from site/building maintenance (area sources), building energy consumption, and traffic (mobile sources). Operational-source emissions generated by the Modified Project land are summarized at Table 3-2. As indicated at Table 3-2, Project maximum daily operational-source emissions would exceed SCAQMD Regional Thresholds for VOC, NOx, CO, and PM₁₀. Project operational-source VOC, NOx, and PM₁₀ exceedances would represent a cumulatively considerable net increase in SCAB nonattainment conditions for O₃ and PM₁₀ (VOC and NO_x are Ozone precursors).

Because the Project is consistent with land uses and development evaluated in the Certified SEIR, the Project operational-source VOC, NOx, CO, and PM₁₀ exceedances are already acknowledged and accounted for in the Certified SEIR.

Table 3-2 Maximum Daily Operational-Source Emissions

			Emissions						
Source	VOC	NOx	СО	SOx	PM ₁₀	PM _{2.5}			
	Summer								
Mobile Source	89.78	76.69	729.57	1.77	154.87	40.15			
Area Source	80.59	34.64	143.12	0.22	2.78	2.76			
Energy Source	0.70	12.02	5.61	0.08	0.97	0.97			
Total Max. Daily Emissions	171.07	123.34	878.29	2.06	158.61	43.88			
SCAQMD Regional Threshold	55	55	550	150	150	55			
Threshold Exceeded?	YES	YES	YES	NO	YES	NO			
		Winter							
Mobile Source	83.39	82.34	615.71	1.66	154.87	40.15			
Area Source	68.04	33.41	14.22	0.21	2.70	2.70			
Energy Source	0.70	12.02	5.61	0.08	0.97	0.97			
Total Max. Daily Emissions	152.13	127.76	635.54	1.94	158.53	43.82			
SCAQMD Regional Threshold	55	55	550	150	150	55			
Threshold Exceeded?	YES	YES	YES	NO	YES	NO			

Source: The Avenue Specific Plan, 2023 Amendment - Air Quality & Energy Assessment (Urban Crossroads, Inc.) May 8, 2024.

Modified Project Conditions of Approval: The Modified Project would implement applicable Certified SEIR mitigation measures.

Based on the preceding, when compared to the Certified SEIR findings, the Modified Project would not result in substantively different or substantively increased contributions to cumulative contributions to criteria pollutant non-attainment impacts.

c) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The Certified SEIR notes that individual development projects within the City would be required to achieve the incremental risk thresholds established by SCAQMD, and on this basis, potential Toxic Air Contaminant (TAC) impacts from individual developments would be less-than-significant. TOP 2050 Policy ER4-9 New Localized Air Pollution Sources Near Existing Sensitive Receptors, ensures that mobile sources of TACs not covered under South Coast AQMD permits are considered

during subsequent project-level environmental review by the City of Ontario. Other air quality mitigation measures implemented under TOP 2050 would further reduce air pollutant emissions, thereby minimizing effects of pollutants at sensitive receptors.

The Certified SEIR nonetheless concludes that buildout of TOP 2050 would generate TACs that could contribute to elevated levels of TAC pollutants in the air basin. On this basis, the Certified SEIR concluded that TOP 2050 TAC emissions impacts at sensitive receptors would be cumulatively significant (Certified SEIR, p. 5.3-57).

Certified SEIR Mitigation Measures: Please refer to previous Certified SEIR air quality mitigation measures listed at Checklist item 3 a).

Modified Project: The Modified Project does not propose or require uses that would generate substantial levels of TACs. However, localized construction-source emissions generated by the Project have the potential to adversely affect proximate sensitive uses.² Accordingly, the potential for the Modified Project construction activities to generate or result in harmful concentrations of air pollutants at sensitive receptors is evaluated in the Modified Project AQIA.

LST Methodology

Localized construction-source impacts resulting from the Modified Project were evaluated consistent with methodologies and protocols presented in *Final Localized Significance Threshold Methodology* (SCAQMD) 2003 (LST Methodology). Per SCAQMD criteria, localized exceedances of the federal and/or state ambient air quality standards (NAAQS/CAAQS) would comprise potentially significant air quality impacts. Collectively, these are referred to as Localized Significance Thresholds (LSTs). LSTs represent the maximum localized emission concentrations that would not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard(s).

² LSTs would apply to the operational phase of a project, if that project includes stationary sources, or

attracts mobile sources that may spend long periods queuing and idling at the site (e.g., transfer facilities and warehouse buildings). The Project does not propose or require such uses. Due to the lack of significant stationary source emissions, an LST analysis for the Modified Project operations is not required.

Sensitive Receptors

Persons that are especially sensitive to air pollution are accorded special consideration when evaluating air quality impacts. Collectively, these persons collectively comprise sensitive receptors, and include: children, the elderly, and individuals with pre-existing respiratory or cardiovascular illness. Structures that house these persons or places where they gather are defined as sensitive receptor locations. Such structures typically include: residences, hotels, hospitals or similar occupancies. Consistent with the LST Methodology, the analysis presented here evaluates potential effects of localized construction-source emissions at the nearest sensitive receptor locations where an individual could remain for 24 hours or more.

Based on an aerial imagery, sensitive receptor residential land uses are located within 25 meters of the Project boundaries. Per the LST Methodology, a minimum separation of 25 meters between receptors and emission sources has been assumed within this analysis.

Thresholds

The LST Methodology provides "Look-up Tables" establishing screening-level thresholds. Emissions that do not exceed the Look-up Table thresholds are presumptively considered less-than-significant. Emissions exceeding Look-up Table thresholds warrant further detailed modeling and analysis. Look-up Table thresholds applicable to the Project are presented below.

Table 3-3 Localized Significance Thresholds

A ativita-		Emissions Thresholds (lbs./day)						
Activity	VOC	NOx	PM ₁₀	PM _{2.5}				
Demolition								
Site Preparation	270	2,193	16	9				
Grading								

Source: The Avenue Specific Plan, 2023 Amendment - Air Quality & Energy Assessment (Urban Crossroads, Inc.) May 8, 2024.

Localized Emissions

Maximum construction-source localized emissions received at the nearest sensitive receptors are presented at Table 3-4.

Table 3-4
Maximum Received Localized Emissions

		Emissions	s (lbs./day)		
	NOx	СО	PM ₁₀	PM _{2.5}	
	Demolition				
Maximum Daily Emissions	23.81	36.35	0.40	0.38	
SCAQMD Localized Threshold	270	2,193	16	9	
Threshold Exceeded?	NO	NO	NO	NO	
	Site Preparation	1			
Maximum Daily Emissions	29.47	56.62	11.52	5.57	
SCAQMD Localized Threshold	270	2,193	16	9	
Threshold Exceeded?	NO	NO	NO	NO	
	Grading				
Maximum Daily Emissions	38.87	70.70	5.70	2.31	
SCAQMD Localized Threshold	270	2,193	16	9	
Threshold Exceeded?	NO	NO	NO	NO	

Source: The Avenue Specific Plan, 2023 Amendment - Air Quality & Energy Assessment (Urban Crossroads, Inc.) May 8, 2024.

As presented at Table 3-4, maximum Project construction-source localized emissions received at area sensitive receptors would not exceed applicable SCAQMD LSTs. On this basis, the potential for the Project to expose sensitive receptors to substantial pollutant concentrations would be less-than-significant.

Modified Project Conditions of Approval: None.

d) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The Certified SEIR notes that development pursuant to TOP 2050 would be required to comply with SCAQMD Rule 402. SCAQMD Rule 402 acts to generally control and regulate odors and odor sources, thereby minimizing potential

effects of construction-source and operational-source odors from other than industrial land uses (Certified SEIR, p. 5.3-46).

The Certified SEIR also acknowledges that certain types of industrial land uses (e.g., compost facilities, landfills, solid-waste transfer stations, fiberglass manufacturing facilities, paint/coating operations, asphalt batch manufacturing plants, chemical manufacturing, and food manufacturing facilities) warrant focused odor impact analyses. The City would require site- and development-specific analyses to ensure that any odors generated by these types of land uses would not adversely affect a substantial number of people (Certified SEIR, p. 5.3-46).

Based on the preceding, the Certified SEIR concluded that the potential for TOP 2050 to create or result in odors that would adversely affect a substantial number of people would be less-than-significant.

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. Construction-source and operational-source odor impacts that may result from the Modified Project are controlled as a byproduct of hazardous/potentially hazardous materials handling plans and Best Management Practices implemented under SCAQMD Rule 402 et al. The Modified Project would be required to comply with all SCAQMD Rules regulating and controlling odors and odor sources.

The Modified Project does not propose or require land uses (e.g., compost facilities, landfills, solid-waste transfer stations, fiberglass manufacturing facilities, paint/coating operations, asphalt batch manufacturing plants, chemical manufacturing, and food manufacturing facilities) that would be substantial odor sources. Moreover, the Modified Project would remove existing agricultural odor sources and would act generally to improve ambient conditions related to odors.

Construction-source and operational-source odor impacts that may result from the Modified Project are controlled as a byproduct of hazardous/potentially hazardous materials handling plans and Best Management Practices implemented under SCAQMD Rule 402³ et al. The Modified Project would be required to comply with all SCAQMD Rules regulating and controlling odors and odor sources. The Modified Project would therefore not create objectionable odors affecting a substantial number of people. The Modified Project does not propose or require uses that would generate other emissions that could adversely affect a substantial number of people. On this basis, when compared to the Certified SEIR findings, no new or substantially increased "other emissions" impacts would occur under the Modified Project.

On this basis, when compared to the Certified SEIR findings, no new or substantially increased odor impacts would occur under the Modified Project.

Modified Project Conditions of Approval: None.

Summary

When compared to impacts considered and addressed in the Certified SEIR, no new significant, substantially increased, or substantially different air quality impacts would result from the Modified Project. No changed or new information has been identified to indicate that any impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan, 2023 Amendment - Air

³ SCAQMD Rule 402. Nuisance.

[&]quot;A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals." http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-402.pdf

Quality & Energy Assessment (Urban Crossroads, Inc.) May 8, 2024; The Avenue Specific Plan, 2024 Amendment.

4. BIOLOGICAL RESOURCES

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?					X	
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies and regulations; or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?					х	
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?					Х	
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?					Х	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?					х	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?					х	

Substantiation:

a) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The Certified SEIR recognizes that development in accordance with TOP 2050 could impact sensitive species. Projects considered for approval under TOP 2050 would be subject to independent CEQA review to determine whether there is potential habitat on-site for sensitive species. The Certified SEIR did not identify any significant impacts in this regard (Certified SEIR, pp. 5.4-28 – 5.4-34).

Certified SEIR Mitigation Measures: None.

Modified Project: TOP 2050 SEIR (Section 5.4) concluded that the area encompassing The Avenue Specific Plan may function as potential habitat for the federally-listed Delhi Sands Flower Loving Fly (DSFLF) and Burrowing Owl. No other potentially significant impacts to candidate, sensitive, or special status species were identified in the SEIR.

Potential Impacts to DSFLF

Potential Project impacts to DSFLF are substantiated in *Habitat Suitability Evaluation* (EnviroPlus Consulting, LLC) October 30, 2023 (Project DSFLF Study). Findings and conclusions of the Project DSFLF Study are presented below.

The Project site was surveyed for evidence of DSFLF, potentially viable DSFLF habitat, and general presence/absence biologic resources by a qualified professional biologist⁴ on October 22, 2023. The survey was conducted under clear skies with temperatures ranging from 60 to 72 °F. Winds were light at 1 to 3 mph from the west (Project DSFLF Study, p. 4).

The survey noted general site conditions, soils types, surface conditions, vegetation types and conditions, and presence or evidence of insects and wildlife. The survey also documented past and present on-site disturbances and ongoing urban development

The Avenue Specific Plan, 2024 Amendment Addendum to The Ontario Plan Certified SEIR (SCH No. 2021070364)

⁴ Biologist permitted by the U.S. Fish and Wildlife Service (Section 10 (a) (1) (A) permit number TE-837439-8 expiring 6/24/2024).

affecting the site's potential suitability as habitat for biological resources (Project DSFLF Study, pp. 2-4).

The survey results indicate that although the survey area is in part mapped as Delhi series soils, "anthropogenic disturbances over decades have altered the natural topography, aeolian processes, vegetation and soil characteristics such that the site does not now meet the USFWS baseline requirement for conducting focused surveys, the presence of Delhi series soils. Additionally, surrounding areas are similarly highly disturbed and/or developed, so it would be highly unlikely that any dispersing DSFLF from a nearby DSFLF-occupied site would temporarily utilize the subject property for foraging or reproduction purposes. Since suitable Delhi series soils were not found, the site does not meet the baseline criterion to be considered for focused surveys as per the USFWS protocol (1996) and does not appear suitable for DSFLF occupation" (Project DSFLF Study, pp. 4, 5). Based on the preceding, the Project's potential impact to DSFLF and DSFLF habitat would be less-than-significant. Note: The January 2024 biological resources assessment update prepared for the Project confirms the above findings and conclusions. Please refer to Biological Update for The Avenue Specific Plan (Planning Area 5) Project; City of Ontario, County of San Bernardino, California (January 2024 Biological Update, VCS Environmental) January 16, 2024, Addendum Appendix C.

Potential Impacts to Burrowing Owl

During the October 2023 site DSFLF surveys, the presence of burrowing owl individuals and evidence of burrowing owl occupation within the site were also noted (Project DSFLF Study, p. 4). The January 2024 Biological Resources Update indicates that burrowing owl individuals were no longer present during a subsequent January 2024 site visit. As such, these individuals are deemed migrant and the site is not considered to be occupied by BUOW (January 2024 Biological Update, p. 5).

The Project site does however evidence burrows suitable for BUOW and suitable BUOW foraging habitat. A BUOW pre-construction survey is therefore required to ensure that potential impacts to BUOW are maintained at levels that would be less-than-significant. Please refer to Condition of Approval BIO-1.

Other Considerations

The Modified Project site serves generally as potential habitat for migratory birds. Development of the site could therefore result in impacts to any nesting migratory birds that may be present. Consistent with California Department of Fish and Wildlife requirements, Condition of Approval BIO-2 is included to ensure that impacts to nesting birds are maintained at levels that would be less-than-significant.

Additionally, areas of the Modified Project site not specifically addressed in the Project DSFLF Study and/or January 2024 Biological Update may warrant updated biological resources assessments to ensure that potential impacts to biological resources for these areas are maintained at levels that would be less-than-significant (please refer to Condition of Approval BIO-3).

Modified Project Conditions of Approval:

BIO-1 Avoidance of Nesting Burrowing Owls: No more than 72 hours prior to any site disturbances, focused surveys for the burrowing owl shall be conducted. If absence of this species is confirmed, project work can proceed. If, however, burrowing owl is located on site, the appropriate resource agencies (CDFW and USFWS) shall be contacted. The Applicant shall consult with the wildlife agencies regarding the most appropriate methods and timing for removal of owls. As necessary, owls will be actively evicted following agency approved protocols (i.e., placing a one-way door at the burrow entrance to ensure that owls cannot access the burrow once they leave). Any such active eviction shall occur outside of the breeding/nesting season. That is, if active eviction is required, eviction shall be accomplished between September 1 and February 15. If more than 30 days have elapsed between owl eviction and completion of clearing and grubbing activities, a subsequent survey for the burrowing owl shall be conducted to ensure that owls have not re-populated the site. Any reoccupation by owls will require subsequent protocol active eviction.

BIO-2 Avoidance of Nesting Migratory Birds: If possible, all vegetation removal activities shall be scheduled from August 1 to February 1, which is outside the general avian nesting season. This would ensure that no active nests would be disturbed, and that removal could proceed rapidly. If vegetation is to be cleared during the nesting season, all suitable habitat

will be thoroughly surveyed within 72 hours prior to clearing for the presence of nesting birds by a qualified biologist (Biologist). The Biologist shall be approved by the City and retained by the Applicant. The survey results shall be submitted by the Applicant to the City Planning Department. If any active nests are detected, the area of nesting shall be flagged and mapped on the construction plans along with a minimum 300-foot buffer, with the final buffer distance to be determined by the Project Biologist. The buffer area shall be avoided until, as determined by the Biologist, the nesting cycle is complete, or it is concluded that the nest has failed. In addition, the Biologist shall be present on the site to monitor the vegetation removal to ensure that any nests, which were not detected during the initial survey, are not disturbed.

BIO-3 To the extent not considered and addressed in prior biological resources assessments, the Project DSFLF Study, or the January 2024 Biological Update, and to properly assess and address potential biological resources impacts, Biological Resources surveys shall be prepared prior to approval of Tentative Tract Maps within the Modified Project site. If suitable habitat is determined present onsite, subsequent focused surveys shall be completed and no "take" of any protected species and/or their habitat shall occur without obtaining the requisite regulatory permits from State and Federal agencies.

b, c) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The Certified SEIR concluded that individual projects subject to CEQA environmental review would be required to determine whether there is potential habitat onsite for sensitive species. The Certified SEIR did not identify any significant impacts in this regard (Certified SEIR, p. 5.4-28).

Certified SEIR Mitigation Measures: None.

Modified Project: TOP 2050 SEIR (Section 5.4) concluded that the area encompassing The Avenue Specific Plan may function as potential habitat for the federally-listed Delhi DSFLF and Burrowing Owl. No other potentially significant impacts to candidate, sensitive, or special status species or their habitats were identified.

Consistent with SEIR requirements, the Project site has been evaluated for the presence of potential habitat for sensitive species. The Project DSFLF Study substantiates that the Project site and surrounding areas are extensively disturbed as the result of current and historic human activities. Surveys conducted as part of the Project DSFLF did not indicate presence or potential presence of riparian habitat, other sensitive natural community, or protected wetlands. The Project does not propose or require facilities or activities that would result in potential adverse effects to off-site riparian habitat, other sensitive natural community, or protected wetlands. Project potential impacts to riparian habitat, sensitive natural communities, and protected wetlands is therefore considered less-than-significant.

Modified Project Conditions of Approval: None.

d) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The Certified SEIR states that no regional wildlife movement corridors have been identified in the City, and most of the City is ill-suited for the purposes of wildlife movement. Additionally, compliance with existing policies and regulations ensures impacts in this regard would be maintained at levels that would be less-than-significant (Certified SEIR, p. 5.4-30).

Certified SEIR Mitigation Measures: None.

Modified Project: No wildlife corridors or linkages are located onsite. Further, the site is bounded on all sides by roads and/or urban development, diminishing its potential to

function as a wildlife movement corridor. Consistent with the conclusion of the Certified

SEIR, the Modified Project would not interfere substantially with the movement of any

native resident or migratory fish or wildlife species or with established native resident or

migratory wildlife corridors or impede the use of native wildlife nursery sites.

Modified Project Conditions of Approval: None.

e, f) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The Certified SEIR did not identify any conflicts with any local policies or ordinances protecting biological resources, adopted Habitat Conservation Plan, Natural Community Plan, or other approved local, regional, or state habitat conservation plan (Certified SEIR, pp. 5.4-30 – 5.4-31).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project would be required to comply with local policies and ordinances protecting biological resources. The Modified Project does propose or require development or activities that would conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Modified Project Conditions of Approval: None.

Summary

When compared to impacts considered and addressed in the Certified SEIR, no new significant, substantially increased, or substantially different biological resources impacts would result from the Modified Project. No changed or new information has been identified to indicate that any impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; Habitat Suitability Evaluation (EnviroPlus Consulting, LLC) October 30, 2023; Biological Update for The Avenue Specific Plan (Planning Area 5) Project; City of Ontario, County of San Bernardino, California (VCS Environmental) January 16, 2024; The Avenue Specific Plan, 2024 Amendment.

5. CULTURAL RESOURCES

					New		
					Information		
				New	Showing	No Changes	
		Substantial	Substantial	Information	Ability to	or New	
		Change in	Change in	Showing	Reduce but	Information	
		Project	Circumstances	Greater	not Eliminate	Requiring	
		Requiring	Requiring	Significant	Significant	Preparation	
		Major EIR	Major EIR	Effects than	Effects in	of an MND or	No
W	ould the project:	Revisions	Revisions	Previous EIR	Previous EIR	EIR	Impact
a)	Cause a substantial adverse change in						
	the significance of a historical resource					X	
	pursuant to Section 15064.5?						
b)	Cause a substantial adverse change in						
	the significance of an archaeological					X	
	resource pursuant to Section 15064.5?						
c)	Disturb any human remains,						
	including those interred outside of					Χ	
	formal cemeteries?						

Substantiation:

a) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: Historic resources in the City include historic districts, historic landmarks or points of historical interest, and other buildings, structures, objects, and sites that appear eligible for listing on the National, California, or Local Registers of Historic Places. The Certified SEIR concluded that adoption of TOP 2050 would not itself directly affect any historical structures; however, identified and potential historic structures and sites may be vulnerable as development occurs. The Certified SEIR concluded this was a potentially significant impact (Certified SEIR, pp. 5.5-18 – 5.5-19).

Certified SEIR Mitigation Measure:

5-1 Historic or potentially historic resources in the City shall be evaluated for historic significance through the City's tier system prior to the issuance of plan or development approvals. Pursuant to City's Development Code (Chapter 7, Historic Preservation), each historic resource shall be fully documented and cataloged pursuant to Historic American Building Survey/Historic American Engineering Record (HABS/HAER) standards, to provide a record of the resource, including, but not limited to: [i] the preparation of site

plans, floor plans, exterior and interior elevations, and detail drawings of character defining features (such as moldings, stairs, etc.); and [ii] photographs of the resource, including the exterior, interior, and interior and exterior character defining features (such as moldings, light fixtures, trim patterns, etc.).

Even with the implementation of Mitigation Measure 5-1, the Certified SEIR concluded that impacts to historical resources would be significant and unavoidable (Certified SEIR, p. 5.5-23).

Modified Project: The Specific Plan area has been surveyed at least five times between 2004 and 2006, as follows.

- Stantec Consulting, Inc., A Phase I Cultural Resources Inventory and Paleontological Assessment for the 111-Acre Avenue Specific Plan Project, City of Ontario, County of San Bernardino, California, April 19, 2006.
- Chambers Group, Inc., Phase I and II Cultural Resources Survey of a 169-Acre Former Dairy Farm, Ontario, San Bernardino County, California, October 2005.
- Chambers Group, Inc., Cultural Resources Survey of 13 Parcels Consisting of 173-Acres, Ontario, San Bernardino County, California, October 2005.
- Chambers Group, Inc., Cultural Resources Survey of a 58-Acres Former Dairy Farm, Ontario, San Bernardino County, California, August 2004.
- Chambers Group, Inc., Cultural Resources Survey of a 163-Acre Former Dairy Farm, Ontario, San Bernardino, California, September 2005.

Additionally, a cultural resources records search of the City was completed in December 2021. No historical resources have been identified within the Specific Plan area.

The Modified Project would be required to conform to City Conditions of Approval providing for protection of potentially significant historic resources, and would implement above-noted Certified SEIR Mitigation Measure 5-1. No additional measures are required or proposed for the Modified Project.

With conformance to City Conditions of Approval, and implementation of mitigation, the potential for the Modified Project to adversely to result in cause a substantial adverse change in the significance of a historical resource would be less-than-significant. When compared to the Certified SEIR findings, no new or substantially increased impacts to paleontological resources would result from the Modified Project.

Modified Project Conditions of Approval: The Modified Project would implement applicable Certified SEIR mitigation measures.

b) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: Adoption of TOP 2050 would not of itself directly affect archaeological resources. However, buildout of TOP 2050 land use plan would allow development activities and ground disturbance affecting known and potential areas of archaeological sensitivity. These activities could potentially cause the disturbance of archaeological resources. Therefore, future development that would be accommodated by TOP 2050 could potentially unearth previously unrecorded resources (Certified SEIR, p. 5.5-19).

Certified SEIR Mitigation Measure:

5-2 In areas of documented or inferred from evident archaeological and/or paleontological resource presence, City staff shall require applicants for development permits to provide studies to document the presence/absence of such resources. On properties where resources are identified, such studies shall provide a detailed mitigation plan, including a monitoring program and recovery and/or in situ preservation plan, based on the recommendations of a qualified cultural preservation expert. The mitigation plan shall include the following requirements:

a) Archaeologists and/or paleontologist shall be retained for the project and will be on call during grading and other significant ground-disturbing activities.

b) Should any cultural/scientific resources be discovered, no further grading shall occur in the area of the discovery until the Planning Director is satisfied that adequate provisions are in place to protect these resources.

c) Unanticipated discoveries shall be evaluated for significance by a San Bernardino County Certified Professional Archaeologist/Paleontologist. If significance criteria are met, then the project shall be required to perform data recovery, professional identification, radiocarbon dates, and other special studies; submit materials to a museum for permanent curation; and provide a comprehensive final report including catalog with museum numbers.

With the implementation of Mitigation Measure 5-2, the Certified SEIR concluded that impacts to archaeological and/or paleontological resources would be less-than-significant. (Certified SEIR, p. 5.5-22).

Modified Project: No archeological resources have been identified within the Specific Plan area as part of the previously-listed archeological surveys or records search. The Modified Project would be required to conform to City Conditions of Approval providing for protection of potentially significant archeological resources, and would implement above-noted Certified SEIR Mitigation Measure 5-2.

With conformance to City Conditions of Approval, and implementation of mitigation, the potential for the Modified Project to adversely to result in cause a substantial adverse change in the significance of a historical resource would be less-than-significant. When compared to the Certified SEIR findings, no new or substantially increased impacts to archeological resources would result from the Modified Project.

Modified Project Conditions of Approval: The Modified Project would implement applicable Certified SEIR mitigation measures. Please refer also to Conditions of Approval that would be implemented under the topical heading "Tribal Cultural Resources."

c) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The Certified SEIR concluded that compliance with existing regulations would ensure that the potential for TOP 2050 to disturb any human remains, including those interred outside of formal cemeteries was less-than-significant (Certified SEIR, p. 5.5-21).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project would be required to comply with all existing regulations, including the California Public Resources Code Section 5097.98, which would afford protection for any human remains discovered during development activities. On this basis, the potential for the Modified Project to result in disturbance of any human remains, including those interred outside of formal cemeteries would be less-than-significant. When compared to the Certified SEIR findings, no new or substantially increased impacts related to potential disturbance of human remains would result from the Modified Project.

Modified Project Conditions of Approval: None.

Summary

When compared to impacts considered and addressed in the Certified SEIR, no new significant, substantially increased, or substantially different impacts to unique cultural resources would occur as a result of the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; Addendum to The Ontario Plan Environmental Impact Report, File Nos.: PGPA19-008, PSPA19-011, and PMTT19-015 (City of Ontario) 2020; The Avenue Specific Plan, 2024 Amendment.

6. ENERGY

				New		
				Information		
			New	Showing	No Changes	
	Substantial	Substantial	Information	Ability to	or New	
	Change in	Change in	Showing	Reduce but	Information	
	Project	Circumstances	Greater	not Eliminate	1. 0	
	Requiring	Requiring	Significant	Significant	Preparation	
	Major EIR	Major EIR	Effects than	Effects in	of an MND or	No
Would the project:	Revisions	Revisions	Previous EIR	Previous EIR	EIR	Impact
a) Result in potentially significant						
environmental impact due to wasteful,						
•					χ	
inefficient, or unnecessary consumption					Λ	
of energy resources, during project						
construction or operation?						
b) Conflict with or obstruct a state or local						
plan for renewable energy or energy					X	
efficiency?						

Substantiation:

a) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The Certified SEIR concluded that regulatory compliance under TOP 2050 buildout conditions would promote building energy efficiency and vehicle fuel efficiency and reduce building energy demand and transportation-related fuel usage. Additionally, TOP 2050 includes policies related to land use and transportation planning and design, energy efficiency, public and active transit, and renewable energy generation that would contribute to enhanced building and transportation-related energy efficiencies and thereby reduce demands on nonrenewable sources of energy. Implementation of TOP 2050 Policies, energy efficiency and conservation measures articulated in the Community Climate Action Plan (CCAP), and compliance with regulatory requirements would ensure that energy consumption resulting from TOP 2050 buildout would not be inefficient, wasteful, or unnecessary. On this basis, the potential for TOP 2050 to result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources would be less-than-significant (Certified SEIR, pp. 5.6-9 – 5.6-12).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. The Modified Project in total would be required to comply with incumbent performance standards established under the Building Energy Efficiency Standards contained in the California Code of Regulations (CCR), Title 24, Part 6 (Title 24, Energy Efficiency Standards). The Modified Project would be required to conform to applicable CALGreen provisions (CCR, Title 24, Part 11 – CALGreen). CALGreen supports the goals of the State's greenhouse gas reduction and building energy efficiency programs. The Modified Project would also implement applicable efficiency/conservation measures provisions of the CCAP and applicable CCAP updates.

Based on the preceding, the Modified Project would not result in or cause wasteful, inefficient, and unnecessary consumption of energy; and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. When compared to impacts addressed in the Certified SEIR, no new or substantially increased energy impacts would occur under the Modified Project.

Modified Project Conditions of Approval: None.

b) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The Certified SEIR notes that TOP 2050 would comply with applicable provisions of the California Renewables Portfolio Standard Program (RPS); and current and future iterations of CALGreen. Additionally TOP 2050 includes policies supporting statewide goals to transition the electricity grid to renewable sources. Mandated compliance with the CCAP and its updates would also be required for all new development under TOP 2050. On this basis, the Certified SEIR concluded that the potential for TOP 2050 to conflict with or obstruct a state or local plan for renewable energy or energy efficiency would be less-than-significant (Certified SEIR, pp. 5.6-13, 5.6-14).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. The Modified Project would be required to comply with incumbent Building Energy Efficiency Standards contained in the California Code of Regulations (CCR), Title 24, Part 6, Energy Efficiency Standards including applicable CALGreen provisions. CALGreen supports the goals of the State's greenhouse gas reduction and building energy efficiency programs. The Modified Project would also be required to implement applicable energy efficiency/conservation measures of the CCAP and its updates.

Based on the preceding, the Modified Project would not result in or cause wasteful, inefficient, and unnecessary consumption of energy; and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Modified Project Conditions of Approval: None.

Summary

When compared to impacts considered and addressed in the Certified SEIR, no new significant, substantially increased, or substantially different energy impacts would occur as a result of the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan, 2024 Amendment.

7. GEOLOGY AND SOILS

W	ould the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a)	Directly or indirectly cause potential						•
	substantial adverse effects, including						
	the risk of loss, injury, or death						
	involving:						
	(i) rupture of a known earthquake fault;					X	
	(ii) strong seismic ground shaking;					X	
	(iii) seismic-related ground failure, including liquefaction; or					Х	
	(iv) landslides?					X	
b)	Result in substantial soil erosion or the loss of topsoil?					X	
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?					Х	
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?					Х	
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?					Х	
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?					X	

Substantiation:

a – d) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The Certified SEIR recognizes existing geological conditions and location of the City within a seismically active area. The Certified SEIR concludes that compliance with California Building Code (CBC) regulations and standard City Conditions of Approval would ensure that potential geology/soils impacts related to earthquakes, seismic hazards, erosion, and adverse soils conditions, would be maintained at levels that would be less-than-significant (Certified SEIR, pp. 5.7-18 – 5.7-21).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. All development proposals within the Modified Project site would be required to comply with CBC regulations and standard City Conditions of Approval, acting to preclude potentially significant geology/soils impacts. All potential geology and soils impacts associated with development of the subject site would be less-than-significant based on compliance with the Uniform Building Code, California Building Code, the Ontario Municipal Code, and applicable TOP 2050 Policies.

There are no known or suspected faults or other adverse geology/soils conditions affecting the subject site (Certified SEIR, pp. 5.7-4 – 5.7-16).⁵ As part of the City's standard review and approval processes, the Modified Project would be required to comply with provisions of Final City-approved geotechnical report(s). Design of the Modified Project facilities would also be required to comply with applicable provisions of the Uniform Building Code (UBC), California Building Code (CBC), City Municipal Code, and would be required to implement applicable Ontario Plan strategies. Compliance with these measures would ensure that potential geology and soils impacts remain at levels that would be less-than-significant. The Modified Project would therefore not result in new, additional, or different geological/soils impacts not considered and addressed in the Certified SEIR.

The Avenue Specific Plan, 2024 Amendment Addendum to The Ontario Plan Certified SEIR (SCH No. 2021070364)

⁵ This is also consistent with previous analysis prepared for the Project site. See: *The Avenue* 2020 *Addendum to the Ontario Plan Environmental Impact Report* [City File Nos. PGPA19-008, PSPA19-011, PMTT19-015] pp. 23 – 260).

Modified Project Conditions of Approval: None.

e) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: Wastewater generated by new development pursuant to buildout of TOP 2050 would be conveyed to and treated at wastewater treatment facilities owned and operated by the Inland Empire Utilities Agency (Regional Plant No. 1 in the City of Ontario and Regional Plant No. 5 in the City of Chino).

The use of septic tanks for new development would be restricted to areas not "in practical proximity existing sewer mains . . ." (Certified SEIR, p. 5.7-22).

Based on the preceding, the Certified SEIR concluded that TOP 2050 would not result in adverse impacts related to use of septic tanks or alternative wastewater disposal systems and ability of soils to accept these systems.

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. The Modified Project site is fully served by existing and planned sewer service. The Modified Project does not propose or require use of septic systems.

Based on the preceding, there is no potential for the Modified Project to result in adverse impacts related to use of septic tanks or alternative wastewater disposal systems and ability of soils to accept these systems.

Modified Project Conditions of Approval: None.

f) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The geology underlying the City is common and typical within the region and is not considered unique (Certified SEIR, p. 5.7-20).

Adoption of TOP 2050 in itself would not directly affect paleontological resources. However, implementation of TOP 2050 land use plan could allow development and redevelopment of potentially sensitive areas. The Certified SEIR concluded this was a potentially significant impact (Certified SEIR, pp. 5.7-20, 5.7-21).

Certified SEIR Mitigation Measures:

- 5-2 In areas of documented or inferred archaeological and/or paleontological resource presence, City staff shall require applicants for development permits to provide studies to document the presence/absence of such resources. On properties where resources are identified, such studies shall provide a detailed mitigation plan, including a monitoring program and recovery and/or in situ preservation plan, based on the recommendations of a qualified cultural preservation expert. The mitigation plan shall include the following requirements:
 - a. Archaeologists and/or paleontologist shall be retained for the project and will be on call during grading and other significant ground-disturbing activities.
 - b. Should any cultural resources be discovered no further grading shall occur in the area of the discovery until the Planning Director or designee is satisfied that adequate provisions are in place to protect these resources.
 - c. Unanticipated discoveries shall be evaluated for significance by a San Bernardino County Certified Professional Archaeologist/Paleontologist. If significance criteria are met, then the project shall be required to perform data recovery, professional identification, radiocarbon dates, and other special studies; submit materials to a museum for permanent curation; and provide a comprehensive final report including a catalog with museum numbers.

With application of mitigation, the Certified SEIR concluded that TOP 2050 impacts to paleontological resources would be less-than-significant (Certified SEIR, p. 5.7-25).

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. The Certified SEIR indicates that there is a possibility of finding paleontological resources within the City boundaries at depths of 10 feet or more below ground surface (Certified SEIR, p. 5.7-22). No known paleontological resources exist within the subject site or its vicinity. Moreover,

soils underlying the site comprise younger Quaternary Alluvium sediments. These soils typically do not contain significant vertebrate fossils (The Avenue 2020 Addendum, p. 25). Additionally, per City Conditions of Approval, should any unanticipated paleontological resources be encountered during excavation, construction activities would be halted or would be relocated to other unaffected areas of the subject site. Under such circumstances, a qualified paleontologist would be retained to evaluate any encountered find. If the find is determined to be significant, avoidance or other appropriate measures shall be implemented.

Modified Project Conditions of Approval: The Modified Project would be required to conform to City Conditions of Approval providing for protection of potentially significant paleontological resources, and would implement above-noted Certified SEIR Mitigation Measure 5-2. No additional measures are required or proposed for the Modified Project.

With conformance to City Conditions of Approval, and implementation of mitigation, the potential for the Modified Project to adversely to result in cause a substantial adverse change in the significance of a paleontological resource would be less-than-significant. When compared to the Certified SEIR findings, no new or substantially increased impacts to paleontological resources would result from the Modified Project.

Summary

When compared to impacts considered and addressed in the Certified SEIR, no new significant, substantially increased, or substantially different geology and soils impacts would occur as a result of the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan, 2024 Amendment.

8. GREENHOUSE GAS EMISSIONS

					New		
					Information		
		61	0.1	New	Showing	No Changes	
		Substantial	Substantial	Information	Ability to	or New	
		Change in	Change in Circumstances	Showing Greater	Reduce but not Eliminate	Information	
		Project Requiring	Requiring	Significant	Significant	Requiring Preparation	
		Major EIR	Major EIR	Effects than	Effects in	of an MND	No
W	ould the project:	Revisions	Revisions	Previous EIR	Previous EIR	or EIR	Impact
a)	Generate greenhouse gas emissions,						•
	either directly or indirectly, that may					Χ	
	have a significant impact on the					^	
	environment?						
b)	Conflict with any applicable plan,						
	policy or regulation of an agency					V	
	adopted for the purpose of reducing					X	
	the emissions of greenhouse gases?						

Substantiation:

a, b) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The Certified SEIR substantiates that TOP 2050 would yield a net decrease in GHG emission when compared to the previous General Plan (TOP 2009) GHG emissions forecasts. Further, under TOP 2050 and the CCAP, the City would achieve State emissions reductions targets and would progress toward attainment of the State's carbon neutrality goals. On this basis, the Certified SEIR concluded that the potential for TOP 2050 to generate greenhouse gas emissions, either directly or indirectly, that may have an adverse impact on the environment would be less-than-significant (Certified SEIR, pp. 5.8-25, 5.8-26).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. GHGs generated by the Modified Project are consistent with GHG emissions estimates reflected in the Certified EIR. For informational purposes, estimated GHGs generated by the Modified Project are presented at Table 8-1.

Table 8-1 Modified Project GHG Emissions

GHG Emissions Sources		-	Emission (lbs	s./day)	
GHG Emissions Sources	CO ₂	CH ₄	N ₂ O	R	Total CO2e
Mobile Source	48,509.00	2.54	2.45	75.33	49,376.80
Area Source	983.99	0.02	0.00	0.00	985.20
Energy Source	9,705.56	0.89	0.06	0.00	9,745.98
Water	665.34	6.15	0.15	0.00	864.42
Waste	351.51	35.13	0.00	0.00	1,229.82
Refrigerants	0.00	0.00	0.00	6.34	6.34
Total CO ₂ e (All Sources) 62,208.56					

Source: The Avenue Specific Plan, 2023 Amendment - Greenhouse Gas Assessment (Urban Crossroads, Inc.) May 8, 2024.

The Modified Project would be required to implement applicable provisions of the incumbent City CAP, to include measures and design features necessary to achieve applicable CAP GHG emissions reduction performance standards. The City CAP supports and complies with state and regional plans, policies, and regulations adopted for the purpose of reducing GHGs. On this basis, the Modified Project would not conflict with plans, policies, and regulations adopted for the purpose of reducing GHGs. The Modified Project would therefore not result in new, additional, or different impacts regarding consistency with applicable GHG emissions reduction plans, policies, and regulations not considered and addressed in the Certified SEIR.

Modified Project Conditions of Approval: None.

Summary

When compared to impacts considered and addressed in the Certified SEIR, no new significant, substantially increased, or substantially different GHG impacts would occur as a result of the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan, 2023 Amendment -

Greenhouse Gas Assessment (Urban Crossroads, Inc.) May 8, 2024; The Avenue Specific Plan, 2024 Amendment.

9. HAZARDS AND HAZARDOUS MATERIALS

	ould the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?					Х	
	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?					Х	
	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ½ mile of an existing or proposed school?					Х	
,	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?					х	
	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?					Х	
	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?					Х	
	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?					Х	

Substantiation:

a, b) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The Certified SEIR determined that buildout in accordance with TOP 2050 would involve the transport, use, and/or disposal of hazardous materials. However, federal and state regulations, City ordinances, and TOP 2050 Policies would appropriately control handling of hazardous substances to reduce potential releases; exposure; and risks of transporting, storing, treating, and disposing of hazardous materials and wastes. On this basis, the Certified SEIR concluded that the potential for TOP 2050 to result in adverse impacts related to transport, use, and/or disposal of hazardous materials; creation of significant hazards, or result in hazardous emissions affecting schools, would be less-than-significant (Certified SEIR, pp. 5.1-4 – 5.1-10).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. The Modified Project would not result in or cause exposure(s) to hazards or potentially hazardous conditions. That is, uses proposed by the Modified Project are not considered hazardous. Nor does the Modified Project propose or require facilities or operations involving inherent substantial hazards.

During the normal course of construction and operation activities, there would be limited transport of potentially hazardous materials (e.g., gasoline, diesel fuel, paints, solvents, fertilizer, etc.) to and from the Modified Project site. However, as presented within the Certified SEIR, the Modified Project would be required to comply with all City and County Hazardous Materials Management Plans and regulations addressing transport, use, storage and disposal of these materials. The Modified Project does not propose or require uses or activities that would result in atypical transportation, use, storage, or disposal of hazardous or potentially hazardous materials not addressed under current regulations and policies.

Further, any commercial/retail occupancies within the Modified Project that would store or use hazardous materials would be required to comply with California Hazardous Materials Business Plan (HMBP) requirements (*California Health & Safety Code*, Division 20, Chapter 6.95). The HMBP contains detailed information on the storage of hazardous materials at regulated facilities. The purpose of the HMBP is to prevent or minimize damage to public health, safety, and the environment, from a release or threatened release of a hazardous material. The HMBP also provides emergency response personnel with adequate information to help them better prepare and respond to chemical-related incidents at regulated facilities.

Existing Hazards/Hazardous Conditions

Previous Analyses

Hazardous or potentially hazardous conditions affecting the subject site have been extensively evaluated previously in Phase I/II Environmental Site Assessments (Phase I/II ESAs) as well as Methane Gas Investigation prepared in support of the Certified 2007 EIR for The Avenue Specific Plan (Certified 2007 EIR, SCH No. 2005071109). These Phase I/II ESAs and Methane Gas Investigation Studies are listed below and are incorporated here by reference. All of the listed documents are available through the City of Ontario.

Phase I Environmental Site Assessments

- Blasland, Bouck & Lee, Inc. *Phase I Environmental Site Assessment and Shallow Soil Sampling, Anderson Property APN No. 218-181-17 and 218-181-21 Ontario, California,* March 2001.
- Carlin Environmental Consulting, Environmental Site Assessment of The Vander Eyk Dairy 13750 S. Haven Avenue Ontario, California, September 29, 2004.
- Geokinetics, *Phase I Environmental Site Assessment Koopman Property Ontario, California*, October 3, 2002.
- Geokinetics, Phase I Environmental Site Assessment Schoneveld Property Ontario, California, November 25, 2002.
- Geokinetics, *Phase I Environmental Site Assessment Harada Property Ontario California*, January 3, 2003.

- Geokinetics, Phase I Environmental Site Assessment Jongsma Property Ontario, California, August 29, 2003.
- Geokinetics, Phase I Environmental Site Assessment Hettinga Property Ontario, California, June 5, 2004.
- Geokinetics, Phase I Environmental Site Assessment Ferreira Property 13950 Haven Avenue Chino, California, February 17, 2005.
- Geokinetics, Phase I Environmental Site Assessment DeGroot Property 14080 Haven Avenue Ontario, California, February 28, 2005.
- Geokinetics, Phase I Environmental Site Assessment Kaplan Property 13923 Archibald Avenue Ontario, California, March 16, 2005.
- Geokinetics, Phase I Environmental Site Assessment Anderson-Dotson Property Ontario, California, November 25, 2002.
- Lawson & Associates, Phase I Environmental Site Assessment Approximate 58-Acre Dairy Property 13737 South Archibald Avenue San Bernardino County, California, December 19, 2003.
- Lawson & Associates, Phase I Environmental Site Assessment Dykstra Dairy, 10129 Schaefer Avenue City of Ontario, San Bernardino County California, February 8, 2005.
- Lawson & Associates, *Phase I Environmental Site Assessment Ferreira Dairy*, 13950 Haven Avenue City of Ontario, San Bernardino County California, March 15, 2005.
- LGC Inland, INC, Phase I Environmental Site Assessment DeGroot Dairy, 14080 Haven Avenue City of Ontario, San Bernardino County California, February 7, 2005.
- Stantec, Phase I Environmental Site Assessment L & M Dairy #2 Parentex Property, City of Ontario, California, April 10, 2006.

Phase II Environmental Site Assessment

• Lawson & Associates, Phase II Soil Sampling Investigation, Del Amo Dairy, 13737 South Archibald Avenue, City of Ontario, San Bernardino County, California, January 21, 2004.

Methane Gas Investigations

• Geokinetics, Subsurface Methane Gas Investigation for The Koopman Property Ontario, California, October 11, 2002.

- Geokinetics, Subsurface *Methane Gas Investigation for Schoneveld Property Ontario, California*, November 25, 2002.
- Geokinetics, Subsurface Methane Gas Investigation for Harada Property Ontario, California, January 3, 2003.
- Geokinetics, Subsurface Methane Gas Investigation for Jongsma Property Ontario, California, August 29, 2003.
- Geokinetics, Subsurface Methane Gas Investigation for Hettinga Property Ontario, California, June 5, 2004.
- Geokinetics, Subsurface Methane Gas Investigation DeGroot Property 14080 Haven Avenue Ontario, California, March 1, 2005.
- Geokinetics, *Preliminary Subsurface Methane Gas Investigation Kaplan Property* 13923 *Archibald Avenue Ontario*, California, March 16, 2005.
- Geokinetics, Subsurface Methane Gas Investigation for Anderson-Dotson Property Ontario, California, November 25, 2002.
- Lawson & Associates. Preliminary Subsurface Methane Gas Investigation Ferreira Property Ontario, California, February 18, 2005.
- Lawson & Associates. Preliminary Methane Site Assessment, Proposed Residential Development, Dykstra Parcel, City of Ontario, California, October 24, 2005.
- Petra Environmental Division, Report of the Site History Relative to The Potential for Methane Generation, 60-Acre Parcel, Designated as (APN 0218-201-44 and 15) Located in the City of Ontario, County of San Bernardino, California, August 9, 2004.

Modified Project Phase I ESA

Complementing the above-cited Phase I/II ESAs, a focused updated Phase I ESA (*Phase I Environmental Site Assessment - 13838, 13898, 14058 S. Archibald Avenue* [Hillmann Consulting] June 30, 2023, 2023 Phase I ESA) has been prepared in support of this Addendum. The 2023 Phase I ESA concluded that the evaluated properties are not adversely affected by any recognized environmental conditions (RECs), controlled recognized environmental conditions (CRECs) and/or significant data gaps (SDGs) (2023 Phase I ESA, p. 3).

Modified Project Conditions of Approval: The Modified Project would be required to implement federal and state regulations, City ordinances, and TOP 2050 Policies

addressing potential hazards or hazardous conditions that could result from construction and operation of the Project uses. Additionally, the Modified Project would be required to implement federal and state regulations, City ordinances, and TOP 2050 Policies. To ensure compliance with applicable regulations, ordinances, and policies, the following measures are included as Project Conditions of Approval.

HM-1 Removal of structures, including, but limited to, under- and aboveground storage tanks, septic systems, and water wells shall conform to all Federal, State, and local agency regulations (specifically with those required by the City Building and Safety Department and the Hazardous Materials Division of the San Bernardino County Fire Department). Due to the extensive disposal requirements and protocols contained within these regulatory schemes, implementation and adherence to these various regulatory requirements will ensure that no significant impacts occur.

HM-2 Prior to grading activities for any areas not previously tested, a methane gas assessment shall be prepared by a licensed professional with expertise in soil gas assessments for subdivisions proposed on former dairies, poultry ranches, hog ranches, livestock feed operations and similar facilities to determine the presence of methane gas within the project boundary. The methane gas assessment shall identify monitoring and mitigation strategies and approaches. All mitigation measures/plans and specifications shall be reviewed and approved by the City of Ontario.

Such an assessment may take two steps. A preliminary assessment will be done prior to grading to determine exactly where dairies have existed in the past so that the post grading assessment/mitigation measures can be focused on the portions of the Planning Areas that have included former agricultural activities. The second step will include actual testing of graded pads no sooner than 30 days after construction to determine if methane is detected above 5,000 ppm.

The following grading guidelines shall also be adhered to:

• Careful clearing, grubbing, segregation, and stockpiling or disposal near surface, of organics-rich soils at the site prior to the initiation of mass grading activities.

- The identification and segregation/stockpiling or disposal of deeper soils which contain elevated levels of organic material. Soils with an organic content of 0.4% or higher shall be segregated for controlled placement that ensures that methane levels are below 5,000 ppm.
- Soils with organic content in excess of 0.4% shall not be placed as "deep" fill. Soils with organic contents in excess of this amount shall be placed in open areas within approximately two feet of the finished ground surface.
- HM-3 To eliminate the risk of ground cracking, manure shall be removed from the site, such that the organic matter content of onsite soils shall not exceed 2% (a 2% total organic content is allowed, of which no more than 1% can be manure) in the building foundation areas when mixed with underlying clean soils and imported fill.
- HM-4 To the extent not previously prepared and to properly assess and address potential hazardous materials, a Phase I Environmental Site Assessment (ESA) shall be performed by a registered environmental assessor (REA) prior to the approval of the Tentative Tract Map, site plan or other discretionary approval for a given phase of development. If potential hazardous materials or conditions are identified in the Phase I report, the recommendations of the ESA shall be implemented. Such recommendations shall include surficial sampling and chemical analysis within agricultural areas or where soil staining was observed. The Phase I ESA shall be provided to the City and shall be included in any CEQA analysis prepared in connection with the consideration of the discretionary approval for development.
- HM-5 If, while performing any excavation as part of Project construction, material that is believed to be hazardous waste as defined in Section 25117 of the California Health and Safety Code is discovered, the developer shall contact the City Fire Department and the County of San Bernardino Fire Department Hazardous Materials Division. Excavation shall be stopped until the material has been tested and the absence of hazardous waste has been confirmed. If hazardous waste is determined to be present, the California Department of Toxic Substances control shall be contacted and the material shall be removed and disposed of pursuant to applicable provisions of California law.

Conditions of Approval identified herein, implementation of federal and state regulations, compliance with City ordinances, and TOP 2050 Policies act to maintain potential hazards/hazardous materials impacts at levels that would be less-than-significant. On this basis, the potential for the Modified Project to adversely to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; or create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment would be less-than-significant.

c) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The Certified SEIR determined that buildout in accordance with TOP 2050 would involve the transport, use, and/or disposal of hazardous materials. However, federal and state regulations, City ordinances, and TOP 2050 Policies would appropriately control handling of hazardous substances to reduce potential releases; exposure; and risks of transporting, storing, treating, and disposing of hazardous materials and wastes. On this basis, the Certified SEIR concluded that the potential for TOP 2050 to result in adverse impacts related to transport, use, and/or disposal of hazardous materials; creation of significant hazards, or result in hazardous emissions affecting schools, would be less-than-significant (Certified SEIR, pp. 5.1-4 – 5.1-10).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project does not propose or require uses that would handle hazardous or acutely hazardous materials, substances, or waste. The Modified Project would not result in potentially significant hazardous impacts at existing or proposed vicinity schools.⁶

Modified Project Conditions of Approval: None.

⁶ Note: Any occupation of the potential school site within the SPA would occur subsequent to development of the SPA uses generally. As such, school occupants would not be subject to any SPA construction-source impacts.

d) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: Development in accordance with TOP 2050 would involve redevelopment and reuse of some sites listed as hazardous materials sites on environmental databases. The environmental databases document the presence of hazardous materials on those sites, but do not document hazardous releases. Redevelopment of the affected sites could potentially expose future residents and workers to hazards from known hazardous materials releases on and near the sites. Should environmental database listed sites be proposed for development, site assessments for hazardous materials and remediation of hazardous materials releases would be required in accordance with TOP 2050 Policies, federal, state, and local regulations. On this basis, the Certified SEIR concluded that the potential for development pursuant to TOP 2050 to be located on hazardous materials sites, and thereby create adverse hazard impacts affecting the public or environment would be less-than-significant (Certified SEIR, pp. 5.9-38, 5.9-39).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. The Modified Project site is not affected by any recognized environmental conditions (RECs), controlled recognized environmental conditions (CRECs) and/or significant data gaps (SDGs). This would include potential listing as a hazardous material site pursuant to Government Code Section 65962.5. Additionally, as discussed in the Certified SEIR, the Modified Project would be required to comply with applicable TOP 2050 Policies, federal, state, and local regulations, ensuring that hazards/hazardous materials impacts are maintained at levels that would be less-than-significant. Therefore, the Modified Project would not create a hazard to the public or the environment and no impact is anticipated.

On this basis, there is no potential for the Modified Project to be located on a Government Code Section 65962.5-listed site, and thereby would not create adverse hazard impacts affecting the public or environment. When compared to the Certified SEIR findings, no

new or substantially increased impacts related to development affecting Government Code Section 65962.5-listed sites would result from the Modified Project.

Modified Project Conditions of Approval: None.

e) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: Ontario International Airport (ONT), as well as a small portion of the Chino Airport property, is located within the City of Ontario. The Certified SEIR determined that TOP 2050 Policies and established processes for consistency reviews of new development with the appropriate Airport Land Use Compatibility Plan (ALUCP) would be sufficient to prevent significant impacts (Certified SEIR, p. 5.8-27).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. Location of area airports relative to the Modified Project site has not changed since preparation of the Certified SEIR – the site remains more than two miles distant from the nearest airport; the nearest airport is ONT, located approximately 3.3 miles north of the Modified Project site.

The Modified Project site is located within the area subject to provisions of The ONT Airport Land Use Compatibility Plan, ALUCP (July 2018). The ALUCP defines the ONT Airport Influence Area (AIA) as an area in which current and future airport-related noise, overflight, safety, and airspace protection factors may significantly affect land uses or necessitate restriction on those uses. The Modified Project site is located outside the ONT safety zones (see: TOP 2050 Policy Plan Figure LU-06, *Airport Safety Zones & Influence Areas*). As with the development anticipated under the Original Project and evaluated in the Certified SEIR, development implemented pursuant to the Modified Project would comply with all requirements set forth within the ALUCP. Based on the preceding, the potential for the Modified Project to result in airport-related safety hazard impacts or excessive noise impacts would be less-than-significant.

Modified Project Conditions of Approval: None.

f) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: In 2018, the City of Ontario prepared a Local Hazard Mitigation Plan (LHMP) to identify the City's hazards, review and assess past disaster occurrences, estimate the probability of future occurrences, and set goals to reduce or eliminate long-term risk to people and property from natural and man-made hazards. Wildfire hazard is rated the highest risk of the 23 hazards evaluated, followed by flooding. Under the LHMP, interstate highways would serve as major emergency response and evacuation routes. TOP 2050 Policies and local roadways are designed and constructed so as to facilitate access under normal and emergency conditions.

A review of emergency access is included as part of the standard City's Design Review process. Additionally, the Ontario Fire Department reviews development applications to ensure that adequate emergency accessibility is provided based on local and state guidance.

Based on the preceding, the Certified SEIR concluded that buildout of the City in accordance with TOP 2050 would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. Impacts in these regards would be less-than-significant (Certified SEIR, p. 5.9-41).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. The Modified Project does not propose or require permanent alteration of vehicle circulation routes, and would not interfere with any identified emergency response or emergency evacuation plan. Standard City design review processes include coordination with fire and police departments during pre-construction review of plans to ensure that potential interference with emergency response plans and evacuation plans are avoided. Based on the preceding, the Modified Project would not impair implementation of, or physically

interfere with, an adopted emergency response plan or emergency evacuation plan. Impacts in these regards would be less-than-significant.

Modified Project Conditions of Approval: None.

g) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The Certified SEIR identifies available resources addressing wildland fires and associated potential impacts. These resources include: CAL FIRE 2019 Strategic Fire Plan for California, the California Fire Code, County of San Bernardino Multijurisdiction Hazard Management Plan, the Ontario LHMP, and fire services from the Ontario Fire Department. The Certified SEIR determined that adherence to existing regulations and review of building plans by the Ontario Fire Department, development and infrastructure associated with TOP 2050 would not exacerbate risk or result in post-wildfire hazards. No significant impacts were identified (Certified SEIR, p. 5.9-41).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. The Modified Project site is located in an urbanized area, and no wildlands are located in the vicinity of the site. Fire protection services are provided by the Ontario Fire Department. Preconstruction coordination with Ontario Fire Department staff and adherence to local fire department regulations during construction and operation of the Modified Project would be required. As such, no new or substantially increased impacts related to wildland fire impacts would result from the Modified Project.

Modified Project Conditions of Approval: None.

Summary

When compared to the Certified SEIR findings, no new or substantially increased hazards or hazardous emission impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from

the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; Phase I Environmental Site Assessment - 13838, 13898, 14058 S. Archibald Avenue (Hillmann Consulting) June 30, 2023; The Avenue Specific Plan, 2024 Amendment.

10. HYDROLOGY AND WATER QUALITY

					New		
		Substantial Change in	Substantial Change in	New Information Showing	Information Showing Ability to Reduce but	No Changes or New Information	
		Project Requiring	Circumstances Requiring	Greater Significant	not Eliminate Significant	Requiring Preparation	
TA7	11.1	Major EIR	Major EIR	Effects than	Effects in	of an MND	No
	ould the project:	Revisions	Revisions	Previous EIR	Previous EIR	or EIR	Impact
a)	Violate any water quality standards or						
	waste discharge requirements or					Χ	
	otherwise substantially degrade						
1 \	surface or ground water quality?						
b)	Substantially decrease groundwater						
	supplies or interfere substantially with groundwater recharge such that the						
	project may impede sustainable					X	
	groundwater management of the						
	basin?						
c)	Substantially alter the existing						
	drainage pattern of the site or area,						
	including through the alteration of the					v	
	course of a stream or river or through					X	
	the addition of impervious surfaces, in						
	a manner which would:						
	(i) result in substantial erosion or					X	
	siltation on- or off-site?					Λ	
	(ii) substantially increase the rate						
	or amount of surface runoff in					X	
	a manner which would result					, ,	
	in flooding on- or offsite?						
	(iii) create or contribute runoff						
	water which would exceed the						
	capacity of existing or planned						
	stormwater drainage systems					X	
	or provide substantial						
	additional sources of polluted						
	runoff?						

The Avenue Specific Plan, 2024 Amendment Addendum to The Ontario Plan Certified SEIR (SCH No. 2021070364) Environmental Checklist Page 3-56

Would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
(iv) impede or redirect flood flows?					Χ	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?					Х	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?					Х	

Substantiation:

a) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The Certified SEIR recognizes that buildout of the City pursuant to TOP 2050 would increase concentrations of pollutants during construction and post-construction activities. To address potential water quality impacts resulting from project construction and operations, projects are required to comply with provisions of the City's National Pollutant Discharge Elimination System (NPDES) permit. NPDES permit requirements include, but are not limited to, mandated preparation of a Stormwater Pollution Prevention Plan (SWPPP) and Water Quality Management Plan (WQMP). Mandated SWPPPs and WQMPs are required to develop and implement Best Management Practices (BMPs) to reduce construction-source and operational-source stormwater pollutant discharges. Based on compliance with the City NPDES Permit and implementation of required SWPPPs and WQMPs, the Certified SEIR did not identify any significant water quality impacts (Certified SEIR, p. 5.10-21).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. Consistent with City

requirements, a WQMP and SWPPP would be prepared for development proposals under the Modified Project. City review and approval of these documents is required prior to issuance of Grading Permits. As with the Original Project, implementation of an approved SWPPP and WQMP would reduce the potential for the development under the Modified Project to violate water quality standards or otherwise adversely affect water quality to levels that would be less-than-significant.

Based on the preceding, the Modified Project's potential to violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality is considered less-than-significant. When compared to the Certified SEIR findings, no new or substantially increased water quality impacts would result from the Modified Project.

Modified Project Conditions of Approval: None.

b) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: As discussed in the Certified SEIR, "[a]pproximately 46 percent of the City's water supply is groundwater pumped by the City from the Chino Groundwater Basin; groundwater pumping is managed by OMUC so that domestic demands do not exceed the safe yield for the basin, consistent with the Chino Basin Watermaster's Optimum Basin Management Program, commonly called the 'OBMP Peace Agreement'" (Certified SEIR, p. 5.10-22). The Certified SEIR notes further "the Chino Groundwater Basin is adjudicated and is considered by DWR to be a very low priority groundwater basin. Each water purveyor has an allotted amount of water that can be pumped from the basin so that the safe yield is not exceeded. The City has access to additional water supplies that can accommodate the proposed increase in growth with buildout of [TOP 2050] and would not interfere with sustainable management of the groundwater basin" (Certified SEIR, p. 5.10-22).

The Certified SEIR recognizes that development pursuant to TOP 2050 would increase the amount of impervious surface within the City. However, groundwater recharge efforts would not be hindered. To these ends, all development projects within the City would be required to prepare project-specific hydrology studies, implement low impact development BMPs and comply with NPDES regulations supporting TOP 2050 Policies promoting infiltration of runoff and groundwater recharge.

Based on the preceding, TOP 2050 would not result in substantial adverse impacts affecting groundwater supplies, groundwater recharge, or groundwater sustainability (Certified SEIR, p. 5.10-23).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. Direct additions to or withdrawals of groundwater are not proposed or required by the Modified Project. Construction proposed by the Modified Project would not involve massive substructures at depths that would significantly impair or alter the direction or rate of flow of groundwater. The Modified Project does not propose or require uses or facilities that would affect designated groundwater recharge areas. All development proposals under the Modified Project would be required to prepare development-specific hydrology studies, implement low impact development BMPs and comply with NPDES regulations supporting TOP 2050 Policies promoting infiltration of runoff and groundwater recharge.

Based on the preceding, the Modified Project would not result in substantial adverse impacts affecting groundwater supplies, groundwater recharge, or groundwater sustainability.

Modified Project Conditions of Approval: None.

c) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: Consistent with NPDES requirements, runoff quantities would not be permitted to substantially increase as a result of a development under TOP 2050. In this regard, projects would be required to prepare project-specific hydrology studies. Further, existing City policies encourage the use of low impact development

strategies to intercept runoff, reduce stormwater discharge rates, increase infiltration and ultimately reduce discharge volumes to traditional storm drain systems.

The Certified SEIR notes that while the amount of impervious surfaces would be increased under TOP 2050 (and thus surface water flows into drainage systems), existing City and County requirements would ensure significant impacts related to alteration of drainage patterns do not occur. Additionally, City policies and regulations act to minimize or avoid development or other actions that would potentially result in impedance or redirection of flood flows (Certified SEIR, pp. 5.10-23 – 5.10-27).

Based on the preceding, the potential for development under TOP 2050 to substantially alter existing drainage patterns resulting in erosion, flooding, polluted runoff, or impeded or redirected flood flows would be less-than-significant.

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. Per requirements of *The Avenue Specific Plan*, 2024 *Amendment*:

The grading and drainage of The Avenue Specific Plan area shall be designed to detain, filter and treat surface runoff, in a manner and combination which is practical, to comply with the most recent requirements of the San Bernardino County NPDES Stormwater Program's Water Quality Management (WQMP) for significant new development projects. The objective of the WQMP for this project is to minimize the detrimental effects of urbanization on the beneficial uses of receiving waters, including effects caused by increased pollutants and changes in hydrology. These effects may be minimized through the implementation of site designs that reduce runoff and pollutant transport by minimizing impervious surfaces and maximizing on-site infiltration, Source Control Best Management Practices (BMPs) and/or either on-site structural Treatment Control BMPs, or participation in regional or watershed-based

Treatment Control BMPs. An alternative to the implementation of on-site Low Impact Development (LID) BMPs to retain/infilter and treat stormwater runoff is the utilization of the off-site, regional Mill Creek Wetland facility for accomplishing water quality improvements in residential project runoff from this master planned community. All non-residential planning area projects within The Avenue will incorporate all required on-site LID BMPs, pursuant to the requirements of the current San Bernardino County Water Quality Management Plan.

Prior to the issuance of a grading or construction permit, all projects greater than 1-acre in size shall apply for coverage under the California General Permit To Discharge Storm Water Associated with Construction Activity, obtain a WDID# from the State Water Resources Control Board and prepare a Stormwater Pollution Prevention Plan (SWPPP) on the CASQA 2009 Template form and upload it to the State SMART database system. A copy of each SWPPP document and [Waste Discharger Identification Number] WDID# Certification shall also be provided to the City of Ontario, prior to any construction permit issuance. The SWPPP will identify and detail all appropriate Best Management Practices (BMPs) to be implemented or installed during construction of the project.

In addition to the preparation of a SWPPP for construction-related activities, and as part of the approval of any grading plans within the Specific Plan Area, the applicant will be required to submit a Water Quality Management Plan (WQMP) on the regional model form provided by the City. The WQMP shall identify and detail all Site Design BMPs, Source

Control BMPs and Treatment Control BMPs to be implemented or installed at this site in order to reduce storm water pollutants and site runoff.⁷

All Priority Land Use (PLU) areas within the Specific Plan Area shall comply with the statewide Trash Provisions adopted by the State Water Resources Control Board (SWRCB) and trash requirements in the most current San Bernardino County Area-Wide MS4 Permit.

[The Avenue Specific Plan, 2024 Amendment, pp. 4-29, 4-30]

Requirements of the Specific Plan Amendment outlined above in combination with City Conditions of Approval would ensure that the potential for development pursuant to the Modified Project to alter drainage patterns in a manner that would result in adverse erosion, siltation, flooding/flood flow or stormwater system capacity impacts would remain at levels that would be less-than-significant.

Modified Project Conditions of Approval: None.

d) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: As discussed in the Certified SEIR, "there are no large bodies of water that would result in a seiche during seismic activity. Additionally, the reservoirs/aboveground water tanks within the City are enclosed, thereby minimizing the possibility of a seiche. The [City] is inland and approximately 30 miles from the ocean and is not at risk of flooding due to tsunamis. Based on the preceding, the Certified SEIR concluded that TOP 2050 would not result in adverse impacts related to flood hazard, tsunami, or seiche zones, risk release of pollutants due to inundation (Certified SEIR, pp. 5.10-26, 5.10-27).

The Avenue Specific Plan, 2024 Amendment Addendum to The Ontario Plan Certified SEIR (SCH No. 2021070364)

⁷ The Mill Creek Wetland Facility (Facility) has been constructed and functional since June 2014. The Facility serves as an alternative to on-site LID BMP implementation for residential tract developers that are members of the Ontario Ranch Builders, LLC consortium and which have adequate reserved capacity in the regional facility for those planning areas. Portions of the Project site acres developed by non-members, would be required to make other arrangements or utilize another, future regional water quality facility. All non-residential planning area projects within The Avenue, including Public Schools, will incorporate on-site LID BMPs, in accordance with the regional NPDES Permit and the current San Bernardino County Water Quality Management Plan, and shall not rely on the regional wetlands facility for retention and treatment of runoff water.

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. Conditions at the Modified Project site as regards flood hazard impacts, tsunami hazard impacts, or seiche hazard impacts have not changed since preparation of the Certified SEIR – the site remains unaffected by substantial potential flood hazards, tsunami hazards, or seiche hazards.

Further, any commercial/retail occupancies within the Modified Project that would store or use hazardous materials would be required to comply with California Hazardous Materials Business Plan (HMBP) requirements (*California Health & Safety Code*, Division 20, Chapter 6.95) The HMBP contains detailed information on the storage of hazardous materials at regulated facilities. The purpose of the HMBP is to prevent or minimize damage to public health, safety, and the environment, from a release or threatened release of a hazardous material, including potential release of materials in a flood event.

Based on the preceding the potential for the Modified Project to result in release of pollutants due to an inundation event would be less-than-significant.

Modified Project Conditions of Approval: None.

e) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: As discussed in the Certified EIR, "[p]rojects approved under TOP 2050 would be required to comply with the Santa Ana River Basin Plan and to control pollutants in discharges of stormwater from postconstruction activities under NPDES Permit No. CAS618036 through preparation of a WQMP identifying BMPs for prevention of stormwater pollution during the post-construction phase, including site-design, source-control, and/or treatment BMPs. Therefore, [TOP 2050] would not obstruct or conflict with the RWQCB's Basin Plan or any groundwater management plan, and impacts would be less than significant" (Certified SEIR, p. 5.10-27).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. The Modified Project does not propose or require uses or facilities that would conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. The Modified Project would have no impacts in these regards.

Modified Project Conditions of Approval: None.

Summary

When compared to the Certified SEIR findings, no new or substantially increased hydrology or water quality impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan, 2024 Amendment.

11. LAND USE AND PLANNING

Would the project: a) Physically divide an established	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
community?					Λ	
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?					Х	

Substantiation:

a) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The Certified SEIR concluded that implementation of TOP 2050 would not result in result in the physical division of an established community (Certified SEIR, p. 5.11-6).

Certified SEIR Mitigation Measures: None.

Modified Project: No established community is located within the Modified Project site. The Modified Project would not otherwise result in potential division of an established community. The Modified Project would have no impacts in these regards.

Modified Project Conditions of Approval: None.

b) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The Certified SEIR concluded that implementation of TOP 2050 would not result in significant land use impacts (Certified SEIR, p. 5.11-11).

Certified SEIR Mitigation Measures: None.

Modified Project: Land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating environmental effects are established under the TOP 2050. The Modified Project amends the site's current land use designations to conform to TOP 2050 land use designations.

The Modified Project would be required to comply with applicable TOP 2050 Policies, applicable requirements of *The Avenue Specific Plan*, 2024 Amendment and provisions of the City Development Code. Collectively, TOP 2050 Policies, the City Development Code, and *The Avenue Specific Plan*, 2024 Amendment, and act to minimize potential environmental effects that may result from the land uses implemented under the Modified Project. On this basis, the potential for the Modified Project to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect is considered less-than-significant.

Modified Project Conditions of Approval: None.

Summary

When compared to the Certified SEIR findings, no new or substantially increased land use and planning impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan, 2024 Amendment.

12. MINERAL RESOURCES

	Substantial Change in Project	Substantial Change in Circumstances	New Information Showing Greater	New Information Showing Ability to Reduce but not Eliminate	No Changes or New Information Requiring	
	Requiring	Requiring	Significant	Significant	Preparation	
	Major EIR	Major EIR	Effects than	Effects in	of an MND	No
Would the project:	Revisions	Revisions	Previous EIR	Previous EIR	or EIR	Impact
a) Result in the loss of availability of	a					
known mineral resource that would	oe				X	
of value to the region and the resider	ts				^	
of the state?						
b) Result in the loss of availability of	a					
locally-important mineral resour	ce					
recovery site delineated on a loc	al				X	
general plan, specific plan, or oth	er					
land use plan?						

Substantiation:

a, b) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The Certified SEIR concluded that implementation of TOP 2050 would have no potential to result in the loss of a known mineral resource of value to the region or the state; or result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan (Certified SEIR, p. 5.12-6).

Certified SEIR Mitigation Measures: None.

Modified Project: Underlying conditions at the subject site have not changed since preparation of the Certified SEIR, and the site remains devoid of any potentially valuable or locally-important mineral resources. On this basis, the Modified Project would have no potential to result in the loss of a known mineral resource of value to the region or the state; or result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. No new or substantially increased mineral resources impacts would result from the Modified

Modified Project Conditions of Approval: None.

Summary

Project.

Based on the preceding, when compared to impacts identified in the Certified SEIR, no new or substantially increased mineral resources impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan, 2024 Amendment.

13. NOISE

W	ould the project result in:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?					Х	
b)	Generation of excessive groundborne vibration or groundborne noise levels?					X	
c)	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?					Х	

General Note: The technical analyses referenced in this section reflect likely maximum impacts. Subsequent to preparation of these analyses, total residential development intensities allowed under the Modified Project have been reduced consistent with direction. Specifically, the technical analyses referenced herein assume residential development of the Modified Project totaling up to 3,807 dwelling units (see Project Traffic Analysis, p. 2 et al.). As subsequently modified, maximum allowed residential development under the Modified Project would not exceed 3,753 dwelling units (see Section 2.0, Project Description, Table 2.1-1).

Substantiation:

a) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The Certified SEIR determined that new development implemented pursuant to TOP 2050 would result in temporary noise increases at sensitive receptors during construction activities (Certified SEIR, p. 5.13-28). Certified

SEIR Mitigation Measure 12-4, below, would reduce construction noise but would not avoid this impact or reduce the impact to levels that would be less-than-significant.

Certified SEIR Mitigation Measure:

- 12-4 Construction activities associated with new development that occurs near sensitive receptors shall be evaluated for potential noise impacts. Construction contractors shall implement the following measures for construction activities in the City of Ontario. Construction plans submitted to the City shall identify these measures on demolition, grading, and construction plans. The City of Ontario Planning and Building Departments shall verify that grading, demolition, and/or construction plans submitted include these notations prior to issuance of demolition, grading, and/or building permits.
 - Construction activity is limited to the hours between 7:00 am and 6:00 pm Monday through Friday and 9:00 am to 6:00 pm Saturdays and Sundays, as prescribed in Municipal Code Section 5-29.09.
 - During the entire active construction period, equipment and trucks used for project construction shall use the best-available noise control techniques wherever feasible (e.g., improved mufflers, equipment re-design, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds).
 - Impact tools (e.g., jack hammers and hoe rams) shall be hydraulically or electrically powered wherever possible. Where the use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used along with external noise jackets on the tools.
 - Stationary equipment such as generators and air compressors shall be located as far as feasible from nearby noise-sensitive uses.
 - Stockpiling shall be located as far as feasible from nearby noise-sensitive receptors.
 - Construction traffic shall be limited, to the extent feasible, to approved haul routes established by the City Planning and Building Agency.
 - At least 10 days prior to the start of construction activities, a sign shall be posted at the entrance(s) to the job site, clearly visible to the public, that includes permitted construction days and hours as well as the telephone numbers of the City's and contractor's authorized representatives that are assigned to respond in the event of a noise or vibration complaint.

- If the authorized contractor's representative receives a complaint, he/she shall investigate, take appropriate corrective action, and report the action to the City.
- Signs shall be posted at the job site entrance(s), within the on-site construction zones, and along queueing lanes (if any) to reinforce the prohibition of unnecessary engine idling. All other equipment shall be turned off if not in use for more than 5 minutes.
- During the entire active construction period and to the extent feasible, the use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only. The construction manager shall use smart back-up alarms, which automatically adjust the alarm level based on the background noise level or switch off back-up alarms and replace with human spotters in compliance with all safety requirements and laws.
- Erect temporary noise barriers (at least as high as the exhaust of equipment and breaking line-of-sight between noise sources and sensitive receptors), as necessary and feasible, to maintain construction noise levels at or below the performance standard of 80 dBA Leq. Barriers shall be constructed with a solid material that has a density of at least 1.5 pounds per square foot with no gaps from the ground to the top of the barrier and may be lined on the construction side with an acoustical blanket, curtain, or equivalent absorptive material.

Modified Project: Potential noise impacts of the Modified Project are evaluated in *The Avenue Specific Plan*, 2023 *Amendment - Noise Impact Analysis* (Urban Crossroads, Inc.) May 8, 2024 (Noise Impact Analysis, Addendum Appendix E). Analysis and conclusions of the Noise Impact Analysis are summarized below.

Noise Standards

Noise impacts would be considered significant if any of the following criteria are exceeded, as shown in Table 13-1.

Table 13-1 Significance Criteria Summary

Analysis	Receiving	Condition(s)	Significance Criteria		
	Land Use	Condition(s)	Daytime	Nighttime	
Off-Site	All	If ambient is < 60 dBA CNEL	≥5 dBA CNEL	Project increase	
Traffic		If ambient is 60 - 64 dBA CNEL	Project increase		

Table 13-1 Significance Criteria Summary

Analysis	Receiving	Condition(s)	Significan	ce Criteria				
Allarysis	Land Use	Condition(s)	Daytime	Nighttime				
	If ambient is >= 65 dBA CNEL			Project increase				
On-Site Traffic	All	See Exhibit 3-A of the N	See Exhibit 3-A of the Noise Impact Analysis.					
		Exterior Noise Level Standards	65 dBA Leq	45 dBA Leq				
Operational	Noise-	if ambient is $< 60 \text{ dBA L}_{\text{eq}}$	≥ 5 dBA L _{eq} Project increase					
Operational	Sensitive	if ambient is 60 - 65 dBA $L_{\rm eq}$	≥ 3 dBA Leq P	roject increase				
		if ambient is > 65 dBA $L_{\rm eq}$	≥ 1.5 dBA L _{eq} I	Project increase				
Construction	Noise-	Noise Level Threshold	80 dE	BA Leq				
Construction	Sensitive	Vibration Level Threshold	0.3 PPV (in/sec)					

Source: The Avenue Specific Plan, 2023 Amendment - Noise Impact Analysis (Urban Crossroads, Inc.) May 8, 2024.

Sensitive Receivers

The following receiver locations, shown at Noise Impact Analysis Exhibit 8-A, *Receiver Locations*, were identified as representative noise impact analysis locations.

- R1: Location R1 represents the existing residence at 3141 E. Mt. Rainier Drive, approximately 1,523 feet southeast of the Project site. Receptor R1 is placed at the private outdoor living areas (backyards) facing the Project site.
- R2: Location R2 represents the existing residence at 3970 S. Oasis Paseo, approximately 2,763 feet east of the Project site. Receptor R2 is placed at the private outdoor living areas (backyards) facing the Project site.
- R3: Location R3 represents the existing residence at 3712 Ironwood Avenue, approximately 1,818 feet northeast of the Project site. Since there is no outdoor use area facing the Project site, Receptor R3 is placed at the nearest building façade facing the Project site.
- R4: Location R4 represents the existing residence at 3092 East Wing Street, approximately 1,218 feet northeast of the Project site. Receptor R4 is placed at the private outdoor living areas (backyards) facing the Project site.
- R5: Location R5 represents the existing residence at South Wangler Place, approximately 631 feet northeast of the Project site. Receptor R5 is placed at the private outdoor living areas (backyards) facing the Project site.

- R6: Location R6 represents the existing residence at 9029 Schaefer Avenue, approximately 375 feet west of the Project site. Receptor R6 is placed at the private outdoor living areas (backyards) facing the Project site.
- R7: Location R7 represents the existing residence at 9060 Edison Avenue, approximately 48 feet west of the Project site. Receptor R7 is placed at the private outdoor living areas (backyards) facing the Project site.

Construction-Source Noise Impacts

In the evaluation of construction-source noise impacts, the Noise Impact Analysis employs empirical reference noise measurements obtained from similar construction activities. Based on the reference construction noise levels, maximum received noise levels attributable to the Modified Project construction activities were calculated, and are summarized at Table 13-2. Compliance with applicable significance thresholds is also presented.

Table 13-2
Maximum Received Construction-Source Noise Levels

Receiver Location	Maximum Received Noise Level (dBA Leq)	Threshold (dBA Leq)	Threshold Exceeded?
R1	49.6	80	No
R2	45.1	80	No
R3	47.8	80	No
R4	50.3	80	No
R5	55.2	80	No
R6	54.8	80	No
R7	60.1	80	No

Source: The Avenue Specific Plan, 2023 Amendment - Noise Impact Analysis (Urban Crossroads, Inc.) May 8, 2024.

As shown at Table 13-2, received construction-source noise levels would not exceed the applicable threshold and would therefore be less-than-significant.

Operational-Source Noise Impacts

The Modified Project has not been designed at this stage of project development. The Avenue Specific Plan, 2024 Amendment development is not expected to include any

specific type of operational noise levels beyond the typical noise sources associated with similar residential and educational land uses in the Project study area, such as people and children, parking lot activity, garage doors, small air conditioners, and trash collection. The proposed residential uses would also be considered a noise-sensitive receiving land use.

The City would require future development within the Specific Plan area to conduct design-specific noise analyses to determine the precise operational noise impacts of each development project and identify any necessary noise abatement measures, if necessary.

Vehicular-Source Noise Impacts

Off-Site Vehicular-Source Noise

To assess the off-site transportation CNEL noise level impacts associated with development of the proposed Project, noise contours were developed based on the Modified Project Traffic Analysis. Noise contour boundaries represent the equal levels of noise exposure and are measured in CNEL from the center of the roadway. Noise contours were developed for the following traffic scenarios:

- Existing Conditions Without Project: This scenario refers to the existing presentday noise conditions without the proposed Project.
- Existing With Project: This scenario refers to the existing present-day noise conditions with the proposed Project.
- Opening Year 2026 Without the Project: This scenario refers to existing plus cumulative growth through 2026 noise conditions without the proposed Project.
- Opening Year 2026 Year With Project: This scenario includes existing plus cumulative growth through 2026 plus the proposed Project traffic volumes identified in the Traffic Impact Analysis.

Using the noise contours presented at Noise Impact Analysis Table 6-1 through 6-4, the following Tables 13-3 and 13-4 present the Project traffic noise level contributions under the Existing and Opening Year scenarios.

Table 13-3
Existing With Project Traffic Noise Level Increases

		Existing wi	th Project Traf		VEL at Receiv		Incremental	Noise Level
			Receiving		and Use (dBA	O		Threshold
ID	Road	Segment	Land Use	No	With	Project	Hereuse	
			Lana Osc	Project	Project	Addition	Limit	Exceeded?
1	Haven Ave	n/o Commercial Dwy	Residential	67.4	67.4	0.0	5.0	No
2	Haven Ave	n/o Ontario Ranch Rd	Residential	68.9	69.4	0.5	5.0	No
3	Haven Ave	n/o Chino Ave	Residential	67.8	67.9	0.5	5.0	No
		•						
4	Haven Ave	n/o Riverside Dr	Residential	67.5	67.6	0.1	5.0	No
5	Haven Ave	n/o Creekside Dr	Residential	68.9	68.9	0.0	5.0	No
6	Haven Ave	n/o SR-60	Residential	70.9	70.9	0.0	3.0	No
7	Archibald Ave	s/o Limonite Ave	Residential	68.9	68.9	0.0	5.0	No
8	Archibald Ave	n/o Limonite Ave	Residential	69.9	69.9	0.0	5.0	No
9	Archibald Ave	n/o Merrill Ave	Residential	68.5	68.9	0.4	5.0	No
10	Archibald Ave	n/o Edison Ave	Residential	68.2	68.8	0.6	5.0	No
11	Archibald Ave	n/o Avenida Dr	Residential	68.7	69.5	0.8	5.0	No
12	Archibald Ave	n/o Schaefer Ave	Residential	68.7	70.0	1.3	5.0	No
13	Archibald Ave	n/o Chino Ave	Residential	69.0	70.2	1.2	5.0	No
14	Archibald Ave	n/o Riverside Dr	Residential	69.3	69.8	0.5	5.0	No
15	Archibald Ave	n/o SR-60	Residential	68.9	69.3	0.4	5.0	No
16	Vineyard Ave	n/o Riverside Dr	Residential	68.4	69.5	1.1	5.0	No
17	Vineyard Ave	n/o Walnut Ave	Residential	69.7	70.4	0.7	5.0	No
18	Vineyard Ave	n/o SR-60	Residential	70.5	70.6	0.1	3.0	No
19	Limonite Ave	e/o Archibald Ave	Residential	68.7	68.9	0.2	5.0	No
20	Merrill Ave	w/o Archibald Ave	Residential	67.6	67.8	0.2	5.0	No
21	Edison Ave	w/o Euclid Ave	Residential	69.6	70.0	0.4	5.0	No
22	Edison Ave	e/o Euclid Ave	Residential	68.6	69.4	0.8	5.0	No
23	Edison Ave	e/o Grove Ave	Residential	68.7	70.0	1.3	5.0	No
24	Edison Ave	e/o Vineyard Ave	Residential	70.6	71.5	0.9	3.0	No
25	Edison Ave	e/o Carpenter Ave	Residential	70.6	71.4	0.8	3.0	No
26	Edison Ave	e/o Ontario Ave	Residential	70.6	71.8	1.2	3.0	No
27	Edison Ave	e/o Future Tract Dwy.	Residential	70.6	71.8	1.2	3.0	No
28	Edison Ave	e/o Archibald Ave	Residential	71.4	72.1	0.7	3.0	No
29	Ontario Ranch Rd	e/o Broadway Ave	Residential	71.7	72.0	0.3	3.0	No
30	Ontario Ranch Rd	e/o Turner Ave	Residential	71.9	72.8	0.9	3.0	No
31	Ontario Ranch Rd	w/o New Haven Dr	Residential	71.9	72.8	0.9	3.0	No
32	Ontario Ranch Rd	e/o Haven Ave	Residential	73.0	74.0	1.0	3.0	No
33	Ontario Ranch Rd	e/o Hamner Ave	Residential	73.6	74.2	0.6	3.0	No
34	Ontario Ranch Rd	e/o I-15	Residential	71.4	71.8	0.4	3.0	No
35	Schaefer Ave	e/o Archibald Ave	Residential	59.7	62.3	2.6	5.0	No
36	Schaefer Ave	e/o Turner Ave	Residential	61.3	63.0	1.7	5.0	No
50	ochacici Ave	Go funct Ave	residential	01.0	00.0	1./	5.0	110

Table 13-3 Existing With Project Traffic Noise Level Increases

		Segment		CN	IEL at Receiv	ing	Incremental Noise Level		
ID	Road		Receiving	L	and Use (dBA	A)	Increase Threshold		
ID			Land Use	No	With	Project	Limit	Exceeded?	
				Project	Project	Addition	Limit	Exceeded?	
37	Schaefer Ave	e/o Oakville Ave	Residential	61.1	62.9	1.8	5.0	No	
38	Chino Ave	w/o Archibald Ave	Residential	65.6	65.7	0.1	5.0	No	
39	Chino Ave	e/o Archibald Ave	Residential	63.5	63.8	0.3	5.0	No	
40	Riverside Dr	w/o Vineyard Ave	Residential	68.1	68.2	0.1	5.0	No	
41	Riverside Dr	e/o Vineyard Ave	Residential	70.7	71.5	0.8	3.0	No	
42	Riverside Dr	e/o Archibald Ave	Residential	70.1	70.3	0.2	3.0	No	
43	Riverside Dr	e/o Haven Ave	Residential	67.9	67.9	0.0	5.0	No	

Source: The Avenue Specific Plan, 2023 Amendment - Noise Impact Analysis (Urban Crossroads, Inc.) May 8, 2024.

Table 13-4
Opening Year 2026 With Project Traffic Noise Level Increases

				CN	IEL at Receiv	ing	Incrementa	l Noise Level
ID	Road	Segment	Receiving	L	and Use (dB	A)	Increase	Threshold
	Roau	Segment	Land Use	No	With	Project	Limit	Exceeded?
				Project	Project	Addition	Limit	Exceedeu:
1	Haven Ave	n/o Commercial Dwy	Residential	67.9	67.9	0.0	5.0	No
2	Haven Ave	n/o Ontario Ranch Rd	Residential	70.1	70.5	0.4	5.0	No
3	Haven Ave	n/o Chino Ave	Residential	70.7	70.7	0.0	3.0	No
4	Haven Ave	n/o Riverside Dr	Residential	69.0	69.0	0.0	5.0	No
5	Haven Ave	n/o Creekside Dr	Residential	69.5	69.5	0.0	5.0	No
6	Haven Ave	n/o SR-60	Residential	71.6	71.6	0.0	3.0	No
7	Archibald Ave	s/o Limonite Ave	Residential	70.0	70.0	0.0	5.0	No
8	Archibald Ave	n/o Limonite Ave	Residential	70.7	70.7	0.0	3.0	No
9	Archibald Ave	n/o Merrill Ave	Residential	69.9	70.3	0.4	5.0	No
10	Archibald Ave	n/o Edison Ave	Residential	68.8	69.4	0.6	5.0	No
11	Archibald Ave	n/o Avenida Dr	Residential	69.5	70.1	0.6	5.0	No
12	Archibald Ave	n/o Schaefer Ave	Residential	69.5	70.6	1.1	5.0	No
13	Archibald Ave	n/o Chino Ave	Residential	69.5	70.6	1.1	5.0	No
14	Archibald Ave	n/o Riverside Dr	Residential	70.1	70.5	0.4	5.0	No
15	Archibald Ave	n/o SR-60	Residential	69.4	69.7	0.3	5.0	No
16	Vineyard Ave	n/o Riverside Dr	Residential	68.9	69.9	1.0	5.0	No
17	Vineyard Ave	n/o Walnut Ave	Residential	70.2	70.8	0.6	3.0	No
18	Vineyard Ave	n/o SR-60	Residential	70.8	70.9	0.1	3.0	No

Table 13-4
Opening Year 2026 With Project Traffic Noise Level Increases

				CN	NEL at Receiv	ing	Incremental	Noise Level
ID	D 1	Comment	Receiving	L	and Use (dBA	A)	Increase '	Γhreshold
ID	Road	Segment	Land Use	No	With	Project	Limit	Exceeded?
				Project	Project	Addition	Limit	Exceeded?
19	Limonite Ave	e/o Archibald Ave	Residential	70.6	70.8	0.2	3.0	No
20	Merrill Ave	w/o Archibald Ave	Residential	70.2	70.3	0.1	3.0	No
21	Edison Ave	w/o Euclid Ave	Residential	71.5	71.8	0.3	3.0	No
22	Edison Ave	e/o Euclid Ave	Residential	71.2	71.6	0.4	3.0	No
23	Edison Ave	e/o Grove Ave	Residential	69.3	70.5	1.2	5.0	No
24	Edison Ave	e/o Vineyard Ave	Residential	73.1	73.6	0.5	3.0	No
25	Edison Ave	e/o Carpenter Ave	Residential	71.4	72.0	0.6	3.0	No
26	Edison Ave	e/o Ontario Ave	Residential	71.4	72.4	1.0	3.0	No
27	Edison Ave	e/o Future Tract Dwy.	Residential	71.4	72.4	1.0	3.0	No
28	Edison Ave	e/o Archibald Ave	Residential	72.1	72.7	0.6	3.0	No
29	Ontario Ranch Rd	e/o Broadway Ave	Residential	72.3	72.7	0.4	3.0	No
30	Ontario Ranch Rd	e/o Turner Ave	Residential	72.6	73.3	0.7	3.0	No
31	Ontario Ranch Rd	w/o New Haven Dr	Residential	72.4	73.2	0.8	3.0	No
32	Ontario Ranch Rd	e/o Haven Ave	Residential	73.5	74.3	0.8	3.0	No
33	Ontario Ranch Rd	e/o Hamner Ave	Residential	74.9	75.4	0.5	3.0	No
34	Ontario Ranch Rd	e/o I-15	Residential	72.0	72.4	0.4	3.0	No
35	Schaefer Ave	e/o Archibald Ave	Residential	62.6	64.2	1.6	5.0	No
36	Schaefer Ave	e/o Turner Ave	Residential	62.6	64.0	1.4	5.0	No
37	Schaefer Ave	e/o Oakville Ave	Residential	64.0	65.0	1.0	5.0	No
38	Chino Ave	w/o Archibald Ave	Residential	66.4	66.5	0.1	5.0	No
39	Chino Ave	e/o Archibald Ave	Residential	65.6	65.8	0.2	5.0	No
40	Riverside Dr	w/o Vineyard Ave	Residential	68.7	68.8	0.1	5.0	No
41	Riverside Dr	e/o Vineyard Ave	Residential	71.4	72.0	0.6	3.0	No
42	Riverside Dr	e/o Archibald Ave	Residential	71.1	71.2	0.1	3.0	No
43	Riverside Dr	e/o Haven Ave	Residential	69.5	69.5	0.0	5.0	No

 $\textbf{Source:} \ \textit{The Avenue Specific Plan, 2023 Amendment - Noise Impact Analysis} \ (Urban \ Crossroads, Inc.) \ May \ 8, 2024.$

As shown above, based on the significance criteria for off-site traffic noise, land uses adjacent to the study area roadway segments would not be subjected to significant noise level increases due to Project-related traffic.

On-Site Vehicular-Source Noise

An on-site exterior noise impact analysis has been completed to determine the noise exposure levels that would result from adjacent transportation noise sources in the Project study area, and to identify potential noise attenuation measures that would achieve acceptable Project exterior and interior noise levels. The primary sources of transportation noise affecting the Modified Project site are anticipated to be from Archibald Avenue, Ontario Ranch Road/Edison Road, and Schaefer Avenue.

The expected future noise levels for the on-site land uses have been estimated, and are presented at Table 13-5.

Table 13-5 Exterior Noise Levels

On-Site Receiver	Roadway	U	Exterior Noise BA CNEL)	Land Use Compatibility	
Location	Roauway	Exterior without Wall	Exterior with Wall		
PA-1A	Schaefer Ave	64.8	58.7	Clearly Acceptable	
PA-1B	Schaefer Ave	64.8	58.7	Clearly Acceptable	
PA-3A	Schaefer Ave	64.8	58.7	Clearly Acceptable	
PA-4	Schaefer Ave	64.8	58.7	Clearly Acceptable	
PA-8B	Ontario Ranch Road/Edison Ave	68.5	63.6	Normally Acceptable	
PA-5	Ontario Ranch Road/Edison Ave	68.5	63.6	Normally Acceptable	
PA-3B	Ontario Ranch Road/Edison Ave	68.5	63.6	Normally Acceptable	
PA-2B	Ontario Ranch Road/Edison Ave	68.5	63.6	Normally Acceptable	
PA-2A	Ontario Ranch Road/Edison Ave	68.5	63.6	Normally Acceptable	
PA-5	Archibald Ave	68.1	63.0	Normally Acceptable	

Source: The Avenue Specific Plan, 2023 Amendment - Noise Impact Analysis (Urban Crossroads, Inc.) May 8, 2024.

Table 13-5 shows that traffic noise levels received at the Project land uses would not exceed the City of Ontario 65 dBA CNEL exterior noise level standards for the noise sensitive residential land uses or schools.

For informational purposes, and to ensure that the interior noise levels comply with the interior noise level standards, future exterior noise levels were calculated at the estimated at the first and second floor building façade locations with planned residential areas

surrounding roadways. The interior noise level is the difference between the predicted exterior noise level at the building façade and the noise reduction of the structure. Typical building construction will provide a Noise Reduction (NR) of approximately 12 dBA with "windows open" and a minimum 25 dBA noise reduction with "windows closed." Tables 13-6 and 13-7 provide the first and second floor interior noise levels that can be expected within the planned residential areas.

Table 13-6 First Floor Interior Noise Levels (CNEL)

Receiver Location	Roadway	Noise Level at Façade	Required Interior NR	Minimum Calculated Interior NR	Upgraded Windows	Interior Noise Level	Threshold	Threshold Exceeded?
PA-1A	Schaefer Ave	58.7	13.7	25.0	No	33.7	45	No
PA-1B	Schaefer Ave	58.7	13.7	25.0	No	33.7	45	No
PA-3A	Schaefer Ave	58.7	13.7	25.0	No	33.7	45	No
PA-4	Schaefer Ave	58.7	13.7	25.0	No	33.7	45	No
PA-8B	Ontario Ranch Road/ Edison Ave	63.6	18.6	25.0	No	38.6	45	No
PA-5	Ontario Ranch Road/ Edison Ave	63.6	18.6	25.0	No	38.6	45	No
PA-3B	Ontario Ranch Road/ Edison Ave	63.6	18.6	25.0	No	38.6	45	No
PA-2B	Ontario Ranch Road/ Edison Ave	63.6	18.6	25.0	No	38.6	45	No
PA-2A	Ontario Ranch Road/ Edison Ave	63.6	18.6	25.0	No	38.6	45	No
PA-5	Archibald Ave	63.0	18.0	25.0	No	38.0	45	No

Source: The Avenue Specific Plan, 2023 Amendment - Noise Impact Analysis (Urban Crossroads, Inc.) May 8, 2024.

Table 13-7 Second Floor Interior Noise Levels (CNEL)

Receiver Location	Roadway	Noise Level at Façade	Required Interior NR	Minimum Calculated Interior NR	Upgraded Windows	Interior Noise Level	Threshold	Threshold Exceeded?
PA-1A	Schaefer Ave	64.7	19.7	25.0	No	39.7	45	No
PA-1B	Schaefer Ave	64.7	19.7	25.0	No	39.7	45	No
PA-3A	Schaefer Ave	64.7	19.7	25.0	No	39.7	45	No
PA-4	Schaefer Ave	64.7	19.7	25.0	No	39.7	45	No
PA-8B	Ontario Ranch Road/ Edison Ave	68.4	23.4	25.0	No	43.4	45	No

The Avenue Specific Plan, 2024 Amendment Addendum to The Ontario Plan Certified SEIR (SCH No. 2021070364) Environmental Checklist Page 3-78

Table 13-7 Second Floor Interior Noise Levels (CNEL)

Receiver Location	Roadway	Noise Level at Façade	Required Interior NR	Minimum Calculated Interior NR	Upgraded Windows	Interior Noise Level	Threshold	Threshold Exceeded?
PA-5	Ontario Ranch Road/ Edison Ave	68.4	23.4	25.0	No	43.4	45	No
PA-3B	Ontario Ranch Road/ Edison Ave	68.4	23.4	25.0	No	43.4	45	No
PA-2B	Ontario Ranch Road/ Edison Ave	68.4	23.4	25.0	No	43.4	45	No
PA-2A	Ontario Ranch Road/ Edison Ave	68.4	23.4	25.0	No	43.4	45	No
PA-5	Archibald Ave	68.1	23.1	25.0	No	43.1	45	No

Source: The Avenue Specific Plan, 2023 Amendment - Noise Impact Analysis (Urban Crossroads, Inc.) May 8, 2024.

Tables 13-6 and 13-7 show that on-site interior traffic noise levels will not exceed the City of Ontario 45 dBA CNEL interior noise level standard for residential development under a windows-closed condition and a means of mechanical ventilation (e.g., air conditioning).

Although no significant on-site exterior or interior noise impacts are expected, the City will require use-specific noise studies for implementing projects within the Specific Plan area. These final noise studies would utilize any recommendations identified herein in combination with precise grading plans and actual building design specifications to identify any additional noise abatement measures, such as exterior noise barriers and/or building materials (e.g., sound transmission class ratings for windows and doors), if necessary.

Modified Project Conditions of Approval: None.

b) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The Certified SEIR determined that mobile-source and stationary/area-source vibration impacts associated with buildout of TOP 2050 would be less-than-significant. However, construction activities associated with buildout of the

individual land uses could expose sensitive uses to strong levels of groundborne vibration and would therefore be a potentially significant impact (Certified SEIR, pp. 5.13-38-5.13-41).

Certified SEIR Mitigation Measure:

12-2 Prior to issuance of a building permit, individual projects that involve vibration-intensive construction activities, such as pile drivers, jack hammers, and vibratory rollers near sensitive receptors shall be evaluated for potential vibration impacts. For construction within 135 feet of fragile structures, such as historical resources, within 100 feet of nonengineered timber and masonry buildings (e.g., most residential buildings), or within 75 feet of engineered concrete and masonry (no plaster); or a vibratory roller within 25 feet of any structure, the project applicant shall prepare a noise and vibration analysis to assess and mitigate potential noise and vibration impacts related to these activities. This noise and vibration analysis shall be conducted by a qualified and experienced acoustical consultant or engineer. The vibration levels shall not exceed Federal Transit Administration (FTA) architectural damage thresholds (e.g., 0.12 inches per second [in/sec] peak particle velocity [PPV] for fragile or historical resources, 0.2 in/sec PPV for nonengineered timber and masonry buildings, and 0.3 in/sec PPV for engineered concrete and masonry). If vibration levels would exceed this threshold, alternative uses shall be used, such as drilling piles as opposed to pile driving and static rollers as opposed to vibratory rollers. If necessary, construction vibration monitoring shall be conducted to ensure vibration thresholds are not exceeded.

The Certified SEIR concluded even with the implementation of Mitigation Measure 12-2, construction-source groundborne vibration impacts would be significant and unavoidable (Certified SEIR, p. 5.13-41).

Modified Project:

Construction activities can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures and soil type. Groundborne vibration from construction activities would cause only intermittent, localized intrusion. In the evaluation of construction-source vibration impacts, the Noise Impact Analysis employs reference construction-source vibration data published by the Federal Transit Administration (FTA). Maximum received construction-source vibration levels are summarized at Table 13-8.

Table 13-8
Maximum Received Construction-Source Vibration Levels

Receiver Location	Maximum Received Vibration Level PPV (in/sec)	Threshold PPV (in/sec)	Threshold Exceeded?
R1	0.000	0.30	No
R2	0.000	0.30	No
R3	0.000	0.30	No
R4	0.000	0.30	No
R5	0.002	0.30	No
R6	0.002	0.30	No
R7	0.033	0.30	No

Source: The Avenue Specific Plan, 2023 Amendment - Noise Impact Analysis (Urban Crossroads, Inc.) May 8, 2024.

Table 13-8 shows the maximum received construction-source vibration levels would not exceed the acceptable 0.20 PPV (in/sec) criteria established by the FTA. Moreover, received vibration levels are unlikely to be sustained during the entire construction period. Rather, maximum vibration levels would be received only during times that heavy construction equipment is operating at the site perimeter. Based on the preceding, construction-source vibration impacts would be less-than-significant.

Modified Project Conditions of Approval: None.

c) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The Certified SEIR concluded that Chino Airport does not significantly affect sensitive receptors within the City of Ontario. However, sensitive land uses within the 65 dBA CNEL noise contour of the Ontario International Airport would be exposed to substantial levels of airport-related noise. Even with the implementation

of Mitigation Measure 12-1, airport-related noise was deemed a significant and unavoidable impact of TOP 2050 (Certified SEIR, pp. 5.13-38 – 5.13-41).

Certified SEIR Mitigation Measure:

Prior to the issuance of building permits for any project that involves a noise-sensitive use within the 65 dBA CNEL contour of the Ontario International Airport, the project property owner/developers shall retain an acoustical engineer to conduct an acoustic analysis and identify, where appropriate, site design features and/or required building acoustical improvements (e.g., sound transmission class rated windows, doors, and attic baffling), to ensure compliance with the City's Noise Compatibility Criteria and the California State Building Code and California Noise Insulation Standards (Titles 24 and 21 of the California Code of Regulations).

Modified Project: The Modified Project site is located approximately 2.2 miles south of the Ontario International Airport (ONT). The Ontario International Airport Land Use Compatibility Plan was adopted by Ontario City Council on April 19, 2011 (amended 2018) to promote compatibility between the airport and the land uses that surround it. The Modified Project site is located within the ONT airport influence area, but is not located within a designated noise impact zone. The Modified Project would therefore not be exposed to excessive airport/airfield-source noise levels associated with ONT operations.

The Project site is located approximately 1.2 miles east of the Chino Airport (CNO). The Modified Project site is located within the CNO airport influence area, but is not located within a designated noise impact zone. At this distance, airport noise level impacts would be less-than-significant.

The Modified Project would not otherwise be exposed to potentially adverse airport/airfield-source noise levels, nor does the Modified Project propose or require uses that would contribute to or exacerbate airport-source noise impacts.

Based on the preceding, the Modified Project would not be adversely affected by airport/airfield noise, nor would the Modified Project contribute to or result in adverse airport/airfield noise impacts. When compared to the Certified SEIR findings, no new or substantially increased airport/airfield noise impacts would result from the Modified Project.

Modified Project Conditions of Approval: None.

Summary

When compared to the impacts identified in the Certified SEIR, no new significant, substantially increased, or substantially different noise impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan, 2023 Amendment - Noise Impact Analysis (Urban Crossroads, Inc.) May 8, 2024; The Avenue Specific Plan, 2024 Amendment.

14. POPULATION AND HOUSING

	Substantial Change in Project	Substantial Change in Circumstances	New Information Showing Greater	New Information Showing Ability to Reduce but not Eliminate	No Changes or New Information Requiring	
	Requiring Major EIR	Requiring Major EIR	Significant Effects than	Significant Effects in	Preparation of an MND	No
Would the project:	Revisions	Revisions	Previous EIR	Previous EIR	or EIR	Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?					Х	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?					Х	

Substantiation:

a, b) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The Certified SEIR concluded that, while development of the City pursuant to TOP 2050 would increase population, housing, and employment, it also would improve the job-housing balance and impacts would be less-than-significant

(Certified SEIR, pp. 5.14-9 – 5.14-12).

Certified SEIR Mitigation Measures: None.

Modified Project:

Direct Population Growth Inducement

The Modified Project amends the site's current land use designations to conform to TOP 2050 land use designations. Under the Modified Project, maximum residential development would total 3,753 dwelling units⁸ (all types). Because the Project land uses and residential development are consistent with buildout of the City anticipated and planned for under TOP 2050, the Project would not result in direct population growth

not previously considered and addressed in the Certified SEIR.

Indirect Growth Inducement

Indirect population growth inducement could result from creation of additional jobs and the extension of infrastructure and services to areas not currently served, or substantial

capacity/capability upgrades to existing systems and services.

In general terms, job creation furthers growth via wages, salaries and general fiscal benefits; increased demands for housing; and increased demand for consumer goods and services. Jobs created by or resulting from the Modified Project would be typical of area

⁸There is the potential for the 10.89-acre school site portion of Planning Area 5 to transition to residential uses, should the school district determine that this site is not needed for school development. If this is the case, these 10.89 acres would be developed with up to 50 residential units, bringing the total Specific Plan residential unit count to 3,803.

employment opportunities, and would be filled by the local residents with no substantial increase in population.

The Modified Project would implement infrastructure improvements that are consistent with the City and purveyor master plans. Because the Project land uses and development are consistent with buildout of the City anticipated and planned for under TOP 2050, the Project would not result in indirect growth not previously considered and addressed in the Certified SEIR.

Consistency with Regional Population Growth Projections

Regional population projections developed by SCAG reflect assumptions and development scenarios incorporated in local plans including City general plans. As demonstrated in the preceding discussions, the Modified Project would not induce or generate growth beyond that reflected in TOP 2050 and evaluated in the Certified SEIR. Accordingly, the Modified Project would not result in growth not already anticipated within SCAG population growth projections for the region.

As supported by the preceding discussions, the Modified Project would not induce substantial population growth; displace substantial numbers of existing housing; or displace substantial numbers of people. When compared to the Certified SEIR findings, no new or substantially increased population and housing impacts would result from the Modified Project.

The Modified Project would increase housing availability. The Modified Project does not propose or require uses or operations that would displace substantial numbers of existing people or housing. The potential for the Modified Project to displace substantial numbers of existing people or housing would be less-than-significant.

Modified Project Conditions of Approval: None.

Summary

Based on the preceding, when compared to impacts identified in the Certified SEIR, no new or substantially increased population and housing impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan, 2024 Amendment.

15. PUBLIC SERVICES

Would the project result in substantial	Substantial	Substantial	New	New	No Changes	No
adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any public	Change in Project Requiring	Change in Circumstances Requiring Major EIR Revisions	Information Showing Greater Significant Effects than Previous EIR	Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	or New Information Requiring Preparation of an MND or EIR	Impact
service: a) Fire protection?					X	
b) Police protection?					X	
c) Schools?					Х	
d) Parks?					Х	
e) Other public facilities?					Х	

Substantiation:

a – e) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: Certified SEIR Section 5.15, *Public Services*, concluded that implementation of TOP 2050 would not result in potentially significant public services impacts (Certified SEIR, pp. 5.15-1 – 5.15-18).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project amends the site's current land use designations to conform to TOP 2050 land use designations. Uses proposed by the Modified Project

would not create substantive additional demands for school or park facilities beyond those reflected in TOP 2050 and evaluated in TOP 2050 SEIR. The Modified Project would be constructed within an already-developed urban environment. Fire protection and police protection services are currently available to the subject site via existing facilities. Development impact fees and sales tax revenues generated by the Modified Project would provide funding sources available for support and enhancement of public services commensurate with incremental demands of the development. By law, the Modified Project would be required to remit school impact fees.

Modified Project Conditions of Approval: None.

Summary

Based on the preceding, when compared to impacts identified in the Certified SEIR, no new or substantially increased public services impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan, 2024 Amendment.

16. RECREATION

Would the project: a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?					X	

The Avenue Specific Plan, 2024 Amendment Addendum to The Ontario Plan Certified SEIR (SCH No. 2021070364) Environmental Checklist Page 3-87 Substantiation:

a, b) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The Certified SEIR determined that because new development would be required to provide sufficient public parkland or pay in-lieu fees, impacts to recreational facilities would be less-than-significant (Certified SEIR, pp. 5.16-

12 - 5.16 - 14).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project amends the site's current land use designations to conform to TOP 2050 land use designations. Proposed residential and commercial uses implemented under the Modified Project would not increase demands on recreational facilities beyond those reflected in TOP 2050 and evaluated in TOP 2050 SEIR. When compared to the Certified SEIR findings, no new or substantially increased recreation

impacts would result from the Modified Project.

Modified Project Conditions of Approval: None.

Summary

Based on the preceding, when compared to impacts identified in the Certified SEIR, no new or substantially increased recreational services or recreational facilities impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

would be uniferent from those previously fuertimed and undiressed in the certified obli

Sources: The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan, 2024 Amendment.

17. TRANSPORTATION

W	ould the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a)	Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?					Х	
b)	Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?					Х	
c)	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?					Х	
d)	Result in inadequate emergency access?					Х	

General Note:

The technical analyses referenced in this section reflect likely maximum impacts. Subsequent to preparation of these analyses, total residential development intensities allowed under the Modified Project have been reduced consistent with direction. Specifically, the technical analyses referenced herein assume residential development of the Modified Project totaling up to 3,807 dwelling units (see Project Traffic Analysis, p. 2 et al.). As subsequently modified, maximum allowed residential development under the Modified Project would not exceed 3,753 dwelling units (see Section 2.0, Project Description, Table 2.1-1).

Substantiation:

Transportation impact analyses of the Modified Project presented here are summarized in part from: *The Avenue Specific Plan Traffic Analysis* (Urban Crossroads, Inc.) April 19, 2024 (Modified Project Traffic Analysis, Traffic Analysis); and *The Avenue Specific Plan Amendment Vehicle Miles Traveled (VMT)* Analysis (Modified Project VMT Analysis, VMT Analysis) (Urban Crossroads, Inc.) March 17, 2024. The Modified Project Traffic Analysis and VMT Analysis are presented at Addendum Appendix F.

a) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: Certified SEIR Section 5.17, *Transportation*, concluded that implementation of TOP 2050 would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities (Certified SEIR, pp. 5.17-18 – 5.17-23).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project does not propose elements or aspects that would conflict with adopted alternative transportation policies. Transit services are currently provided to the City and the Modified Project vicinity by Omnitrans. On a long-term basis, the Modified Project may result in increased demand for public transportation as increased employment opportunities become available onsite. Transit agencies routinely review and adjust their ridership schedules to accommodate shifts in demand for services. As part of the City's standard development review processes, the need for transit-related facilities, bicycle, and pedestrian access would be coordinated between the City and the Applicant.

The Modified Project would accommodate and would not interfere with the City *Multipurpose Trails and Bikeway Corridor Plan*. The Modified Project would provide internal and perimeter pedestrian and bicycle amenities consistent with provisions of *The Avenue Specific Plan*, 2024 *Amendment* and City Conditions of Approval.

Modified Project Conditions of Approval: None.

b) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: CEQA Guidelines Section 15064.3, subdivision (b) was added to the CEQA Guidelines in 2019. The Vehicle Miles Traveled (VMT) metric established under Section 15064.3 is recognized. The VMT metric became effective in July 2020. The Certified SEIR concluded that even with application of mitigation VMT impacts of TOP 2050 would be significant and unavoidable (Certified SEIR, p. 5.17-34).

Certified SEIR Mitigation Measures:

New Mitigation

- T-1 Prior to approval of discretionary projects subject to VMT reduction analysis, applicants shall demonstrate compliance with the City's VMT Guidelines for CEQA assessment of VMT impacts. For projects with VMT per Service Population exceeding the County's significance threshold, a mitigation plan shall be developed and implemented. Mitigation should consist of Transportation Demand Management (TDM) measures analyzed under a VMT-reduction methodology consistent with the California Air Pollution Control Officers Association's (CAPCOA) Final Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (2021) and approved by the City of Ontario (if applicable). Examples of measures include but are not limited to:
 - Pedestrian Network Improvements: constructing new sidewalks and/or improving damaged or substandard sidewalks that connect to a larger pedestrian network.
 - Construct or Improve Bike Facilities: constructing new or enhancing a single existing Class I, II or IV bike facility that connects to a larger bike network.
 - Construct or Improve Bike Boulevards: implementing a Class III bike boulevard on a local or collector street that is one travel lane in each direction, has a design speed of 25 mph or less and a design volume of 5,000 ADT or less.
 - Expand Bikeway Networks: constructing a network of interconnected new Class I, II, or IV bike facilities.
 - Provide End of Trip Bicycle Facilities: constructing facilities that support cyclists such as bike parking, lockers, and showers.
 - Implement Transit-Supportive Roadway Treatments: funding infrastructure improvements such as traffic signal modifications and roadway signing and striping that are dedicated to improving transit travel times and reliability.
 - Transit Passes: proving discounted or free transit fare to a specific geographic area, population group, or to the general public.
 - Vanpool Program: providing groups of 5 to 15 people with direct shuttle service between their workplace and residence.
 - Carshare Program (conventional or EV): providing access to a shared fleet of ondemand vehicles for short-term use/rental. Best practice is to discount carshare

membership and provide priority parking for carshare vehicles to encourage use of the service.

- Bikeshare Program (conventional or EV): providing access to a shared fleet of ondemand bicycles for short-term use/rental. Best practice is to discount bikeshare membership and dedicate bikeshare parking to encourage use of the service.
- Rideshare Program: providing access to and encouraging the use of a ridesharing platform or service. This could be an app, website, or other service that provides ridematching coordination services.
- Community-Based Travel Planning (CBTP): CBTP is a residential based approach to outreach, performed by trained advisors, that provides households within a targeted geographic area with customized information, incentives, and support to encourage the use of transportation alternatives in place of single occupancy vehicles.
- Commute Trip Reduction (CTR) Program: CTR programs can be mandatory or voluntary, and involve providing information, coordination, services, infrastructure, and/or incentives for alternative modes such as ridesharing, vanpool, transit passes, and cycling.

Modified Project: The California Environmental Quality Act (CEQA) requires all lead agencies to adopt VMT as the measure for identifying transportation impacts for land use projects. To comply with CEQA, in June of 2020 the City of Ontario developed and adopted their own VMT methodologies and thresholds (Resolution No. 2020-071) (City Guidelines). The VMT analysis presented here conforms to adopted City Guidelines. Projects that do not result in significant VMT impacts per City Guidelines would not conflict or be inconsistent with *CEQA Guidelines* Section 15064.3, subdivision (b).

Project generated VMT has been estimated using the origin/destination method and boundary method. Consistent with City Guidelines, VMT has been presented as total VMT and total VMT per Service Population (i.e., population and employees). Total VMT represents all VMT generated in the City of Ontario on a typical weekday. Total VMT per service population is an efficiency metric representing VMT generated on a typical weekday per person who lives and/or works in the City or travels to the City for another purpose (Project VMT Analysis, p. 2).

City Guidelines identifies the efficiency based metric VMT per Service Population (SP) (i.e., population and employees) is to be used to conduct project-level VMT analyses for land use projects in the City of Ontario. City Guidelines also identifies the following impact threshold for project-level VMT analyses:

 A significant impact would occur if the Project VMT per SP exceeds the Citywide average VMT per SP under General Plan Buildout Conditions.

The City of Ontario's average VMT per SP under General Plan Buildout conditions has been calculated using the TOP General Plan Buildout (2050) model. Table 17-1 presents the City of Ontario's Citywide average VMT per SP for General Plan Buildout (2050) conditions. As presented at Table 17-1, the City of Ontario's VMT per SP under General Plan Buildout (2050) conditions is estimated at 30.70 VMT per SP.

Table 17-1 TOP 2050 Buildout Citywide VMT Per Service Population

Service Population	706,494
VMT	21,689,573
VMT per SP	30.70

Source: The Avenue Specific Plan Amendment Vehicle Miles Traveled (VMT) Analysis (Urban Crossroads, Inc.) March 17, 2024

VMT impacts of the Project were evaluated employing both the Origin/Destination VMT Methodology and the Boundary VMT Methodology. Methodology details are presented at Project VMT Analysis pp. 3, 4.

VMT impacts of the Project employing the Origin/Destination VMT Methodology are presented at Table 17-2.

Table 17-2 Project VMT Impacts

Origin/Destination VMT Methodology

	Baseline	General Plan Buildout Year (2050)
Households	3,807	3,807
Population	13,325	13,325
Employment	957	957
Service Population	14,282	14,282
Total OD VMT	139,550	245,044
OD VMT/SP	19.4	17.2
City Threshold	30.7	30.7
Threshold Exceeded	No	No

Source: The Avenue Specific Plan Amendment Vehicle Miles Traveled (VMT) Analysis (Urban Crossroads, Inc.) March 17, 2024.

VMT impacts of the Project employing the Boundary VMT Methodology are presented at Table 17-3.

Table 17-3
Project VMT Impacts
Boundary VMT Methodology

	City Bo	oundary	10-Mile Boundary			
Scenario	No Project	With Project	No Project	With Project		
Service Population	706,494	708,515	2,172,176	2,174,197		
Boundary VMT	9,602,250	9,600,990	34,288,519	34,291,339		
VMT per SP	13.6	13.6	15.8	15.8		
Change in VMT	0.0		0.00			
Threshold Exceeded	No		No			

Source: The Avenue Specific Plan Amendment Vehicle Miles Traveled (VMT) Analysis (Urban Crossroads, Inc.) March 17, 2024.

The analysis presented here supports the following findings:

- Consistent with City Guidelines, VMT estimates were prepared measuring both Project generated VMT per service population and Citywide boundary VMT.
- Project generated VMT per service population would not exceed City's adopted impact threshold of Citywide average VMT per SP under General Plan Buildout Conditions.

 Citywide boundary VMT was found to remain unchanged with the addition of the proposed Project.

Based on the preceding, the Modified Project VMT would not exceed applicable City VMT impact significance thresholds. On this basis, the potential for the Modified Project to conflict or be inconsistent with *CEQA Guidelines* Section 15064.3, subdivision (b) would be less-than-significant.

Modified Project Conditions of Approval: None.

c, d) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The Certified SEIR concluded that buildout of the City pursuant to TOP 2050 would result in changes to the circulation network. Such changes would however be implemented consistent with City roadway classification and roadway design standards, acting to preclude potential design hazards. Additionally, City Design Review processes ensure that adequate emergency access is provided for all new development projects. On this basis, there would be no impacts related to hazardous design features, or emergency access provisions (Certified SEIR, pp. 5.17-25, 5.17-26).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project does not propose elements or aspects that would substantially increase transportation/traffic hazards. Moreover, all improvements under the Modified Project would be designed and implemented consistent with recommendations of the Traffic Analysis (see: Traffic Analysis Section 1.6, *Recommendations*; and *The Avenue Specific Plan, 2024 Amendment, Section 4.1, Master Plan of Circulation*), and City traffic engineering and safety standards, thereby minimizing the potential to result in or cause hazardous traffic/transportation conditions.

The Modified Project would generate urban traffic comparable to and compatible with the vehicle mix and vehicle categories present within the area roadway system. The Modified Project uses would therefore not cause or result in incompatible vehicle movements or traffic that would substantively increase hazards. Further, based on the projected net decrease in trip generation under the Modified Project, the potential for the Modified Project to result in potential traffic hazards would likely be reduced when compared to the uses entitled under the Original Project and assumed within the Certified SEIR.

Additionally, pursuant to the Modified Project Construction Traffic Management Plan (please refer to Addendum Section 2, *Project Description*, 2.3.8 Construction Area Traffic Management Plan), the Modified Project would be required to maintain appropriate access during construction activities.

Modified Project Conditions of Approval: None.

Summary

Based on the preceding, when compared to impacts identified in the Certified SEIR, no new or substantially increased transportation impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan Traffic Analysis (Urban Crossroads, Inc.) April 19, 2024; The Avenue Specific Plan Amendment Vehicle Miles Traveled (VMT) Analysis (Urban Crossroads, Inc.) March 17, 2024; The Avenue Specific Plan, 2024 Amendment.

18. TRIBAL CULTURAL RESOURCES

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or					х	-
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.					X	

Substantiation:

a, b) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: With the implementation of mitigation, the Certified SEIR concluded that impacts to prehistoric archeological resources, which include TCRs, would be less-than-significant (Certified SEIR, pp. 5.18-8 – 5.18-11).

Certified SEIR Mitigation Measures:

5-3 Upon receipt of an application for a proposed project subject to CEQA and within the City's jurisdiction, the City's representative shall consult with the relevant tribe(s)' representative(s) to determine if the proposed project is within a culturally sensitive area

to the tribe. If sufficient evidence is provided to reasonably ascertain that the site is within a tribal culturally sensitive area, an archaeologist shall prepare a cultural resources assessment. The findings of the cultural resources assessment shall be incorporated into the CEQA documentation. A copy of the report shall be forwarded to the tribe(s). If mitigation is recommended in the CEQA document, the procedure described in Mitigation Measure 5-4 shall be followed.

- 5-4 Prior to the issuance of grading permits for a proposed project for which the CEQA document defines cultural resource mitigation for potential tribal resources, the project applicant shall contact the designated tribe(s) to notify them of the grading, excavation, and monitoring program. The applicant shall coordinate with the City of Ontario and the tribal representative(s) to develop mitigation measures that address the designation, responsibilities, and participation of tribal monitors during grading, excavation, and ground-disturbing activities; scheduling; terms of compensation; and treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on the site. The City of Ontario shall be the final arbiter of the conditions for projects within the City's jurisdiction.
- TCR-1 Tribal Cultural Resources Monitoring. The project archaeologist, in consultation with interested tribes, the developer, and the City of Ontario, shall develop an archaeological monitoring plan (AMP) to address the details, timing, and responsibility of archaeological and cultural activities that will occur on the project site. Details in the AMP shall include:
 - 1. Project-related ground disturbance (including, but not limited to, brush clearing, grading, trenching, etc.) and development scheduling;
 - 2. The development of a rotating or simultaneous schedule in coordination with the developer and the project archeologist for designated Native American Tribal Monitors from the consulting tribes during grading, excavation and ground disturbing activities on the site: including the scheduling, safety requirements, duties, scope of work, and Native American Tribal Monitors' authority to stop and redirect grading activities in coordination with all project archaeologists (if the tribes cannot come to an agreement on the rotating or simultaneous schedule of tribal monitoring, the Native American

Heritage Commission shall designate the schedule for the onsite Native American Tribal Monitor for the proposed project);

3. The protocols and stipulations that the developer, City, Tribes, and project archaeologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resources evaluation.

At least 30 days prior to application for a grading permit and before any brush clearance, grading, excavation, and/or ground disturbing activities on the site, the developer shall retain a tribal cultural monitor to monitor all ground-disturbing activities in an effort to identify any unknown archaeological resources.

Pursuant to the AMP, a tribal monitor from the consulting tribe shall be present during the initial grading activities. If tribal resources are found during grubbing activities, the tribal monitoring shall be present during site grading activities.

- TCR-2 Treatment and Disposition of Cultural Resources. In the event that Native American cultural resources are inadvertently discovered during the course of any ground-disturbing activities, including but not limited to brush clearance, grading, trenching, etc., for the proposed project, the following procedures will be carried out for treatment and disposition of the discoveries:
 - 1. Temporary Curation and Storage: During the course of construction, all discovered resources shall be temporarily curated in a secure location on-site or at the offices of the project archaeologist. The removal of any artifacts from the project site will need to be thoroughly inventoried with tribal monitor oversight of the process;
 - 2. Treatment and Final Disposition: The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and nonhuman remains as part of the required mitigation for impacts to cultural resources. The applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Ontario with evidence of same:

- a. Accommodate the process for on-site reburial of the discovered items with the consulting Native American tribes or bands. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloging, basic analysis, other analyses as recommended by the project archaeologist and approved by consulting tribes, and basic recordation have been completed; all documentation should be at a level of standard professional practice to allow the writing of a report of professional quality;
- b. A curation agreement with an appropriate qualified repository in San Bernardino County that meets federal standards per 36 CFR Part 79, and therefore the resource would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility in San Bernardino County, to be accompanied by payment of the fees necessary for permanent curation;
- c. For purposes of conflict resolution, if more than one Native American tribe or band is involved with the project and cannot come to an agreement as to the disposition of cultural materials, materials shall be curated at the San Bernardino County Museum by default;
- d. At the completion of grading, excavation, and ground-disturbing activities on the site, a Phase IV Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the project archaeologist and Native Tribal Monitors within 60 days of completion of grading. This report shall document the impacts to the known resources on the property; describe how each mitigation measure was fulfilled; document the type of cultural resources recovered and the disposition of such resources; provide evidence of the required cultural sensitivity training for the construction staff held during the required pregrade meeting; and, in a confidential appendix, include the daily/weekly monitoring notes from the archaeologist. All reports produced will be submitted to the City, County Museum, and consulting tribes.

Modified Project: Tribal scoping and outreach was previously undertaken for The Avenue Specific Plan in July 2021. At that time, responses from Agua Caliente Band of Cahuilla Indians, the Gabrieleno Band of Mission Indians – Kizh Nation, Quechan Tribe of the Fort Yuma Reservation, and the San Manuel Yuhaaviatam Band of Mission Indians were received, but no consultation was requested for the Specific Plan. The Kizh Nation and San Manuel Band requested consultation if/when a specific development project was to be built. Additionally, the Gabrieleno Band of Mission Indians – Kizh Nation provided a series of measures to be included as conditions of approval for future development projects. (see Conditions of Approval TR-1 through TR-3, below). These Conditions will apply to future project approvals within the Specific Plan Area.

Outreach for this Project occurred again in December 2022 with SB-18 notifications sent. Responses were received from San Manuel Band of Mission Indians - Serrano Nation, Gabrieleno Band of Mission Indians - Kizh Nation, Quechan Tribe of the Fort Yuma Reservation, Gabrieleno Band of Mission Indians - Tongva Tribe, Agua Caliente Band of Cahuilla Indians, Morongo Band of Mission Indians, and the San Manuel Yuhaaviatam Band of Mission Indians. Out of those responses, San Manuel Band of Mission Indians - Serrano Nation and Gabrieleno Band of Mission Indians - Kizh Nation provided comments, with both requesting consultation on future development projects.

With the implementation of the mitigation presented in the Certified SEIR, in addition to the Conditions of Approval listed below, the potential for the Modified Project to cause a substantial adverse change in the significance of a tribal cultural resource would be less-than-significant. When compared to the Certified SEIR findings, no new or substantially increased impacts to tribal cultural resources would result from the Modified Project.

Modified Project Conditions of Approval:

- TR-1 Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities:
 - A. The project applicant/lead agency shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians Kizh Nation. The monitor

shall be retained prior to the commencement of any "ground-disturbing activity" for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). "Ground-disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching.9

- B. A copy of the executed monitoring agreement shall be submitted to the lead agency prior to the earlier of the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity.¹⁰
- C. The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the project applicant/lead agency upon written request to the Tribe.
- D. On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Kizh from a designated point of contact for the project applicant/lead agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh to the project applicant/lead agency that no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh TCRs.

⁹ Tribal monitoring shall cease once all ground disturbance activities have been completed with respect to the property or portion thereof. Example: Once excavation, grading, trenching, etc. have occurred tribal monitoring shall cease.

¹⁰ The extent of necessary manpower and hourly wage shall be subject to commercially reasonable standards. If there is a dispute as to scope of the necessary labor needs or wage rates, the City shall arbitrate any such disputes in accordance with commercially reasonable standards.

E. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural and/or historic purposes.

TR-2 Unanticipated Discovery of Human Remains and Associated Funerary Objects:

- A. Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute.
- B. If Native American human remains and/or grave goods discovered or recognized on the project site, then all construction activities shall immediately cease. Health and Safety Code Section 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and all ground-disturbing activities shall immediately halt and shall remain halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe they are Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission, and Public Resources Code Section 5097.98 shall be followed.
- C. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2).
- D. Construction activities may resume in other parts of the project site at a minimum of 200 feet away from discovered human remains and/or burial goods, if the Kizh determines in its sole discretion that resuming construction activities at that distance is acceptable and provides the project manager express consent of that determination (along with any other mitigation measures the Kizh monitor and/or archaeologist deems necessary). (CEQA Guidelines Section 15064.5(f).)

- E. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. Any historic archaeological material that is not Native American in origin (non-TCR) shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, it shall be offered to a local school or historical society in the area for educational purposes.
- F. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.

TR-3 Procedures for Burials and Funerary Remains:

- A. As the Most Likely Descendant ("MLD"), the Koo-nas-gna Burial Policy shall be implemented. To the Tribe, the term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the preparation of the soil for burial, the burial of funerary objects with the deceased, and the ceremonial burning of human remains.
- B. If the discovery of human remains includes four or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be created.
- C. The prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all sacred materials.
- D. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to

- recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed.
- E. In the event preservation in place is not possible despite good faith efforts by the project applicant/developer and/or landowner, before ground-disturbing activities may resume on the project site, the landowner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects.
- F. Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.
- G. The Tribe will work closely with the project's qualified archaeologist to ensure that the excavation is treated carefully, ethically, and respectfully. If data recovery is approved by the Tribe, documentation shall be prepared and shall include (at a minimum) detailed descriptive notes and sketches. All data recovery data recovery-related forms of documentation shall be approved in advance by the Tribe. If any data recovery is performed, once complete, a final report shall be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive and/or destructive diagnostics on human remains.

Summary

When compared to impacts considered and addressed in the Certified SEIR, no new significant, substantially increased, or substantially different impacts to tribal cultural resources would occur as a result of the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; The Avenue Specific Plan, 2024 Amendment.

19. UTILITIES AND SERVICE SYSTEMS

		Substantial Change in Project Requiring Major EIR	Substantial Change in Circumstances Requiring Major EIR	New Information Showing Greater Significant Effects than	New Information Showing Ability to Reduce but not Eliminate Significant Effects in	No Changes or New Information Requiring Preparation of an MND	No
	ould the project:	Revisions	Revisions	Previous EIR	Previous EIR	or EIR	Impact
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?					X	
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?					Х	
c)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?					Х	
d)	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?					Х	
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?					Х	

Substantiation:

a) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The Certified SEIR concluded that, although buildout of TOP 2050 would generate additional wastewater, it would be adequately treated in accordance with Regional Water Quality Control Board and California Department of

Public Health requirements. City sanitary sewer systems, and stormwater management would be expanded to accommodate growth associated with the buildout of TOP 2050.

Other utilities systems would be extended and improved consistent with purveyor master plans and as warranted by market conditions. Compliance with regulatory requirements and standard conditions of approval acts to reduce impacts on utilities systems generally, improve system efficiencies, and reduce system maintenance requirements. Collectively, this diminishes the requirement to construct new systems or replace existing systems.

Construction of utilities systems serving the City under TOP 2050 buildout conditions would not result in substantially different impacts than would result from development of TOP 2050 land uses generally.

The Certified SEIR concluded that with implementation of regulatory requirements and standard conditions of approval, the potential for TOP 2050 to require or result in the relocation or construction of new or expanded utilities systems, the construction or relocation of which would result in adverse environmental impacts would be less-than-significant (Certified SEIR, p. 5.19-11).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project amends the site's current land use designations to conform to TOP 2050 land use designations. Proposed residential and commercial uses implemented under the Modified Project would not increase demands on utilities systems beyond those reflected in TOP 2050 and evaluated in TOP 2050 SEIR.

The Modified Project is fully-served by utilities and services systems including: water, wastewater treatment, storm water drainage, electric power, natural gas, and telecommunication facilities. Any localized modification of or connections to serving utilities systems implemented by the Modified Project would not result in substantially different impacts than would result from development of the Modified Project land uses

generally. These impacts would be no greater than or different than impacts considered and addressed in the Certified SEIR.

Modified Project Conditions of Approval: None.

b) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: A foundational document for compliance with both SB 610 and SB 221 is the Urban Water Management Plan (UWMP). Both of these statutes repeatedly identify the UWMP as a planning document that, if properly prepared, can be used by a water supplier to meet the standards set forth in both statutes. Thorough and complete UWMPs will allow water suppliers to use UWMPs as a foundation to fulfill the specific requirements of these two statutes. Cities, counties, water districts, property owners, and developers will all be able to utilize this document when planning for and proposing new projects (Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001).

The City of Ontario 2020 Urban Water Management Plan (UWMP) substantiates that there would be sufficient and reliable water supplies available to the City through 2045. The Certified SEIR concludes that buildout of the City under TOP 2050 would incrementally increase water demands. However, water demands of the City would remain below 2020 UWMP water demand projections. On this basis, there would be sufficient water supplies available to the City under TOP 2050 buildout conditions. The potential for there to be insufficient water supplies available to serve the City and reasonably foreseeable future development during normal, dry and multiple dry years is therefore considered less-than-significant (Certified SEIR, pp. 5.19-30, 5.19-31).

Certified SEIR Mitigation Measures: None.

Modified Project: Consistent with SB610 requirements, a Water Supply Assessment (WSA) has been prepared for the Modified Project (see: Water Supply Assessment and Written Verification of Sufficient Water Supply, The Avenue Specific Plan, City Of Ontario [Albert A. Webb Associates] January 24, 2024; Project WSA, Addendum Appendix G).

The Project WSA concludes that water demand of the Modified Project was not fully accounted for in the 2020 UWMP (Project WSA, p. 25). The WSA also concludes that "water supplies available to OMUC [Ontario Municipal Utilities Company] currently meet and exceed citywide water demands. Groundwater production by OMUC is currently less than their existing rights and within their production capacity. Regardless, OMUC has the means and right to exceed their groundwater allocation in the Chino Basin when required to meet demand pursuant to the Judgment. Further, OMUC has rights to water held in storage that would supply all City demands for more than two years. In addition to groundwater, OMUC can supply water to the Project purchased from the WFA that is within their existing entitlements and capacities" (Project WSA, p. 64). On this basis, the potential for the Modified Project to result in insufficient water supplies available to serve the City and reasonably foreseeable future development during normal, dry and multiple dry years would be less-than-significant.

Modified Project Conditions of Approval: None.

c) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified EIR Conclusions: The Certified EIR recognizes that buildout of the City under TOP 2050 would result in increased wastewater treatment demands. However, existing wastewater treatment plants have excess capacity sufficient to meet these increased demands. Planned wastewater treatment plant expansion would provide additional capacity available to serve the City under TOP 2050 buildout conditions. Treated wastewater meets or exceeds RWQCB and NPDES standards and requirements. On this basis, the Certified EIR concluded that the potential for buildout of City under TOP 2050 to result in or cause insufficient or inadequate wastewater treatment would be less-than-significant.

Certified EIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. By extension, the Modified Project wastewater treatment demand is reflected in wastewater treatment

demand of the City under TOP 2050, as considered and addressed in the Certified SEIR. The Project proposes conventional urban residential/commercial development. Wastewater generated by the Modified Project would not require special or atypical treatment. Based on the preceding, the potential for the Modified Project to result in or cause insufficient or inadequate wastewater treatment would be less-than-significant.

Modified Project Conditions of Approval: None.

d, e) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: The Certified SEIR concluded that buildout of TOP 2050 would be served by landfills with sufficient permitted capacities to accommodate all solid waste disposal needs. Additionally, no conflicts with federal, state, and local management and reduction statutes and regulations related to solid waste were identified. The Certified SEIR determined that impacts related to solid waste would be less-than-significant (Certified SEIR, p. 5.17-31).

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. By extension, the Modified Project solid waste management demand is reflected in solid waste management demand of the City under TOP 2050, as considered and addressed in the Certified SEIR. Moreover, the Modified Project would comply with applicable solid waste management and reduction statutes and regulations (summarized below), acting to further reduce solid waste management impacts of the Modified Project.

City of Ontario Construction & Demolition Recycling Plan (CDRP)

Pursuant to Ontario Municipal Ordinance (OMC) Sec. 6-3.602 Construction & Demolition Recycling Plan and the 2016 California Green Building Standards Code (CALGreen), all building and demolition permit applicants are required to prepare and submit a Construction & Demolition Recycling Plan (CDRP) and a CDRP Summary Report. OMC Sec. 6-3.602 and CALGreen require all construction and qualifying renovation and

demolition projects to divert at least 65% of all generated waste materials. The Modified Project would be subject to (OMC) Sec. 6-3.602 and CALGreen construction waste diversion mandates. The City oversees compliance with OMC Sec. 6-3.602 and CALGreen construction waste diversion mandates.

AB 939 - California Integrated Waste Management Act of 1989

Solid waste management is guided by the California Integrated Waste Management Act of 1989 (AB 939), which emphasizes resource conservation through reduction, recycling, and reuse of solid waste. AB 939 requires that localities conduct a Solid Waste Generation Study (SWGS) and develop a Source Reduction Recycling Element (SRRE), providing for a minimum 50 percent reduction in waste sent to landfills. Diversion rates are calculated and tracked by the California Integrated Waste Management Board (Board). Alternatively, the Board can determine that a jurisdiction's "good faith efforts" to implement comprehensive diversion programs have satisfied the requirement even if diversion levels are below 50 percent.

To reduce waste disposal, AB 939 requires every California city and county to divert 50 percent of its waste from landfills. Residential, commercial and governmental waste recycling programs in support of the SRRE have been implemented by the City.

The City is currently meeting or exceeding all AB 939 solid waste diversion targets. The Modified Project would be required to comply with AB 939 as implemented by the City.

AB 341 - Commercial Recycling

Assembly Bill 341 mandates recycling for businesses producing four or more cubic yards of solid waste per week, and multifamily dwellings of five units or more. Under the law, business must separate recyclables from trash and then either subscribe to City of Ontario recycling services, self-haul their recyclables, or contract with a permitted private recycler. The Modified Project would be subject to Assembly Bill 341 mandates.

AB 1826 - Commercial Organics Recycling

Under Assembly Bill 1826, businesses are required to arrange for organic recycling services. The Modified Project would be subject to Assembly Bill 1826 mandates.

The California Department of Resources Recycling and Recovery (CalRecycle) oversees both the mandatory commercial recycling program and the mandatory commercial organics recycling program. The City of Ontario supports both bills through public outreach, monitoring of recycling efforts, providing notification to non-compliant businesses, and periodic State reporting.

The Modified Project would be required to comply with the above solid waste management statutes and regulations. The City and CalRecycle would oversee and monitor compliance with applicable solid waste management statutes and regulations.

SB 1383 - Organic Waste Management Requirements

SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The law grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025.

The City is currently developing programs and strategies to address the requirements of SB 1383, the Modified Project would be required to ultimately abide by those requirements.

As stated in the Certified SEIR, impacts to solid waste services and facilities from new development are addressed through the payment of development impact fees as outlined in the City of Ontario Development Impact Fee Calculation and Nexus Fee Schedules. With the payment of required development impact fees and compliance with existing solid waste regulations, the Modified Project would not result in any new or substantially increased solid waste impacts not previously identified within the Certified SEIR.

Based on the preceding, the Modified Project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals would be less-than-significant. Additionally, the Modified Project would comply with applicable solid waste

management and reduction statutes and regulations. On this basis, the Modified Project would result in less-than-significant solid waste management impacts. The Modified Project would not result in solid waste management impacts substantially greater than or substantially than solid waste management impacts considered and addressed in the Certified SEIR.

Modified Project Conditions of Approval: None.

When compared to impacts considered and addressed in the Certified SEIR, no new significant, substantially increased, or substantially different utilities and service systems impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; Water Supply Assessment and Written Verification of Sufficient Water Supply, The Avenue Specific Plan, City Of Ontario (Albert A. Webb Associates) January 24, 2024; The Avenue Specific Plan, 2024 Amendment.

20. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?					Х	
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?					Х	

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing Greater Significant Effects than Previous EIR	New Information Showing Ability to Reduce but not Eliminate Significant Effects in Previous EIR	No Changes or New Information Requiring Preparation of an MND or EIR	No Impact
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?					Х	
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?					Х	

Substantiation:

a – d) No Changes or New Information Requiring Preparation of an MND or EIR.

Certified SEIR Conclusions: As discussed in the Certified SEIR, CAL FIRE has determined that the City contains no areas subject to very high wildfire risk. However, the City recognizes that even though fuel loading is light in Ontario and fire risk comes primarily from urban fires, not wildfires, there is some risk related to wildfires. There are many resources available to address wildland fires should they arise - CAL FIRE's 2019 Strategic Fire Plan for California, the CFC, County of San Bernardino MJHMP, City of Ontario LHMP, and fire services from the City of Ontario Fire Department. With adherence to these building practices, development and infrastructure associated with TOP 2050 would not exacerbate risk or result in post-wildfire hazards (e.g., landslides, mudflows, and flooding). In addition, TOP 2050 incorporates policies to prevent wildfire hazards and support the community during wildfire events (Certified SEIR, pp. 5.20-15, 5.20-16). On this basis, the Certified SEIR concluded that potential wildfire impacts resulting from TOP 2050 would be less-than-significant.

Certified SEIR Mitigation Measures: None.

Modified Project: The Modified Project land uses and development concepts are consistent with anticipated buildout of the City under TOP 2050. By extension, potential wildfire impacts affecting the Modified Project are reflected in the assessment of wildfire impacts affecting the City under TOP 2050, as considered and addressed in the Certified SEIR. Per CAL FIRE "Fire Hazard Severity Zone Maps," the City and the Modified Project site are not located within or near a state responsibility area, or within an area classified as a very high fire hazard severity zone.

Fire protection services for the Modified Project site and vicinity are currently provided by the Ontario Fire Department (Fire Department). Adherence to Fire Department building and site design requirements, and compliance with codified fire protection and prevention measures during construction and operation of the Modified Project are required. On this basis, when compared to the Certified SEIR findings, no new or substantially increased wildfire impacts would result from the Modified Project.

Modified Project Conditions of Approval: None.

Summary

When compared to impacts considered and addressed in the Certified SEIR, no new significant, substantially increased, or substantially different wildfire impacts would result from the Modified Project. No changed or new information has been identified to indicate that any potential impacts resulting from the Modified Project would be different from those previously identified and addressed in the Certified SEIR.

Sources: The Ontario Plan 2050 Certified Supplemental Environmental Impact Report, SCH No. 2021070364 (Placeworks) August 2022; SW San Bernardino County, Fire Hazard Severity Zones in SRA (November 7, 2007); https://osfm.fire.ca.gov/media/6781/fhszs_map62.pdf; The Avenue Specific Plan, 2024 Amendment.

21. MANDATORY FINDINGS OF SIGNIFICANCE

				New		
				Information		
			New	Showing	No Changes	
	Substantial	Substantial	Information	Ability to	or New	
	Change in	Change in	Showing	Reduce but	Information	
	Project	Circumstances	Greater	not Eliminate	Requiring	
	Requiring	Requiring	Significant	Significant	Preparation	
	Major EIR	Major EIR	Effects than	Effects in	of an MND	No
Does the project:	Revisions	Revisions	Previous EIR	Previous EIR	or EIR	Impact
a) Have the potential to substantially						
degrade the quality of the						
environment, substantially reduce the						
habitat of a fish or wildlife species,						
cause a fish or wildlife population to						
drop below self-sustaining levels,						
threaten to eliminate a plant or animal					X	
community, substantially reduce the						
number or restrict the range of a rare or						
endangered plant or animal or						
eliminate important examples of the						
major periods of California history or						
prehistory?						
b) Have impacts that are individually						
1						
limited, but cumulatively						
considerable? ("Cumulatively						
considerable" means that the						
incremental effects of a project are					Χ	
considerable when viewed in					^	
connection with the effects of the past						
projects, the effects of other current						
projects, and the effects of probable						
future projects.)						
c) Have environmental effects which will						
cause substantial adverse effects on					X	
human beings, either directly or					Λ	
indirectly?						

Substantiation:

a – c) No Changes or New Information Requiring Preparation of an MND or EIR.

This Addendum defines, describes, compares, and contrasts potential environmental impacts of the Modified Project in the context of the environmental impacts assessed in the Certified SEIR. In so doing, this Addendum substantiates consistency with applicable *CEQA Guidelines* provisions addressing preparation of an Addendum to a previously-Certified SEIR.

As supported by the discussions presented herein, the Modified Project would not result in or cause any new significant impacts, substantively increased impacts, or substantively different environmental impacts than those previously considered and addressed in the Certified SEIR. Analysis beyond that presented in this Addendum is not required or warranted.

4.0 DETERMINATION

4.0 DETERMINATION

As supported by the analysis presented herein, the potential environmental effects of the development allowed by the Modified Project, and associated required discretionary actions, have been adequately addressed in the Certified EIR. As such, the development of any further information and analysis is not warranted. Pursuant to the requirements of *CEQA Guidelines* Section 15162 and 15164, the following determinations have been made.

Major Revisions to the Certified EIR Not Required

Based on the preceding analysis and information, there is no evidence that major changes to the Certified EIR are required. This Addendum indicates that there is no new significant or more severe environmental impact, and that the development of the Modified Project described herein would essentially have the same, or reduced, impacts as those considered and addressed in the Certified EIR.

No Substantial Change in Circumstances Requiring Major Revisions to the Certified EIR No information exists in the record, or is otherwise available that indicates that there are substantial changes in circumstances that would require major changes to the Certified EIR.

No New Information Showing Greater Significant Effects than Identified in the Certified EIR

This Addendum has considered all available relevant information to determine whether there is new information, which was not available at the time the Certified EIR was prepared, that may indicate that a new significant effect may occur that was not reported in the Certified EIR. As supported by the analysis presented in this Addendum, there is no substantial new information that was not available at the time of the Certified EIR, indicating that there would be a new, significant impact requiring major revisions of the Certified EIR.

No New Information Showing Ability to Reduce Significant Effects Identified in the Certified EIR

The Addendum analysis substantiates that there are no significant impacts requiring identification of alternatives to the Modified Project. The continued implementation of applicable mitigation from previous relevant CEQA documents, as incorporated in this Addendum, reduce the Project's potentially significant impacts to levels that are less-than-significant.

Summary

The analysis presented in this document substantiates that the analysis presented in the Certified EIR is sufficient to satisfy CEQA requirements for the proposed Modified Project. That is, with incorporation of mitigation, implementation of the Modified Project described and evaluated herein would not result in any significant new, different, additional, or substantially increased environmental impacts than were previously considered and addressed in the Certified EIR. As such, environmental assessment of the Modified Project does not require any major revision of the previously-approved Certified EIR, nor would development allowed by the Modified Project result in conditions that would require preparation of further analysis as described in the CEQA Guidelines.

5.0 MITIGATION SUMMARY

5.0 MITIGATION SUMMARY

5.1 OVERVIEW

The following Table 5.1-1, *Mitigation Summary Matrix*, presents relevant mitigation measures incorporated in the Certified SEIR, and Conditions of Approval proposed by the Modified Project described herein.

Certified SEIR mitigation measures that are no longer required are indicated by strikeout font. New Conditions of Approval to be implemented under the Modified Project are indicated by *bold italic text*. The "Remarks" column identifies status and applicability of all Mitigation Measures/Conditions of Approval. Required measures presented at Table 5.1-1 will be implemented through the Modified Project Conditions of Approval or as otherwise deemed appropriate by the City.

At the discretion of the City, any of the mitigation measures/conditions of approval identified at Table 5.1-1 may be modified to respond to incumbent conditions and context as they may apply to development proposed by the Modified Project. Any such modifications shall not result in any new significant environmental impacts. Rather, modifications (if any) would ensure compliance and consistency with current City goals, policies, regulations, and development programs/plans.

Table 5.1-1 Mitigation Summary Matrix		
Mitigation Measures	Remarks	
Aesthetics		
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all aesthetics impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the Modified Project.	
Agriculture and Forestry Resources		
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all agriculture and forestry resources impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the Modified Project.	
Air Quality		
3-1 Prior to discretionary approval by the City of Ontario for development projects subject to CEQA (California Environmental Quality Act) review (i.e., nonexempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project construction-related air quality impacts to the City of Ontario Planning Department for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology for assessing air quality impacts. If construction-related criteria air pollutants are determined to have the potential to exceed the South Coast AQMD–adopted thresholds of significance, the City of Ontario building department shall require feasible mitigation measures to reduce air quality emissions. Potential measures shall be incorporated as conditions of approval for a project and may include:	Applicable. This Measure is carried forward from the Certified SEIR and would be implemented by the Modified Project. Consistent with this measure, a development-specific air quality impact analysis has been prepared for the Modified Project. Please refer to the Modified Project AQIA, Addendum Appendix B. The Modified Project would implement MM 3-1 emissions reductions/emissions control measures per City Conditions of Approval.	

Table 5.1-1	
Mitigation Sur	
Mitigation Measures	Remarks
 Require fugitive dust control measures that exceed South Coast Air Quality Management District's Rule 403, such as: Requiring use of nontoxic soil stabilizers to reduce wind erosion. Applying water every four hours to active soil disturbing activities. Tarping and/or maintaining a minimum of 24 inches of freeboard on trucks hauling dirt, sand, soil, or other loose materials. Using construction equipment rated by the United States Environmental Protection Agency as having Tier 4 interim or higher exhaust emission limits. Ensuring construction equipment is properly serviced and maintained to the manufacturer's standards. Limiting nonessential idling of construction equipment to no more than five consecutive minutes. Using Super-Compliant VOC paints for coating architectural surfaces whenever possible. A list of Super-Compliant architectural coating manufactures can be found on the South Coast Air Quality Management District's website at: http://www.aqmd.gov/prdas/brochures/Super-Compliant AlM.pdf. These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) 	Kemarks
submitted to the City and shall be verified by the City's Planning	
Department.	
3-2 The City of Ontario shall evaluate new development proposals within the City and require all developments to include access or linkages to alternative modes of transportation, such as transit stops, bike paths, and/or pedestrian paths (e.g., sidewalks).	Applicable. This Measure is carried forward from the Certified SEIR and shall be implemented by the Modified Project.

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	Remarks
AQ-1 Prior to discretionary approval by the City of Ontario for development projects subject to CEQA (California Environmental Quality Act) review (i.e., nonexempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project operation-phase-related air quality impacts to the City of Ontario Planning Department for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology in assessing air quality impacts. If operation-related air pollutants are determined to have the potential to exceed the South Coast AQMD—adopted thresholds of significance, the City of Ontario Planning Department shall require that applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions during operational activities. The identified measures shall be included as part of the conditions of approval. Possible mitigation measures to reduce long-term emissions could include, but are not limited to the following:	Applicable. This Measure is carried forward from the Certified SEIR and would be implemented by the Modified Project. Consistent with this measure, a development-specific air quality impact analysis has been prepared for the Modified Project. Please refer to the Modified Project AQIA, Addendum Appendix B. The Modified Project would implement MM AQ-1 emissions reductions/emissions control measures per City Conditions of Approval.
 For site-specific development that requires refrigerated vehicles, the construction documents shall demonstrate an adequate number of electrical service connections at loading docks for plug-in of the anticipated number of refrigerated trailers to reduce idling time and emissions. Applicants for manufacturing and light industrial uses shall consider energy storage and combined heat and power in appropriate applications to optimize renewable energy generation systems and avoid peak energy use. Site-specific developments with truck delivery and loading areas and truck parking spaces shall include signage as a reminder to limit idling of vehicles while parked for 	

Table 5.1-1	
Mitigation Sur	
Mitigation Measures	Remarks
 loading/unloading in accordance with California Air Resources Board Rule 2845 (13 CCR Chapter 10 sec. 2485). Provide changing/shower facilities as specified in Section A5.106.4.3 of CALGreen (Nonresidential Voluntary Measures). Provide bicycle parking facilities per Section A4.106.9 of CALGreen (Residential Voluntary Measures). Provide preferential parking spaces for low-emitting, fuel-efficient, and carpool/van vehicles per Section A5.106.5.1 of CALGreen (Nonresidential Voluntary Measures). Provide facilities to support electric charging stations per Section A5.106.5.3 and Section A5.106.8.2 of CALGreen (Nonresidential Voluntary Measures; Residential Voluntary Measures). Applicant-provided appliances shall be Energy Star-certified appliances or appliances of equivalent energy efficiency (e.g., 	
dishwashers, refrigerators, clothes washers, and dryers). Installation of Energy Star-certified or equivalent appliances shall be verified by the City during plan check.	
Biological Resources	
BIO-1 Avoidance of Nesting Burrowing Owls: No more than 72 hours prior to any site disturbances, focused surveys for the burrowing owl shall be conducted. If absence of this species is confirmed, project work can proceed. If, however, burrowing owl is located on site, the appropriate resource agencies (CDFW and USFWS) shall be contacted. The Applicant shall consult with the wildlife agencies regarding the most appropriate methods and timing for removal of owls. As necessary, owls will be actively evicted following agency approved protocols (i.e., placing a one-way door at the burrow	Mitigation is not identified in the Certified SEIR. Condition of Approval BIO-1 is incorporated to ensure that impacts to the burrowing owl are maintained at levels that would be less-than-significant.

Table 5.1-1	
Mitigation Sur	mmary Matrix
Mitigation Measures	Remarks
entrance to ensure that owls cannot access the burrow once they leave). Any such active eviction shall occur outside of the breeding/nesting season. That is, if active eviction is required, eviction shall be accomplished between September 1 and February 15. If more than 30 days have elapsed between owl eviction and completion of clearing and grubbing activities, a subsequent survey for the burrowing owl shall be conducted to ensure that owls have not re-populated the site. Any reoccupation by owls will require subsequent protocol active eviction.	
BIO-2 Avoidance of Nesting Migratory Birds: If possible, all vegetation removal activities shall be scheduled from August 1 to February 1, which is outside the general avian nesting season. This would ensure that no active nests would be disturbed, and that removal could proceed rapidly. If vegetation is to be cleared during the nesting season, all suitable habitat will be thoroughly surveyed within 72 hours prior to clearing for the presence of nesting birds by a qualified biologist (Biologist). The Biologist shall be approved by the City and retained by the Applicant. The survey results shall be submitted by the Applicant to the City Planning Department. If any active nests are detected, the area of nesting shall be flagged and mapped on the construction plans along with a minimum 300-foot buffer, with the final buffer distance to be determined by the Project Biologist. The buffer area shall be avoided until, as determined by the Biologist, the nesting cycle is complete, or it is concluded that the nest has failed. In addition, the Biologist shall be present on the site to monitor the vegetation removal to ensure that any nests, which were not detected during the initial survey, are not disturbed.	Mitigation is not identified in the Certified SEIR. Condition of Approval BIO-2 is incorporated to ensure that impacts to the nesting migratory birds are maintained at levels that would be less-than-significant.

Table 5.1-1		
Mitigation Summary Matrix Mitigation Measures Remarks		
Mitigation Measures		
BIO-3 To the extent not considered and addressed in prior biological resources assessments, the Project DSFLF Study, or the January 2024 Biological Update, and to properly assess and address potential biological resources impacts, Biological Resources surveys shall be prepared prior to approval of Tentative Tract Maps within the Modified Project site. If suitable habitat is determined present onsite, subsequent focused surveys shall be completed and no "take" of any protected species and/or their habitat shall occur without obtaining the requisite regulatory permits from State and Federal agencies.	Mitigation is not identified in the Certified SEIR. Condition of Approval BIO-3 is incorporated to ensure that impacts affecting areas of the Specific Plan that may not have been previously identified are resolved prior to the approval of Tentative Tract Maps for the affected areas.	
Cultural Resources		
5-1 Historic or potentially historic resources in the City shall be evaluated for historic significance through the City's tier system prior to the issuance of plan or development approvals. Pursuant to City's Development Code (Chapter 7, Historic Preservation), each historic resource shall be fully documented and cataloged pursuant to Historic American Building Survey/Historic American Engineering Record (HABS/HAER) standards, to provide a record of the resource, including, but not limited to: [i] the preparation of site plans, floor plans, exterior and interior elevations, and detail drawings of character defining features (such as moldings, stairs, etc.); and [ii] photographs of the resource, including the exterior, interior, and interior and exterior character defining features (such as moldings, light fixtures, trim patterns, etc.).	Applicable. This Measure is carried forward from the Certified SEIR and shall be implemented by the Modified Project. Note: Previous surveys indicate there are no known or probable historic resources within the Modified Project site.	
5-2 In areas of documented or inferred from evident archaeological and/or paleontological resource presence, City staff shall require applicants for development permits to provide studies to document the presence/absence of such resources. On properties where resources are identified, such studies shall provide a detailed	Applicable. This Measure is carried forward from the Certified SEIR and shall be implemented by the Modified Project. Note: Previous surveys indicate there are no known or probable archaeological and/or paleontological resources within the Modified Project site. The Modified Project would implement MM 5-2 measures providing for	

Table 5.1-1	
Mitigation Sur Mitigation Measures	mmary Matrix Remarks
mitigation plan, including a monitoring program and recovery and/or in situ preservation plan, based on the recommendations of a qualified cultural preservation expert. The mitigation plan shall include the following requirements:	protection of unknown resources that may exist in a buried context. Please refer also to Conditions of Approval that would be implemented under the topical heading "Tribal Cultural Resources."
 a) Archaeologists and/or paleontologist shall be retained for the project and will be on call during grading and other significant ground-disturbing activities. b) Should any cultural/scientific resources be discovered, no further grading shall occur in the area of the discovery until the Planning Director is satisfied that adequate provisions are in place to protect these resources. c) Unanticipated discoveries shall be evaluated for significance by a San Bernardino County Certified Professional Archaeologist/Paleontologist. If significance criteria are met, then the project shall be required to perform data recovery, professional identification, radiocarbon dates, and other special studies; submit materials to a museum for permanent curation; and provide a comprehensive final report including catalog with museum numbers. 	
Energy	
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all energy impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the Modified Project.
Geology and Soils	
Please refer to Mitigation Measure 5-2, presented previously.	Applicable. Mitigation is carried forward from the Certified EIR and shall be implemented by the Modified Project.

Table 5.1-1 Mitigation Summary Matrix		
Mitigation Measures	Remarks	
Greenhouse Gas Emissions		
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all GHG impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the Modified Project.	
Hazards and Hazardous Materials		
HM-1 Removal of structures, including, but limited to, under- and aboveground storage tanks, septic systems, and water wells shall conform to all Federal, State, and local agency regulations (specifically with those required by the City Building and Safety Department and the Hazardous Materials Division of the San Bernardino County Fire Department). Due to the extensive disposal requirements and protocols contained within these regulatory schemes, implementation and adherence to these various regulatory requirements will ensure that no significant impacts occur.	Mitigation is not identified in the Certified SEIR. Condition of Approval HM-1 is incorporated to ensure compliance with applicable regulations, ordinances, and policies.	
HM-2 Prior to grading activities for any areas not previously tested, a methane gas assessment shall be prepared by a licensed professional with expertise in soil gas assessments for subdivisions proposed on former dairies, poultry ranches, hog ranches, livestock feed operations and similar facilities to determine the presence of methane gas within the project boundary. The methane gas assessment shall identify monitoring and mitigation strategies and approaches. All mitigation measures/plans and specifications shall be reviewed and approved by the City of Ontario.	Mitigation is not identified in the Certified SEIR. Condition of Approval HM-2 is incorporated to ensure compliance with applicable regulations, ordinances, and policies.	
Such an assessment may take two steps. A preliminary assessment will be done prior to grading to determine exactly where dairies have existed in the past so that the post grading		

Table 5.1-1		
	Mitigation Summary Matrix	
Mitigation Measures	Remarks	
assessment/mitigation measures can be focused on the portions of the Planning Areas that have included former agricultural activities. The second step will include actual testing of graded pads no sooner than 30 days after construction to determine if methane is		
detected above 5,000 ppm.		
The following grading guidelines shall also be adhered to:		
 Careful clearing, grubbing, segregation, and stockpiling or disposal near surface, of organics-rich soils at the site prior to the initiation of mass grading activities. 		
• The identification and segregation/stockpiling or disposal of deeper soils which contain elevated levels of organic material. Soils with an organic content of 0.4% or higher shall be segregated for controlled placement that ensures that methane levels are below 5,000 ppm.		
• Soils with organic content in excess of 0.4% shall not be placed as "deep" fill. Soils with organic contents in excess of this amount shall be placed in open areas within approximately two feet of the finished ground surface.		
HM-3 To eliminate the risk of ground cracking, manure shall be	Mitigation is not identified in the Certified SEIR.	
removed from the site, such that the organic matter content of		
onsite soils shall not exceed 2% (a 2% total organic content is	Condition of Approval HM-3 is incorporated to ensure compliance	
allowed, of which no more than 1% can be manure) in the building	with applicable regulations, ordinances, and policies.	
foundation areas when mixed with underlying clean soils and imported fill.		

Table 5.1-1	
Mitigation Sur Mitigation Measures	nmary Matrix Remarks
HM-4 To the extent not previously prepared and to properly assess and address potential hazardous materials, a Phase I Environmental Site Assessment (ESA) shall be performed by a registered environmental assessor (REA) prior to the approval of the Tentative Tract Map, site plan or other discretionary approval for a given phase of development. If potential hazardous materials or conditions are identified in the Phase I report, the recommendations of the ESA shall be implemented. Such recommendations shall include surficial sampling and chemical analysis within agricultural areas or where soil staining was observed. The Phase I ESA shall be provided to the City and shall be included in any CEQA analysis prepared in connection with the consideration of the discretionary approval for development.	Mitigation is not identified in the Certified SEIR. Condition of Approval HM-4 is incorporated to ensure compliance with applicable regulations, ordinances, and policies.
HM-5 If, while performing any excavation as part of Project construction, material that is believed to be hazardous waste as defined in Section 25117 of the California Health and Safety Code is discovered, the developer shall contact the City Fire Department and the County of San Bernardino Fire Department Hazardous Materials Division. Excavation shall be stopped until the material has been tested and the absence of hazardous waste has been confirmed. If hazardous waste is determined to be present, the California Department of Toxic Substances control shall be contacted and the material shall be removed and disposed of pursuant to applicable provisions of California law.	Mitigation is not identified in the Certified SEIR. Condition of Approval HM-5 is incorporated to ensure compliance with applicable regulations, ordinances, and policies.
Hydrology and Water Quality	
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all hydrology and water quality impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the

Table 5.1-1 Mitigation Summary Matrix		
Mitigation Measures	Remarks	
	Modified Project.	
Land Use and Planning		
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all land use and planning impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the Modified Project.	
Mineral Resources		
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all mineral resources impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the Modified Project.	
Noise		
12.1 Prior to the issuance of building permits for any project that involves a noise sensitive use within the 65 dBA CNEL contour of the Ontario International Airport, the project property owner/developers shall retain an acoustical engineer to conduct an acoustic analysis and identify, where appropriate, site design features and/or required building acoustical improvements (e.g., sound transmission class rated windows, doors, and attic baffling), to ensure compliance with the City's Noise Compatibility Criteria and the California State Building Code and California Noise Insulation Standards (Titles 24 and 21 of the California Code of Regulations).	Airport noise level impacts affecting the Modified Project site have been evaluated in this Addendum and are substantiated to be less-than-significant. Please refer also to the Modified Project Noise Impact Analysis presented at Addendum Appendix E.	
12.2 Prior to issuance of a building permit, individual projects that involve vibration intensive construction activities, such as pile drivers, jack hammers, and vibratory rollers near sensitive receptors shall be evaluated for potential vibration impacts. For construction	Construction-source vibration impacts of the Modified Project have been evaluated in this Addendum and are substantiated to be less-than-significant. Please refer also to the Modified Project Noise Impact Analysis presented at Addendum Appendix E.	

within 135 feet of fragile structures, such as historical resources, within 100 feet of nonengineered timber and masonry buildings (e.g., most residential buildings), or within 75 feet of engineered concrete and masonry (no plaster); or a vibratory roller within 25 feet of any structure, the project applicant shall prepare a noise and vibration analysis to assess and mitigate potential noise and vibration impacts related to these activities. This noise and vibration analysis shall be conducted by a qualified and experienced acoustical consultant or engineer. The vibration levels shall not exceed Federal Transit Administration (FTA) architectural damage thresholds (e.g., 0.12 inches per second [in/sec] peak particle velocity	Table 5.1-1		
within 135 feet of fragile structures, such as historical resources, within 100 feet of nonengineered timber and masonry buildings (e.g., most residential buildings), or within 75 feet of engineered concrete and masonry (no plaster); or a vibratory roller within 25 feet of any structure, the project applicant shall prepare a noise and vibration analysis to assess and mitigate potential noise and vibration impacts related to these activities. This noise and vibration analysis shall be conducted by a qualified and experienced acoustical consultant or engineer. The vibration levels shall not exceed Federal Transit Administration (FTA) architectural damage thresholds (e.g., 0.12 inches per second [in/sec] peak particle velocity	Mitigation Sur	Mitigation Summary Matrix	
within 100 feet of nonengineered timber and masonry buildings (e.g., most residential buildings), or within 75 feet of engineered concrete and masonry (no plaster); or a vibratory roller within 25 feet of any structure, the project applicant shall prepare a noise and vibration analysis to assess and mitigate potential noise and vibration impacts related to these activities. This noise and vibration analysis shall be conducted by a qualified and experienced acoustical consultant or engineer. The vibration levels shall not exceed Federal Transit Administration (FTA) architectural damage thresholds (e.g., 0.12 inches per second [in/sec] peak particle velocity	Mitigation Measures	Remarks	
nonengineered timber and masonry buildings, and 0.3 in/sec PPV for engineered concrete and masonry). If vibration levels would exceed this threshold, alternative uses shall be used, such as drilling piles as opposed to pile driving and static rollers as opposed to vibratory rollers. If necessary, construction vibration monitoring shall be conducted to ensure vibration thresholds are not exceeded. 12 4 Construction activities associated with new development that occurs near sensitive receptors shall be evaluated for potential noise evaluated in this Addendum and are substantiated to be	within 135 feet of fragile structures, such as historical resources, within 100 feet of nonengineered timber and masonry buildings (e.g., most residential buildings), or within 75 feet of engineered concrete and masonry (no plaster); or a vibratory roller within 25 feet of any structure, the project applicant shall prepare a noise and vibration analysis to assess and mitigate potential noise and vibration impacts related to these activities. This noise and vibration analysis shall be conducted by a qualified and experienced acoustical consultant or engineer. The vibration levels shall not exceed Federal Transit Administration (FTA) architectural damage thresholds (e.g., 0.12 inches per second [in/sec] peak particle velocity [PPV] for fragile or historical resources, 0.2 in/sec PPV for nonengineered timber and masonry buildings, and 0.3 in/sec PPV for engineered concrete and masonry). If vibration levels would exceed this threshold, alternative uses shall be used, such as drilling piles as opposed to pile driving and static rollers as opposed to vibratory rollers. If necessary, construction vibration monitoring shall be conducted to ensure vibration thresholds are not exceeded. 12 4 Construction activities associated with new development that occurs near sensitive receptors shall be evaluated for potential noise impacts. Construction contractors shall implement the following measures for construction activities in the City of Ontario. Construction plans submitted to the City shall identify these measures on demolition, grading, and construction plans. The City of Ontario Planning and Building Departments shall verify that grading, demolition, and/or construction plans submitted include these notations prior to issuance of demolition, grading, and/or building permits.	Construction-source noise impacts of the Modified Project have been evaluated in this Addendum and are substantiated to be less-than-significant. Please refer also to the Modified Project Noise	

Table 5.1-1	
Mitigation Summary 1	Matrix
Mitigation Measures	Remarks
and 6:00 pm Monday through Friday and 9:00 am to 6:00 pm	
Saturdays and Sundays, as prescribed in Municipal Code Section	
5-29.09.	
During the entire active construction period, equipment and	
trucks used for project construction shall use the best available noise	
control techniques wherever feasible (e.g., improved mufflers,	
equipment re design, use of intake silencers, ducts, engine	
enclosures, and acoustically attenuating shields or shrouds).	
• Impact tools (e.g., jack hammers and hoe rams) shall be	
hydraulically or electrically powered wherever possible. Where the	
use of pneumatic tools is unavoidable, an exhaust muffler on the	
compressed air exhaust shall be used along with external noise	
jackets on the tools.	
Stationary equipment such as generators and air compressors	
shall be located as far as feasible from nearby noise sensitive uses.	
Stockpiling shall be located as far as feasible from nearby	
noise sensitive receptors.	
Construction traffic shall be limited, to the extent feasible, to	
approved haul routes established by the City Planning and Building	
Agency.	
At least 10 days prior to the start of construction activities, a sign	
shall be posted at the entrance(s) to the job site, clearly visible to the	
public, that includes permitted construction days and hours as well	
as the telephone numbers of the City's and contractor's authorized	
representatives that are assigned to respond in the event of a noise	
or vibration complaint. If the authorized contractor's representative	
receives a complaint, he/she shall investigate, take appropriate	
corrective action, and report the action to the City.	
• Signs shall be posted at the job site entrance(s), within the	
on site construction zones, and along queueing lanes (if any) to	

Table 5.1-1	
Mitigation Summary Matrix	
Mitigation Measures	Remarks
reinforce the prohibition of unnecessary engine idling. All other equipment shall be turned off if not in use for more than 5 minutes. During the entire active construction period and to the extent feasible, the use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only. The construction manager shall use smart back-up alarms, which automatically adjust the alarm level based on the background noise level or switch off back-up alarms and replace with human spotters in compliance with all safety requirements and laws. Erect temporary noise barriers (at least as high as the exhaust of equipment and breaking line of sight between noise sources and sensitive receptors), as necessary and feasible, to maintain construction noise levels at or below the performance standard of 80 dBA Leq. Barriers shall be constructed with a solid material that has	
a density of at least 1.5 pounds per square foot with no gaps from the ground to the top of the barrier and may be lined on the construction side with an acoustical blanket, curtain, or equivalent absorptive material.	
Population and Housing	
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all population and housing impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the Modified Project.
Public Services	
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all public services impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the Modified Project.

Table 5.1-1	
Mitigation Sur	nmary Matrix
Mitigation Measures	Remarks
Recreation	
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all recreation impacts of the Modified Project would be less-than-significant. No mitigation is required of the Modified Project.
Transportation	
T-1 Prior to approval of discretionary projects subject to VMT reduction analysis, applicants shall demonstrate compliance with the City's VMT Guidelines for CEQA assessment of VMT impacts. For projects with VMT per Service Population exceeding the County's significance threshold, a mitigation plan shall be developed and implemented. Mitigation should consist of Transportation Demand Management (TDM) measures analyzed under a VMT-reduction methodology consistent with the California Air Pollution Control Officers Association's (CAPCOA) Final Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (2021) and approved by the City of Ontario (if applicable). Examples of measures include but are not limited to: • Pedestrian Network Improvements: constructing new sidewalks and/or improving damaged or substandard sidewalks that connect to a larger pedestrian network. • Construct or Improve Bike Facilities: constructing new or enhancing a single existing Class I, II or IV bike facility that connects to a larger bike network. • Construct or Improve Bike Boulevards: implementing a Class III bike boulevard on a local or collector street that is one travel lane in each direction, has a design speed of 25 mph or less and a design	Modified Project VMT impacts have been evaluated in this Addendum and are substantiated to be less-than-significant. Please refer also to the Modified Project VMT Analysis presented at Addendum Appendix F.

Table 5.1-1	
Mitigation Summary Mat	rix
Mitigation Measures	Remarks
volume of 5,000 ADT or less.	
 Expand Bikeway Networks: constructing a network of 	
interconnected new Class I, II, or IV bike facilities.	
Provide End of Trip Bicycle Facilities: constructing facilities that	
support cyclists such as bike parking, lockers, and showers.	
Implement Transit-Supportive Roadway Treatments: funding	
infrastructure improvements such as traffic signal modifications and	
roadway signing and striping that are dedicated to improving	
transit travel times and reliability.	
• Transit Passes: proving discounted or free transit fare to a	
specific geographic area, population group, or to the general public.	
 Vanpool Program: providing groups of 5 to 15 people with 	
direct shuttle service between their workplace and residence.	
 Carshare Program (conventional or EV): providing access to a 	
shared fleet of on demand vehicles for short term use/rental. Best	
practice is to discount carshare membership and provide priority	
parking for carshare vehicles to encourage use of the service.	
Bikeshare Program (conventional or EV): providing access to a	
shared fleet of on demand bicycles for short term use/rental. Best	
practice is to discount bikeshare membership and dedicate	
bikeshare parking to encourage use of the service.	
Rideshare Program: providing access to and encouraging the	
use of a ridesharing platform or service. This could be an app,	
website, or other service that provides ride matching coordination	
services.	
 Community Based Travel Planning (CBTP): CBTP is a 	
residential based approach to outreach, performed by trained	
advisors, that provides households within a targeted geographic	
area with customized information, incentives, and support to	
encourage the use of transportation alternatives in place of single	

Table 5.1-1	
Mitigation Sur	nmary Matrix
Mitigation Measures	Remarks
occupancy vehicles.	
 Commute Trip Reduction (CTR) Program: CTR programs can be 	
mandatory or voluntary, and involve providing information,	
coordination, services, infrastructure, and/or incentives for	
alternative modes such as ridesharing, vanpool, transit passes, and	
cycling.	
Tribal Cultural Resources	
5-3 Upon receipt of an application for a proposed project subject to	Applicable. This Measure is carried forward from the Certified SEIR
CEQA and within the City's jurisdiction, the City's representative	and shall be implemented by the Modified Project.
shall consult with the relevant tribe(s)' representative(s) to	
determine if the proposed project is within a culturally sensitive	
area to the tribe. If sufficient evidence is provided to reasonably	
ascertain that the site is within a tribal culturally sensitive area, an	
archaeologist shall prepare a cultural resources assessment. The	
findings of the cultural resources assessment shall be incorporated	
into the CEQA documentation. A copy of the report shall be	
forwarded to the tribe(s). If mitigation is recommended in the CEQA	
document, the procedure described in Mitigation Measure 5-4 shall	
be followed.	
5-4 Prior to the issuance of grading permits for a proposed project for	Applicable. This Measure is carried forward from the Certified SEIR
which the CEQA document defines cultural resource mitigation for	and shall be implemented by the Modified Project.
potential tribal resources, the project applicant shall contact the	
designated tribe(s) to notify them of the grading, excavation, and	
monitoring program. The applicant shall coordinate with the City of	
Ontario and the tribal representative(s) to develop mitigation	
measures that address the designation, responsibilities, and	
participation of tribal monitors during grading, excavation, and	
ground-disturbing activities; scheduling; terms of compensation;	
and treatment and final disposition of any cultural resources, sacred	

Table 5.1-1	
Mitigation Sur	
Mitigation Measures	Remarks
sites, and human remains discovered on the site. The City of Ontario shall be the final arbiter of the conditions for projects within the City's jurisdiction.	
TCR-1 Tribal Cultural Resources Monitoring. The project archaeologist, in consultation with interested tribes, the developer, and the City of Ontario, shall develop an archaeological monitoring plan (AMP) to address the details, timing, and responsibility of archaeological and cultural activities that will occur on the project site. Details in the AMP shall include:	Applicable. This Measure is carried forward from the Certified SEIR and shall be implemented by the Modified Project.
1. Project-related ground disturbance (including, but not limited to, brush clearing, grading, trenching, etc.) and development scheduling;	
2. The development of a rotating or simultaneous schedule in coordination with the developer and the project archeologist for designated Native American Tribal Monitors from the consulting tribes during grading, excavation and ground disturbing activities on the site: including the scheduling, safety requirements, duties, scope of work, and Native American Tribal Monitors' authority to stop and redirect grading activities in coordination with all project archaeologists (if the tribes cannot come to an agreement on the rotating or simultaneous schedule of tribal monitoring, the Native American Heritage Commission shall designate the schedule for the onsite Native American Tribal Monitor for the proposed project);	
3. The protocols and stipulations that the developer, City, Tribes, and project archaeologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resources	

Table 5.1-1	
Mitigation Summary Matrix Mitigation Measures Remarks	
evaluation.	TCMurks
At least 30 days prior to application for a grading permit and before any brush clearance, grading, excavation, and/or ground disturbing activities on the site, the developer shall retain a tribal cultural monitor to monitor all ground-disturbing activities in an effort to identify any unknown archaeological resources.	
Pursuant to the AMP, a tribal monitor from the consulting tribe shall be present during the initial grading activities. If tribal resources are found during grubbing activities, the tribal monitoring shall be present during site grading activities.	
TCR-2 Treatment and Disposition of Cultural Resources. In the event that Native American cultural resources are inadvertently discovered during the course of any ground-disturbing activities, including but not limited to brush clearance, grading, trenching, etc., for the proposed project, the following procedures will be carried out for treatment and disposition of the discoveries:	Applicable. This Measure is carried forward from the Certified SEIR and shall be implemented by the Modified Project.
1. Temporary Curation and Storage: During the course of construction, all discovered resources shall be temporarily curated in a secure location on-site or at the offices of the project archaeologist. The removal of any artifacts from the project site will need to be thoroughly inventoried with tribal monitor oversight of the process;	
2. Treatment and Final Disposition: The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and nonhuman	

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Measures	Remarks
remains as part of the required mitigation for impacts to cultural resources. The applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Ontario with evidence of same:	
a. Accommodate the process for on-site reburial of the discovered items with the consulting Native American tribes or bands. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloging, basic analysis, other analyses as recommended by the project archaeologist and approved by consulting tribes, and basic recordation have been completed; all documentation should be at a level of standard professional practice to allow the writing of a report of professional quality;	
b. A curation agreement with an appropriate qualified repository in San Bernardino County that meets federal standards per 36 CFR Part 79, and therefore the resource would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility in San Bernardino County, to be accompanied by payment of the fees necessary for permanent curation;	
c. For purposes of conflict resolution, if more than one Native American tribe or band is involved with the project and cannot come to an agreement as to the disposition of cultural materials, materials shall be curated at the San Bernardino County Museum by default;	

Table 5.1-1	
Mitigation Summary Matrix	
Mitigation Measures	Remarks
d. At the completion of grading, excavation, and ground-disturbing activities on the site, a Phase IV Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the project archaeologist and Native Tribal Monitors within 60 days of completion of grading. This report shall document the impacts to the known resources on the property; describe how each mitigation measure was fulfilled; document the type of cultural resources recovered and the disposition of such resources; provide evidence of the required cultural sensitivity training for the construction staff held during the required pregrade meeting; and, in a confidential appendix, include the daily/weekly monitoring notes from the archaeologist. All reports produced will be submitted to the City, County Museum, and consulting tribes. TR-1 Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities: A. The project applicant/lead agency shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation. The monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). "Ground-disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching. B. A copy of the executed monitoring agreement shall be submitted to the lead agency prior to the earlier of the commencement of any	In addition to mitigation carried forward as noted above, Condition of Approval TR-1 is incorporated to ensure that tribal cultural resource impacts are maintained at levels that would be less-than-significant.

Table 5.1-1 Mitigation Summary Matrix	
Mitigation Sur Mitigation Measures	nmary Matrix Remarks
ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity.	
C. The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the project applicant/lead agency upon written request to the Tribe.	
D. On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Kizh from a designated point of contact for the project applicant/lead agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh to the project applicant/lead agency that no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh TCRs.	
E. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered	

Table 5.1-1	
Mitigation Summary Matrix	
Mitigation Measures	Remarks
TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural and/or historic purposes.	
TR-2 Unanticipated Discovery of Human Remains and Associated Funerary Objects:	In addition to mitigation carried forward as noted above, Condition of Approval TR-2 is incorporated to ensure that tribal cultural resource impacts are maintained at levels that would be less-than-significant.
A. Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute.	
B. If Native American human remains and/or grave goods discovered or recognized on the project site, then all construction activities shall immediately cease. Health and Safety Code Section 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and all ground- disturbing activities shall immediately halt and shall remain halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe they are Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission, and Public Resources Code Section 5097.98 shall be followed.	
C. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2).	

Table 5.1-1	
Mitigation Summary Matrix	
Mitigation Measures	Remarks
D. Construction activities may resume in other parts of the project site at a minimum of 200 feet away from discovered human remains and/or burial goods, if the Kizh determines in its sole discretion that resuming construction activities at that distance is acceptable and provides the project manager express consent of that determination (along with any other mitigation measures the Kizh monitor and/or archaeologist deems necessary). (CEQA Guidelines Section 15064.5(f).)	
E. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. Any historic archaeological material that is not Native American in origin (non-TCR) shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, it shall be offered to a local school or historical society in the area for educational purposes. F. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.	
TR-3 Procedures for Burials and Funerary Remains: A. As the Most Likely Descendant ("MLD"), the Koo-nas-gna Burial Policy shall be implemented. To the Tribe, the term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the preparation of the soil for burial, the burial of funerary objects with the deceased, and the ceremonial burning of human remains.	In addition to mitigation carried forward as noted above, Condition of Approval TR-3 is incorporated to ensure that tribal cultural resource impacts are maintained at levels that would be less-than-significant.

Table 5.1-1	
Mitigation Sur Mitigation Measures	nmary Matrix Remarks
B. If the discovery of human remains includes four or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be created.	
C. The prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all sacred materials.	
D. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed.	
E. In the event preservation in place is not possible despite good faith efforts by the project applicant/developer and/or landowner, before ground-disturbing activities may resume on the project site, the landowner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human	

Table 5.1-1	
Mitigation Summary Matrix	
Mitigation Measures	Remarks
remains and/or ceremonial objects.	
F. Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.	
G. The Tribe will work closely with the project's qualified archaeologist to ensure that the excavation is treated carefully, ethically, and respectfully. If data recovery is approved by the Tribe, documentation shall be prepared and shall include (at a minimum) detailed descriptive notes and sketches. All data recovery data recovery-related forms of documentation shall be approved in advance by the Tribe. If any data recovery is performed, once complete, a final report shall be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive and/or destructive diagnostics on human remains.	
Utilities and Service Systems	
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all utilities and service systems impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the Modified Project.

Table 5.1-1 Mitigation Summary Matrix		
Mitigation Measures	Remarks	
Wildfire		
N/A	Mitigation is not identified in the Certified SEIR. As substantiated in this Addendum, all wildfire impacts of the Modified Project would be less-than-significant, or no impacts would result from the Modified Project. No mitigation is required of the Modified Project.	

DECISION NO.:

FILE NO.: PMTT23-002 (TTM 20572)

DAB Hearing Date: November 18, 2024

SUBJECT: Tentative Tract Map No. 20572 to subdivide 77.2 acres of land into

seven numbered lots and fourteen lettered lots, located at the northwest corner of Archibald Avenue and Ontario Ranch Road, within the PA-5 (Low-Density Residential, Medium-Density Residential, and School) land use district of The Avenue Specific Plan; (APNs: 0218-191-14, 0218-191-15, 0218-191-04, 0218-191-16 &

0218-191-05)

PART 1: RECITALS

WHEREAS, RICHLAND DEVELOPERS, INC. ("Applicant") filed an Application for the approval of Tentative Tract Map No. 20572, File No. PMTT23-002, as described in the title of this Decision (hereinafter referred to as "Application" or "Project"); and

WHEREAS, the Application applies to 77.2 acres of land generally located at the northwest corner of Archibald Avenue and Ontario Ranch Road, within the PA-5 (Low-Density Residential, Medium-Density Residential, and School) land use district of The Avenue Specific Plan, and is presently partially unimproved agricultural land and a plant nursery; and

WHEREAS, the property to the north of the Project site is within the Retail/Commercial land use district of The Avenue Specific Plan and is developed with agricultural/dairy uses. The properties to the east are within the PA-5 (Low-Density Residential) and PA-7 (Low-Medium-Density Residential) land use districts of The Avenue Specific Plan and are developed with single-family homes and townhomes. The properties to the south are within PA-17 (Multi-Family Attached) and PA-21 (Commercial) land use districts of the Parkside Specific Plan and are vacant. The property to the west is within The Avenue Specific Plan and is developed with the Cucamonga Creek Channel; and

WHEREAS, on January 17, 2023, the Applicant applied for Tentative Tract Map No. 20572 (File No. PMTT23-002) to subdivide 77.2 acres of land. The Applicant also applied for a Development Agreement (File No. PDA23-003) to establish the terms of development for the Project site on August 24, 2023, and an amendment to The Avenue Specific Plan (File No. PSPA22-005) to bring the Project site's zoning into conformance with The Ontario Plan 2050's Land Use Plan on July 14, 2022; and

WHEREAS, the Project proposes an "A Map" to subdivide PA-5 of The Avenue Specific Plan into seven numbered lots and fourteen lettered lots to facilitate future

subdivision and development. In conjunction with Development Agreements, this A Map serves to facilitate establishment of backbone infrastructure, including major streets, utilities, and neighborhood edges; and

WHEREAS, additional subdivision for development of residential, school, landscape, and other associated recreational land uses will occur with future "B Maps", which will establish individual residential lots and land for the proposed school; internal circulation areas, streets, and utility plotting; internal neighborhood edges and recreational facilities; and other amenities in compliance with all Development Code and The Avenue Specific Plan requirements; and

WHEREAS, the Project is required to design and build a pedestrian bridge across the Cucamonga Creek Channel and is contingent on future residential occupancy numbers. Additionally, the project is required to expand the northern part of the Ontario Ranch Road bridge at the Cucamonga Creek Channel to the ultimate right-of-way width; and

WHEREAS, the Project proposes landscaped neighborhood edges along Archibald Avenue and Ontario Ranch Road and will be designed and constructed in accordance with the Streetscape Master Plan, The Avenue Specific Plan, and Development Code requirements. A centralized 4.2-acre park is also proposed, which will also be designed and constructed as residential occupancies are issued, in accordance with The Avenue Specific Plan, Development Code, and Development Agreement. Any additional required parkland resulting from fluctuations in proposed densities at time of residential development will be provided as part of the future B Maps. Lastly, a 10-foot-wide trail will be designed and constructed along the west property boundary, adjacent to the Cucamonga Creek Channel, which will provide a pedestrian path from the northern boundary of the tract south to Ontario Ranch Road; and

WHEREAS, the City of Ontario certified the Environmental Impact Report prepared for The Ontario Plan and associated Statement of Overriding Considerations on January 27, 2010, and issued Resolution No. 2010-003; and

WHEREAS, the City of Ontario adopted the Policy Plan (General Plan) as part of the component framework for The Ontario Plan on January 27, 2010, and issued Resolution No. 2010-004; and

WHEREAS, the City of Ontario certified the Supplemental Environmental Impact Report (Certified SEIR), for the General Plan Amendment for The Ontario Plan 2050 Technical Update on August 16, 2022, in which development and use of the Project site was discussed; and

WHEREAS, the Planning Director of the City of Ontario has prepared and approved for attachment an Addendum to the Certified SEIR (hereinafter referred to as "EIR Addendum") in accordance with the requirements of the California Environmental Quality Act of 1970, together with State and local guidelines implementing said Act, all as amended to date (collectively referred to as CEQA); and

WHEREAS, the environmental impacts of this Project were thoroughly analyzed in the EIR Addendum, which concluded that implementation of the Project could result in a number of significant effects on the environment that were previously analyzed in the Certified EIR, and that the Certified EIR identified mitigation measures that would reduce each of those significant effects to a less-than-significant level; and

WHEREAS, the City's "Local Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed; and

WHEREAS, Ontario Development Code Table 2.02-1 (Review Matrix) grants the Development Advisory Board (DAB) the responsibility and authority to review and make recommendation to the Planning Commission on the subject Application; and

WHEREAS, all members of the DAB of the City of Ontario were provided the opportunity to review and comment on the Application, and no comments were received opposing the proposed development; and

WHEREAS, the Project has been reviewed for consistency with the Housing Element of the Policy Plan component of The Ontario Plan 2050, as State Housing Element law (as prescribed in Government Code Sections 65580 through 65589.8) requires that development projects must be consistent with the Housing Element, if upon consideration of all its aspects, it is found to further the purposes, principals, goals, and policies of the Housing Element; and

WHEREAS, the Project is located within the Airport Influence Area of Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and is subject to, and must be consistent with, the policies and criteria set forth in the Ontario International Airport Land Use Compatibility Plan (hereinafter referred to as "ALUCP"), which applies only to jurisdictions within San Bernardino County, and addresses the noise, safety, airspace protection, and overflight impacts of current and future airport activity; and

WHEREAS, the proposed Project is located within the Airport Influence Area of Chino Airport, within the City of Ontario boundary, and is subject to, and must be consistent with, the policies criteria set forth in Reference I, Chino Airport Land Use Compatibility Plan (CNO ALUCP), which applies only to jurisdictions within City of Ontario,

and addresses the safety, airspace protection, and overflight impacts of current and future airport activity; and

WHEREAS, City of Ontario Development Code Division 2.03 (Public Hearings) prescribes the manner in which public notification shall be provided and hearing procedures to be followed, and all such notifications and procedures have been completed; and

WHEREAS, on November 18, 2024, the DAB of the City of Ontario conducted a hearing on the Application and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the adoption of this Decision have occurred.

PART 2: THE DECISION

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED AND DECIDED by the Development Advisory Board of the City of Ontario as follows:

<u>SECTION 1</u>: **Environmental Determination and Findings.** As the recommending body for the Project, the DAB has reviewed and considered the information contained in the administrative record for the Project, including all written and oral evidence provided during the comment period. Based upon the facts and information contained in the administrative record, including all written and oral evidence presented to the DAB, the DAB finds as follows:

- (1) The environmental impacts of the Project were reviewed in conjunction with an Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364), certified by the Ontario City Council on August 16, 2022, in conjunction with File No. PGPA20-002; and
- (2) The EIR Addendum and administrative record have been completed in compliance with CEQA, the State CEQA Guidelines, and the City of Ontario Local CEQA Guidelines; and
- (3) The City's "Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed. This Application introduces no new significant environmental impacts; and
- (4) All previously adopted mitigation measures shall be a condition of project approval, as they are applicable to the Project, and are incorporated herein by this reference; and

- (5) The EIR Addendum contains a complete and accurate reporting of the environmental impacts associated with the Project, and reflects the independent judgment of the Development Advisory Board; and
- (6) There is no substantial evidence in the administrative record supporting a fair argument that the Project may result in significant environmental impacts.
- <u>SECTION 2</u>: <u>Subsequent or Supplemental Environmental Review Not Required.</u> Based on the EIR Addendum, all related information presented to the DAB, and the specific findings set forth in Section 1, above, the DAB finds that the preparation of a subsequent or supplemental Certified EIR is not required for the Project, as the Project:
- (1) Does not constitute substantial changes to the Certified EIR that will require major revisions to the Certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and
- (2) Does not constitute substantial changes with respect to the circumstances under which the Certified EIR was prepared, that will require major revisions to the Certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of the previously identified significant effects; and
- (3) Does not contain new information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the Certified EIR was certified/adopted, that shows any of the following:
- (a) The Project will have one or more significant effects not discussed in the Certified EIR; or
- (b) Significant effects previously examined will be substantially more severe than shown in the Certified EIR; or
- (c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the City declined to adopt such measures; or
- (d) Mitigation measures or alternatives considerably different from those analyzed in the Certified EIR would substantially reduce one or more significant effects on the environment, but which the City declined to adopt.
- SECTION 3: **Housing Element Compliance.** Pursuant to the requirements of California Government Code Chapter 3, Article 10.6, commencing with Section 65580, as the recommending body for the Project, the DAB finds that based on the facts and information contained in the Application and supporting documentation, at the time of

Project implementation, the project is consistent with the Housing Element of the Policy Plan (General Plan) component of The Ontario Plan, as the project site is not one of the properties in the Housing Element Sites Inventory contained in Tables B-1 and B-2 of the Housing Element Technical Report.

SECTION 4: Airport Land Use Compatibility Plan ("ALUCP") Compliance. The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

- On April 19, 2011, the City Council of the City of Ontario approved and (1) adopted the Ontario International Airport Land use Compatibility Plan, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the recommending body for the Project, the DAB has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the DAB, therefore, finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP; and
- (2)On August 2, 2022, the City Council of the City of Ontario approved and adopted a Development Code Amendment to establish the Chino Airport ("CNO") Overlay Zoning District ("OZD") and Reference I, Chino Airport Land Use Compatibility Plan ("CNO ALUCP"). The CNO OZD and CNO ALUCP established the Airport Influence Area for Chino Airport, solely within the City of Ontario, and limits future land uses and development within the Airport Influence Area, as they relate to safety, airspace protection, and overflight impacts of current and future airport activity. The CNO ALUCP is consistent with policies and criteria set forth within the Caltrans 2011 California Airport Land Use Planning Handbook. The proposed Project is located within the Airport Influence Area of Chino Airport and was evaluated and found to be consistent with the California Airport Land Use Planning Handbook and the CNO ALUCP. As the recommending body for the Project, the DAB has reviewed and considered the facts and information contained in the Application and supporting documentation against the CNO ALUCP compatibility factors, including Safety, Airspace Protection, and Overflight. As a result, the DAB, therefore, finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the

policies and criteria set forth within the California Airport Land Use Planning Handbook and the Chino ALUCP.

<u>SECTION 5</u>: **Concluding Facts and Reasons.** Based upon the substantial evidence presented to the DAB during the above-referenced hearing and upon the specific finding set forth in the Sections above, the DAB hereby concludes as follows:

- The proposed Tentative Tract Map is consistent with the goals, policies, plans, and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan, and applicable area and specific plans, and planned unit developments. The proposed Tentative Tract Map is located within the Low-Density Residential (LDR; 2.1-5.0 du/ac), Medium-Density Residential (MDR; 11.1-25.0 du/ac), and Public School (PS) land use districts of the Policy Plan Land Use Map, and the PA-5 (Low-Density Residential, Medium-Density Residential, and School) land use district of The Avenue Specific Plan. The proposed subdivision is consistent with the goals, policies, plans, and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan, as the project will contribute to providing "a spectrum of housing types and price ranges that match the jobs in the City, and that make it possible for people to live and work in Ontario and maintain a quality of life" (Goal LU-1). Furthermore, the Project will promote the City's policy to "incorporate a variety of land uses and building types in our land use planning efforts that result in a complete community where residents at all stages of life, employers, workers, and visitors have a wide spectrum of choices of where they can live, work, shop, and recreate within Ontario" (Policy LU-1.6 Complete Community). Along with the Project's conditions of approval and related Development Agreement, the proposed A Map will establish backbone infrastructure, including streets and utilities, and enable orderly future residential, school, and recreational development to occur in accordance with the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan, as well as the Development Code and The Avenue Specific Plan.
- (2) The design or improvement of the proposed Tentative Tract Map is consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan, and applicable specific plans and planned unit developments. The proposed Tentative Tract Map is located within the Low-Density Residential (LDR; 2.1-5.0 du/ac), Medium-Density Residential (MDR; 11.1-25.0 du/ac), and Public School (PS) land use districts of the Policy Plan Land Use Map, and the PA-5 (Low-Density Residential, Medium-Density Residential, and School) land use district of The Avenue Specific Plan. The proposed design or improvement of the subdivision is consistent with the goals, policies, plans, and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan, as the project will contribute to providing "[a] high level of design quality resulting in neighborhoods... public spaces, parks, and streetscapes that are attractive, safe, functional, human-scale, and distinct" (Goal CD-2).

- (3) The site is physically suitable for the type of development proposed. The Project site meets the minimum lot area and dimensions of the PA-5 (Low-Density Residential, Medium-Density Residential, and School) land use district of The Avenue Specific Plan, and is physically suitable for the type of future residential, recreational, and school subdivision and development proposed in terms of zoning, land use and development activity proposed, and existing and proposed site conditions. With the Project's conditions of approval and related Development Agreement, the proposed A Map will establish backbone infrastructure, including streets and utilities, and enable orderly future residential, school, and recreational development to occur in accordance with The Ontario Plan, Development Code and The Avenue Specific Plan.
- (4) The site is physically suitable for the density/intensity of development proposed. The Project will facilitate future subdivision and development of residential, recreational, and school land uses at a density of 4.5 du/ac within the Low-Density-Residential area and 22.0 du/ac within the Medium-Density Residential area of the PA-5 land use district of The Avenue Specific Plan. The Project site meets the minimum lot area and dimensions of the Specific Plan and is physically suitable to support this proposed density.
- (5) The design of the subdivision or the proposed improvements thereon, are not likely to cause substantial environmental damage, or substantially and avoidably injure fish or wildlife, or their habitat. The project site is not located in an area that has been identified as containing candidate, sensitive, or special status species in local or regional plans, policies or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service, nor does the site contain any riparian habitat or other sensitive natural community, and no wetland habitat is present on site; therefore, the design of the subdivision, or improvements proposed thereon, are not likely to cause substantial environmental damage, or substantially and avoidably injure fish or wildlife, or their habitat.
- (6) The design of the subdivision, or the type of improvements thereon, are not likely to cause serious public health problems. The design of the proposed subdivision, and the future residential, recreational, and school improvements proposed on the project site, are not likely to cause serious public health problems, as the project is not anticipated to involve the transport, use, or disposal of hazardous materials during either construction or project implementation, include the use of hazardous materials or volatile fuels, nor are there any known stationary commercial or industrial land uses within close proximity to the subject site that use/store hazardous materials to the extent that they would pose a significant hazard to visitors or occupants to the project site.
- (7) The design of the subdivision, or the type of improvements thereon, will not conflict with easements acquired by the public at large for access through, or use of property within, the proposed subdivision. The proposed subdivision has provided for all necessary public easements and dedications for access through, or use of property

within, the proposed subdivision. Furthermore, all such public easements and dedications have been designed pursuant to: (a) the requirements of the Policy Plan component of The Ontario Plan and applicable area plans; (b) applicable specific plans or planned unit developments; (c) applicable provisions of the City of Ontario Development Code; (d) applicable master plans and design guidelines of the City; and (e) applicable Standard Drawings of the City.

SECTION 6: **Development Advisory Board Action.** Based upon the findings and conclusions set forth in the Sections above, the Development Advisory Board hereby RECOMMENDS the Planning Commission APPROVES the herein described Application, subject to each and every condition set forth in the Department reports attached hereto as "Attachment A," and incorporated herein by this reference.

SECTION 7: **Indemnification.** The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void, or annul this approval. The City of Ontario shall promptly notify the applicant of any such claim, action, or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 8: **Custodian of Records.** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East "B" Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario. The records are available for inspection by any interested person, upon request.

APPROVED AND ADOPTED this 18th day of November 2024.

Development Advisory Board Chairman

ATTACHMENT A:

File No. PMTT23-002 Departmental Conditions of Approval

(Departmental conditions of approval to follow this page)



LAND DEVELOPMENT DIVISION CONDITIONS OF APPROVAL

303 East B Street, Ontario, California 91764 Phone: 909.395.2036 / Fax: 909.395.2420

Date Prepared: 10/25/2024

File No: PMTT23-002

Related Files: PSPA22-005, PDA23-003

Project Description: Tentative Tract Map No. 20572 (File No. PMTT23-002) to subdivide 77.2 acres of land into seven numbered lots and fourteen lettered lots, located at the northwest corner of Archibald Avenue and Ontario Ranch Road, within the PA-5 (Low-Density Residential, Medium-Density Residential, and School) land use district of The Avenue Specific Plan (File No. PMTT23-002); (APNs: 0218-191-14, 0218-191-15, 0218-191-04, 0218-191-16 & 0218-191-05); **submitted by Richland Communities.**

Prepared By: Alexis Vaughn, Associate Planner

<u>Phone</u>: 909.395.2416 (direct) <u>Email</u>: avaughn@ontarioca.gov

The Planning Department, Land Development Section, conditions of approval applicable to the above-described Project, are listed below. The Project shall comply with each condition of approval listed below:

- **1.0 Standard Conditions of Approval.** The project shall comply with the *Standard Conditions* for New Development, adopted by City Council Resolution No. 2017-027 on April 18, 2017. A copy of the *Standard Conditions* for New Development may be obtained from the Planning Department or City Clerk/Records Management Department.
- **2.0 Special Conditions of Approval.** In addition to the *Standard Conditions for New Development* identified in condition no. 1.0, above, the project shall comply with the following special conditions of approval:

2.1 Time Limits.

(a) Tentative Tract Map approval shall become null and void 2 years following the effective date of application approval, unless the final tract map has been recorded, or a time extension has been approved by the Planning Commission pursuant to Development Code Section 2.02.025 (Time Limits and Extensions). This Permit does not supersede any individual time limits specified herein for performance of specific conditions or improvements.

2.2 <u>Subdivision Map.</u>

(a) The Final Tract Map shall be in conformance with the approved Tentative Tract Map on file with the City. Variations from the approved Tentative Tract Map may be reviewed and approved by the Planning Department. A substantial variation from the approved

Tentative Tract Map may require review and approval by the Planning Commission, as determined by the Planning Director.

- **(b)** Tentative Tract Map approval shall be subject to all conditions, requirements and recommendations from all other departments/agencies provided on the attached reports/memorandums.
- (c) This Project/Application is for an "A Map" to establish major backbone infrastructure (streets, utilities), and to facilitate mass grading activities and future residential subdivisions with recreational and school facilities. Further subdivision and development of the site requires review and approval of "B Maps" in accordance with all applicable laws, regulations, and agreements in place at the time of B Map submittal. All future B Map parcels shall be the minimum size necessary to support the proposed use(s). Specific considerations shall be made for walls and obstructions to be constructed between the residential uses and the Cucamonga Creek Channel and school uses. Walls and fences shall be designed and installed as part of the B Map process.
- (d) On-site improvements and utilities are subject to change based on subsequent tentative tract or parcel maps and development plans. Developers shall comply with the related Development Agreement (File No. PDA23-003) and all further conditions of approval for each future tract or parcel map. Additionally, future tract or parcel maps may require additional studies, on-site improvements, fees, exhibits, or any other items necessary for development of the project, at the sole discretion of the City.
- (e) Pursuant to California Government Section 66474.9, the subdivider agrees that it will defend, indemnify, and hold harmless the City of Ontario or its agents, officers and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void or annul any approval of the City of Ontario, whether by its City Council, Planning Commission or other authorized board or officer of this subdivision, which action is brought within the time period provided for in Government Code Section 66499.37. The City of Ontario shall promptly notify the subdivider of any such claim, action or proceeding and the City of Ontario shall cooperate fully in the defense.
- **2.3** <u>General Requirements.</u> The Project shall comply with the following general requirements:
- (a) All construction documentation shall be coordinated for consistency, including, but not limited to, architectural, structural, mechanical, electrical, plumbing, landscape and irrigation, grading, utility and street improvement plans. All such plans shall be consistent with the approved entitlement plans on file with the Planning Department.
- **(b)** The project site shall be developed in conformance with the approved plans on file with the City. Any variation from the approved plans must be reviewed and approved by the Planning Department prior to building permit issuance.
- **(c)** The herein-listed conditions of approval from all City departments shall be included in the construction plan set for the project, which shall be maintained on site during project construction, including but not limited to, grading and utility work.

2.4 Landscaping.

- (a) The Project shall provide and continuously maintain landscaping and irrigation systems in compliance with the provisions of Ontario Development Code Division 6.05 (Landscaping).
- **(b)** Comply with the conditions of approval of the Planning Department, Landscape Planning Division.
- **(c)** Landscaping shall not be installed until the Landscape and Irrigation Construction Documentation Plans required by Ontario Development Code Division 6.05 (Landscaping) have been approved by the Landscape Planning Division.
- **(d)** Changes to approved Landscape and Irrigation Construction Documentation Plans, which affect the character or quantity of the plant material or irrigation system design, shall be resubmitted for approval of the revision by the Landscape Planning Division, prior to the commencement of the changes.
- **2.5** <u>Walls and Fences</u>. All Project walls and fences shall comply with the requirements of Ontario Development Code Division 6.02 (Walls, Fences and Obstructions).
- **2.6** <u>Signs</u>. All Project signage shall comply with the requirements of Ontario Development Code Division 8.1 (Sign Regulations).
- **2.7** <u>Sound Attenuation</u>. The Project shall be constructed and operated in a manner so as not to exceed the maximum interior and exterior noise levels set forth in Ontario Municipal Code Title 5 (Public Welfare, Morals, and Conduct), Chapter 29 (Noise).

2.8 Environmental Requirements.

- (a) If human remains are found during project grading/excavation/construction activities, the area shall not be disturbed until any required investigation is completed by the County Coroner and Native American consultation has been completed (if deemed applicable).
- **(b)** If any archeological or paleontological resources are found during project grading/excavation/construction, the area shall not be disturbed until the significance of the resource is determined. If determined to be significant, the resource shall be recovered by a qualified archeologist or paleontologist consistent with current standards and guidelines, or other appropriate measures implemented.
- 2.9 <u>Indemnification</u>. The applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void or annul any approval of the City of Ontario, whether by its City Council, Planning Commission or other authorized board or officer. The City of Ontario shall promptly notify the applicant of any such claim, action or proceeding, and the City of Ontario shall cooperate fully in the defense.

2.10 Additional Fees.

- (a) Within 5 days following final application approval, the Notice of Determination ("NOD") filing fee shall be provided to the Planning Department. The fee shall be paid by check, made payable to the "Clerk of the Board of Supervisors", which shall be forwarded to the San Bernardino County Clerk of the Board of Supervisors, along with all applicable environmental forms/notices, pursuant to the requirements of the California Environmental Quality Act ("CEQA"). Failure to provide said fee within the time specified will result in the extension of the statute of limitations for the filing of a CEQA lawsuit from 30 days to 180 days.
- **(b)** After the Project's entitlement approval, and prior to issuance of final building permits, the Planning Department's <u>Plan Check</u> and <u>Inspection</u> fees shall be paid at the rate established by resolution of the City Council, if/as apply.
- **2.11** Related Applications. Tentative Tract Map No. 20572 (File No. PMTT23-002) final approval shall be contingent upon approval of related amendment to The Avenue Specific Plan and the related Development Agreement (File Nos. PSPA22-005 and PDA23-003, respectively) by the City Council.

2.12 Additional Requirements.

(a) Conditions of Approval from the San Manuel Band of Mission Indians and the Gabrieleno Band of Mission Indians – Kizh Nation are enclosed.

 From:
 Mr. Bonnie Bryant

 To:
 Alexis Vaughn

 Cc:
 Ryan Nordness

Subject: The avenue Specific plan Amendment

Date: Thursday, February 23, 2023 9:19:12 AM

Hello Ms. Vaughn,

Thank you for contacting the San Manuel Band of Mission Indians (SMBMI) regarding the above referenced project. SMBMI appreciates the opportunity to review the project documentation, which was received by our Cultural Resources Management Department on February 8, 2023, pursuant to CEQA (as amended, 2015) and CA PRC 21080.3.1. The proposed project area exists within Serrano ancestral territory and, therefore, is of interest to the Tribe. However, due to the nature and location of the proposed project, and given the CRM Department's present state of knowledge, SMBMI does not have any concerns with the project's implementation, as planned, at this time. As a result, SMBMI requests that the following language be made a part of the project/permit/plan conditions:

CUL MMs

- 1. In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed within TCR-1, regarding any pre-contact and/or historic-era finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.
- 2. If significant pre-contact and/or historic-era cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to SMBMI for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.
- 3. If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.

TCR MMs

- 1. The San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed in CR-1, of any pre-contact and/or historic-era cultural resources discovered during project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a cultural resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with SMBMI, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents SMBMI for the remainder of the project, should SMBMI elect to place a monitor on-site.
- 2. Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to SMBMI. The Lead Agency and/or applicant shall, in good faith, consult with SMBMI throughout the life of the project.

Please provide the final copy of the project/permit/plan conditions so that SMBMI may review the included language. This communication concludes SMBMI's input on this project, at this time, and no additional consultation pursuant to CEQA is required unless there is an unanticipated discovery of cultural resources during project implementation. If you should have any further questions with regard to this matter, please do not hesitate to contact me at your convenience, as I will be your Point of Contact (POC) for SMBMI with respect to this project.

Respectfully,
Mr. Bonnie Bryant
Cultural Resource technician
San Manuel Band of Mission Indians
Bonnie.Bryant@sanmanuel-nsn.gov

Mr. Bonnie Bryant

Cultural Resources Tech
Bonnie.Bryant@sanmanuel-nsn.gov
O:(909) 864-8933 x 50-2033
M:(909) 633-6615
26569 Community Center Dr Highland, California 92346





GABRIELEÑO BAND OF MISSION INDIANS – KIZH NATION



California State Recognized Aboriginal Tribe of the Los Angeles Basin (Historically known as the Gabrieleño Tribal Council - San Gabriel Band of Mission Indians)

GABRIELENO BAND OF MISSION INDIANS - KIZH NATION - PROPOSED TCR MITIGATION MEASURES

TCR-1: Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities

- A. The project applicant/lead agency shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians Kizh Nation. The monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). "Ground-disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching.
- B. A copy of the executed monitoring agreement shall be submitted to the lead agency prior to the earlier of the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity.
- C. The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the project applicant/lead agency upon written request to the Tribe.
- D. On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Kizh from a designated point of contact for the project applicant/lead agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh to the project applicant/lead agency that no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh TCRs.
- E. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural and/or historic purposes.

TCR-2: Unanticipated Discovery of Human Remains and Associated Funerary Objects

- A. Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute.
- B. If Native American human remains and/or grave goods discovered or recognized on the project site, then all construction activities shall immediately cease. Health and Safety Code Section 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and all ground-disturbing activities shall immediately halt and shall remain halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe they are Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission, and Public Resources Code Section 5097.98 shall be followed.
- C. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2).
- D. Construction activities may resume in other parts of the project site at a minimum of 200 feet away from discovered human remains and/or burial goods, if the Kizh determines in its sole discretion that resuming construction activities at that distance is acceptable and provides the project manager express consent of that determination (along with any other mitigation measures the Kizh monitor and/or archaeologist deems necessary). (CEQA Guidelines Section 15064.5(f).)
- E. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. Any historic archaeological material that is not Native American in origin (non-TCR) shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, it shall be offered to a local school or historical society in the area for educational purposes.
- F. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.

TCR-3: Procedures for Burials and Funerary Remains:

- A. As the Most Likely Descendant ("MLD"), the Koo-nas-gna Burial Policy shall be implemented. To the Tribe, the term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the preparation of the soil for burial, the burial of funerary objects with the deceased, and the ceremonial burning of human remains.
- B. If the discovery of human remains includes four or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be created.
- C. The prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all sacred materials.
- D. In the case where discovered human remains cannot be fully documented and recovered on the

- same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed.
- E. In the event preservation in place is not possible despite good faith efforts by the project applicant/developer and/or landowner, before ground-disturbing activities may resume on the project site, the landowner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects.
- F. Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.
- G. The Tribe will work closely with the project's qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the Tribe, documentation shall be prepared and shall include (at a minimum) detailed descriptive notes and sketches. All data recovery data recovery-related forms of documentation shall be approved in advance by the Tribe. If any data recovery is performed, once complete, a final report shall be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive and/or destructive diagnostics on human remains.

PLEASE NOTE THE FOLLOWING:

Any/all revisions to the Kizh's proposed TCR mitigations set forth above must be requested in writing, and not more than ten (10) calendar days from the date that we consulted on the subject Project. Requested revisions shall be delivered to the Kizh via email at admin@gabrielenoindians.org, and in a Word document, redline format. Please include as the email subject: "REQUEST FOR MITIGATION REVISIONS," and identify the project name and location/address. If revisions are not requested within 10 calendar days of consultation, the Kizh's proposed mitigations are presumed accepted as proposed (i.e., as set forth above). The laws preserving the confidentiality of Native

The laws preserving the confidentiality of Native

American documents and records prohibits the inclusion of any information about the location of Native American artifacts, sites, sacred lands, or any other information that is exempt from public disclosure pursuant to the Public Records Act. (Cal. Code Regs. § 15120(d) Rocklin (2011) 197 Cal.App.4th 200, at p. 220. Please be advised that these protective mitigation measures are property of the KIZH Nation Tribal government and no other entity or Tribal government nor should they be utilized for any other Tribal government or entity and are protected under the AB52 confidentiality act

Thank you for your anticipated cooperation.



ENGINEERING DEPARTMENT CONDITIONS OF APPROVAL

(Land Development Division, Environmental Section, Traffic & Transportation Division, Ontario Municipal Utilities Company, Broadband Department, and Financial Services Agency Conditions incorporated)

☐ DEVELOPMENT PLAN	☐ PARCE	L MAP X TRACT MAP
OTHER	☐ FOR C	ONDOMINIUM PURPOSES
PROJE	ECT FILE NO.	Tract Map No. 20572
RELATED F	ILE NO(S). <u>PN</u>	MTT23-002; PSPA22-005
⊠ OR	IGINAL F	REVISED://_
CITY PROJECT ENGINEER 8	R PHONE NO:	Henry Pham (909) 395-2141
CITY PROJECT PLANNER &	PHONE NO:	Alexis Vaughn (909) 395-2416
DAB MEETING DATE:		November 18 th , 2024
PROJECT NAME / DESCRIPT	FION:	A Tentative Tract Map to subdivide 77.2 acres of land into eight lots within The Avenue Specific Plan
LOCATION:		Northwest corner of Archibald Avenue and Ontario Ranch Road
APPLICANT:		Richland Communities Derek Barbour
REVIEWED BY:		All To P.E. 11/12/24
APPROVED BY:	FOR	Raymond Lee, P.E. Assistant City Engineer Khoi Do, P.E. City Engineer Date

Last Revised: 11/12/2024

Project File No. TM 20572 (PMTT23-002; PSPA22-005)

Project Engineer: Henry Pham DAB Date: 11/18/2024



THIS PROJECT SHALL COMPLY WITH THE REQUIREMENTS SET FORTH IN THE GENERAL STANDARD CONDITIONS OF APPROVAL ADOPTED BY THE CITY COUNCIL (RESOLUTION NO. 2017-027) AND THE PROJECT SPECIFIC CONDITIONS OF APPROVAL SPECIFIED HEREIN. ONLY APPLICABLE CONDITIONS OF APPROVAL ARE CHECKED. THE APPLICANT SHALL BE RESPONSIBLE FOR THE COMPLETION OF ALL APPLICABLE CONDITIONS OF APPROVAL PRIOR TO FINAL MAP OR PARCEL MAP APPROVAL, ISSUANCE OF PERMITS AND/OR OCCUPANCY CLEARANCE, AS SPECIFIED IN THIS REPORT.

1.	PRIO	R TO FINAL MAP OR PARCEL MAP APPROVAL, APPLICANT SHALL: Check Whe Complete	n
\boxtimes	1.01	Dedicate to the City of Ontario, the right-of-way, described below to achieve: • 74 feet half-width on Archibald Avenue • 124 feet full-width for "A" Street • 60 feet full-width for "B", "C", "D", "E", "F", "G", and "H" Streets	
		Property line corner 'cut-back' required at the intersections described below:	
	1.02	Dedicate to the City of Ontario, the following easement(s): 1. For neighborhood edge purposes: a. 19 feet wide along the west side of Archibald Avenue over lettered lots "B",	
	1.03	Restrict vehicular access to the site as follows:	
\boxtimes	1.04	Vacate the following street(s) and/or easement(s): A. All interfering on-site easements shall be quitclaimed, vacated, and/or submit non-interference letter from affected owner/utility company.	
	1.05	Submit a copy of a recorded private reciprocal use agreement or easement. The agreement or easement shall ensure, at a minimum, common ingress and egress and joint maintenance of all common access areas and drive aisles.	
	1.06	Provide (original document) Covenants, Conditions and Restrictions (CC&Rs) as applicable to the project and as approved by the City Attorney and the Engineering and Planning Departments, ready for recordation with the County of San Bernardino. The CC&Rs shall provide for, but not be limited to, common ingress and egress, joint maintenance responsibility for all common access improvements, common facilities, parking areas, utilities, median and landscaping improvements and drive approaches, in addition to maintenance requirements established in the Water Quality Management Plan (WQMP), as applicable to the project. The CC&Rs shall also address the maintenance and repair responsibility for public improvements/utilities (sewer, water, storm drain, recycled water, etc.) located within open space/easements. In the event of any maintenance or repair of these facilities, the City shall only restore disturbed areas to current City Standards.	
	1.07	For all development occurring south of the Pomona Freeway (60-Freeway) and within the specified boundary limits (per Boundary Map found at http://tceplumecleanup.com/), the property developer/owner is made aware of the South Archibald Trichloroethylene (TCE) Plume "Disclosure Letter". Property owner may wish to provide this Letter as part of the Real Estate Transfer Disclosure requirements under California Civil Code Section 1102 et seq. This may include notifications in the Covenants, Conditions and Restrictions (CC&Rs) or other decuments related to property transfer and disclosures. Additional information on the plume in	

Last Revised 11/12/2024 Page 2 of 14



		available from the Santa Ana Regional Water Quality Control Board at http://geotracker.waterboards.ca.gov/profile_report?global_id=T10000004658.	
	1.08	File an application for Reapportionment of Assessment, together with payment of a reapportionment processing fee, for each existing assessment district listed below. Contact the Financial Services Department at (909) 395-2124 regarding this requirement.	
		(1)	
		(2)	
\boxtimes	1.09	Prepare a fully executed Subdivision Agreement (on City approved format and forms) with accompanying security as required, or complete all public improvements.	
\boxtimes	1.10	Provide a monument bond (i.e. cash deposit) in an amount calculated by the City's approved cost estimate spreadsheet (available for download on the City's website: www.ontarioca.gov) or as specified in writing by the applicant's Registered Engineer or Licensed Land Surveyor of Record and approved by the City Engineer, whichever is greater.	
\boxtimes	1.11	Provide a preliminary title report current to within 30 days.	
	1.12	File an application, together with an initial deposit (if required), to establish a Community Facilities District (CFD) pursuant to the Mello-Roos Community Facilities District Act of 1982. The application and fee shall be submitted a minimum of four (4) months prior to final subdivision map approval, and the CFD shall be established prior to final subdivision map approval or issuance of building permits, whichever occurs first. The CFD shall be established upon the subject property to provide funding for various City services. An annual special tax shall be levied upon each parcel or lot in an amount to be determined. The special tax will be collected along with annual property taxes. The City shall be the sole lead agency in the formation of any CFD. Contact Financial Services Agency at (909) 395-2015 or email CFD@ontarioca.gov to initiate the CFD application process.	
\boxtimes	1.13	Ontario Ranch Developments:	
		\boxtimes 1) Provide evidence of final cancellation of Williamson Act contracts associated with this tract, prior to approval of any final subdivision map. Cancellation of contracts shall have been approved by the City Council.	
		2) Provide evidence of sufficient storm water capacity availability equivalents (Certificate of Storm Water Treatment Equivalents).	
		☑ 3) Provide evidence of sufficient water availability equivalents (Certificate of Net MDD Availability).	
	1.14	Other conditions: • Prepare Quit Claims for neighborhood edge fee-simple dedications along the north side of Ontario Ranch Road and west side of Archibald Avenue.	
2.		R TO ISSUANCE OF ANY PERMITS, APPLICANT SHALL:	
		NERAL its includes Grading, Building, Demolition and Encroachment)	
\boxtimes	2.01	Record Tract Map No. 20572 pursuant to the Subdivision Map Act and in accordance with the City of Ontario Municipal Code.	
\boxtimes	2.02	Submit a PDF of the recorded map to the City Engineer's office.	
	2.03	Note that the subject parcel is a recognized parcel in the City of Ontario per	



	2.04	Note that the subject parcel is an 'unrecognized' parcel in the City of Ontario and shall require a Certificate of Compliance to be processed unless a deed is provided confirming the existence of the parcel prior to the date of March 4, 1972.	
	2.05	Apply for a:	
		☐ Certificate of Compliance with a Record of Survey;	
		☐ Lot Line Adjustment (Record a Conforming Deed with the County of San Bernardino within six months of the recordation of the Lot Line Adjustment to conform the new LLA legal description. Submit a copy of the recorded Conforming Deed to the Engineering Department.);	
		☐ Make a Dedication of Easement.	
	2.06	Provide (original document) Covenants, Conditions and Restrictions (CC&R's), as applicable to the project, and as approved by the City Attorney and the Engineering and Planning Departments, ready for recordation with the County of San Bernardino. The CC&R's shall provide for, but not be limited to, common ingress and egress, joint maintenance of all common access improvements, common facilities, parking areas, utilities and drive approaches in addition to maintenance requirements established in the Water Quality Management Plan (WQMP), as applicable to the project.	
	2.07	For all development occurring south of the Pomona Freeway (60-Freeway) and within the specified boundary limits (per Boundary Map found at http://tceplumecleanup.com/), the property developer/owner is made aware of the South Archibald Trichloroethylene (TCE) Plume "Disclosure Letter". Property owner may wish to provide this Letter as part of the Real Estate Transfer Disclosure requirements under California Civil Code Section 1102 et seq. This may include notifications in the Covenants, Conditions and Restrictions (CC&Rs) or other documents related to property transfer and disclosures. Additional information on the plume is available from the Santa Ana Regional Water Quality Control Board at http://geotracker.waterboards.ca.gov/profile_report?global_id=T10000004658 .	
\boxtimes	2.08	Submit a soils/geology report.	
\boxtimes	2.09	Other Agency Permit/Approval: Submit a copy of the approved permit and/or other form of approval of the project from the following agency or agencies:	
		State of California Department of Transportation (Caltrans) San Bernardino County Road Department (SBCRD) San Bernardino County Flood Control District (SBCFCD) Federal Emergency Management Agency (FEMA) Cucamonga Valley Water District (CVWD) for sewer/water service United States Army Corps of Engineers (USACE) California Department of Fish & Game Inland Empire Utilities Agency (IEUA) for connection to an existing IEUA sewer on Archibald Avenue. Other:	
	2.10	Dedicate to the City of Ontario the right-of-way described below:	
		feet on	
		Property line corner 'cut-back' required at the intersection ofanda	
	2.11	Dedicate to the City of Ontario the following easement(s):	
	2.12	Vacate the following street(s) and/or easement(s): A. All interfering on-site easements shall be quitclaimed, vacated, and/or submit non-interference	



letter from affected owner/utility company.

	2.13	Ontario Ranch Developments:	
		☐ 1) Submit a copy of the permit from the San Bernardino County Health Department to the Engineering Department and the Ontario Municipal Utilities Company (OMUC) for the destruction/abandonment of the on-site water well. The well shall be destroyed/abandoned in accordance with the San Bernardino County Health Department guidelines.	
		2) Make a formal request to the City of Ontario Engineering Department for the proposed temporary use of an existing agricultural water well for purposes other than agriculture, such as grading, dust control, etc. Upon approval, the Applicant shall enter into an agreement with the City of Ontario and pay any applicable fees as set forth by said agreement.	
		☐ 3) Design proposed retaining walls to retain up to a maximum of three (3) feet of earth. In no case shall a wall exceed an overall height of nine (9) feet (i.e. maximum 6-foot high wall on top of a maximum 3-foot high retaining wall.	
	2.14	Submit a security deposit to the Engineering Department to guarantee construction of the public improvements required herein valued at 100% of the approved construction cost estimate. Security deposit shall be in accordance with the City of Ontario Municipal Code. Security deposit will be eligible for release, in accordance with City procedure, upon completion and acceptance of said public improvements.	
	2.15	The applicant/developer shall submit all necessary survey documents prepared by a Licensed Surveyor registered in the State of California detailing all existing survey monuments in and around the project site. These documents are to be reviewed and approved by the City Survey Office.	
	2.16	Pay all Development Impact Fees (DIF) to the Building Department. Storm Drain Development Impact Fee, approximately, shall be paid to the Building Department. Final fee shall be determined based on the approved site plan and the DIF rate at the time of payment.	
П	2.17	Other conditions:	

Project File No. TM 20572 (PMTT23-002; PSPA22-005)

Project Engineer: Henry Pham

DAB Date: 11/18/2024

 \boxtimes



В.	PUBL	IC IM	PROVE	MEN	TS					
(Se	e atta	ched	Exhibit	'A' fe	or plan	check	submittal	requir	ements.))

Design and construct full public improvements in accordance with the City of Ontario Municipal 2.18 Code, current City standards and specifications, master plans and the adopted specific plan for the area, if any. These public improvements shall include, but not be limited to, the following (checked boxes):

Improvement	Archibald Avenue	Ontario Ranch Road	Street "A"	Streets "B" through "H"
Curb and Gutter	New; 48 ft. from C/L Replace damaged Remove and replace	New; 65 ft. from C/L Replace damaged Remove and replace	New; 36 ft. from C/L. (both sides) Replace damaged Remove and replace	New; 30 ft. from C/L (both sides) Replace damaged Remove and replace
AC Pavement	Replacement Widen 15-27 additional feet along frontage, including pavm't transitions	Replacement Widen 39-51 additional feet along frontage, including pavm't transitions	Replacement New	Replacement New
PCC Pavement (Truck Route Only)	New Modify existing	New Modify existing	New Modify existing	New Modify existing
Drive Approach	New Remove and replace	New¹ Remove and replace	New Remove and replace	New Remove and replace
Sidewalk	New Remove and replace	New Remove and replace	New Remove and replace	New Remove and replace
ADA Access Ramp	New Remove and replace	New Remove and replace	New Remove and replace	New Remove and replace
Parkway	✓ Trees✓ Landscaping (w/irrigation)	✓ Trees✓ Landscaping (w/irrigation)	✓ Trees✓ Landscaping (w/irrigation)	☐ Trees☐ Landscaping(w/irrigation)
Raised Landscaped Median	New Remove and replace	New Remove and replace	New Remove and replace	New Remove and replace
Fire Hydrant	New Relocation	New Relocation	New Relocation	New Relocation

Page 6 of 14 Last Revised 11/12/2024

Project File No. TM 20572 (PMTT23-002; PSPA22-005)

Project Engineer: Henry Pham

DAB Date: 11/18/2024



Sewer (see Sec. 2.C)	Main Lateral	Main Lateral	Main Lateral	Main Lateral
Water (see Sec. 2.D)	Main Service	Main Service	Main Service	Main Service
Recycled Water (see Sec. 2.E)	Main Service	Main Service	Main Service	Main Service
Traffic Signal System (see Sec. 2.F)	New Modify existing	New Modify existing	New Modify existing	New Modify existing
Traffic Signing and Striping (see Sec. 2.F)	New Modify existing	New Modify existing	New² Modify existing	New Modify existing
Street Light (see Sec. 2.F)	New Relocation	New Relocation	New Relocation	New Relocation
Bus Stop Pad or Turn-out (see Sec. 2.F)	New Modify existing	New Modify existing	New Modify existing	New Modify existing
Storm Drain (see Sec. 2G)	Main Lateral	Main Lateral	Main Lateral	Main Lateral
Fiber Optics (see Sec. 2K)	Conduit / Appurtenances	Conduit / Appurtenances	Conduit / Appurtenances	Conduit / Appurtenances
Overhead Utilities	Underground Relocate	Underground Relocate	Underground Relocate	Underground Relocate
Removal of Improvements				
Other Improvements	Construct pedestrian trail along the Cucamonga Creek Channel from Ontario Ranch Rd. to the pedestrian bridge.	Construct ultimate north side of Ontario Ranch Road vehicle bridge over Cucamonga Creek Channel ³		

Specific notes for improvements listed in item no. 2.18, above:

¹Drive Approach for access to trail along the east side of the Cucamonga Creek Channel

²See Traffic Engineering Condition of Approval No. 6

³See Traffic Engineering Condition of Approval No. 3



	2.19	Construct a 2" asphalt concrete (AC) grind and overlay on the existing section of the following street(s): • Along west side of Archibald Avenue to centerline. • Along north side of Ontario Ranch Rd. to centerline.	
	2.20	Reconstruction of the full pavement structural section, per City of Ontario Standard Drawing number 1011, may be required based on the existing pavement condition and final street design. Minimum limits of reconstruction shall be along property frontage, from street centerline to curb/gutter.	
\boxtimes	2.21	Depending on site conditions and number of utility service cuts at time of construction, additional pavement restoration may be required.	
	2.22	Make arrangements with the Cucamonga Valley Water District (CVWD) to provide water service sewer service to the site. This property is within the area served by the CVWD and Applicant shall provide documentation to the City verifying that all required CVWD fees have been paid.	
\boxtimes	2.23	Overhead utilities shall be under-grounded, in accordance with Title 7 of the City's Municipal Code (Ordinance No. 2804 and 2892).	
\boxtimes	2.24	Other conditions: • Design and pay 50% of the construction cost of the pedestrian bridge over the Cucamonga Creek Channel along the west side of the project.	
	C. SE	WER	
\boxtimes	2.25	33-inch and 12-inch sewer mains are available for connection by this project in Archibald Avenue and Ontario Ranch Road respectively. The 33-inch main is owned and operated by IEUA and the connection must be approved by IEUA.	
	2.26	Design and construct a sewer main extension. A sewer main is not available for direct connection. The closest main is approximately feet away.	
	2.27	Submit documentation that shows expected peak loading values for modeling the impact of the subject project to the existing sewer system. The project site is within a deficient public sewer system area. Applicant shall be responsible for all costs associated with the preparation of the model. Based on the results of the analysis, Applicant may be required to mitigate the project impact to the deficient public sewer system, including, but not limited to, upgrading of existing sewer main(s), construction of new sewer main(s) or diversion of sewer discharge to another sewer.	
\boxtimes	2.28	Other conditions: See attached Ontario Municipal Utilities Company conditions of approval.	
	D. WA	TER	
\boxtimes	2.29	12-inch and 24-inch water mains are available for connection by this project in Ontario Ranch Road and Archibald Avenue respectively. (Ref: Water Drawing Number: 925PZ)	
	2.30	Design and construct a water main extension. A water main is not available for direct connection. The closest main is approximately feet away.	
\boxtimes	2.31	Other conditions: See attached Ontario Municipal Utilities Company conditions of approval.	
	E. RE	CYCLED WATER	
\boxtimes	2.32	12-inch and 24-inch recycled water mains are available for connection by this project in Ontario Ranch Road and Archibald Avenue respectively. (Ref: Recycled Water Drawing Number: 930PZ)	
\boxtimes	2.33	Design and construct an on-site recycled water system for this project. A recycled water main does exist in the vicinity of this project.	

Page 8 of 14 Last Revised 11/12/2024

	2.34	Design and construct an on-site recycled water ready system for this project. A recycled water main does not currently exist in the vicinity of this project but is planned for the near future. If Applicant would like to connect to this recycled water main when it becomes available, the cost for the connection shall be borne solely by the Applicant.	
	2.35	Submit one (1) electronic copy, in PDF format, of the Supplemental Engineering Report (ER), for the use of recycled water to OMUC's Water Quality Programs at OMUCWQPlanCheck@ontarioca.gov for review and subsequent submittal to the California State Water Board (Division of Drinking Water) for final approval.	
		Note: The Division of Drinking Water review and approval process may take up to four (4) months. Contact the OMUC's Water Quality Programs at (909) 395-2678 or email OMUCWQPlanCheck@ontarioca.gov regarding this requirement. Failure to obtain an approval letter from the Division of Drinking Water authorizing the use of recycled water will delay meter installation and if applicable, occupancy release for new developments.	
	2.36	Submit one (1) electronic copy, in PDF format, of the Landscape Plans (on-site & off-site) to OMUC's Water Quality Programs at OMUCWQPlanCheck@ontarioca.gov for review and approval.	
\boxtimes	2.37	Other conditions: See attached Ontario Municipal Utilities Company conditions of approval.	
	F. TR	AFFIC / TRANSPORTATION	
	2.38	Submit a focused traffic impact study, prepared and signed by a Traffic/Civil Engineer registered in the State of California. The study shall address, but not be limited to, the following issues as required by the City Engineer: 1. On-site and off-site circulation 2. Traffic level of service (LOS) at 'build-out' and future years 3. Impact at specific intersections as selected by the City Engineer	
\boxtimes	2.39	New traffic signal installations shall be added to Southern California Edison (SCE) customer account number # 2-20-044-3877.	
\boxtimes	2.40	Other conditions: See attached Traffic Engineering conditions of approval.	
	G. DR	AINAGE / HYDROLOGY	
	2.41	A 54-inch storm drain main is available to accept flows from this project in Ontario Ranch Road. (Ref: Storm Drain Drawing Number: 1-301-23 (SBCFCD Line))	
	2.42	Submit a hydrology study and drainage analysis, prepared and signed by a Civil Engineer registered in the State of California. The study shall be prepared in accordance with the San Bernardino County Hydrology Manual and City of Ontario standards and guidelines. Additional drainage facilities, including, but not limited to, improvements beyond the project frontage, may be required to be designed and constructed, by Applicant, as a result of the findings of this study.	
	2.43	An adequate drainage facility to accept additional runoff from the site does not currently exist downstream of the project. Design and construct a storm water detention facility on the project site. 100-year post-development peak flow shall be attenuated such that it does not exceed 80% of predevelopment peak flows, in accordance with the approved hydrology study and improvement plans.	
	2.44	Submit a copy of a recorded private drainage easement or drainage acceptance agreement to the Engineering Department for the acceptance of any increase to volume and/or concentration of historical drainage flows onto adjacent property, prior to approval of the grading plan for the project.	
	2.45	Comply with the City of Ontario Flood Damage Prevention Ordinance (Ordinance No. 2409). The project site or a portion of the project site is within the Special Flood Hazard Area (SFHA) as indicated on the Flood Insurance Rate Map (FIRM) and is subject to flooding during a 100-year frequency storm. The site plan shall be subject to the provisions of the National Flood Insurance Program.	

Last Revised 11/12/2024 Page 9 of 14



	2.46	 Construct a 48-inch storm drain main connecting to the existing 54-inch storm drain stub out in Ontario Ranch Road at the Cucamonga Creek Channel. This main shall run north approximately 630 feet to the lot line between lots one and seven. Construct a 36-inch storm drain main within the 20-foot storm drain easement connecting from the 48-inch main described above to the project's northerly boundary. 	
	H. ST (NPDE	ORM WATER QUALITY / NATIONAL POLLUTANT DISCHARGE AND ELIMINATION SYSTEM	
	2.47	401 Water Quality Certification/404 Permit — Submit a copy of any applicable 401 Certification or 404 Permit for the subject project to the City project engineer. Development that will affect any body of surface water (i.e. lake, creek, open drainage channel, etc.) may require a 401 Water Quality Certification from the California Regional Water Quality Control Board, Santa Ana Region (RWQCB) and a 404 Permit from the United States Army Corps of Engineers (USACE). The groups of water bodies classified in these requirements are perennial (flow year round) and ephemeral (flow during rain conditions, only) and include, but are not limited to, direct connections into San Bernardino County Flood Control District (SBCFCD) channels. If a 401 Certification and/or a 404 Permit are not required, a letter confirming this from Applicant's engineer shall be submitted. Contact information: USACE (Los Angeles District) (213) 452-3414; RWQCB (951) 782-4130.	
\boxtimes	2.48	Submit a Water Quality Management Plan (WQMP). This plan shall be approved by the Engineering Department prior to approval of any grading plan. The WQMP shall be submitted, utilizing the current San Bernardino County Stormwater Program template, available at: http://www.sbcounty.gov/dpw/land/npdes.asp .	
	2.49	Design and construct a Connector Pipe Trash Screen or equivalent Trash Treatment Control Device, per catch basin located within or accepting flows tributary of a Priority Land Use (PLU) area that meets the Full Capture System definition and specifications, and is on the Certified List of the State Water Resources Control Board. The device shall be adequately sized per catch basin and include a deflector screen with vector control access for abatement application, vertical support bars, and removable component to facilitate maintenance and cleaning.	
	2.50	Other conditions:	
	J. SPI	ECIAL DISTRICTS	
	2.51	File an application, together with an initial deposit (if required), to establish a Community Facilities District (CFD) pursuant to the Mello-Roos Community Facilities District Act of 1982. The application and fee shall be submitted a minimum of four (4) months prior to final subdivision map approval, and the CFD shall be established prior to final subdivision map approval or issuance of building permits, whichever occurs first. The CFD shall be established upon the subject property to provide funding for various City services. An annual special tax shall be levied upon each parcel or lot in an amount to be determined. The special tax will be collected along with annual property taxes. The City shall be the sole lead agency in the formation of any CFD. Contact Financial Services Agency at (909) 395-2015 or email CFD@ontarioca.gov to initiate the CFD application process.	
	2.52	Other conditions:	
		BER OPTIC	
X	2.53	A fiber optic line is available for connection by this project in Archibald Avenue.	

Last Revised 11/12/2024 Page 10 of 14



	2.54	Design and construct fiber optic system to provide access to the City's conduit and fiber optic system per the City's Fiber Optic Master Plan. Building entrance conduits shall start from the closest OntarioNet hand hole constructed along the project frontage in the ROW and shall terminate in the main telecommunications room for each building. Conduit infrastructure shall interconnect with the primary and/or secondary backbone fiber optic conduit system at the nearest OntarioNet hand hole. Generally located along Archibald Avenue.	
\boxtimes	2.55	Refer to the City's Fiber Optic Master Plan for design and layout guidelines. Contact the Broadband Operations Department at (909) 395-2000, regarding this requirement.	
3.	PRIO	R TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY, APPLICANT SHALL:	7.7
\boxtimes	3.01	Set new monuments in place of any monuments that have been damaged or destroyed as a result of construction of the subject project. Monuments shall be set in accordance with City of Ontario standards and to the satisfaction of the City Engineer.	
\boxtimes	3.02	Complete all requirements for recycled water usage.	
		☑ 1) Procure from OMUC a copy of the letter of confirmation from the California State Water Board (Division of Drinking Water) that the Engineering Report (ER) has been reviewed and the subject site is approved for the use of recycled water.	
		☑ 2) Obtain clearance from the OMUC confirming completion of recycled water improvements and passing of shutdown tests and cross connection inspection, upon availability/usage of recycled water.	
		☑ 3) Complete Site Supervisor training of on-site personnel in the use of recycled water, in accordance with the ER, upon availability/usage of recycled water.	
	3.03	The applicant/developer shall submit all final survey documents prepared by a Licensed Surveyor registered in the State of California detailing all survey monuments that have been preserved, revised, adjusted or set along with any maps, corner records or Records of Survey needed to comply with these Conditions of Approvals and the latest edition of the California Professional Land Survey Act. These documents are to be reviewed and approved by the City Survey Office.	
\boxtimes	3.04	Ontario Ranch Projects: For developments located at an intersection of any two collector or arterial streets, the applicant/developer shall set a monument if one does not already exist at that intersection. Contact the City Survey office for information on reference benchmarks, acceptable methodology and required submittals.	
	3.05	Confirm payment of all Development Impact Fees (DIF) to the Building Department.	
\boxtimes	3.06	Submit electronic copies (PDF and Auto CAD format) of all approved improvement plans, studies and reports (i.e. hydrology, traffic, WQMP, etc.).	
4.	PRIO	R TO FINAL ACCEPTANCE, APPLICANT SHALL:	
\boxtimes	4.01	Complete all Conditions of Approval listed under Sections 1-3 above.	
\boxtimes	4.02	Pay all outstanding fees pursuant to the City of Ontario Municipal Code, including but not limited to, plan check fees, inspection fees and Development Impact Fees.	
	4.03	The applicant/developer shall submit a written request for the City's final acceptance of the project addressed to the City Project Engineer. The request shall include a completed Acceptance and Bond Release Checklist, state that all Conditions of Approval have been completed and shall be signed by the applicant/developer. Upon receipt of the request, review of the request shall be a minimum of 10 business days. Conditions of Approval that are deemed incomplete by the City will cause delays in the acceptance process.	

Last Revised 11/12/2024 Page 11 of 14



\boxtimes	4.04	Submit record drawings (PDF) for all public improvements identified within Section 2 of these	
		Conditions of Approval.	-

Last Revised 11/12/2024 Page 12 of 14 Project Engineer: Henry Pham

DAB Date: 11/18/2024



EXHIBIT 'A'

ENGINEERING DEPARTMENT First Plan Check Submittal Checklist

Project Number: Tract Map No. 20572

All plan check submittals are to be done digitally through the City Of Ontario Citizen Portal Access. The following items are to be included with the first plan check submittal:

- 1. A copy of this check list

- 4. 🛛 Project Conditions of Approval
- 5. A Potable and Recycled Water demand calculations (include water demand calculations showing low, average and peak water demand in GPM for the proposed development and proposed water meter size).
- Public Street improvement plan with street cross-sections
- 8. Recycled Water improvement plan (include recycled water demand calculations showing low, average and peak water demand in GPM for the proposed development and proposed water meter size and an exhibit showing the limits of areas being irrigated by each recycled water meter)
- 9. No Public Sewer improvement plan
- 10.

 Public Storm Drain improvement plan
- 11.

 Public Street Light improvement plan
- 12. Signing and Striping improvement plan
- 14. HOA Landscape improvement plans. Show corner sight line distance per engineering standard drawing 1309.
- 16. Dry Utility plans within public right-of-way (at a minimum the plans must show existing and ultimate right-of-way, curb and gutter, proposed utility location including centerline dimensions, wall to wall clearances between proposed utility and adjacent public line, street work repaired per Standard Drawing No. 1306. Include Auto CAD electronic submittal)
- 17.
 Traffic Signal improvement plan and One (1) copy of Traffic Signal Specifications with modified Special Provisions. Please contact the Traffic Division at (909) 395-2154 to obtain Traffic Signal Specifications.
- 18. Water Quality Management Plan (WQMP), including one (1) copy of the approved Preliminary WQMP (PWQMP).
- 19. Mydrology/Drainage study



20.	Soils/Geology report Soils/Geolog		
21.	☑ Payment for Final Map/Parcel Map processing fee		
22.	☑ Final Map/Parcel Map		
23.			
24.	☑ Preliminary Title Report (current within 30 days)		
25.			
26.	☑ Set of supporting documents and maps (legible copies): referenced improvement plans referenced record final maps/parcel maps (full size, 18"x26"), Assessor's Parcel map (full si recorded documents such as deeds, lot line adjustments, easements, etc.		
27.	7. Supplemental Engineering Report, in electronic format (PDF format), for recycled water use only. Must be reviewed and submitted to the Division of Drinking Water by OMUC Water Quality Programs before clearing plan check workflows (includes grading and landscape plan reviews). Approval letter issued by the Division of Drinking Water must be obtained before meter installation and if applicable, occupancy release.		
28.	Other:		

Last Revised 11/12/2024 Page 14 of 14



CITY OF ONTARIO MEMORANDUM



DATE: October 17, 2024

TO: Henry Pham, Engineering Department CC: Alexis Vaughn, Planning Department

FROM: Jeff Krizek, Utilities Engineering Division

SUBJECT: DPR5(6) COAs1 & Utilities Engineering Conditions of Approval (COA) (#10601) | QCR: HY

PROJECT NO.: TM-20572 (PMTT23-002)

BRIEF DESCRIPTION:

TM-20572 (**PMTT23-002**): A Tentative Tract Map (TTM 20572) to subdivide 77.2 acres of land into eight (8) lots, located at the northwest corner of Archibald Avenue and Ontario Ranch Road within the PA-5 (Low-Density Residential, Medium-Density Residential, and School) land use district of The Avenue Specific Plan (APN(s): 0218-191-14, 0218-191-15, 0218-191-04, 0218-191-16 & 0218-191-05). Related File: PSPA22-005.

OMUC UTILITIES ENGINEERING DIVISION CONDITIONS OF APPROVAL

CONDITIONS OF APPROVAL: The Ontario Municipal Utilities Company (OMUC) Utilities Engineering Division recommends this application for approval subject to the Conditions of Approval outlined below and compliance with the City's Design Development Guidelines, Specifications Design Criteria, and City Standards. The Applicant shall be responsible for the compliance with and the completion of all the following applicable Conditions of Approval prior to the following milestones and subject to compliance with City's Design Development Guidelines, Specifications Design Criteria, and City Standards:

General Conditions:

 Standard Conditions of Approval: Project shall comply with the requirements set forth in the Amendment to the Standard Conditions of Approval for New Development Projects adopted by the City Council (Resolution No. 2017-027) on April 18, 2017, or as amended or superseded by Council Resolution; as well as project-specific conditions/requirements as outlined below.

Prior to Issuance of Any Permits (Grading, Building, Demolition and Encroachment), unless other timeline milestones are specified by individual conditions below, the Applicant Shall:

General Conditions (Section 2.A, Other conditions): The Applicant shall comply with the following:

- 2. <u>Inherited Requirements and Conditions of Approval:</u> This project is subject to all the Requirements and Conditions of Approval of related entitlements: The Avenue Specific Plan, as amended. Any conflict in Conditions of Approval and requirements, the Conditions of Approval below for this Project will supersede previous Conditions of Approval.
- 3. <u>Final Utilities Systems Map (USM)</u>: Submit a Final Utilities Systems Map (USM) as part of the precise grading plan submittal that meets all the City's USM requirements. These requirements include to show and label all existing and proposed utilities (including all appurtenances such as backflow devices, DCDAs, etc.), sizes, points of connection, and any easements. The final utility design shall comply with all Division of Drinking Water (CCR §64572) Separation Requirements. See Utility Systems Map (USM) Requirements document for details.

- 4. Public Utilities and Public Right-of-Way including Public Utility Easements (PUE): All City of Ontario Public Utilities shall be installed within a Public Right-of-Way (RoW), or within a Public Utility Easements (PUE), or within a combination of RoW and PUE. In this case, Public Utilities is referring to the mains and connected appurtenances of the following City of Ontario/OMUC Utilities: Public Potable Water; Public Recycled Water; and Public Sanitary Sewer. Public Utilities shall be subject to the Minimum RoW/PUE Area Requirements and PUE Restrictions:
 - a. <u>Minimum RoW Area Requirements:</u> Public Utilities shall be installed within in existing RoW/PUE in alignments/locations that meet the following minimum RoW/PUE areas surrounding the Public Utilities, and/or additional RoW/PUE shall be dedicated/granted to the City to provide the following minimum RoW/PUE areas surrounding the Public Utilities:
 - i. For each main, the RoW/PUE Area shall be a minimum of 20 feet wide, centered on the utility main with a minimum of 10 feet of RoW/PUE on each side of the main and this minimum area shall extend a minimum for 10 feet past the end of a main;
 - ii. For each Service/Lateral, the RoW/PUE Area shall be a minimum of 10 feet wide, centered on the service/lateral with a minimum of 5 feet of PRoW on each side of each service/lateral:
 - iii. For each water meter box, the RoW/PUE Area shall be a minimum of 5 feet behind and 5 feet on each side of a water meter box;
 - iv. For each water appurtenances (fire hydrants, blowoffs, airvacs, etc), the RoW/PUE Area shall be a minimum of 5 feet on each side surrounding the water appurtenances (fire hydrants, blowoffs, airvacs, etc);
 - v. The RoW/PUE minimum areas for separate Public Utilities may overlap, provide that all minimum separations and PUE Restrictions are met.
 - b. <u>PUE Restrictions:</u> The Minimum PUE Area required surrounding Public Utilities shall be subject to the following restrictions:
 - i. The Minimum PUE Area required surrounding Public Utilities shall not contain;
 - A. Any storm water quality improvements (infiltration, detention, retention, bioswale, etc);
 - B. Landscaping with thick or intrusive root structures,
 - C. Any trees;
 - D. Any private utilities, plumbing lines, private fire system, or irrigation lines; or,
 - E. Any permanent structures or overhangs of permanent structures.
 - ii. The PUE surface shall be designed to allow vehicle access over and along the full length of the utility main by any City maintenance vehicle.
 - iii. Minimum Separations: Within a PUE, all Department of Drinking Water (DDW) Water Main Separations per California Code of Regulations (CCR) §64572 shall be met for all Public Potable Water Mains and Services between: all Public City Utilities; Non-City Utilities; and Private Utilities. Additionally, the following Minimum Separations shall be met:
 - A. At minimum there shall be a 4 feet horizontal separation between each utility as measured between the outside walls of the utility pipelines, or in the case of a Joint Utility Trench, between the outside edge of the Joint Utility Trench and the outside wall of the Utility Pipeline. The minimum 4 feet horizontal separation also includes between services and service appurtenances and: other utilities (public or private) and utility appurtenances; any other objects or potentials obstructions (boxes, handholes, vaults, transformers, panels, poles and standards, signs, driveway approaches and wings/curb returns, trees, controllers, etc.); and any other items, as determined by the Ontario Municipal Utilities Company (OMUC).
 - B. Public Utility mains shall not be located behind curb or under curb & gutter and shall be located at minimum of 8 feet from curbface. With specific written permission of OMUC Management Staff, in rare circumstances, this 8 feet minimum can be reduced to 5 feet in specific locations where the 8 feet is not feasible, but at all locations the utilities alignments shall be optimized to meet this minimum location, while still maintaining all other minimum separation.
- 5. <u>Well Abandonment</u>: All existing Ground Water Wells shall be abandoned per County and State requirements prior to grading if they are not authorized to remain in service by the City's Water Resources Section.
- 6. <u>Septic Tank Abandonment</u>: All existing septic tank(s) on the property shall be abandoned per City, County, and State regulations and standards.

Sanitary Sewer Conditions (Section 2.C): The Applicant shall comply with the following:

- 7. <u>Sewer Sub-Area Master Plans (SSAMP):</u> Convert the Conceptual Sewer Sub-Area Master Plan to a Final SSAMP pursuant to Section 4-8 of the Sewer Master Plan (SMP) and submit it to OMUC for review and approval with the first submittal of the sewer plans and prior to issuance of any permits.
- 8. <u>Sanitary Sewer Infrastructure:</u> The Project is limited to Public Sewer Mains within Public Streets in Publicly Dedicated Right-of-way for Streets and Public Sewer Mains are not allowed within private property or private streets/private drive aisles. The Project is required to install the following Public Sewer Mains and only to the extent necessary to serve each lot:
 - a. An 8-inch main in "Public Street A" connecting between the existing IEUA public sewer main in Archibald Avenue and the proposed main in "Public Steet B". For the point of connection to the existing sewer manhole, the slope of the main going west from the inside of the existing manhole to the first proposed manhole along "Public Street A" shall be a continuous slope, uniform size, and continuous horizontal alignment. This means that the existing 10-inch main stub shall be removed and the manhole reconstructed/rechannelized to allow for a different size and slope. Connection at main must also meet IEUA standards/requirements and the design plans must be approved by IEUA.
 - b. An 8-inch main in "Public Street B" connecting between the proposed 8-inch main in "Public Street C" and the proposed main in "Public Street F" and connecting to the proposed main in "Public Street A".
 - c. An 8-inch main in "Public Street C" connecting between the proposed main in "Public Street B" and the proposed main in "Public Street E".
 - d. An 8-inch main in "Public Street F" connecting between the proposed main in "Public Street B" and the proposed main in "Public Street E".
 - e. An 8-inch main in "Public Street E" connecting to the proposed main in "Public Street C" and extending south.
 - f. An 8-inch main in "Public Street E" connecting to the proposed main in "Public Street F" and extending north.
 - g. An 8-inch main in "Public Street D" connecting between the proposed main in "Public Street G" and "Public Street C".
 - h. An 8-inch main in "Public Street G" connecting to the proposed main in "Public Street D", extending east to west of Archibald Avenue, and connecting to the proposed main in "Public Street H".
 - i. An 8-inch main in "Public Street H" connecting between the proposed main in "Public Street G" and the existing 8-inch main in "Public Street H" north of Ontario Ranch Road.
 - i. The Public Sewer Mains shall be sized per Final SSAMP.
 - k. The Public Sewer Mains within TM-20572 shall be not constructed or plans for final design approved until the entitlements (tentative maps and developments plans) for Lots 1-7 and Lot A are completed locking in unit and density placement.
 - All proposed sewer within Lot 1, Lot 2, Lot 3, Lot 4, Lot 5, Lot 6, Lot 7, and Lot A, or within installed in private drives and private alleys, shall be private, privately maintained, and per Building Code and Plumbing Code requirements.
 - m. The public sewer laterals connecting the public sewer mains to Lots 1-7 and Lot A shall not be constructed or plans for final design that include the laterals shall not be approved until the entitlements (tentative maps and developments plans) for Lots 1-7 and Lot A are completed locking in each lots' site layout.
 - All existing sewer laterals and main stubs that are not going to be used by this project shall be abandoned back to the main. This includes:
 - i. The main to the north side of the street along Ontario Ranch Road between "Public Street H" and Archibald Avenue per City standards and requirements.
 - ii. The two mains to the west side of the street along Archibald Avenue between "Public Street A" and the northern tract boundary per City standards and requirements. These mains connect to the IEUA main in Archibald Avenue and must also meet IEUA standards/requirements and the design plans must be approved by IEUA.

9. Sanitary Sewer Service:

- a. Residential Uses: the residences and buildings shall share an onsite private sewer system that discharges wastewater to the Public Sanitary Sewer System through a shared Public Sewer Lateral per Standard #2003. If not under one ownership, the maintenance of the shared onsite private sewer system shall be established through Covenants, Conditions, and Restrictions (CC&Rs).
- b. Non-Residential Amenity Buildings that generate wastewater and its onsite private sewer system shall discharge wastewater to the Public Sanitary Sewer System through a Public Sewer Lateral per Standard #2003.
- c. Public Sewer Laterals and Storm Water Quality Improvements: No storm water quality improvements (infiltration, detention, retention, bioswale, etc) shall be installed above or within 5 feet of any Public Sewer Lateral.
- 10. <u>Private Onsite Sewer System and Plumbing:</u> The Onsite Sewer System shall be privately maintained by the property owner and shall meet the following requirements:
 - a. Private Onsite Sewer and Storm Water Quality Improvements: No storm water quality improvements (infiltration, detention, retention, bioswale, etc) shall be installed above or within 5 feet of any Private Onsite Sewer pipes.

Potable Water Conditions (Section 2.D): The Applicant shall comply with the following:

- 11. <u>Potable Water Infrastructure:</u> The Project is limited to Public Potable Water Mains within Public Streets in Publicly Dedicated Right-of-way for Streets and Public Potable Water Mains are not allowed within private property or private streets/private drive aisles. The Project is required to install the following Public Potable Water Mains and only to the extent necessary to serve each lot and achieve required looping:
 - a. A 12-inch main in Ontario Ranch Road connecting between the existing 24-inch public 925PZ potable at "Public Street H" and extending west to Cucamonga Creek Channel.
 - b. An 8-inch main in "Public Street A" connecting between the existing 24-inch public 925PZ potable main in Archibald Avenue and the proposed main in "Public Street B".
 - c. An 8-inch main in "Public Street B" connecting between the proposed 8-inch main in "Public Street C" and the proposed main in "Public Street F" and connecting to the proposed main in "Public Street A".
 - d. An 8-inch main in "Public Street C" connecting between the proposed 8-inch main in "Public Street B" and the proposed main in "Public Street D" and connecting to the proposed main in "Public Street E".
 - e. An 8-inch main in "Public Street F" connecting between the proposed 8-inch main in "Public Street B" and the proposed main in "Public Street D" and connecting to the proposed main in "Public Street E".
 - f. An 8-inch main in "Public Street E" connecting between the proposed main in "Public Street C" and the proposed main in "Public Street F".
 - g. An 8-inch main in "Public Street D" connecting between the proposed main in "Public Street C" and the proposed main in "Public Street G" and connecting to the proposed main in "Public Street F".
 - h. An 8-inch main in "Public Street G" connecting between the existing 24-inch public 925PZ potable main in Archibald Avenue and the proposed main in "Public Steet D" and connecting to the proposed main in "Public Street H".
 - i. An 8-inch main in "Public Street H" connecting between the proposed main in "Public Street G" and the existing 8-inch main in "Public Street H" north of Ontario Ranch Road.
 - j. The public water services/main-stubs connecting the public water mains to Lots 1-7 & Lot A and appurtenances shall not be constructed nor plans for final design that include the services/ appurtenances shall not be approved until the entitlements (tentative maps and developments plans) for Lots 1-7 and Lot A are completed locking in each lots' site layout.
 - k. All proposed water within Lot 1, Lot 2, Lot 3, Lot 4, Lot 6, Lot 7 and Lot A, or within installed in private drives and private alleys, shall be private, privately maintained, and per Building Code and Plumbing Code requirements with master meters with backflows serving the Lots and submeters for each unit.

12. Potable Water Service:

a. Domestic Service:

- i. Residential Uses: the residences shall be sub-metered and share an onsite private domestic water system that connects to the Public Potable Water System through a shared a domestic potable water service and public master meter connected to the Public Potable Water System with onsite private backflow prevention device. Maintenance of the shared onsite private domestic water system shall be established through Covenants, Conditions, and Restrictions (CC&Rs).
- ii. Any Non-Residential Uses needing a potable water service shall have its own potable water service and meter with backflow prevention device connected to the Public Potable Water System.
- b. <u>Irrigation Service:</u> For landscape irrigation uses that are not served by Recycled Water, the landscape irrigation uses shall have a separate irrigation water service and meter with backflow prevention device connected to the Public Potable Water System separate from the domestic water uses and the onsite plumbing systems shall be also separate from each other.
 - i. Community Service District (CFD) Maintained Irrigation Areas: Any irrigated areas that are to be maintained by a Community Service District (CFD) and not by the property owner or owners association require irrigation services and meters separate from those that are maintained by the property owner or owners association.

c. Backflow Prevention:

- i. A Backflow Prevention Device is required for each Meter connected to the Public Potable Water System that: serves any residential use that is more than one (1) single family residential unit; or, any non-residential use; or, only irrigation use.
- ii. Backflow Prevention Device Location: In order to reduce the risk of contamination to the Public Potable Water System, a Backflow Prevention Device location shall comply with the following requirements:
 - A. As measured along the pipe connecting to the Backflow Prevention Device, the backflow concrete pad shall be located a minimum of 3 feet and a maximum of 5 feet from:
 - The Right-Of-Way line for Publicly Dedicated Streets; or,
 - The back of the sidewalk or the meter box (where there is no sidewalk), whichever is closer, for mains within PUEs and not within Right-Of-Way for Publicly Dedicated Streets.
 - B. Only one single bend of up to 90 degrees maximum is allowed along the pipe to the Backflow and the single bend must be located at one of the following places: either the along the 90-degree riser connecting at the backflow assembly; or, at the end of the 12-inch stub at the back of the meter box.
 - C. All the minimum DDW Separations also apply to the pipeline connecting between the Main/Meter-Box to a Backflow Device (or DCDA) and any Backflow Device (or DCDA). This also includes storm water quality improvements (infiltration, detention, retention, bioswale, etc). Also, no public or private non-potable water conveyances (private utilities, plumbing lines, sewer, private fire system, storm drain) shall cross the pipeline connecting between the Main/Meter-Box to a Backflow Device (or DCDA) or under any Backflow Device (or DCDA).
- d. <u>Fire Water Service:</u> For onsite private Fire System uses: Where the domestic water service and meters connected to the Public Potable Water System that serves any use that is more than one (1) single family detached residential unit, or any non-residential use: if an onsite private fire system is required, then a separate Fire Service with Double Check Detector Assembly (DCDA) per City Standard #4208 connected to the Public Potable Water System is required, to serve the onsite private fire system. The onsite fire system and onsite domestic water plumbing system shall be separate. The DCDA Location shall be the same as the Backflow Prevention Device above.

Recycled Water Conditions (Section 2.E): The Applicant shall comply with the following:

- 13. <u>City Ordinance 2689</u>: This development shall comply with City Ordinance 2689 and make use of recycled water for all approved uses, including but not limited to landscape irrigation for HOA maintained areas and parks. Appropriately sized public and private mains shall be installed throughout the Project to meet this requirement, as approved by the City.
- Recycled Water Infrastructure: In order to comply with City Ordinance 2689, install the following recycled water mains
 - a. A 12-inch main in Ontario Ranch Road connecting between the existing 12-inch public 930PZ potable at "Public Street H" and extending west to Cucamonga Creek Channel.
 - b. An 8-inch main in "Public Street A" connecting between the existing 24-inch public 930PZ recycled main in Archibald Avenue and the proposed main in "Public Steet B". For the point of connection to the main in Archibald Avenue, the existing eastern 8-inch main stub must be removed back to the tee on the 24-inch main.
 - c. An 8-inch main in "Public Street B" connecting between the proposed 8-inch main in "Public Street C" and the proposed main in "Public Street A".
 - d. An 8-inch main in "Public Street C" connecting between the proposed 8-inch main in "Public Street B" and the proposed main in "Public Street D".
 - e. An 8-inch main in "Public Street D" connecting between the proposed main in "Public Street C" and the proposed main in "Public Street G".
 - f. An 8-inch main in "Public Street G" connecting between the proposed main in "Public Street D" and to the proposed main in "Public Street H".
 - g. An 8-inch main in "Public Street H" connecting between the proposed main in "Public Street G" and the existing 8-inch main in "Public Street H" north of Ontario Ranch Road.
 - h. The public water services/main-stubs connecting the public sewer mains to Lots 1-7 & Lot A and appurtenances shall not be constructed nor plans for final design that include the services/ appurtenances shall not be approved until the entitlements (tentative maps and developments plans) for Lots 1-7 and Lot A are completed locking in each lots' site layout.
- 15. Recycled Water Service: In order to comply with City Ordinance 2689:
 - Install irrigation recycled water services with meters to serve any irrigated landscape areas that recycled water use is allowed.
 - i. Community Service District (CFD) Maintained Irrigation Areas: Any irrigated areas that are to be maintained by a Community Service District (CFD) and not by the property owner or owners association require irrigation services and meters separate from those that are maintained by the property owner or owners association.
 - b. All Lots shall have access to recycled water, either by extending mains in adjacent public streets to provide individual water services with meters, or through shared services with meters. Maintenance of the shared onsite private recycled water system shall be established through Covenants, Conditions, and Restrictions (CC&Rs).
- 16. <u>RW Program Requirements:</u> In order to receive RW service, the applicant shall comply with each of the following:
 - a. Prior to Precise Grading Plan Approval and Building Permits Issuance:
 - i. Provide two hard copies and the digital files (in PDF and AutoCAD format) for both on-site and offsite utility plans, including landscape and irrigation improvements.
 - ii. Submit an **Engineering Report (ER)** to the City detailing recycled water usage for review and approval by the City and the State. The review process for the ER is typically 3 months. City will coordinate the State's approval of the ER.
 - iii. For details, contact OMUCWQPlanCheck@ontarioca.gov.
 - b. Prior to Occupancy Release/Finalizing:
 - i. Pass start-up and cross-connection test successfully.
 - ii. Provide evidence demonstrating the training of on-site supervisor or designee as determined in the ER.



CITY OF ONTARIO MEMORANDUM

Development Plan Review

Project: PMTT23-002 (TM-20572) Date: November 6, 2024

Location: NWC Archibald Avenue and Ontario Ranch Road

(The Avenue Specific Plan)

By: Jaime Maciel-Carrera

Diego Tapia

The Transportation Division recommends the following to be incorporated into the Project's Conditions-of-Approval:

Condition:

- The Applicant/Developer shall be responsible to design and construct street improvements
 along property frontages of Archibald Avenue, Ontario Ranch Road, and all in-tract public
 streets in accordance with conditions issued by City's Land Development Division. These,
 and all other street improvements required herein, shall include, but not be limited to,
 concrete curb and gutter, sidewalk, LED street lights, signing and striping, and parkway
 landscaping.
- 2. Curb return radii shall be designed and constructed in accordance with City Standard Drawing No. 1106.
- 3. The Applicant/Developer shall be responsible to design and construct the necessary pavement and striping transitions from the westerly side of the Cucamonga Creek Channel bridge to the widened roadway portions along Ontario Ranch Road, to the intersection of "H" Street. Striping improvements shall include the removal existing interim signing and striping beyond the project frontage limits and the installation of ultimate signing and striping necessary to accommodate fully widened street improvements, from the westerly side of the Cucamonga Creek Channel bridge to east of Archibald Avenue. See striping exhibit prepared by Hunsaker & Associates dated 11/03/2023.
- 4. The Applicant/Developer shall be responsible to design and construct the necessary striping transitions from existing roadway conditions to the widened roadway portions along Archibald Avenue. Striping improvements shall include the removal existing interim signing and striping beyond the project frontage limits and the installation of ultimate signing and striping necessary to accommodate fully widened street improvements, from the northerly property line to Eucalyptus Avenue. See striping exhibit prepared by Hunsaker & Associates dated 11/03/2023.

- 5. The Applicant/Developer shall be responsible to design and construct the necessary striping transitions from existing roadway conditions to the widened roadway portions along Ontario Ranch Road. Striping improvements shall include the removal existing interim signing and striping beyond the project frontage limits and the installation of ultimate signing and striping necessary to accommodate fully widened street improvements, from the westerly property line to approximately 1,200 feet east of Broadway Avenue. See striping exhibit prepared by Hunsaker & Associates dated 11/03/2023.
- 6. The Applicant/Developer shall design and construct the ultimate signing and striping improvements on "A" Street, from Archibald Avenue to Ottawa Avenue/Cellars Way to accommodate the proposed west leg of the intersection. See striping exhibit prepared by Hunsaker & Associates dated 11/03/2023.
- 7. The Applicant/Developer shall be responsible to design and construct modifications to the existing traffic signal on Archibald Avenue at Ontario Ranch Road. The traffic signal modification shall address relocation of any equipment including video detection, CCTV cameras, fiber optic communication conduit, cable and equipment, emergency vehicle preemption systems, and bicycle detection to the satisfaction of the City Engineer. All new signal equipment shall be installed at its ultimate location, unless precluded by right-of-way limitations.
- 8. The Applicant/Developer shall be responsible to design and construct modifications to the existing traffic signal on Archibald Avenue at "A" Street/La Avenida Drive. The traffic signal modification shall address relocation of any equipment including video detection, CCTV cameras, fiber optic communication conduit, cable and equipment, emergency vehicle preemption systems, and bicycle detection to the satisfaction of the City Engineer. All new signal equipment shall be installed at its ultimate location, unless precluded by right-of-way limitations.
- 9. The Applicant/Developer shall be responsible to design and construct traffic signal at the following intersection:
 - a. "H" Street at Ontario Ranch Road. This signalized access point must align with the future development on the southside of Ontario Ranch Road.

The new traffic signal shall include video detection, fiber optic communication conduit, CCTV cameras, cable and equipment, emergency vehicle preemption systems and bicycle detection to the satisfaction of the City Engineer. All new signal equipment shall be installed at its ultimate location, unless precluded by right-of-way limitations.

- 10. Proposed tract entrance between "A" Street /La Avenida Drive and Ontario Ranch Road on Archibald Avenue shall be restricted to right-in/right-out ingress/egress due to the existing raised median.
- 11. The Applicant/Developer shall be responsible to design and construct a bus turnout to serve future bus stop on the westside of Archibald Avenue, south of "A" Street /La Avenida Drive. The bus turnout shall be designed in accordance with Omnitrans requirements and to the satisfaction of the City Engineer.
- 12. The Applicant/Developer shall be responsible to design and construct a bus turnout to serve future bus stop on the northside of Ontario Ranch Road, west of "H" Street. The bus turnout

- shall be designed in accordance with Omnitrans requirements and to the satisfaction of the City Engineer.
- 13. The Applicant/Developer shall be responsible to design and construct in-fill public street lights and potential new service pedestals along all in-tract public streets, and its project frontage on Archibald Avenue and Ontario Ranch Road. Street lighting shall be LED-type and in accordance with City's Approved Material List LED Luminaires. The Applicant/Developer shall also install smart nodes on all new street light fixtures.
- 14. Property frontage along Ontario Ranch Road, Archibald Avenue and "A" Street shall be signed "No Parking Any Time" or "No Stopping Any Time" as applicable.
- 15. All landscaping, block walls, and other obstructions shall be compatible with the stopping sight distance requirements per City of Ontario Standard Drawing No. 1309.
- 16. The Applicant/Developer's engineer-of-record shall meet with City Engineering staff prior to start of signing and striping, traffic signal, and street lighting design, and develop an interim striping plan that includes any necessary pavement transitions in preparation for the plan check stage.

Jmc, dt;



CITY OF ONTARIO MEMORANDUM

TO: Alexis Vaughn, Associate Planner

Planning Department

FROM: Paul Ehrman, Sr. Deputy Fire Chief/Fire Marshal

Fire Department

DATE: January 24, 2023

SUBJECT: PMTT 23-002 - A Tentative Tract Map to subdivide 77.2 acres of land

into eight (8) lots, located at the northwest corner of Archibald Avenue and Ontario Ranch Road within the PA-5 (Low Density Residential) land use district of The Avenue Specific Plan (APN(s): 0218-191-14, 0218-191-

15, 0218-191-04, 0218-191-16 & 0218-191-05).

☐ The plan <u>does</u> adequately address Fire Department requirements at this time.

No comments.



MEMORANDUM

го:	Scott Murphy, Community Development Director (Copy of memo only) Rudy Zeledon, Planning Director (Copy of memo only) Diane Ayala, Advanced Planning Division (Copy of memo only) Charity Hernandez, Economic Development James Caro, Building Department Raymond Lee, Engineering Department Jamie Richardson, Landscape Planning Division Dennis Mejia, Municipal Utility Company Heather Lugo, Police Department Paul Erhman, Deputy Fire Chief/Fire Marshal Jay Bautista, Traffic/Transportation Manager Lorena Mejia, Airport Planning Jeff Tang, Engineering/NPDES Angela Magana, Community Improvement (Copy of memo only) Jimmy Chang, IPA Department Blaine Ishii, Integrated Waste			
FROM:	Alexis Vaughn, Associate Planner			
DATE:	January 23, 2023			
SUBJECT:	FILE #: PMTT23-002 Finance Acct#:			
the second secon	g project has been submitted for review. Please send one (1) copy and email one (1) copy of port to the Planning Department by . Only DAB action is required			
Note.	Both DAB and Planning Commission actions are required			
	Only Planning Commission action is required			
H	DAB, Planning Commission and City Council actions are required			
	Only Zoning Administrator action is required			
PROJECT DESCRIPTION: A Tentative Tract Map to subdivide 77.2 acres of land into eight (8) lots, located at the northwest corner of Archibald Avenue and Ontario Ranch Road within the PA-5 (Low Density Residential) land use district of The Avenue Specific Plan (APN(s): 0218-191-14, 0218-191-15, 0218-191-04, 0218-191-16 & 0218-191-05). Related File(s): [insert File #s].				
The plan	n does adequately address the departmental concerns at this time.			
\boxtimes	No comments			
	Report attached (1 copy and email 1 copy)			
Ø	Standard Conditions of Approval apply			
The plan	n does not adequately address the departmental concerns.			
	The conditions contained in the attached report must be met prior to scheduling for Development Advisory Board.			

1-30-23

Date Item D - 266 of 271



MEMORANDUM

10:	Scott Murphy, Community Development Dire Rudy Zeledon, Planning Director (Copy of m Diane Ayala, Advanced Planning Division (C Charity Hernandez, Economic Development James Caro, Building Department Raymond Lee, Engineering Department Jamie Richardson, Landscape Planning Div Dennis Mejia, Municipal Utility Company Heather Lugo, Police Department Paul Ehrman, Deputy Fire Chief/Fire Marsha Jay Bautista, Traffic/Transportation Manage Lorena Mejia, Airport Planning Jeff Tang, Engineering/NPDES Angela Magana, Community Improvement Jimmy Chang, IT Department Blaine Ishii, Integrated Waste	nemo only) Copy of memo only) ision al	
FROM:	Alexis Vaughn, Associate Planner		Revision #1
DATE:	August 09, 2023		
SUBJECT:	FILE #: PMTT23-002	Finance Acct#:	
_	g project has been resubmitted for review. Pl report to the Planning Department by .	ease send one (1) copy and er	mail one (1) copy
8) lots, locat Low-Density	ESCRIPTION: A Tentative Tract Map (TTM 2 ted at the northwest corner of Archibald Aven y Residential, Medium-Density Residential, are (APN(s): 0218-191-14, 0218-191-15, 0218-2-005.	ue and Ontario Ranch Road wnd School) land use district of T	rithin the PA-5 The Avenue
The plar	n does adequately address the departmental	concerns at this time.	
	No comments		
	See previous report for Conditions Report attached (1 copy and email 1 copy)		
□	Standard Conditions of Approval apply		
The plan	n does not adequately address the departmer	ntal concerns	
	The conditions contained in the attached represent Advisory Board.		luling for

Broadband Operations
Department

Signature

08/30/2023

Title



MEMORANDUM

TO:	Scott Murphy, Community Development Director (Copy of memo only) Rudy Zeledon, Planning Director (Copy of memo only) Diane Ayala, Advanced Planning Division (Copy of memo only) Charity Hernandez, Economic Development James Caro, Building Department Raymond Lee, Engineering Department Jamie Richardson, Landscape Planning Division Dennis Mejia, Municipal Utility Company Heather Lugo, Police Department Paul Ehrman, Deputy Fire Chief/Fire Marshal Jay Bautista, Traffic/Transportation Manager Lorena Mejia, Airport Planning Jeff Tang, Engineering/NPDES Angela Magana, Community Improvement (Copy of memo only) Jimmy Chang, IT Department Blaine Ishii, Integrated Waste			
FROM:	Revision #5/Sub6 TTM & Docs (UE Rev4(Sub			
DATE:	August 28, 2024			
SUBJECT:	FILE #: PMTT23-002 Finance Acct#:			
	g project has been resubmitted for review. Please send one (1) copy and email one (1) copy report to the Planning Department by .			
(8) lots, loca (Low-Densit	DESCRIPTION: A Tentative Tract Map (TTM 20572) to subdivide 77.2 acres of land into eight sted at the northwest corner of Archibald Avenue and Ontario Ranch Road within the PA-5 by Residential, Medium-Density Residential, and School) land use district of The Avenue (APN(s): 0218-191-14, 0218-191-15, 0218-191-04, 0218-191-16 & 0218-191-05). Related 12-005.			
The pla	n does adequately address the departmental concerns at this time.			
	No comments			
	See previous report for Conditions			
	Report attached (1 copy and email 1 copy)			
	Standard Conditions of Approval apply			
The pla	n does not adequately address the departmental concerns.			
	The conditions contained in the attached report must be met prior to scheduling for Development Advisory Board.			



CITY OF ONTARIO MEMORANDUM



DATE: September 19, 2023

TO: Alexis Vaughn, Planning Department
FROM: Blaine Ishii, Integrated Waste Department
SUBJECT: DPR #1 – Integrated Waste Comments

PROJECT NO.: PMTT23-002

ATTACHMENTS:

BRIEF DESCRIPTION

PMTT23-002

THIS SUBMITTAL IS COMPLETE.

CORRECTION ITEMS: In order to be considered for approval by the Integrated Waste Department the applicant shall address all the correction items below and resubmit the application for further review. Please note that all design shall meet the City's Design Development Guidelines, Specifications Design Criteria, and City Standards.

Integrated Waste Comments:

1. <u>N/A</u>



MEMORANDUM

TO:	Scott Murphy, Community Development Director (Copy of memo only) Henry Noh, Planning Director (Copy of memo only) Diane Ayala, Advanced Planning Division (Copy of memo only) Charity Hernandez, Economic Development James Caro, Building Department Raymond Lee, Engineering Department Jamie Richardson, Landscape Planning Division Dennis Mejia, Municipal Utility Company Heather Lugo, Police Department Paul Ehrman, Deputy Fire Chief/Fire Marshal Jay Bautista, Traffic/Transportation Manager Lorena Mejia, Airport Planning				
	Nathan Pino, Engineering Angela Magana, Community Improvement (Copy of memo only) Jimmy Chang, IT Department Blaine Ishii, Integrated Waste				
FROM:	Alexis Vaughn, Associate Planner				
DATE:	May 30, 2024				
SUBJECT:	FILE #: PMTT23-002& PSPA22-005 Finance Acct#: 5th Submittal				
	project has been resubmitted for review. Please send one (1) copy and email one (1) copy report to the Planning Department by .				
(8) lots, locat (Low-Density	ESCRIPTION: A Tentative Tract Map (TTM 20572) to subdivide 77.2 acres of land into eight led at the northwest corner of Archibald Avenue and Ontario Ranch Road within the PA-5 Residential, Medium-Density Residential, and School) land use district of The Avenue (APN(s): 0218-191-14, 0218-191-15, 0218-191-04, 0218-191-16 & 0218-191-05). Related 2-005.				
The plan	n does adequately address the departmental concerns at this time.				
	No comments				
	See previous report for Conditions				
	Report attached (1 copy and email 1 copy)				
	Standard Conditions of Approval apply				
The plan	n does not adequately address the departmental concerns.				
	The conditions contained in the attached report must be met prior to scheduling for Development Advisory Board.				

Landscape Planning Division Jamie Richardson

Sr. Landscape Architect 06/21/2024

Department Signature Title Date Item D - 270 of 271

AIRPORT LAND USE COMPATIBILITY PLANNING CONSISTENCY DETERMINATION REPORT



Project File No.:	PMTT23-002			Reviewed By:	
Address:				Lorena Mejia	
APN:	0218-191-04, 05	, 14, 15 & 16		Contact Info:	
Existing Land Dairy/Vacant Use:				909-395-2276	
				Project Planner:	
Proposed Land Use:	Tentative Tract I	Map to subdivide 77.2 acres of land in	to 8 lots	Alexis Vaughn	
Site Acreage:	77.2	Proposed Structure Heig	ht: N/A	Date: 4/5/23	
ONT-IAC Projec	t Review: n	/a		CD No.: 2023-004	
Airport Influence	Area:	NT, Chino		PALU No.: n/a	
TI	ne project is	s impacted by the follow	ing ONT ALUCP Compa	tibility Zones:	
Safe	ty	Noise Impact	Airspace Protection	Overflight Notification	
Zone 1 Zone 1A Zone 2 Zone 3 Zone 4 Zone 5 Zone 1 Allowable Heigh	Zo	75+ dB CNEL 70 - 75 dB CNEL 65 - 70 dB CNEL 60 - 65 dB CNEL ct is impacted by the followe 2 Zone 3	High Terrain Zone FAA Notification Surfaces Airspace Obstruction Surfaces Airspace Avigation Easement Area Allowable Height: 200 FT + wing Chino ALUCP Sates Zone 4 Zone 4		
Allowable Heig	Jiit				
		CONSISTENCY	DETERMINATION		
This proposed Project is:					
The proposed project is located within the Airport Influence Area of Ontario International Airport (ONT) and was evaluated and found to be consistent with the policies and criteria of the Airport Land Use Compatibility Plan (ALUCP) for ONT. Real Estate Transaction Disclosure Required					
Airport Planner Signature:					