

Irvine Unified School District

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# SOLIS PARK SCHOOL EXPANSION PROJECT

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March 2026 | EIR Addendum

State Clearinghouse No. 2002101020





March 2026 | Addendum to the Orange County Great Park  
Environmental Impact Report  
State Clearinghouse No. 2002101020

# SOLIS PARK SCHOOL EXPANSION PROJECT

for Irvine Unified School District

*Prepared for:*

**Irvine Unified School District**

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# ENVIRONMENTAL CHECKLIST

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## PROJECT INFORMATION

**Project Title:** Solis Park School Expansion Project

**Lead Agency Name and Address:**

Irvine Unified School District  
2015 Roosevelt  
Irvine, California 92620

**Contact Person and Phone Number:**

Bethany Short, Supervisor, Facilities Planning  
949.936.5327

**Project Location:**

101 Abacus, (Assessor's Parcel Number [APN] 591-701-01) in the City of Irvine, Orange County

**Project Sponsor's Name and Address:**

Irvine Unified School District  
2015 Roosevelt  
Irvine, California 92620

**General Plan Designation:** Education Facility (EDU)

**Zoning:** Institutional

**Description of Project:**

The proposed project involves the expansion of Solis Park School, within the existing campus boundaries. Current enrollment capacity is approximately 1,000 students. The proposed project would increase student capacity to 1,300 students to accommodate long-term enrollment needs. The proposed project would include the construction of a new two-story, 20,422-square-foot classroom building in the west corner of the campus along Sentosa, providing 11 permanent classrooms with 10,112 square feet on the first floor and 10,310 square feet on the second floor. In addition to the 11 classrooms, the new building would include an art room, a science room, a work room, a staff room, office space, and staff and student restrooms.

## **ENVIRONMENTAL CHECKLIST**

### **Surrounding Land Uses and Setting:**

Solis Park School is within the Great Park Neighborhoods, surrounded primarily by newly constructed single-family and multifamily residential developments, along with associated parks and landscaped open spaces. The Orange County Great Park, a major regional recreational and cultural facility, is approximately one mile west of the school. The school and immediate surroundings are fully built out with no vacant or undeveloped land parcels.

### **Other Public Agencies Whose Approval is Required (e.g., Permits, Financing Approval, or Participating Agreement):**

The Division of the State Architect approval of a fire life-safety evaluation is required.

## **ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED**

Chapter 4, *Environmental Analysis*, of this document summarizes the environmental impact conclusions of the Certified Environmental Impact Report (EIR) and concludes that the proposed project meets the conditions described in the California Environmental Quality Act (CEQA) Guidelines Section 15164 for preparation of an Addendum.

## DETERMINATION

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Signature

3/24/2026

Date

KELVIN OKINO

Name

EXECUTIVE DIRECTOR, FACILITIES & CONST.

Title

**ENVIRONMENTAL CHECKLIST**

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# 1. INTRODUCTION

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## 1.1 BACKGROUND, PURPOSE, AND SCOPE

This document is an Addendum to the 2003 Orange County Great Park Environmental Impact Report (EIR) (State Clearinghouse [SCH] No. 2002101020) (Certified EIR, which analyzed the environmental effects of the development of residential and nonresidential development on a portion of the former Marine Corps Air Station (MCAS) El Toro site (approved project), and provides the basis for augmenting the previously certified EIR. The Irvine Unified School District (IUSD or District) proposes to construct a new two-story classroom building on the existing campus of Solis Park School and additional site improvements on the campus that would result in an increase of student capacity (proposed project). This EIR Addendum provides an analysis of project-specific impacts for the development of the proposed project.

This EIR Addendum has been prepared pursuant to the provisions of the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] Sections 21000 et seq.) and the CEQA Guidelines (California Code of Regulations [CCR], Title 14, Division 6, Chapter 3, Sections 15000–15387). IUSD is the lead agency responsible for this Addendum to the Certified EIR for the proposed project. Pursuant to the provisions of CEQA and the CEQA Guidelines, IUSD is the lead agency charged with the responsibility of deciding whether to approve the requested action.

## 1.2 ENVIRONMENTAL PROCEDURES

### 1.2.1 CEQA Requirements

Pursuant to PRC Section 21166 and Section 15162 of the state CEQA Guidelines, when an EIR has been certified or a negative declaration adopted for a project, no subsequent or supplemental EIR or negative declaration shall be prepared for the project unless the lead agency determines that one or more of the following conditions are met:

- (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR

## 1. INTRODUCTION

or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

- (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:
  - (A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
  - (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
  - (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 project proponents decline to adopt the mitigation measure or alternative; or
  - (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

A supplement to an EIR (supplemental EIR), which is narrower in scope than a subsequent EIR, may be prepared if any of the previously mentioned criteria apply, but “only minor changes or additions would be necessary to make the previous EIR adequately apply to the project in the changed situation” (CEQA Guidelines Section 15163[a]). In the absence of the need to prepare either a subsequent or supplemental EIR, an addendum to a previously certified EIR may be prepared. CEQA Guidelines Section 15164 states:

- (a) The lead agency or a responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.
- (b) An addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.
- (c) An addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration.

**1. INTRODUCTION**

- (d) The decision making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision on the project.
- (e) A brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR, the lead agency's findings on the project, or elsewhere in the record. The explanation must be supported by substantial evidence. (CEQA Guidelines Section 15164)

This Addendum to the Certified EIR has been prepared because evaluation of the proposed project has not indicated any of the circumstances requiring a subsequent or supplemental EIR is required. As demonstrated in Chapter 4, *Environmental Analysis*, of this Addendum, the proposed project would not result in impacts that differ from the approved project, and it would not trigger the need for preparation of a subsequent or supplemental EIR under the criteria in CEQA Guidelines Sections 15162(a) and 15163(a). The proposed project would not change the assumptions made under the Orange County Great Park EIR.

The proposed project is consistent with the Certified EIR and would not require changes to the approved project. This Addendum demonstrates that no substantial changes are proposed to the approved project or have occurred in the development area covered by the Certified EIR that would require major revisions to the Certified EIR or substantially increase the severity of previously identified significant effects (CEQA Guidelines Section 15162[a][1]). Therefore, the impacts of the proposed project are within the levels and types of environmental impacts disclosed in the Certified EIR.

As substantiated in Chapter 4 of this Addendum, the proposed project would not result in new significant impacts or substantially increase the severity of the impacts of the approved project due to substantial changes in circumstances since certification of the Certified EIR (CEQA Guidelines Section 15162[a][2]).

In addition, no information that was not known and could not have been known at the time the Certified EIR was certified has been revealed that shows new or substantially more severe significant impacts would result (CEQA Guidelines Section 15162[a][3]). There are no new or considerably different mitigation measures that would substantially reduce one or more significant impacts of the approved project but that are not adopted.

Because this Addendum does not identify new or substantially more severe significant impacts, circulation for public review and comment is not necessary (CEQA Guidelines Section 15164[c]). However, IUSD has considered this Addendum together with the previously certified EIR prior to adoption of the proposed project, pursuant to CEQA Guidelines Section 15164(d).

## 1. INTRODUCTION

### 1.3 CONTENT AND ORGANIZATION OF THIS ADDENDUM

This Addendum relies on the CEQA Guidelines checklist, which addresses environmental issues by section. Additionally, this Addendum also addresses environmental topics that were not addressed in the Certified EIR, including greenhouse gas (GHG) emissions, mineral resources, tribal cultural resources, and wildfire. The completed checklist is in Chapter 4, where each environmental topic has the following subheadings:

- Summary of Impact Identified in the Approved Project
- Impacts Associated with the Proposed Project (including environmental checklist)
- Adopted Mitigation Measures Applicable to the Proposed Project

### 1.4 ENVIRONMENTAL DOCUMENTATION

#### 1.4.1 2003 Orange County Great Park Certified Environmental Impact Report

In May 2003, the City of Irvine (City) certified the Final Program EIR for the Orange County Great Park (OCGP), SCH No. 2002101020 (2003 OCGP EIR), which analyzed the environmental effects of the development of 3,625 residential units and 6,585,594 square feet of nonresidential development (including Great Park and other non–Great Park Neighborhood uses) on a portion of the former MCAS El Toro site. Subsequently, the City approved seven addenda to the 2003 OCGP EIR.

#### 1.4.2 2011 Orange County Great Park Certified Supplemental Environmental Impact Report

In September 2011, the Irvine City Council (City Council) certified a Supplemental EIR (2011 OCGP Supplemental EIR), which analyzed a total of 4,894 dwelling units and 6,585,594 square feet of nonresidential uses (including Great Park uses and other non–Great Park Neighborhood uses) on a portion of the former MCAS El Toro site. The City Council then approved an eighth Addendum in October 2011. This Addendum included educational land uses but did not specifically include Solis Park School. The actions analyzed in the 2003 OCGP EIR, the eighth Addenda, and the 2011 Supplemental EIR are referred to collectively as the 2011 Certified EIR.

### **1.4.3 2012 Orange County Great Park Certified Supplemental Environmental Impact Report**

In November 2013, the Irvine City Council certified a Second Supplemental EIR (2012 Supplemental EIR), which addressed the environmental effects associated with the implementation of the Heritage Fields 2012–General Plan Amendment and Zone Change Project (Heritage Fields Project) at the former MCAS El Toro base, further increasing the development density allowed under the 2011 Supplemental EIR. The Heritage Fields Project included the development of 9,500 residential units, 220,000 square feet of retail uses, 11,000 square feet of childcare, 25,000 square feet of church/synagogue, 1,282,222 square feet of multi-use non-residential, 3,364,000 square feet of medical and science uses, two kindergarten through eighth grade (K–8) schools, one high school, and 100 acres of neighborhood park uses in the Great Park Neighborhood.

### **1.4.4 2019 Environmental Impact Report Addendum**

In February 2019, the District prepared an Addendum to the 2003 certified EIR, which analyzed the construction and operation of a new K–8 school (Solis School, previously referred to as K–8 school no. 3) that would be located in District 5 of the Great Park Neighborhood, and have a total capacity of 1,000 students. The analyzed the construction of 102,278 square feet of construction and contained seven buildings including classrooms, gymnasium, multipurpose room, library, administration, kindergarten, and daycare.

### **1.4.5 Documents Incorporated by Reference**

The following documentation was previously prepared for the approved project:

- City of Irvine General Plan
- City of Irvine Zoning Ordinance
- Irvine Unified School District Final Program Environmental Impact Report for the Orange County Great Park Final, May 2003 (SCH No. 2002101020)

**1. INTRODUCTION**

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## 2. ENVIRONMENTAL SETTING

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### 2.1 PROJECT LOCATION

The Solis Park School campus (campus) is at 101 Abacus (APN 591-701-01) in the City of Irvine, Orange County, California (Figure 1, *Regional Location*). The proposed project would occur within 0.6 acre of the existing 13.36-acre campus, in the Great Park Neighborhoods community (project site) (Figure 2, *Local Vicinity*, and Figure 3, *Aerial Photograph*).

### 2.2 SOLIS PARK SCHOOL

Solis Park School opened in August 2022 and currently serves students from transitional kindergarten (TK) through eighth grade. In the 2025–2026 school year, Solis Park School had an enrollment of approximately 1,000 students. Additionally, IUSD had an enrollment of approximately 38,000 students in the 2025–2026 school.

### 2.3 ENVIRONMENTAL SETTING

#### 2.3.1 Regional and Local Setting

The City of Irvine is bound by the cities of Santa Ana, Tustin, and unincorporated Orange County to the north; the City of Newport Beach and unincorporated Orange County to the south; the cities of Lake Forest and Laguna Hills and unincorporated Orange County to the east; and the City of Costa Mesa to the west. Regional access to the project site is provided primarily by State Route 133 (SR-133), approximately 0.3 mile west of the campus, and Interstate 5 (I-5), approximately 1.4 miles southwest of the campus (Figure 1).

The Solis Park School campus is in the Great Park Neighborhoods community. The campus is bordered by Culture to the north, Sentosa to the south, Abacus to the east, and Baluster to the west. Residential neighborhoods surround the project site. Primary access to the school is provided via Abacus and Culture, which through surface streets, connect to major arterials, including Lynx.

#### 2.3.2 Existing Land Use and Conditions

The project site is within the developed and operating Solis Park School campus, which serves students from TK through eighth grade. The campus occupies approximately 13.36 acres and

## **2. ENVIRONMENTAL SETTING**

includes classroom buildings, administrative offices, a multipurpose building, playfields, hardcourts, playground equipment, and landscaped areas. Surface parking lots are on the perimeter of the school, and designated pedestrian and bicycle access points are provided from surrounding neighborhood streets. As shown in Figure 3, the project site is primarily developed.

The project site is fully developed and maintained for educational and recreational use. All areas within the proposed project footprint have been previously disturbed and graded, and there are no natural or sensitive biological resources on or adjacent to the project site. The school facilities were constructed in coordination with the broader Great Park Neighborhoods development, and existing infrastructure (i.e., water, sewer, storm drain, and utilities) is already in place to serve the project site.

### **2.3.3 Surrounding Land Uses**

Solis Park School is within the Great Park Neighborhoods, surrounded primarily by newly constructed single-family and multifamily residential developments, along with associated parks and landscaped open spaces. The Orange County Great Park, a major regional recreational and cultural facility, is approximately one mile west of the school.

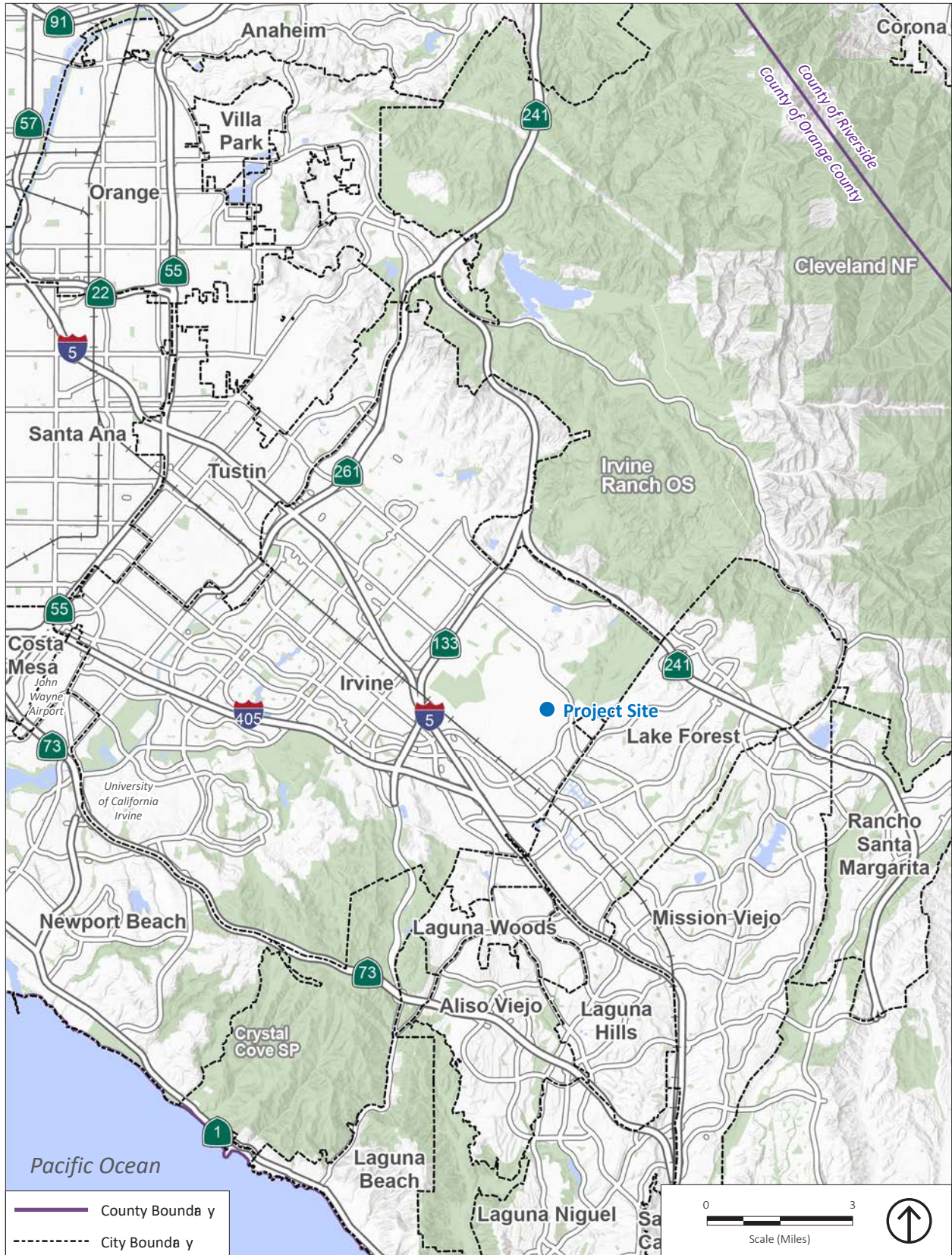
The school and immediate surroundings are fully built out with no vacant or undeveloped land parcels. The campus is not within any designated Focus Areas in the 2045 Irvine General Plan, but instead resides within a master-planned mixed-use neighborhood designed to integrate educational and recreational uses with housing and community amenities.

### **2.3.4 General Plan Land Use and Zoning**

The campus is zoned Trails and Transit Oriented Development (TTOD) and has a land use designation of Education Facility (EDU) under the 2045 Irvine General Plan. Surrounding properties are designated for Low- to Medium-Density Residential uses and are zoned accordingly under the Great Park Neighborhoods Specific Plan. Community parks and open spaces nearby are designated Public/Institutional or Open Space under the General Plan.

The proposed project would be confined to the existing Solis Park School campus boundaries and would not necessitate any amendments to the current General Plan land use designation or zoning.

ADDENDUM TO THE ORANGE COUNTY GREAT PARK EIR  
SOLIS PARK SCHOOL EXPANSION PROJECT  
IRVINE UNIFIED SCHOOL DISTRICT



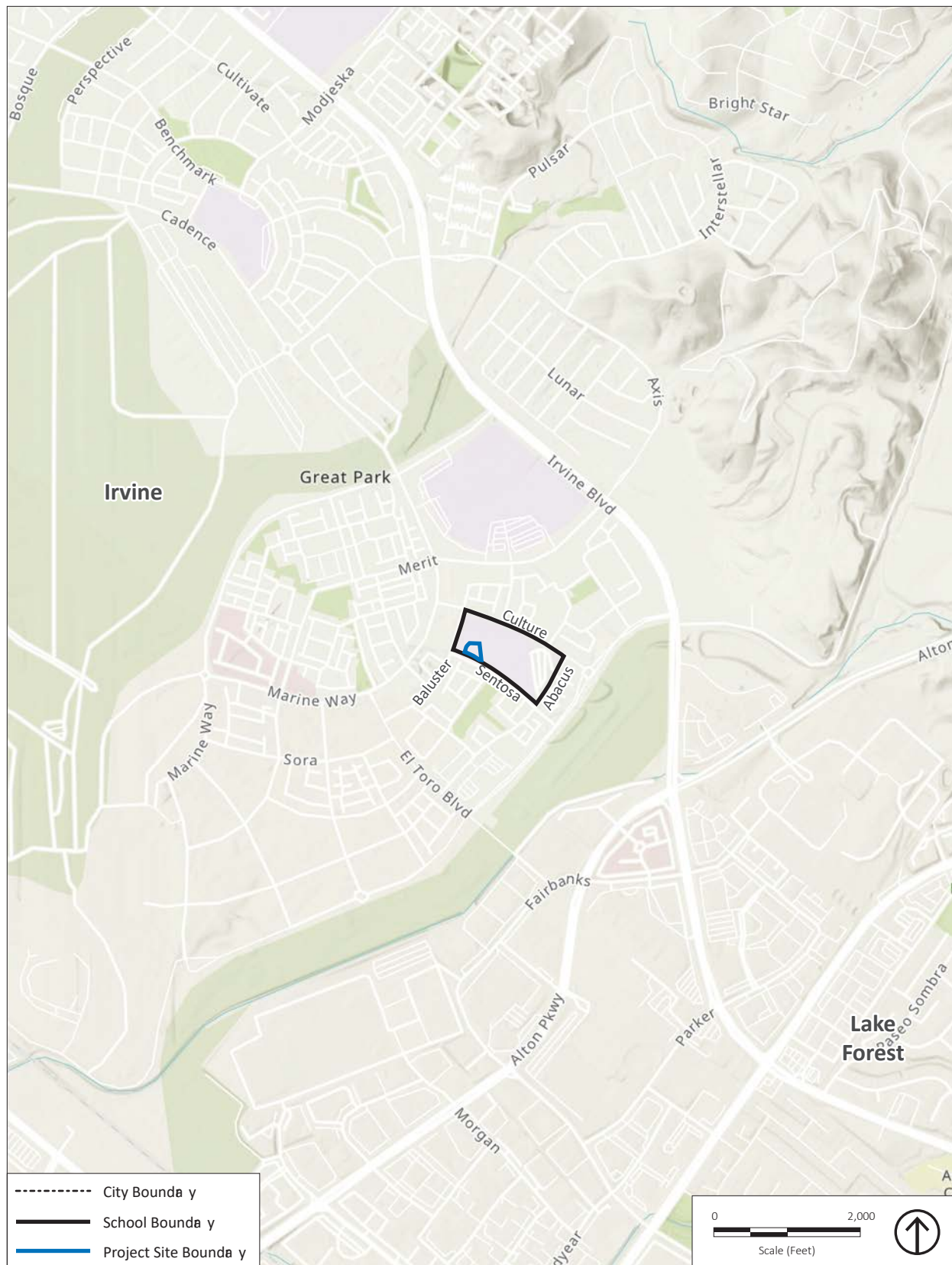
Source: Generated using ArcMap 2025.

Figure 1  
Regional Location

**2. ENVIRONMENTAL SETTING**

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ADDENDUM TO THE ORANGE COUNTY GREAT PARK EIR  
SOLIS PARK SCHOOL EXPANSION PROJECT  
IRVINE UNIFIED SCHOOL DISTRICT



Source: Generated using ArcMap 2025.

Figure 2  
Local Vicinity

**2. ENVIRONMENTAL SETTING**

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ADDENDUM TO THE ORANGE COUNTY GREAT PARK EIR  
SOLIS PARK SCHOOL EXPANSION PROJECT  
IRVINE UNIFIED SCHOOL DISTRICT



Source: Nea map 2025.

Figure 3  
Site Aerial

**2. ENVIRONMENTAL SETTING**

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## 3. PROJECT DESCRIPTION

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### 3.1 PROJECT BACKGROUND

As stated in Section 1.4, *Environmental Documentation*, the 2003 OCGP EIR analyzed the reuse and development of approximately 4,693 acres of the former MCAS El Toro, including up to 3,625 residential units and 6,585,594 square feet of nonresidential uses such as cultural, institutional, and recreational facilities, as well as major park and open space improvements.

The 2011 OCGP Supplemental EIR evaluated revised development assumptions, including a total of 4,894 residential units and the same overall 6,585,594 square feet of nonresidential uses. In October 2011, the City approved an eighth addendum, which expanded the scope of analyzed land uses to include educational facilities within the Great Park planning area, although it did not specifically identify Solis Park School.

The 2003 Certified EIR and its MMRP serve as the environmental baseline for this Addendum, which evaluates the proposed Solis Park School expansion project.

### 3.2 PROPOSED PROJECT

The proposed project includes the construction of a new two-story classroom building within the existing Solis Park School campus. As a result of the proposed project, student capacity on the campus would increase by approximately 300 students, from 1,000 to 1,300 students.

#### 3.2.1 New Classroom Building

The proposed project includes the construction of a new, two-story, 20,422-square-foot classroom building on the south side of the campus, adjacent to Sentosa. The new classroom building would include 11 permanent classrooms and several support areas (Figure 4, *Conceptual Site Plan*).

The new classroom building would consist of a 10,310-square-foot first floor, that would include four classrooms, a staff work room, office space, student and staff restrooms, shared common areas, an elevator, machine room, and electrical data room. Two of the four classrooms on the first floor would be for special education. Additionally, the 10,112-square-foot second floor would include seven classrooms, a science room and science work space, art/elective room, single occupancy restroom, elevator, shared common areas, storage room, and custodians' room (Figure 5, *First and Second Floor Site Plans*, and Figure 6, *Proposed Project Renderings*).

### **3. PROJECT DESCRIPTION**

#### **3.2.2 Construction**

The proposed project would be constructed in a single phase between February 2027 and August 2028. Site preparation would be limited to removing asphalt and concrete paving, underground utilities, basketball standards, ball walls, fencing, and multiple trees and ground cover planting. No demolition of permanent structures would occur. Construction of the new building would disturb 0.6 acre (Figure 3), and would use standard heavy equipment, with staging in designated areas within school campus. After completion, the new building would comply with the most recent Title 24 energy-efficiency standards.



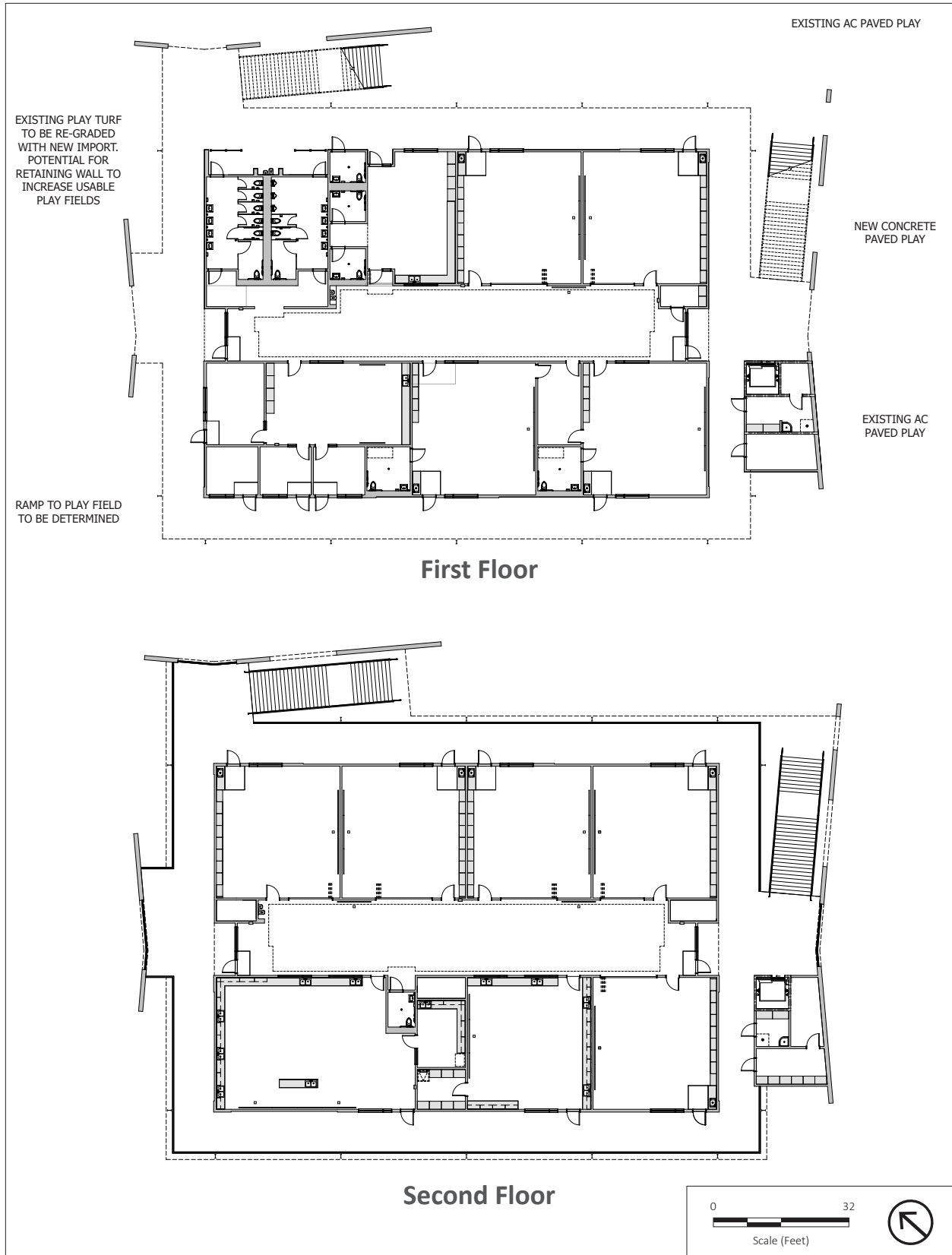
Source: PJHM Architects 2026.

Figure 4  
Conceptual Site Plan

**3. PROJECT DESCRIPTION**

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ADDENDUM TO THE ORANGE COUNTY GREAT PARK EIR  
SOLIS PARK SCHOOL EXPANSION PROJECT  
IRVINE UNIFIED SCHOOL DISTRICT



Source: PJHM Architects 2026.

Figure 5  
First and Second Floor Site Plan

**3. PROJECT DESCRIPTION**

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Source: PJHM Architects 2025.

Figure 6  
Proposed Project Renderings

**3. PROJECT DESCRIPTION**

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## 4. ENVIRONMENTAL ANALYSIS

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The Certified EIR determined that most environmental impacts could be reduced to less-than-significant levels with mitigation. However, significant and unavoidable impacts were identified related to traffic and circulation (cumulative freeway and tollway ramp conditions), air quality (construction and operational emissions exceeding South Coast Air Quality Management District [AQMD] thresholds), agricultural resources (permanent conversion of farmland), and population and housing (exacerbation of the regional jobs to housing imbalance). A Mitigation Monitoring and Reporting Program (MMRP) was adopted to ensure implementation of applicable measures.

### 4.1 AESTHETICS

#### 4.1.1 Summary of Impacts Identified in the Approved Project

The Certified EIR determined that the project site is not surrounded by any scenic vistas or is subject to any scenic highways. The Certified EIR determined that the project site does not contain any scenic resources. Development of the project site would not degrade the existing visual character or quality of the site and its surroundings. The Certified EIR determined a potentially significant impact would occur resulting from light and glare associated with the high school athletic fields, nighttime lighting from parking lots, walkways, and buildings. Impacts were reduced to a less-than-significant level with the implementation of mitigation measures.

**4. ENVIRONMENTAL ANALYSIS**

**4.1.2 Impacts Associated with the Proposed Project**

The following table summarizes the level of impact from the Certified EIR related to aesthetics and conditions resulting from the proposed project requiring subsequent review.

Except as provided in Public Resources Code Section 21099, would the project:	Level of Impact in Certified EIR	Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum CEQA Guidelines Section 15164
		Change in Project or Circumstances Involving New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(1-2)</i>	New Information Showing New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(3)(A-B)</i>	New Mitigation or Alternative to Reduce Significant Effect Is Declined <i>CEQA Guidelines Section 15162(a)(3)(C-D)</i>	
a) Have a substantial adverse effect on a scenic vista?	LTS	No	No	No	Yes
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	LTS	No	No	No	Yes
c) In nonurbanized 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?	LTS	No	No	No	Yes
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	LTS/M	No	No	No	Yes

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation;  
 SU = significant and unavoidable; N/A = topic not analyzed in Certified EIR

**4. ENVIRONMENTAL ANALYSIS**

**a) Would the project have a substantial adverse effect on a scenic vista?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

As discussed previously, the Certified EIR determined that the approved project would not result in adverse impacts to a scenic vista because the planning area, which includes the proposed project site, is in a developing urbanized area, and no scenic vistas have been identified near or within the planning area. The project site is currently developed with the existing Solis Park School. Like the approved project, development of the proposed project would not result in any new impacts that were not previously disclosed in the Certified EIR and therefore, the preparation of a subsequent or supplemental EIR is not warranted.

**b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The Certified EIR determined that none of the surrounding roadways are designated county or state scenic highways. The City's General Plan designates I-5 as an urban character highway. The I-5 is approximately two miles southwest of the project site. As with the approved project, the proposed project is not near a state scenic highway and would not result in substantial damage to scenic resources (Caltrans 2025). Therefore, no new changes or impacts would occur as a result of the development of the proposed project, and the preparation of a subsequent or supplemental EIR is not warranted.

**c) In nonurbanized 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?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

Like the approved project, the proposed project would not degrade the existing visual character or quality of the project site and its surroundings. The proposed project is in an already developed area in an urbanized city and within the existing Solis Park School. Development of the proposed project would not affect the visual character of the City of Irvine. The project site is zoned Industrial and designated Education Facility (EDU). As with the approved project, the proposed project is a permitted use under the zoning designation and general visual impacts from the proposed development would be consistent with those assumed in the Certified EIR. Therefore, implementation of the proposed project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. Therefore, no new changes or impacts would occur as a result of the development of the proposed project, and the preparation of a subsequent or supplemental EIR is not warranted.

#### **4. ENVIRONMENTAL ANALYSIS**

- d) **Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

There are no existing limits for light and glare defined by adopted City regulations or requirements that apply to the proposed project. As discussed in the Certified EIR, in addition to athletic amenities, the approved project involved lighting from the parking lots, walkways, and buildings, and would be installed in compliance with the City of Irvine's Uniform Security Code (Chapter 5 of the Irvine Municipal Code) and Chapter 3-16, Lighting, of the City's Zoning Ordinance to confine lighting sources to the project site and protect adjacent properties from glare. No new sports lighting would be added or modified as part of the proposed project, and the proposed project would not introduce lighting nor reflective surfaces at substantially greater intensities than existing lights and buildings near the project site. The proposed project would not result in a new source of substantial light or glare and would not impact daytime or nighttime views. The Certified EIR implemented mitigation measures that reduced lighting and glare impacts of the approved project to a less-than-significant level. However, the proposed project would not result in light and glare impacts, thus these mitigation measures would not apply to the proposed project. Therefore, with implementation of mitigation, no new impacts would occur, and there are no changes or new information associated with development of the proposed project that would require the preparation of a subsequent or supplemental EIR.

#### **4.1.3 Adopted Mitigation Measures Applicable to the Proposed Project**

The Certified EIR identified Mitigation Measures A-1 and A-2 to reduce aesthetic impacts. However, none of the mitigation measures referenced in the Certified EIR would apply to the proposed project, and no new mitigation measures would be required. No change or impact would occur under the proposed project that would require the preparation of a subsequent or supplemental EIR.

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## 4.2 AGRICULTURE AND FORESTRY RESOURCES

### 4.2.1 Summary of Impacts Identified in the Approved Project

The Certified EIR determined that the approved project would result in the permanent loss of approximately 802 acres of land classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Development of the approved project would result in the loss of agricultural land. There were no feasible mitigation measures outlined in the Certified EIR that would address the conversion of agricultural land to urban uses. Conversion of farmland to non-agricultural use was deemed significant and unavoidable by the Certified EIR.

### 4.2.2 Impacts Associated with the Proposed Project

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

	Level of Impact in Certified EIR	Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum CEQA Guidelines Section 15164
		Change in Project or Circumstances Involving New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(1-2)</i>	New Information Showing New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(3)(A-B)</i>	New Mitigation or Alternative to Reduce Significant Effect Is Declined <i>CEQA Guidelines Section 15162(a)(3)(C-D)</i>	
<b>Would the Project:</b>	<b>EIR</b>				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	SU	No	No	No	Yes

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Would the Project:	Level of Impact in Certified EIR	Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum CEQA Guidelines Section 15164
		Change in Project or Circumstances Involving New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(1-2)</i>	New Information Showing New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(3)(A-B)</i>	New Mitigation or Alternative to Reduce Significant Effect Is Declined <i>CEQA Guidelines Section 15162(a)(3)(C-D)</i>	
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	SU	No	No	No	Yes
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	LTS	No	No	No	Yes
d) Result in the loss of forest land or conversion of forest land to non-forest use?	LTS	No	No	No	Yes
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?	SU	No	No	No	Yes

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation;  
 SU = significant and unavoidable; N/A = topic not analyzed in Certified EIR

**a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**  
 The project site is zoned TTOD that allows for a mix of residential, commercial, recreational, and

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educational uses that support a multiuse environment. The proposed project would not require a change in the land use designation for the project site. Although portions of the approved project site are formerly designated Prime Farmland, the project site is designated as Urban and Built-Up Land and does not contain any farmland (DOC 2025a). Agricultural uses do not currently exist and are not planned on the existing elementary school campus. Impacts related to the conversion of farmland identified as significant and unavoidable by the Certified EIR are not applicable to the proposed project. No new impact to agricultural resources is anticipated as a result of the proposed project. Therefore, the preparation of a subsequent or supplemental EIR is not warranted.

**b) Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The project site is zoned TTOD and is not under a Williamson Act contract (DOC 2025b). Agricultural uses do not exist and are not planned on the project site. Additionally, the project site has already been developed with the current campus; therefore, no agricultural zoning impacts would occur, and no changes or new information would occur that would require the preparation of a subsequent or supplemental EIR.

**c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The Certified EIR determined that the planning area does not contain land use or zoning for forest land, timberland, or timberland production, nor was zoning or land uses for these uses proposed under the approved project. No conflict with zoning for or rezoning of forest and timberland would occur through development of the proposed project. Therefore, the proposed project would not result in new impacts, as compared to the approved project, and no changes or new information require the preparation of a subsequent or supplemental EIR.

**d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The Certified EIR determined there is no forest land within the boundaries of the planning area, nor was zoning or land uses for these uses proposed under the approved project. Similar to the approved project, the proposed project would not result in the loss of forest land or the conversion of forest land to non-forest use. Therefore, the proposed project would not result in

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new impacts, as compared to the approved project, and no changes or new information resulting would require the preparation of a subsequent or supplemental EIR.

- e) **Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forest land to non-forest use?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

Although portions of the approved project site are formerly designated Prime Farmland, the project site is designated as Urban and Built-Up Land and does not contain any farmland (DOC 2025a). Agricultural uses do not currently exist and are not planned on the existing campus. Impacts related to the conversion of farmland identified as significant and unavoidable by the Certified EIR are not applicable to the proposed project. No other changes in the existing environment are proposed, which, due to their location or nature, would result in conversion of Farmland, to nonagricultural use or conversion of forest to non-forest use not already stated. Therefore, no impact would occur as a result of the proposed project, and the preparation of a subsequent or supplemental EIR is not warranted.

#### **4.2.3 Adopted Mitigation Measures Applicable to the Proposed Project**

The Certified EIR identified Mitigation Measures AG-1 through AG-3 to reduce impacts on agricultural resources. However, none of the mitigation measures referenced in the Certified EIR would apply to the proposed project, and no new mitigation measures would be required. No change or impact would occur under the proposed project that would require the preparation of a subsequent or supplemental EIR.

## 4.3 AIR QUALITY

### 4.3.1 Summary of Impacts Identified in the Approved Project

The City of Irvine is in Orange County, California, which lies within the South Coast Air Basin (SoCAB). The South Coast AQMD is the agency responsible for preparing the air quality management plan (AQMP) for the SoCAB in coordination with the Southern California Association of Governments (SCAG). The Certified EIR determined there would be no impact in regard to the creation of objectionable odors that would affect a substantial number of people. The Certified EIR also determined that there would be no new impacts, or increase in the severity of impacts, with respect to exposure of sensitive receptors<sup>1</sup> to substantial pollutant concentrations from construction activities. The Certified EIR identified that mass criteria air pollutant emissions generated during construction of the approved project of volatile organic compounds (VOCs), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), coarse inhalable particulate matter (PM<sub>10</sub>), and fine inhalable particulate matter (PM<sub>2.5</sub>) would be greater than the applicable South Coast AQMD mass daily thresholds and would cumulatively contribute to the nonattainment designations of the SoCAB. For long-term operations, regional operational emissions of CO, VOC, NO<sub>x</sub>, and PM<sub>2.5</sub> would exceed South Coast AQMD's regional significance thresholds and would cumulatively contribute to the nonattainment designations of the SoCAB. The Certified EIR determined that the long-term operation of the approved project would result in significant and unavoidable impacts due to emissions of VOCs. The Certified EIR did not identify any land within the project site that handles large amounts of solid waste, chemicals associated with heavy industry, or other uses that may generate objectionable odors are known under the approved project. Although mitigation measures identified in the Certified EIR would reduce air quality impacts of the approved project, air quality impacts were identified as a significant and unavoidable impact of the approved project.

### 4.3.2 Impacts Associated with the Proposed Project

The primary air pollutants of concern for which ambient air quality standards (AAQS) have been established are ozone (O<sub>3</sub>), CO, PM<sub>10</sub>, PM<sub>2.5</sub>, sulfur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>), and lead (Pb). Areas are classified under the federal and California Clean Air Act as either in attainment or nonattainment for each criteria pollutant based on whether the AAQS have been achieved. The SoCAB, which is managed by the South Coast AQMD, is designated nonattainment for O<sub>3</sub> and PM<sub>2.5</sub> under the California and National AAQS, nonattainment for

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<sup>1</sup> A sensitive receptor is an individual/group or area that is vulnerable to harm from an environmental impacts like pollution or noise. This could include residences, schools, hospitals, among others. Sensitive receptor referenced in this document refer to the single-family homes located near the campus.

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PM<sub>10</sub> under the California AAQS, and nonattainment for lead (Los Angeles County only) under the National AAQS (CARB 2023).

Furthermore, the South Coast AQMD has identified regional thresholds of significance for criteria pollutant emissions and criteria air pollutant precursors, including VOC, CO, NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. Development projects below the regional significance thresholds are not expected to generate sufficient criteria pollutant emissions to violate any air quality standard or contribute substantially to an existing or projected air quality violation. Where available, the significance criteria established by the South Coast AQMD may be relied upon to make the following determinations.

	Level of Impact in Certified EIR	Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum CEQA Guidelines Section 15164
		Change in Project or Circumstances Involving New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(1-2)</i>	New Information Showing New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(3)(A-B)</i>	New Mitigation or Alternative to Reduce Significant Effect Is Declined <i>CEQA Guidelines Section 15162(a)(3)(C-D)</i>	
<b>Would the Project:</b>					
a) Conflict with or obstruct implementation of the applicable air quality plan?	LTS	No	No	No	Yes
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?	SU	No	No	No	Yes
c) Expose sensitive receptors to substantial pollutant concentrations?	LTS	No	No	No	Yes
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	LTS	No	No	No	Yes

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation;  
 SU = significant and unavoidable; N/A = topic not analyzed in Certified EIR

**a) Would the project conflict with or obstruct implementation of the applicable air quality plan?**

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**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The Certified EIR determined that the approved project would be consistent with the AQMP because it furthers the objectives of SCAG's regional objectives to increase residential density near existing employment and transportation centers. Since the certification of the EIR, the South Coast AQMD adopted the 2022 AQMP. Regional growth projections are used by South Coast AQMD to forecast future emission levels in the SoCAB. For Southern California, these regional growth projections are provided by the SCAG and are partially based on land use designations included in city and county general plans. Typically, only large, regionally significant projects have the potential to affect the regional growth projections.

Changes in population, housing, or employment growth projections have the potential to affect SCAG's demographic projections and therefore the assumptions in South Coast AQMD's AQMP. The proposed project would involve development of a new two-story classroom building in the west corner of the campus. Thus, based on the scope and nature of the proposed project, it would not be a regionally significant project that has the potential to result in changes in population, housing, or employment in the City of Irvine. As such, the proposed project is not considered a project of statewide, regional, or areawide significance that would require intergovernmental review under Section 15206(b) of the CEQA Guidelines and would not have the potential to substantially affect SCAG's demographic projections. Additionally, as demonstrated in Section 4.3.2(b), the regional emissions that would be generated by the operational phase of the proposed project would be less than the South Coast AQMD emissions thresholds and would therefore not be considered by South Coast AQMD to be a substantial source of air pollutant emissions that would have the potential to affect the attainment designations in the SoCAB. Therefore, like the approved project, the proposed project would not affect the regional emissions inventory or conflict with strategies in the AQMP. No new impacts would occur, and there would be no changes or new information associated with the development of the proposed project that would require the preparation of a subsequent or supplemental EIR.

**b) Would the project 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?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

Construction activities would generate air pollutants. These emissions would primarily be (1) exhaust from off-road diesel-powered construction equipment, (2) dust generated by construction activities, (3) exhaust from on-road vehicles, and (4) off-gassing of VOCs from paints and asphalt.

The Certified EIR determined that the approved project's construction emissions would remain consistent with all applicable emissions thresholds with mitigation incorporated. Construction activities associated with the proposed project are anticipated to disturb approximately 0.6 acre

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on the existing campus. The proposed project would involve site preparation and soil haul, grading, building construction, paving, architectural coating, and finishing/landscaping. Construction would occur over approximately 20 months, from January 2027 to August 2028. Consistent with the Certified EIR, construction-related emissions would be temporary in nature, limited to the project site and immediate vicinity, and would not contribute substantially to cumulative air quality impacts given the scale of activity. Maximum daily emissions for NO<sub>x</sub>, CO, SO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> from construction-related activities would be less than their respective South Coast AQMD regional significance threshold values. Impacts to the regional air quality associated with construction of the proposed project would be less than significant. Therefore, no new impacts would occur, and there would be no changes or new information associated with development of the proposed project that would require the preparation of a subsequent or supplemental EIR.

##### **c) Would the project expose sensitive receptors to substantial pollutant concentrations?**

###### **Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The proposed project could expose sensitive receptors to elevated pollutant concentrations if it causes or significantly contributes to elevated pollutant concentration levels. Unlike regional emissions, localized emissions are typically evaluated in terms of air concentration rather than mass so they can be more readily correlated to potential health effects. The nearest receptors to the project site are the single-family residences located approximately 100 feet south, across Sentosa.

Air pollutant emissions generated by construction activities would cause temporary increases in air pollutant concentrations. The Certified EIR determined that the approved project would not expose sensitive receptors to significant air pollutant concentrations. Currently, South Coast AQMD does not require the evaluation of long-term excess cancer risk or chronic health impacts for a short-term project. The proposed project is anticipated to be completed in approximately 20 months, which would limit the exposure for on-site and off-site receptors. Furthermore, construction activities would not generate on-site exhaust emissions that would exceed the screening-level construction localized significance threshold (LSTs). Thus, construction emissions would not pose a health risk to on-site and off-site receptors, and proposed project-related construction health impacts would be less than significant.

Operation of the proposed project would not generate substantial emissions from on-site stationary sources. Land uses that have the potential to generate substantial stationary sources of emissions include industrial land uses, such as chemical processing and warehousing operations where truck idling would occur on site and would require a permit from South Coast AQMD. The proposed project involves the construction of a new classroom and would not fall within these categories of uses. Localized air quality impacts related to operation-related emissions would be less than significant. Therefore, no new impacts would occur, and there

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would be no changes or new information associated with development of the proposed project that would require the preparation of a subsequent or supplemental EIR.

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

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The Certified EIR determined that odor impacts from the approved project would be less than significant. Similarly, the proposed project would not result in objectionable odors. The threshold for odor is if a project creates an odor nuisance pursuant to South Coast AQMD Rule 402, *Nuisance*, which states the following:

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.

The type of facilities that are considered to have objectionable odors include wastewater treatment plants, compost facilities, landfills, solid waste transfer stations, fiberglass manufacturing facilities, paint/coating operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch plants, chemical manufacturing, and food manufacturing facilities. The proposed project involves the construction of a new two-story classroom building on the south side of the existing campus and would not fall within the objectionable odors land uses. The proposed project would continue to be operated as a school. Emissions from construction equipment, such as diesel exhaust and VOCs from architectural coatings and paving activities may generate odors. However, these odors would be low in concentration, temporary, and would not affect a substantial number of people. Therefore, no new odor impacts would occur as a result of the proposed project, and there would be no changes or new information associated with development of the proposed project that would require the preparation of a subsequent or supplemental EIR.

### **4.3.3 Adopted Mitigation Measures Applicable to the Proposed Project**

The Certified EIR identified Mitigation Measures AQ-1 through AQ-5 to reduce impacts on air quality. However, only Mitigation Measure AQ-1 would apply to the proposed project. The

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following revised mitigation measure is referenced in the Certified EIR, and would apply to the proposed project to reduce impacts on air quality:

**AQ- 1** Prior to the start of ~~demolition and~~ construction within the project area, adjacent sensitive receptors shall be informed of the planned ~~demolition and~~ construction activities. Measures to avoid significantly impacting these receptors shall be developed and implemented by the IUSD project proponent, ~~in coordination with these uses. Other applicable mitigation measures~~ such as erection of fences around construction areas; staggered use of equipment near sensitive receptors; diversion of truck trips away from receptors; etc.; shall be employed as necessary. Compliance with this measure shall be verified by the ~~Director of Community Development~~ IUSD.

Implementation of this mitigation measure from the Certified EIR would reduce all significant impacts on air quality to a less-than-significant level. No change or impact would occur under the proposed project that would require the preparation of a subsequent or supplemental EIR.

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## 4.4 BIOLOGICAL RESOURCES

### 4.4.1 Summary of Impacts Identified in the Approved Project

The Certified EIR concluded that implementation of the approved project would not result in adverse effects on biological resources, including loss of habitat occupied by sensitive or special-status species, loss of sensitive plant communities, wetlands, or wildlife corridors, with implementation of mitigation measures. Very few biological resources have a high potential to exist on the project site. No designated preserve areas are found within the project site. The Certified EIR determined that implementation of the approved project would not conflict with any conservation plans, and impacts to biological resources would remain less than significant.

### 4.4.2 Impacts Associated with the Proposed Project

The following table summarizes the level of impact from the Certified EIR related to biological resources and conditions resulting from the proposed project requiring subsequent review.

	Level of Impact in Certified EIR	Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum CEQA Guidelines Section 15164
		Change in Project or Circumstances Involving New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(1-2)</i>	New Information Showing New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(3)(A-B)</i>	New Mitigation or Alternative to Reduce Significant Effect Is Declined <i>CEQA Guidelines Section 15162(a)(3)(C-D)</i>	
<b>Would the Project:</b>					
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	LTS	No	No	No	Yes

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	Level of Impact in Certified EIR	Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum CEQA Guidelines Section 15164
		Change in Project or Circumstances Involving New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(1-2)</i>	New Information Showing New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(3)(A-B)</i>	New Mitigation or Alternative to Reduce Significant Effect Is Declined <i>CEQA Guidelines Section 15162(a)(3)(C-D)</i>	
<b>Would the Project:</b>					
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	LTS	No	No	No	Yes
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?	LTS	No	No	No	Yes
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?	LTS	No	No	No	Yes
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	LTS	No	No	No	Yes

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	Level of Impact in Certified EIR	Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum CEQA Guidelines Section 15164
		Change in Project or Circumstances Involving New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(1-2)</i>	New Information Showing New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(3)(A-B)</i>	New Mitigation or Alternative to Reduce Significant Effect Is Declined <i>CEQA Guidelines Section 15162(a)(3)(C-D)</i>	
<b>Would the Project:</b>					
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?	LTS	No	No	No	Yes

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation; SU = significant and unavoidable; N/A = topic not analyzed in Certified EIR

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

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**  
The Certified EIR determined that several sensitive plant species potentially occur in the greater project area of the approved project. Impacts related to habitat modification and special-status species within the greater planning area were addressed and mitigated in the Certified EIR. Furthermore, the project site is currently built out and has been developed for educational uses. As such, implementation of the proposed project would not result in any new significant impacts or increase in the severity of impact previously identified. No new impacts would occur that would require the preparation of a subsequent or supplemental EIR.

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

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**  
The project site is zoned TTOD and is approved for urban mixed uses under the approved project. No riparian habitat or other sensitive natural communities currently exist on site (USFWS 2025). The project site is currently developed for and operating under educational use designation. The proposed project would not increase the severity of impacts on any sensitive natural communities. Therefore, no new impacts would occur, and no new changes associated

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with development of the proposed project would require the preparation of a subsequent or supplemental EIR.

- c) **Would the project 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?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

According to the National Wetland Inventory, there are no state or federally protected wetlands within the project site. There is currently a freshwater pond approximately 0.3 mile northeast of the project site (USFWS 2025). The project site is currently developed for and operating under educational use designation, and development of the proposed project would not alter the wetland. No watercourse runs through the project site. Therefore, no changes or new impacts would occur that would warrant the preparation of a subsequent or supplemental EIR.

- d) **Would the project 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?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

There are no natural wildlife corridors or nursery sites associated with the project site. According to the Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) and Implementation Agreement, there are no designated preserve areas within the planning area. The proposed project would not interfere with the movement of migratory fish or wildlife species. The project site is designated TTOD and is not part of the wildlife corridor designed as part of the 2003 Orange County General Plan. Therefore, no new changes would occur with the implementation of the proposed project and would not warrant the preparation of a subsequent or supplemental EIR.

- e) **Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

- f) **Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.** The City of Irvine enacted the Urban Forestry Ordinance in 1994 that would require a permit for the removal of any trees in the public right-of-way, trees considered significant by the Irvine Municipal Code, boundary trees, or parking lot trees (City of Irvine 2025). The proposed project would require the removal of ornamental trees and landscaping in the school's playfield within the boundaries of the campus. Implementation of the proposed project would not remove any trees from the public right-of-way, and would include the removal of protected, boundary, or parking lot trees; thus, the proposed project would not conflict with the Urban Forestry Ordinance. Therefore, no impact would occur, and no

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changes or new information would require the preparation of a subsequent or supplemental EIR.

- g) Would the project conflict with the provisions of an adopted Habitat Conservation Plan; Natural Community Conservation Plan; or other approved local, regional, or state habitat conservation plan?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The project site is in the Great Parks Neighborhood community, designated in the City of Irvine General Plan. The Orange County General Plan adopted an HCP/NCCP, which designated portions of Planning Area 51 for habitat preserve. The project site is not designated habitat preserve by the adopted HCP/NCCP. Development of the proposed project would not conflict with the HCP/NCCP. Therefore, no new impacts would occur, and no changes or new information would require the preparation of a subsequent or supplemental EIR.

### **4.4.3 Adopted Mitigation Measures Applicable to the Proposed Project**

The Certified EIR identified Mitigation Measures BIO-1 through BIO-4 to reduce impacts on biological resources. However, none of the mitigation measures referenced in the Certified EIR would apply to the proposed project, and no new mitigation measures would be required. No change or impact would occur under the proposed project that would require the preparation of a subsequent or supplemental EIR.

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**4.5 CULTURAL RESOURCES**

**4.5.1 Summary of Impacts Identified in the Approved Project**

The Certified EIR determined that impacts to cultural resources would be less than significant. The Certified EIR determined that there are no features or characteristics of the project area that define or include unique ethnic cultural values. There are no known or documented culturally significant religious or sacred uses associated with the project area. Grading activities have the potential to uncover previously undiscovered human remains and archaeological resources. In the event remains are uncovered, all work on the project site would be required to stop and the County Coroner and the Native American Heritage Commission would be notified. Mandatory compliance with these requirements would ensure that impacts to cultural resources are less than significant. Impacts to cultural resources would be less than significant after mitigation.

**4.5.2 Impacts Associated with the Proposed Project**

The following table summarizes the level of impact from the Certified EIR related to cultural resources and conditions resulting from the proposed project requiring subsequent review.

	Level of Impact in Certified EIR	Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum CEQA Guidelines Section 15164
		Change in Project or Circumstances Involving New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(1-2)</i>	New Information Showing New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(3)(A-B)</i>	New Mitigation or Alternative to Reduce Significant Effect Is Declined <i>CEQA Guidelines Section 15162(a)(3)(C-D)</i>	
<b>Would the Project:</b>					
a) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?	LTS	No	No	No	Yes
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?	LTS/M	No	No	No	Yes

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	Level of Impact in Certified EIR	Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum CEQA Guidelines Section 15164
		Change in Project or Circumstances Involving New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(1-2)</i>	New Information Showing New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(3)(A-B)</i>	New Mitigation or Alternative to Reduce Significant Effect Is Declined <i>CEQA Guidelines Section 15162(a)(3)(C-D)</i>	
<b>Would the Project:</b>					
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	LTS/M	No	No	No	Yes

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation;  
SU = significant and unavoidable; N/A = topic not analyzed in Certified EIR

**a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.** CEQA Guidelines Section 15064.5 defines historical resources as a resource listed or determined to be eligible for listing by the State Historical Resources Commission, a local register of historical resources, or the lead agency. The Certified EIR determined that no listings under the National Register of Historic Places would be impacted by the development of the approved project. Development of the proposed project would not result in an adverse impact to historical resources as the project site is currently developed, and no historic resources exist on site. Therefore, no new impacts would occur, and there would be no changes or new information associated with the development of the proposed project that would require the preparation of a subsequent or supplemental EIR.

**b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.** The Certified EIR states that the majority of previously documented archaeological resources in the project area are in the portions of Planning Area 51 designated as 1.4 Habitat Preserve in the zoning ordinance. There are 10 prehistoric archaeological sites and 8 isolated prehistoric artifacts that have been recorded in the northeastern habitat preserve portion of Planning Area 51. Although the project site is not in the habitat preserve and has been previously disturbed during construction of the existing campus, considering the sensitivity of the area, there is the potential that archaeological resources are present that may be disturbed during grading activities associated with the proposed project. The City of Irvine has standard conditions

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applied prior to the issuance of grading permits when a project site includes potentially significant archaeological sites. These include retaining a qualified archaeologist, establishing procedures for cultural and scientific resource surveillance, and protection of any resources discovered during the grading process. Thus, with adherence to Mitigation Measure CUL-2 as required under the Certified EIR and compliance with standard conditions of approval, impacts related to archaeological resources would be reduced and the development of the proposed project would not result in any new significant impacts to archaeological resources. Therefore, no new impacts would occur, and there would be no changes or new information associated with development of the proposed project that would require the preparation of a subsequent or supplemental EIR.

**c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The Certified EIR determined that no known human remains occur within the planning area and it is not anticipated that human remains are present within the planning area. However, in the event that human remains are discovered due to grading and excavation of the project site during construction of the proposed project, California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98 require that the District stop all work in the area of the find and notify the County Coroner and the Native American Heritage Commission. Mandatory compliance with these requirements would ensure that impacts to human remains are less than significant. Therefore, no new impacts would occur, and there would be no changes or new information associated with development of the proposed project that would require the preparation of a subsequent or supplemental EIR.

#### 4.5.3 Adopted Mitigation Measures Applicable to the Proposed Project

The Certified EIR identified Mitigation Measures CULT-1 through CULT-4 to reduce impacts on cultural resources. However, only Mitigation Measures CULT-2 through CULT-4 would apply to the proposed project. The following revised mitigation measures are referenced from the Certified EIR would apply to the proposed project to reduce impacts on cultural resources.

**CULT-2** Monitoring of excavation and grading activities associated with ~~future development in PAs 51 and 30~~ the proposed project shall be conducted by a certified archaeologist, that will be on-call and notified to be present for monitoring during all grading and other significant ground-disturbing activities that would occur beneath the existing artificial fill in accordance with the report required in Mitigation Measure CULT-1. If resources are encountered in the course of ground disturbance, the archaeological monitor shall be empowered to halt grading and to initiate an archaeological testing

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program. The testing shall include recordation of artifacts, controlled removal of the materials, and an assessment of their importance under CEQA and the City's local guidelines. Compliance with this measure shall be verified by the ~~Community Development Department~~ IUSD.

**CULT-3** ~~Prior to construction activities for the proposed project the issuance of grading permits and/or building permits for any future development in PAs 51 and 30, a detailed mitigation program shall be submitted by the applicant to the City of Irvine prepared by a qualified archaeologist to address archaeological resources discovered during grading. Provisions of the program shall include an immediate evaluation of the find by a qualified archaeologist. If the find is determined to be a unique archaeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation shall be available. Work may continue on other parts of the construction site while archaeological resource mitigation takes place. The City of Irvine has standard conditions applied prior to the issuance of grading permits when a project site includes potentially significant archaeological sites. These include retaining~~ The District shall retain a qualified archaeologist, establishing procedures for cultural and scientific resource surveillance, and protection of any resources discovered during the grading process. Compliance with this measure shall be verified by the ~~Community Development Department~~ District.

**CULT-4** ~~Prior to the issuance of any grading and/or building permits~~ construction activities, a mitigation program shall be ~~submitted by the developer to the City of Irvine prepared by the District~~ to address the accidental discovery or recognition of any human remains. The program shall include the following:

There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:

- The county coroner must be contacted to determine that no investigation of the cause of death is required, and  
If the coroner determines the remains to be Native American:
- The coroner shall contact the Native American Heritage Commission within 24 hours.
- The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American.
- The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or

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disposing of, with appropriated dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98, or

- Where the following conditions occur, the landowner or his authorized representative shall reburial the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.
- The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission.
- The descendant identified fails to make a recommendation; or
- The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.

Compliance with this measure shall be verified by the ~~Community Development Department~~ IUSD.

Similar to the approved project, implementation of mitigation measures from the Certified EIR would reduce all significant impacts on cultural resources to a less-than-significant level. No change or impact would occur under the proposed project that would require the preparation of a subsequent or supplemental EIR.

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## 4.6 ENERGY

### 4.6.1 Summary of Impacts Identified in the Approved Project

The Certified EIR did not specifically analyze energy because it was approved prior to the 2019 amendments to the CEQA Guidelines to incorporate subdivision (b) to CEQA Guidelines Section 15162.2. However, the approved project would be required to comply with the Irvine Sustainable Community Initiative, which is an ordinance that implements policies in support of renewable energy, green building, and sustainability.

Because environmental and regulatory settings were not addressed specifically with respect to energy in the approved project, and because the environmental and regulatory settings for the proposed project have changed since the certification of the EIR, the following discussion is provided to update conditions relative to development of the proposed project.

### 4.6.2 Impacts Associated with the Proposed Project

The following table summarizes the level of impact from the Certified EIR related to energy resources and conditions resulting from the proposed project requiring subsequent review.

Would the Project:	Level of Impact in Certified EIR	Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum CEQA Guidelines Section 15164
		Change in Project or Circumstances Involving New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(1-2)</i>	New Information Showing New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(3)(A-B)</i>	New Mitigation or Alternative to Reduce Significant Effect Is Declined <i>CEQA Guidelines Section 15162(a)(3)(C-D)</i>	
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	N/A	No	No	No	Yes
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	N/A	No	No	No	Yes

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation;

SU = significant and unavoidable; N/A = topic not analyzed in Certified EIR

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- a) **Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The following discusses the potential energy demands from construction activities associated with the construction and operation of the proposed project.

#### **Short-Term Construction Impacts**

The Certified EIR did not specifically analyze energy because it was approved prior to the 2019 amendments to the CEQA Guidelines to incorporate subdivision (b) to CEQA Guidelines Section 15162.2. Construction of the proposed project would create temporary increased demands for electricity and vehicle fuels compared to existing conditions and would result in short-term transportation-related energy use.

#### *Electrical Energy*

Similar to the approved project, construction of the proposed project would require electricity use to power the construction equipment. The majority of construction equipment would be gas- or diesel-powered, and electricity would not be used to power most of the construction equipment. Electricity use during construction would vary during different phases of construction. Later construction phases could result in the use of electricity-powered equipment for interior construction and architectural coatings. It is anticipated that the majority of electric-powered construction equipment would be hand tools (e.g., power drills, table saws) and lighting, which would result in minimal electricity usage during construction activities. Therefore, proposed project-related construction activities would not result in wasteful or unnecessary electricity demands. No new impacts would occur that would require the preparation of a subsequent or supplemental EIR.

#### *Natural Gas Energy*

Construction equipment would not be powered by natural gas for either the approved project or the proposed project. Therefore, impacts would be less than significant with respect to natural gas usage. No new impacts would occur that would require the preparation of a subsequent or supplemental EIR.

#### *Transportation Energy*

Transportation energy use during construction of the approved project and proposed project would come from delivery vehicles, haul trucks, and construction employee vehicles. In addition, transportation energy demand would come from use of off-road construction

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equipment. It is anticipated that the majority of off-road construction equipment, such as those used during demolition and grading, would be gas or diesel powered.

The use of energy resources by vehicles and equipment would fluctuate according to the phase of construction and would be temporary. In addition, all construction equipment would cease operating upon completion of project construction. Thus, impacts related to transportation energy use during construction would be temporary and would not require expanded energy supplies or the construction of new infrastructure. Furthermore, to limit wasteful and unnecessary energy consumption, the construction contractors are anticipated to minimize nonessential idling of construction equipment during construction, in accordance with Section 2449 of the California Code of Regulations, Title 13, Article 4.8, Chapter 9. Construction trips would also not result in unnecessary use of energy since the project site is centrally located and is served by numerous regional freeway systems (e.g., I-5 and SR-261) that provide the most direct routes from various areas of the region. Electrical energy would be available for use during construction from existing connections, precluding the use of less-efficient generators. Thus, energy use during construction of the project would not be considered inefficient, wasteful, or unnecessary. No new impacts would occur that would require the preparation of a subsequent or supplemental EIR.

#### **Long-Term Impacts During Operation**

Operation of the approved project would generate demand for electricity and natural gas and would result in transportation energy use. Similarly, the proposed project would also create demand for electricity and natural gas on the project site and would also result in transportation energy use. Operational use of energy would include heating, cooling, and ventilation of buildings; water heating; operation of electrical systems; use of on-site equipment and appliances; and indoor, outdoor, and perimeter lighting.

#### *Electrical Energy*

Electrical service to the campus would continue to be provided by Southern California Edison through connections to existing off-site electrical lines as needed. The proposed project would add a new two-story classroom building to the campus. The Certified EIR determined that the approved project would comply with the energy use guidelines in Title 24 of the California Code of Regulations (CCR). Similarly, the proposed project would also be consistent with the requirements of the Building Energy Efficiency Standards and California Green Building Standards Code (CALGreen). However, the Title 24 standards were most recently updated in 2022 and would be more stringent than the standards that applied to the approved project. These features would comply with the goals outlined in Appendix F of the CEQA Guidelines, as the proposed project would promote the use of renewable energy and decrease reliance on fossil fuels to meet the electricity demands of the campus. Because the proposed project would comply with these regulations and would provide features to decrease electricity use by the

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campus, it would not result in wasteful, inefficient, or unnecessary electricity demands. Therefore, operation of the proposed project would result in a less-than-significant impact related to electricity. No new impacts would occur that would require the preparation of a subsequent or supplemental EIR.

##### *Natural Gas Energy*

The Certified EIR determined that the approved project would comply with the energy use guidelines in Title 24 of the CCR. Similarly, the proposed project would be consistent with the requirements of the latest Building Energy Efficiency Standards and CALGreen. These measures would comply with the goals outlined in Appendix F of the CEQA Guidelines, as the proposed project would decrease reliance on fossil fuels to meet the natural gas demands of the campus, it would not result in wasteful, inefficient, or unnecessary natural gas demands. Therefore, operation of the proposed project would result in less-than-significant impacts with respect to natural gas usage. No new impacts would occur that would require the preparation of a subsequent or supplemental EIR.

##### *Transportation Energy*

Both the approved project and proposed project would consume fuel and other forms of transportation energy during operations from the use of motor vehicles. Because the efficiency of the motor vehicles in use, such as the average miles per gallon for motor vehicles involved with the proposed project are unknown, estimates of transportation energy use is assessed based on the overall vehicle-miles traveled (VMT) and related transportation energy use. Both the approved and proposed project's VMT would primarily come from students and staff. Student population is expected to increase by 300 students, which would increase VMT to the project site by a negligible amount.

As electricity consumed in California is required to meet the increasing renewable energy-mix requirements under the state's Renewable Portfolio Standard (RPS) and accelerated by Senate Bill (SB) 1020, greater and greater proportions of electricity consumed for transportation energy demand envisioned under the proposed project would continue to be sourced from renewable energy sources rather than fossil fuels. While the student capacity would increase under the proposed project, the proposed project would serve the local population as the majority of the daily vehicle trips generated by the proposed project would result from drop-off and pick-up of students residing within close proximity to the existing school campus. In addition, as noted in Section 4.17, *Transportation/Traffic*, consistent with the City of Irvine's Traffic Study Guidelines, the proposed project does not require analysis of VMT as it is exempt since the proposed project is serving as a public school (kindergarten through 12th grade). Furthermore, since vehicle fuel efficiencies would improve year over year through the buildout and result in a decrease in overall per-capita transportation energy consumption, impacts would be less than significant with respect to operation-related fuel usage for the proposed project as compared to

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the approved project. No new impacts would occur that would require the preparation of a subsequent or supplemental EIR.

**b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The state's electricity grid is transitioning to renewable energy under California's Renewable Energy Program. Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. Electricity production from renewable sources is generally considered carbon neutral. The RPS goals have been updated since adoption of SB 1078 in 2002. In general, California has RPS requirements of 50 percent by 2026, 52 percent by 2027, 60 percent by 2030, 90 percent by 2035, 95 percent by 2040, and 100 percent by 2045.

The statewide RPS requirements do not directly apply to individual development projects, but to utilities and energy providers such as Southern California Edison, whose compliance with RPS requirements would contribute to the state objective of transitioning to renewable energy. The land uses accommodated by the proposed project would not change (school use) and the proposed project would comply with the most recent Title 24 energy-efficiency standards. Therefore, implementation of the proposed project would not conflict with or obstruct implementation of California's RPS Program, and this impact would be less than significant.

### **4.6.3 Adopted Mitigation Measures Applicable to the Proposed Project**

Energy impacts were not analyzed in the Certified EIR, thus, no mitigation measures were identified in the Certified EIR for the approved project. However, as described in Section 4.6.2, the proposed project would not result in new energy impacts. Therefore, no new changes or impacts would occur under the proposed project that would require the preparation of a subsequent or supplemental EIR.

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### 4.7 GEOLOGY AND SOILS

#### 4.7.1 Summary of Impacts Identified in the Approved Project

The Certified EIR for the Orange County Great Park evaluated potential impacts related to geology, soils, and paleontological resources associated with redevelopment of the former MCAS El Toro, which includes the Solis Park area. The analysis determined that the project area is within a seismically active region of Southern California but that no active or potentially active faults traverse or project into the project site. Although the area could experience strong ground shaking from nearby active fault zones such as the Newport-Inglewood and Elsinore Faults, the Certified EIR concluded that compliance with applicable building codes and site-specific geotechnical recommendations would ensure that new development is designed to withstand anticipated seismic forces.

The Certified EIR also identified that the potential for liquefaction within the Great Park area is low due to dense alluvial soils and groundwater depths generally exceeding 80 feet below the surface. Localized occurrences of expansive soils, differential settlement, or soil erosion were noted as potential issues during grading, but these could be effectively managed through standard engineering design, erosion-control practices, and adherence to the City's Grading and Water Quality Ordinances. Because the terrain is largely level, the risk of landslides, subsidence, or collapse was determined to be low, and no unstable or unique geologic features were identified within the project area.

To ensure that all future development within the Great Park area incorporated appropriate design and construction safeguards, the Certified EIR established Mitigation Measures GS-1 through GS-4. These measures require that all new development be designed in accordance with current seismic provisions and City-adopted building codes (GS-1), that project-specific geotechnical studies be prepared prior to development to address site conditions and prevent settlement (GS-2), that existing structures be seismically evaluated for compliance with modern safety standards prior to reuse (GS-3), and that detailed geotechnical and hydrology reports be prepared prior to grading to address erosion control, surface runoff, and long-term drainage management (GS-4). Implementation of these measures, together with compliance with the California Building Standards Code and local grading requirements, was found to reduce all geology- and soils-related impacts to less-than-significant levels.

The Certified EIR also evaluated the potential for development to affect paleontological resources or unique geologic features. Although much of the former base had been previously graded or disturbed, deeper subsurface formations within the Great Park area were recognized as having the potential to contain scientifically important fossil remains. To address this possibility, the Certified EIR included Mitigation Measure P-1, which requires the retention of a qualified paleontologist prior to grading, monitoring of earth-moving activities in sensitive

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formations, recovery and preservation of any fossil specimens encountered, and temporary halting or diversion of grading if necessary to allow for fossil recovery.

With implementation of Mitigation Measures GS-1 through GS-4 and P-1, and adherence to standard City of Irvine grading and building regulations, the Certified EIR concluded that impacts related to geology, soils, seismic hazards, and paleontological resources would be less than significant, and no significant and unavoidable impacts were identified for these topics.

### 4.7.2 Impacts Associated with the Proposed Project

The following table summarizes the level of impact from the Certified EIR related to geology and soils and conditions resulting from the proposed project requiring subsequent review.

	Level of Impact in Certified EIR	Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum CEQA Guidelines Section 15164
		Change in Project or Circumstances Involving New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(1-2)</i>	New Information Showing New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(3)(A-B)</i>	New Mitigation or Alternative to Reduce Significant Effect Is Declined <i>CEQA Guidelines Section 15162(a)(3)(C-D)</i>	
<b>Would the Project:</b>					
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, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	LTS/M	No	No	No	Yes
ii) Strong seismic ground shaking?	LTS/M	No	No	No	Yes
iii) Seismic-related ground failure, including liquefaction?	LTS	No	No	No	Yes

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	Level of Impact in Certified EIR	Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum CEQA Guidelines Section 15164
		Change in Project or Circumstances Involving New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(1-2)</i>	New Information Showing New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(3)(A-B)</i>	New Mitigation or Alternative to Reduce Significant Effect Is Declined <i>CEQA Guidelines Section 15162(a)(3)(C-D)</i>	
<b>Would the Project:</b>					
iv) Landslides?	LTS/M	No	No	No	Yes
b) Result in substantial soil erosion or the loss of topsoil?	LTS/M	No	No	No	Yes
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?	LTS	No	No	No	Yes
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?	LTS/M	No	No	No	Yes
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?	LTS	No	No	No	Yes
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	N/A	No	No	No	Yes

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation;  
 SU = significant and unavoidable; N/A = topic not analyzed in Certified EIR

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a) **Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:**

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

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.** The Certified EIR concluded that no active or potentially active faults traverse or project into the former MCAS El Toro site. The Solis Park School campus is not within an Alquist-Priolo Earthquake Fault Zone, and the nearest regional faults, the Newport-Inglewood and Elsinore Faults, are more than 10 miles from the project site (DOC 2025d). Therefore, the potential for surface rupture is extremely low. The proposed project would not alter site conditions or introduce new fault hazards. Therefore, no adverse impacts would occur, and no changes or new information has been presented that would require the preparation of a subsequent or supplemental EIR.

ii) **Strong seismic ground shaking?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.** The project site could be subject to ground shaking during a regional seismic event; however, the new classroom building would be designed and constructed in accordance with the 2022 California Building Code (CBC) and the City of Irvine's seismic design criteria, which incorporate updated engineering standards for structural performance during earthquakes. Compliance with applicable building code provisions and implementation of Mitigation Measure GS-1 (design to seismic standards) would ensure that seismic hazards are appropriately addressed. Implementation of the proposed project would not result in any new significant impacts or increase the severity of impacts previously identified in the approved project. Therefore, no adverse impacts would occur, and no changes or new information has been presented that would require the preparation of a subsequent or supplemental EIR.

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

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.** The Certified EIR and General Plan Safety Element identified a low potential for liquefaction due to dense subsurface soils and groundwater depths greater than 80 feet (City of Irvine 2024). The Solis Park campus has been previously graded and compacted, further reducing liquefaction risk. Any minor variability in subsurface conditions would be addressed through compliance with Mitigation Measures GS-1 and GS-2, which require preparation of project-specific geotechnical evaluations and adherence to CBC seismic

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design standards. Therefore, no adverse impacts would occur, and no changes or new information has been presented that would require the preparation of a subsequent or supplemental EIR.

##### iv) Landslides?

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.** The project site is level and underlain by stable soils within the Tustin Plain. No steep slopes or landslide-prone areas are present. The proposed project would not increase landslide potential or involve grading that could destabilize adjacent property. Therefore, no adverse impacts would occur, and no changes or new information has been presented that would require the preparation of a subsequent or supplemental EIR.

##### b) Would the project result in substantial soil erosion or the loss of topsoil?

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.** The project site is already fully developed. Because the project would disturb less than one acre, it would not be subject to the National Pollutant Discharge Elimination System Construction General Permit. However, the project would be required to implement standard erosion and sediment-control best management practices consistent with local stormwater regulations to minimize pollutant discharges during construction. Thus, implementation of the proposed project would not result in any new significant impacts or increase the severity of impacts previously identified for the approved project. Therefore, no adverse impacts would occur, and no changes or new information has been presented that would require the preparation of a subsequent or supplemental EIR.

##### c) Would the project 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?

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.** The Certified EIR found most soils in the Great Park area to be well suited for grading and construction, and no significant impacts from landslides, lateral spreading, subsidence, liquefaction, or collapse were anticipated under either the Base Plan or Overlay Plan. The proposed classroom addition would not alter underlying stability conditions. Compliance with Mitigation Measure GS-1, which requires adherence to geotechnical recommendations and CBC design standards, would ensure stability during and after construction.

The City of Irvine's updated General Plan Safety Element identifies landslide hazards primarily in the foothills of the Santa Ana Mountains and San Joaquin Hills, and subsidence potential in low-lying areas over the Orange County Water District groundwater basin (City of Irvine 2024). The project site is not in these hazard zones, and Irvine has no history of acute subsidence events

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(City of Irvine 2024). Accordingly, consistent with the Certified EIR and the City's Safety Element, no new or more severe impacts would occur, and no new information has been identified that would require preparation of a subsequent or supplemental EIR.

**d) Would the project 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?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

Localized expansive soils may occur within the Great Park area. Mitigation Measure GS-1 requires site-specific geotechnical analysis and foundation design to address expansive soils, as well as recommendations for slab and drainage design. Compliance with these measures would prevent damage from soil expansion. Implementation of the proposed project would not result in any new significant impacts or increase the severity of impacts previously identified in the approved project. Therefore, no adverse impacts would occur, and no changes or new information has been presented that would require the preparation of a subsequent or supplemental EIR.

**e) Would the project 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?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The project site would connect to the existing sewer system and would not involve other alternative wastewater disposal systems. The proposed project would not use septic tanks or other alternative wastewater disposal systems. Therefore, development of the proposed project would not result in any new impacts that were not previously analyzed and would not warrant the preparation of a subsequent or supplemental EIR.

**f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The Certified EIR identified that the Orange County Great Park area is underlain by sedimentary formations that have the potential to contain paleontological resources, particularly within deeper undisturbed alluvial or bedrock units. The project site has been previously graded and developed, substantially reducing the potential for disturbance of intact paleontological resources or unique geologic features.

However, in the unlikely event that previously undiscovered fossil remains are encountered during ground disturbance, Mitigation Measure P-1 from the Certified EIR would continue to apply. Under this measure, a qualified paleontologist must be retained prior to grading to monitor construction, recover any fossil materials, and ensure appropriate curation of recovered specimens. Compliance with Mitigation Measure P-1, along with City of Irvine

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standard grading and monitoring procedures, would ensure that potential paleontological resources are protected.

Implementation of the proposed project would not result in any new significant impacts or increase the severity of impacts previously identified for the approved project. Therefore, no adverse impacts would occur, and no changes or new information have been presented that would require the preparation of a subsequent or supplemental EIR.

### 4.7.3 Adopted Mitigation Measures Applicable to the Proposed Project

The Certified EIR identified Mitigation Measures GS-1 through GS-4 to reduce impacts related to geological resources. However, only Mitigation Measure GS-1 would apply to the proposed project. Additionally, the Certified EIR identified Mitigation Measure P-1 to reduce impacts on paleontological resources, which is still applicable to the proposed project. The following revised mitigation measure is referenced in the Certified EIR, and would apply to the proposed project to reduce impacts to geological and paleontological resources:

**GS-1** ~~Prior to issuance of a building permit construction activities, the City of Irvine IUSD shall require that all development be designed in accordance with the seismic design provisions outlined in future proposed development geotechnical reports and specified in the latest Building Codes adopted by the City of Irvine State of California. Compliance with this measure shall be verified by the Community Development Department District.~~

**P-1** ~~Prior to issuance of a grading permit for any portion of the project area In the event that any paleontological discoveries are made during construction of the proposed project, the contractor shall notify the qualified paleontologist shall be retained by the City or designee IUSD to carry out an appropriate paleontology investigation of the area proposed for grading. (A qualified paleontologist is defined as an individual with an M.S. or Ph.D. in paleontology or geology who is familiar with paleontological procedures and techniques.) The City of Irvine has standard conditions applied prior to the issuance of grading permits when a project site includes potentially significant paleontological sites, and paleontological monitoring conditions have not been attached to the previous map approval. These standard conditions include retaining a qualified paleontologist, establishing procedures for cultural and scientific resource surveillance, and protection of any resources discovered during the grading process.~~

When fossils are discovered, the paleontologist (or paleontological monitor) shall recover them. In most cases, this fossil salvage can be completed in a short period of time. However, some fossils specimens (such as a complete large mammal skeleton) may require an extended salvage period. In these instances the paleontologist (or

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paleontological monitor) shall be allowed to temporarily direct, divert, or halt grading to allow recovery of fossil remains in a timely manner. Because of the potential for the recovery of small fossil remains, such as isolated mammal teeth, it may be necessary in certain instances to set up a screen-washing operation on site. Fossil remains collected during the monitoring and salvage portion of the mitigation program shall be cleaned, repaired, sorted, and cataloged. Compliance with this measure shall be verified by the ~~Community Development Department~~ District.

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**4.8 GREENHOUSE GAS EMISSIONS**

**4.8.1 Summary of Impacts Identified in the Approved Project**

The Certified EIR stated that the approved project’s GHG emissions inventory would be below the South Coast AQMD’s efficiency metric, resulting in less-than-significant impacts on GHG emissions, and that the approved project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. Therefore, the Certified EIR concluded that the approved project would result in less-than-significant GHG emissions impacts.

**4.8.2 Impacts Associated with the Proposed Project**

The following table summarizes the level of impact from the Certified EIR related to GHG emissions and conditions resulting from the proposed project requiring subsequent review.

	Level of Impact in Certified EIR	Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum CEQA Guidelines Section 15164
		Change in Project or Circumstances Involving New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(1-2)</i>	New Information Showing New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(3)(A-B)</i>	New Mitigation or Alternative to Reduce Significant Effect Is Declined <i>CEQA Guidelines Section 15162(a)(3)(C-D)</i>	
<b>Would the Project:</b>					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	LTS	No	No	No	Yes
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	LTS	No	No	No	Yes

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation; SU = significant and unavoidable; N/A = topic not analyzed in Certified EIR

**a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

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**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

Proposed project-related construction and operational would not exceed South Coast AQMD's bright-line threshold and were already assumed in the Certified EIR because the proposed project involves no operational changes to the campus. Therefore, the proposed project would not result in new or substantially greater impacts related to GHG emissions and preparation of a subsequent or supplemental EIR is not required.

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

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

Applicable plans adopted for the purpose of reducing GHG emissions for the proposed project include CARB's Scoping Plan and SCAG's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

#### **CARB Scoping Plan**

Since certification of the EIR, CARB has adopted the 2022 Climate Change Scoping Plan. The latest 2022 Climate Change Scoping Plan outlines the state's strategies to reduce GHG emissions in accordance with the targets established under Assembly Bill (AB) 32, SB 32, and AB 1279 (CARB 2022). The Scoping Plan is applicable to state agencies and is not directly applicable to cities/counties and individual projects. Nonetheless, the Scoping Plan has been the primary tool that is used to develop performance-based and efficiency-based CEQA criteria and GHG reduction targets for climate action planning efforts.

Statewide strategies to reduce GHG emissions in the 2022 Climate Change Scoping Plan include implementing SB 100, which expands the RPS to 60 percent by 2030; expanding the Low Carbon Fuel Standards to 18 percent by 2030; implementing the Mobile Source Strategy to deploy zero-electric vehicle buses and trucks; implementing the Sustainable Freight Action Plan; implementing the Short-Lived Climate Pollutant Reduction Strategy, which reduces methane and hydrofluorocarbons to 40 percent below 2013 levels by 2030 and black carbon emissions to 50 percent below 2013 levels by 2030; continuing to implement SB 375; creating a post-2020 Cap-and-Trade Program; and developing an Integrated Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

Statewide strategies to reduce GHG emissions include the Low Carbon Fuel Standards, California Appliance Energy Efficiency regulations, California Renewable Energy Portfolio standard, changes in the CAFE standards, and other early action measures as necessary to ensure the state is on target to achieve the GHG emissions-reduction goals of AB 32, SB 32, and AB 1279. In addition, similar to the approved project, the proposed project also would be subject to the Building Energy Efficiency Standards and CALGreen. Because the proposed project would comply with the latest 2022 energy standards, it would offer an improvement over the energy standards of the approved project. The proposed project would comply with these GHG

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emissions-reduction measures since they are statewide strategies. The proposed project GHG emissions would be reduced from compliance with statewide measures that have been adopted since AB 32, SB 32, and AB 1279 were adopted. Therefore, no new impacts would occur, and there would be no changes or new information associated with the development of the proposed project that would require the preparation of a subsequent or supplemental EIR.

#### **SCAG's Regional Transportation Plan/Sustainable Communities Strategy**

Since the certification of the EIR, SCAG adopted the 2020–2045 RTP/SCS (Connect SoCal) in September 2020. Connect SoCal identifies that land use strategies that focus on new housing and job growth in areas rich with destinations and mobility options are consistent with a land use development pattern that supports and complements the proposed transportation network. The overarching strategy in Connect SoCal is to plan for the Southern California region to grow in more compact communities in transit priority areas and priority growth areas; provide neighborhoods with efficient and plentiful public transit; establish abundant and safe opportunities to walk, bike, and pursue other forms of active transportation; and preserve more of the region's remaining natural lands and farmlands (SCAG 2020). Connect SoCal's transportation projects help more efficiently distribute population, housing, and employment growth, and forecast development is generally consistent with regional-level General Plan data to promote active transportation and reduce GHG emissions. The projected regional development, when integrated with the proposed regional transportation network in Connect SoCal, would reduce per-capita GHG emissions related to vehicular travel and achieve the GHG reduction per-capita targets for the SCAG region.

The Connect SoCal Plan does not require that local general plans, specific plans, or zoning be consistent with the SCS, but provides incentives for consistency to governments and developers. The proposed project would construct a new classroom building within the existing school campus for the existing and future students of Solis Park School. The proposed project would not change underlying zoning or uses on the proposed site. The proposed project would continue to serve the local student population within the surrounding communities. Serving the local community may reduce VMT by adding additional capacity to the existing elementary school and thus providing a closer option for students who may need to attend other schools under existing conditions. Therefore, the proposed project would not interfere with SCAG's ability to implement the regional strategies in Connect SoCal. No new impacts would occur, and there would be no changes or new information associated with the development of the proposed project that would require the preparation of a subsequent or supplemental EIR.

### **4.8.3 Adopted Mitigation Measures Applicable to the Proposed Project**

No mitigation measures identified in the Certified EIR would be applicable to the proposed project. Therefore, no new changes or impacts would occur under the proposed project that would require the preparation of a subsequent or supplemental EIR.

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### 4.9 HAZARDS AND HAZARDOUS MATERIALS

#### 4.9.1 Summary of Impacts Identified in the Approved Project

Hazards and hazardous materials are discussed in Section 5.5, *Public Health and Safety*, of the Certified EIR. The Certified EIR for the Orange County Great Park analyzed potential hazards and hazardous materials impacts associated with redevelopment of the former MCAS El Toro. The Certified EIR identified that historical military operations involved the storage, use, and disposal of fuels, solvents, and other hazardous substances that resulted in localized soil and groundwater contamination. These areas were remediated through the Department of the Navy's Installation Restoration Program and evaluated under the Base Realignment and Closure process. The U.S. Environmental Protection Agency (USEPA) and California Department of Toxic Substances Control determined that cleanup actions were complete and that property within the Great Park planning area, including the project site, was suitable for unrestricted public use.

The Certified EIR concluded that, with implementation of Mitigation Measures HH-1 through HH-6, potential hazards related to residual contamination, asbestos-containing materials, lead-based paint, and future construction activities would be reduced to less-than-significant levels. These measures require ongoing disclosure of hazardous materials information, confirmation of remediation and institutional controls prior to property transfer, removal or management of asbestos-containing materials and lead-based paint, coordination with the Orange County Fire Authority (OCFA) for fire and life-safety compliance, and preparation of a protocol plan for addressing any previously unidentified contamination during grading or construction. No significant and unavoidable impacts related to hazards or hazardous materials were identified in the Certified EIR.

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## 4.9.2 Impacts Associated with the Proposed Project

The following table summarizes the level of impact from the Certified EIR related to hazards and hazardous conditions and conditions resulting from the proposed project requiring subsequent review.

	Level of Impact in Certified EIR	Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum <i>CEQA Guidelines Section 15164</i>
		Change in Project or Circumstances Involving New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(1-2)</i>	New Information Showing New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(3)(A-B)</i>	New Mitigation or Alternative to Reduce Significant Effect Is Declined <i>CEQA Guidelines Section 15162(a)(3)(C-D)</i>	
<b>Would the Project:</b>					
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	LTS	No	No	No	Yes
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	LTS/M	No	No	No	Yes
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	LTS	No	No	No	Yes
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	LTS	No	No	No	Yes

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	Level of Impact in Certified EIR	Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum CEQA Guidelines Section 15164
		Change in Project or Circumstances Involving New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(1-2)</i>	New Information Showing New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(3)(A-B)</i>	New Mitigation or Alternative to Reduce Significant Effect Is Declined <i>CEQA Guidelines Section 15162(a)(3)(C-D)</i>	
<b>Would the Project:</b>					
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	NI	No	No	No	Yes
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	LTS	No	No	No	Yes
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	N/A	No	No	No	Yes

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation;  
 SU = significant and unavoidable; N/A = topic not analyzed in Certified EIR

**a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

Construction of the proposed two-story classroom building would involve limited use of common hazardous materials such as fuels, oils, paints, and solvents typical of short-term construction. These materials would be stored and handled in accordance with state and federal regulations, including the California Code of Regulations Title 8 and local Fire Code requirements. The school’s ongoing operations would continue to involve routine custodial and maintenance supplies in small, properly stored quantities. No substantial increase in the transport, use, or disposal of hazardous materials would occur. Mitigation Measure HH-5 would

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ensure that a protocol plan is in place for managing any accidental discoveries of unknown materials.

Implementation of the proposed project would not result in any new significant impacts or increase the severity of impacts previously identified for the approved project. Therefore, no adverse impacts would occur, and no changes or new information have been presented that would require the preparation of a subsequent or supplemental EIR.

**b) Would the project 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?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The Certified EIR identified historic hazardous materials associated with the former MCAS El Toro; however, these areas were remediated under the Department of the Navy's Installation Restoration Program and verified by the California Department of Toxic Substances Control and the USEPA as suitable for unrestricted use prior to transfer. The Solis Park School property is fully remediated and suitable for sensitive land uses, including schools.

During construction, the potential for accidental spills of fuels, lubricants, or other materials would be minimized through standard construction BMPs and compliance with Mitigation Measure HH-5, which requires preparation of a protocol plan for worker safety, contamination response, and agency notification if previously unidentified materials are encountered.

This measure would ensure continued protection of human health and the environment during construction and operation. Implementation of the proposed project would not result in any new significant impacts or increase the severity of impacts previously identified for the approved project. Therefore, no adverse impacts would occur, and no changes or new information have been presented that would require the preparation of a subsequent or supplemental EIR.

**c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The proposed project would occur entirely within the existing Solis Park School campus, which already accommodates TK-8 educational uses. No industrial or hazardous emissions sources are located within one-quarter mile of the site, and the proposed project would not introduce new hazardous materials or operations beyond routine school use. Construction would involve only temporary use of small quantities of common materials such as fuels and paints, all managed under existing regulations.

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Implementation of the proposed project would not result in any new significant impacts or increase the severity of impacts previously identified for the approved project. Therefore, no adverse impacts would occur, and no changes or new information have been presented that would require the preparation of a subsequent or supplemental EIR.

- d) Would the project 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?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The project site is not listed on the Cortese List or any other regulatory database of contaminated sites (DTSC 2025). The property was reviewed and cleared under the MCAS El Toro Base Realignment and Closure process, and all necessary remediation was completed to meet unrestricted use standards. The proposed project would not include any components that would introduce new hazardous materials to the project site or the campus. Therefore, no adverse impacts would occur, and no changes or new information have been presented that would require the preparation of a subsequent or supplemental EIR.

- e) For a project 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?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The project site is approximately seven miles east of John Wayne Airport and is outside any Airport Environs Land Use Plan (AELUP) safety or noise influence area (ALUC 2008). The proposed two-story classroom building would not result in new aviation hazards, alter existing flight patterns, or expose occupants to excessive aircraft noise. Therefore, no adverse impacts would occur, and no changes or new information have been presented that would require the preparation of a subsequent or supplemental EIR.

- f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The proposed project would occur entirely within the existing Soils Park School campus and would not alter or obstruct adjacent public rights-of-way. Emergency access routes to the campus from Great Park Boulevard, and neighborhood streets would remain available during and after construction. Project plans would be reviewed by the OCFA, in compliance with Mitigation Measures HH-3 and HH-4, to ensure continued compliance with emergency response and fire-life-safety standards.

Implementation of the proposed project would not result in any new significant impacts or increase the severity of impacts previously identified for the approved project. Therefore, no

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adverse impacts would occur, and no changes or new information have been presented that would require the preparation of a subsequent or supplemental EIR.

**g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The Solis Park School campus is in a fully urbanized area of Irvine and is not within a State Responsibility Area or a Very High Fire Hazard Severity Zone (CalFIRE 2025). Vegetation on-site consists of maintained ornamental landscaping, and the area is served by the OCFA and City water infrastructure. Consistent with Mitigation Measure HH-3, any new development is reviewed by OCFA for compliance with fire-protection and fuel-modification requirements.

Therefore, no adverse impacts would occur, and no changes or new information have been presented that would require the preparation of a subsequent or supplemental EIR.

### **4.9.3 Adopted Mitigation Measures Applicable to the Proposed Project**

The Certified EIR identified Mitigation Measures HH-1 through HH-6 to reduce impacts to public health and safety. The Certified EIR identified Mitigation Measures HH-1 through HH-6 to reduce impacts on public health and safety (hazards and hazardous materials). However, only Mitigation Measures HH-3 through HH-5 would apply to the proposed project. The following revised mitigation measures are referenced in the Certified EIR, and would apply to the proposed project to reduce impacts on hazards and hazardous materials:

**HH-3** The ~~Community Development Department~~ USD, in coordination with the Orange County Fire Authority (OCFA), will be responsible for review of all development plans, which would include evaluation of very high fire severity zones, special fire protection plans, and any requirements for fuel modification zones. Projects potentially impacted by wildland fire hazards will be subject to OCFA Guidelines for “Development Within and Exclusion from Very High Fire Severity Zones” and “Fuel Modification Plans and Maintenance.” Additionally, all demolition, renovation, and construction activities in the project area will be subject to review by OCFA to ensure adequate fire protection, water flow, emergency access, design features, etc., according to the standards of the Uniform Fire Code and the California Fire Code. Due to the implementation of these standard fire protection procedures, the proposed project is not anticipated to result in significant short- or long-term adverse impacts related to fire hazards.

**HH-4** Prior to ~~issuance of occupancy permits of construction of any existing new~~ structure at the former MCAS El Toro, a fire life-safety evaluation of the structure, including recommendations for improvements required for compliance with DSA ~~with~~

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~~current Building Codes for use of existing structures adopted by the City of Irvine and plans for any required improvements, shall be submitted to the Chief Building Official Division of State Architects for review and approval.~~

**HH-5** ~~Prior to the issuance of a grading permit construction activities, the applicant contractor shall prepare and the Director of Community Development IUSD shall approve a protocol plan (including, but not limited to, worker training, health and safety precautions, additional testing requirements, and emergency notification procedures) in the event of unknown hazardous materials are discovered during grading, construction, and/or related development activities. The applicant and/or property owner that If the District discovers contamination due to past military operations not previously identified by the Department of Navy (DON), the District shall be responsible for notifying the DON, and the appropriate regulatory agencies, and the Director of Community Development of the City of Irvine in a timely manner.~~ Additionally, said protocol plan shall be revised should the discovery of previously unknown hazardous materials be made during any of the previously mentioned development activities.

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## 4.10 HYDROLOGY AND WATER QUALITY

### 4.10.1 Summary of Impacts Identified in the Approved Project

The Certified EIR determined that the approved project has potential to have significant impacts on water quality standards and waste discharge requirements. However, the approved project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge. The proposed project would be required to comply with state, regional, and local water quality standards. The Certified EIR determined that the approved project is not near the ocean nor other large bodies of water that may result in inundation due to seiche, tsunami mudflow. The Certified EIR concluded that the approved project would result in a less-than-significant impact with respect to hydrology and water quality.

### 4.10.2 Impacts Associated with the Proposed Project

The following table summarizes the level of impact from the Certified EIR related to hydrology and water quality and conditions resulting from the proposed project requiring subsequent review.

	Level of Impact in Certified EIR	Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum CEQA Guidelines Section 15164
		Change in Project or Circumstances Involving New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(1-2)</i>	New Information Showing New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(3)(A-B)</i>	New Mitigation or Alternative to Reduce Significant Effect Is Declined <i>CEQA Guidelines Section 15162(a)(3)(C-D)</i>	
<b>Would the Project:</b>					
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	LTS	No	No	No	Yes

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	Level of Impact in Certified EIR	Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum CEQA Guidelines Section 15164
		Change in Project or Circumstances Involving New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(1-2)</i>	New Information Showing New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(3)(A-B)</i>	New Mitigation or Alternative to Reduce Significant Effect Is Declined <i>CEQA Guidelines Section 15162(a)(3)(C-D)</i>	
<b>Would the Project:</b>					
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	LTS	No	No	No	Yes
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	LTS				
i) result in substantial erosion or siltation on- or off-site;	LTS	No	No	No	Yes
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	LTS	No	No	No	Yes
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	LTS	No	No	No	Yes

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Would the Project:	Level of Impact in Certified EIR	Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum CEQA Guidelines Section 15164
		Change in Project or Circumstances Involving New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(1-2)</i>	New Information Showing New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(3)(A-B)</i>	New Mitigation or Alternative to Reduce Significant Effect Is Declined <i>CEQA Guidelines Section 15162(a)(3)(C-D)</i>	
iv) impede or redirect flood flows?	LTS	No	No	No	Yes
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	LTS	No	No	No	Yes
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	LTS	No	No	No	Yes

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation;  
SU = significant and unavoidable; N/A = topic not analyzed in Certified EIR

**a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**  
The proposed project would be required to comply with state, regional, and local water quality standards, and there are no unusual conditions associated with the proposed project that could result in substantial water quality degradation. The proposed project would adhere to the Regional Water Quality Control Board (RWQCB) standards. Like the approved project, the proposed project would incorporate water quality features in conformance with RWQCB standards to ensure that post-construction water quality and downstream effects remain less than significant. The proposed project would not otherwise substantially degrade water quality. Therefore, no adverse impacts would occur, and no changes or new information has been presented that would require the preparation of a subsequent or supplemental EIR.

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

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**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The Certified EIR concluded that development of the project area will not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. The proposed project would not otherwise substantially degrade groundwater supplies or interfere substantially with groundwater recharge. Therefore, no adverse impacts would occur, and no changes or new information has been presented that would require the preparation of a subsequent or supplemental EIR.

**c) 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:**

**i) Result in a substantial erosion or siltation on- or off-site;**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.** The Education Facility (EDU) land use designation identifies land used intended for educational institutions. The proposed project would be developed in a similar manner following the approved project. Implementation of the proposed project would not result in any new significant impacts or increase the severity of impacts previously identified for the approved project. Therefore, no adverse impacts would occur, and no changes or new information has been presented that would require the preparation of a subsequent or supplemental EIR.

**ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.** The Education Facility (EDU) land use designation identifies land intended for educational institutions. Development and operation of the proposed project would not involve a significant change in the course of a stream or river or increase the rate or amount of surface runoff as compared to the approved project. Implementation of the proposed project would not result in any new significant impacts or increase the severity of impacts previously identified in the approved project. Therefore, no adverse impacts would occur, and no changes or new information has been presented that would require the preparation of a subsequent or supplemental EIR.

**iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.** Development and operation of the proposed project would not involve stormwater

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discharges that would exceed the capacity of existing systems and would not contain constituents that would exceed wastewater treatment requirements of the RWQCB. Therefore, the proposed project would not result in new impacts compared to the approved project and impacts would be less than significant. Therefore, no adverse impacts would occur, and no changes or new information has been presented that would require the preparation of a subsequent or supplemental EIR.

**iv) Impede or redirect flood flows?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.** The project site is zoned X by the Flood Emergency Management Agency (FEMA) Flood Insurance Map (FEMA 2025). The proposed project would not impede or redirect flood flows within a 100-year flood hazard area. No impact is anticipated. Therefore, no impact would occur, and no changes or new information would occur that would require the preparation of a subsequent or supplemental EIR.

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

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.** A seiche is a surface wave created when an inland water body is shaken, usually by an earthquake. The Certified EIR indicates that there are no inland bodies of water, dams, or levees that could pose a substantial flood hazard to the project site. A mudflow is a landslide composed of saturated rock debris and soil with a consistency of wet cement. There are no slopes on the project site that could pose a substantial flood hazard due to mudflow. A tsunami is a series of ocean waves caused by a sudden displacement of the ocean floor, most often due to earthquakes. The project site is approximately 10 miles inland from the Pacific Ocean. No substantially adverse risk of flooding due to a tsunami is anticipated. No impacts related to seiche, tsunami, and mudflow would occur. Therefore, no impact would occur, and no changes or new information would occur that would require the preparation of a subsequent or supplemental EIR.

**e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.** The City of Irvine implemented a Storm Water Runoff Management Program to ensure that water quality is protected. Like the approved project, the proposed project would comply with all federal, state, and local regulations discussed in the Certified EIR. Therefore, no impact would occur, and no changes or new information would occur with the development of the proposed project that would require the preparation of a subsequent or supplemental EIR.

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### **4.10.3 Adopted Mitigation Measures Applicable to the Proposed Project**

The Certified EIR identified Mitigation Measures H/WQ-1 through H/WQ-4 to reduce impacts on hydrology and water quality. However, none of the mitigation measures referenced in the Certified EIR would apply to the proposed project, and no new mitigation measures would be required. Construction and operation of the project were required to comply with standard state and local regulatory requirements, including the National Pollutant Discharge Elimination System General Construction Permit, Municipal Separate Storm Sewer Systems Permit, and City of Irvine Grading and Drainage Ordinance, which provide equivalent or greater protection against erosion and pollutant discharge. These existing regulatory mechanisms remain applicable to the proposed project and are sufficient to ensure that impacts would remain less than significant. Therefore, no new changes or impacts would occur under the proposed project that would require the preparation of a subsequent or supplemental EIR.

**4. ENVIRONMENTAL ANALYSIS**

## 4.11 LAND USE AND PLANNING

### 4.11.1 Summary of Impacts Identified in the Approved Project

The Certified EIR determined that the approved project would not physically divide an established community or conflict with any land use plan, policy, or regulation. The Certified EIR identified no significant impacts to land use and planning.

### 4.11.2 Impacts Associated with the Proposed Project

The following table summarizes the level of impact from the Certified EIR related to land use and conditions resulting from the proposed project requiring subsequent review.

Would the Project:	Level of Impact in Certified EIR	Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum CEQA Guidelines Section 15164
		Change in Project or Circumstances Involving New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(1-2)</i>	New Information Showing New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(3)(A-B)</i>	New Mitigation or Alternative to Reduce Significant Effect Is Declined <i>CEQA Guidelines Section 15162(a)(3)(C-D)</i>	
a) Physically divide an established community?	LTS	No	No	No	Yes
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?	LTS	No	No	No	Yes

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation; SU = significant and unavoidable; N/A = topic not analyzed in Certified EIR

#### a) Would the project physically divide an established community?

##### **Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The project site is currently developed with the existing Solis Park School, which is surrounded primarily by newly constructed single-family and multifamily residential developments, along with associated parks and landscaped open spaces. The proposed project would not physically divide an existing established community as all improvements would occur within the existing

#### 4. ENVIRONMENTAL ANALYSIS

elementary school campus, and no housing is located on site. Therefore, no new impacts would occur, and no changes or new information would occur that would require the preparation of a subsequent or supplemental EIR.

- b) Would the project 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?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The project site is designated Education Facility (EDU) and is zoned Institutional. The project site is not part of the habitat preserve, and development of the project site would not conflict with any HCP or NCCP. No significant impacts related to conflict with an HCP/NCCP were identified in the Certified EIR. In addition, the proposed project would be confined to the existing Solis Park School campus boundaries and would not necessitate any amendments to the current General Plan land use designation or zoning. Therefore, development of the proposed project would not result in any new impacts that were not previously analyzed and would not warrant the preparation of a subsequent or supplemental EIR.

#### **4.11.3 Adopted Mitigation Measures Applicable to the Proposed Project**

No mitigation measures were identified in the Certified EIR for land use and planning, and no new mitigation measures would be required for the proposed project. Therefore, no new changes or impacts would occur under the proposed project that would require the preparation of a subsequent or supplemental EIR.

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## 4.12 MINERAL RESOURCES

### 4.12.1 Summary of Impacts Identified in the Approved Project

Mineral resources were not evaluated as a separate topic in the Certified EIR. Instead, mineral resources were discussed in Section 5.6, *Geology and Seismicity*. The Certified EIR determined that no mineral extraction has occurred on the site and mineral resources are not anticipated based on known geologic conditions. The Certified EIR determined that the approved project would not result in any impact on mineral resources because the project site does not contain any such resources. The project site does not contain any locally important mineral resources and is not delineated on a local general plan, specific plan, or other land use plan. Therefore, no adverse impact would occur regarding mineral resources.

### 4.12.2 Impacts Associated with the Proposed Project

The following table summarizes the level of impact from the Certified EIR related to mineral resources and conditions resulting from the proposed project requiring subsequent review.

Would the Project:	Level of Impact in Certified EIR	Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum CEQA Guidelines Section 15164
		Change in Project or Circumstances Involving New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(1-2)</i>	New Information Showing New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(3)(A-B)</i>	New Mitigation or Alternative to Reduce Significant Effect Is Declined <i>CEQA Guidelines Section 15162(a)(3)(C-D)</i>	
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?	LTS	No	No	No	Yes
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	LTS	No	No	No	Yes

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation;  
SU = significant and unavoidable; N/A = topic not analyzed in Certified EIR

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- a) **Would the project result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

According to the Department of Conservation Mineral Land Classification Maps, the project site is within an area classified as MRZ-1, which is an area that indicates there is little likelihood that significant mineral resources are present (DOC 2025c). Development of the proposed project would not result in a loss of mineral resources as the project site is currently developed with an existing elementary school and is not used for mineral extraction, nor were any mineral resources identified on the project site during prior construction of the campus. Therefore, development of the proposed project would not result in any new impacts that were not previously analyzed and would not warrant the preparation of a subsequent or supplemental EIR.

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

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The Certified EIR determined that the planning area does not contain any locally important mineral resources and is not delineated on a local general plan or other land use plans. The project site is entirely within the planning area analyzed in the Certified EIR. As discussed previously, the project site is classified as an MRZ-1 zone, which indicates that there is little likelihood that significant mineral resources are present within the project site (DOC 2025). Therefore, development of the proposed project would not result in any new impacts that were not previously analyzed and would not warrant the preparation of a subsequent or supplemental EIR.

#### 4.12.3 Adopted Mitigation Measures Applicable to the Proposed Project

Mineral resources impacts were not analyzed in the Certified EIR; thus, no mitigation measures were identified in the Certified EIR for the approved project. However, as described in Section 4.12.2, the proposed would not result in new impacts to mineral resources. Therefore, no new changes or impacts would occur under the proposed project that would require the preparation of a subsequent or supplemental EIR.

## 4.13 NOISE

### 4.13.1 Summary of Impacts Identified in the Approved Project

Off-site, traffic-related exterior noise impacts were analyzed for the approved project, which assumed that a traffic noise impact would occur if a noise-sensitive land use would experience an increase of 1.5 decibels (dB), where the resulting noise levels would be in excess of 65 A-weighted decibels (dBA) community noise equivalent level (CNEL). The Certified EIR concluded that changes in the off-site traffic noise levels ranged between 0 and 5 dB on the roadway segments analyzed, but no study area segments were expected to experience noise increases of 1.5 dB or greater due to project implementation. As a result, no project or cumulative noise impacts associated with any of the roadway segments analyzed were identified.

Project-related sources of stationary noise included activities associated with commercial and retail uses, including parking lots, mechanical equipment, and loading/unloading activities, and activities related to residential uses, including air conditioners, yard-care equipment, and outdoor activities. However, the Certified EIR concluded that no significant impacts would occur, as stationary source noise is regulated by the City through its Municipal Code to ensure that they are controlled to acceptable levels. Consequently, the Certified EIR concluded that the approved project would not result in stationary source project-level or cumulative noise impacts.

### CONSTRUCTION NOISE AND VIBRATION

To minimize the potential construction noise impacts associated with the approved project, the project applicant or its successor will be required to implement plans, programs, or policies (PPPs) 8-1, 8-2, and 8-3 and Project Design Feature (PDF) 8-1, that were outlined in the Certified EIR. Future projects within the Great Park Neighborhood and other off-site projects in the vicinity of the Great Park Neighborhoods are required to comply with the City noise regulations or those of other adjacent jurisdictions. Therefore, the Certified EIR concluded that construction-related noise impacts would be controlled within the areas close to each construction site and would, therefore, be unlikely to combine with noise generated from other construction sites. The Certified EIR concluded that with implementation of the existing regulations, PPPs, PDFs, and mitigation measures, potential noise impacts associated with the approved project would be reduced to a less-than-significant level.

**4. ENVIRONMENTAL ANALYSIS**

**4.13.2 Impacts Associated with the Proposed Project**

The following table summarizes the level of impact from the Certified EIR related to noise and conditions resulting from the proposed project requiring subsequent review.

	Level of Impact in Certified EIR	Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum CEQA Guidelines Section 15164
		Change in Project or Circumstances Involving New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(1-2)</i>	New Information Showing New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(3)(A-B)</i>	New Mitigation or Alternative to Reduce Significant Effect Is Declined <i>CEQA Guidelines Section 15162(a)(3)(C-D)</i>	
<b>Would the Project:</b>					
a) Generate 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?	LTS/M	No	No	No	Yes
b) Generate excessive groundborne vibration or groundborne noise levels?	LTS/M	No	No	No	Yes
c) For a project 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?	LTS	No	No	No	Yes

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation;  
 SU = significant and unavoidable; N/A = topic not analyzed in Certified EIR

**4. ENVIRONMENTAL ANALYSIS**

- a) **Would the project generate 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?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The nearest sensitive receptors to the project site include single-family homes bordering the site on all sides. Construction equipment mix is anticipated to be similar to that of the approved project and include concrete saws, dozers, excavators, tractors, loaders, backhoes, excavators, graders, forklifts, generators, welders, and air compressors, pavers and paving equipment, and rollers. Since the City does not include noise thresholds for construction noise, the Federal Transit Administration (FTA) recommended 80 dBA Leq criterion can be applied to the surrounding sensitive receptors. Therefore, the proposed project would not exceed the established FTA threshold of 80 dBA Leq. Thus, no new significant impacts or impacts of greater severity than those identified in the Certified EIR would occur, and the level of impact remains unchanged from the EIR. There are no changes or new significant information that would require preparation of a subsequent or supplemental EIR.

- b) **Would the project generate excessive groundborne vibration or groundborne noise levels?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

Under the approved project within the EIR, vibration impacts were found to be less than significant as the surrounding communities were not built out at the time of the approved project's construction schedule. However, under the proposed project, sensitive receptors within the surrounding communities are built out and occupied. Therefore, the proposed project analyzes vibration damage and annoyance at the nearby off-site sensitive receptors.

The threshold for vibrational damage is the FTA criterion of 0.20 inches per second (in/sec) peak-particle velocity (PPV) (for non-engineered timber and masonry buildings). No intensive vibration activity, such as pile driving or rock crushing, would be required during the construction of the proposed project. The equipment anticipated to induce the highest vibration is a vibratory roller for new pavement by the proposed building. Vibratory rollers generate vibration levels of 0.21 in/sec PPV at 25 feet. Potential architectural impacts due to vibration are assessed from the edge of construction to the nearest off-site structure. The nearest sensitive receptors, as measured from edge of the area of work, would be the residences to the south, approximately 100 feet across Sentosa. The resulting vibration levels at these buildings due to construction vibration are up to 0.009 in/sec PPV, which is below the FTA building damage criteria of 0.2 in/sec PPV for residential structures. Therefore, the proposed project would not result in new significant impacts or impacts of greater severity than those identified in the EIR. There are no changes or new significant information that would require preparation of a subsequent or supplemental EIR.

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Vibration annoyance is analyzed from the acoustical center of the construction site to represent the average level from mobile equipment, such as vibratory rollers throughout the site. The threshold for vibration annoyance for residential receptors is 78 VdB. Under the proposed project, the nearest receptors would be approximately 100 feet to the west of the project site, resulting in vibration annoyance levels of 66 VdB or less. Thus, the proposed project would not generate levels in excess of the FTA threshold of 78 VdB. Therefore, the proposed project would not result in new significant impacts or impacts of greater severity than those identified in the EIR. There are no changes or new significant information that would require preparation of a subsequent or supplemental EIR.

- c) **For a project 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?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The nearest airport to the approved project was the John Wayne Airport, approximately 11 miles away. Therefore, workers and residents who reside within the project site were found to not be impacted by airport noise. Under the proposed project, impacts would remain the same as the approved project (no impact) as the nearest airport would still be the John Wayne Airport. Therefore, no impact would occur from airport noise under the proposed project, and there are no changes or new significant information that would require preparation of a subsequent or supplemental EIR.

#### **4.13.3 Adopted Mitigation Measures Applicable to the Proposed Project**

No mitigation measures were identified in the Certified EIR for noise, and no new mitigation measures would be required for the proposed project. Therefore, no new changes or impacts would occur under the proposed project that would require the preparation of a subsequent or supplemental EIR.

**4. ENVIRONMENTAL ANALYSIS**

## 4.14 POPULATION AND HOUSING

### 4.14.1 Summary of Impacts Identified in the Approved Project

The Certified EIR determined that the approved project would serve the existing and future school district population. The approved project would not be a growth-inducing project. The approved project would not result in the displacement of housing. The proposed project would increase student capacity compared to what was analyzed in the approved project to accommodate long-term enrollment needs. The addition of classrooms will further accommodate the surrounding residential neighborhoods. Therefore, no impact would occur in regard to population growth.

### 4.14.2 Impacts Associated with the Proposed Project

The following table summarizes the level of impact from the Certified EIR related to population and housing and conditions resulting from the proposed project requiring subsequent review.

		Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum CEQA Guidelines Section 15164
		Change in Project or Circumstances Involving New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(1-2)</i>	New Information Showing New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(3)(A-B)</i>	New Mitigation or Alternative to Reduce Significant Effect Is Declined <i>CEQA Guidelines Section 15162(a)(3)(C-D)</i>	
<b>Would the Project:</b>	<b>Level of Impact in Certified EIR</b>				
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)?	LTS	No	No	No	Yes

**4. ENVIRONMENTAL ANALYSIS**

Would the Project:	Level of Impact in Certified EIR	Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum CEQA Guidelines Section 15164
		Change in Project or Circumstances Involving New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(1-2)</i>	New Information Showing New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(3)(A-B)</i>	New Mitigation or Alternative to Reduce Significant Effect Is Declined <i>CEQA Guidelines Section 15162(a)(3)(C-D)</i>	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	LTS	No	No	No	Yes

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation;  
 SU = significant and unavoidable; N/A = topic not analyzed in Certified EIR

**a) Would the project 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)?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The proposed project would expand student capacity from 1,000 to 1,300 students, which would accommodate long-term enrollment needs. The proposed project would continue to serve the existing District population in the vicinity of the project site. No new homes are proposed as part of the project. Therefore, no impact would occur and the preparation of a subsequent or supplemental EIR is required.

**b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

Implementation of the proposed project would not result in the displacement of residential units or persons. The project site is currently developed with the existing Solis Park School and no housing exists on-site. Therefore, no impact would occur and the preparation of a subsequent or supplemental EIR is required.

### **4.14.3 Adopted Mitigation Measures Applicable to the Proposed Project**

No mitigation measures were identified in the Certified EIR for population and housing, and no new mitigation measures would be required for the proposed project. Therefore, no new changes or impacts would occur under the proposed project that would require the preparation of a subsequent or supplemental EIR.

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**4.15 PUBLIC SERVICES**

**4.15.1 Summary of Impacts Identified in the Approved Project**

The Certified EIR determined that compliance with all standard conditions and guidelines during development review and permitting processes, including existing plans, programs, or policies, would ensure that impacts on police and fire protection services would be reduced to a less-than-significant level. The Certified EIR determined that no significant impacts were anticipated in regard to public services.

**4.15.2 Impacts Associated with the Proposed Project**

The following table summarizes the level of impact from the Certified EIR related to public services and conditions resulting from the proposed project requiring subsequent review.

	Level of Impact in Certified EIR	Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum CEQA Guidelines Section 15164
		Change in Project or Circumstances Involving New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(1-2)</i>	New Information Showing New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(3)(A-B)</i>	New Mitigation or Alternative to Reduce Significant Effect Is Declined <i>CEQA Guidelines Section 15162(a)(3)(C-D)</i>	
<b>Would the Project:</b>					
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:	LTS	No	No	No	Yes
Fire protection?	LTS	No	No	No	Yes
Police protection?	LTS	No	No	No	Yes

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	Level of Impact in Certified EIR	Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum CEQA Guidelines Section 15164
		Change in Project or Circumstances Involving New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(1-2)</i>	New Information Showing New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(3)(A-B)</i>	New Mitigation or Alternative to Reduce Significant Effect Is Declined <i>CEQA Guidelines Section 15162(a)(3)(C-D)</i>	
<b>Would the Project:</b>					
Schools?	LTS	No	No	No	<b>Yes</b>
Parks?	LTS	No	No	No	<b>Yes</b>
Other public facilities?	LTS	No	No	No	<b>Yes</b>

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation;  
SU = significant and unavoidable; N/A = topic not analyzed in Certified EIR

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

**Fire protection?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.** OCFA provides fire protection services to the City of Irvine, including the project site. There are three OCFA Stations near the project site that would provide fire protection services. The nearest fire station to the project site is OCFA Station 38, which is 1.2 miles south of the project site. The Portola Springs OCFA Station 27 is 2.4 miles northeast of the project site and OCFA Station 20 is 3.2 miles northwest of the project site. The proposed project involves the construction of a new two-story classroom building in the west corner of the school campus. The proposed project would expand student capacity from 1,000 to 1,300 students, which would accommodate long-term enrollment needs. The addition of students on campus would not result in the need for additional fire service facilities, nor would impacts be greater than what was proposed under the approved project. Therefore, no new impacts would occur, and no changes or new information associated with the proposed project would require the preparation of a subsequent or supplemental EIR.

**Police protection?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.** The project site is in the service boundaries of the Irvine Police Department (IPD). As stated in

#### 4. ENVIRONMENTAL ANALYSIS

the Certified EIR, the increased police protection demands generated would be managed through the existing review and approval process and compliance with applicable plans and regulations. The proposed project involves the construction of a new two-story, classroom building on the south side of the campus. The proposed project would expand student capacity from 1,000 to 1,300 students, which would accommodate long-term enrollment needs. The addition of students on campus would not result in the need for additional police service facilities, nor would impacts be greater than what was proposed under the approved project. The proposed school would primarily serve existing residents nearby and would not require additional or expanded police facilities that could cause significant physical environmental impacts. As stated in the Certified EIR, the necessary police protection services required by the incremental implementation of the approved project would be provided through the continued implementation of the City's Strategic Business Plan and annual budget review process. Police department needs are assessed and budget allocations are revised accordingly to ensure that adequate levels of service are maintained throughout the city. Therefore, no new impacts would occur, and no changes or new information associated with the proposed project would require the preparation of a subsequent or supplemental EIR.

#### **Schools?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The proposed project is within the IUSD. Buildout of the approved project provided additional school facilities to meet the educational needs of the Great Park Neighborhoods adjacent to the school site. The proposed project would expand student capacity from 1,000 to 1,300 students, which would accommodate long-term enrollment needs. No additional school demands would be created. Therefore, no new impacts would occur, and no changes or new information associated with the proposed project would require the preparation of a subsequent or supplemental EIR.

#### **Parks?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The proposed project would serve the existing student population along with the local and regional park systems in the area. Development of the proposed project would not develop the need for additional park or recreational facilities as the school site will also have athletic fields to accommodate the student population. Therefore, no new impacts would occur, and no changes or new information associated with the proposed project would require the preparation of a subsequent or supplemental EIR.

#### **Other public facilities?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The proposed project would not increase the need for other public facilities such as libraries and museums. The proposed project is a school site that would accommodate the current and

future student population. The nearest public library to the project site is the Irvine Public Library- Heritage Park branch approximately 5.3 miles northwest of the project site. Therefore, no new impacts would occur, and no changes or new information associated with the proposed project would require the preparation of a subsequent or supplemental EIR.

### **4.15.3 Adopted Mitigation Measures Applicable to the Proposed Project**

No mitigation measures were identified in the Certified EIR for public services, and no new mitigation measures would be required for the proposed project. Therefore, no new changes or impacts would occur under the proposed project that would require the preparation of a subsequent or supplemental EIR.

**4. ENVIRONMENTAL ANALYSIS**

**4.16 RECREATION**

**4.16.1 Summary of Impacts Identified in the Approved Project**

The Certified EIR determined that the approved project would not have any adverse impacts on recreation facilities. The approved project would serve the existing and future district school population, would provide various athletic facilities and would not create the need for use of other existing recreational facilities in the area. Therefore, no impact would occur.

**4.16.2 Impacts Associated with the Proposed Project**

The following table summarizes the level of impact from the Certified EIR related to recreation and conditions resulting from the proposed project requiring subsequent review.

	Level of Impact in Certified EIR	Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum CEQA Guidelines Section 15164
		Change in Project or Circumstances Involving New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(1-2)</i>	New Information Showing New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(3)(A-B)</i>	New Mitigation or Alternative to Reduce Significant Effect Is Declined <i>CEQA Guidelines Section 15162(a)(3)(C-D)</i>	
<b>Would the Project:</b>					
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?	LTS	No	No	No	Yes
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	LTS	No	No	No	Yes

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation;  
 SU = significant and unavoidable; N/A = topic not analyzed in Certified EIR

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

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

Current and future student population at Solis Park School are adequately served by existing neighborhood and regional parks and other recreational facilities. The proposed project involves the construction of a new two-story classroom building in the west corner of the school campus. The proposed project would expand student capacity from 1,000 to 1,300 students, which would accommodate long-term enrollment needs. The proposed project would not create the need for use of other existing recreational facilities in the area. The proposed project would not result in substantial physical deterioration of the recreational facilities in the area. Therefore, no new impacts would occur, and no changes or new information associated with the proposed project would require the preparation of a subsequent or supplemental EIR.

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

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The proposed project would serve the current student population and any future needs with the expansion of student capacity. Therefore, development of the proposed project would not result in any new impacts that were not previously analyzed, nor are any changes proposed or new information provided associated with development of the proposed project that would require the preparation of a subsequent or supplemental EIR.

### **4.16.3 Adopted Mitigation Measures Applicable to the Proposed Project**

No mitigation measures identified in the Certified EIR would be applicable to the proposed project. Therefore, no new changes or impacts would occur under the proposed project that would require the preparation of a subsequent or supplemental EIR.

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### 4.17 TRANSPORTATION/TRAFFIC

#### 4.17.1 Summary of Impacts Identified in the Approved Project

The Certified EIR conducted a traffic impact analysis report to evaluate the potential impacts related to transportation and traffic. The Certified EIR analyzed the study area circulation system based on existing traffic conditions, and 2015, 2030, and post-2030 future traffic conditions. In some cases, project impacts that were not mitigated by improvements identified in the North Irvine Transportation Mitigation Program were identified for project development scenarios. It was determined that traffic impacts would remain significant and unavoidable for the approved project if there are intersections where identified improvements may not be feasible due to cost, right-of-way concerns, or community opposition.

Because the primary responsibility for approving and/or completing certain improvements outside of Irvine lies with agencies other than the City (i.e., City of Lake Forest, Laguna Woods, Mission Viejo, Orange County, and the California Department of Transportation), the Certified EIR concluded that potential impacts may not be fully mitigated if such improvements were not completed for reasons beyond the City's control (i.e., the City cannot undertake or require improvements outside of Irvine's jurisdiction). The City adopted the North Irvine Transportation Mitigation Program to establish a funding mechanism for the transportation improvement mitigation measures required under CEQA for Planning Areas 1, 5B, 6, 9, 40, and 51, which was designed to provide improvement within Irvine and contribute a fair-share to improvements outside Irvine. Although the City acknowledged the fair-share cost of improvements to impacted facilities, because the adjacent cities have full control over implementing the identified improvements under their jurisdiction, mitigation could not be guaranteed. Therefore, the Certified EIR concluded that if improvements are not completed for reasons beyond the City's control, the approved project's traffic impacts would remain significant.

#### 4.17.2 Impacts Associated with the Proposed Project

A traffic impact analysis report was conducted for the proposed project and is included as Appendix A.

The following table summarizes the level of impact from the Certified EIR related to traffic/transportation and conditions resulting from the proposed project requiring subsequent review.

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Would the Project:	Level of Impact in Certified EIR	Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum CEQA Guidelines Section 15164
		Change in Project or Circumstances Involving New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(1-2)</i>	New Information Showing New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(3)(A-B)</i>	New Mitigation or Alternative to Reduce Significant Effect Is Declined <i>CEQA Guidelines Section 15162(a)(3)(C-D)</i>	
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	LTS/M	No	No	No	Yes
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	N/A	No	No	No	Yes
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	LTS/M	No	No	No	Yes
d) Result in inadequate emergency access?	LTS/M	No	No	No	Yes

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation;  
SU = significant and unavoidable; N/A = topic not analyzed in Certified EIR

**a) Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The Certified EIR determined that the proposed would not conflict with a program, plan, ordinance, or policy addressing the circulation system. The proposed project would include the construction of a new two-story classroom building in the west corner of the campus. All improvements associated with the proposed project would occur within the footprint of the existing school campus and would not result in substantial changes to transit, roadway, bicycle, or pedestrian facilities in the project area. The proposed project would not prevent the use of any roads on which public transit routes operate, nor would it generate increases traffic volumes on roads used as public transit routes to a degree that would cause lengthy delays for transit riders or eliminate and/or reduce access to such transit facilities. Access to the project

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site is located on Sentosa. Currently, the campus provides pedestrian pathways throughout the school. The approved project provided recommendations that educational facilities provide bicycle lockers or racks on site, as well as signage. Like the approved project, the proposed project would also follow these recommendations for pedestrian and bicyclists' awareness and safety. The proposed project would experience morning and afternoon peak traffic conditions associated with student drop-off and pick-up activities, which is typical of a school campus. Thus, with implementation of recommendations with respect to pedestrian and bicyclists' awareness and safety as outlined in the Certified EIR traffic impact analysis, no new impacts would occur, and no changes or new information would require the preparation of a subsequent or supplemental EIR.

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

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.** SB 743, signed by the Governor in 2013, has directed the Office of Planning and Research (OPR) to look at different metrics for identifying transportation impacts under CEQA. The Final OPR Technical Advisory was released in December 2018 and identified VMT as the preferred metric for transportation impact analysis for CEQA assessment. Consistent with SB 743, lead agencies can screen projects from project-level VMT assessment under the presumption that the project will result in a less-than-significant transportation impact.

The proposed project would serve the students residing within the IUSD. The Certified EIR analyzed project trips by faculty and staff originating outside of and within the City of Irvine. The proposed project involves the construction of a new two-story classroom building in the west corner of the campus. The proposed project would expand student capacity from 1,000 to 1,300 students, which would accommodate long-term enrollment needs. As mentioned previously, the majority of the daily vehicle trip generated by the proposed project would result from drop-off and pick-up of students residing near the existing school campus. The Traffic Study determined that the proposed project does not require analysis of VMT as it is exempt since the proposed project is serving as a public school (TK through eighth grade). Therefore, no new impacts would occur, and no changes or new information would occur that would require the preparation of a subsequent or supplemental EIR.

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

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.** The approved project determined that there would be an increase in vehicle-pedestrian conflicts corresponding with education facilities' starting and ending times, an increased number of pedestrians and bicycles in the area, and the vehicular turning movements that would occur at the schools' driveways, at nearby intersections, and in the general vicinity.

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However, it was determined that these issues are typical for a school development and would be reduced through school area signs and crosswalks.

Existing vehicle access to Solis Park School is provided via three site access driveways. The intersection of Culture and Zawn provides access to the west parking lot and pick-up/drop-off area on the south leg of the intersection. Two unsignalized driveways provide access to Abacus along the eastern boundary of the site. The northern driveway serves inbound traffic only, while the southern driveway serves outbound traffic only.

No impacts to on-site circulation are anticipated during the typical school day between 7 a.m. and 3 p.m. The existing site access points, pick-up/drop-off areas, and on-site parking are all anticipated to be sufficient to serve the school expansion project. The proposed project would not change pedestrian and bicycle access to campus.

Additionally, implementation of the proposed project would require no changes to vehicle access to the project site. The proposed project would include minor improvements to internal pedestrian walkways on campus. Therefore, the proposed project would not create a substantial increase in hazards due to design or incompatible uses. Therefore, no new impacts would occur, and no changes or new information would occur that would require the preparation of a subsequent or supplemental EIR.

#### d) Would the project result in inadequate emergency access?

##### **Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The proposed project would not result in inadequate emergency vehicle access. The project site has street frontages on all sides. Circulation features at the project site would accommodate emergency and ingress and egress by emergency vehicles as required by the OFCA. All access features must satisfy the City of Irvine's fire code. Compliance with the required fire code would ensure that adequate emergency access is provided. Therefore, no impact would occur, and no changes or new information would require the preparation of a subsequent or supplemental EIR.

### **4.17.3 Adopted Mitigation Measures Applicable to the Proposed Project**

The Certified EIR identified mitigation measures TRAN-1 through TRAN-8 to reduce impacts on transportation and traffic. However, none of the mitigation measures referenced in the Certified EIR would apply to the proposed project, and no new mitigation measures would be required. Therefore, no new changes or impacts would occur under the proposed project that would require the preparation of a subsequent or supplemental EIR.

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### 4.18 TRIBAL CULTURAL RESOURCES

#### 4.18.1 Summary of Impacts Identified in the Approved Project

AB 52 applies to projects that require a notice of preparation, mitigated negative declaration or negative declaration, and establishes a formal notice and consultation process between lead agencies and California Native American tribes that have requested to be notified. AB 52 went into effect in July 2015. The Certified EIR evaluated cultural resources in Section 5.11, *Cultural Resources*, which included tribal cultural resources and the discovery of human remains. The Certified EIR implemented mitigation measures to ensure the preservation of all cultural resources, which would include the monitoring of construction areas around known archaeological sites, reporting the recovery of any unidentified human remains to the appropriate authorities, and the preservation of protected cultural resources. Therefore, the approved project would not result in substantial adverse cumulative impacts on tribal cultural resources after mitigation.

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### 4.18.2 Impacts Associated with the Proposed Project

The following table summarizes the level of impact from the Certified EIR related to tribal cultural resources and conditions resulting from the proposed project requiring subsequent review.

	Level of Impact in Certified EIR	Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum CEQA Guidelines Section 15164
		Change in Project or Circumstances Involving New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(1-2)</i>	New Information Showing New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(3)(A-B)</i>	New Mitigation or Alternative to Reduce Significant Effect Is Declined <i>CEQA Guidelines Section 15162(a)(3)(C-D)</i>	
<b>Would the Project:</b>					
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	LTS/M	No	No	No	Yes
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	LTS/M	No	No	No	Yes

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	Level of Impact in Certified EIR	Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum CEQA Guidelines Section 15164
		Change in Project or Circumstances Involving New or More Severe Significant Effects CEQA Guidelines Section 15162(a)(1-2)	New Information Showing New or More Severe Significant Effects CEQA Guidelines Section 15162(a)(3)(A-B)	New Mitigation or Alternative to Reduce Significant Effect Is Declined CEQA Guidelines Section 15162(a)(3)(C-D)	
<b>Would the Project:</b>					
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	LTS/M	No	No	No	<b>Yes</b>

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation;  
 SU = significant and unavoidable; N/A = topic not analyzed in Certified EIR

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

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

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.** The Certified EIR determined that grading and exaction may disturb potential archaeological resources found within the planning area due to grading and exaction and thus, the project site. The approved project implemented Mitigation Measure CULT-4 in

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the event that if cultural resources are encountered during grading, alteration of earth materials in the vicinity of the find would be halted until a qualified expert has evaluated the find and recorded identified cultural resources. Compliance with the applicable mitigation measure and regulatory compliance would ensure that any significant resources discovered during construction of the proposed project would be properly examined by an archaeologist for recommendations concerning protection and preservation. In addition, the Certified EIR determined that it is not anticipated that human remains are present within the planning area. Implementation of the mitigation measure and regulatory code compliance would result in a less-than-significant impact of discovery of human remains. Therefore, no new impacts would occur, and there would be no changes or new information associated with the development of the proposed project that would require the preparation of a subsequent or supplemental EIR.

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

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.** The Certified EIR determined that grading and excavation may disturb potential archaeological resources found within the planning area due to grading and excavation and thus, the project site. The approved project implemented Mitigation Measure CUL-4 in the event that if cultural resources are encountered during grading, alteration of earth materials in the vicinity of the find would be halted until a qualified expert has evaluated the find and recorded identified cultural resources. Implementation of these mitigation measures would ensure that any significant resources discovered during construction of the proposed project would be properly examined by an archaeologist for recommendations concerning protection and preservation. Additionally, the Certified EIR determined that it is not anticipated that human remains are present within the planning area. However, in the event that human remains are discovered due to grading and excavation of the project site during construction of the proposed project, California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98 require that the District stop all work in the area of the find and notify the County Coroner and the Native American Heritage Commission. Mandatory compliance with these requirements would ensure that impacts to human remains are less than significant. Therefore, no new impacts would occur with respect to Tribal Cultural Resources, and there would be no changes or new information associated with development of the proposed project that would require the preparation of a subsequent or supplemental EIR.

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### 4.18.3 Adopted Mitigation Measures Applicable to the Proposed Project

The following mitigation measure from the Certified EIR, as amended, would apply to the proposed project to reduce impacts on cultural resources:

**CULT-4** ~~Prior to the issuance of any grading and/or building permits~~ construction activities, a mitigation program shall be ~~submitted by the developer to the City of Irvine prepared by the District~~ to address the accidental discovery or recognition of any human remains. The program shall include the following:

There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:

- The county coroner must be contacted to determine that no investigation of the cause of death is required, and

If the coroner determines the remains to be Native American:

- The coroner shall contact the Native American Heritage Commission within 24 hours.
- The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American.
- The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriated dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98, or
- Where the following conditions occur, the landowner or his authorized representative shall reburial the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.
  - The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission.
  - The descendant identified fails to make a recommendation; or

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- The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.

Compliance with this measure shall be verified by the ~~Community Development Department~~ IUSD.

Similar to the approved project, implementation of mitigation measure from the Certified EIR would reduce all significant impacts on cultural resources to a less-than-significant level. No change or impact would occur under the proposed project that would require the preparation of a subsequent or supplemental EIR.

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**4.19 UTILITIES AND SERVICE SYSTEMS**

**4.19.1 Summary of Impacts Identified in the Approved Project**

The Certified EIR determined that the development and operation of the approved project would not create a significant demand for water such that it would have an impact on the forecasted water supply of the Irvine Ranch Water District (IRWD). The Certified EIR also determined that the construction and operation of the approved project would not generate a significant amount of wastewater such that it would have an impact on wastewater treatment capacity, and that there is adequate landfill capacity for the generation of solid waste from the approved project. Adherence to City plans, programs, and policies would ensure that implementation of the approved project would have a less-than-significant impact on water, wastewater treatment, solid waste, and energy facilities.

**4.19.2 Impacts Associated with the Proposed Project**

The following table summarizes the level of impact from the Certified EIR related to utilities and service systems and conditions resulting from the proposed project requiring subsequent review.

	Level of Impact in Certified EIR	Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum CEQA Guidelines Section 15164
		Change in Project or Circumstances Involving New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(1-2)</i>	New Information Showing New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(3)(A-B)</i>	New Mitigation or Alternative to Reduce Significant Effect Is Declined <i>CEQA Guidelines Section 15162(a)(3)(C-D)</i>	
<b>Would the Project:</b>					
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	LTS	No	No	No	Yes

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	Level of Impact in Certified EIR	Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum CEQA Guidelines Section 15164
		Change in Project or Circumstances Involving New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(1-2)</i>	New Information Showing New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(3)(A-B)</i>	New Mitigation or Alternative to Reduce Significant Effect Is Declined <i>CEQA Guidelines Section 15162(a)(3)(C-D)</i>	
<b>Would the Project:</b>					
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	LTS	No	No	No	<b>Yes</b>
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?	LTS	No	No	No	<b>Yes</b>
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?	LTS	No	No	No	<b>Yes</b>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	LTS	No	No	No	<b>Yes</b>

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation;  
SU = significant and unavoidable; N/A = topic not analyzed in Certified EIR

**a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?**

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**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The Certified EIR determined that there would be an increase in demand for water, sewer service, energy, natural gas, and telecommunications services associated with development of the approved project. The proposed project would include the construction of a new two-story classroom building in the west corner of the campus between February 2027 and August 2028. The proposed project may increase the demand for water, sewer service, energy, natural gas, and telecommunication services. However, as discussed under checklist questions 4.19.2(b), (c), (d), and (e), the changes from the proposed project would be considered negligible and would not create significant impacts. Therefore, no impact would occur, and no changes or new information would require the preparation of a subsequent or supplemental EIR.

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

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The Certified EIR determined that sufficient water supply is available through the IRWD to serve the approved project. Analysis projected enough water supply within a 20-year projection. The construction and operation of the proposed project would expand student capacity from 1,000 to 1,300 students, which would accommodate students residing in the surrounding neighborhoods and long-term needs. The addition of students on campus would not create significant demand for water such that it would have an impact on the forecasted water supply of the IRWD. Impacts to water resources from development of the proposed project would be less than significant. Therefore, no impact would occur, and no changes or new information would require the preparation of a subsequent or supplemental EIR.

**c) Would the project 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?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The Certified EIR determined that the construction and operation of the approved project would not generate a significant amount of wastewater such that it would have an impact on wastewater treatment capacity forecasted by IRWD. The construction and operation of the proposed project would expand student capacity from 1,000 to 1,300 students, which would accommodate students residing in the surrounding neighborhoods and long-term needs. The addition of students on campus would not create significant wastewater such that it would have an impact on treatment capacity forecasted by IRWD. Therefore, there would be sufficient wastewater treatment capacity to support the proposed project. No new impacts would occur as a result of development of the proposed project, and no new changes or new information would require the preparation of a subsequent or supplemental EIR.

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- d) Would the project 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?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The Certified EIR determined that development of the approved project would result in solid waste generation during construction and operation of the school. Solid waste generated in the project area is collected by the County of Orange Integrated Waste Management Department and hauled to the Frank R. Bowerman Landfill, at 11002 Bee Canyon Access Road in Irvine. This landfill facility is permitted to accept a daily maximum of 11,500 tons per day and is scheduled to close in approximately 2053. The proposed project would generate solid waste during construction resulting from clearing and grubbing of the site and from the building construction. The generation of construction waste would occur on a short-term basis and the resulting volume of construction-generated waste is anticipated to be insignificant. Moreover, construction and demolition debris are required to be recycled to comply with the 50 percent diversion rate pursuant to AB 939. Potentially hazardous construction waste would only be disposed of at facilities permitted to receive them and in accordance with local, state, and federal regulations.

Operation of the proposed project would result in an increased volume of solid waste received at local landfills. The Certified EIR determined that the approved project solid waste generation would be negligible when compared to the daily capacity at the landfill. The existing landfill has the capacity to accommodate the solid waste demands resulting from the proposed project. Like the approved project, the proposed project would also result in short-term construction waste as well as an overall increase in solid waste generation with the increase in student capacity. However, this increase, like the approved project, would be considered negligible compared to the daily landfill capacity. No new impacts would occur as result of development of the proposed project, and no new changes or new information would require the preparation of a subsequent or supplemental EIR.

- e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The Certified EIR determined that construction and operation of the approved project would comply with applicable federal, state, and local regulations related to solid waste. The following federal and state laws and regulations govern solid waste disposal. The USEPA administers the Resource Conservation and Recovery Act of 1976 and the Solid Waste Disposal Act of 1965, which govern solid waste disposal. In the State of California, AB 939 (Integrated Solid Waste Management Act of 1989; PRC 40050 et seq.) required every California city and county to divert 50 percent of its waste from landfills by the year 2000 by such means as recycling, source reduction, and composting. In addition, AB 939 requires each county to prepare a countywide

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siting element specifying areas for transformation or disposal sites to provide capacity for solid waste generated in the county that cannot be reduced or recycled for a 15-year period. AB 1327, the California Solid Waste Reuse and Recycling Access Act of 1991, requires local agencies to adopt ordinances mandating the use of recyclable materials in development projects. The proposed project would comply with all laws and regulations governing solid waste and the county's strategies for waste reduction. Additionally, to reduce the amount of waste going into local landfills from schools, the state passed the School Diversion and Environmental Education Law, SB 373, which required CalRecycle to develop school waste reduction tools. In compliance with this law, CalRecycle encourages school districts to establish and maintain a paper recycling program in all classrooms, administrative offices, and other areas owned and leased by the school district. Participation in this and other such programs would further reduce solid waste generated from the project and assist in the county's compliance with AB 939. The proposed project would comply with all federal, state, and local statutes and regulations related to solid waste and no impact would result from the project implementation. No new impacts would occur as result of development of the proposed project, and no new changes or new information would require the preparation of a subsequent or supplemental EIR.

#### **4.19.3 Adopted Mitigation Measures Applicable to the Proposed Project**

The Certified EIR identified Mitigation Measures SW-1 through SW-5 to reduce impacts on utilities and service systems. However, none of the mitigation measures referenced in the Certified EIR would apply to the proposed project, and no new mitigation measures would be required. No change or impact would occur under the proposed project that would require the preparation of a subsequent or supplemental EIR.

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## 4.20 WILDFIRE

### 4.20.1 Summary of Impacts Identified in the Approved Project

The topic of wildfire was added to the CEQA checklist in 2019, and therefore, the Certified EIR did not analyze the topic of wildfire separately. However, the Certified EIR determined that the potential to expose people or structures to a significant risk of loss, injury, or death involving wildland fires would be less than significant. The Certified EIR determined that the project site is not within a High Fire Severity Zone. Therefore, impacts with respect to wildfire would be less than significant.

### 4.20.2 Impacts Associated with the Proposed Project

The following table summarizes the level of impact from the Certified EIR related to wildfire and conditions resulting from the proposed project requiring subsequent review.

	Level of Impact in Certified EIR	Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum CEQA Guidelines Section 15164
		Change in Project or Circumstances Involving New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(1-2)</i>	New Information Showing New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(3)(A-B)</i>	New Mitigation or Alternative to Reduce Significant Effect Is Declined <i>CEQA Guidelines Section 15162(a)(3)(C-D)</i>	
<b>Would the Project:</b>					
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	N/A	No	No	No	<b>Yes</b>
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?	N/A	No	No	No	<b>Yes</b>

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	Level of Impact in Certified EIR	Conditions Requiring Subsequent Review			Proposed Project Meets the Conditions for an Addendum CEQA Guidelines Section 15164
		Change in Project or Circumstances Involving New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(1-2)</i>	New Information Showing New or More Severe Significant Effects <i>CEQA Guidelines Section 15162(a)(3)(A-B)</i>	New Mitigation or Alternative to Reduce Significant Effect Is Declined <i>CEQA Guidelines Section 15162(a)(3)(C-D)</i>	
<b>Would the Project:</b>					
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?	N/A	No	No	No	Yes
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?	N/A	No	No	No	Yes

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation;  
 SU = significant and unavoidable; N/A = topic not analyzed in Certified EIR

**a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The project site is not on land classified as a very high fire hazard severity zone (FHSZ) (CalFire 2025). The nearest very high FHSZ is approximately 0.2 mile east of the project site. The project site is within an urban, built-out area of the city. Operation of the proposed project would continue to serve the existing Solis Park School student population. The proposed project would follow the appropriate local and regional procedures and policies regarding emergency response and would not interfere with any adopted emergency response or evacuation plan. The project site would accommodate emergency and ingress and egress by emergency vehicles as required by OFCA. All access features must satisfy the City of Irvine’s fire code. Compliance

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with the required fire code would ensure that adequate emergency access is provided. Therefore, no impact would occur, and no changes or new information would require the preparation of a subsequent or supplemental EIR.

- b) Would the project, 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?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

As previously discussed, the nearest fire hazard severity zone is approximately 0.2 mile east of the project site. Additionally, the project site and surrounding area are flat and in an urbanized area. There is no wildland susceptible to wildfire on or near the project site. The project site and surrounding area are currently developed, and therefore lack the vegetation necessary for the uncontrolled spread of a wildfire. Construction activities would be subject to review by OCF to ensure adequate fire protection according to the standards of the Uniform Fire Code and the California Fire Code. Therefore, no impact would occur, and no changes or new information would require the preparation of a subsequent or supplemental EIR.

- c) Would the project 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?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The project site is in an urban area served by existing utility infrastructure, including water, wastewater, and power. In addition, the proposed project would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk. Therefore, no impact would occur, and no changes or new information would require the preparation of a subsequent or supplemental EIR.

- d) Would the project 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?**

**Project Meets the Conditions for an Addendum Pursuant to CEQA Guidelines Section 15164.**

The project site is in an urban, built-out area of the city and is flat; the surrounding area is also flat. Additionally, according to the FEMA flood zone map, the project site is within Zone X, an area of minimal flood hazard (FEMA 2025). The project site and surrounding area are generally flat and would have low potential of post-fire slope instability. Therefore, no impact would occur, and no changes or new information would require the preparation of a subsequent or supplemental EIR.

#### **4. ENVIRONMENTAL ANALYSIS**

### **4.20.3 Adopted Mitigation Measures Applicable to the Proposed Project**

Wildfire impacts were not analyzed in the Certified EIR, thus, no mitigation measures were identified in the Certified EIR for the approved project. However, Mitigation Measure HH-3, shown in Section 4.9.3 of this Addendum, would be applicable to the proposed project to reduce wildfire impacts. No new mitigation measures would be required for the proposed project. Therefore, no new changes or impacts would occur under the proposed project that would require the preparation of a subsequent or supplemental EIR.

## 5. FINDINGS

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As summarized in this section and for the reasons described in Chapter 4 of this Addendum, the District has concluded that the proposed project meets the conditions of CEQA Guidelines Section 15164 and that therefore an Addendum to the Certified EIR is the appropriate CEQA document to address the proposed project.

As previously discussed, under CEQA Guidelines Section 15164, an Addendum to an EIR may be prepared if only minor technical changes or additions are necessary or none of the conditions described in CEQA Guidelines Section 15162 calling for the preparation of a subsequent EIR have occurred. The following restates the standards outlined in CEQA Guidelines Section 15162 as they relate to the proposed project.

- 1. No substantial changes are proposed in the project which would require major revisions of the Certified EIR to the involvement of new significant environmental effect or a substantial increase in the severity of previously identified significant effect.**

The proposed project consists of the construction of one new two-story classroom building within the existing Solis Park School campus. Student capacity on the campus would increase from 1,000 to 1,300 students. The proposed project does not include a change in land use or additional development that was not previously analyzed in the Certified EIR or subsequent addenda. The proposed project includes construction-type activities previously analyzed in the Certified EIR and subsequent addenda. The proposed project does not include substantial changes compared to the approved project; implementation of the proposed project would not require revisions to the Certified EIR. The analysis provided in Chapter 4 illustrates that the proposed project would not result in any new or more severe significant impacts than those identified in the Certified EIR.

- 2. No substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the Certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.**

Substantial changes have not occurred with respect to the circumstances under which the approved project was undertaken that would require major revisions to the Certified EIR. The Certified EIR and subsequent addenda analyzed educational land uses, which includes the project site, although Solis Park School was not specifically identified. Implementation of the proposed project would occur within the impact boundaries identified in the Certified EIR. The

## 5. FINDINGS

proposed project does not include a change in land use or propose any off-site improvements. Therefore, no proposed changes or revisions to the Certified EIR are required.

**3. No new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:**

**(a) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;**

The proposed project would be implemented within the impact boundary identified for the approved project analyzed in the Certified EIR. Additionally, the proposed project does not include any land use changes; therefore, the proposed project would not affect the operational conditions analyzed in the Certified EIR and subsequent addenda. Although the Certified EIR did not specifically identify Solis Park School, the construction activities associated with the proposed project would not include new construction equipment, intensity, or methods that would substantially increase significant impacts identified in the Certified EIR.

**(b) Significant effects previously examined will be substantially more severe than shown in the previous EIR;**

Based on the prior analysis, the new components in the proposed project would not result in more severe impacts than those identified in the Certified EIR. All other operational characteristics of the approved project would remain unchanged from those evaluated in the Certified EIR and subsequent addenda.

**(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 project proponents decline to adopt the mitigation measure or alternative; or**

Mitigation measures or alternatives previously found not to be feasible at the time the Certified EIR was prepared have not been identified as feasible. The proposed project would incorporate all applicable mitigation measures from the Certified EIR. The mitigation measures not applicable to the proposed project would continue to be valid, feasible, and applicable to the approved project as refined by the subsequent Addendum. No new mitigation measures are required.

**(d) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects**

**on the environment, but the project proponents decline to adopt the mitigation measure or alternative.**

No new mitigation measures or alternatives were identified. The existing applicable mitigation measures from the Certified EIR would reduce impacts to the feasible extent possible. No new mitigation measures or revisions to previously adopted measures are required.

**5. FINDINGS**

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# Appendix A      Solis Park K-8 School Transportation Analysis

**APPENDIX**

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Appendix A  
Solis Park K-8 School Transportation Analysis

# SOLIS PARK K-8 SCHOOL

TRANSPORTATION ANALYSIS

**Prepared for:**  
PlaceWorks

**Prepared by:**  
DJ&A, P.C.



September 29, 2025

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- Appendix B—Intersection Analysis Reports [2025 Existing]
- Appendix C—Intersection Analysis Reports [2029 No Project]
- Appendix D—Intersection Analysis Reports [2025 With Project]
- Appendix E—Intersection Analysis Reports [2029 With Project]

## 1. Introduction

Solis Park K-8 School is located at 101 Abacus in the City of Irvine. This transportation analysis report analyzes changes related to traffic and vehicle miles traveled (VMT) associated with proposed improvements to the school. The proposed improvements involve the construction of a new classroom building for the school and would increase the student capacity from 972 students to 1,300 students. This is an increase of 328 students. The school expansion is necessary to accommodate increased enrollment from new residential development planned to the south of the school.

The transportation analysis evaluates traffic conditions with the proposed project and includes the following elements:

- A limited scope traffic and site circulation analysis – including review of site access driveways and adjacent intersections
- VMT screening

A more detailed description of the proposed project is provided below.

### 1.1 Project Description

Improvements at Solis Park School are proposed to be constructed in one phase. The project consists of the construction of the new two-story classroom building and associated site improvements, including fire lane access, circulation and accessibility features, and enhanced pedestrian connections between the new building and existing parking areas. The new classroom building would be located in the southwest portion of the existing campus replacing a portion of the existing field and blacktop.

Construction of the project is anticipated to be complete by 2029.

## 2. Methodology

The Irvine Unified School District (IUSD) operates as the lead agency for the preparation of this transportation analysis and environmental review is being completed following the requirements of the California Environmental Quality Act (CEQA). As lead agency, IUSD is the approving agency for both the transportation analysis and overall CEQA document. IUSD has not established specific requirements to guide the completion of a transportation analysis. Therefore, this analysis follows the transportation impact analysis guidelines established by the City of Irvine. This approach provides consistency between this analysis and other transportation impact analyses conducted in the vicinity of the project location.

### 2.1 Intersection Analysis

Level of service for signalized intersections is evaluated using the intersection capacity utilization (ICU) analysis methodology, consistent with City of Irvine guidelines. The ICU methodology determines intersection level of service by evaluating volume to capacity ratios for the intersection. Unsignalized site access driveways, intersections, and roundabouts are evaluated using the latest edition of the Highway Capacity Manual (HCM). Under the HCM methodology, intersection level of service is determined by calculating the average delay experienced by vehicles at the intersection for all-way stop controlled and roundabout locations or through the controlled approaches to the intersection for side street stop-controlled intersections.

### 2.2 Project Peak Hours

The traffic analysis examines the AM peak hour only, corresponding to the peak school drop-off time period. The PM peak hour for a K-8 school does not overlap with the typical PM peak hour for adjacent street traffic. Therefore, no analysis of PM peak hour traffic conditions is included in this report.

### 2.3 VMT Analysis

The project is evaluated for potential impacts related to Vehicle Miles Travelled (VMT) consistent with the requirements contained in the City of Irvine Transportation Impact Analysis Guidelines. These guidelines outline the following steps for VMT impact analysis:

- For residential projects, the project's Residential VMT per capita rate will be evaluated against the residential VMT per capita threshold goal:
  - If the project's residential VMT rate is less than or equal to the City's adopted residential VMT rate threshold, then no impact results and no mitigation is required.
  - If the project's residential VMT rate is greater than the City's adopted residential VMT rate threshold, then the project has a VMT impact and mitigation is required.
- For non-residential projects (i.e., office, industrial, retail greater than 100,000 total gross square feet, hotels, hospitals, commercial recreation, university uses), the project's non-residential VMT per employee rate will be evaluated against the non-residential VMT per employee threshold goal:
  - If the project's non-residential VMT rate is less than or equal to the City's adopted non-residential VMT rate threshold, then no impact results and no mitigation is required.
  - If the project's non-residential VMT rate is greater than the City's adopted non-residential VMT rate threshold, then the project has a VMT impact and mitigation is required.

- For mixed-use projects that include both residential and non-residential uses, all project land uses will be evaluated, except for those specific land uses screened out in Tier 1. Both the residential VMT per capita and non-residential VMT per employee will be evaluated separately. If either residential or non-residential uses cause impacts, such uses will be mitigated.

If the project results in a VMT impact, then mitigation is required to reduce the project’s VMT rate to the City’s adopted VMT rate threshold.

## 2.4 Determination of Significant Impacts

At all study intersections and driveways, traffic levels of service (LOS) are designated A through F, with LOS A representing free flow conditions and LOS F representing severe traffic congestion. Table 1 summarizes the criteria for the intersection LOS under both the ICU and HCM methodologies.

Table 1 Level of Service Thresholds

Level of Service (LOS)	ICU (volume to capacity ratio)	HCM Unsignalized (control delay)
A	0.00-0.60	≤ 10
B	0.61-0.70	> 10 to ≤ 15
C	0.71-0.80	> 15 to ≤ 25
D	0.81-0.90	> 25 to ≤ 35
E	0.91-1.00	> 35 to ≤ 50
F	Above 1.00	> 50

The City of Irvine has adopted a minimum level of service standard of LOS D for all intersections included in the project study area. For any intersection that would have an ICU above 0.90, the LOS is not acceptable. All project intersections with an ICU better than 0.91 would operate at an acceptable LOS.

## 2.5 Average Daily Traffic Analysis

Average daily traffic (ADT) data was collected along nearby roadways as a part of this study to support the separate noise and air quality analyses conducted as part of the CEQA environmental review. ADT data collection was completed on a typical weekday during the school year.

## 2.6 Project Opening Year and Traffic Growth Rate

The project opening year for the project is anticipated to be 2029. This is the short-term future analysis year selected for analysis in this report. An annual growth rate of 1% was applied to existing intersection and roadway volumes to develop traffic forecasts for 2029 conditions. This growth rate is consistent with City of Irvine guidelines.

It is acknowledged that the Great Park area is a growing part of the city and new residential development is coming online in future years between 2025 and 2029. However, the limited scope of this traffic study means that most of the study intersections are located in close proximity to Solis Park School and within the Solis Park neighborhood. The residential developments adjacent to the school and the project study intersections are complete and future traffic generated by new residential development south of Astor is not anticipated to significantly impact most of the project study intersections. The largest potential change in traffic volumes would be anticipated at the intersection of Lynx and Astor. As shown in this analysis, this intersection is forecast to operate at LOS A in the

Opening Year condition with and without the project. Even with larger background increases in traffic at this location, no significant traffic impacts would be anticipated at this location as this increase in traffic would have been analyzed as part of the environmental review completed for the new residential developments and the intersection was constructed to serve these forecast traffic volumes.

## 2.7 Traffic Study Periods and Scenarios

Traffic operations and roadway segment volumes for the study area intersections are reported for each of the following scenarios:

- Existing Conditions (2025) without Project
- Opening Year (2029) without Project
- Existing Conditions (2025) with Project
- Opening Year (2029) with Project

### 3. Study Area Intersections and Roadway Segments

This section discusses the existing project site, site access driveways, and the surrounding transportation network, including roadways and pedestrian and bicycle infrastructure.

#### 3.1 Study Intersections

The following intersections and roadway segments are included in this transportation impact analysis:

##### Study Intersections

1. Lynx and Culture
2. Lynx and Sentosa
3. Lynx and Astor
4. Abacus and Sentosa
5. Zawn and Culture

##### Project Driveways

1. Abacus and Solis South Driveway
2. Abacus and Solis North Driveway

Figure 1 illustrates the project site plan and location. Figures 2 and 3 show the existing lane geometry for study intersections and project driveways.

#### 3.2 Existing Road Network

Selected roadways located in the vicinity of the project area are described in this section. Items of note include existing geometry, pedestrian and bicycle facilities, speed limit, parking facilities, and adjacent land uses. The selected roadways are as follows:

##### **Culture**

Culture is a two-lane local roadway that borders the northern edge of the Solis Park School campus. The roadway provides access to surrounding residential streets, as well as a secondary pick-up/drop-off area and parking lot for Solis Park School. The roadway has sidewalks on both sides and marked crosswalks, supporting pedestrian access. The speed limit is not signed, and is assumed to be 25 mph, consistent with typical residential streets. On-street parking is permitted along portions of the roadway between Cadence to the West and Lynx to the east. Adjacent land uses include residential neighborhoods and educational institutions.

##### **Lynx**

Lynx is a two-lane north-south roadway that runs along the eastern boundary of the traffic study area and the Solis Park neighborhood. The street has a sidewalk on the west side of the street and striping for on-street bike lanes in both directions. The speed limit is 25 mph in the study area. On-street parking is prohibited. Land uses along Lynx are residential.

##### **Abacus**

Abacus is a local roadway serving the Solis Park neighborhood and the roadway borders the east side of Solis Park School. The roadway provides access to surrounding residential streets, as well as the primary pick-up/drop-off area and parking lot for Solis Park School. The roadway is two lanes (one in

each direction). The speed limit is 25 mph. Sidewalks are provided in both directions. On-street parking is permitted. The surrounding land use includes predominantly single-family and attached homes and Solis Park School.

### **Sentosa**

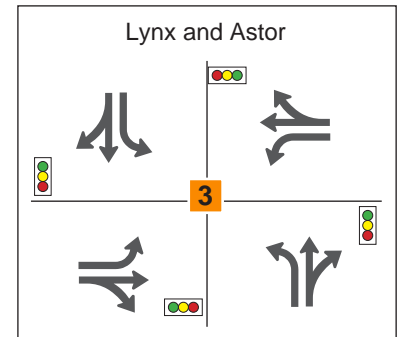
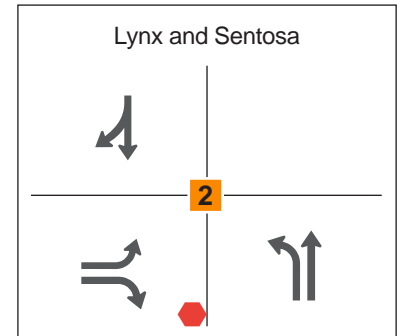
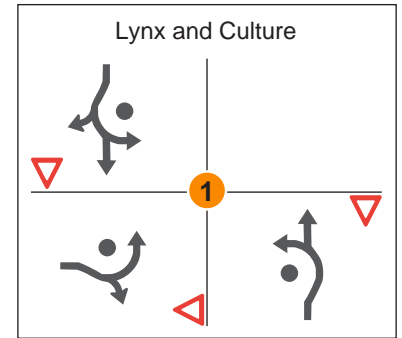
Sentosa is a local roadway serving the Solis Park neighborhood and the roadway borders the south side of Solis Park School. The roadway provides access to surrounding residential streets. The roadway is two lanes (one in each direction). The speed limit is 25 mph. Sidewalks are provided in both directions. On-street parking is permitted. The surrounding land use includes predominantly single-family and attached homes and Solis Park School.

### **3.3 Bicycle and Pedestrian Facilities**

On-street, striped bike lanes are provided along Lynx to the east of the school campus. Other roadways in the study area are local residential streets, which allow bicycle access, but are not striped to provide bike lanes. Numerous off-street pathways connect surrounding residential uses to the school campus. All local residential streets near the school campus provide sidewalks on both sides of the street.

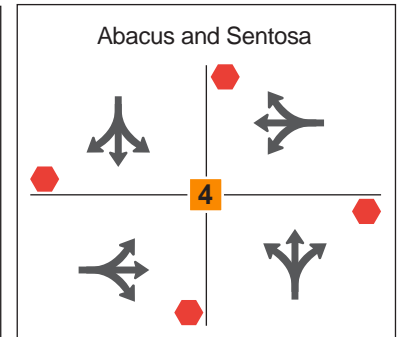
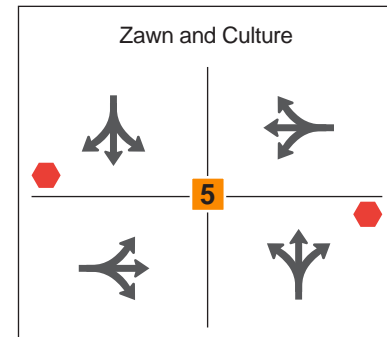
Marked crosswalks are provided at the intersections of Abacus and Sentosa, Abacus and Culture, Baluster and Sentosa, and Baluster and Culture. Mid-block crosswalks are provided across Culture and Sentosa, providing connectivity between Solis Park School and residential neighborhoods to the north and south of the campus.



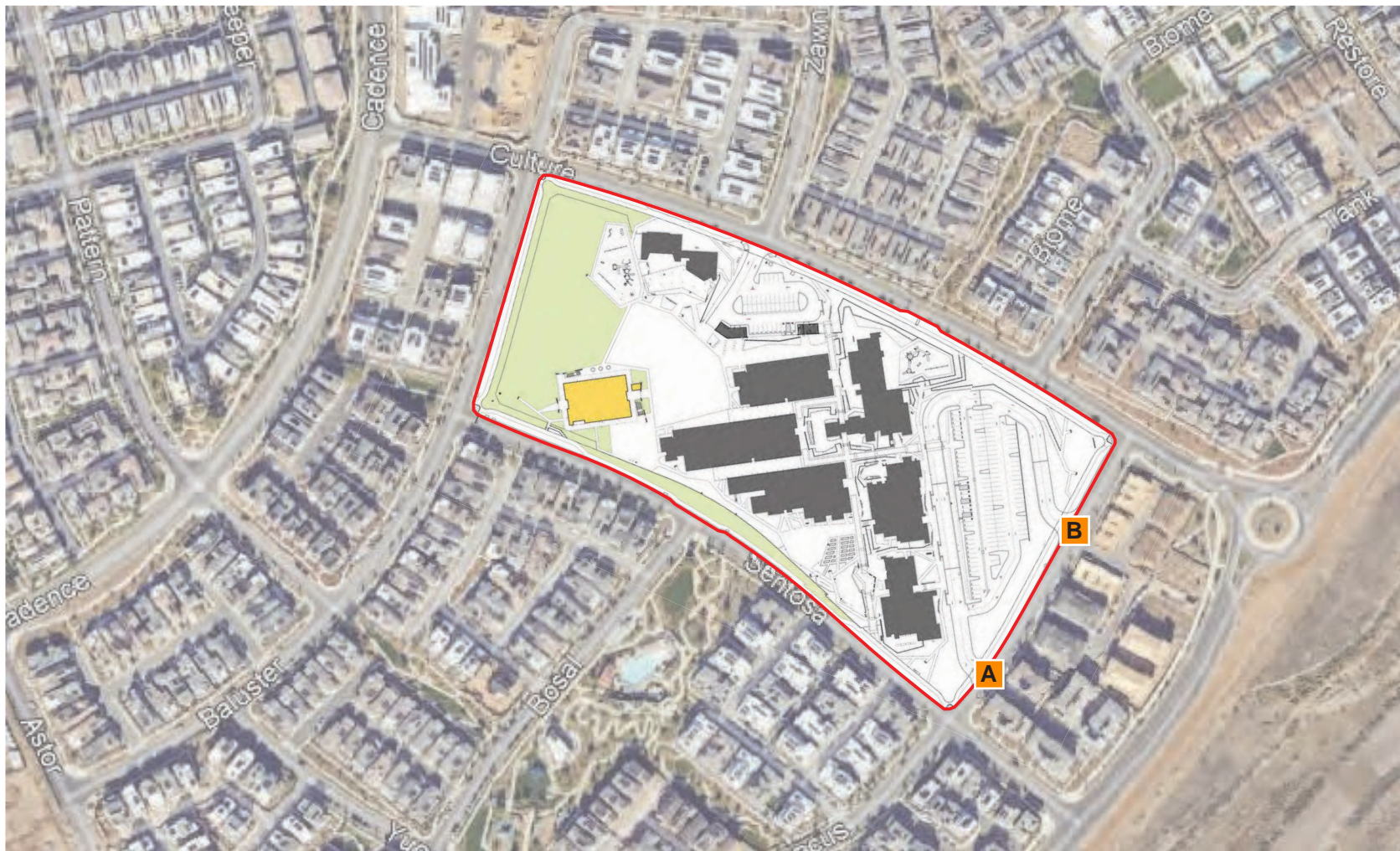


**LEGEND**

- Study Intersection
- Study Roundabout
- Project Site
- Stop Sign
- Yield Sign
- Traffic Light

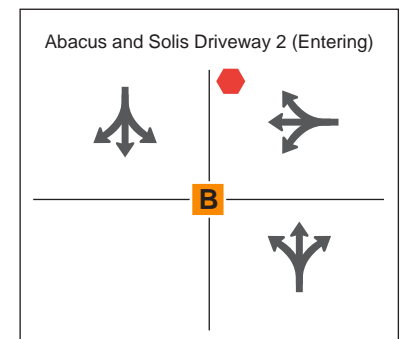
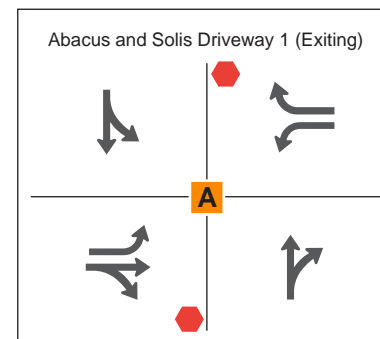


**Figure 2: Existing Intersection Geometry**



**LEGEND**

- Study Driveway
- ◆ Stop Sign
- Project Site



**Figure 3: Existing Driveway Geometry**

## 4. Existing Conditions

This section presents the Existing Conditions (2025) for traffic in the project study area. Descriptions of the existing roadway volumes and intersection level of service analysis results for the Existing Year (2025) No Project scenario are included in this section.

### 4.1 Average Daily Traffic

The average daily traffic (ADT) volumes for the study area roadway segments for the Existing Condition are summarized in Table 2. Traffic count data sheets are provided in Appendix A.

Table 2 Roadway Average Daily Traffic (ADT)

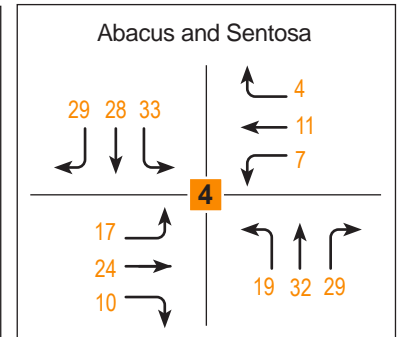
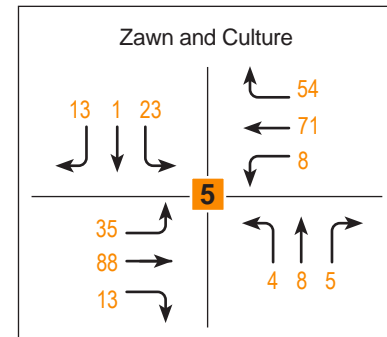
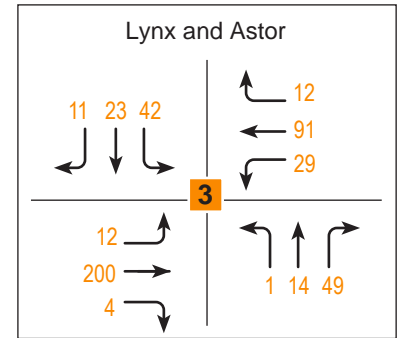
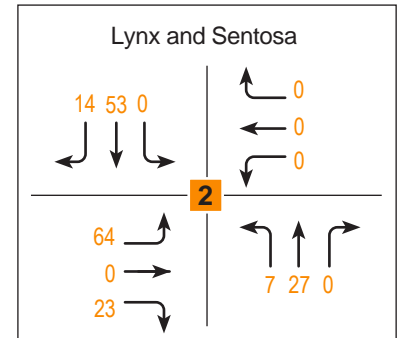
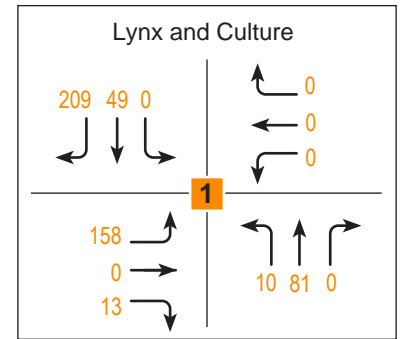
Roadway	Source	Count Date	EXISTING ADT
Sentosa between Abacus and Lynx	AimTD LLC	09/09/2025	820
Lynx between Sentosa and Astor	AimTD LLC	09/09/2025	1,201
Abacus between Sentosa and Culture	AimTD LLC	09/09/2025	1,233
Culture between Zawn and Abacus	AimTD LLC	09/09/2025	1,761

### 4.2 Intersection and Driveway Level of Service

Intersection and driveway level of service (LOS) was analyzed using the methods outlined in Section 2. Table 3 summarizes the existing level of service at the study intersections and site access driveways. Existing Year (2025) No Project AM peak hour turning movement volumes are shown in Figures 4 and 5. All study intersections and site access driveways currently operate at an acceptable level of service during the weekday AM peak hour.

Table 3 Existing Intersection and Driveway Level of Service

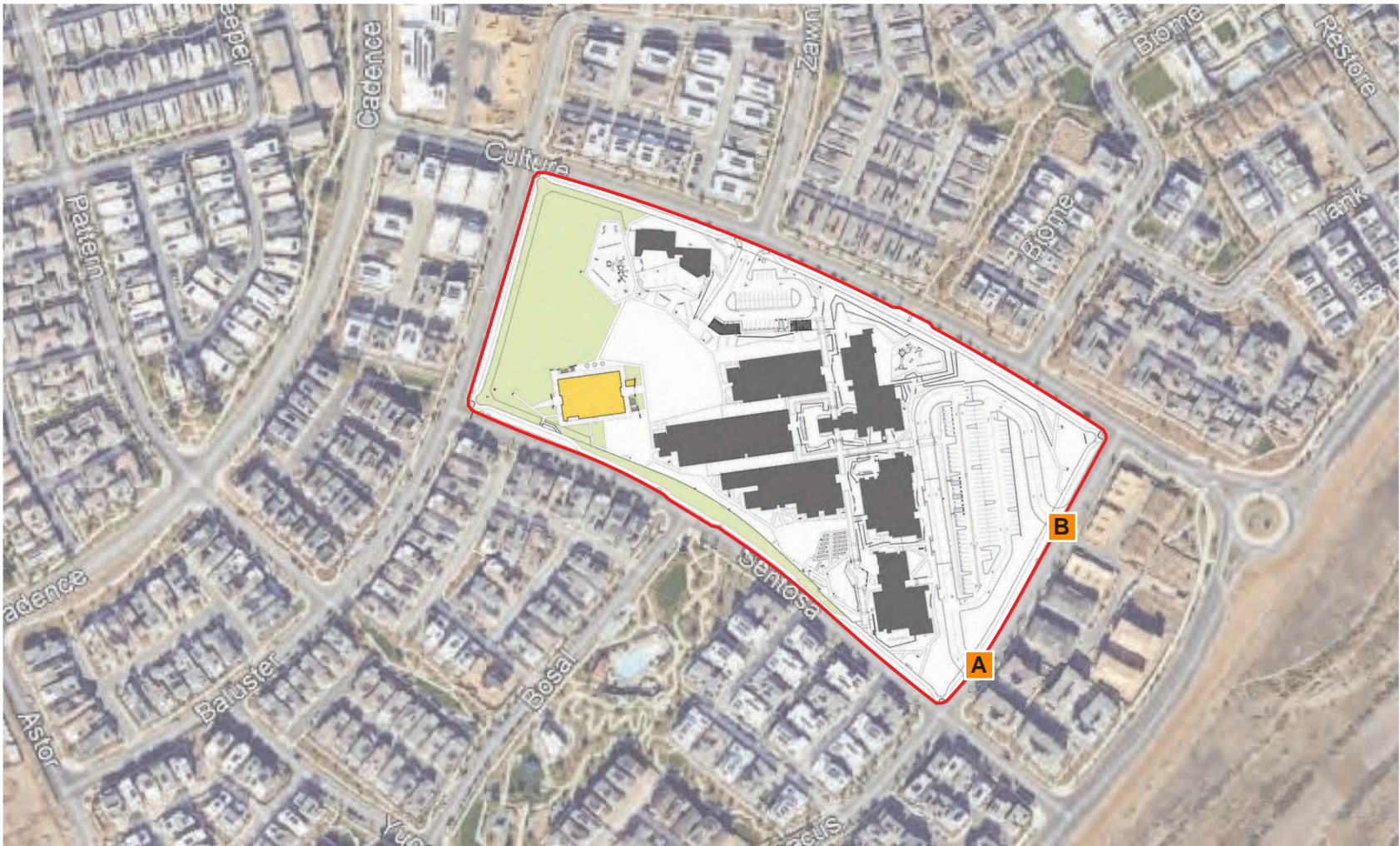
Intersection/Driveway	AM Peak Hour		AM Peak Hour	
	V/C Ratio	LOS	HCM Delay (seconds)	LOS
Lynx and Culture	-	-	4.3	A
Lynx and Sentosa	-	-	9.7	A
Lynx and Astor	0.367	A	-	-
Abacus and Sentosa	-	-	7.5	A
Abacus and Solis Driveway 1	-	-	9.9	A
Abacus and Solis Driveway 2	-	-	9.5	A
Zawn and Culture	-	-	7.9	A



**LEGEND**

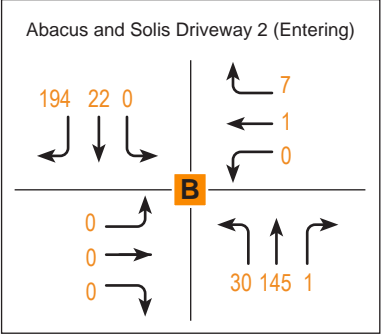
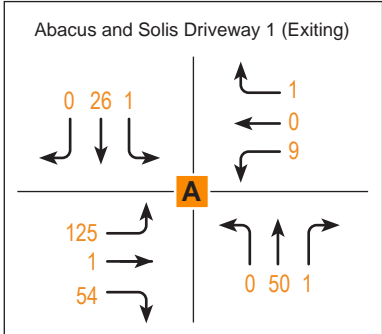
- Study Intersection
- ✕ AM Peak Hour Volume
- Project Site

**Figure 4: Existing Year (2025) Intersection No Project Volumes AM**



**LEGEND**

- Study Driveway
- × AM Peak Hour Volume
- Project Site



**Figure 5: Existing Year (2025) Driveway No Project Volumes AM**

## 5. Opening Year (2029) No Project

This section presents the ADT and peak hour traffic operations for the Opening Year (2029) No Project scenario. Opening Year No Project traffic volumes were developed by applying a 1% annual growth rate to Existing Year (2025) counts. Forecasts for average daily traffic and intersection level of service for the Opening Year (2029) No Project scenario are presented in this section.

### 5.1 Average Daily Traffic

The average daily traffic for the study area roadway segment in the Opening Year (2029) No Project scenario is presented in Table 4.

Table 4 Estimated ADT Opening Year No Project

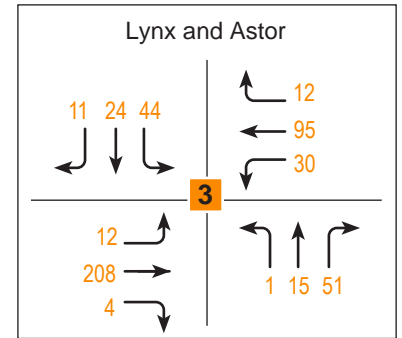
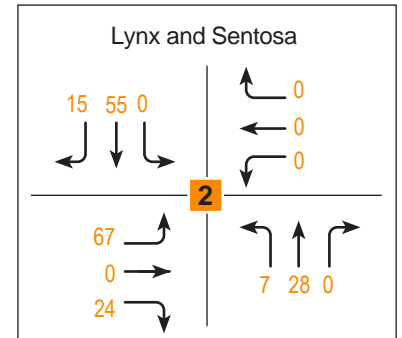
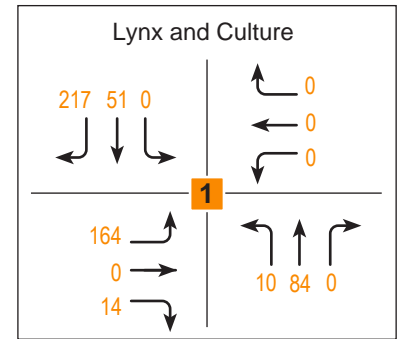
Roadway	2029 No Project Volume
Sentosa between Abacus and Lynx	853
Lynx between Sentosa and Astor	1,250
Abacus between Sentosa and Culture	1,283
Culture between Zawn and Abacus	1,833

### 5.2 Intersection Level of Service

Table 5 presents a summary of the AM peak hour intersection level of service analysis results for the Opening Year (2029) No Project scenario. Opening Year (2029) No Project AM peak hour turning movement volumes are shown in Figures 6 and 7. All study intersections and site access driveways are forecasted to operate at acceptable levels of service during the Opening Year No Project conditions.

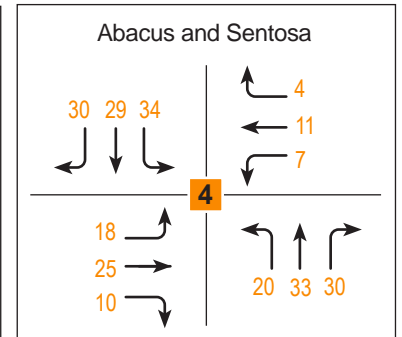
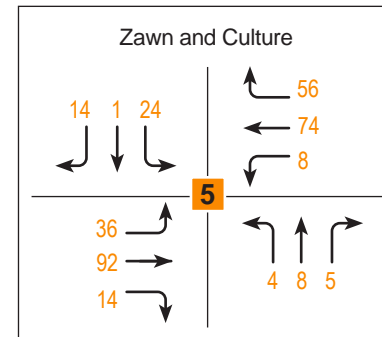
Table 5 Opening Year (2029) No Project Intersection LOS

Intersection	AM Peak Hour		AM Peak Hour	
	V/C Ratio	LOS	HCM Delay (seconds)	LOS
Lynx and Culture	-	-	4.4	A
Lynx and Sentosa	-	-	9.7	A
Lynx and Astor	0.373	A	-	-
Abacus and Sentosa	-	-	7.6	A
Abacus and Solis Driveway 1	-	-	9.9	A
Abacus and Solis Driveway 2	-	-	9.6	A
Zawn and Culture	-	-	7.9	A

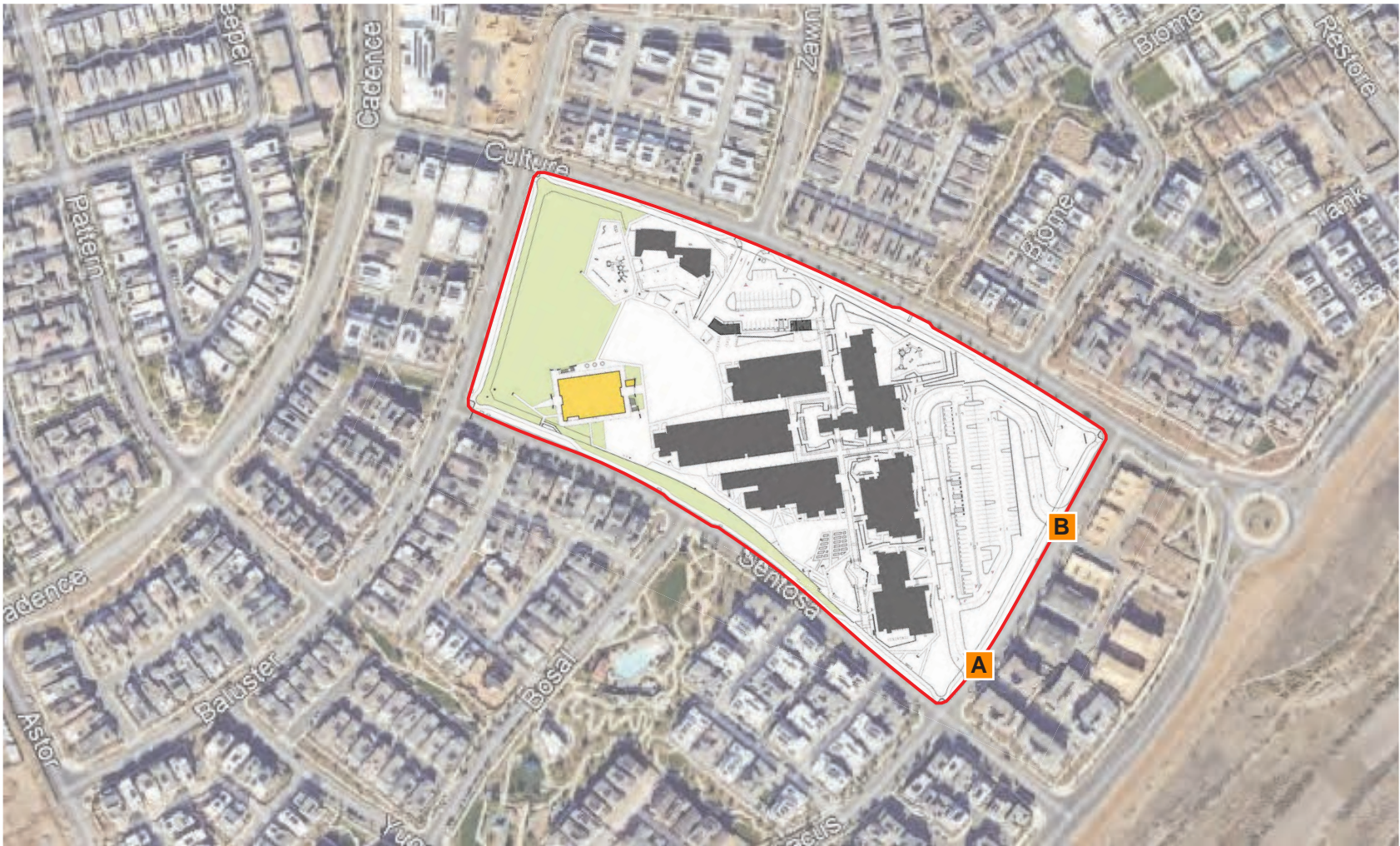


**LEGEND**

- Study Intersection
- × AM Peak Hour Volume
- Project Site

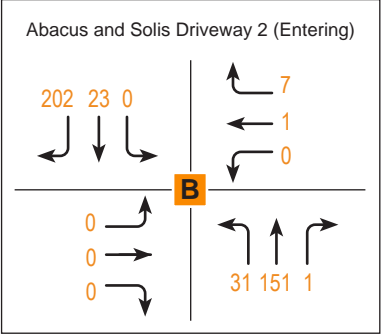
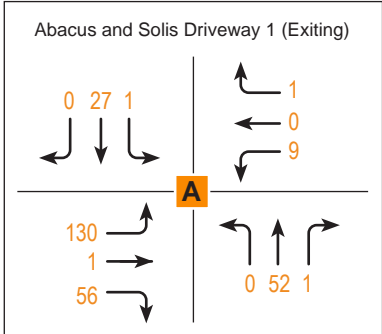


**Figure 6: Opening Year (2029)  
Intersection No Project Volumes AM**



**LEGEND**

- Study Driveway
- × AM Peak Hour Volume
- Project Site



**Figure 7: Opening Year (2029)  
Driveway No Project Volumes AM**

## 6. Project Conditions

This section presents the trip generation forecasts for the project, ADT values for the 2025 Existing with Project and 2029 Opening Year with Project conditions, and LOS analysis for the study intersections and project driveways for the 2025 Existing with Project and 2029 Opening Year with Project conditions.

The VMT screening analysis is also presented, along with site access and circulation for the project condition.

### 6.1 Trip Generation and Distribution

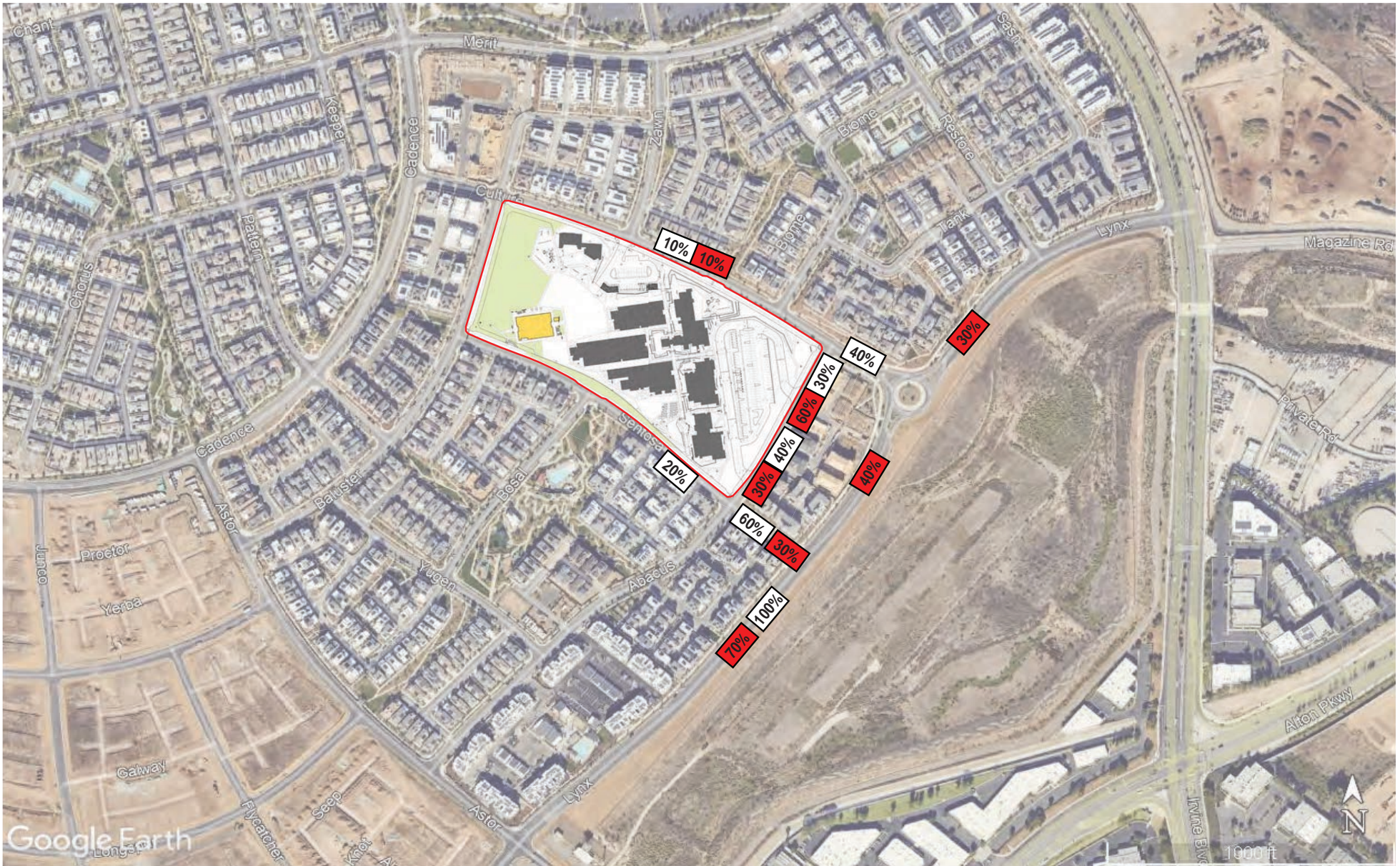
Forecast trip generation for the project is estimated using rates published in the ITE Trip Generation Manual 12<sup>th</sup> Edition and information provided by IUSD regarding the projected increase in student capacity with the proposed project.

The ITE Trip Generation Manual 12<sup>th</sup> Edition does not present trip generation rates for a K-8 school specifically. Instead, the trip generation rate for an elementary (K-6) school was used for this analysis since the majority of new students would be in grades K-6. Trip generation forecasts were developed for the AM peak hour and weekday time periods.

Table 6 presents the trip generation forecasts. The forecast distribution of project trips in the study are in shown in Figure 8.

Table 6 Project Trip Generation

Land Use and Time Period	Trip Generation Rate	Distribution		Trips		Total
		Inbound	Outbound	Inbound	Outbound	
Elementary School - AM Peak Hour	0.73 trips / student	54%	46%	129	110	239
Elementary School - Weekday Daily	2.27 trips / student	50%	50%	373	372	745



**LEGEND**

□ Inbound Estimated Trip Distribution Percentages

■ Outbound Estimated Trip Distribution Percentages

**Figure 8: Estimated Trip Distribution**

### 6.2 With Project ADT Volumes

Table 7 presents ADT volumes for each roadway segment in each analysis scenario.

Table 7 With Project ADT Volumes

Roadway	2025 No Project	2025 With Project	2029 No Project	2029 With Project
Sentosa between Abacus and Lynx	820	853	1,267	1,300
Lynx between Sentosa and Astor	1,201	1,250	1,946	1,995
Abacus between Sentosa and Culture	1,233	1,283	1,904	1,954
Culture between Zawn and Abacus	1,761	1,833	1,836	1,907

### 6.3 Existing Year (2025) with Project Intersection and Driveway Analysis

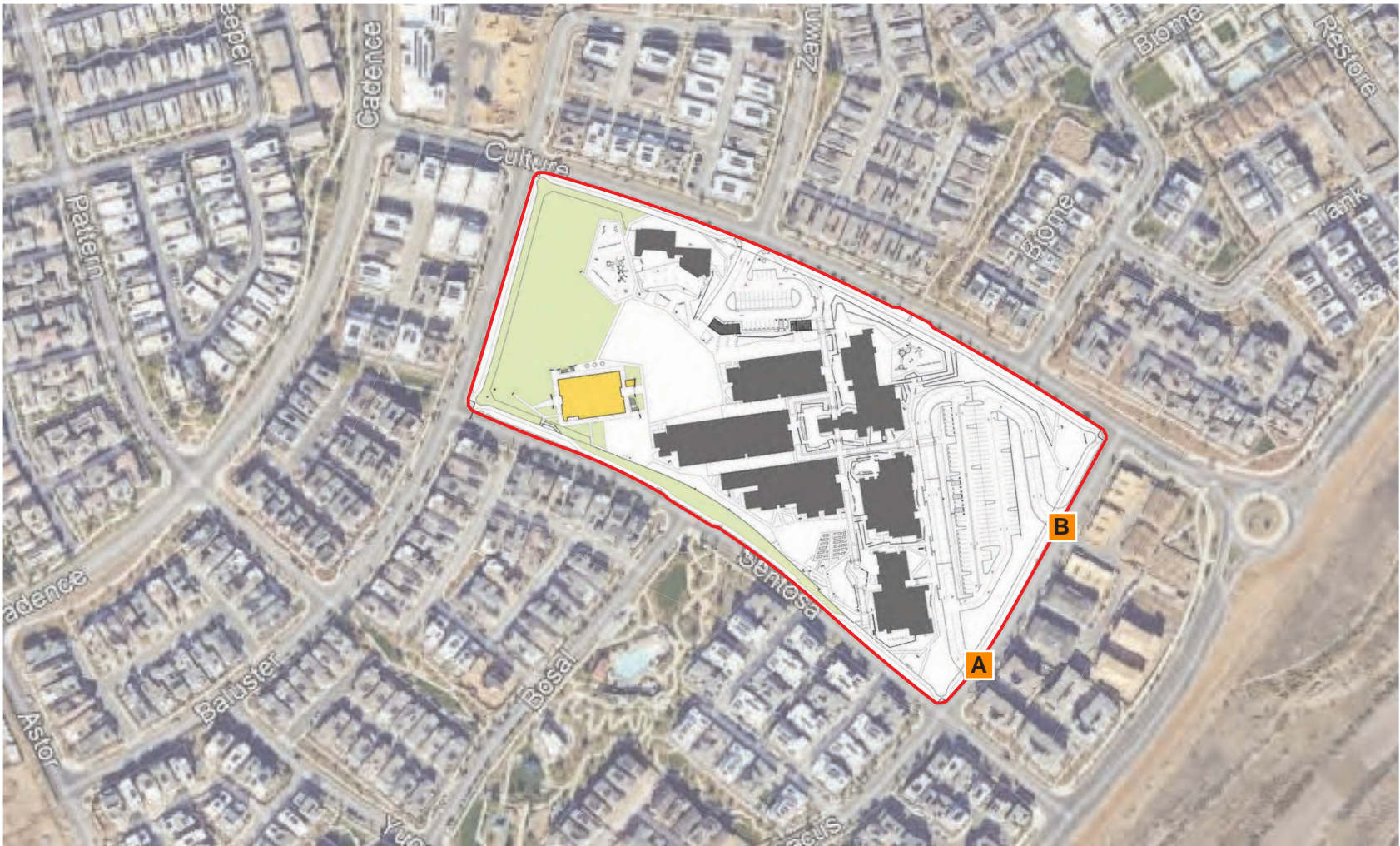
A summary of the AM peak hour intersection level of service analysis results for the Existing Year (2025) with Project scenario is presented in Table 8. Existing Year (2025) with Project AM peak hour turning movement volumes are shown in Figures 9 and 10.

Table 8 Existing Year (2025) With Project Intersection LOS

Intersection	AM Peak Hour				AM Peak Hour			
	2025 Existing No Project		2025 Existing W/ Project		2025 Existing No Project		2025 Existing W/ Project	
	V/C Ratio	LOS	V/C Ratio	LOS	HCM Delay (s)	LOS	HCM Delay (s)	LOS
Lynx and Culture	-	-	-	-	4.3	A	4.7	A
Lynx and Sentosa	-	-	-	-	9.7	A	11.7	B
Lynx and Astor	0.367	A	0.471	A	-	-	-	-
Abacus and Sentosa	-	-	-	-	7.5	A	7.9	A
Abacus and Solis Driveway 1	-	-	-	-	9.9	A	11.1	B
Abacus and Solis Driveway 2	-	-	-	-	9.5	A	9.9	A
Zawn and Culture	-	-	-	-	7.9	A	8.0	A

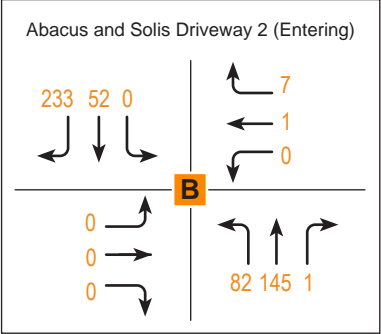
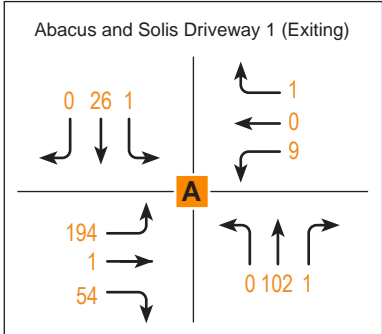
The project is not forecasted to generate significant changes to delay or LOS at any of the study intersections or site access driveways. No impacts are forecasted to occur in the Existing Plus Project condition.





**LEGEND**

- Study Driveway
- × AM Peak Hour Volume
- Project Site



**Figure 10: Existing Year (2025)  
Driveway With Project Volumes AM**

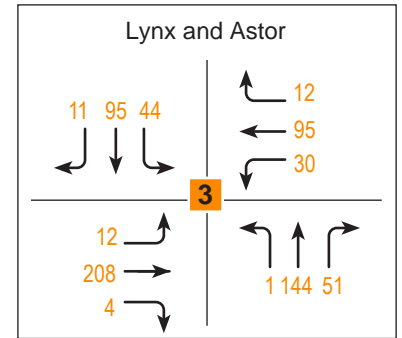
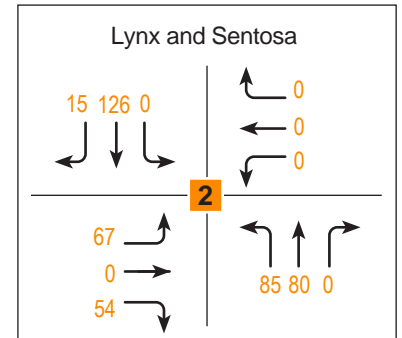
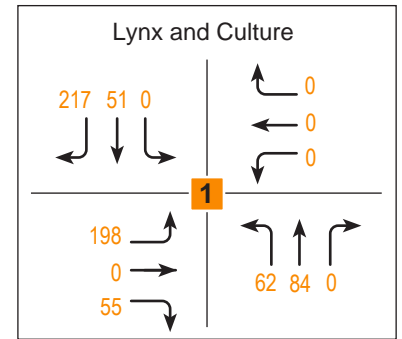
### 6.4 Opening Year (2029) with Project Intersection and Driveway Analysis

A summary of the AM peak hour intersection level of service analysis results for the Opening Year (2029) with Project scenario is presented in Table 9. Opening Year with Project AM peak hour turning movement volumes are shown in Figures 11 and 12.

Table 9 Opening Year (2029) With Project Intersection LOS

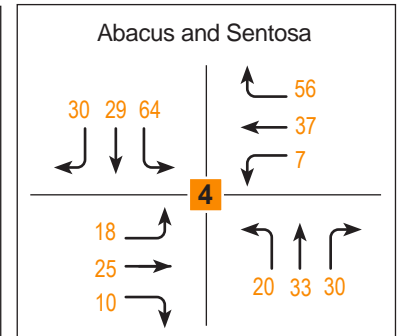
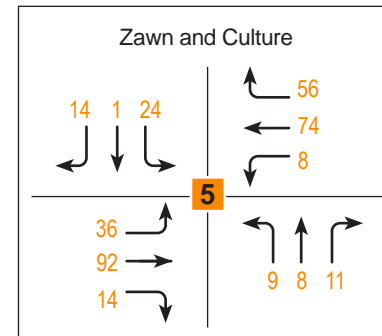
Intersection	AM Peak Hour				AM Peak Hour			
	2029 Opening Year No Project		2029 Opening Year W/Project		2029 Opening Year No Project		2029 Opening Year W/Project	
	V/C Ratio	LOS	V/C	LOS	HCM Delay (s)	LOS	HCM Delay (s)	LOS
Lynx and Culture	-	-	-	-	4.4	A	4.8	A
Lynx and Sentosa	-	-	-	-	9.7	A	11.6	B
Lynx and Astor	0.373	A	0.478	A	-	-	-	-
Abacus and Sentosa	-	-	-	-	7.6	A	8.0	A
Abacus and Solis Driveway 1	-	-	-	-	9.9	A	11.4	B
Abacus and Solis Driveway 2	-	-	-	-	9.6	A	9.9	A
Zawn and Culture	-	-	-	-	7.9	A	8.0	A

The project is not forecasted to generate significant changes to delay or LOS at any of the study intersections or site access driveways. No impacts are forecasted to occur in the Opening Year Plus Project condition.

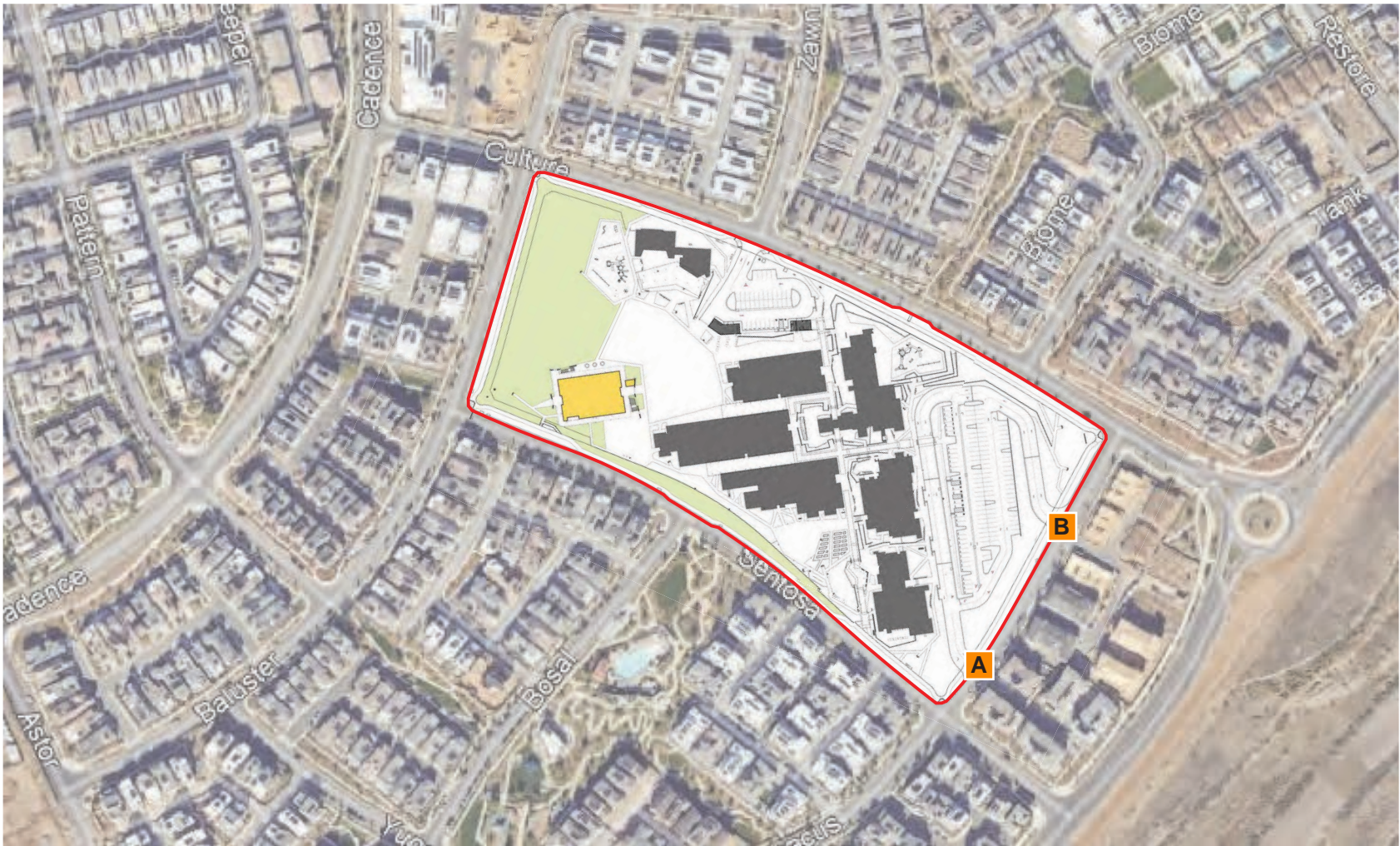


**LEGEND**

- Study Intersection
- × AM Peak Hour Volume
- Project Site

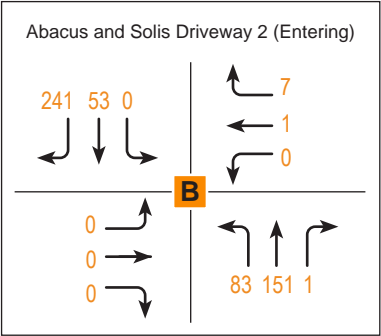
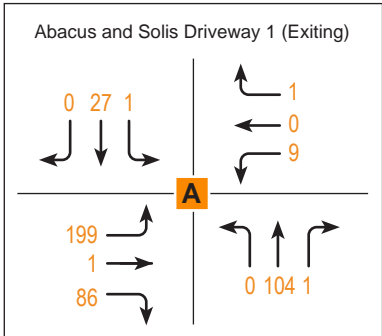


**Figure 11: Opening Year (2029) Intersection With Project Volumes AM**



**LEGEND**

- Study Driveway
- × AM Peak Hour Volume
- Project Site



**Figure 12: Opening Year (2029) Driveway With Project Volumes AM**

## 6.5 VMT Analysis

The City of Irvine Transportation Analysis Guidelines describe the screening criteria adopted by the city to determine if the assessment of VMT is required for a proposed project. The adopted screening criteria include the following:

1. The project requires an Addendum to a certified EIR and can demonstrate that it is not subject to VMT analysis per CEQA Guidelines Sections 15064.3 and 15007(c) and applicable guidance from the Governor's Office of Planning and Research.
2. The project results in a net increase of 250 or less weekday daily trips based on latest edition of the Institute of Transportation Engineers (ITE) trip rates (or other trip generation rate approved by the City).
3. The project is located in a Transit Priority Area (i.e., within half-mile distance of existing rail transit station or located within half-mile of two or more existing bus routes with a frequency of service interval of 15 minutes or less during morning and evening peak hours) except when the project:
  - a. Has a Floor Area Ratio (FAR) of less than 0.75;
  - b. Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking);
  - c. Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Planning Organization; or
  - d. Replaces affordable residential units with a smaller number of moderate, or high-income residential units.
4. The project is a 100 percent restricted affordable housing units (Note: If less than 100 percent, the number of restricted affordable units is not subject to VMT impact analysis. "Restricted" for VMT analysis purposes shall mean having a recorded instrument against the property that defines affordability terms).
5. The project is locally serving such as 100,000 square feet or less of retail use, a daycare use or a locally serving public school (kindergarten through 12th grade).

The Solis Park School project would be eligible under criterion number five above since it is a locally serving public school. Based on this review the proposed Solis Park School project is screened out from the need to conduct a VMT analysis under the City of Irvine guidelines.

## 6.6 Site Access

The proposed Solis Park School project would not change vehicle access to and from the project site and no changes to on-site circulation for vehicles are proposed as part of the project. The northern school parking and pick-up/drop-off area located along Culture on the west side of the school would remain as existing. The eastern school parking and pick-up/drop-off area located along Abacus on the east side of the school would also remain as existing.

## Vehicle Circulation

Existing vehicle access to Solis Park School is provided via three site access driveways. The intersection of Culture and Zawn provides access to the west parking lot and pick-up/drop-off area on the south leg of the intersection. Two unsignalized driveways provide access to Abacus along the eastern boundary of the site. The northern driveway serves inbound traffic only, while the southern driveway serves outbound traffic only.

The western parking lot provides 165 feet of pick-up/drop-off area and is reserved for use by kindergarten students. The eastern parking lot provides 350 feet of pick-up/drop-off area and is utilized by 1<sup>st</sup> through 8<sup>th</sup> grade students. Additionally, the on-street parking areas along Abacus, Culture, Sentosa, and Baluster provide additional areas for pick-up/drop-off activities. Combined, these on-street curb areas offer up to 2,000 additional linear feet of curb space for pick-up and drop-off activities depending on typical on-street parking demand levels.

To analyze the potential number of vehicles that would travel to the school for pick-up activities in the PM time period (school release), this analysis utilizes a school trip calculator published by the North Carolina Department of Transportation (NCDOT). This calculator provides forecasts of project trips and vehicle queues during the afterschool pick-up time period based on the number of students and level of busing provided for the school.

IUSD does not currently provide bus services for schools in the district, so no adjustments were made to account for students being bused to school.

A 1,300-student capacity figure for the school was used to analyze the pick-up/drop-zone length and adequacy to accommodate PM peak vehicle queues on the school site. Using the NCDOT school trip calculator, the average PM afterschool vehicle queue is forecast to be 1,676 feet in length, corresponding to about 76 cars. This average queue length does not exceed the combined total available pick-up/drop-off area of approximately 515 feet on campus and nearly 2,000 feet available along roadways adjacent to campus. No impact is anticipated in terms of pick-up and drop-off activities. A printout of the NCDOT calculator analysis is provided in the Appendix.

No impacts to on-site circulation are anticipated during the typical school day between 7am and 3pm. The existing site access points, pick-up/drop-off areas, and on-site parking are all anticipated to be sufficient to serve the school expansion project.

## Pedestrian and Bicycle Circulation

The proposed project would not change pedestrian and bicycle access to campus. No impacts are anticipated.

## 7. Conclusion

Based on the results of the transportation impact analysis, the proposed Solis Park School project would not significantly impact traffic operations at any of the study intersections or site access driveways. All study intersections and site access driveways are forecast to operate at an acceptable level of service under both Existing Year (2025) and Opening Year (2029) with Project scenarios. No traffic mitigation measures are necessary.

## References

- City of Irvine. (2020, June). *Traffic Study Guidelines*, Retrieved from <https://legacy.cityofirvine.org/civica/filebank/blobdload.asp?BlobID=32554>
- State of California Governor's Office of Planning and Research. (2018, December). *Technical Advisory On Evaluating Transportation Impacts In CEQA*. Retrieved 2023, from opr.ca.gov: [https://opr.ca.gov/docs/20190122-743\\_Technical\\_Advisory.pdf](https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf)



## Appendix A—Turning Movement & Roadway Segment Counts



**ADT2 Lynx between Sentosa and Astor.**

Prepared by AimTD LLC tel. 714 253 7888

AM Period	NB	SB	PM Period	NB	SB	
0:00	0	0	12:00	10	8	
0:15	0	0	12:15	7	9	
0:30	0	0	12:30	8	8	
0:45	0 0	1 1	12:45	11 36	3 28	64
1:00	0	0	13:00	8	11	
1:15	1	0	13:15	10	11	
1:30	0	1	13:30	5	11	
1:45	0 1	0 1	13:45	10 33	8 41	74
2:00	0	0	14:00	15	15	
2:15	0	1	14:15	10	6	
2:30	0	0	14:30	13	16	
2:45	0 0	1 2	14:45	15 53	13 50	103
3:00	0	0	15:00	14	15	
3:15	0	0	15:15	15	7	
3:30	1	0	15:30	13	2	
3:45	1 2	0 0	15:45	16 58	7 31	89
4:00	0	0	16:00	4	11	
4:15	0	0	16:15	11	5	
4:30	0	1	16:30	17	11	
4:45	0 0	0 1	16:45	6 38	10 37	75
5:00	0	0	17:00	8	10	
5:15	0	5	17:15	16	13	
5:30	1	6	17:30	9	10	
5:45	0 1	4 15	17:45	10 43	7 40	83
6:00	0	3	18:00	10	5	
6:15	1	16	18:15	12	13	
6:30	5	12	18:30	10	7	
6:45	3 9	11 42	18:45	6 38	6 31	69
7:00	1	14	19:00	10	4	
7:15	7	9	19:15	14	10	
7:30	7	21	19:30	7	7	
7:45	9 24	15 59	19:45	7 38	6 27	65
8:00	8	21	20:00	7	3	
8:15	9	19	20:15	7	5	
8:30	10	14	20:30	3	6	
8:45	12 39	23 77	20:45	3 20	2 16	36
9:00	9	11	21:00	4	5	
9:15	7	9	21:15	3	3	
9:30	9	7	21:30	2	3	
9:45	8 33	12 39	21:45	1 10	4 15	25
10:00	7	4	22:00	2	2	
10:15	10	6	22:15	0	2	
10:30	12	15	22:30	1	0	
10:45	15 44	8 33	22:45	2 5	1 5	10
11:00	15	17	23:00	0	0	
11:15	7	6	23:15	3	1	
11:30	11	5	23:30	2	1	
11:45	9 42	7 35	23:45	0 5	1 3	8
<b>Total Vol.</b>	195	305	<b>500</b>	377	324	<b>701</b>

Daily Totals		Combined
NB	SB	
572	629	<b>1201</b>

	AM			PM		
<b>Split %</b>	39.0%	61.0%	<b>41.6%</b>	53.8%	46.2%	<b>58.4%</b>
<b>Peak Hour</b>	10:15	8:00	<b>8:00</b>	15:00	14:30	<b>14:30</b>
<b>Volume</b>	52	77	<b>116</b>	58	51	<b>108</b>
<b>P.H.F.</b>	0.87	0.84	<b>0.83</b>	0.91	0.80	<b>0.93</b>

**ADT3 Abacus between Sentosa and Culture.**

Prepared by AimTD LLC tel. 714 253 7888

AM Period	NB	SB	PM Period	NB	SB	
0:00	0	1	12:00	4	5	
0:15	1	0	12:15	2	5	
0:30	0	0	12:30	5	2	
0:45	0	1	12:45	1	12	27
1:00	0	0	13:00	5	4	
1:15	0	1	13:15	4	5	
1:30	0	1	13:30	6	5	
1:45	0	0	13:45	23	38	57
2:00	0	0	14:00	81	18	
2:15	0	1	14:15	16	5	
2:30	0	0	14:30	33	12	
2:45	0	0	14:45	82	212	250
3:00	0	0	15:00	51	5	
3:15	1	0	15:15	13	12	
3:30	0	0	15:30	19	8	
3:45	0	1	15:45	14	97	129
4:00	0	0	16:00	15	6	
4:15	0	0	16:15	11	9	
4:30	0	0	16:30	16	11	
4:45	1	1	16:45	11	53	87
5:00	0	1	17:00	15	5	
5:15	0	0	17:15	13	12	
5:30	1	0	17:30	29	8	
5:45	1	2	17:45	12	69	102
6:00	2	1	18:00	13	12	
6:15	0	1	18:15	8	7	
6:30	1	0	18:30	14	3	
6:45	2	5	18:45	7	42	72
7:00	1	0	19:00	11	9	
7:15	4	5	19:15	7	11	
7:30	4	3	19:30	2	8	
7:45	81	90	19:45	4	24	55
8:00	65	12	20:00	2	7	
8:15	20	4	20:15	2	1	
8:30	10	7	20:30	2	4	
8:45	3	98	20:45	3	9	26
9:00	1	5	21:00	4	3	
9:15	7	6	21:15	3	3	
9:30	6	5	21:30	2	4	
9:45	3	17	21:45	1	10	23
10:00	8	6	22:00	2	3	
10:15	5	3	22:15	1	3	
10:30	7	10	22:30	0	2	
10:45	6	26	22:45	2	5	16
11:00	4	7	23:00	2	2	
11:15	6	6	23:15	2	3	
11:30	7	5	23:30	0	2	
11:45	4	21	23:45	0	4	12
<b>Total Vol.</b>	262	115	<b>377</b>	575	281	<b>856</b>

**Daily Totals**

NB	SB	Combined
837	396	<b>1233</b>

**AM**

**PM**

Split %	69.5%	30.5%	<b>30.6%</b>	67.2%	32.8%	<b>69.4%</b>
<b>Peak Hour</b>	7:45	10:30	<b>7:45</b>	14:00	13:45	<b>14:00</b>
<b>Volume</b>	176	31	<b>203</b>	212	40	<b>250</b>
<b>P.H.F.</b>	0.54	0.78	<b>0.60</b>	0.65	0.56	<b>0.63</b>

**ADT4 Culture between Zawn and Abacus.**

Prepared by AimTD LLC tel. 714 253 7888

AM Period	EB		WB		PM Period	EB		WB	
0:00	0		0		12:00	3		2	
0:15	2		0		12:15	15		10	
0:30	0		0		12:30	8		12	
0:45	0	2	0	0	12:45	9	35	12	36
<hr/>									
1:00	0		0		13:00	9		11	
1:15	0		1		13:15	10		10	
1:30	1		1		13:30	14		5	
1:45	0	1	0	2	13:45	53	86	18	44
<hr/>									
2:00	0		0		14:00	25		54	
2:15	0		0		14:15	37		22	
2:30	0		0		14:30	32		15	
2:45	0	0	0	0	14:45	24	118	25	116
<hr/>									
3:00	0		0		15:00	15		28	
3:15	1		0		15:15	12		14	
3:30	0		0		15:30	16		12	
3:45	0	1	0	0	15:45	17	60	13	67
<hr/>									
4:00	0		0		16:00	5		14	
4:15	0		0		16:15	38		21	
4:30	0		0		16:30	21		18	
4:45	0	0	0	0	16:45	23	87	16	69
<hr/>									
5:00	1		0		17:00	26		25	
5:15	2		2		17:15	27		16	
5:30	2		0		17:30	19		24	
5:45	1	6	2	4	17:45	21	93	18	83
<hr/>									
6:00	2		4		18:00	12		9	
6:15	7		2		18:15	10		11	
6:30	5		6		18:30	6		15	
6:45	5	19	2	14	18:45	7	35	20	55
<hr/>									
7:00	6		6		19:00	9		13	
7:15	16		10		19:15	10		13	
7:30	13		10		19:30	14		7	
7:45	41	76	25	51	19:45	11	44	4	37
<hr/>									
8:00	30		36		20:00	6		1	
8:15	23		23		20:15	4		6	
8:30	22		49		20:30	7		4	
8:45	23	98	8	116	20:45	5	22	4	15
<hr/>									
9:00	7		4		21:00	2		5	
9:15	10		4		21:15	8		6	
9:30	5		5		21:30	3		4	
9:45	7	29	6	19	21:45	2	15	2	17
<hr/>									
10:00	9		3		22:00	4		2	
10:15	3		6		22:15	4		4	
10:30	28		16		22:30	2		0	
10:45	13	53	5	30	22:45	1	11	1	7
<hr/>									
11:00	16		9		23:00	0		2	
11:15	12		10		23:15	5		1	
11:30	10		6		23:30	2		1	
11:45	10	48	3	28	23:45	1	8	0	4

**Total Vol.** 333 264 **597** 614 550 **1164**

**Daily Totals**

EB	WB	Combined
947	814	<b>1761</b>

**AM**

**PM**

Split %	55.8%	44.2%	<b>33.9%</b>	52.7%	47.3%	<b>66.1%</b>
<b>Peak Hour</b>	7:45	7:45	<b>7:45</b>	13:45	14:00	<b>13:45</b>
<b>Volume</b>	116	133	<b>249</b>	147	116	<b>256</b>
<b>P.H.F.</b>	0.71	0.68	<b>0.88</b>	0.69	0.54	<b>0.81</b>

### INTERSECTION TURNING MOVEMENT COUNTS

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

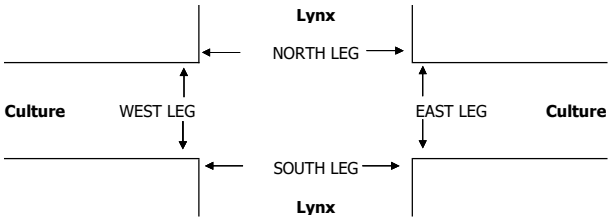
<b>DATE:</b> Tue, Sep 9, 25	<b>LOCATION:</b> NORTH & SOUTH: EAST & WEST:	Irvine Lynx Culture	<b>PROJECT #:</b> SC5601 <b>LOCATION #:</b> 1 <b>CONTROL:</b> ROUNDABOUT
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NOTES:	AM		▲	
	PM		N	
	MD	◀ W		E ▶
	OTHER		S	
	OTHER		▼	

LANES:	NORTHBOUND Lynx			SOUTHBOUND Lynx			EASTBOUND Culture			WESTBOUND Culture			TOTAL
	NL 0.5	NT 0.5	NR X	SL X	ST 0.5	SR 0.5	EL 0.5	ET X	ER 0.5	WL X	WT X	WR X	
7:00 AM	1	5	0	0	10	8	3	0	1	0	0	0	28
7:15 AM	1	13	0	0	4	20	6	0	6	0	0	0	50
7:30 AM	1	15	0	0	17	20	5	0	3	0	0	0	61
7:45 AM	1	19	0	0	11	103	53	0	3	0	0	0	190
8:00 AM	3	34	0	0	13	47	64	0	4	0	0	0	165
8:15 AM	3	16	0	0	13	28	20	0	4	0	0	0	84
8:30 AM	3	12	0	0	12	31	21	0	2	0	0	0	81
8:45 AM	2	16	0	0	16	5	17	0	5	0	0	0	61
<b>VOLUMES</b>	15	130	0	0	96	262	189	0	28	0	0	0	725
<b>APPROACH %</b>	10%	90%	0%	0%	27%	73%	85%	0%	13%	0%	0%	0%	
<b>APP/DEPART</b>	145	/	319	358	/	124	222	/	0	0	/	282	0
<b>BEGIN PEAK HR</b>	7:45 AM												
<b>VOLUMES</b>	10	81	0	0	49	209	158	0	13	0	0	0	525
<b>APPROACH %</b>	11%	89%	0%	0%	19%	81%	90%	0%	7%	0%	0%	0%	
<b>PEAK HR FACTOR</b>	0.615			0.566			0.638			0.000			0.684
<b>APP/DEPART</b>	91	/	239	258	/	62	176	/	0	0	/	224	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	2	0	2
0	0	1	0	1
0	0	2	0	2
0	0	0	0	0
0	0	0	0	0
0	0	5	0	5

0	0	5	0
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### INTERSECTION TURNING MOVEMENT COUNTS

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

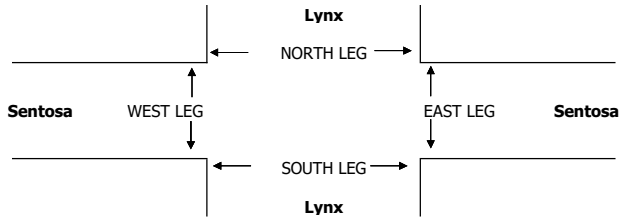
<b>DATE:</b> Tue, Sep 9, 25	<b>LOCATION:</b> NORTH & SOUTH: EAST & WEST:	Irvine Lynx Sentosa	<b>PROJECT #:</b> SC5601 <b>LOCATION #:</b> 2 <b>CONTROL:</b> STOP E
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NOTES:	AM	▲	N
	PM	◀	W
	MD		E ▶
	OTHER		S
	OTHER		▼

LANES:	NORTHBOUND Lynx			SOUTHBOUND Lynx			EASTBOUND Sentosa			WESTBOUND Sentosa			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
7:00 AM	1	0	0	0	11	1	6	0	3	0	0	0	22
7:15 AM	1	6	0	0	7	2	8	0	2	0	0	0	26
7:30 AM	3	4	0	0	17	2	12	0	4	0	0	0	42
7:45 AM	1	8	0	0	11	4	16	0	4	0	0	0	44
8:00 AM	2	6	0	0	12	5	27	0	9	0	0	0	61
8:15 AM	0	9	0	0	13	3	9	0	6	0	0	0	40
8:30 AM	1	9	0	0	7	6	7	0	7	0	0	0	37
8:45 AM	0	12	0	0	18	4	5	0	5	0	0	0	44
<b>VOLUMES</b>	9	54	0	0	96	27	90	0	40	0	0	0	318
<b>APPROACH %</b>	14%	86%	0%	0%	77%	22%	69%	0%	31%	0%	0%	0%	
<b>APP/DEPART</b>	63	/	145	124	/	136	131	/	0	0	/	37	0
<b>BEGIN PEAK HR</b>	7:30 AM												
<b>VOLUMES</b>	6	27	0	0	53	14	64	0	23	0	0	0	189
<b>APPROACH %</b>	18%	82%	0%	0%	78%	21%	73%	0%	26%	0%	0%	0%	
<b>PEAK HR FACTOR</b>	0.917			0.895			0.611			0.000			0.775
<b>APP/DEPART</b>	33	/	92	68	/	76	88	/	0	0	/	21	0

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

0	1	1	0
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### INTERSECTION TURNING MOVEMENT COUNTS

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

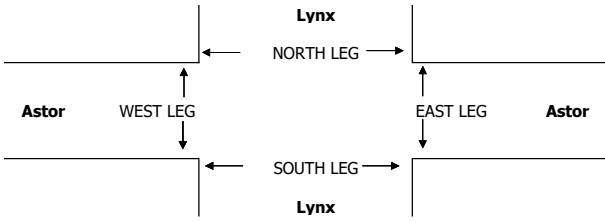
DATE: Tue, Sep 9, 25	LOCATION: NORTH & SOUTH: EAST & WEST:	Irvine Lynx Astor	PROJECT #: LOCATION #: CONTROL:	SC5601 3 SIGNAL
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NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▶ E ▼
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	NORTHBOUND Lynx			SOUTHBOUND Lynx			EASTBOUND Astor			WESTBOUND Astor			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
LANES:	1	1	0	1	1	0	1	1	0	1	1	0	
7:00 AM	0	0	13	5	9	0	0	27	0	18	15	0	87
7:15 AM	0	4	26	8	2	0	1	34	1	11	10	2	99
7:30 AM	1	1	15	11	7	2	2	41	0	5	9	4	98
7:45 AM	0	4	14	9	5	1	2	48	1	6	11	3	104
8:00 AM	0	2	13	12	5	4	3	56	0	5	26	3	129
8:15 AM	1	3	9	11	6	2	3	52	0	9	30	3	129
8:30 AM	0	6	14	8	5	2	2	44	0	5	16	2	104
8:45 AM	0	3	13	11	7	3	4	48	4	10	19	4	126
VOLUMES	2	23	117	75	46	14	17	350	6	69	136	21	876
APPROACH %	1%	16%	82%	56%	34%	10%	5%	94%	2%	31%	60%	9%	
APP/DEPART	142	/	61	135	/	121	373	/	542	226	/	152	0
BEGIN PEAK HR	8:00 AM												
VOLUMES	1	14	49	42	23	11	12	200	4	29	91	12	488
APPROACH %	2%	22%	77%	55%	30%	14%	6%	93%	2%	22%	69%	9%	
PEAK HR FACTOR	0.800			0.905			0.915			0.786			0.946
APP/DEPART	64	/	38	76	/	56	216	/	291	132	/	103	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
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### INTERSECTION TURNING MOVEMENT COUNTS

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

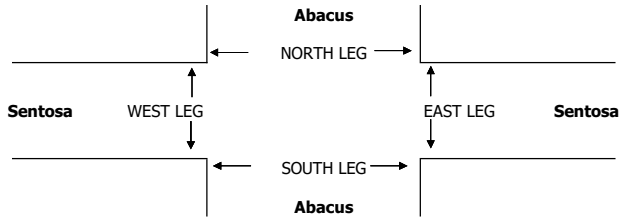
<b>DATE:</b> Tue, Sep 9, 25	<b>LOCATION:</b> NORTH & SOUTH: EAST & WEST:	Irvine Abacus Sentosa	<b>PROJECT #:</b> SC5601 <b>LOCATION #:</b> 4 <b>CONTROL:</b> STOP ALL
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NOTES:	AM	▲	N	
	PM			
	MD	◀ W		E ▶
	OTHER			S
	OTHER			▼

LANES:	NORTHBOUND Abacus			SOUTHBOUND Abacus			EASTBOUND Sentosa			WESTBOUND Sentosa			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
7:00 AM	0	1	3	0	0	0	0	6	1	0	2	0	13
7:15 AM	0	1	6	0	5	0	2	4	0	1	1	1	21
7:30 AM	0	1	12	2	1	1	0	3	0	2	3	2	27
7:45 AM	9	17	8	12	8	6	2	4	1	0	4	1	72
8:00 AM	9	7	7	16	11	19	4	9	8	2	3	2	97
8:15 AM	1	1	6	5	4	2	7	5	0	1	2	0	34
8:30 AM	0	7	8	0	5	2	3	6	1	4	2	1	39
8:45 AM	0	3	4	2	4	2	0	4	1	3	1	0	24
<b>VOLUMES</b>	19	38	54	37	38	32	18	41	12	13	18	7	328
<b>APPROACH %</b>	17%	34%	49%	35%	36%	30%	25%	57%	17%	34%	47%	18%	
<b>APP/DEPART</b>	111	/	63	107	/	63	72	/	132	38	/	70	0
<b>BEGIN PEAK HR</b>	7:45 AM												
<b>VOLUMES</b>	19	32	29	33	28	29	16	24	10	7	11	4	243
<b>APPROACH %</b>	24%	40%	36%	37%	31%	32%	31%	47%	20%	32%	50%	18%	
<b>PEAK HR FACTOR</b>	0.588			0.489			0.580			0.786			0.620
<b>APP/DEPART</b>	80	/	52	90	/	45	51	/	86	22	/	60	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	1	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	1	0	1

0	0	1	0
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### INTERSECTION TURNING MOVEMENT COUNTS

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

PROJECT #: SC5601  
 LOCATION #: 5  
 CONTROL: STOP E

LOCATION: Irvine  
 NORTH & SOUTH: Abacus  
 EAST & WEST: Solis Driveway 1 (exiting)

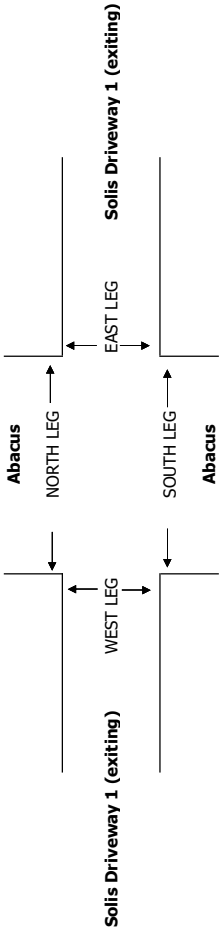
DATE: Tue, Sep 9, 25

**NOTES:**



LANES:	NORTHBOUND <small>Abacus</small>			SOUTHBOUND <small>Abacus</small>			EASTBOUND <small>Solis Driveway 1 (exiting)</small>			WESTBOUND <small>Solis Driveway 1 (exiting)</small>			U-TURNS				
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	NB	SB	EB	WB	TTL
7:00 AM	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1
7:15 AM	0	4	0	0	5	0	0	0	0	0	0	0	0	0	0	0	9
7:30 AM	0	3	0	1	2	0	1	0	0	1	0	0	0	0	0	0	8
7:45 AM	0	20	0	0	4	0	60	1	19	3	0	1	0	0	0	0	108
8:00 AM	0	13	0	1	11	0	52	0	29	5	0	0	0	0	0	0	111
8:15 AM	0	7	1	0	4	0	13	0	6	1	0	0	0	0	0	0	32
8:30 AM	0	10	0	0	7	0	0	0	1	0	0	0	0	0	0	0	17
8:45 AM	0	3	0	0	6	0	0	0	1	1	0	0	0	0	0	0	11
VOLUMES	0	61	1	2	39	0	126	1	55	11	0	1	0	0	0	0	297
APPROACH %	0%	98%	2%	5%	95%	0%	69%	1%	30%	92%	0%	8%	0%	0%	0%	0%	
APP/DEPART	62	/	188	41	/	105	182	/	4	12	/	0					0
BEGIN PEAK HR	7:45 AM																
VOLUMES	0	50	1	1	26	0	125	1	54	9	0	1	0	0	0	0	268
APPROACH %	0%	98%	2%	4%	96%	0%	69%	1%	30%	90%	0%	10%	0%	0%	0%	0%	
PEAK HR FACTOR	0.638			0.563			0.556			0.500							0.604
APP/DEPART	51	/	176	27	/	89	180	/	3	10	/	0					0

0	0	0	0	0
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### INTERSECTION TURNING MOVEMENT COUNTS

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

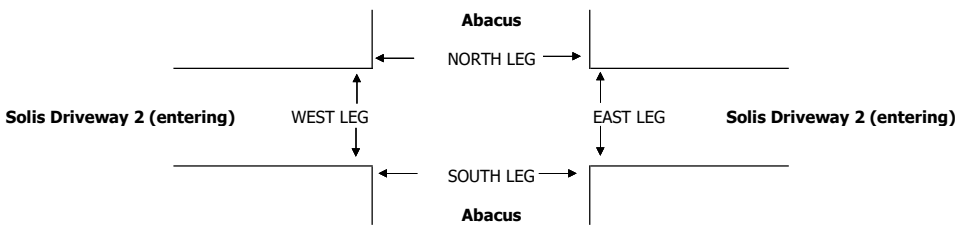
DATE: Tue, Sep 9, 25	LOCATION: NORTH & SOUTH: EAST & WEST:	Irvine Abacus Solis Driveway 2 (entering)	PROJECT #: LOCATION #: CONTROL:	SC5601 6 STOP ALL
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NOTES:	AM		▲	
	PM		N	
	MD	◀ W		E ▶
	OTHER		S	
	OTHER		▼	

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Abacus			Abacus			Solis Driveway 2 (entering)			Solis Driveway 2 (entering)			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
7:00 AM	0	1	0	0	0	7	0	0	0	0	0	0	8
7:15 AM	2	2	0	0	6	15	0	0	0	1	0	0	26
7:30 AM	2	3	0	0	3	19	0	0	0	0	0	0	27
7:45 AM	13	71	0	0	5	103	0	0	0	0	0	3	195
8:00 AM	13	52	0	0	9	61	0	0	0	0	1	2	138
8:15 AM	2	19	1	0	5	11	0	0	0	0	0	2	40
8:30 AM	1	13	0	0	7	4	0	0	0	0	0	1	26
8:45 AM	0	5	0	0	7	2	0	0	0	0	0	0	14
VOLUMES	33	166	1	0	42	222	0	0	0	1	1	8	476
APPROACH %	17%	83%	1%	0%	16%	83%	0%	0%	0%	10%	10%	80%	
APP/DEPART	200	/	176	266	/	43	0	/	1	10	/	256	0
BEGIN PEAK HR	7:30 AM												
VOLUMES	30	145	1	0	22	194	0	0	0	0	1	7	401
APPROACH %	17%	82%	1%	0%	10%	89%	0%	0%	0%	0%	13%	88%	
PEAK HR FACTOR	0.524			0.502			0.000			0.667			0.514
APP/DEPART	176	/	153	217	/	22	0	/	1	8	/	225	0

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

0	1	0	0
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### INTERSECTION TURNING MOVEMENT COUNTS

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

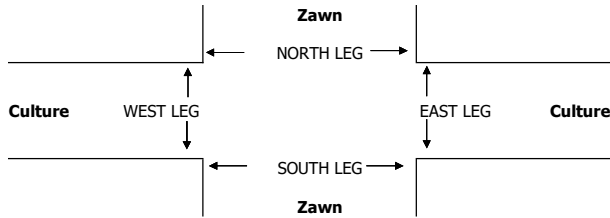
<b>DATE:</b> Tue, Sep 9, 25	<b>LOCATION:</b> NORTH & SOUTH: EAST & WEST:	Irvine Zawn Culture	<b>PROJECT #:</b> SC5601 <b>LOCATION #:</b> 7 <b>CONTROL:</b> STOP S
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NOTES:	AM	▲	N
	PM	◀	W
	MD		E ▶
	OTHER		S
	OTHER	▼	

LANES:	NORTHBOUND Zawn			SOUTHBOUND Zawn			EASTBOUND Culture			WESTBOUND Culture			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
7:00 AM	0	0	0	1	0	1	0	5	0	2	3	1	13
7:15 AM	1	0	0	3	3	2	0	13	5	5	4	1	37
7:30 AM	1	0	0	0	0	2	3	12	2	2	3	4	29
7:45 AM	0	1	0	5	0	8	9	36	8	5	16	4	92
8:00 AM	3	7	4	5	0	0	8	21	3	2	20	14	87
8:15 AM	1	0	1	4	1	1	4	18	1	0	7	16	54
8:30 AM	0	0	0	9	0	4	14	13	1	1	28	20	90
8:45 AM	1	0	0	10	0	0	2	13	1	0	4	4	35
<b>VOLUMES</b>	7	8	5	37	4	18	40	131	21	17	85	64	438
<b>APPROACH %</b>	35%	40%	25%	63%	7%	31%	21%	68%	11%	10%	51%	38%	
<b>APP/DEPART</b>	20	/	112	59	/	42	192	/	174	167	/	110	0
<b>BEGIN PEAK HR</b>	7:45 AM												
<b>VOLUMES</b>	4	8	5	23	1	13	35	88	13	8	71	54	323
<b>APPROACH %</b>	24%	47%	29%	62%	3%	35%	26%	65%	10%	6%	53%	41%	
<b>PEAK HR FACTOR</b>	0.304			0.712			0.642			0.679			0.878
<b>APP/DEPART</b>	17	/	97	37	/	22	136	/	116	133	/	88	0

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





# Elementary School (520)

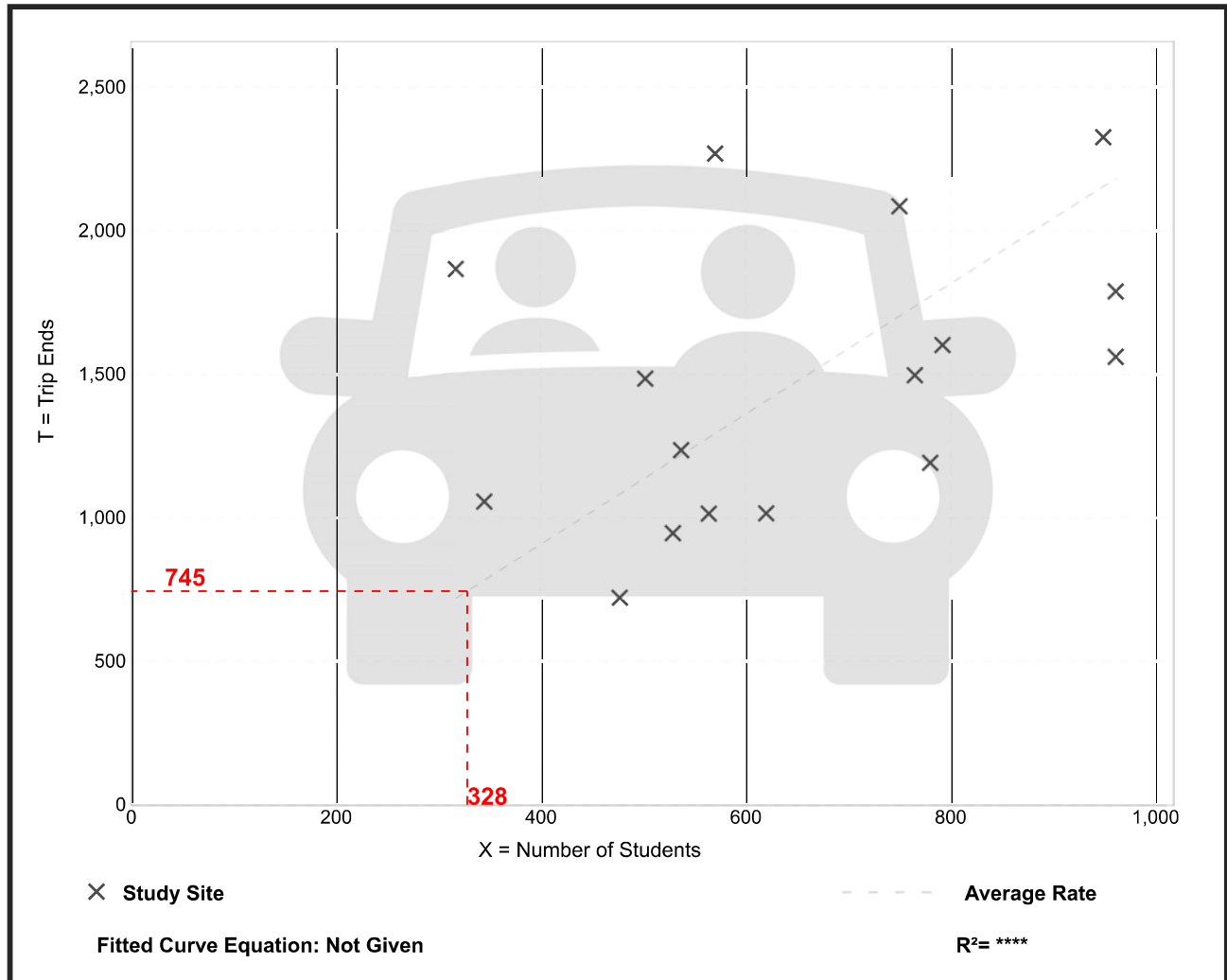
**Vehicle Trip Ends vs: Students**  
**On a: Weekday**

**Setting/Location: General Urban/Suburban**  
Number of Studies: 16  
Avg. Num. of Students: 651  
Directional Distribution: 50% entering, 50% exiting

## Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
2.27	1.51 - 5.89	0.93

## Data Plot and Equation





## Appendix B—Intersection Analysis Reports [2025 Existing]

# HCS Roundabouts Report

## General Information

## Site Information

Analyst	DJ&A		Intersection	Lynx Street & Culture Street
Agency or Co.			E/W Street Name	Culture Street
Date Performed	9/09/2025		N/S Street Name	Lynx Street
Analysis Year	2025		Analysis Time Period, hrs	1.00
Time Analyzed	7:45 AM		Peak Hour Factor	0.92
Project Description			Jurisdiction	Irvine

## Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Number of Lanes (N)	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0
Lane Assignment			LTR								LTR				LTR	
Volume (V), veh/h	5	158	0	13					0	10	81	0	0	0	49	209
Percent Heavy Vehicles, %	3	3	3	3					3	3	3	3	3	3	3	3
Flow Rate (v <sub>PCE</sub> ), pc/h	6	177	0	15					0	11	91	0	0	0	55	234
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	1								1				1			
Pedestrians Crossing, p/h	0								0				0			
Proportion of CAVs, %	0															

## Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway, s		4.9763						4.9763			4.9763	
Follow-Up Headway, s		2.6087						2.6087			2.6087	

## Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v <sub>e</sub> ), pc/h		198						102			289	
Entry Volume, veh/h		192						99			281	
Circulating Flow (v <sub>c</sub> ), pc/h	55			285			183			17		
Exiting Flow (v <sub>ex</sub> ), pc/h	0			251			268			70		
Capacity (c <sub>PCE</sub> ), pc/h		1305						1145			1356	
Capacity (c), veh/h		1267						1112			1317	
v/c Ratio (x)		0.15						0.09			0.21	

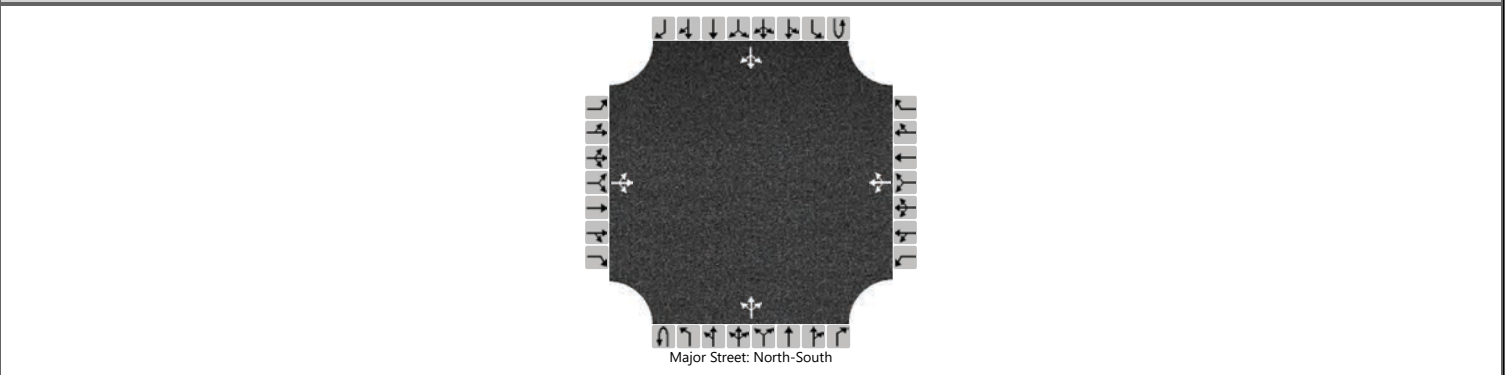
## Delay and Level of Service

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		4.1						4.0			4.5	
Lane LOS		A						A			A	
95% Queue Length, Q <sub>95</sub> (veh)		0.5						0.3			0.8	
95% Queue Length, Q <sub>95</sub> (ft)		12.8						7.7			20.5	
Approach Delay, s/veh   LOS	4.1		A			A-47	4.0		A	4.5		A
Intersection Delay, s/veh   LOS	4.3						A					

# HCS Two-Way Stop-Control Report

General Information				Site Information			
Analyst	DJ&A	Intersection	Lynx Street & Sentosa Street				
Agency/Co.		Jurisdiction	Irvine				
Date Performed	09/09/2025	East/West Street	Sentosa Street				
Analysis Year	2025	North/South Street	Lynx Street				
Time Analyzed	7:30 AM	Peak Hour Factor	0.92				
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00				
Project Description							

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		64	0	23		0	0	0		7	27	0		1	53	14
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type   Storage					Left + Thru								1			

## Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			95				0				8				1	
Capacity, c (veh/h)			864				0				1521				1577	
v/c Ratio			0.11								0.01				0.00	
95% Queue Length, Q <sub>95</sub> (veh)			0.4								0.0				0.0	
95% Queue Length, Q <sub>95</sub> (ft)			10.2								0.0				0.0	
Control Delay (s/veh)			9.7							7.4	0.0	0.0		7.3	0.0	0.0
Level of Service (LOS)			A							A	A	A		A	A	A
Approach Delay (s/veh)	9.7								1.5				0.1			
Approach LOS	A								A				A			

Lanes, Volumes, Timings  
Lynx and Astor 2025 NP

09/26/2025

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	12	200	4	29	91	12	1	14	49	42	23	11
Future Volume (vph)	12	200	4	29	91	12	1	14	49	42	23	11
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr't		0.997			0.983			0.883			0.951	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1583	1662	0	1583	1638	0	1583	1472	0	1583	1585	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1583	1662	0	1583	1638	0	1583	1472	0	1583	1585	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			10			53			12	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		444			501			402			472	
Travel Time (s)		10.1			11.4			9.1			10.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	217	4	32	99	13	1	15	53	46	25	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	13	221	0	32	112	0	1	68	0	46	37	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (%)	14.8%	35.2%		14.8%	35.2%		14.8%	35.2%		14.8%	35.2%	
Maximum Green (s)	5.0	18.0		5.0	18.0		5.0	18.0		5.0	18.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	5.0	18.0		5.0	18.0		5.0	18.0		5.0	18.0	
Actuated g/C Ratio	0.08	0.28		0.08	0.28		0.08	0.28		0.08	0.28	
v/c Ratio	0.11	0.47		0.26	0.24		0.01	0.15		0.37	0.08	
Control Delay	29.5	23.0		33.3	17.8		27.0	8.4		37.1	13.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	29.5	23.0		33.3	17.8		27.0	8.4		37.1	13.6	

Lanes, Volumes, Timings  
Lynx and Astor 2025 NP

09/26/2025

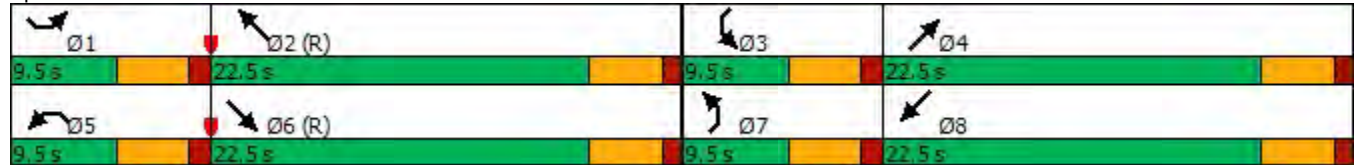


Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
LOS	C	C		C	B		C	A		D	B	
Approach Delay		23.4			21.2			8.7			26.6	
Approach LOS		C			C			A			C	

Intersection Summary

Area Type:	Other
Cycle Length:	64
Actuated Cycle Length:	64
Offset: 0 (0%), Referenced to phase 2:NWT and 6:SET, Start of Green	
Natural Cycle:	65
Control Type:	Pretimed
Maximum v/c Ratio:	0.47
Intersection Signal Delay:	21.4
Intersection LOS:	C
Intersection Capacity Utilization	36.7%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 3:

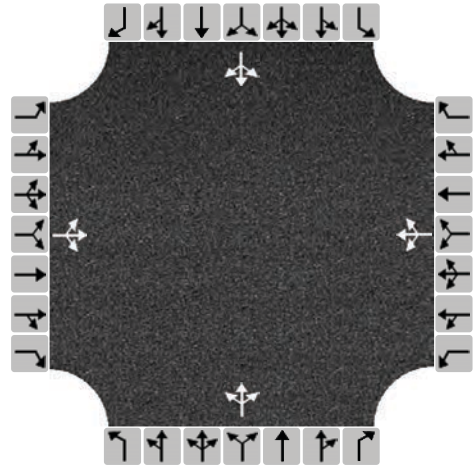


# HCS All-Way Stop Control Report

## General and Site Information

Analyst	DJ&A
Agency/Co.	
Date Performed	09/09/2025
Analysis Year	2025
Analysis Time Period (hrs)	1.00
Time Analyzed	7:45 AM
Project Description	
Intersection	Abacus Street & Sentosa Street
Jurisdiction	Irvine
East/West Street	Sentosa Street
North/South Street	Abacus Street
Peak Hour Factor	0.92

## Lanes



## Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume (veh/h)	17	24	10	7	11	4	19	32	29	33	28	29
% Thrus in Shared Lane												

## Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Lane												
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	55			24			87			98		
Percent Heavy Vehicles	2			2			2			2		
Initial Departure Headway, $h_d$ (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.049			0.021			0.077			0.087		
Final Departure Headway, $h_d$ (s)	4.30			4.34			4.04			4.08		
Final Degree of Utilization, x	0.066			0.029			0.098			0.111		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, $t_s$ (s)	2.30			2.34			2.04			2.08		

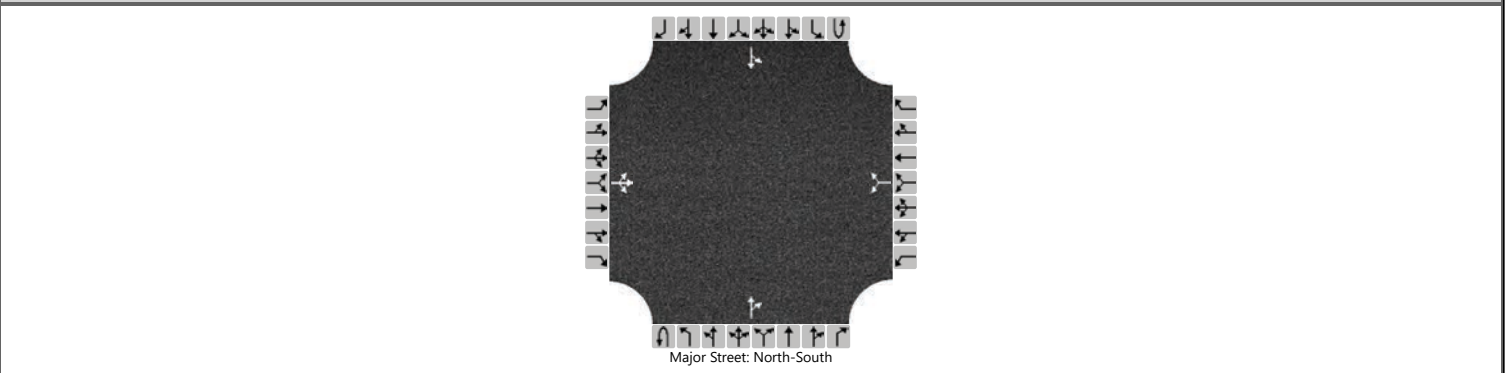
## Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Lane												
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	55			24			87			98		
Capacity (veh/h)	837			830			892			883		
95% Queue Length, $Q_{95}$ (veh)	0.2			0.1			0.3			0.4		
95% Queue Length, $Q_{95}$ (ft)	5.1			2.5			7.6			10.2		
Control Delay (s/veh)	7.6			7.5			7.5			7.6		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh)   LOS	7.6		A	7.5		A	7.5		A	7.6		A
Intersection Delay (s/veh)   LOS	7.5						A					

# HCS Two-Way Stop-Control Report

General Information				Site Information			
Analyst	DJ&A			Intersection	Abacus Street & Solis Driveway 1 (exit)		
Agency/Co.				Jurisdiction	Irvine		
Date Performed	9/09/2025			East/West Street	Solis Driveway 1 (exit)		
Analysis Year	2025			North/South Street	Abacus Street		
Time Analyzed	7:45 AM			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	1.00		
Project Description							

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0	
Configuration			LTR				LR					TR			LT		
Volume (veh/h)		125	1	54		9		1			50	1			1	26	
Percent Heavy Vehicles (%)		3	3	3		3		3							3		
Proportion Time Blocked																	
Percent Grade (%)		0				0											
Right Turn Channelized																	
Median Type   Storage		Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1		6.2							4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13		6.23							4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5		3.3							2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53		3.33							2.23		

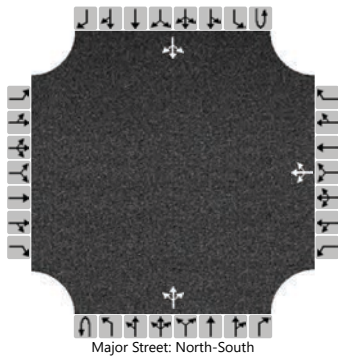
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			196				11								1		
Capacity, c (veh/h)			935				826								1543		
v/c Ratio			0.21				0.01								0.00		
95% Queue Length, Q <sub>95</sub> (veh)			0.8				0.0								0.0		
95% Queue Length, Q <sub>95</sub> (ft)			20.5				0.0								0.0		
Control Delay (s/veh)			9.9				9.4								7.3	0.0	
Level of Service (LOS)			A				A								A	A	
Approach Delay (s/veh)		9.9				9.4								0.3			
Approach LOS		A				A								A			

# HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	DJ&A	Intersection	Abacus Street & Solis Driveway 2
Agency/Co.		Jurisdiction	Irvine
Date Performed	9/09/2025	East/West Street	Solis Driveway 2 (entering)
Analysis Year	2025	North/South Street	Abacus Street
Time Analyzed	7:30AM	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description			

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0		0	1	0		0	1	0
Configuration							LTR				LTR				LTR	
Volume (veh/h)						0	1	7		30	145	1		1	22	194
Percent Heavy Vehicles (%)						3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type   Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)						7.1	6.5	6.2						4.1		
Critical Headway (sec)						7.13	6.53	6.23						4.13		
Base Follow-Up Headway (sec)						3.5	4.0	3.3						2.2		
Follow-Up Headway (sec)						3.53	4.03	3.33						2.23		

## Delay, Queue Length, and Level of Service

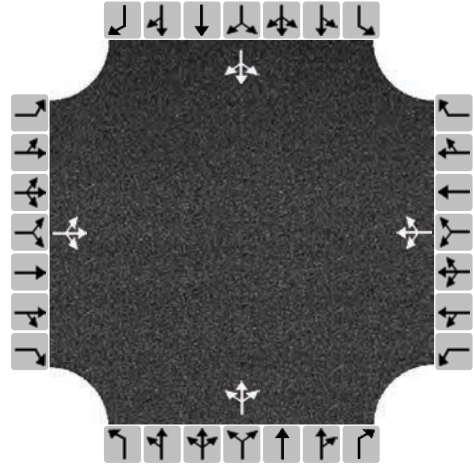
Flow Rate, v (veh/h)						9				33				1		
Capacity, c (veh/h)						801				1327				1415		
v/c Ratio						0.01				0.02				0.00		
95% Queue Length, Q <sub>95</sub> (veh)						0.0				0.1				0.0		
95% Queue Length, Q <sub>95</sub> (ft)						0.0				2.5				0.0		
Control Delay (s/veh)						9.5				7.8	0.2	0.2		7.5	0.0	0.0
Level of Service (LOS)						A				A	A	A		A	A	A
Approach Delay (s/veh)					9.5				1.5				0.0			
Approach LOS					A				A				A			

# HCS All-Way Stop Control Report

## General and Site Information

Analyst	DJ&A
Agency/Co.	
Date Performed	9/09/2025
Analysis Year	2025
Analysis Time Period (hrs)	1.00
Time Analyzed	7:45 AM
Project Description	
Intersection	Zawn Street & Culture Street
Jurisdiction	Irvine
East/West Street	Culture Street
North/South Street	Zawn Street
Peak Hour Factor	0.92

## Lanes



## Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume (veh/h)	35	88	13	8	71	54	4	8	5	23	1	13
% Thrus in Shared Lane												

## Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Lane												
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	148			145			18			40		
Percent Heavy Vehicles	2			2			2			2		
Initial Departure Headway, $h_d$ (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.131			0.129			0.016			0.036		
Final Departure Headway, $h_d$ (s)	4.20			3.99			4.47			4.49		
Final Degree of Utilization, x	0.173			0.160			0.023			0.050		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, $t_s$ (s)	2.20			1.99			2.47			2.49		

## Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Lane												
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	148			145			18			40		
Capacity (veh/h)	856			903			805			803		
95% Queue Length, $Q_{95}$ (veh)	0.6			0.6			0.1			0.2		
95% Queue Length, $Q_{95}$ (ft)	15.2			15.2			2.5			5.1		
Control Delay (s/veh)	8.1			7.7			7.6			7.7		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh)   LOS	8.1		A	7.7		A	7.6		A	7.7		A
Intersection Delay (s/veh)   LOS	7.9						A					



## Appendix C— Intersection Analysis Reports [2029 No Project]

# HCS Roundabouts Report

## General Information

Analyst	DJ&A
Agency or Co.	
Date Performed	9/09/2025
Analysis Year	2029
Time Analyzed	7:45 AM
Project Description	Opening Year No Project AM Volumes



## Site Information

Intersection	Lynx Street & Culture Street
E/W Street Name	Culture Street
N/S Street Name	Lynx Street
Analysis Time Period, hrs	1.00
Peak Hour Factor	0.92
Jurisdiction	Irvine

## Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Number of Lanes (N)	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0
Lane Assignment	LTR								LTR				LTR			
Volume (V), veh/h	5	164	0	14					0	10	84	0	0	0	51	217
Percent Heavy Vehicles, %	3	3	3	3					3	3	3	3	3	3	3	3
Flow Rate (v <sub>PCE</sub> ), pc/h	6	184	0	16					0	11	94	0	0	0	57	243
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	1								1				1			
Pedestrians Crossing, p/h	0								0				0			
Proportion of CAVs, %	0															

## Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway, s		4.9763						4.9763			4.9763	
Follow-Up Headway, s		2.6087						2.6087			2.6087	

## Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v <sub>e</sub> ), pc/h		206						105			300	
Entry Volume, veh/h		200						102			291	
Circulating Flow (v <sub>c</sub> ), pc/h	57			295			190			17		
Exiting Flow (v <sub>ex</sub> ), pc/h	0			260			278			73		
Capacity (C <sub>PCE</sub> ), pc/h		1302						1137			1356	
Capacity (c), veh/h		1264						1104			1317	
v/c Ratio (x)		0.16						0.09			0.22	

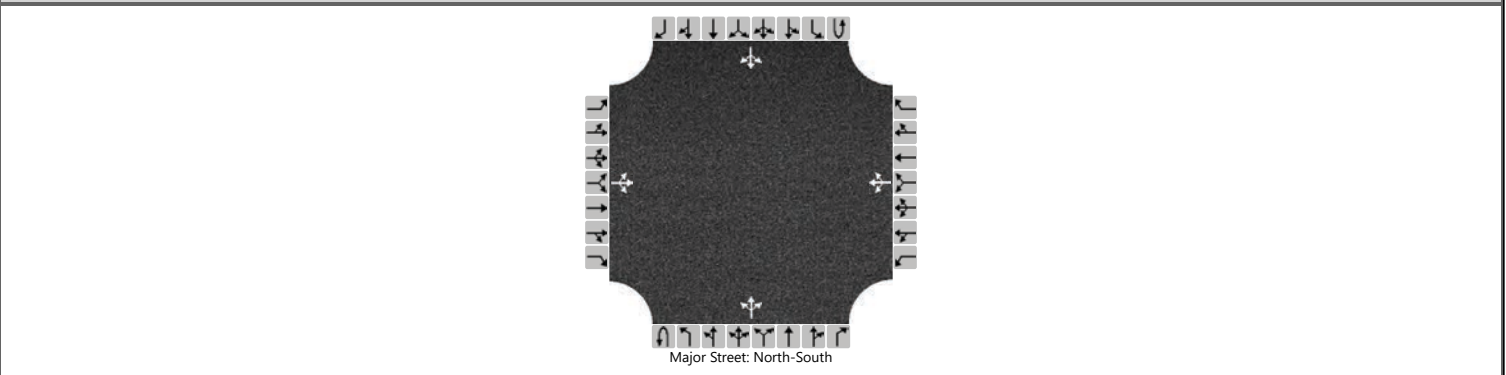
## Delay and Level of Service

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		4.2						4.1			4.6	
Lane LOS		A						A			A	
95% Queue Length, Q <sub>95</sub> (veh)		0.6						0.3			0.9	
95% Queue Length, Q <sub>95</sub> (ft)		15.4						7.7			23.0	
Approach Delay, s/veh   LOS	4.2		A			A-56	4.1		A	4.6		A
Intersection Delay, s/veh   LOS	4.4						A					

# HCS Two-Way Stop-Control Report

General Information				Site Information			
Analyst	DJ&A			Intersection	Lynx Street & Sentosa Street		
Agency/Co.				Jurisdiction	Irvine		
Date Performed	09/09/2025			East/West Street	Sentosa Street		
Analysis Year	2029			North/South Street	Lynx Street		
Time Analyzed	7:30 AM			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	1.00		
Project Description	Opening Year No Project AM Volumes						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		67	0	24		0	0	0		7	28	0		1	55	15
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type   Storage					Left + Thru								1			

## Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			99				0				8				1	
Capacity, c (veh/h)			861				0				1517				1576	
v/c Ratio			0.11								0.01				0.00	
95% Queue Length, Q <sub>95</sub> (veh)			0.4								0.0				0.0	
95% Queue Length, Q <sub>95</sub> (ft)			10.2								0.0				0.0	
Control Delay (s/veh)			9.7							7.4	0.0	0.0		7.3	0.0	0.0
Level of Service (LOS)			A							A	A	A		A	A	A
Approach Delay (s/veh)	9.7								1.5				0.1			
Approach LOS	A								A				A			

Lanes, Volumes, Timings  
Lynx and Astor 2029 NP

09/26/2025



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	12	208	4	30	95	12	1	15	51	44	24	11
Future Volume (vph)	12	208	4	30	95	12	1	15	51	44	24	11
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr't		0.997			0.983			0.884			0.953	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1583	1662	0	1583	1638	0	1583	1473	0	1583	1588	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1583	1662	0	1583	1638	0	1583	1473	0	1583	1588	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			10			55			12	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		444			501			402			472	
Travel Time (s)		10.1			11.4			9.1			10.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	226	4	33	103	13	1	16	55	48	26	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	13	230	0	33	116	0	1	71	0	48	38	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (%)	14.8%	35.2%		14.8%	35.2%		14.8%	35.2%		14.8%	35.2%	
Maximum Green (s)	5.0	18.0		5.0	18.0		5.0	18.0		5.0	18.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	5.0	18.0		5.0	18.0		5.0	18.0		5.0	18.0	
Actuated g/C Ratio	0.08	0.28		0.08	0.28		0.08	0.28		0.08	0.28	
v/c Ratio	0.11	0.49		0.27	0.25		0.01	0.16		0.39	0.08	
Control Delay	29.5	23.4		33.6	18.0		27.0	8.5		37.8	13.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	29.5	23.4		33.6	18.0		27.0	8.5		37.8	13.7	

Lanes, Volumes, Timings  
Lynx and Astor 2029 NP

09/26/2025

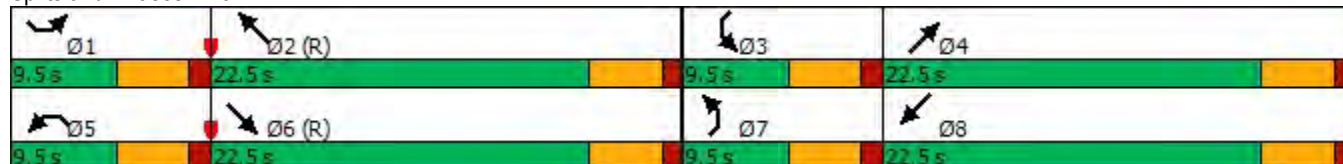


Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
LOS	C	C		C	B		C	A		D	B	
Approach Delay		23.7			21.4			8.7			27.1	
Approach LOS		C			C			A			C	

Intersection Summary

Area Type: Other  
 Cycle Length: 64  
 Actuated Cycle Length: 64  
 Offset: 0 (0%), Referenced to phase 2:NWT and 6:SET, Start of Green  
 Natural Cycle: 65  
 Control Type: Pretimed  
 Maximum v/c Ratio: 0.49  
 Intersection Signal Delay: 21.7  
 Intersection LOS: C  
 Intersection Capacity Utilization 37.3%  
 ICU Level of Service A  
 Analysis Period (min) 15

Splits and Phases: 3:

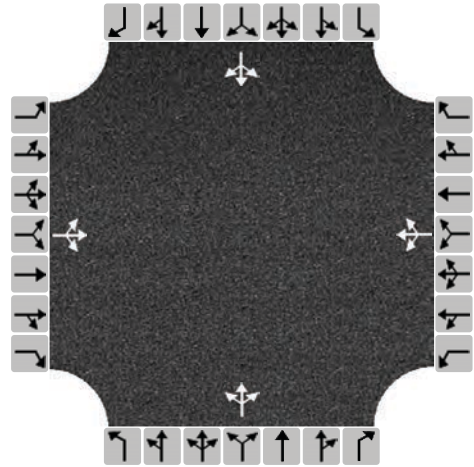


# HCS All-Way Stop Control Report

## General and Site Information

Analyst	DJ&A
Agency/Co.	
Date Performed	09/09/2025
Analysis Year	2029
Analysis Time Period (hrs)	1.00
Time Analyzed	7:45 AM
Project Description	Opening Year No Project AM Volumes
Intersection	Abacus Street & Sentosa Street
Jurisdiction	Irvine
East/West Street	Sentosa Street
North/South Street	Abacus Street
Peak Hour Factor	0.92

## Lanes



## Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume (veh/h)	18	25	10	7	11	4	20	33	30	34	29	30
% Thrus in Shared Lane												

## Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Lane												
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	58			24			90			101		
Percent Heavy Vehicles	2			2			2			2		
Initial Departure Headway, $h_d$ (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.051			0.021			0.080			0.090		
Final Departure Headway, $h_d$ (s)	4.32			4.36			4.05			4.08		
Final Degree of Utilization, x	0.069			0.029			0.101			0.115		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, $t_s$ (s)	2.32			2.36			2.05			2.08		

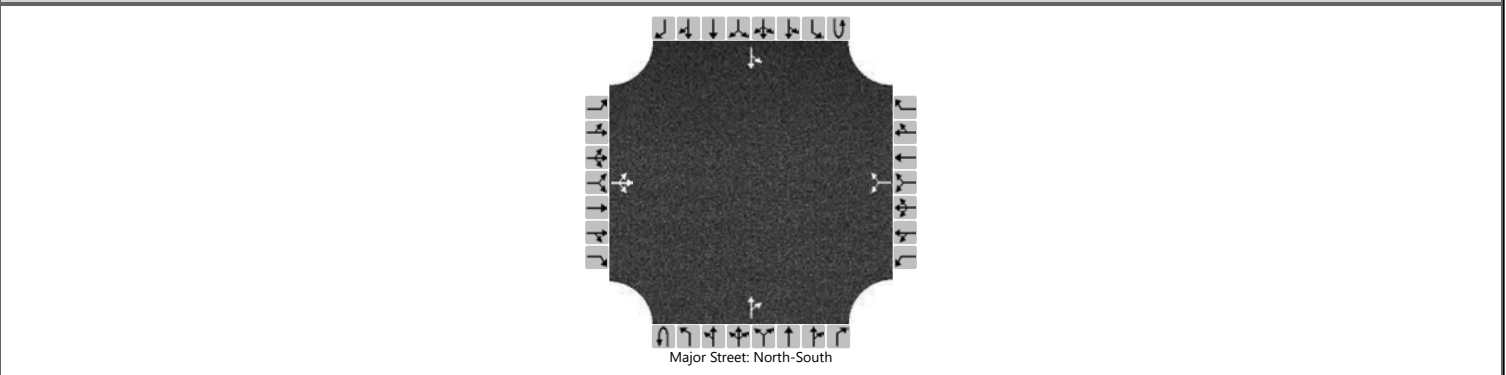
## Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Lane												
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	58			24			90			101		
Capacity (veh/h)	833			826			889			881		
95% Queue Length, $Q_{95}$ (veh)	0.2			0.1			0.3			0.4		
95% Queue Length, $Q_{95}$ (ft)	5.1			2.5			7.6			10.2		
Control Delay (s/veh)	7.6			7.5			7.5			7.6		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh)   LOS	7.6		A	7.5		A	7.5		A	7.6		A
Intersection Delay (s/veh)   LOS	7.6						A					

# HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	DJ&A	Intersection	Abacus Street & Solis Driveway 1 (exit)
Agency/Co.		Jurisdiction	Irvine
Date Performed	9/09/2025	East/West Street	Solis Driveway 1 (exit)
Analysis Year	2029	North/South Street	Abacus Street
Time Analyzed	7:45 AM	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Opening Year No Project AM Volumes		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0	
Configuration			LTR				LR					TR			LT		
Volume (veh/h)		130	1	56		9		1			52	1			1	27	
Percent Heavy Vehicles (%)		3	3	3		3		3							3		
Proportion Time Blocked																	
Percent Grade (%)		0				0											
Right Turn Channelized																	
Median Type   Storage		Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1		6.2							4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13		6.23							4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5		3.3							2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53		3.33							2.23		

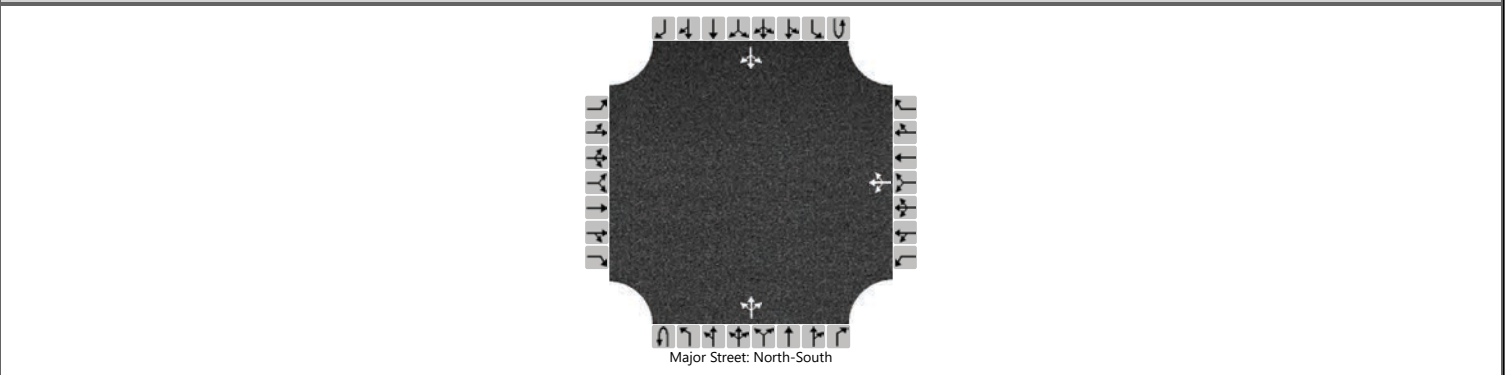
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			203				11								1		
Capacity, c (veh/h)			932				819								1540		
v/c Ratio			0.22				0.01								0.00		
95% Queue Length, Q <sub>95</sub> (veh)			0.8				0.0								0.0		
95% Queue Length, Q <sub>95</sub> (ft)			20.5				0.0								0.0		
Control Delay (s/veh)			9.9				9.5								7.3	0.0	
Level of Service (LOS)			A				A								A	A	
Approach Delay (s/veh)		9.9				9.5								0.3			
Approach LOS		A				A								A			

# HCS Two-Way Stop-Control Report

General Information				Site Information			
Analyst	DJ&A			Intersection	Abacus Street & Solis Driveway 2		
Agency/Co.				Jurisdiction	Irvine		
Date Performed	9/09/2025			East/West Street	Solis Driveway 2 (entering)		
Analysis Year	2029			North/South Street	Abacus Street		
Time Analyzed	7:30AM			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	1.00		
Project Description	Opening Year No Project AM Volumes						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0		0	1	0		0	1	0
Configuration							LTR				LTR				LTR	
Volume (veh/h)						0	1	7		31	151	1		1	23	202
Percent Heavy Vehicles (%)						3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type   Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)						7.1	6.5	6.2						4.1								4.1		
Critical Headway (sec)						7.13	6.53	6.23						4.13								4.13		
Base Follow-Up Headway (sec)						3.5	4.0	3.3						2.2								2.2		
Follow-Up Headway (sec)						3.53	4.03	3.33						2.23								2.23		

## Delay, Queue Length, and Level of Service

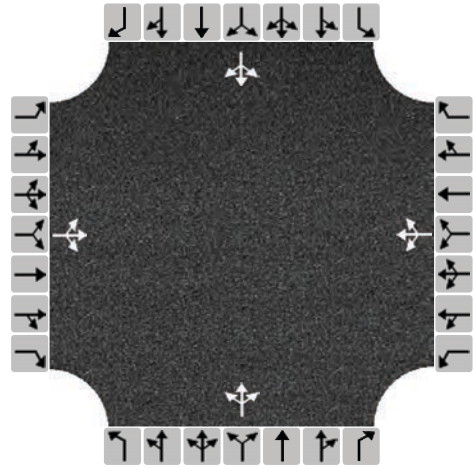
Flow Rate, v (veh/h)						9				34				1		
Capacity, c (veh/h)						792				1316				1407		
v/c Ratio						0.01				0.03				0.00		
95% Queue Length, Q <sub>95</sub> (veh)						0.0				0.1				0.0		
95% Queue Length, Q <sub>95</sub> (ft)						0.0				2.5				0.0		
Control Delay (s/veh)						9.6				7.8	0.2	0.2		7.6	0.0	0.0
Level of Service (LOS)						A				A	A	A		A	A	A
Approach Delay (s/veh)					9.6				1.5				0.0			
Approach LOS					A				A				A			

# HCS All-Way Stop Control Report

## General and Site Information

Analyst	DJ&A
Agency/Co.	
Date Performed	9/09/2025
Analysis Year	2029
Analysis Time Period (hrs)	1.00
Time Analyzed	7:45 AM
Project Description	Opening Year No Project AM Volumes
Intersection	Zawn Street & Culture Street
Jurisdiction	Irvine
East/West Street	Culture Street
North/South Street	Zawn Street
Peak Hour Factor	0.92

## Lanes



## Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume (veh/h)	36	92	14	8	74	56	4	8	5	24	1	14
% Thrus in Shared Lane												

## Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Lane												
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	154			150			18			42		
Percent Heavy Vehicles	2			2			2			2		
Initial Departure Headway, $h_d$ (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.137			0.133			0.016			0.038		
Final Departure Headway, $h_d$ (s)	4.21			4.00			4.50			4.51		
Final Degree of Utilization, x	0.181			0.167			0.023			0.053		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, $t_s$ (s)	2.21			2.00			2.50			2.51		

## Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Lane												
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	154			150			18			42		
Capacity (veh/h)	855			900			800			799		
95% Queue Length, $Q_{95}$ (veh)	0.7			0.6			0.1			0.2		
95% Queue Length, $Q_{95}$ (ft)	17.8			15.2			2.5			5.1		
Control Delay (s/veh)	8.1			7.8			7.6			7.8		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh)   LOS	8.1		A	7.8		A	7.6		A	7.8		A
Intersection Delay (s/veh)   LOS	7.9						A					



## Appendix D— Intersection Analysis Reports [2025 With Project]

# HCS Roundabouts Report

## General Information

Analyst	DJ&A
Agency or Co.	
Date Performed	9/09/2025
Analysis Year	2025
Time Analyzed	7:45 AM
Project Description	Existing with Project AM Volumes



## Site Information

Intersection	Lynx Street & Culture Street
E/W Street Name	Culture Street
N/S Street Name	Lynx Street
Analysis Time Period, hrs	1.00
Peak Hour Factor	0.92
Jurisdiction	Irvine

## Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Number of Lanes (N)	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0
Lane Assignment	LTR								LTR				LTR			
Volume (V), veh/h	5	192	0	13					0	62	81	0	0	0	49	209
Percent Heavy Vehicles, %	3	3	3	3					3	3	3	3	3	3	3	3
Flow Rate (v <sub>PCE</sub> ), pc/h	6	215	0	15					0	69	91	0	0	0	55	234
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	1								1				1			
Pedestrians Crossing, p/h	0								0				0			
Proportion of CAVs, %	0															

## Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway, s		4.9763						4.9763			4.9763	
Follow-Up Headway, s		2.6087						2.6087			2.6087	

## Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v <sub>e</sub> ), pc/h		236						160			289	
Entry Volume, veh/h		229						155			281	
Circulating Flow (v <sub>c</sub> ), pc/h	55			381			221			75		
Exiting Flow (v <sub>ex</sub> ), pc/h	0			309			306			70		
Capacity (C <sub>PCE</sub> ), pc/h		1305						1101			1278	
Capacity (c), veh/h		1267						1069			1241	
v/c Ratio (x)		0.18						0.15			0.23	

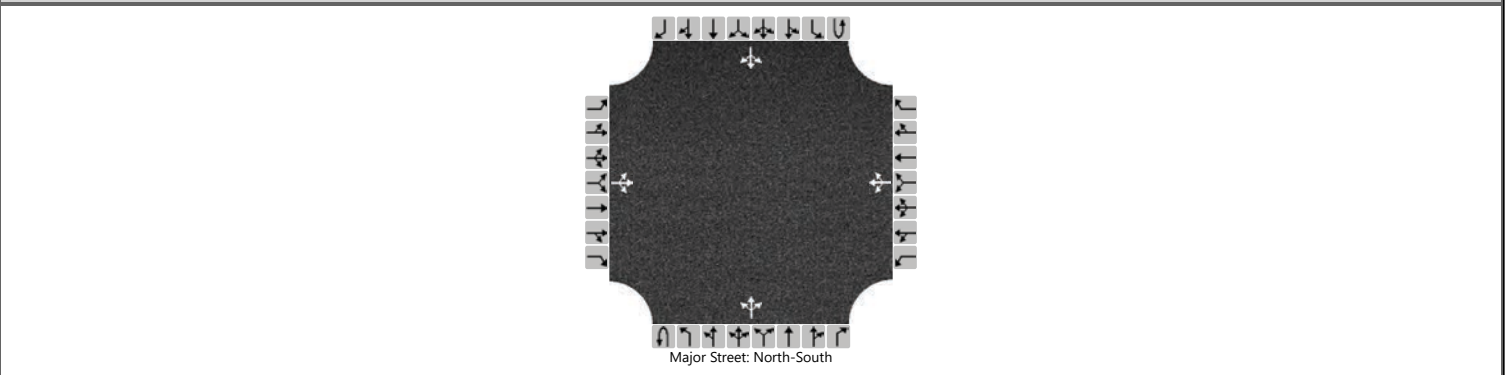
## Delay and Level of Service

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		4.4						4.7			4.9	
Lane LOS		A						A			A	
95% Queue Length, Q <sub>95</sub> (veh)		0.7						0.5			0.9	
95% Queue Length, Q <sub>95</sub> (ft)		17.9						12.8			23.0	
Approach Delay, s/veh   LOS	4.4		A			A-65	4.7		A	4.9		A
Intersection Delay, s/veh   LOS	4.7						A					

# HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	DJ&A	Intersection	Lynx Street & Sentosa Street
Agency/Co.		Jurisdiction	Irvine
Date Performed	09/09/2025	East/West Street	Sentosa Street
Analysis Year	2025	North/South Street	Lynx Street
Time Analyzed	7:30 AM	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Existing with Project AM Volumes		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0	
Configuration			LTR				LTR				LTR				LTR		
Volume (veh/h)		64	0	23		0	0	0		84	79	0		1	124	14	
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3			
Proportion Time Blocked																	
Percent Grade (%)		0				0											
Right Turn Channelized																	
Median Type   Storage		Left + Thru								1							

## Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			95				0			91				1			
Capacity, c (veh/h)			633				0			1425				1504			
v/c Ratio			0.15							0.06				0.00			
95% Queue Length, Q <sub>95</sub> (veh)			0.5							0.2				0.0			
95% Queue Length, Q <sub>95</sub> (ft)			12.8							5.0				0.0			
Control Delay (s/veh)			11.7							7.7	0.5	0.5		7.4	0.0	0.0	
Level of Service (LOS)			B							A	A	A		A	A	A	
Approach Delay (s/veh)		11.7								4.2				0.1			
Approach LOS		B								A				A			

Lanes, Volumes, Timings  
Lynx and Astor 2025 WP

09/26/2025



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	12	200	4	29	91	12	1	143	49	42	94	11
Future Volume (vph)	12	200	4	29	91	12	1	143	49	42	94	11
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr't		0.997			0.983			0.962				0.984
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1583	1662	0	1583	1638	0	1583	1603	0	1583	1640	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1583	1662	0	1583	1638	0	1583	1603	0	1583	1640	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			10			27			9	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		444			501			402			472	
Travel Time (s)		10.1			11.4			9.1			10.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	217	4	32	99	13	1	155	53	46	102	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	13	221	0	32	112	0	1	208	0	46	114	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (%)	14.8%	35.2%		14.8%	35.2%		14.8%	35.2%		14.8%	35.2%	
Maximum Green (s)	5.0	18.0		5.0	18.0		5.0	18.0		5.0	18.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	5.0	18.0		5.0	18.0		5.0	18.0		5.0	18.0	
Actuated g/C Ratio	0.08	0.28		0.08	0.28		0.08	0.28		0.08	0.28	
v/c Ratio	0.11	0.47		0.26	0.24		0.01	0.44		0.37	0.24	
Control Delay	29.5	23.0		33.3	17.8		27.0	19.9		37.1	18.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	29.5	23.0		33.3	17.8		27.0	19.9		37.1	18.0	

Lanes, Volumes, Timings  
Lynx and Astor 2025 WP

09/26/2025

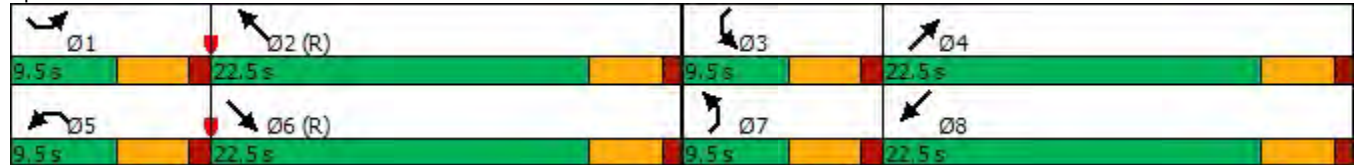


Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
LOS	C	C		C	B		C	B		D	B	
Approach Delay		23.4			21.2			19.9			23.5	
Approach LOS		C			C			B			C	

Intersection Summary

Area Type:	Other
Cycle Length:	64
Actuated Cycle Length:	64
Offset:	0 (0%), Referenced to phase 2:NWT and 6:SET, Start of Green
Natural Cycle:	65
Control Type:	Pretimed
Maximum v/c Ratio:	0.47
Intersection Signal Delay:	22.0
Intersection LOS:	C
Intersection Capacity Utilization	47.1%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 3:

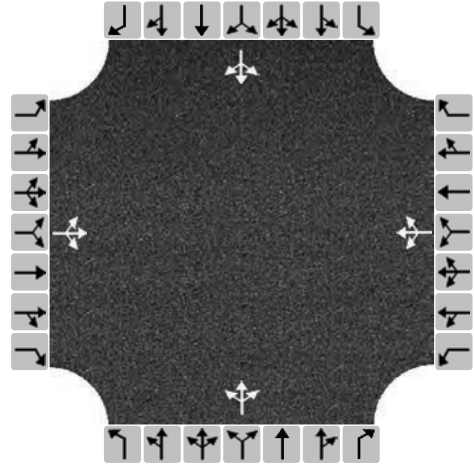


# HCS All-Way Stop Control Report

## General and Site Information

Analyst	DJ&A
Agency/Co.	
Date Performed	09/09/2025
Analysis Year	2025
Analysis Time Period (hrs)	1.00
Time Analyzed	7:45 AM
Project Description	Existing with Project AM Volumes
Intersection	Abacus Street & Sentosa Street
Jurisdiction	Irvine
East/West Street	Sentosa Street
North/South Street	Abacus Street
Peak Hour Factor	0.92

## Lanes



## Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume (veh/h)	17	24	10	7	37	56	19	32	29	63	28	29
% Thrus in Shared Lane												

## Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Lane												
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	55			109			87			130		
Percent Heavy Vehicles	2			2			2			2		
Initial Departure Headway, $h_d$ (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.049			0.097			0.077			0.116		
Final Departure Headway, $h_d$ (s)	4.50			4.17			4.28			4.36		
Final Degree of Utilization, x	0.069			0.126			0.103			0.158		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, $t_s$ (s)	2.50			2.17			2.28			2.36		

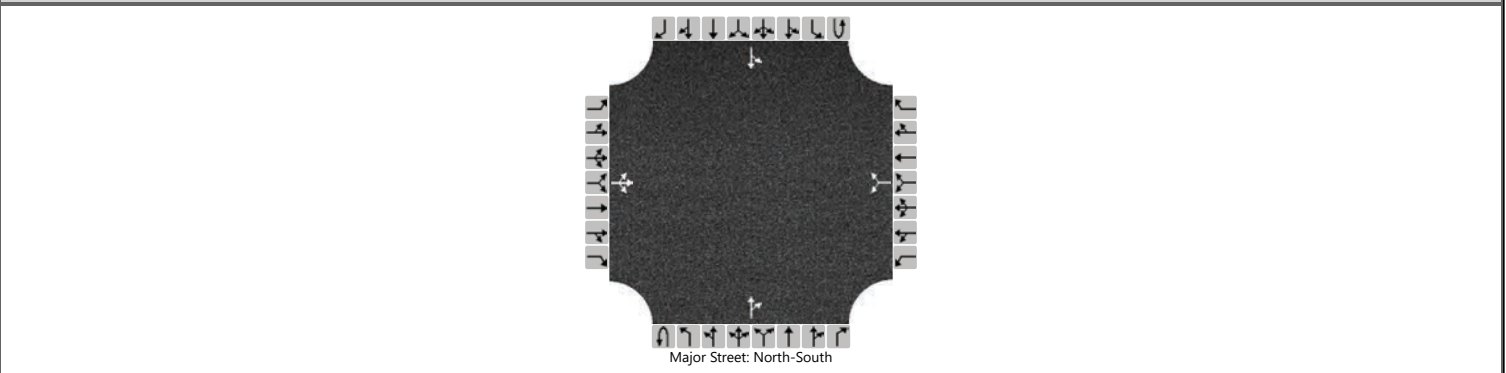
## Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Lane												
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	55			109			87			130		
Capacity (veh/h)	800			863			841			826		
95% Queue Length, $Q_{95}$ (veh)	0.2			0.4			0.3			0.6		
95% Queue Length, $Q_{95}$ (ft)	5.1			10.2			7.6			15.2		
Control Delay (s/veh)	7.8			7.8			7.8			8.2		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh)   LOS	7.8		A	7.8		A	7.8		A	8.2		A
Intersection Delay (s/veh)   LOS	7.9						A					

# HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	DJ&A	Intersection	Abacus Street & Solis Driveway 1 (exit)
Agency/Co.		Jurisdiction	Irvine
Date Performed	9/09/2025	East/West Street	Solis Driveway 1 (exit)
Analysis Year	2025	North/South Street	Abacus Street
Time Analyzed	7:45 AM	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Existing with Project AM Volumes		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0	
Configuration			LTR				LR					TR			LT		
Volume (veh/h)		194	1	54		9		1			102	1			1	26	
Percent Heavy Vehicles (%)		3	3	3		3		3							3		
Proportion Time Blocked																	
Percent Grade (%)		0				0											
Right Turn Channelized																	
Median Type   Storage		Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1		6.2							4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13		6.23							4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5		3.3							2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53		3.33							2.23		

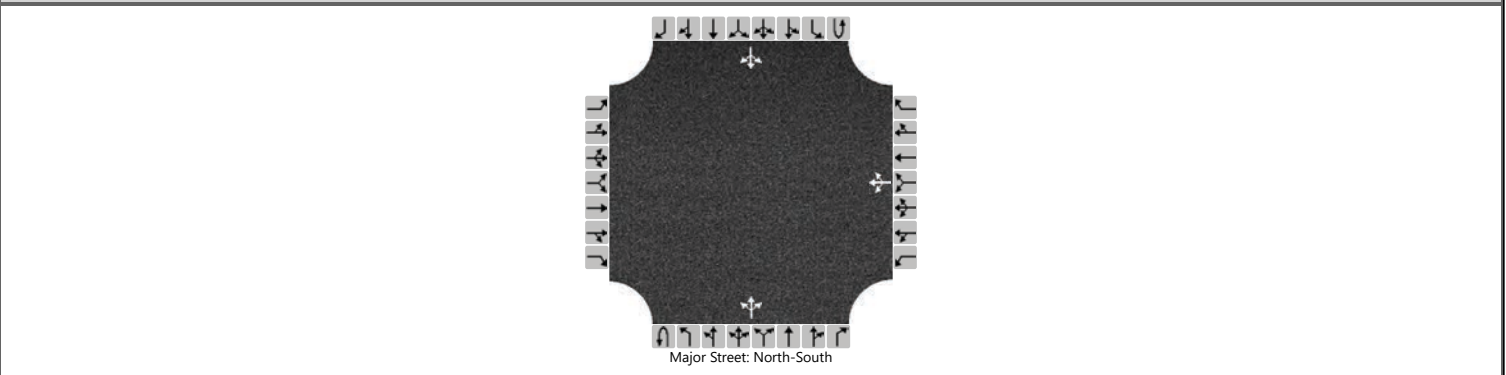
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			271				11								1		
Capacity, c (veh/h)			862				759								1471		
v/c Ratio			0.31				0.01								0.00		
95% Queue Length, Q <sub>95</sub> (veh)			1.4				0.0								0.0		
95% Queue Length, Q <sub>95</sub> (ft)			35.8				0.0								0.0		
Control Delay (s/veh)			11.1				9.8								7.4	0.0	
Level of Service (LOS)			B				A								A	A	
Approach Delay (s/veh)		11.1				9.8								0.3			
Approach LOS		B				A								A			

# HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	DJ&A	Intersection	Abacus Street & Solis Driveway 2
Agency/Co.		Jurisdiction	Irvine
Date Performed	9/09/2025	East/West Street	Solis Driveway 2 (entering)
Analysis Year	2025	North/South Street	Abacus Street
Time Analyzed	7:30AM	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Existing with Project AM Volumes		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0		0	1	0		0	1	0
Configuration							LTR				LTR				LTR	
Volume (veh/h)						0	1	7		82	145	1		1	52	233
Percent Heavy Vehicles (%)						3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type   Storage	Undivided															

## Critical and Follow-up Headways

Base Critical Headway (sec)						7.1	6.5	6.2										4.1		
Critical Headway (sec)						7.13	6.53	6.23										4.13		
Base Follow-Up Headway (sec)						3.5	4.0	3.3										2.2		
Follow-Up Headway (sec)						3.53	4.03	3.33										2.23		

## Delay, Queue Length, and Level of Service

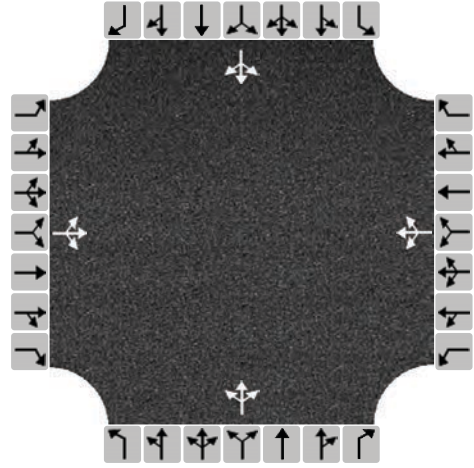
Flow Rate, v (veh/h)							9											89												1		
Capacity, c (veh/h)							747											1245												1415		
v/c Ratio							0.01											0.07												0.00		
95% Queue Length, Q <sub>95</sub> (veh)							0.0											0.2												0.0		
95% Queue Length, Q <sub>95</sub> (ft)							0.0											5.0												0.0		
Control Delay (s/veh)							9.9											8.1	0.6	0.6										7.5	0.0	0.0
Level of Service (LOS)							A											A	A	A										A	A	A
Approach Delay (s/veh)					9.9				3.3				0.0																			
Approach LOS					A				A				A																			

# HCS All-Way Stop Control Report

## General and Site Information

Analyst	DJ&A
Agency/Co.	
Date Performed	9/09/2025
Analysis Year	2025
Analysis Time Period (hrs)	1.00
Time Analyzed	7:45 AM
Project Description	Existing with Project AM Volumes
Intersection	Zawn Street & Culture Street
Jurisdiction	Irvine
East/West Street	Culture Street
North/South Street	Zawn Street
Peak Hour Factor	0.92

## Lanes



## Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume (veh/h)	35	88	13	21	71	54	9	8	11	23	1	13
% Thrus in Shared Lane												

## Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Lane												
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	148			159			30			40		
Percent Heavy Vehicles	2			2			2			2		
Initial Departure Headway, $h_d$ (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.131			0.141			0.027			0.036		
Final Departure Headway, $h_d$ (s)	4.25			4.06			4.46			4.54		
Final Degree of Utilization, x	0.175			0.179			0.038			0.051		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, $t_s$ (s)	2.25			2.06			2.46			2.54		

## Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Lane												
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	148			159			30			40		
Capacity (veh/h)	847			887			806			794		
95% Queue Length, $Q_{95}$ (veh)	0.6			0.7			0.1			0.2		
95% Queue Length, $Q_{95}$ (ft)	15.2			17.8			2.5			5.1		
Control Delay (s/veh)	8.1			7.9			7.6			7.8		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh)   LOS	8.1		A	7.9		A	7.6		A	7.8		A
Intersection Delay (s/veh)   LOS	8.0						A					

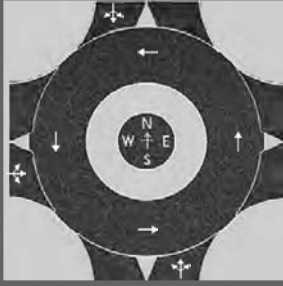


## Appendix E—Intersection Analysis Reports [2029 With Project]

# HCS Roundabouts Report

## General Information

Analyst	DJ&A
Agency or Co.	
Date Performed	9/09/2025
Analysis Year	2029
Time Analyzed	7:45 AM
Project Description	Opening Year with Project AM Volumes



## Site Information

Intersection	Lynx Street & Culture Street
E/W Street Name	Culture Street
N/S Street Name	Lynx Street
Analysis Time Period, hrs	1.00
Peak Hour Factor	0.92
Jurisdiction	Irvine

## Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Number of Lanes (N)	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0
Lane Assignment	LTR								LTR				LTR			
Volume (V), veh/h	5	198	0	55					0	62	84	0	0	0	51	217
Percent Heavy Vehicles, %	3	3	3	3					3	3	3	3	3	3	3	3
Flow Rate (v <sub>PCE</sub> ), pc/h	6	222	0	62					0	69	94	0	0	0	57	243
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes	1								1				1			
Pedestrians Crossing, p/h	0								0				0			
Proportion of CAVs, %	0															

## Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway, s		4.9763						4.9763			4.9763	
Follow-Up Headway, s		2.6087						2.6087			2.6087	

## Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v <sub>e</sub> ), pc/h		290						163			300	
Entry Volume, veh/h		282						158			291	
Circulating Flow (v <sub>c</sub> ), pc/h	57			391			228			75		
Exiting Flow (v <sub>ex</sub> ), pc/h	0			318			316			119		
Capacity (C <sub>PCE</sub> ), pc/h		1302						1094			1278	
Capacity (c), veh/h		1264						1062			1241	
v/c Ratio (x)		0.22						0.15			0.23	

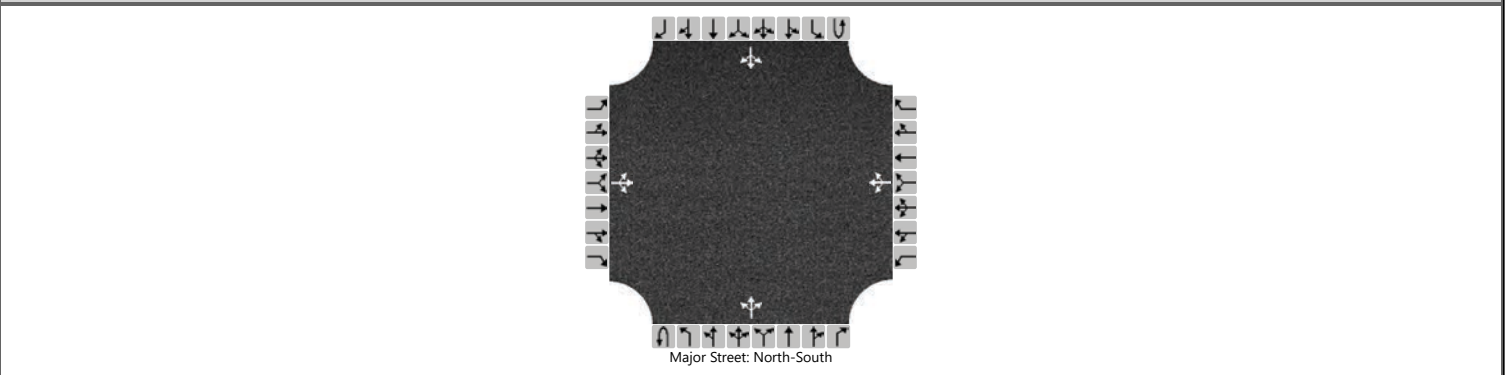
## Delay and Level of Service

Approach	EB			WB			NB			SB		
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		4.8						4.7			5.0	
Lane LOS		A						A			A	
95% Queue Length, Q <sub>95</sub> (veh)		0.9						0.5			0.9	
95% Queue Length, Q <sub>95</sub> (ft)		23.0						12.8			23.0	
Approach Delay, s/veh   LOS	4.8		A			A-74	4.7		A	5.0		A
Intersection Delay, s/veh   LOS	4.8						A					

# HCS Two-Way Stop-Control Report

General Information				Site Information			
Analyst	DJ&A			Intersection	Lynx Street & Sentosa Street		
Agency/Co.				Jurisdiction	Irvine		
Date Performed	09/09/2025			East/West Street	Sentosa Street		
Analysis Year	2029			North/South Street	Lynx Street		
Time Analyzed	7:30 AM			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	1.00		
Project Description	Opening Year with Project AM Volumes						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		67	0	54		0	0	0		85	80	0		1	126	15
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type   Storage					Left + Thru								1			

## Critical and Follow-up Headways






















Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			132				0				92				1	
Capacity, c (veh/h)			679				0				1421				1503	
v/c Ratio			0.19								0.07				0.00	
95% Queue Length, Q <sub>95</sub> (veh)			0.7								0.2				0.0	
95% Queue Length, Q <sub>95</sub> (ft)			17.9								5.0				0.0	
Control Delay (s/veh)			11.6							7.7	0.5	0.5		7.4	0.0	0.0
Level of Service (LOS)			B							A	A	A		A	A	A
Approach Delay (s/veh)	11.6								4.2				0.1			
Approach LOS	B								A				A			

Lanes, Volumes, Timings  
Lynx and Astor 2029 WP

09/26/2025

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	12	208	4	30	95	12	1	144	51	44	95	11
Future Volume (vph)	12	208	4	30	95	12	1	144	51	44	95	11
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr't		0.997			0.983			0.961			0.984	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1583	1662	0	1583	1638	0	1583	1602	0	1583	1640	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1583	1662	0	1583	1638	0	1583	1602	0	1583	1640	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			10			27			9	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		444			501			402			472	
Travel Time (s)		10.1			11.4			9.1			10.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	226	4	33	103	13	1	157	55	48	103	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	13	230	0	33	116	0	1	212	0	48	115	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (%)	14.8%	35.2%		14.8%	35.2%		14.8%	35.2%		14.8%	35.2%	
Maximum Green (s)	5.0	18.0		5.0	18.0		5.0	18.0		5.0	18.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	5.0	18.0		5.0	18.0		5.0	18.0		5.0	18.0	
Actuated g/C Ratio	0.08	0.28		0.08	0.28		0.08	0.28		0.08	0.28	
v/c Ratio	0.11	0.49		0.27	0.25		0.01	0.45		0.39	0.25	
Control Delay	29.5	23.4		33.6	18.0		27.0	20.1		37.8	18.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	29.5	23.4		33.6	18.0		27.0	20.1		37.8	18.1	

Lanes, Volumes, Timings  
Lynx and Astor 2029 WP

09/26/2025

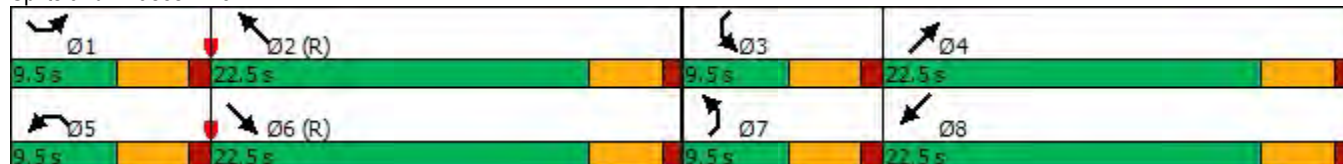


Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
LOS	C	C		C	B		C	C		D	B	
Approach Delay		23.7			21.4			20.2			23.9	
Approach LOS		C			C			C			C	

Intersection Summary

Area Type:	Other
Cycle Length:	64
Actuated Cycle Length:	64
Offset:	0 (0%), Referenced to phase 2:NWT and 6:SET, Start of Green
Natural Cycle:	65
Control Type:	Pretimed
Maximum v/c Ratio:	0.49
Intersection Signal Delay:	22.3
Intersection LOS:	C
Intersection Capacity Utilization	47.8%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 3:

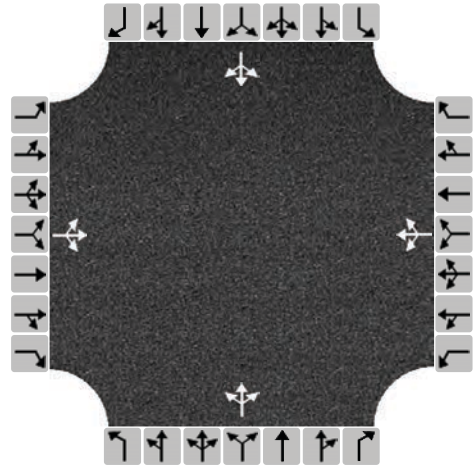


# HCS All-Way Stop Control Report

## General and Site Information

Analyst	DJ&A
Agency/Co.	
Date Performed	09/09/2025
Analysis Year	2029
Analysis Time Period (hrs)	1.00
Time Analyzed	7:45 AM
Project Description	Opening Year with Project AM Volumes
Intersection	Abacus Street & Sentosa Street
Jurisdiction	Irvine
East/West Street	Sentosa Street
North/South Street	Abacus Street
Peak Hour Factor	0.92

## Lanes



## Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume (veh/h)	18	25	10	7	37	56	20	33	30	64	29	30
% Thrus in Shared Lane												

## Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Lane												
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	58			109			90			134		
Percent Heavy Vehicles	2			2			2			2		
Initial Departure Headway, h <sub>d</sub> (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.051			0.097			0.080			0.119		
Final Departure Headway, h <sub>d</sub> (s)	4.52			4.19			4.29			4.37		
Final Degree of Utilization, x	0.072			0.127			0.108			0.162		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t <sub>s</sub> (s)	2.52			2.19			2.29			2.37		

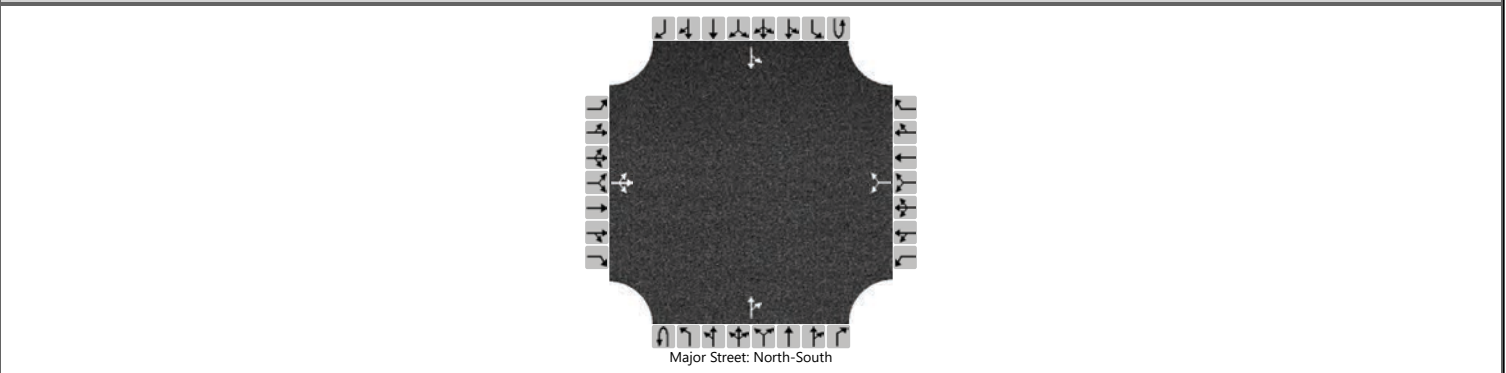
## Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Lane												
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	58			109			90			134		
Capacity (veh/h)	796			859			839			824		
95% Queue Length, Q <sub>95</sub> (veh)	0.2			0.4			0.4			0.6		
95% Queue Length, Q <sub>95</sub> (ft)	5.1			10.2			10.2			15.2		
Control Delay (s/veh)	7.9			7.8			7.8			8.2		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh)   LOS	7.9		A	7.8		A	7.8		A	8.2		A
Intersection Delay (s/veh)   LOS	8.0						A					

# HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	DJ&A	Intersection	Abacus Street & Solis Driveway 1 (exit)
Agency/Co.		Jurisdiction	Irvine
Date Performed	9/09/2025	East/West Street	Solis Driveway 1 (exit)
Analysis Year	2029	North/South Street	Abacus Street
Time Analyzed	7:45 AM	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Opening Year with Project AM Volumes		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LR					TR			LT	
Volume (veh/h)		199	1	86		9		1			104	1			1	27
Percent Heavy Vehicles (%)		3	3	3		3		3							3	
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type   Storage		Undivided														

## Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1		6.2							4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13		6.23							4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5		3.3							2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53		3.33							2.23		

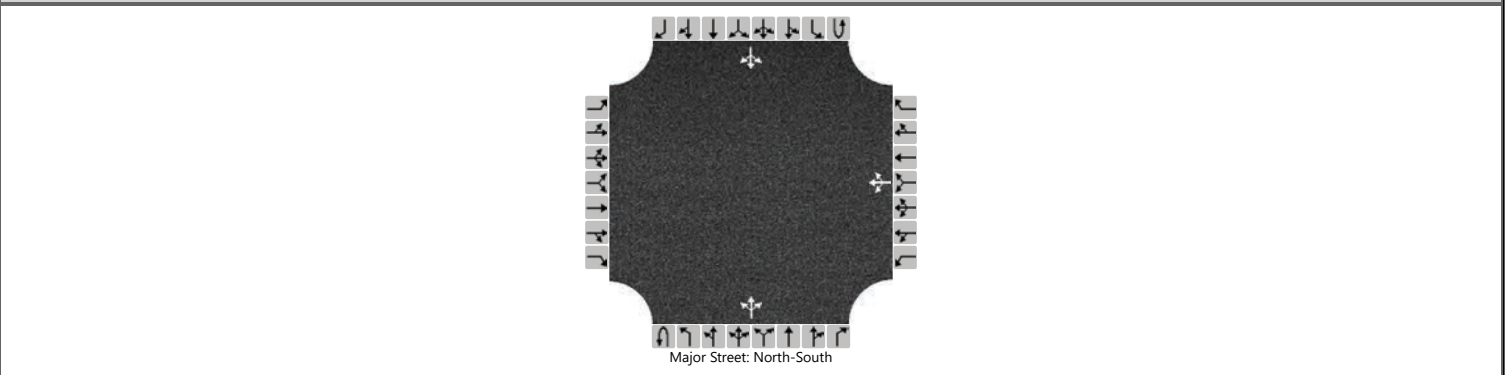
## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			311				11								1		
Capacity, c (veh/h)			875				713								1469		
v/c Ratio			0.36				0.02								0.00		
95% Queue Length, Q <sub>95</sub> (veh)			1.6				0.0								0.0		
95% Queue Length, Q <sub>95</sub> (ft)			41.0				0.0								0.0		
Control Delay (s/veh)			11.4				10.1								7.5	0.0	
Level of Service (LOS)			B				B								A	A	
Approach Delay (s/veh)		11.4				10.1								0.3			
Approach LOS		B				B								A			

# HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	DJ&A	Intersection	Abacus Street & Solis Driveway 2
Agency/Co.		Jurisdiction	Irvine
Date Performed	9/09/2025	East/West Street	Solis Driveway 2 (entering)
Analysis Year	2029	North/South Street	Abacus Street
Time Analyzed	7:30AM	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Opening Year with Project AM Volumes		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LTR				LTR				LTR	
Volume (veh/h)						0	1	7		83	151	1		1	53	241
Percent Heavy Vehicles (%)						3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type   Storage		Undivided														

## Critical and Follow-up Headways

Base Critical Headway (sec)						7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)						7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)						3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)						3.53	4.03	3.33		2.23				2.23		

## Delay, Queue Length, and Level of Service

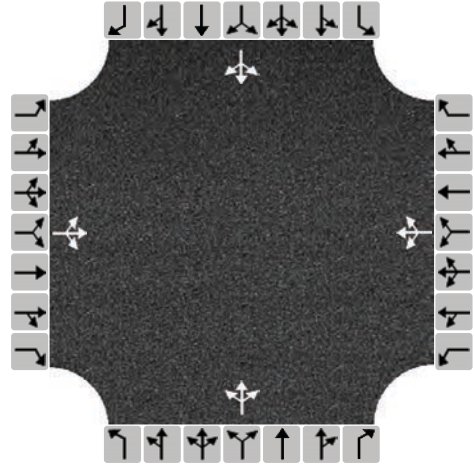
Flow Rate, v (veh/h)						9			90				1				
Capacity, c (veh/h)						737			1235				1407				
v/c Ratio						0.01			0.07				0.00				
95% Queue Length, Q <sub>95</sub> (veh)						0.0			0.2				0.0				
95% Queue Length, Q <sub>95</sub> (ft)						0.0			5.0				0.0				
Control Delay (s/veh)						9.9			8.1	0.7	0.7		7.6	0.0	0.0		
Level of Service (LOS)						A			A	A	A		A	A	A		
Approach Delay (s/veh)						9.9				3.3				0.0			
Approach LOS						A				A				A			

# HCS All-Way Stop Control Report

## General and Site Information

Analyst	DJ&A
Agency/Co.	
Date Performed	9/09/2025
Analysis Year	2029
Analysis Time Period (hrs)	1.00
Time Analyzed	7:45 AM
Project Description	Opening Year with Project AM Volumes
Intersection	Zawn Street & Culture Street
Jurisdiction	Irvine
East/West Street	Culture Street
North/South Street	Zawn Street
Peak Hour Factor	0.92

## Lanes



## Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume (veh/h)	36	92	14	21	74	56	9	8	11	24	1	14
% Thrus in Shared Lane												

## Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Lane												
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	154			164			30			42		
Percent Heavy Vehicles	2			2			2			2		
Initial Departure Headway, $h_d$ (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.137			0.146			0.027			0.038		
Final Departure Headway, $h_d$ (s)	4.26			4.07			4.49			4.56		
Final Degree of Utilization, x	0.183			0.186			0.038			0.054		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, $t_s$ (s)	2.26			2.07			2.49			2.56		

## Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Lane												
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	154			164			30			42		
Capacity (veh/h)	845			884			801			790		
95% Queue Length, $Q_{95}$ (veh)	0.7			0.7			0.1			0.2		
95% Queue Length, $Q_{95}$ (ft)	17.8			17.8			2.5			5.1		
Control Delay (s/veh)	8.2			8.0			7.7			7.8		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh)   LOS	8.2		A	8.0		A	7.7		A	7.8		A
Intersection Delay (s/veh)   LOS	8.0						A					

# MSTA School Traffic Calculations

AM and PM Peak Traffic Estimates  
(These numbers do not reflect peak hour traffic volumes)

School Name: \_\_\_\_\_

Type: **Typical Public with buses**

Version: 102816

AM Cars / Student	PM Cars / Student	Avg. Car Length	PM At one Time
36.56%	16.31%	22.19	45.50%
34.58%	14.10%	22.70	51.90%
9.20%	4.30%	24.42	55.71%

MSTA School Queue Input					Calculations					
Type School	Student Population	Number of Buses	Staff Members	Student Drivers	PM Total Vehicles	PM Peak Vehicles	Average Queue Length	Total AM Trips	Total PM Trips	High Demand Length
Elementary	1012				166	76	1676	740	332	30%
Middle	288	14	119		41	21	483	199	82	628
High		6	29							
							2159	939	414	2807

648

Elementary School Data									
AM Trips Generated					PM Trips Generated				
Direction	Parents	Buses	Staff	Trips	Parents	Buses	Staff	Trips	
IN	370			370	166			166	
OUT	370			370	166			166	
				AM Elementary Trips	740				
					PM Elementary Trips				332

Middle School Data									
AM Trips Generated					PM Trips Generated				
Direction	Parents	Buses	Staff	Trips	Parents	Buses	Staff	Trips	
IN	100			100	41			41	
OUT	100			100	41			41	
				AM Middle Trips	199				
					PM Middle Trips				82

AM Trips Generated					PM Trips Generated				
Direction	Parents	Buses	Staff	Trips	Parents	Buses	Staff	Trips	
IN									
OUT									
				AM High Trips					
					PM High Trips				
				All AM TRIPS	All PM TRIPS				
				In	In				
				Out	Out				
				Total	Total				
				470	207				
				470	207				
				939	414				

ADT
1072
281
1353

**NOTES**

- Average Queue Length does not include an alternative traffic pattern required for high traffic demand days which is usually 30% additional length.
- Average Queue Length does not include the Student Loading Zone.
- Peak traffic volumes at schools normally occur within a 30-minute time period. (Justifying a PHF of 0.5)