

June 2022 | Draft Environmental Impact Report

SPORTS FACILITIES LIGHTING AT LA QUINTA HIGH SCHOOL PROJECT

for Garden Grove Unified School District

Prepared for:

Garden Grove Unified School District

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Abbreviations and Acronyms

ABBREVIATIONS AND ACRONYMS

AAQS	ambient air quality standards
AB	Assembly Bill
ACM	asbestos-containing materials
ADT	average daily traffic
amsl	above mean sea level
AQMP	air quality management plan
AST	aboveground storage tank
BAU	business as usual
bgs	below ground surface
BMP	best management practices
CAA	Clean Air Act
CAFE	corporate average fuel economy
CalARP	California Accidental Release Prevention Program
CalEMA	California Emergency Management Agency
Cal/EPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
Cal/OSHA	California Occupational Safety and Health Administration
CalRecycle	California Department of Resources, Recycling, and Recovery
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDE	California Department of Education
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
cfs	cubic feet per second
CGS	California Geologic Survey
CMP	congestion management program

Abbreviations and Acronyms

CNDDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CO	carbon monoxide
CO ₂ e	carbon dioxide equivalent
Corps	US Army Corps of Engineers
CSO	combined sewer overflows
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
dB	decibel
dba	A-weighted decibel
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
EIR	environmental impact report
EPA	United States Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GHG	greenhouse gases
GWP	global warming potential
HCM	Highway Capacity Manual
HQTA	high quality transit area
HVAC	heating, ventilating, and air conditioning system
IPCC	Intergovernmental Panel on Climate Change
L _{dn}	day-night noise level
L _{eq}	equivalent continuous noise level
LBP	lead-based paint
LCFS	low-carbon fuel standard
LOS	level of service
LST	localized significance thresholds
M _w	moment magnitude
MCL	maximum contaminant level
MEP	maximum extent practicable

Abbreviations and Acronyms

mgd	million gallons per day
MMT	million metric tons
MPO	metropolitan planning organization
MT	metric ton
MWD	Metropolitan Water District of Southern California
NAHC	Native American Heritage Commission
NO _x	nitrogen oxides
NPDES	National Pollution Discharge Elimination System
O ₃	ozone
OES	California Office of Emergency Services
PM	particulate matter
POTW	publicly owned treatment works
ppm	parts per million
PPV	peak particle velocity
RCRA	Resource Conservation and Recovery Act
REC	recognized environmental condition
RMP	risk management plan
RMS	root mean square
RPS	renewable portfolio standard
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SIP	state implementation plan
SLM	sound level meter
SoCAB	South Coast Air Basin
SO _x	sulfur oxides
SQMP	stormwater quality management plan
SRA	source receptor area [or state responsibility area]
SUSMP	standard urban stormwater mitigation plan
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board

Abbreviations and Acronyms

TAC	toxic air contaminants
TNM	transportation noise model
tpd	tons per day
TRI	toxic release inventory
TTCP	traditional tribal cultural places
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	underground storage tank
UWMP	urban water management plan
V/C	volume-to-capacity ratio
VdB	velocity decibels
VHFHSZ	very high fire hazard severity zone
VMT	vehicle miles traveled
VOC	volatile organic compound
WQMP	water quality management plan
WSA	water supply assessment

1. Executive Summary

1.1 INTRODUCTION

This draft environmental impact report (DEIR) addresses the environmental effects associated with the implementation of the proposed Sports Facilities Lighting at La Quinta High School project (proposed project). The California Environmental Quality Act (CEQA) requires that local government agencies consider the environmental consequences before taking action on projects over which they have discretionary approval authority. An environmental impact report analyzes potential environmental consequences in order to inform the public and support informed decisions by local and state governmental agency decision makers.

This DEIR has been prepared pursuant to the requirements of CEQA and the Garden Grove Unified School District's (GGUSD or District) CEQA procedures. The District, as the lead agency, has reviewed and revised all submitted drafts, technical studies, and reports as necessary to reflect its own independent judgment, including reliance on technical personnel and review of technical subconsultant reports.

Data for this DEIR derive from onsite field observations; discussions with affected agencies; analysis of adopted plans and policies; review of available studies, reports, data, and similar literature; and specialized environmental assessments (aesthetics, air quality, cultural and paleontological resources, energy, greenhouse gas emissions, noise, transportation, and tribal cultural resources).

1.2 ENVIRONMENTAL PROCEDURES

This DEIR has been prepared pursuant to CEQA to assess the environmental effects associated with implementation of the proposed project, as well as anticipated future discretionary actions and approvals. CEQA established six main objectives for an EIR:

1. Disclose to decision makers and the public the significant environmental effects of proposed activities.
2. Identify ways to avoid or reduce environmental damage.
3. Prevent environmental damage by requiring implementation of feasible alternatives or mitigation measures.
4. Disclose to the public reasons for agency approval of projects with significant environmental effects.
5. Foster interagency coordination in the review of projects.
6. Enhance public participation in the planning process.

An EIR is the most comprehensive form of environmental documentation in CEQA and the CEQA Guidelines; it is intended to provide an objective, factually supported analysis and full disclosure of the

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environmental consequences of a proposed project with the potential to result in significant, adverse environmental impacts.

An EIR is one of various decision-making tools used by a lead agency to consider the merits and disadvantages of a project that is subject to its discretionary authority. Before approving a proposed project, the lead agency must consider the information in the EIR; determine whether the EIR was prepared in accordance with CEQA and the CEQA Guidelines; determine that it reflects the independent judgment of the lead agency; adopt findings concerning the project's significant environmental impacts and alternatives; and adopt a statement of overriding considerations if significant impacts cannot be avoided.

1.2.1 EIR Format

Chapter 1. Executive Summary: Summarizes the background and description of the proposed project, the format of this EIR, project alternatives, any critical issues remaining to be resolved, and the potential environmental impacts and mitigation measures identified for the proposed project.

Chapter 2. Introduction: Describes the purpose of this DEIR, background on the project, the notice of preparation, the use of incorporation by reference, and Final EIR certification.

Chapter 3. Project Description: A detailed description of the project, including its objectives, its area and location, approvals anticipated to be required as part of the project, necessary environmental clearances, and the intended uses of this DEIR.

Chapter 4. Environmental Setting: A description of the physical environmental conditions in the vicinity of the project as they existed at the time the notice of preparation was published, from local and regional perspectives. These provide the baseline physical conditions from which the lead agency determines the significance of the project's environmental impacts.

Chapter 5. Environmental Analysis: Each environmental topic is analyzed in a separate section that discusses: the thresholds used to determine if a significant impact would occur; the methodology to identify and evaluate the potential impacts of the project; the existing environmental setting; the potential adverse and beneficial effects of the project; the level of impact significance before mitigation; the mitigation measures for the proposed project; the level of significance after mitigation is incorporated; and the potential cumulative impacts of the proposed project and other existing, approved, and proposed development in the area.

Chapter 6. Significant Unavoidable Adverse Impacts: Describes the significant unavoidable adverse impacts of the proposed project, if applicable.

Chapter 7. Alternatives to the Proposed Project: Describes the alternatives and compares their impacts to the impacts of the proposed project. Alternatives include the No Project Alternative and a Reduced Intensity Alternative.

Chapter 8. Impacts Found Not to Be Significant: Briefly describes the potential impacts of the project that were determined not to be significant by the Notice of Preparation and were therefore not discussed in detail in this DEIR.

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Chapter 9. Significant Irreversible Changes Due to the Proposed Project: Describes the significant irreversible environmental changes associated with the project.

Chapter 10. Growth-Inducing Impacts of the Project: Describes the ways in which the proposed project would cause increases in employment or population that could result in new physical or environmental impacts.

Chapter 11. Organizations and Persons Consulted: Lists the people and organizations that were contacted during the preparation of this DEIR.

Chapter 12. Qualifications of Persons Preparing EIR: Lists the people who prepared this DEIR for the proposed project.

Chapter 13. Bibliography: The technical reports and other sources used to prepare this DEIR.

Appendices: The appendices for this document consist of these supporting documents:

- Appendix A: Notice of Preparation (NOP) and Comments
- Appendix B: Air Quality and Greenhouse Gas Emissions Assessment
- Appendix C: Lighting Plans
- Appendix D: Noise Analysis

1.2.2 Type and Purpose of This DEIR

This DEIR has been prepared as a “Project EIR,” defined by § 15161 of the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3). This type of EIR examines the environmental impacts of a specific development project and should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project including planning, construction, and operation.

1.3 PROJECT LOCATION

La Quinta High School is located 10372 West McFadden Avenue in the City Westminster in northern Orange County. The City of Westminster is bounded by the City of Garden Grove to the northeast, the City of Fountain Valley to the southeast, the City of Huntington Beach to the southwest, the City of Seal Beach to the west, and the City of Stanton to the north. Regional access to the City is provided by State Route 39 (SR-39) traversing the City north to south vertically, and Interstate 405 (I-405) traversing the City in a northwest-southeast direction diagonally.

1.4 PROJECT SUMMARY

The proposed project is prompted by the passage of SB 328, which requires high schools to start no earlier than 8:30 a.m., beginning in the 2022-23 school year. The later start shifts certain sports activities into sunset hours, which would prevent the activity unless lights are added to their respective fields and courts. As a result, the District proposes to add lights to the baseball, football/track, soccer, and softball fields, as well as its tennis

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courts and track at La Quinta High School (LQHS). Sports lighting would consist of concrete bases with galvanized steel poles between 50 and 80 feet tall, with LED luminaires mounted at various heights. The proposed project would require limited demolition of hardscape and softscape to install lighting poles and electrical power at the existing sports facilities.

Due to the amount of time required to erect the permanent lights describe above, the District plans to use temporary lights at the football field only.

1.5 SUMMARY OF PROJECT ALTERNATIVES

CEQA Guidelines Section 15126.6 requires that an EIR describe a range of reasonable alternatives to a project that could feasibly attain the basic objectives of a project and avoid or lessen the environmental effects of a project. While the District considered various options and recommendations during the scoping process, the final selection of alternatives was based on the CEQA Guidelines § 15126.6(f), which states that the selection of alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project.

Based on the criteria listed in Section 7.1.1 of this DEIR, the following two alternatives have been determined to represent a reasonable range of alternatives that have the potential to feasibly attain most of the basic objectives of the project but may avoid or substantially lessen significant effects of the project. These alternatives are analyzed in detail in the following sections.

- No Project Alternative
- Use of Offsite Facilities Alternative

1.6 NO PROJECT ALTERNATIVE

The CEQA Guidelines require analysis of a No Project Alternative. The purpose of this alternative is to describe and analyze a scenario under which the proposed project is not implemented so that decision makers can compare the impacts of approving the proposed project with the impacts of not approving the proposed project. The No Project Alternative analysis must discuss the existing site conditions as well as what would reasonably be expected to occur in the foreseeable future based on any current plans, and it must be consistent with available infrastructure and community services.

Under the No Project Alternative, the proposed improvements at La Quinta High School would not be implemented. The existing athletic facilities on campus would not be lighted, and athletic programs and events would take place in the dark.

The No Project Alternative would eliminate impacts to all the environmental resources analyzed in the EIR. However, the No Project Alternative would not meet any of the project objectives.

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1.6.1 USE OF OFFSITE FACILITIES ALTERNATIVE

Under the Use of Offsite Facilities Alternative, the proposed light poles would not be installed on the project site, and the District would seek use of lighted City parks and facilities within the surrounding area, if available. This would require transporting students from La Quinta High School to offsite City parks and facilities to accommodate the school's athletic programs.

The Use of Offsite Facilities Alternative would eliminate the proposed project's impacts to aesthetics, cultural and paleontological resources, and tribal cultural resources, but would result in greater impacts to air quality, energy, greenhouse gas emissions, noise, and transportation compared to the proposed project. This alternative would not meet any of the project objectives.

1.7 ISSUES TO BE RESOLVED

Section 15123(b)(3) of the CEQA Guidelines requires that an EIR contain issues to be resolved, including the choice among alternatives and whether or how to mitigate significant impacts. With regard to the proposed project, the major issues to be resolved include decisions by the lead agency as to:

1. Whether this DEIR adequately describes the environmental impacts of the project.
2. Whether the benefits of the project override the environmental impacts that cannot be feasibly avoided or mitigated to a level of insignificance.
3. Whether there are other mitigation measures that should be applied to the project in addition to the mitigation measures identified in the DEIR.
4. Whether there are any alternative to the project that would substantially lessen any of the significant impacts of the proposed project and achieve most of the basic project objectives.

1.8 AREAS OF CONTROVERSY

The proposed project may generate areas of controversy, but at the date of publication, none have been raised by the community, public agencies, or other organizations. Comments received during circulation of the NOP are included in Appendix A.

1.9 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE AFTER MITIGATION

Table 1-1, *Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation*, summarizes the conclusions of the environmental analysis contained in this DEIR. Impacts are identified as significant or less than significant, and mitigation measures are identified for all significant impacts. The level of significance after imposition of the mitigation measures is also presented.

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Table 1-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
5.1 AESTHETICS			
Impact 5.1-1: The proposed project would not substantially degrade the existing visual character or quality of public views of the project site and its surroundings. [Thresholds AE-1 and AE-3]	Less than Significant.	Not applicable.	Less than Significant.
Impact 5.1-2: The proposed project would not alter scenic resources within a state scenic highway. [Threshold AE-2]	Less than Significant.	Not applicable.	Less than Significant.
Impact 5.1-2: The proposed project would generate additional light and glare. [Threshold AE-4]	Potentially Significant	AE-1: The Garden Grove Unified School District shall minimize the effects of new sources of nighttime lighting by incorporating the following measures into project design and operation: <ul style="list-style-type: none"> All lighting shall be shielded and directed downward onto the athletic fields to minimize potential light escape and/or spillover onto adjacent properties. The new athletic field lights shall be shut off by or before 9:00 p.m. 	Significant and Unavoidable
5.2 AIR QUALITY			
Impact 5.2-1: The proposed project would not conflict with the South Coast AQMD AQMP. [Threshold AQ-1]	Less than Significant.	Not applicable.	Less than Significant.
Impact 5.2-2: Construction and operational activities associated with the proposed project would not generate short-term or long-term emissions in exceedance of the South Coast AQMD's regional threshold criteria. [Thresholds AQ-2 and AQ-3]	Less than Significant.	Not applicable.	Less than Significant.
Impact 5.2-3: Construction and operation of the proposed project would not expose sensitive receptors to substantial pollutant concentrations. [Threshold AQ-3]	Less than Significant.	Not applicable.	Less than Significant.

1. Executive Summary

Table 1-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Impact 5.2-4: The proposed project would not result in other emissions (such as those leading to odors) that would adversely affect a substantial number of people. [Threshold AQ-4]	Less than Significant.	Not applicable.	Less than Significant.
5.3 CULTURAL AND PALEONTOLOGICAL RESOURCES			
Impact 5.3-1: Development of the proposed project would not impact an identified historic resource. [Threshold C-1]	No Impact	Not applicable.	No Impact
Impact 5.3-2: Development of the proposed project could impact archaeological resources. [Threshold C-2]	Potentially Significant	Not applicable.	Less Than Significant
Impact 5.3-3: Grading activities could potentially disturb human remains, but compliance with existing regulations would ensure that impacts are less than significant. [Threshold C-3]	Less Than Significant	CUL-1: If cultural resources are encountered during ground-disturbing activities, work in the immediate area shall cease, and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) shall be contacted immediately to evaluate the find(s). If the discovery proves to be significant under CEQA, additional work such as data recovery excavation may be warranted and will be reported to the Garden Grove Unified School District.	Less Than Significant
Impact 5.3-4: Development of the proposed project could impact paleontological resources or unique geologic features. [Threshold C-4]	Potentially Significant	CUL-2: A qualified paleontologist shall be on call in the event that paleontological resources are found during ground-disturbing activities. The paleontologist shall be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediments that are likely to contain the remains of small fossils. The paleontologist shall be empowered to temporarily halt or divert equipment to allow for the removal of abundant or large specimens in a timely manner.	Less Than Significant
5.4 ENERGY			
Impact 5.4-1: The proposed project would not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of	Less than Significant.	Not applicable.	Less than Significant.

1. Executive Summary

Table 1-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
energy resources during project construction or operation. [Threshold E-1]			
Impact 5.4-2: The proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. [Threshold E-2]	No Impact.	Not applicable.	No Impact.
5.5 GREENHOUSE GAS EMISSIONS			
Impact 5.5-1: Implementation of the proposed project would not generate a net increase in GHG emissions, either directly or indirectly, that would have a significant impact on the environment. [Threshold GHG-1]	Less than Significant.	Not applicable.	Less than Significant.
Impact 5.5-2: Implementation of the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. [Threshold GHG-2]	Less than Significant.	Not applicable.	Less than Significant.
5.6 NOISE			
Impact 5.6-1: Construction activities would not result in temporary noise increases in the vicinity of the proposed project. [Threshold N-1]	Less than Significant.	Not applicable.	Less than Significant.
Impact 5.6-2: Project implementation would not result in long-term operation-related noise that would cause substantial increases in ambient noise levels. [Threshold N-1]	Less than Significant.	Not applicable.	Less than Significant.
Impact 5.6-3: The project would not create excessive groundborne vibration and groundborne noise. [Threshold N-2]	Less than Significant.	Not applicable.	Less than Significant.

1. Executive Summary

Table 1-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Impact 5.6-4: The proximity of the project site to an airport or airstrip would not result in exposure of future workers to excessive airport-related noise. [Threshold N-3]	No Impact.	Not applicable.	No Impact.
5.7 TRANSPORTATION			
Impact 5.7-1: The proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. [Threshold T-1]	Less than Significant.	Not applicable.	Less than Significant.
Impact 5.7-2: The proposed project would not conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b). [Threshold T-2]	Less than Significant.	Not applicable.	Less than Significant.
Impact 5.7-3: The proposed project would not create hazardous conditions (sharp curves, etc.) or result in potential conflicting uses, and emergency access. [Thresholds T-3 and T-4]	Less than Significant.	Not applicable.	Less than Significant.
5.8 TRIBAL CULTURAL RESOURCES			
Impact 5.8-1: The proposed project would not cause a substantial adverse change in the significance of a tribal cultural resource that is 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). [Threshold TCR-1.i]	Less than Significant.	Not applicable.	Less than Significant.
Impact 5.8-2: The proposed project could cause a substantial adverse change in the significance of a tribal cultural resource that	Potentially Significant.	TCR-1: Prior to any ground disturbing construction activities, the Garden Grove Unified School District (District) shall retain a Native American monitor. The tribal monitor shall only be present on-site during the construction phases that involve ground-disturbing	Less than Significant.

1. Executive Summary

Table 1-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
is determined by the lead agency to be significant pursuant to criteria in Public Resources Code section 5024.1(c). [Threshold TCR-1.ii]		<p>activities. Ground-disturbing activities are defined as activities that may include, but are not limited to, pavement removal, potholing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching within the project area. The tribal monitor will complete daily monitoring logs that will provide descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when the grading and excavation activities are completed or when the tribal representatives and monitor have indicated that the project site has a low potential for affecting tribal cultural resources.</p> <p>Upon discovery of any tribal cultural resources, construction activities shall cease in the immediate vicinity of the find until the tribal monitor can assess the find. The evaluation of all tribal cultural resources unearthed by project construction activities shall be evaluated by a qualified archaeologist and/or tribal monitor. If the resources are Native American in origin, the tribal monitor shall coordinate with the District regarding treatment and curation of these resources as well as notifying local tribes of the find. Typically, the tribe(s) will request reburial or preservation for educational purposes. The District may continue work on other parts of the project site while evaluation and, if necessary, mitigation takes place (CEQA Guidelines Section 15064.5[f]). If the tribal monitor determines a resource to constitute a "historical resource" or "unique archaeological resource," time and funding sufficient to allow for implementation of avoidance measures or appropriate mitigation must be available. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and Public Resources Code Section 21083.2(b) for unique archaeological resources. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. The District shall be responsible for ensuring that a public, nonprofit institution with a research interest in the materials, such as the Natural Museum of Los Angeles County or the Fowler Museum, curate any historic archaeological material that is not Native American in origin if such an institution agrees to accept the material. If no institution accepts the archaeological material, the District shall offer it to a local historical society for educational purposes or retain the material and use it for educational purposes.</p>	

1. Executive Summary

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2. Introduction

2.1 PURPOSE OF THE ENVIRONMENTAL IMPACT REPORT

The California Environmental Quality Act (CEQA) requires that all state and local governmental agencies consider the environmental consequences of projects over which they have discretionary authority before taking action on those projects. This draft environmental impact report (DEIR) has been prepared to satisfy CEQA and the CEQA Guidelines. The EIR is the public document designed to provide decision makers and the public with an analysis of the environmental effects of the proposed project, to indicate possible ways to reduce or avoid environmental damage and to identify alternatives to the project. The EIR must also disclose significant environmental impacts that cannot be avoided; growth inducing impacts; effects not found to be significant; and significant cumulative impacts of all past, present, and reasonably foreseeable future projects.

The lead agency means “the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment” (CEQA § 21067). The Garden Grove Unified School District (GGUSD or District) has the principal responsibility for approval of the Sports Facilities Lighting at La Quinta High School Project (proposed project). For this reason, the GGUSD is the CEQA lead agency for this project.

The intent of the DEIR is to provide sufficient information on the potential environmental impacts of the proposed project to allow the GGUSD to make an informed decision regarding approval of the project. Specific discretionary actions to be reviewed by the District are described in Section 3.4, *Intended Uses of the EIR*.

This DEIR has been prepared in accordance with requirements of the:

- California Environmental Quality Act (CEQA) of 1970, as amended (Public Resources Code, §§ 21000 et seq.)
- State Guidelines for the Implementation of the CEQA of 1970 (CEQA Guidelines), as amended (California Code of Regulations, §§ 15000 et seq.)

The overall purpose of this DEIR is to inform the lead agency, responsible agencies, decision makers, and the general public about the environmental effects of the development and operation of the proposed project. This DEIR addresses effects that may be significant and adverse; evaluates alternatives to the project; and identifies mitigation measures to reduce or avoid adverse effects.

2. Introduction

2.2 NOTICE OF PREPARATION

The GGUSD determined that an EIR would be required for this project and issued a Notice of Preparation (NOP) on April 12, 2022 (see Appendix A). Comments received during the initial study's public review period, from April 12, 2022 to May 11, 2022 (see Table 2-1, *Notice of Preparation Comments*), as well as a summary of the comments presented at the scoping meeting, are provided in Appendix A of this DEIR.

Table 2-1 Notice of Preparation Comments

Commenter	Comment Summary	Date Received
Clyde Morgan	The commenter asks for locations of lights and how late the lights would operate.	April 14, 2022
Margarita Cabral, South Coast Air Quality Management District	The commenter states that the NOP is the only available document, and asks where the rest of the CEQA documents are.	April 14, 2022
Lijin Sun, South Coast Air Quality Management District	The commenter recommends use of South Coast AQMD's CEQA Air Quality Handbook and website, and CALEEMod for the air quality and greenhouse gas emissions analyses. The commenter states that there are several resources for identifying mitigation measures South Coast AQMD's CEQA Air Quality Handbook, South Coast AQMD's Mitigation Monitoring and Reporting Plan for the 2016 Air Quality Management Plan, and Southern California Association of Government's Mitigation Monitoring and Reporting Plan for the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy.	May 5, 2022

The NOP process helps determine the scope of the environmental issues to be addressed in the DEIR. Based on this process for the proposed project, certain environmental categories were identified as having the potential to result in significant impacts. Environmental issues that were considered to have potentially significant impacts are addressed in this DEIR, and issues identified to result in less than significant impacts or no impacts are addressed in the Chapter 8, *Impacts Found Not to be Significant*, of the DEIR.

2.3 SCOPE OF THIS DEIR

The scope of the DEIR was determined based on the NOP, comments received in response to the NOP, and comments received at the scoping meeting conducted by the GGUSD. Pursuant to §§ 15126.2 and 15126.4 of the CEQA Guidelines, the DEIR should identify any potentially significant adverse impacts and recommend mitigation that would reduce or eliminate these impacts to levels of insignificance.

2.3.1 Impacts Considered Less Than Significant

During preparation of the NOP, GGUSD determined that 12 environmental impact categories were not significantly affected by or did not affect the proposed project. These environmental topics are discussed in Chapter 8, *Impacts Found Not to be Significant*, of this DEIR.

- Agriculture and Forestry Resources
- Biological Resources
- Geology and Soils

2. Introduction

- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Utilities and Service Systems
- Wildfire

2.3.2 Potentially Significant Adverse Impacts

Through the NOP process, GGUSD determined that further analysis was needed for eight environmental topics to determine whether the proposed project would result in potentially significant impacts. These topics are evaluated in detail in Chapter 5, *Environmental Analysis*, of this DEIR.

- Aesthetics
- Air Quality
- Cultural and Paleontological Resources
- Energy
- Greenhouse Gas Emissions
- Noise
- Transportation
- Tribal Cultural Resources

2.3.3 Unavoidable Significant Adverse Impacts

This DEIR identifies one significant and unavoidable adverse impacts, as defined by CEQA, that would result from implementation of the proposed project. Unavoidable adverse impacts may be considered significant on a project-specific basis, cumulatively significant, and/or potentially significant. The District must prepare a “statement of overriding considerations” before it can approve the project, attesting that the decision-making body has balanced the benefits of the proposed project against its unavoidable significant environmental effects and has determined that the benefits outweigh the adverse effects, and therefore the adverse effects are considered acceptable. The impact that was found in the DEIR to be significant and unavoidable are:

- Light and glare impacts on the residential neighborhood that is adjacent to the southern boundary of the project site.

2.4 INCORPORATION BY REFERENCE

The following documents are incorporated herewith by reference into this DEIR, consistent with § 15150 of the CEQA Guidelines, and they are available for review at the GGUSD Office.

2. Introduction

- City of Westminster General Plan, September 2016

2.5 FINAL EIR CERTIFICATION

This DEIR is being circulated for a 45-day review period, from June 15, 2022, to August 1, 2022. Interested agencies and members of the public are invited to provide written comments on the DEIR. In compliance with §§ 15085(a) and 15087(a)(1) of the CEQA Guidelines, the GGUSD, serving as the lead agency, has published a Notice of Completion (NOC) and Notice of Availability (NOA) of the DEIR, which indicates that the DEIR and all associated technical appendices can be viewed at the following locations:

- Garden Grove Unified School District, 11700 Knott Avenue, Garden Grove, CA 92811
- La Quinta High School, 10372 West McFadden Avenue, Westminster, CA 92683

In addition, the DEIR is available online at the Garden Grove Unified School District website: <https://www.ggusd.us/departments/facilities>.

Any public agency or members of the public wishing to comment on the DEIR must submit their comments in writing or via email with the subject heading **“Sports Facilities Lighting at La Quinta High School Project”** to one the following addresses prior to the end of the public review period:

- **Mail:** Kevin Heerschap, Interim Assistant Director, Facilities
Garden Grove Unified School District
11700 Knott Avenue
Garden Grove, CA 92811
- **Email:** facilities@ggusd.us
- **Voicemail:** (714) 663.6442

Upon completion of the 45-day review period, GGUSD will review all written comments received and prepare written responses for each. The Final EIR (FEIR) will include all received comments, GGUSD’s responses to those comments, and any changes to the DEIR that result from comments. The FEIR will be presented to the GGUSD’s Board of Education for potential certification as the environmental document for the proposed project. All persons who comment on the DEIR will be notified of the availability of the FEIR and the date of the public hearing.

2.6 MITIGATION MONITORING

Public Resources Code § 21081.6 requires that an agency adopt a mitigation monitoring and reporting program (MMRP) for any project for which it has made findings pursuant to Public Resources Code § 21081. Such a program is intended to ensure the implementation of all mitigation measures adopted through the preparation of the EIR.

2. Introduction

The MMRP for the proposed project will be completed as part of the FEIR, prior to consideration of the project by the District's Board of Education.

2. Introduction

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3. Project Description

3.1 PROJECT LOCATION

La Quinta High School is located at 10372 West McFadden Avenue in the City of Westminster in northern Orange County (see Figure 3-1, *Regional Location*). The proposed improvements would occur at La Quinta High School's football/track, soccer, baseball, and softball fields, and 10 tennis courts.

The City of Westminster is bounded by the City of Garden Grove to the northeast, City of Fountain Valley to the southeast, City of Huntington Beach to the southwest, City of Seal Beach to the west, and City of Stanton to the north. Regional access to the City is provided by SR-39 and I-405, which are 2.2 miles west and 1.5 miles southwest of the project site, respectively. La Quinta High School is surrounded by West McFadden Avenue, residential uses, and Anthony Elementary School to the north; Ward Street and residential uses to the east; residential uses and Mile Square Golf Course to the south; and residential and commercial uses to the west (see Figure 3-2, *Local Vicinity*, and Figure 3-3, *Aerial Photograph*).

3.2 STATEMENT OF OBJECTIVES

Section 15124(b) of CEQA Guidelines requires a project description to include a statement of the objectives of a project that address the underlying purpose. The following specific objectives have been identified for the proposed project:

1. Maintain opportunities for access to student athletic facilities while adjusting to the State's late start requirements under SB 328.
2. Provide lighting to allow for safe night use of athletic facilities to accommodate school events and activities.
3. Provide lighting to allow after-school community use of school athletic facilities subject to District use policies and the Civic Center Act.

3.3 PROJECT CHARACTERISTICS

"Project," as defined by the CEQA Guidelines, means:

... the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and that is any of the following: (1)...enactment and amendment of zoning ordinances, and the adoption and amendment of local General Plans or elements thereof pursuant to Government Code Sections 65100–65700. (14 Cal. Code of Reg. § 15378[a])

3. Project Description

3.3.1 Proposed Project

Garden Grove Unified School District (GGUSD or District) plans to add competitive sports lighting to its seven comprehensive high schools (see Figure 3-4, *Cumulative District High School Lighting Projects*). The proposed lighting improvements are prompted by the passage of Senate Bill (SB) 328, which requires high schools to start no earlier than 8:30 a.m. Instituting a later start time is expected to reduce the negative impacts of sleep deprivation on adolescents and give them multiple, safety, and learning benefits. However, with the later start time, schools will also end later, which will affect sports activities unless the athletic fields and courts are lighted for evening use.

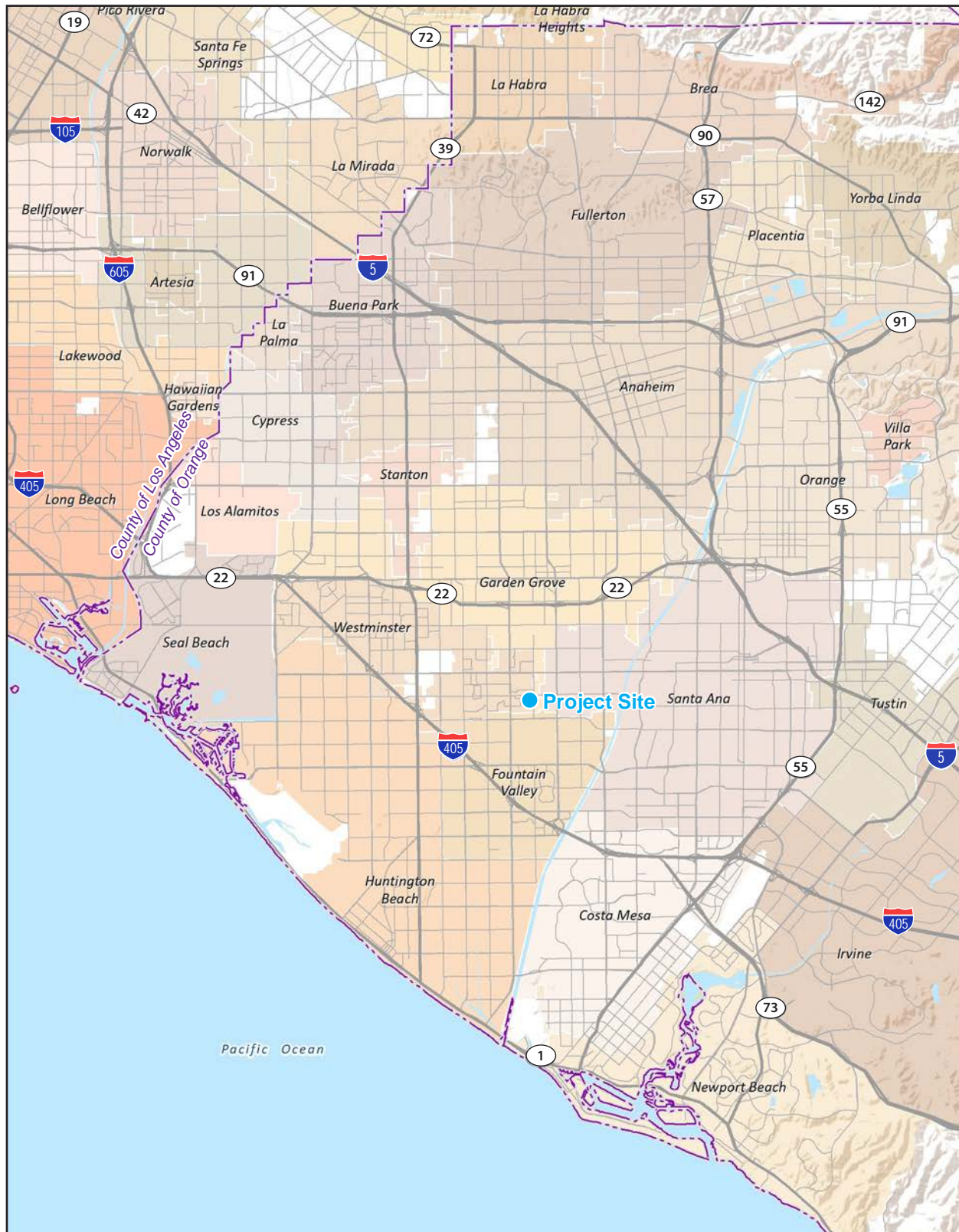
The District plans to light the tennis courts, and football/track, baseball, softball, and soccer fields at La Quinta High School. Public address (PA) systems are not part of the proposed sports lighting project for the proposed project. The proposed sports lighting project would allow extended use of the listed athletic facilities into evening hours for the benefit of existing students. No additional student sports programs would be added that could increase participants or spectators. The proposed project would require limited demolition of hardscape and softscape to install lighting poles at the existing sports facilities. No structural demolition would be required.

As with the existing conditions, the newly lit athletic facilities would be available for use by community groups after school hours when the facilities are not in use by students and during weekends, as provided by the District's use policy under the Civic Center Act.

The lighting has been designed to meet the California Interscholastic Federation field lighting recommendations for competitive events. Sports lighting would consist of concrete bases with galvanized steel poles between 50 and 90 feet tall, with LED luminaires mounted at heights ranging from 16 feet to 80 feet.

As shown in Exhibit A, *2021 Sun Graph for Westminster*, from November to February, daylight is available until around 4:45 p.m. or 5:50 p.m. when the sun starts to set; from March to October, daylight is available until around 7 p.m., and as late as around 8 p.m. from June to July (Timeanddate.com 2022). In general, all student activities are scheduled to end by 6:30 p.m. (community use would end by 9 p.m.). For most days, operating hours for the lights would be up to two hours during winter months and one to two hours during springs and autumn months.

Figure 3-1 - Regional Location



— · — · — · County Boundary

Note: Unincorporated county areas are shown in white.

Source: ESRI, 2022

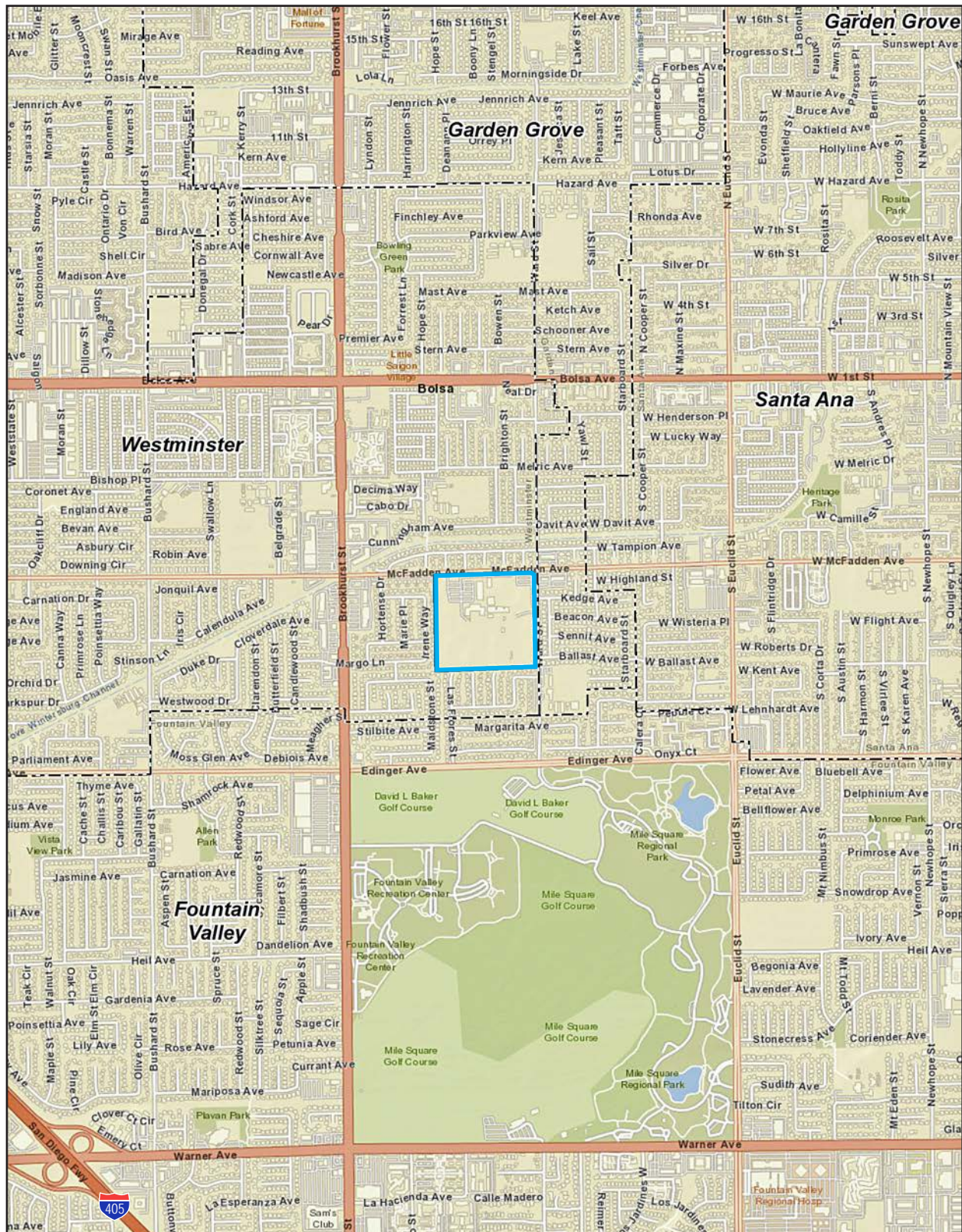


3. Project Description

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3. Project Description

Figure 3-2 - Local Vicinity



— School Boundary
--- City Boundary

Source: ESRI, 2022

0 2,000
Scale (Feet)



PlaceWorks

3. Project Description

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3. Project Description

Figure 3-3 - Aerial Photograph

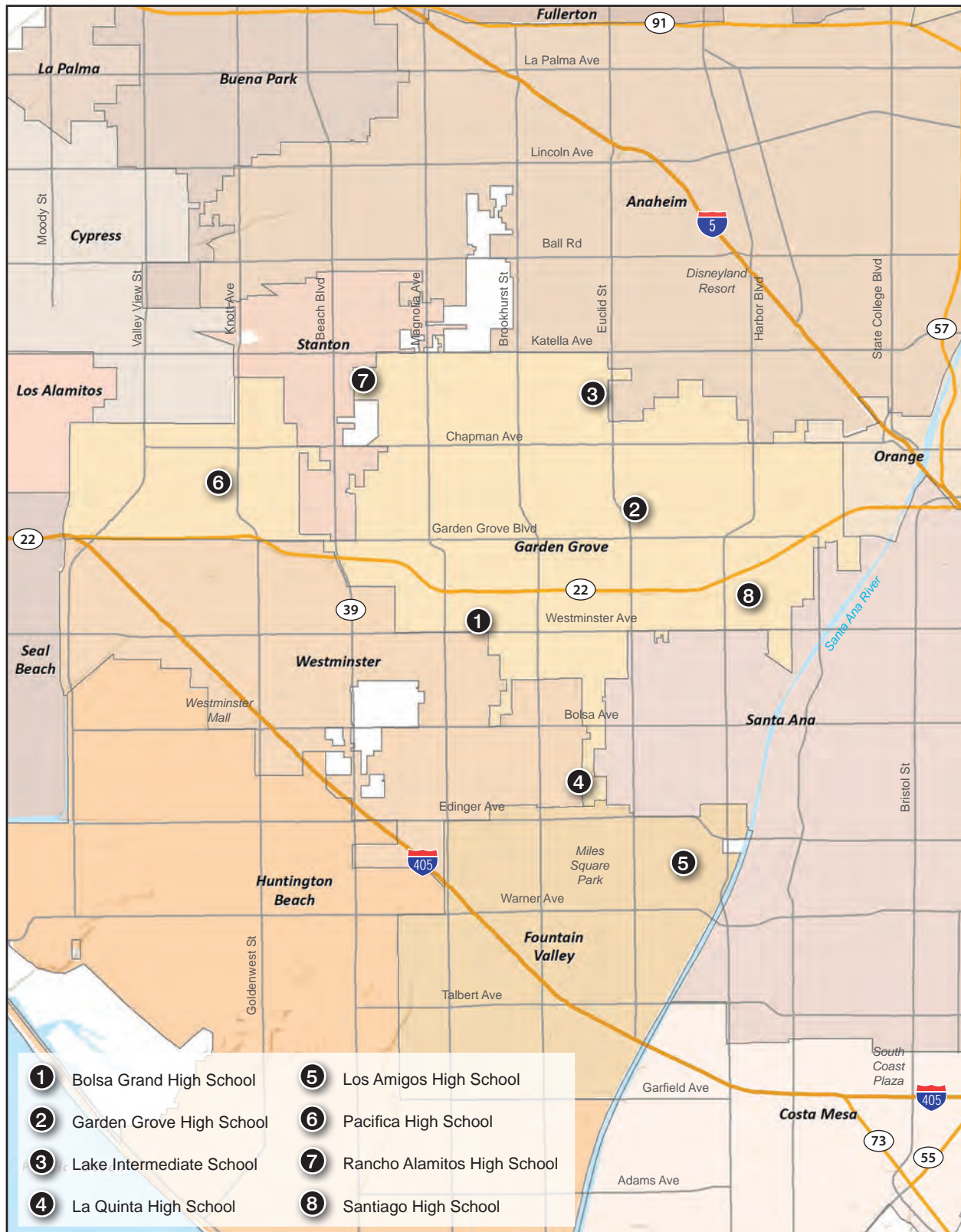


3. Project Description

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3. Project Description

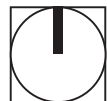
Figure 3-4 - Cumulative District High School Lighting Projects



Note: Unincorporated county areas are shown in white.

Source: ESRI, 2022

0 1.5
Scale (Miles)

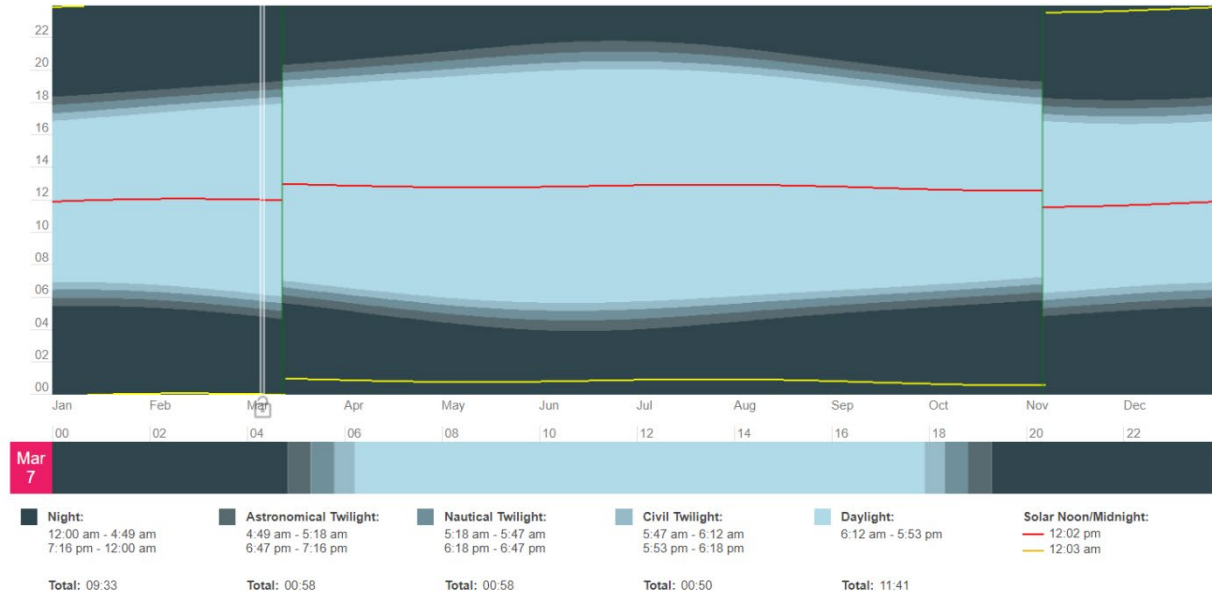


3. Project Description

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3. Project Description

Exhibit A: 2021 Sun Graph for Westminster



Note: The red line representing solar noon period reflects daylight saving time beginning in early March to early November.

GGUSD serves as the lead agency for the proposed project in accordance with the California Environmental Quality Act (CEQA), Section 15051(c).

3.3.1.1 TEMPORARY LIGHTING

There is insufficient time to design and construct permanent lights by the start of the 2022-23 school year, so the District proposes to rent lights for one season. The District has identified the rentable lights shown in Figure 3-5, *Temporary Musco Lights Available for Rent*. Depending on availability, the lights may be LED or Metal Halide on light poles with wheels. The temporary lights are proposed for the football field only. Figure 3-6, *Temporary Lights at La Quinta High School Football Field*, shows the locations of the light poles. The scan average would be 31.52 footcandles (fc). Temporary electrical power will be provided.

3.3.1.2 PERMANENT LIGHTING AT LA QUINTA HIGH SCHOOL

The District proposes to light the tennis courts and football/track, softball, baseball, and soccer fields by providing light poles at various heights. The light pole locations and direction of their illumination are shown on Figure 3-7, *Lighting Plan* (also see Appendix C, *Lighting Plans*).

Tennis Courts

There are 10 tennis courts at La Quinta High School; twenty 50-foot light poles would be provided on six of the 10 courts. The proposed lighting plan would provide a maximum average of 62 foot-candles (fc).

3. Project Description

Football Field and Track

The football field would be lighted using four 80-foot poles, with an average of 50 fc. The lighting plan will also light the track for evening use, with an average of 25.78 fc.

Soccer Field

The soccer field would be lighted using two 70-foot poles and two 90-foot poles with an average of 30 fc.

Baseball and Softball Fields

The baseball field would be lighted using five 70-foot light poles and one 80-foot light pole, providing an average of 50 fc for infield and 30 fc for outfield.

The softball field would be lighted with two 60-foot poles, one 70-foot pole, and one 90-foot poles, and would provide an average of 50 fc for infield and 30 fc for outfield.

3.3.1.3 ACTIVITIES SCHEDULE

The proposed activities schedule for La Quinta School is shown in Table 3-1, *La Quinta High School – Proposed Lighting by Sport and Hours*. All student activities are scheduled to end by 6:30 p.m., and no new sports programs are proposed for the project. Because the project simply shifts start times of existing activities, the addition of lights is not expected to increase the number of participants or spectators.

Table 3-1 La Quinta High School – Proposed Lighting by Sport and Hours

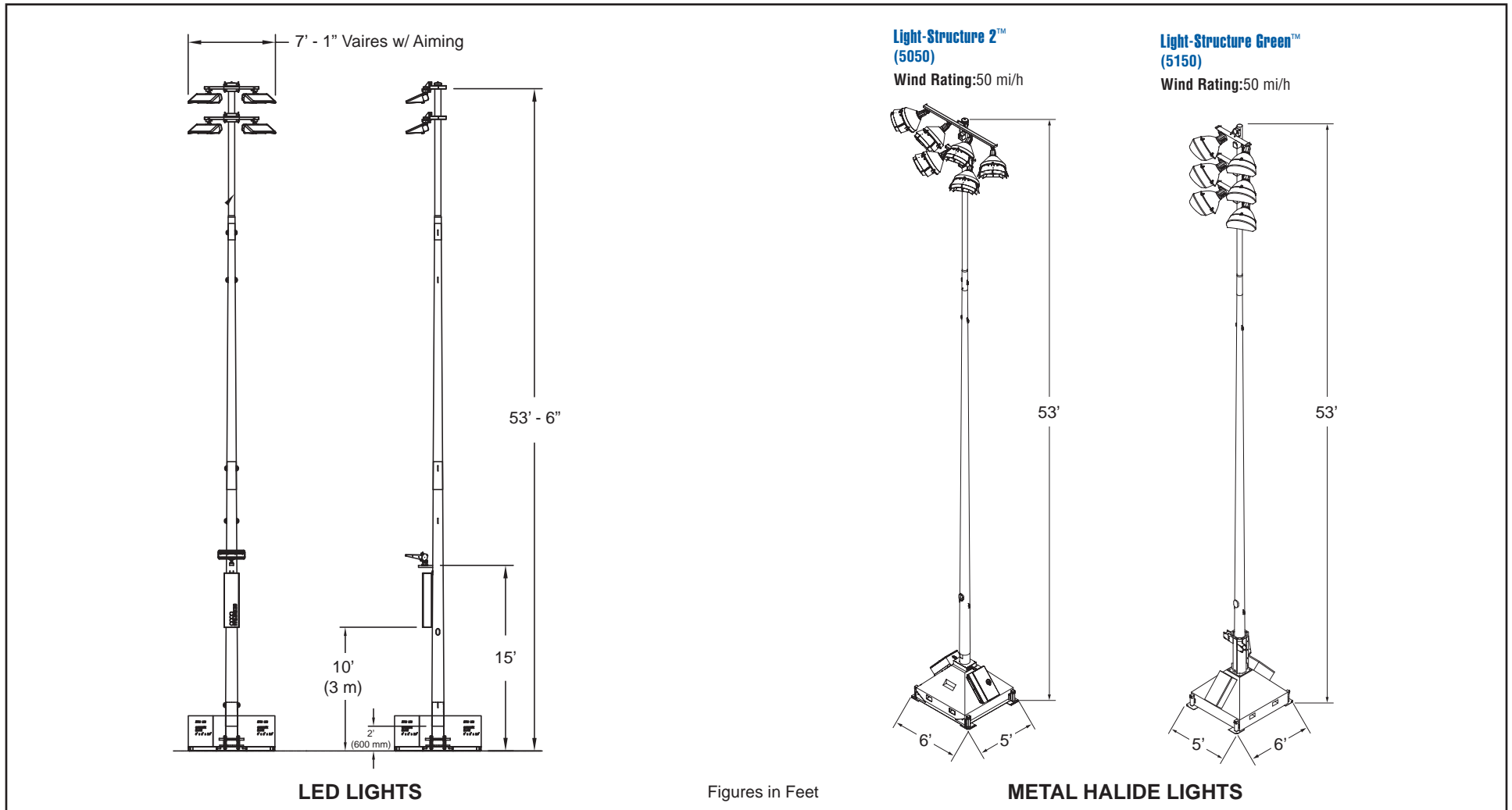
Field #	Sport	Proposed Start Time	Typical Game Duration	Starting Date	Sunset Time ¹	Ending Date	Sunset Time ¹	Typical Late Game Ending Time
2	FS/JV Football	3:30 p.m.	2.5 Hours +/- 30 Minutes	8/18/2022	7:35 p.m.	10/28/2022	6:02 p.m.	6/6:30 p.m.
1	Girls Tennis	3:30 p.m.	2.5 Hours +/- 30 Minutes	8/22/2022	7:30 p.m.	11/11/2022	4:50 p.m.	6/6:30 p.m.
5	Soccer	3:30 p.m.	1.67 Hours +/- 30 Minutes	11/14/2022	4:48 p.m.	2/4/2023	5:25 p.m.	5:10/5:40 p.m.
3	Baseball	3:30 p.m.	2.5 Hours +/- 30 Minutes	2/11/2023	5:32 p.m.	4/29/2023	7:34 p.m.	5:45/6:15 p.m.
4	Softball	3:30 p.m.	1.75 Hours +/- 30 Minutes	2/11/2023	5:32 p.m.	4/29/2023	7:34 p.m.	5:15/5:45 p.m.

Note: Yellow highlighting indicates lights on.

¹ Two sunset times are shown because of the difference in the beginning of the sport season and the end of the season; in some instances, there is no need for lights at the beginning, but lights would be needed at the end (and vice versa).

3. Project Description

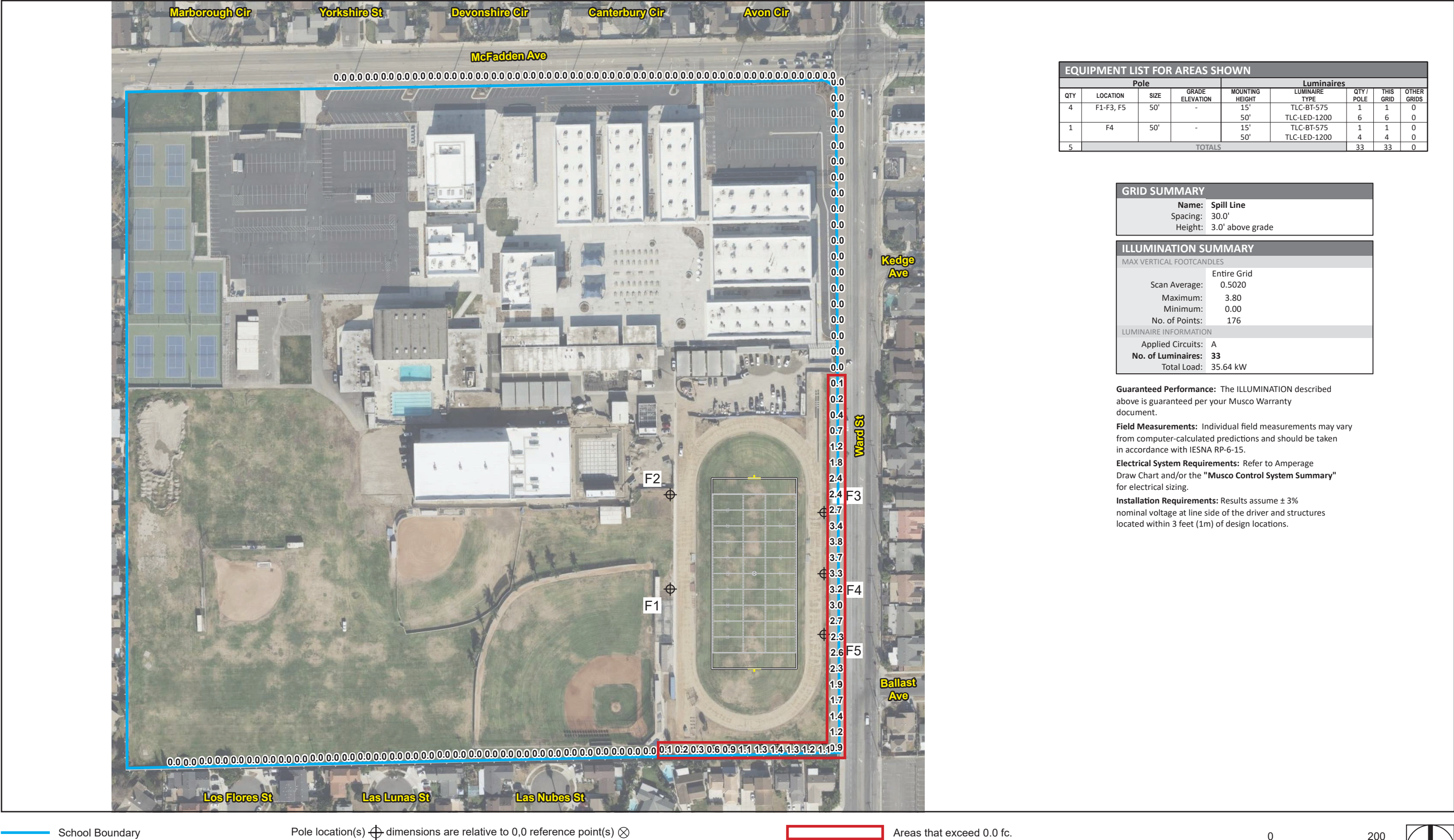
Figure 3-5 - Temporary MUSCO Lights Available for Rent



3. Project Description

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Figure 3-6 - Temporary Lights at La Quinta High School Football Field



EQUIPMENT LIST FOR AREAS SHOWN								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
4	F1-F3, F5	50'	-	15'	TLC-BT-575	1	1	0
				50'	TLC-LED-1200	6	6	0
1	F4	50'	-	15'	TLC-BT-575	1	1	0
				50'	TLC-LED-1200	4	4	0
5	TOTALS					33	33	0

GRID SUMMARY	
Name:	Spill Line
Spacing:	30.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY	
MAX VERTICAL FOOTCANDLES	
Scan Average:	Entire Grid 0.5020
Maximum:	3.80
Minimum:	0.00
No. of Points:	176
LUMINAIRE INFORMATION	
Applied Circuits:	A
No. of Luminaires:	33
Total Load:	35.64 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

3. Project Description

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3. Project Description

Figure 3-7 - Lighting Plan



EQUIPMENT LAYOUT

INCLUDES:

- Baseball
- Football
- Soccer
- Softball
- Tennis
- Track

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

EQUIPMENT LIST FOR AREAS SHOWN

Pole				Luminaires		
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE
2	A1-A2	70'	-	70'	TLC-LED-1200	3
				15.5'	TLC-BT-575	1
				70'	TLC-LED-900	2
2	A3-A4	60'	-	15.5'	TLC-BT-575	1
				60'	TLC-LED-1200	3
1	B1	70'	-	70'	TLC-LED-900	2
				15.5'	TLC-BT-575	1
				70'	TLC-LED-1500	4
1	B2	80'	-	80'	TLC-LED-1500	5/10*
				15.5'	TLC-BT-575	2/1*
				80'	TLC-LED-900	1/1*
1	B3	70'	-	15.5'	TLC-BT-575	1
				70'	TLC-LED-1500	5
1	B4	90'	-	15.5'	TLC-BT-575	1
				90'	TLC-LED-1500	5/5*
2	C1-C2	70'	-	15.5'	TLC-BT-575	2
				70'	TLC-LED-1500	5
3	F2-F4	80'	-	80'	TLC-LED-900	1
				15.5'	TLC-BT-575	2
				80'	TLC-LED-1500	10
1	S1	90'	-	90'	TLC-LED-1500	5
1	S3	70'	-	70'	TLC-LED-1500	4
				70'	TLC-LED-900	1
1	S4	70'	-	70'	TLC-LED-900	1
				70'	TLC-LED-1500	4
4	T1-T2	50'	-	50'	TLC-LED-900	2
	T5-T6	50'	-	50'	TLC-LED-600	1
2	T3-T4	50'	-	50'	TLC-LED-600	2
				50'	TLC-LED-900	4
22	TOTALS					156

* This structure utilizes a back-to-back mounting configuration

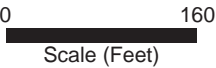
SINGLE LUMINAIRE AMPERAGE DRAW CHART

Ballast Specifications (.90 min power factor)	Line Amperage Per Luminaire (max draw)						
	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)	480 (60)
Single Phase Voltage	5.3	5.0	4.6	4.0	3.2	2.9	2.3
TLC-LED-900	7.0	6.6	6.1	5.2	4.2	4.0	3.0
TLC-LED-1200	8.5	8.1	7.4	6.4	5.1	4.7	3.7
TLC-BT-575	3.4	3.2	2.9	2.5	2.0	1.8	1.5
TLC-LED-600	3.4	3.2	3.0	2.6	2.0	1.9	1.5

School Boundary

Pole location(s) ⓧ dimensions are relative to 0,0 reference point(s) ⊗

Source: MUSCO, 2022; Visionaire Lighting, 2022



3. Project Description

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3. Project Description

3.3.1.4 COMMUNITY USE – LA QUINTA HIGH SCHOOL

A breakdown of community use per athletic facility is shown below. The total evening use at the school is estimated to be 300 people and approximately 120 cars.¹ This assumption is conservative and assumes a robust use of all athletic facilities at the same time.

Baseball/Softball Fields

- 15 players/team
- 5 coaches/assistants
- 20 spectators
- Total: 40 people/team
- Total 1 Field: 80 people/field
- **Total 2 Fields: 160 people**

Tennis Courts

- 4 players per court (assuming doubles)
- 10 courts
- 40 players
- 10 coaches/spectators
- **Total: 50 people**

Football/Soccer Field

- 20 players/team
- 5 coaches/assistants
- 20 spectators
- Total: 45 people/team
- **Total: 90 people**

3.3.1.5 COMMUNITY ACCESS

Figure 3-8, *La Quinta High School Community Access*, shows that the public would access the school through the driveway on McFadden Avenue. Community members would be able to park in the parking lot at the northwestern portion of the site and access the sports facilities through the western and southern gates in this parking lot.

¹ 2.5 people/car
 $300/2.5 = 120$ cars

3. Project Description

3.3.2 Project Phasing

The District proposes to begin use of temporary lights in August 2022. Construction of permanent lights is anticipated to take five months and is scheduled to start on March 1, 2023, and finish by August 30, 2023.

3.3.3 Discretionary Approvals

3.3.3.1 LEAD AGENCY

The Garden Grove Unified School District is the Lead Agency under CEQA and has the approval authority over the proposed project. Discretionary actions for the proposed project would include: (1) certification of the environmental document and (2) approval of the proposed project.

3.3.3.2 OTHER AGENCY ACTION REQUESTED

The Garden Grove Unified School District is the Lead Agency under CEQA and has the approval authority over the proposed project. The District would require approval and/or coordination from the following agencies to implement the proposed project.

State Agencies

The District will seek approval of the proposed project from the Division of the State Architect (DSA). The District will seek approval of a construction stormwater runoff and NPDES permits from Santa Ana Regional Water Quality Control Board and construction permit from South Coast Air Quality Management District. Since the project will not receive state funding, California Department of Education (CDE) and DTSC approvals are not required.

3.4 INTENDED USES OF THE EIR

This Draft EIR examines the environmental impacts of the proposed project. This DEIR also addresses various actions by the District and others to adopt and implement the proposed project. It is the intent of this DEIR to evaluate the environmental impacts of the proposed project, thereby enabling the Garden Grove Unified School District, other responsible agencies, and interested parties to make informed decisions with respect to the requested entitlements. The anticipated approvals required for this project are:

Lead Agency	Action
Garden Grove Unified School District	Consider Final EIR for certification and project approval
Responsible Agencies	Action
Department of General Services, Division of State Architect	Approval of construction drawings
Santa Ana Regional Water Quality Control Board	Construction stormwater runoff permits, NPDES Permit
South Coast Air Quality Management District	Construction Permit

3. Project Description

Figure 3-8 - La Quinta High School Community Access



Source: GBA

0 250
Scale (Feet)



PlaceWorks

3. Project Description

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3. Project Description

3.4.1 Lead Agency Approval

GGUSD is the lead agency under CEQA and is carrying out the proposed project; to approve the proposed project, the GGUSD Board of Education must first certify the Final EIR (FEIR). The Board will consider the information in the EIR when making its decision to approve or deny the proposed project, or in directing modifications to the proposed project in response to the EIR's findings and mitigation measures. The EIR is intended to disclose to the public the proposed project's details, analyses of the proposed project's potential environment impacts, and identification of feasible mitigation or alternatives that would lessen or reduce significant impacts to less than significant levels.

3.5 REFERENCES

Timeanddate.com. 2022, March (accessed). Sun & Moon, Sun Calculator: City Lookup, Westminster, California: Sunrise, Sunset, and Daylength.
<https://www.timeanddate.com/sun/@5408406?month=3&year=2021>.

3. Project Description

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4. Environmental Setting

4.1 INTRODUCTION

This section provides a “description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, ... from both a local and a regional perspective” (Guidelines § 15125[a]), pursuant to provisions of the California Environmental Quality Act (CEQA) and the CEQA Guidelines. The environmental setting provides the baseline physical conditions from which the lead agency will determine the significance of environmental impacts resulting from the proposed project.

4.2 REGIONAL ENVIRONMENTAL SETTING

4.2.1 Regional Location

The City of Westminster is in northern Orange County and is bounded by the City of Garden Grove to the northeast, the City of Fountain Valley to the southeast, the City of Huntington Beach to the southwest, the City of Seal Beach to the west, and the City of Stanton to the north. Regional access to the City is provided by State Route 39 (SR 39) traversing the City north to south vertically and Interstate 405 (I-405) traversing the City in a northwest-southeast direction diagonally.

4.2.2 Regional Planning Considerations

4.2.2.1 SCAG REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY

The Southern California Association of Governments (SCAG) is a council of governments representing Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. SCAG is the federally recognized metropolitan planning organization for this region, which encompasses over 380,000 square miles. SCAG is a regional planning agency and a forum for addressing regional issues concerning transportation, the economy community development, and the environment. SCAG is also the regional clearinghouse for projects requiring environmental documentation under federal and state law. In this role, SCAG reviews proposed development and infrastructure projects to analyze their impacts on regional planning programs.

The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (“Connect SoCal”) was adopted in September 2020. Major themes in the 2020 RTP/SCS include integrating strategies for land use and transportation; striving for sustainability; protecting and preserving existing transportation infrastructure; increasing capacity through improved system managements; providing more transportation choices; leveraging technology; responding to demographic and housing market changes; supporting commerce, economic growth, and opportunity; promoting the links between public health, environmental protection, and economic opportunity; and incorporating the principles of social equity and environmental justice into the plan.

4. Environmental Setting

The SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce greenhouse gas (GHG) emissions from transportation (excluding goods movement). The SCS is meant to provide growth strategies that will achieve the regional GHG emissions reduction targets identified by the California Air Resources Board. However, the SCS does not require that local general plans, specific plans, or zoning be consistent with the SCS; instead, it provides incentives to government and developers for consistency.

4.2.2.2 SOUTH COAST AIR BASIN AIR QUALITY MANAGEMENT PLAN

The project site is in the South Coast Air Basin (SoCAB), which is managed by the South Coast Air Quality Management District (South Coast AQMD). Pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state law, and standards are detailed in the SoCAB Air Quality Management Plan (AQMP). Air pollutants for which ambient air quality standards (AAQS) have been developed are known as criteria air pollutants—ozone (O₃), carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NO_x), sulfur dioxide, coarse inhalable particulate matter (PM₁₀), fine inhalable particulate matter (PM_{2.5}), and lead. VOC and NO_x are criteria pollutant precursors and go on to form secondary criteria pollutants, such as O₃, through chemical and photochemical reactions in the atmosphere. Air basins are classified as attainment/nonattainment areas for particular pollutants depending on whether they meet AAQS for that pollutant. The SoCAB is designated nonattainment for O₃, PM_{2.5}, PM₁₀, and lead (Los Angeles County only) under the California and National AAQS and nonattainment for NO₂ under the California AAQS.

4.2.2.3 SENATE BILL 743

On September 27, 2013, SB 743 was signed into law and started a process that fundamentally changes transportation impacts analysis as part of CEQA compliance. With the adoption of SB 375, the state signaled its commitment to encouraging land use and transportation planning decisions and investments that reduce VMT and thereby contribute to the reduction of GHG emissions, as required by the California Global Warming Solutions Act of 2006 (AB 32).

SB 743 eliminates auto delay, level of service, and other similar measures of vehicular capacity or traffic congestion as the sole basis for determining significant impacts under CEQA. Pursuant to the CEQA Guidelines, the new criteria “shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses” (Public Resources Code § 21099[b][1]).

Pursuant to SB 743, the Natural Resources Agency adopted revisions to the CEQA Guidelines to implement SB 743 on December 28, 2018. The revised CEQA Guidelines establish new criteria for determining the significance of transportation impacts. Under the new Guidelines, VMT-related metric(s) are required beginning on July 1, 2020, to evaluate the significance of transportation-related impacts under CEQA for development projects, land use plans, and transportation infrastructure projects. The legislation does not preclude the application of local general plan policies, zoning codes, conditions of approval, or any other planning requirements that require evaluation of level of service, but these metrics can no longer constitute the sole basis for determining transportation impacts under CEQA.

4. Environmental Setting

4.2.2.4 GREENHOUSE GAS EMISSIONS REDUCTION LEGISLATION

Current State of California guidance and goals for reductions in greenhouse gas (GHG) emissions are generally embodied in Executive Order S-03-05; Executive Order B-30-15; Assembly Bill 32 (AB 32), the Global Warming Solutions Act (2008); and Senate Bill 375 (SB 375), the Sustainable Communities and Climate Protection Act.

Executive Order S-03-05, signed June 1, 2005, set the following GHG reduction targets for California:

- 2000 levels by 2010
- 1990 levels by 2020
- 80 percent below 1990 levels by 2050

AB 32 was passed by the state legislature on August 31, 2006, to place the state on a course toward reducing its contribution of GHG emissions. AB 32 follows the emissions reduction targets established in Executive Order S-3-05. Based on the GHG emissions inventory conducted for its 2008 Scoping Plan, the California Air Resources Board (CARB) approved a 2020 emissions limit of 427 million metric tons of carbon dioxide-equivalent emissions (MMTCO₂e) for the state (CARB 2008). CARB is required to update the Scoping Plan every five years. In 2015, the governor signed Executive Order B-30-15 into law, establishing a GHG reduction target for year 2030, which was later codified under SB 32 (2016). The 2016-2017 update to the Scoping Plan addresses the 2030 target of a 40 percent below 1990 levels. The proposed project's consistency with CARB's Scoping Plan is analyzed in Section 5.4, *Greenhouse Gas Emissions*.

In 2008, SB 375 was adopted to connect GHG emissions reductions targets for the transportation sector to local land use decisions that affect travel behavior. Its intent is to reduce GHG emissions from light-duty trucks and automobiles by aligning regional long-range transportation plans, investments, and housing allocations to local land use planning to reduce vehicle miles traveled and vehicle trips. SB 375 required CARB to establish GHG emissions reduction targets for each of the 17 regions in California managed by a metropolitan planning organization (MPO). In addition, SB 375 requires CARB to update the targets for the MPOs every eight years. The targets as set by CARB in 2010 for the SCAG region are an 8 percent per capita reduction from 2005 GHG emission levels by 2020 and a 13 percent per capita reduction from 2005 GHG emission levels by 2035 (CARB 2010). In 2017, SCAG's targets were updated to an 8 percent per capita GHG reduction in 2020 from 2005 levels (unchanged from the 2010 target) and a 19 percent per capita GHG reduction in 2035 from 2005 levels (compared to the 2010 target of 13 percent) (CARB 2018).

The 2020-2045 Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS), known as Connect SoCal, projects that the SCAG region will meet its GHG per capita reduction targets of 8 percent by 2020 and 19 percent by 2035. It is also projected that implementation of the plan would reduce VMT per capita for year 2045 by 4.1 percent compared to baseline conditions for the year.

4.3 LOCAL ENVIRONMENTAL SETTING

The Garden Grove Unified School District (GGUSD or District) encompasses approximately 28 square miles including most of the City of Garden Grove and portion of Anaheim, Cypress, Fountain Valley, Santa Ana, Stanton, and Westminster. The District has 71 schools: 48 elementary schools, 10 intermediate schools, 8 high

4. Environmental Setting

schools, and 5 alternative schools (GGUSD 2022). Districtwide enrollment was 40,124 for the 2020-21 school year (CDE 2022a). Enrollment at La Quinta High School for the 2020-21 school year was 2,156 (CDE 2022b).

Garden Grove Unified School District offices are at 10331 Stanford Avenue, about 3.5-miles north of the project site. State Route 39 (Beach Boulevard) is about 2.2 miles west of the site and Interstate Route 405 (San Diego Freeway) is about 1.5 miles southwest of the project site.

4.3.1 Project Location

The project site consists of five athletic fields at La Quinta High School at 10372 West McFadden Avenue, Westminster, in Orange County (see Figure 3-1, *Regional Location*, Figure 3-2, *Local Vicinity*, and Figure 3-3, *Aerial Photograph*).

4.3.2 Existing Land Use

La Quinta High School is approximately 39.5-acres, and the project consists of lighting five athletic fields on the campus, which totals 8.56 acres. See Table 4-1, *La Quinta High School Athletic Facilities Acreage*.

Table 4-1 La Quinta High School Athletic Facilities Acreage

Athletic Facilities	Approximate Acreage
Tennis Courts	1.95
Football Field	1.65
Baseball Field	2.27
Softball Field	1.16
Soccer Field	1.53
Total	8.56

4.3.2.1 EXISTING GENERAL PLAN LAND USE AND ZONING DESIGNATIONS

La Quinta High School is in the City of Westminster; the project site is zoned P/SP (Public/Semi-Public) and the General Plan land use designation for the project site is Public/Semi-Public Facilities.

The proposed project would be developed on the project site within the boundaries of the existing La Quinta High School campus. The proposed project's development would not require modification to project site's current General Plan designation or zoning.

4.3.2.2 SURROUNDING LAND USE

La Quinta High School is surrounded by West McFadden Avenue, residential uses, and Anthony Elementary School to the north; Ward Street and residential uses to the east; residential uses and Mile Square Golf Course to the south; and residential and commercial uses to the west.

4. Environmental Setting

4.3.3 Aesthetics

The project site is surrounded by residential, commercial, institutional, and park uses. The project site is not part of a scenic vista. Views around the project site are characterized by residential and commercial uses. Details related to the proposed project's impacts on aesthetics are provided in Section 5.1, *Aesthetics*.

4.3.4 Air Quality and Greenhouse Gas Emissions

The project site is located in the SoCAB which is managed by the South Coast AQMD, as indicated in Section 4.2.2.2, above. The SoCAB is designated nonattainment for ozone (O₃), fine inhalable particulate matter (PM_{2.5}), and lead under the California and National AAQS and nonattainment for coarse inhalable particulate matter (PM₁₀) and nitrogen dioxide (NO₂) under the California AAQS. Additional information regarding air quality and climate change regulations affecting the City of Westminster is provided in Section 4.2.2, *Regional Planning Considerations*. Existing air quality conditions in the City of Westminster, greenhouse gas emissions and energy consumption are discussed in more detail in Sections 5.2, *Air Quality*, 5.3, *Energy*, and 5.4, *Greenhouse Gas Emissions*.

4.3.5 Noise

The project site is in a largely developed area with residential and commercial uses and is subject to noise from transportation and stationary sources. In addition to roadway noise and stationary noise sources (property maintenance, light mechanical equipment, people talking, etc.), the project vicinity is also subject to recurring events of athletic field noise from the existing uses on the project site. Noise-sensitive receptors in the vicinity of the proposed project are the residential uses surrounding the project site. Refer to Section 5.5, *Noise*, for additional information concerning the noise environment and an analysis of project-related noise impacts.

4.3.6 Transportation

La Quinta High School is bound by McFadden Avenue to the north and Ward Street to the east. There are sidewalks on both side of McFadden Avenue and Ward Street; Orange County Transportation Authority (OCTA) bus route 66 stops along McFadden Avenue, including adjacent to the project site. Refer to Section 5.6, *Transportation*, for additional information concerning traffic and transportation impacts.

4.3.7 Cultural, Paleontological, and Tribal Cultural Resources

The City is fully urbanized; however, ground-disturbing activities in the City, including the project site could uncover cultural, paleontological, and tribal cultural resources. Refer to Section 5.3, *Cultural and Paleontological Resources*, and Section 5.7, *Tribal Cultural Resources*, for additional information concerning cultural, paleontological, and tribal cultural impacts.

4.4 ASSUMPTIONS REGARDING CUMULATIVE IMPACTS

Section 15130 of the CEQA Guidelines states that cumulative impacts shall be discussed where they are significant. It further states that this discussion shall reflect the level and severity of the impact and the

4. Environmental Setting

likelihood of occurrence, but not in as great a level of detail as that necessary for the project alone. Section 15355 of the Guidelines defines cumulative impacts as “...two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” Cumulative impacts represent the change caused by the incremental impact of a project when added to other proposed or committed projects in the vicinity.

The CEQA Guidelines (Section 15130 [b][1]) state that the information utilized in an analysis of cumulative impacts should come from one of two sources:

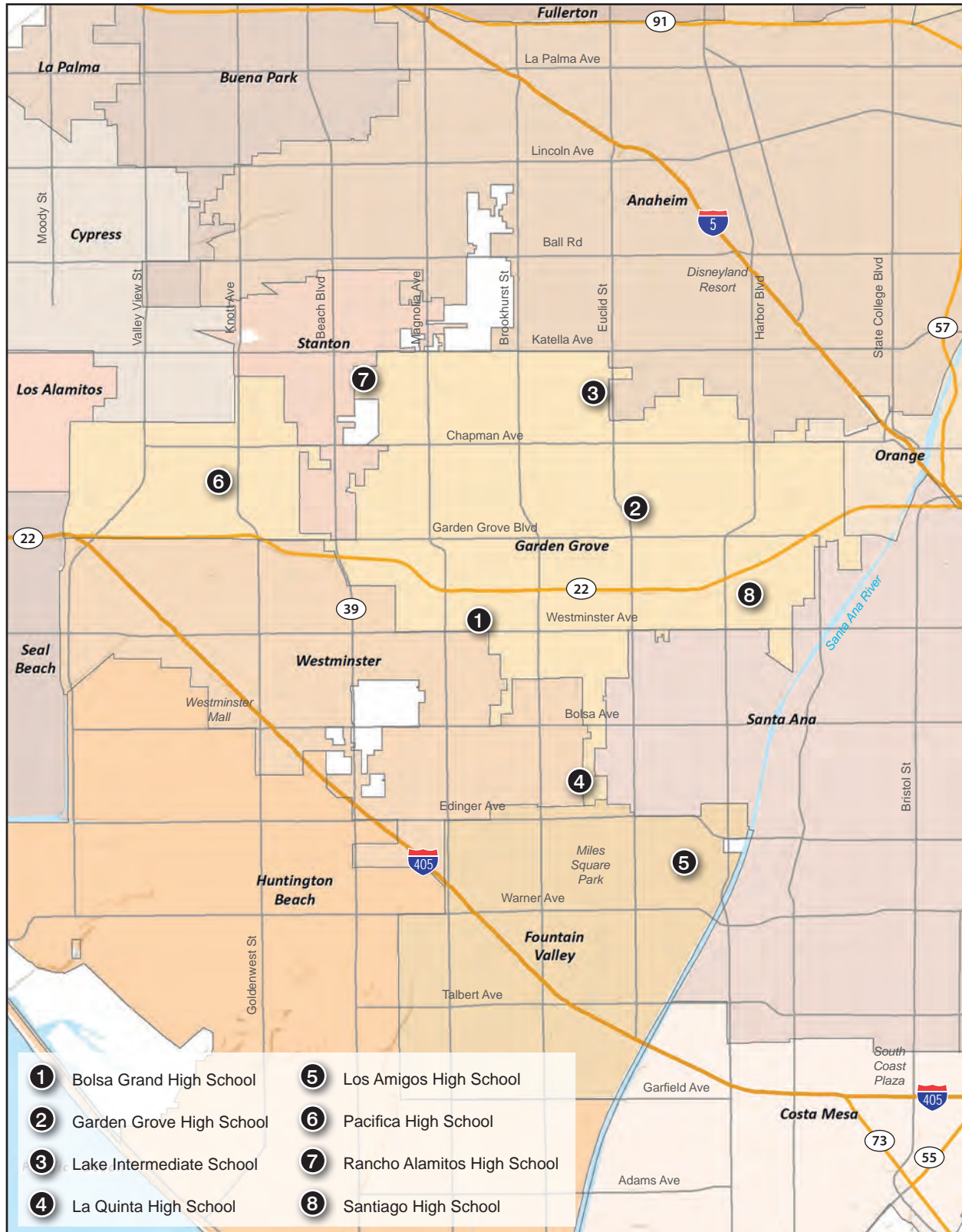
- A. A list of past, present and probable future projects producing related cumulative impacts, including, if necessary, those projects outside the control of the agency.
- B. A summary of projections contained in an adopted General Plan or related planning document designed to evaluate regional or area-wide conditions.

The cumulative impacts analyses in this DEIR use a combination of Method A and Method B. The District plans to add competitive sports lighting to its seven comprehensive high schools, including La Quinta High School. Figure 4-1, *Cumulative District High School Lighting Projects*).

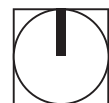
The cumulative impacts of the Proposed Project have been addressed for each environmental category discussed in Chapter 5.0, *Environmental Analysis*, of this DEIR.

4. Environmental Setting

Figure 4-1 - Cumulative District High School Projects



0 1.5
Scale (Miles)



4. Environmental Setting

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4.5 REFERENCES

- California Air Resources Board (CARB). 2008, October. Climate Change Proposed Scoping Plan: A Framework for Change.
- . 2010, August 9. Staff Report Proposed Regional Greenhouse Gas Emission Reduction Targets for Automobiles and Light Trucks Pursuant to Senate Bill 375.
- . 2018, February. Proposed Update to the SB 375 Greenhouse Gas Emission Reduction Targets. Updated Final Staff Report.
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- California Department of Education (CDE). 2022a. 2020-21 Enrollment by Grade. Garden Grove Unified Report (30-66522). Dataquest.
<https://dq.cde.ca.gov/dataquest/dqcensus/EnrEthGrd.aspx?cds=3066522&agglevel=district&year=2020-21>
- . 2022b. 2020-21 Enrollment by Grade. La Quinta High School Report (30-66522-3033578). Dataquest.
<https://dq.cde.ca.gov/dataquest/dqcensus/EnrEthGrd.aspx?cds=30665223033578&agglevel=school&year=2020-21>
- Garden Grove Unified School District (GGUSD). 2022. School Boundaries and Information.
<https://www.ggusd.us/schools/>.

5. Environmental Analysis

Chapter 5 examines the environmental setting of the Sports Facilities Lighting at La Quinta High School Project (proposed project), analyzes its effects and the significance of its impacts, and recommends mitigation measures to reduce or avoid impacts. This chapter has a separate section for each environmental issue area that was determined to need further study in the Draft Environmental Impact Report (DEIR). This scope was determined in the Notice of Preparation (NOP), which was published on April 12, 2022 (see Appendix A), and through public and agency comments received during the NOP comment period from April 12, 2022 to May 11, 2022 (see Appendix A). Environmental issues and their corresponding sections are:

- 5.1 Aesthetics
- 5.2 Air Quality
- 5.3 Cultural and Paleontological Resources
- 5.4 Energy
- 5.5 Greenhouse Gas Emissions
- 5.6 Noise
- 5.7 Transportation
- 5.8 Tribal Cultural Resources

Sections 5.1 through 5.8 provide a detailed discussion of the environmental setting, impacts associated with the proposed project, and mitigation measures designed to reduce significant impacts where required and when feasible. The residual impacts following the implementation of any mitigation measure are also discussed.

The NOP also determined that certain issues under an environmental topic would not be significantly affected by implementation of the proposed project; these issues are not discussed further in this DEIR.

Organization of Environmental Analysis

To assist the reader with comparing information between environmental issues, each section is organized under the following major headings:

- Environmental Setting
- Thresholds of Significance
- Environmental Impacts
- Cumulative Impacts
- Level of Significance Before Mitigation
- Mitigation Measures
- Level of Significance After Mitigation

5. Environmental Analysis

- References

In addition, Chapter 1, *Executive Summary*, has a table that summarizes all impacts by environmental issue.

Terminology Used in This Draft EIR

The level of significance is identified for each impact in this DEIR. Although the criteria for determining significance are different for each topic area, the environmental analysis applies a uniform classification of the impacts based on definitions consistent with California Environmental Quality Act (CEQA) and the CEQA Guidelines:

- **No impact.** The project would not change the environment.
- **Less than significant.** The project would not cause any substantial, adverse change in the environment.
- **Less than significant with mitigation incorporated.** The EIR includes mitigation measures that avoid substantial adverse impacts on the environment.
- **Significant and unavoidable.** The project would cause a substantial adverse effect on the environment, and no feasible mitigation measures are available to reduce the impact to a less than significant level.

5. Environmental Analysis

5.1 AESTHETICS

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the proposed project at La Quinta High School to result in aesthetic impacts at the campus and surrounding community.

5.1.1 Environmental Setting

5.1.1.1 REGULATORY BACKGROUND

State and local laws, regulations, plans, or guidelines regarding fire, emergency, and police services that are potentially applicable to the proposed project are summarized in this section.

State

State Scenic Highway Program

The State Scenic Highway Program was created in 1963 by the State Legislature to protect and enhance the natural scenic beauty along portions of state highway system that are determined to be scenic highways. Scenic highways can have an “eligible” designation or be “officially designated.” The status of a proposed state scenic highway changes from eligible to officially designated when a local jurisdiction adopts a scenic corridor protection program, then applies to the California Department of Transportation (Caltrans) for scenic highway approval and receives notification from Caltrans that the highway has been officially designated as a Scenic Highway.

California Building Code: Building Energy Efficiency Standards

Energy conservation standards for new residential and nonresidential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the CEC) in June 1977 and most recently revised in 2016 (Title 24, Part 6, of the California Code of Regulations [CCR]). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. On June 10, 2015, the CEC adopted the 2016 Building Energy Efficiency Standards, which went into effect on January 1, 2017. Title 24 requires outdoor lighting controls to reduce energy usage; in effect, this reduces outdoor lighting.

Nighttime Sky, CCR Title 24, Outdoor Lighting Standards

The California legislature passed a bill in 2001 requiring the California Energy Commission to adopt energy efficiency standards for outdoor lighting, both public and private. In November 2003, the commission adopted changes to the California Code of Regulations, Title 24, parts 1 and 6, Building Energy Efficiency Standards. These standards became effective on October 1, 2005, and included changes to the requirements for outdoor lighting for residential and nonresidential development. These standards improved the quality of outdoor lighting and helped to reduce the impacts of light pollution, light trespass, and glare. The standards regulate lighting characteristics such as maximum power and brightness, shielding, and sensor controls to turn lighting on and off. Different lighting standards are set for different “lighting zones” (LZ), and the zone for a specific

5. Environmental Analysis

AESTHETICS

area is based on population figures from the 2000 Census. Areas can be designated LZ1 (dark), LZ2 (rural), or LZ3 (urban). Based on this classification, the project site is designated LZ3.

Local

City of Westminster General Plan

Land Use Element

The Land Use Element includes the following goals and policies related to visual resources:

- Goal LU-4: Land Use Compatibility. Compatible residential, commercial, and industrial development that is sensitively integrated with existing development and neighborhoods and minimizes impacts on surrounding land uses.
 - Policy LU-4.1: Development Compatibility. Require that development is located and designed to ensure compatibility among land uses, addressing such elements as building orientation and setbacks; buffering; visibility and privacy; automobile and truck access; impacts of noise, lighting, and glare; landscape quality; and aesthetics.
 - Policy LU-4.4: Mitigation. Require new uses to provide buffers between existing uses where potential adverse impacts could occur, such as decorative walls, setbacks and landscaping, restricted vehicular access, parking enclosures, and lighting control.

Community Design Element

The Community Design includes the following goals, policies, and objectives related to visual resources:

- Goal CD-2: Design Quality. Projects, developments, and public spaces that visually enhance the character of the community, reinforce civic pride and public safety, discourage blight, and appropriately buffer dissimilar land uses so that the differences in type and intensity do not conflict.
 - Policy CD-2.2: Public and Private Facilities. Minimize visual impacts of public and private facilities and support structures through sensitive site design and construction. This includes, but is not limited to: appropriate placement of facilities; undergrounding of utilities, where possible; and aesthetic design (e.g., cell tower stealthing).

City of Westminster Municipal Code

Section 17.300.040 Outdoor Lighting

Outdoor lighting can present a negative visual and/or psychological effect on individuals, especially in areas where residential uses abut or are in close proximity to commercial, office, or industrial areas. This section provides the following provisions for the installation and operation of lighting:

1. All exterior lighting shall be designed, arranged, directed, or shielded in such a manner as to contain direct illumination onsite, thereby preventing excess illumination and light spillover onto adjoining land uses

5. Environmental Analysis

AESTHETICS

and/or roadways. Additionally, outdoor lighting shall be located and designed to prevent a significant increase in the overall ambient illumination.

2. All lighting fixtures shall be architecturally integrated with the character of the principal structure(s).
3. Uniformity or, where appropriate, compatibility of lighting type (i.e., height, wattage, energy efficiency, base support, finish material, texture, color, and style of poles and luminaires) shall be provided.
4. Landscaping and pedestrian-walkway lights shall have a low height.
5. Security lighting shall be provided at all entrances/exits.
6. All lights and illuminated signs in a parking area shall be directed away from adjacent properties and the public right-of-way.
7. Loading areas shall have lighting for security and safety purposes. All illumination shall be directed away from adjoining properties.

5.1.1.2 EXISTING CONDITIONS

Visual Character and Landform

The project site is fully developed and consists of outdoor athletic facilities that support the high school. The project site is surrounded by West McFadden Avenue, residential uses, and Anthony Elementary School to the north; Ward Street and residential uses to the east; residential uses and Mile Square Golf Course to the south; and residential and commercial uses to west. The project site is located in a highly urbanized area; the site does not contain unique visual features that would distinguish it from surrounding areas. The project site and surrounding immediate vicinity are largely flat.

Scenic Vistas and Corridors

The project site is not located within a designated scenic vista. The project site is located in a developed urban area and is not part of a scenic vista, views around the project site include the other urbanized uses such as residential and commercial uses.

The project site is not located near or within a designated scenic highway. The nearest officially designated state scenic highway is State Route 91 (SR-91) from SR 55 to the east city limit of Anaheim, which is approximately 10.4 miles northeast of La Quinta High School.

Light and Glare

The project site and its immediate vicinity contain many existing sources of nighttime illumination. There is no nighttime lighting installed on the existing athletic fields. Off-site lighting sources includes street lighting, vehicular lighting, and exterior lighting on existing residential and commercial uses.

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Existing Views

The existing visual character of the project site is of a school campus; the site is designated as P/SP (Public/Semi-Public). The project site can be seen from public rights-of-way, including McFadden Avenue and Ward Street, as well as from the surrounding residential and commercial uses.

5.1.2 Thresholds of Significance

Appendix G of the CEQA Guidelines states that, “except as provided in Public Resources Code Section 21099,” a project would normally have a significant effect on the environment if the project would:

- AE-1 Have a substantial adverse effect on a scenic vista.
- AE-2 Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
- AE-3 In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality.
- AE-4 Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. For the purposes of this analysis, an industry standard of 0.8 foot-candle (fc) was used for a significance determination because 0.8 fc would be close to twilight light levels.

5.1.3 Environmental Impacts

5.1.3.1 METHODOLOGY

Nighttime illumination and glare impacts are the effects of a project’s exterior lighting upon adjoining uses and areas. Light and glare impacts are determined through a comparison of the existing light sources with the proposed lighting plan or policies. In some cases, excessive light and glare can be annoying to residents or other sensitive land uses; be disorienting or dangerous to drivers; impair the character of rural communities; and/or adversely affect wildlife.

Nighttime illumination and glare analysis address the effects of a project’s nighttime lighting on adjoining uses and areas. Light and glare impacts are determined through a comparison of the existing light sources with the proposed lighting plan or policies. If the project has the potential to generate spill light on adjacent sensitive receptors or generate glare at receptors in the vicinity of the project site, mitigation measures can be provided to reduce potential impacts, as necessary. The following provides relevant lighting assessment terminology used in this analysis.

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Terminology

The **foot-candle** (fc) is a unit based on English measurements. Although foot-candles are considered obsolete in some scientific circles, they are nevertheless used because many existing light meters are calibrated in foot-candles. Moonlight produces approximately 0.01 fc, and sunlight can produce up to 10,000 fc. The general benchmarks for light levels are shown in Table 5.1-1, *General Light Levels Benchmark*.

Table 5.1-1 General Light Levels Benchmark

Outdoor Light	Foot-Candles
Direct Sunlight	10,000
Full Daylight	1,000
Overcast Day	100
Dusk	10
Twilight	1
Deep Twilight	0.1
Full Moon	0.01
Quarter Moon	0.001
Moonless Night	0.0001
Overcast Night	0.00001
Gas station canopies	25–30
Typical neighborhood streetlight and parking garage	1.0–5.0

Horizontal foot-candle. The amount of light received on a horizontal surface such as a roadway or parking lot pavement.

Vertical foot-candle. The amount of light received on a vertical surface such as a billboard or building façade.

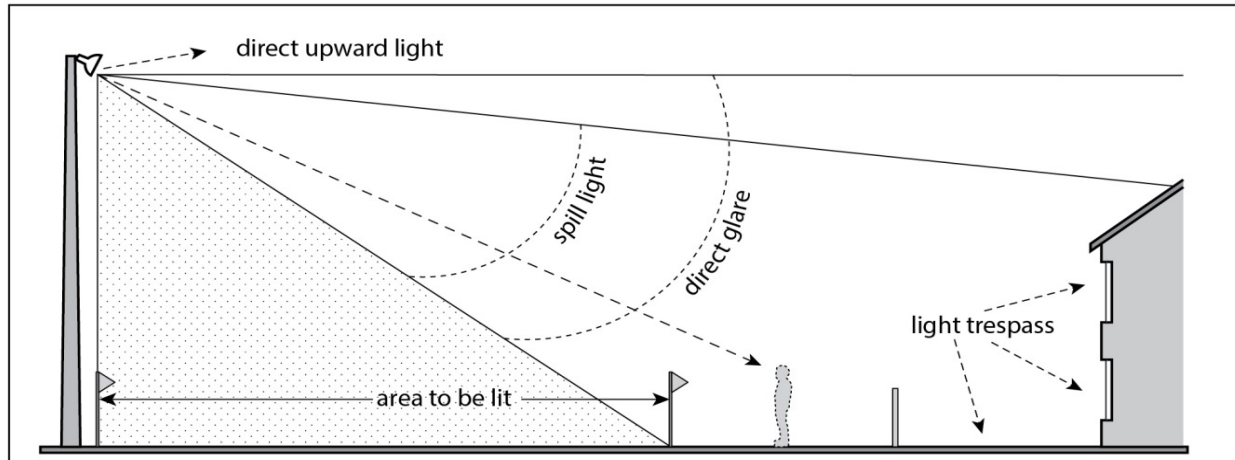
Glare means lighting entering the eye directly from a light fixture or indirectly from reflective surfaces that causes visual discomfort or reduced visibility. Glare can be generated by building-exterior materials, surface-paving materials, vehicles traveling or parked on roads and driveways, and sports lights. Any highly reflective façade material is a concern because buildings can reflect bright sunrays. The concepts of spill light, direct glare, and light trespass are illustrated in Exhibit A, *Spill Light, Direct Glare, and Light Trespass*, adapted from the Institution of Lighting Engineers (ILE 2003).

Direct glare is caused by looking at an unshielded lamp or a light at maximum candlepower. Direct glare is dependent on the brightness of the light source, the contrast in brightness between the light source and the surrounding environment, the size of the light source, and its position.

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Exhibit A: Spill Light, Direct Glare, and Light Trespass



Illuminance is the amount of light on a surface or plane, typically expressed in a horizontal plane (e.g., on the ground) or in a vertical plane (e.g., on the side of a building).

Lumen means the unit of measure used to quantify the amount of visible light produced by a light source or emitted from a luminaire (as distinct from “watt,” a measure of power consumption).

Luminaire means outdoor electrically powered illuminating devices that include a light source, outdoor reflective or refractive surfaces, lenses, electrical connectors and components, and all parts used to mount the assembly, distribute the light, and/or protect the light source, whether permanently installed or portable. An important component of luminaires is their shielding:

- **Fully shielded.** A luminaire emitting no light above the horizontal plane.
- **Shielded.** A luminaire emitting less than 2 percent of its light above the horizontal plane.
- **Partly shielded.** A luminaire emitting less than 10 percent of its light above the horizontal plane.
- **Unshielded.** A luminaire that may emit light in any direction.

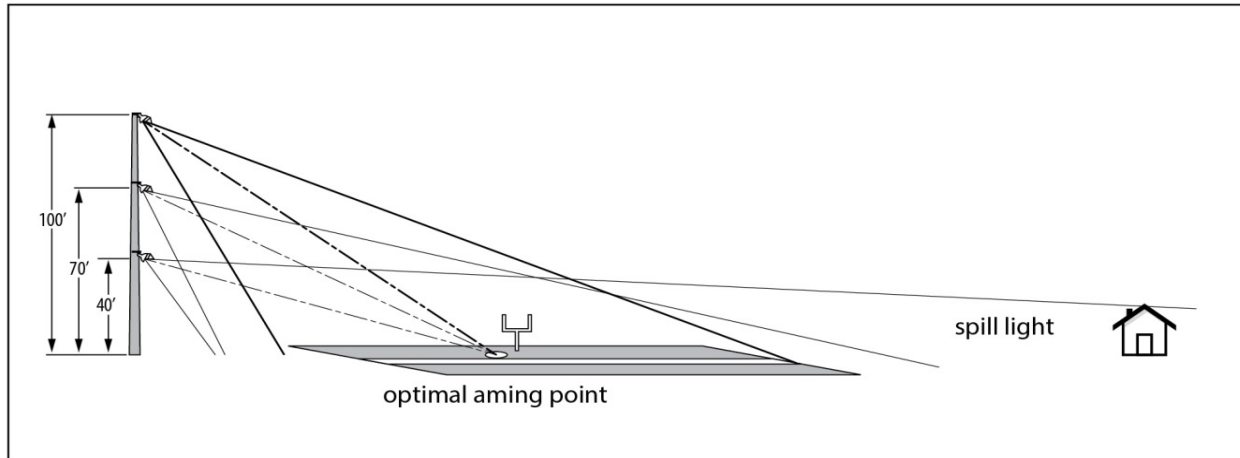
Light trespass means light that falls beyond the property on which it originates. The amount of trespass is expressed in foot-candles and is measured in the vertical plane at five feet above grade at the property line of the site on which the light(s) is located. If the adjacent property is a street, alley, or sidewalk, the point at which trespassing light is measured is the center of the street, alley, sidewalk, or right-of-way. Field measurements to determine light trespass compliance do not include the effect of light produced by streetlights.

As a general rule, taller poles allow fixtures to be aimed more directly on the playing surface, which reduces the amount of light spilling into surrounding areas. Proper fixture angles ensure even light distribution across the playing area and reduce spill light, as shown in Exhibit B, *Pole Heights and Lighting Angles*.

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Exhibit B: Pole Heights and Lighting Angles



Sky Glow is light that reflects into the night sky and reduces visibility of the sky and stars. It is a concern in many jurisdictions, especially those with observatories.

5.1.3.2 IMPACT ANALYSIS

Impact 5.1-1: The proposed project would not substantially degrade the existing visual character or quality of public views of the project site and its surroundings. [Thresholds AE-1 and AE-3]

A scenic vista is a viewpoint that provides expansive views of a highly valued landscape for benefit of the public. There are no scenic vistas officially designated by the City of Westminster General Plan. Therefore, the proposed project would not obstruct or alter views of scenic vistas. As shown in Figure 3-7, *Lighting Plan*, the proposed light poles would be in the southern portion of the campus, where the sports facilities are located. The proposed light poles would be most visible from Ward Street and the residential uses to the west and south of the project site. Views of the proposed light poles from McFadden Street would be partially obstructed by the existing school buildings located on the northern portion of the site. The proposed light poles have the potential to alter the visual character of the project site and surrounding. A total of 22 light poles would be installed six 50-foot poles, two 60-foot poles, eight 70-foot poles, four 80-foot poles, and two 90-foot poles—and providing 156 LED luminaires mounted at various heights.

As indicated above, the existing vertical elements of the campus that are visible from the residential areas to the north, south, east, and west include light poles, power lines, trees, and school buildings; the athletic facilities are visible from the residential areas to the east and south of the project site. The La Quinta High School is in an urbanized area, the proposed project would not degrade views of any scenic resource, the project is consistent with zoning and would not violate any regulations governing scenic quality. As the project site is already developed with school uses, the proposed light poles would not result in a substantial change in the visual character of the project suite and surrounding. Therefore, impacts would be less than significant.

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Impact 5.1-2: The proposed project would not alter scenic resources within a state scenic highway. [Threshold AE-2]

The nearest officially designated state scenic highway is SR-91 from SR 55 to the east city limit of Anaheim, which is approximately 10.4 miles northeast of La Quinta High School (Caltrans 2022). Due to the distance and intervening development, La Quinta High School is not visible from scenic routes. No scenic resources would be damaged, and no impact would occur.

Impact 5.1-3: The proposed project would generate additional light and glare. [Threshold AE-4]

For the purposes of this analysis, an industry standard of 0.8 foot-candle (fc) was used for a significance determination because 0.8 fc would be close to twilight light levels.

Light Trespass Impact

Temporary Lights

As shown in Figure 3-6, *Temporary Lights at La Quinta High School Football Field*, five temporary 50-foot light poles would be installed. The nearest sensitive receptor would be the residences approximately 100 feet to the east. The highest light level would be 3.8 fc. Due to the shorter light poles, which would be less effective in controlling light spillover, and the proximity of the temporary lights to the residential neighborhood adjacent to the site's eastern boundary, impacts would be potentially significant.

Permanent Lights

Although the Westminster Municipal Code does not identify a maximum amount of illumination that can be generated by institutional uses, Section 17.300.40, Outdoor Lighting, provides provisions for the installation and operation of lighting, such as directing or shielding lights to contain direct illumination thereby preventing excess spillover onto adjoining land uses, and ensuring that outdoor lighting is located and designed to prevent a significant increase in the overall ambient illumination.

The proposed project would install light poles at the various sporting facilities onsite that would range in height from 50 feet to 90 feet and would be located on the southern portion of the campus. As shown in Table 5.1-2, *Lighting Level Summary*, the proposed project would install lighting required to effectively illuminate the sports facilities at La Quinta High School.

Table 5.1-2 Lighting Level Summary

Area	Guaranteed Average Illumination	Minimum Illumination	Maximum Illumination
Tennis Courts	62 (maximum)	-	-
Football Field	50	41	60
Soccer Field	30	25	36
Softball Field	50 / 30 Infield / outfield	38 / 18 Infield / outfield	63 / 43 Infield / outfield
Baseball Field	50 / 30 Infield / outfield	36 / 19 Infield / outfield	63 / 47 Infield / outfield

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As shown in Figure 5.1-1, *Light Spillover*, it is not possible to completely eliminate spillover of light and glare onto adjacent properties and roadways, but the proposed pole heights allow the best control for focusing the lights to minimize spillover light. Higher mounting heights are generally more effective in controlling spill light, because a more controlled and/or narrower beam may be used, making it easier to confine the light to the design area. Lower mounting heights increase the spill light beyond the property boundaries. Lower mounting heights make bright parts of the floodlights more visible from positions outside the property boundary, which can increase glare.

As shown in Figure 5.1-1, the perimeter along the campus' southern boundary would reach a maximum of 6.9 fc. Light levels on the eastern and western boundaries would be less than 0.8 fc at the property line. As the lighting along the southern boundary of the campus would exceed the significance threshold of 0.8 fc, the proposed project would result in a potentially significant impact.

Generation of Glare

Sports facilities on the project site would install 22 Musco lights within the southern portion of the campus. The design elements for glare control include mounting height, visors and shielding, and reflective housing around the lamp. As part of the proposed project, the lighting engineer that installs the lights would ensure that the lights are properly adjusted and maintained so that glare would not impact the surrounding community. In general, all school activities are scheduled to end by 6:30 p.m., and community use will end by 9 p.m. Therefore, glare from the proposed lights would be temporary. However, because light spillover would exceed the significance threshold, impacts would be potentially significant.

5.1.4 Cumulative Impacts

Development projects' consistency with applicable plans and policies would be separately reviewed by the applicable lead agency. If needed, the lead agency would require appropriate mitigation measures for each development project to reduce identified impacts. The Garden Grove Unified School District plans to add competitive sports lighting to other comprehensive high schools in its District. However, aesthetic impacts of a project typically are site-specific. Therefore, the proposed project would not contribute to a cumulative impact, and cumulative impacts would be **less than significant**.

5.1.5 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, some impacts would be less than significant: 5.1-1 and 5.1-2.

Without mitigation, these impacts would be **potentially significant**:

- Impact 5.1-3 The proposed project would result in significant light spillover.

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5.1.6 Mitigation Measures

Impact 5.1-3

AE-1 The Garden Grove Unified School District shall minimize the effects of new sources of lighting by incorporating the following measures into project design and operation:

- All lighting shall be shielded and directed downward onto the athletic fields to minimize potential light escape and/or spillover onto adjacent properties.
- The new sports facilities lights shall be shut off by or before 9:00 p.m.

5.1.7 Level of Significance After Mitigation

Although Mitigation Measure AE-1 would reduce light and glare impacts, impacts would continue to be significant and unavoidable as the proposed light poles would be placed adjacent to residential uses, and the estimated foot-candles of these light poles would exceed the significance threshold of 0.8 fc. Therefore, impacts would be **significant and unavoidable**.

5.1.8 References

California Department of Transportation (Caltrans). 2022, March (accessed). Scenic Highways, State Scenic Highway Map ArcGIS.
<https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aaca>

Institution of Lighting Engineers (ILE). 2003, May. Guidance Notes for the Reduction of Light Pollution.
<https://www.gov.je/SiteCollectionDocuments/Planning%20and%20building/SPG%20Lightpollution%202002.pdf>.

Figure 5.1-1 - Light Spillover



— School Boundary

Areas that exceed 0.0 fc.

Pole location(s) ⚡ dimensions are relative to 0,0 reference point(s) ⊗

Source: MUSCO, 2022



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5.2 AIR QUALITY

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for the proposed sports facilities lighting at La Quinta High School (proposed project) to impact air quality in a local and regional context.

Criteria air pollutant emissions modeling is included in Appendix B, *Air Quality and Greenhouse Gas Emissions Assessment*, of this DEIR. The modeling shown in Appendix B was performed for Rancho Alamitos High School, another high school within the District that would also include sports facilities lighting on its campus. As both projects would result in similar levels of construction and operations, the modeling is applicable to the proposed project at La Quinta High School.

5.2.1 Environmental Setting

5.2.1.1 AIR POLLUTANTS OF CONCERN

Criteria Air Pollutants

Criteria air pollutants are defined as those pollutants for which the federal and state governments have established air quality standards for outdoor or ambient concentrations to protect public health with a determined margin of safety. Ozone (O_3), coarse particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$) are generally considered to be regional pollutants because they or their precursors affect air quality on a regional scale. Pollutants such as carbon monoxide (CO), nitrogen dioxide (NO_2), and sulfur dioxide (SO_2) are considered to be local pollutants because they tend to accumulate in the air locally. PM is also considered a local pollutant.

- **Carbon Monoxide** in the urban environment is associated primarily with the incomplete combustion of fossil fuels in motor vehicles. CO combines with hemoglobin in the bloodstream and reduces the amount of oxygen that can be circulated through the body. High CO concentrations can cause headaches, aggravate cardiovascular disease and impair central nervous system functions. CO concentrations can vary greatly over comparatively short distances. Relatively high concentrations of CO are typically found near crowded intersections and along heavy roadways with slow moving traffic. Even under the most severe meteorological and traffic conditions, high concentrations of CO are limited to locations within relatively short distances of the source. Overall CO emissions are decreasing as a result of the Federal Motor Vehicle Control Program, which has mandated increasingly lower emission levels for vehicles manufactured since 1973. CO levels in the SoCAB are in compliance with the state and federal one- and eight-hour standards.
- **Nitrogen Oxides.** Nitrogen gas comprises about 80 percent of the air and is naturally occurring. At high temperatures and under certain conditions, nitrogen can combine with oxygen to form several different gaseous compounds collectively called nitric oxides (NO_x). Motor vehicle emissions are the main source of NO_x in urban areas. NO_x is very toxic to animals and humans because of its ability to form nitric acid with water in the eyes, lungs, mucus membrane, and skin. In animals, long-term exposure to NO_x increases susceptibility to respiratory infections, and lowering resistance to such diseases as pneumonia and influenza. Laboratory studies show that susceptible humans, such as asthmatics, who are exposed to high

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concentrations can suffer from lung irritation or possible lung damage. Precursors of NO_x , such as NO and NO_2 , attribute to the formation of O_3 and $\text{PM}_{2.5}$. Epidemiological studies have also shown associations between NO_2 concentrations and daily mortality from respiratory and cardiovascular causes and with hospital admissions for respiratory conditions.

- **Ozone** is a secondary pollutant, meaning it is not directly emitted. It is formed when volatile organic compounds (VOCs) or ROGs and NO_x undergo photochemical reactions that occur only in the presence of sunlight. The primary source of ROG emissions is unburned hydrocarbons in motor vehicle and other internal combustion engine exhaust. NO_x forms as a result of the combustion process, most notably due to the operation of motor vehicles. Sunlight and hot weather cause ground-level O_3 to form. Ground-level O_3 is the primary constituent of smog. Because O_3 formation occurs over extended periods of time, both O_3 and its precursors are transported by wind and high O_3 concentrations can occur in areas well away from sources of its constituent pollutants. People with lung disease, children, older adults, and people who are active can be affected when O_3 levels exceed ambient air quality standards. Numerous scientific studies have linked ground-level O_3 exposure to a variety of problems including lung irritation, difficult breathing, permanent lung damage to those with repeated exposure, and respiratory illnesses.
- **Particulate Matter** includes both aerosols and solid particulates of a wide range of sizes and composition. Of concern are those particulates smaller than or equal to 10 microns in diameter size (PM_{10}) and smaller than or equal to 2.5 microns in diameter ($\text{PM}_{2.5}$). Smaller particulates are of greater concern because they can penetrate deeper into the lungs than larger particles. PM_{10} is generally emitted directly as a result of mechanical processes that crush or grind larger particles or form the resuspension of dust, typically through construction activities and vehicular travel. PM_{10} generally settles out of the atmosphere rapidly and is not readily transported over large distances. $\text{PM}_{2.5}$ is directly emitted in combustion exhaust and is formed in atmospheric reactions between various gaseous pollutants, including NO_x , sulfur oxides (SO_x), and VOCs. $\text{PM}_{2.5}$ can remain suspended in the atmosphere for days and/or weeks and can be transported long distances. The principal health effects of airborne PM are on the respiratory system. Short-term exposure of high $\text{PM}_{2.5}$ and PM_{10} levels are associated with premature mortality and increased hospital admissions and emergency room visits. Long-term exposure is associated with premature mortality and chronic respiratory disease. According to the US Environmental Protection Agency (USEPA), some people are much more sensitive than others to breathing PM_{10} and $\text{PM}_{2.5}$. People with influenza, chronic respiratory and cardiovascular diseases, and the elderly may suffer worse illnesses; people with bronchitis can expect aggravated symptoms; and children may experience decline in lung function due to breathing in PM_{10} and $\text{PM}_{2.5}$. Other groups considered sensitive include smokers and people who cannot breathe well through their noses. Exercising athletes are also considered sensitive because many breathe through their mouths.
- **Sulfur Dioxide** is a colorless, pungent, irritating gas formed by the combustion of sulfurous fossil fuels. It enters the atmosphere as a result of burning high-sulfur-content fuel oils and coal and chemical processes at plants and refineries. Gasoline and natural gas have very low sulfur content and do not release significant quantities of SO_2 . When sulfur dioxide forms sulfates (SO_4) in the atmosphere, together these pollutants are referred to as sulfur oxides (SO_x). Thus, SO_2 is both a primary and secondary criteria air pollutant. At sufficiently high concentrations, SO_2 may irritate the upper respiratory tract. Current scientific evidence links short-term exposures to SO_2 , ranging from 5 minutes to 24 hours, with an array of adverse respiratory

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effects, including bronchoconstriction and increased asthma symptoms. These effects are particularly adverse for asthmatics at elevated ventilation rates (e.g., while exercising or playing) at lower concentrations and when combined with particulates, SO₂ may do greater harm by injuring lung tissue. Studies also show a connection between short-term exposure and increased visits to emergency facilities and hospital admissions for respiratory illnesses, particularly in at-risk populations such as children, the elderly, and asthmatics.

Table 5.2-1, *Criteria Air Pollutant Sources and Health Effects Summary*, summarizes the common sources and potential health effects associated with the criteria air pollutants.

Table 5.2-1 Criteria Air Pollutant Sources Health Effects Summary

Pollutant	Major Manmade Sources	Human Health and Welfare Effects
Carbon Monoxide (CO)	An odorless, colorless gas formed when carbon fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, effecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
Nitrogen Dioxide (NO ₂)	A reddish-brown gas formed during fuel combustion for motor vehicles, energy utilities and industrial sources.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone and acid rain. Causes brown discoloration of the atmosphere.
Ozone (O ₃)	Formed by a chemical reaction between reactive organic gases (ROGs) and nitrous oxides (N ₂ O) in the presence of sunlight. Common sources of these precursor pollutants include motor vehicle exhaust, industrial emissions, solvents, paints, and landfills.	Irritates and causes inflammation of the mucus membranes and lung airways; causes wheezing, coughing and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield.
Particulate Matter (PM ₁₀ and PM _{2.5})	Power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles and others.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (haze).
Sulfur Dioxide (SO ₂)	A colorless, nonflammable gas formed when fuel containing sulfur is burned. Examples are refineries, cement manufacturing, and locomotives.	Respiratory irritant. Aggravates lung and heart problems. Can damage crops and natural vegetation. Impairs visibility.

Source: ECORP 2022

Toxic Air Contaminants

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For regulatory purposes, carcinogenic TACs are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is expressed as excess cancer cases per one million exposed individuals. Noncarcinogenic TACs differ in that there is

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generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

There are many different types of TACs, with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Public exposure to TACs can result from emissions from normal operations, as well as from accidental releases of hazardous materials during upset conditions. The health effects of TACs include cancer, birth defects, neurological damage, and death.

Most recently, CARB identified DPM as a TAC. DPM differs from other TACs in that it is not a single substance but rather a complex mixture of hundreds of substances. Diesel exhaust is a complex mixture of particles and gases produced when an engine burns diesel fuel. DPM is a concern because it causes lung cancer; many compounds found in diesel exhaust are carcinogenic. DPM includes the particle-phase constituents in diesel exhaust. The chemical composition and particle sizes of DPM vary between different engine types (heavy-duty, light-duty), engine operating conditions (idle, accelerate, decelerate), fuel formulations (high/low sulfur fuel), and the year of the engine. Some short-term (acute) effects of diesel exhaust include eye, nose, throat, and lung irritation, and diesel exhaust can cause coughs, headaches, light-headedness, and nausea. DPM poses the greatest health risk among the TACs; due to their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

5.2.1.1 REGULATORY BACKGROUND

Ambient air quality standards have been adopted at the state and federal levels for criteria air pollutants. In addition, both the state and federal government regulate the release of TACs. The proposed project is in the SoCAB and is subject to the rules and regulations imposed by the South Coast AQMD, the California AAQS adopted by CARB, and National AAQS adopted by the EPA. Federal, state, regional, and local laws, regulations, plans, or guidelines that are potentially applicable to the proposed project are summarized in this section.

Federal and State

Ambient Air Quality Standards

The Clean Air Act was passed in 1963 by the US Congress and has been amended several times. The 1970 Clean Air Act amendments strengthened previous legislation and laid the foundation for the regulatory scheme of the 1970s and 1980s. In 1977, Congress again added several provisions, including nonattainment requirements for areas not meeting National AAQS and the Prevention of Significant Deterioration program. The 1990 amendments represent the latest in a series of federal efforts to regulate the protection of air quality in the United States. The Clean Air Act allows states to adopt more stringent standards or to include other pollution species. The California Clean Air Act, signed into law in 1988, requires all areas of the state to achieve and maintain the California AAQS by the earliest practical date. The California AAQS tend to be more restrictive than the National AAQS.

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These National and California AAQS are the levels of air quality considered to provide a margin of safety in the protection of the public health and welfare. They are designed to protect “sensitive receptors” most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

Both California and the federal government have established health-based AAQS for seven air pollutants. As shown in Table 5.2-2, *Ambient Air Quality Standards for Criteria Pollutants*, these pollutants are O₃, NO₂, CO, SO₂, PM₁₀, PM_{2.5}, and Pb. In addition, the state has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

Table 5.2-2 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard ¹	Federal Primary Standard ²	Major Pollutant Sources
Ozone (O ₃) ³	1 hour	0.09 ppm	*	Motor vehicles, paints, coatings, and solvents.
	8 hours	0.070 ppm	0.070 ppm	
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hours	9.0 ppm	9 ppm	
Nitrogen Dioxide (NO ₂)	Annual Arithmetic Mean	0.030 ppm	0.053 ppm	Motor vehicles, petroleum-refining operations, industrial sources, aircraft, ships, and railroads.
	1 hour	0.18 ppm	0.100 ppm	
Sulfur Dioxide (SO ₂)	Annual Arithmetic Mean	*	0.030 ppm	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	1 hour	0.25 ppm	0.075 ppm	
	24 hours	0.04 ppm	0.14 ppm	
Respirable Coarse Particulate Matter (PM ₁₀)	Annual Arithmetic Mean	20 µg/m ³	*	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	50 µg/m ³	150 µg/m ³	
Respirable Fine Particulate Matter (PM _{2.5}) ⁴	Annual Arithmetic Mean	12 µg/m ³	12 µg/m ³	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	*	35 µg/m ³	
Lead (Pb)	30-Day Average	1.5 µg/m ³	*	
	Calendar Quarter	*	1.5 µg/m ³	

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Table 5.2-2 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard ¹	Federal Primary Standard ²	Major Pollutant Sources
	Rolling 3-Month Average	*	0.15 µg/m ³	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
Sulfates (SO ₄) ⁵	24 hours	25 µg/m ³	*	Industrial processes.
Visibility Reducing Particles	8 hours	ExCo =0.23/km visibility of 10≥ miles	No Federal Standard	Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt.
Hydrogen Sulfide	1 hour	0.03 ppm	No Federal Standard	Hydrogen sulfide (H ₂ S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas and can be emitted as the result of geothermal energy exploitation.
Vinyl Chloride	24 hours	0.01 ppm	No Federal Standard	Vinyl chloride (chloroethene), a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents.

Source: CARB 2016.

Notes: ppm: parts per million; µg/m³: micrograms per cubic meter

* Standard has not been established for this pollutant/duration by this entity.

1 California standards for O₃, CO (except 8-hour Lake Tahoe), SO₂ (1 and 24 hour), NO₂, and particulate matter (PM₁₀, PM_{2.5}, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2 National standards (other than O₃, PM, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The O₃ standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM_{2.5}, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.

3 On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

4 On December 14, 2012, the national annual PM_{2.5} primary standard was lowered from 15 µg/m³ to 12.0 µg/m³. The existing national 24-hour PM_{2.5} standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standard of 15 µg/m³. The existing 24-hour PM₁₀ standards (primary and secondary) of 150 µg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

5 On June 2, 2010, a new 1-hour SO₂ standard was established, and the existing 24-hour and annual primary standards were revoked. The 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

California has also adopted a host of other regulations that reduce criteria pollutant emissions.

- **Assembly Bill (AB) 1493: Pavley Fuel Efficiency Standards.** Pavley I is a clean-car standard that reduces greenhouse gas (GHG) emissions from new passenger vehicles (light-duty auto to medium-duty vehicles) from 2009 through 2016. In January 2012, CARB approved the Advanced Clean Cars program (formerly known as Pavley II) for model years 2017 through 2025.

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- **Senate Bill (SB) 1078 and SB 107: Renewables Portfolio Standards.** A major component of California's Renewable Energy Program is the renewables portfolio standard (RPS) established under SB 1078 (Sher) and SB 107 (Simitian). Under the RPS, certain retail sellers of electricity were required to increase the amount of renewable energy each year by at least 1 percent to reach at least 20 percent by December 30, 2010.
- **20 California Code of Regulations (CCR): Appliance Energy Efficiency Standards.** The 2006 Appliance Efficiency Regulations (20 CCR sections 1601–1608) were adopted by the California Energy Commission on October 11, 2006 and approved by the California Office of Administrative Law on December 14, 2006. The regulations include standards for both federally regulated appliances and non–federally regulated appliances.
- **24 CCR, Part 6: Building and Energy Efficiency Standards.** Energy conservation standards for new residential and nonresidential buildings adopted by the California Energy Resources Conservation and Development Commission (now the California Energy Commission) in June 1977.
- **24 CCR, Part 11: Green Building Standards Code.** Establishes planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants.

Tanner Air Toxics Act and Air Toxics Hot Spot Information and Assessment Act

Public exposure to TACs is a significant environmental health issue in California. In 1983, the California legislature enacted a program to identify the health effects of TACs and reduce exposure to them. The California Health and Safety Code defines a TAC as “an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health” (17 CCR § 93000). A substance that is listed as a hazardous air pollutant pursuant to § 112(b) of the federal Clean Air Act (42 US Code § 7412[b]) is a TAC. Under state law, the California Environmental Protection Agency (CalEPA), acting through CARB, is authorized to identify a substance as a TAC if it is an air pollutant that may cause or contribute to an increase in mortality or serious illness, or may pose a present or potential hazard to human health.

California regulates TACs primarily through AB 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics “Hot Spot” Information and Assessment Act of 1987). The Tanner Air Toxics Act set up a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an “airborne toxics control measure” for sources that emit that TAC. If there is a safe threshold for a substance (i.e., a point below which there is no toxic effect), the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate “toxics best available control technology” to minimize emissions. To date, CARB has established formal control measures for 11 TACs that are identified as having no safe threshold.

Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High-priority facilities are required to perform a health risk assessment, and if specific thresholds are exceeded, are required to communicate the results to the public through notices and public meetings.

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CARB has promulgated the following specific rules to limit TAC emissions:

- **13 CCR Chapter 10 § 2485: Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling.** Generally restricts on-road diesel-powered commercial motor vehicles with a gross vehicle weight rating of greater than 10,000 pounds from idling more than five minutes.
- **13 CCR Chapter 10 § 2480: Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools.** Generally restricts a school bus or transit bus from idling for more than five minutes when within 100 feet of a school.
- **13 CCR § 2477 and Article 8: Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate.** Regulations established to control emissions associated with diesel-powered TRUs.

Regional

Air Quality Management Planning

The South Coast AQMD is the agency responsible for improving air quality in the SoCAB and ensuring that the National and California AAQS are attained and maintained. South Coast AQMD is responsible for preparing the air quality management plan (AQMP) for the SoCAB in coordination with the Southern California Association of Governments (SCAG). Since 1979, a number of AQMPs have been prepared.

2016 AQMP

On March 3, 2017, South Coast AQMD adopted the 2016 AQMP, which serves as an update to the 2012 AQMP. The 2016 AQMP addresses strategies and measures to attain the following National AAQS:

- 2008 National 8-hour ozone standard by 2031
- 2012 National annual PM_{2.5} standard by 2025¹
- 2006 National 24-hour PM_{2.5} standard by 2019
- 1997 National 8-hour ozone standard by 2023
- 1979 National 1-hour ozone standard by 2022

It is projected that total NO_x emissions in the SoCAB would need to be reduced to 150 tons per day (tpd) by year 2023 and to 100 tpd in year 2031 to meet the 1997 and 2008 federal 8-hour ozone standards. The strategy to meet the 1997 federal 8-hour ozone standard would also lead to attaining the 1979 federal 1-hour ozone standard by year 2022 (South Coast AQMD 2017), which requires reducing NO_x emissions in the SoCAB to 250 tpd. This is approximately 45 percent more reduction than existing regulations for the 2023 ozone standard and 55 percent more reduction than existing regulations to meet the 2031 ozone standard.

Reducing NO_x emissions would also reduce PM_{2.5} concentrations in the SoCAB. However, because the goal is to meet the 2012 federal annual PM_{2.5} standard no later than year 2025, South Coast AQMD is seeking to

¹ The 2016 AQMP requests a reclassification from moderate to serious nonattainment for the 2012 National PM_{2.5} standard.

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reclassify the SoCAB from “moderate” to “serious” nonattainment under this federal standard. A “moderate” nonattainment would require meeting the 2012 federal standard by no later than 2021.

Overall, the 2016 AQMP is composed of stationary and mobile-source emission reductions from regulatory control measures, incentive-based programs, co-benefits from climate programs, mobile-source strategies, and reductions from federal sources, such as aircrafts, locomotives, and ocean-going vessels. Strategies outlined in the 2016 AQMP would be implemented in collaboration between CARB and the EPA (South Coast AQMD 2017).

Lead Implementation Plan

In 2008, the EPA designated the Los Angeles County portion of the SoCAB as a nonattainment area under the federal lead (Pb) classification because of the addition of source-specific monitoring under the new federal regulation. This designation was based on two source-specific monitors in the City of Vernon and the City of Industry that exceeded the new standard in the 2007 to 2009 period. The remainder of the SoCAB, outside the Los Angeles County nonattainment area, remains in attainment of the new 2008 lead standard. On May 24, 2012, CARB approved the State Implementation Plan (SIP) revision for the federal lead standard, which the EPA revised in 2008. Lead concentrations in this nonattainment area have been below the level of the federal standard since December 2011. The SIP revision was submitted to the EPA for approval.

South Coast AQMD Rules and Regulations

All projects are subject to South Coast AQMD rules and regulations in effect at the time of activity.

- **Rule 401, Visible Emissions.** This rule is intended to prevent the discharge of pollutant emissions from an emissions source that results in visible emissions. Specifically, the rule prohibits the discharge of any air contaminant into the atmosphere by a person from any single source of emission for a period or periods aggregating more than three minutes in any one hour that is as dark as or darker than designated No. 1 on the Ringelmann Chart, as published by the US Bureau of Mines.
- **Rule 402, Nuisance.** This rule is intended to prevent the discharge of pollutant emissions from an emissions source that results in a public nuisance. Specifically, this rule prohibits any person from discharging quantities of air contaminants or other material from any source such that it would result in an injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public. Additionally, the discharge of air contaminants would also be prohibited where it would endanger the comfort, repose, health, or safety of any number of persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. This rule does not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.
- **Rule 403, Fugitive Dust.** This rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust and requires best available control measures to be applied to earth-moving and grading activities.

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- **Rule 445, Wood Burning Devices.** In general, the rule prohibits new developments from the installation of wood-burning devices. This rule is intended to reduce the emission of particulate matter from wood-burning devices and applies to manufacturers and sellers of wood-burning devices, commercial sellers of firewood, and property owners and tenants that operate a wood-burning device.
- **Rule 1113, Architectural Coatings.** This rule serves to limit the VOCs content of architectural coatings used on projects in the South Coast AQMD. Any person who supplies, sells, offers for sale, or manufactures any architectural coating for use on projects in the South Coast AQMD must comply with the current VOC standards set in this rule.
- **Rule 1403, Asbestos Emissions from Demolition/Renovation Activities.** The purpose of this rule is to specify work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials (ACM). The requirements for demolition and renovation activities include asbestos surveying, notification, ACM removal procedures and time schedules, ACM handling and clean-up procedures, and storage, disposal, and landfilling requirements for asbestos-containing waste materials. All operators are required to maintain records, including waste shipment records, and are required to use appropriate warning labels, signs, and markings.

5.2.1.2 EXISTING CONDITIONS

The California Air Resources Board (CARB) divides the state into air basins that share similar meteorological and topographical features. The project site lies in the SoCAB, which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino counties and all of Orange County. The air basin is on a coastal plain with connecting broad valleys and low hills and is bounded by the Pacific Ocean on the southwest, with high mountains forming the remainder of the perimeter.

Meteorology

Temperature and Precipitation

The air basin is part of a semi-permanent high-pressure zone in the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. This usually mild weather pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds. The annual average temperature varies little throughout the 6,645-square-mile SoCAB, ranging from the low 60s to the high 80s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas.

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all annual rains fall between November and April. Summer rainfall is normally restricted to widely scattered thundershowers near the coast, with slightly heavier shower activity in the east and over the mountains.

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Humidity

Although the SoCAB has a semiarid climate, the air near the earth's surface is typically moist because of the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the SoCAB by offshore winds, the "ocean effect" is dominant. Periods of heavy fog, especially along the coast, are frequent, and low clouds, often referred to as high fog, are a characteristic climatic feature. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the SoCAB.

Wind

Wind patterns across the south coastal region are characterized by westerly or southwesterly onshore winds during the day and by easterly or northeasterly breezes at night. Wind speed is higher during the dry summer months than during the rainy winter.

Between periods of wind, air stagnation may occur in both the morning and evening hours. Air stagnation is one of the critical determinants of air quality conditions on any given day. During the winter and fall, surface high-pressure systems over the SoCAB, combined with other meteorological conditions, can result in very strong, downslope Santa Ana winds. These winds normally continue a few days before predominant meteorological conditions are reestablished.

The mountain ranges to the east affect the diffusion of pollutants by inhibiting the eastward transport of pollutants. Air quality in the SoCAB generally ranges from fair to poor and is similar to air quality in most of coastal Southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions.

Inversions

In conjunction with the two characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, two similarly distinct types of temperature inversions control the vertical depth through which pollutants are mixed. These inversions are the marine/subsidence inversion and the radiation inversion. The height of the base of the inversion at any given time is known as the "mixing height." The combination of winds and inversions is a critical determinant leading to highly degraded air quality in the summer and generally good air quality in the winter in Orange County.

SoCAB Nonattainment Areas

The AQMP provides the framework for air quality basins to achieve attainment of the state and federal ambient air quality standards through the SIP. Areas are classified as attainment or nonattainment areas for particular pollutants depending on whether they meet the AAQS. Severity classifications for ozone nonattainment range in magnitude from marginal, moderate, and serious to severe and extreme.

- ***Unclassified.*** A pollutant is designated unclassified if the data are incomplete and do not support a designation of attainment or nonattainment.

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- **Attainment.** A pollutant is in attainment if the AAQS for that pollutant was not violated at any site in the area during a three-year period.
- **Nonattainment.** A pollutant is in nonattainment if there was at least one violation of an AAQS for that pollutant in the area.
- **Nonattainment/Transitional.** A subcategory of the nonattainment designation. An area is designated nonattainment/transitional to signify that the area is close to attaining the AAQS for that pollutant.

The attainment status for the SoCAB is shown in Table 5.2-3, *Attainment Status of Criteria Air Pollutants in the South Coast Air Basin*.

Table 5.2-3 Attainment Status of Criteria Air Pollutants in the South Coast Air Basin

Pollutant	State	Federal
Ozone – 1-hour	Extreme Nonattainment	No Federal Standard
Ozone – 8-hour	Extreme Nonattainment	Extreme Nonattainment
PM ₁₀	Serious Nonattainment	Attainment
PM _{2.5}	Nonattainment	Nonattainment
CO	Attainment	Attainment
NO ₂	Attainment	Attainment/Maintenance
SO ₂	Attainment	Attainment
Lead	Attainment	Nonattainment (Los Angeles County only) ¹
All others	Attainment/Unclassified	Attainment/Unclassified

Source: CARB 2021.

¹ In 2010, the Los Angeles portion of the SoCAB was designated nonattainment for lead under the new 2008 federal AAQS as a result of large industrial emitters. Remaining areas in the SoCAB are unclassified.

Multiple Air Toxics Exposure Study V

The Multiple Air Toxics Exposure Study (MATES) is a monitoring and evaluation study on existing ambient concentrations of TACs and the potential health risks from air toxics in the SoCAB. In April 2021, South Coast AQMD released the latest update to the MATES study, MATES V. The first MATES analysis, MATES I, began in 1986 but was limited because of the technology available at the time. Conducted in 1998, MATES II was the first MATES iteration to include a comprehensive monitoring program, an air toxics emissions inventory, and a modeling component. MATES III was conducted in 2004 to 2006, with MATES IV following in 2012 to 2013.

MATES V uses measurements taken during 2018 and 2019, with a comprehensive modeling analysis and emissions inventory based on 2018 data. The previous MATES studies quantified the cancer risks based on the inhalation pathway only. MATES V includes information on the chronic noncancer risks from inhalation and non-inhalation pathways for the first time. Cancer risks and chronic noncancer risks from MATES II through IV measurements have been re-examined using current Office of Environmental Health Hazards Assessment and CalEPA risk assessment methodologies and modern statistical methods to examine the trends over time.

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The MATES V study showed that cancer risk in the SoCAB decreased to 454 in a million from 997 in a million in the MATES IV study. Overall, air toxics cancer risk in the SoCAB decreased by 54 percent since 2012 when MATES IV was conducted. MATES V showed the highest risk locations near the Los Angeles International Airport and the Ports of Long Beach and Los Angeles. DPM continues to be the major contributor to air toxics cancer risk (approximately 72 percent of the total cancer risk). Goods movement and transportation corridors have the highest cancer risk. Transportation sources account for 88 percent of carcinogenic air toxics emissions, and the remainder is from stationary sources, which include large industrial operations such as refineries and power plants as well as smaller businesses such as gas stations and chrome-plating facilities. (South Coast AQMD 2021).

Existing Ambient Air Quality

Existing levels of ambient air quality and historical trends and projections in the vicinity of the project site are best documented by measurements taken by the South Coast AQMD. The air quality monitoring station closest to the proposed project is the Anaheim-Loara School Monitoring Station. Data from this station includes O₃, NO₂, PM₁₀, and PM_{2.5} and is summarized in Table 5.2-4, *Ambient Air Quality Monitoring Summary*.

Table 5.2-4 Ambient Air Quality Monitoring Summary

Pollutant Standards	2018	2019	2020
O₃ – Anaheim-Loara School Monitoring Station			
Max 1-hour concentration (ppm)	0.112	0.096	0.142
Max 8-hour concentration (ppm) (State/Federal)	0.071 / 0.071	0.082 / 0.082	0.098 / 0.097
Number of days above 1-hour standard (State/Federal)	1 / 0	1 / 0	6 / 2
Number of days above 8-hour standard (State/Federal)	1 / 1	1 / 1	16 / 15
PM₁₀ – Anaheim-Loara School Monitoring Station			
Max 24-hour concentration (µg/m ³) (State/Federal)	94.6 / 94.6	127.1 / 127.6	74.5 / 94.6
Number of days above 24-hour standard (State/Federal)	12.0 / 0	24.4 / 0	* / *
PM_{2.5} – Anaheim-Loara School Monitoring Station			
Max 24-hour concentration (µg/m ³) (State/Federal)	68.0 / 63.12	34.1 / 36.1	64.8 / 60.2
Number of days above federal 24-hour standard	7.0	4.0	12.0
Source: ECORP 2022			

Existing Emissions

The existing high school operations currently generate criteria air pollutant emissions from area sources (e.g., use of landscaping equipment, maintenance activities such as architectural coating), energy use (i.e., natural gas used for heating), and mobile sources (i.e., student and staff trips to the campus).

Sensitive Receptors

Some land uses are considered more sensitive to air pollution (i.e., TACs) than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardiorespiratory diseases.

Residential areas are also considered sensitive to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Other sensitive receptors include retirement facilities, hospitals, and schools. Recreational land uses are

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considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation. Industrial, commercial, retail, and office areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent because the majority of workers tend to stay indoors most of the time. In addition, the workforce is generally the healthiest segment of the population. The nearest offsite sensitive receptors are the single-family residences surrounding the project site's boundaries. Sensitive receptors also include the students and staff on campus.

5.2.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

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

5.2.2.1 SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT THRESHOLDS

The significance criteria established by the applicable air quality management or air pollution control district (South Coast AQMD) may be relied upon to make the above determinations. According to the South Coast AQMD, an air quality impact is considered significant if the proposed project would violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. The South Coast AQMD has established thresholds of significance for air quality for construction and operational activities of land use development projects, such as that proposed, as shown in Table 5.2-5, *South Coast AQMD Regional Significance Thresholds*.

Table 5.2-5 South Coast AQMD Significance Thresholds

Air Pollutant	Construction Phase	Operational Phase
Reactive Organic Gases (ROG)	75 lbs/day	55 lbs/day
Carbon Monoxide (CO)	550 lbs/day	550 lbs/day
Nitrogen Oxides (NO _x)	100 lbs/day	55 lbs/day
Sulfur Oxides (SO _x)	150 lbs/day	150 lbs/day
Coarse Particulate Matter (PM ₁₀)	150 lbs/day	150 lbs/day
Fine Particulate Matter (PM _{2.5})	55 lbs/day	55 lbs/day

Source: ECORP 2022

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By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's individual emissions exceed its identified significance thresholds, the project would be cumulatively considerable. Projects that do not exceed significance thresholds would not be considered cumulative considerable.

Localized Significance Thresholds

In addition to regional significance thresholds, the South Coast AQMD developed localized significance thresholds (LSTs) for emissions of NO₂, CO, PM₁₀, and PM_{2.5} generated at new development sites (offsite mobile source emissions are not included in the LST analysis protocol). LSTs represent the maximum emissions that can be generated at a project site without expecting to cause or substantially contribute to an exceedance of the most stringent national or state ambient air quality standards. LSTs are based on the ambient concentrations of that pollutant within the project source receptor area (SRA), as demarcated by the South Coast AQMD, and the distance to the nearest sensitive receptor. LST analysis is applicable for all projects that disturb five acres or less on a single day. The South Coast AQMD has prepared mass rate LST look-up tables for projects disturbing one acre, two acres, and five acres. The project site is in SRA 17 as derived from the South Coast AQMD mass rate LST look-up tables, with sensitive receptors located directly adjacent to the project site's southern and western boundaries, and with sensitive receptors across the street to the east and north of the project site.

South Coast AQMD identifies localized significance thresholds (LST), shown in Table 5.2-6, *South Coast AQMD Localized Significance Thresholds*. Emissions of NO₂, CO, PM₁₀, and PM_{2.5} generated at a project site could expose sensitive receptors to substantial concentrations of criteria air pollutants. Off-site mobile-source emissions are not included in the LST analysis. A project would generate a significant impact if it generates emissions that, when added to the local background concentrations, violate the AAQS.

Table 5.2-6 South Coast AQMD Localized Significance Thresholds

Air Pollutant (Relevant AAQS)	Concentration
1-Hour CO Standard (CAAQS)	20 ppm
8-Hour CO Standard (CAAQS)	9.0 ppm
1-Hour NO ₂ Standard (CAAQS)	0.18 ppm
Annual NO ₂ Standard (CAAQS)	0.03 ppm
24-Hour PM ₁₀ Standard – Construction (South Coast AQMD) ¹	10.4 µg/m ³
24-Hour PM _{2.5} Standard – Construction (South Coast AQMD) ¹	10.4 µg/m ³
24-Hour PM ₁₀ Standard – Operation (South Coast AQMD) ¹	2.5 µg/m ³
24-Hour PM _{2.5} Standard – Operation (South Coast AQMD) ¹	2.5 µg/m ³
Annual Average PM ₁₀ Standard (South Coast AQMD) ¹	1.0 µg/m ³

Source: South Coast AQMD 2019.

ppm – parts per million; µg/m³ – micrograms per cubic meter

¹ Threshold is based on South Coast AQMD Rule 403. Since the SoCAB is in nonattainment for PM₁₀ and PM_{2.5}, the threshold is established as an allowable change in concentration. Therefore, background concentration is irrelevant.

To assist lead agencies, South Coast AQMD developed screening-level LSTs to back-calculate the mass amount (pounds per day) of emissions generated on-site that would trigger the levels shown in Table 5.2-6 for projects

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under five acres. These “screening-level” LST tables are the LSTs for all projects of five acres and less and are based on emissions over an 8-hour period; however, they can be used as screening criteria for larger projects to determine whether or not dispersion modeling may be required.

The screening-level LSTs in SRA 17 are shown in Table 5.2-7, *South Coast AQMD Screening-Level Localized Significance Thresholds*.

Table 5.2-7 South Coast AQMD Screening-Level Localized Significance Thresholds

Acreage Disturbed	Threshold (lbs/day)			
	Nitrogen Oxides (NO _x)	Carbon Monoxide (CO)	Coarse Particulates (PM ₁₀)	Fine Particulates (PM _{2.5})
Construction Threshold				
1 Acre	81	485	4	3
Operational Threshold				
1 Acre	81	485	1	1

Source: ECORP 2022

5.2.3 Environmental Impacts

5.2.3.1 METHODOLOGY

Air quality impacts were assessed in accordance with methodologies recommended by the South Coast AQMD. Where criteria air pollutant quantification was required, emissions were modeled using the California Emissions Estimator Model (CalEEMod), version 2020.4.0. CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. Project construction-generated air pollutant emissions were calculated using CalEEMod model defaults for Orange County. Operational air pollutant emissions are discussed qualitatively based on information from the Project proponent.

5.2.3.2 IMPACT ANALYSIS

Impact 5.2-1: The proposed project would not conflict with the South Coast AQMD AQMP. [Threshold AQ-1]

A consistency determination with the AQMP plays an important role in local agency project review by linking local planning and individual projects to the AQMP. It fulfills the CEQA goal of informing decision makers of the environmental effects of the proposed project under consideration early enough to ensure that air quality concerns are fully addressed. It also provides the local agency with ongoing information as to whether they are contributing to the clean air goals in the AQMP.

The regional emissions inventory for the SoCAB is compiled by South Coast AQMD and SCAG. Regional population, housing, and employment projections developed by SCAG are based in part on cities' general plan land use designations. These projections form the foundation for the emissions inventory of the AQMP. These

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demographic trends are incorporated into SCAG's regional transportation plan/sustainable communities strategy to determine priority transportation projects and vehicle miles traveled in the SCAG region.

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. Since the proposed project would not generate new student enrollment, the proposed project would not substantially affect housing, employment, or population projections within the region.

As shown in Table 5.2-8, *Construction-Related Emissions (Regional Significance)*, and Table 5.2-9, *Construction-Related Emissions (Local Significance)*, the proposed project would result in emissions that would be below the South Coast AQMD regional and localized thresholds during construction and would have a negligible contribution during operations. Therefore, the proposed project would not result in an increase in the frequency or severity of existing air quality violations and would not have the potential to cause or affect a violation of the ambient air quality standards or result in the delay of timely attainment of air quality standards or AQMP emissions reductions.

To further reduce emissions, the proposed project would be required to comply with emissions reduction measures promulgated by the South Coast AQMD, such as South Coast AQMD Rules 201, 402, 403, and 1113. South Coast AQMD Rule 402 prohibits the 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. South Coast AQMD Rule 403 requires fugitive dust sources to implement Best Available Control Measures for all sources, and all forms of visible particulate matter are prohibited from crossing any property line. South Coast AQMD Rule 403 is intended to reduce PM₁₀ emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. South Coast AQMD 1113 requires manufacturers, distributors, and end-users of architectural and industrial maintenance coatings to reduce ROG emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories. As such, the proposed project meets this consistency criterion.

As the proposed project would not result in a long-term impact on the region's ability to meet state and federal air quality standards (see Table 5.2-8), the proposed project's long-term influence would be consistent with the goals, objectives, and strategies of the South Coast AQMD's 2016 AQMP. Impacts would be less than significant.

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Impact 5.2-2: Construction and operational activities associated with the proposed project would not generate short-term or long-term emissions in exceedance of the South Coast AQMD's regional threshold criteria. [Thresholds AQ-2 and AQ-3]

Construction Activities

Regional Construction Significance

Construction-generated emissions are temporary and short-term but have the potential to represent a significant air quality impact. Three basic sources of short-term emissions would be generated through construction of the proposed project—operation of the construction vehicles (e.g., excavators, trenchers, dump trucks), the creation of fugitive dust during clearing and grading, and the use of asphalt or other oil-based substances during paving activities. Construction activities such as excavation and grading operations, construction vehicle traffic, and wind blowing over exposed soils would generate exhaust emissions and fugitive PM emissions that affect local air quality at various times during construction. Effects would be variable depending on the weather, soil conditions, the amount of activity taking place, and the nature of dust control effects. The dry climate of the area during the summer months creates a high potential for dust generation. Construction activities would be subject to SCAQMD Rule 403, which requires taking reasonable precautions to prevent the emissions of fugitive dust, such as using water or chemicals, where possible, for control of dust during the clearing of land and other construction activities.

Table 5.2-8, *Construction-Related Emissions (Regional Significance)*, shows the predicted maximum daily construction-generated emissions for the proposed project.

Table 5.2-8 Construction-Related Emissions (Regional Significance)

Construction Year	Pollutants (pounds per day)					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Construction Year One	1.33	12.50	14.46	0.02	2.67	1.50
South Coast AQMD Regional Significance Threshold	75	100	550	150	150	55
Exceed South Coast AQMD Regional Threshold?	No	No	No	No	No	No

Source: ECORP 2022

As shown in Table 5.2-8, emissions generated during project construction would not exceed the SCAQMD's regional thresholds of significance. Therefore, criteria pollutant emissions generated during project construction would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard, and no health effects from the proposed project criteria pollutants would occur.

Localized Construction Significance

The nearest sensitive receptors to the lighting improvements are the residences adjacent to the southern boundary of the campus where the baseball field is located. For this project, the appropriate SRA for the localized significance thresholds is the Central Orange County, SRA 17. LSTs apply to CO, NO₂, PM₁₀, and

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PM_{2.5}. The proposed project would disturb approximately one acre during construction. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. The nearest sensitive receptors to the construction activity as a result of the proposed project are the residences located directly adjacent to the proposed lighting improvements (<25 meters).² Table 5.9, *Construction-Related Emissions (Localized Significance)*, presents the results of localized emissions. The LSTs reflect a maximum disturbance of the entire site.

Table 5.2-9 Construction-Related Emissions (Localized Significance)

Activity	Pollutant (pounds per day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Site Preparation	6.93	3.95	0.46	0.25
Grading	12.00	5.93	2.58	1.47
Building Construction/Light Installation	7.02	7.15	0.37	0.34
Paving	5.08	6.34	0.26	0.24
Combined Total	31.03	23.37	3.67	2.30
<i>South Coast AQMD Localized Significance Threshold (1 acre of disturbance)</i>	81	485	4	3
Exceed South Coast AQMD Localized Threshold?	No	No	No	No

Source: ECORP 2022

Table 5.2-9 shows that the emissions of these pollutants on the peak day of construction would not result in significant concentrations of pollutants at nearby sensitive receptors. Therefore, significant impacts would not occur concerning LSTs during construction activities. Impacts would be less than significant.

Operational Activities

Regional Operational Significance

The proposed project would add competitive sports lighting to its athletic fields at La Quinta High School. No additional school sports programs would be added, and therefore, there would be no increase in student or staff population. The operational emissions would solely be generated from the lighting of the sports fields and would have a negligible contribution to existing conditions. The proposed project would not increase vehicle miles traveled in the City but could capture trips that now must travel to remote facilities due to the absence of lighted facilities at La Quinta High School. Therefore, by its very nature, the proposed project would not generate quantifiable criteria emissions from project operations. Impacts would be less than significant.

Localized Operational Significance

According to the South Coast AQMD localized significance threshold methodology, LSTs would apply to the operational phase of a proposed project only if the project includes stationary sources (e.g., smokestacks) or attracts heavy-duty trucks that may spend long periods queuing and idling at the site (e.g., warehouse or transfer

² The South Coast AQMD Methodology explicitly states, "It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters" (ECORP 2022).

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facilities). The proposed project does not include such uses. Therefore, in the case of the proposed project, the operational LST protocol is not applied. Impacts would be less than significant.

Impact 5.2-3: Construction and operation of the proposed project would not expose sensitive receptors to substantial pollutant concentrations. [Threshold AQ-3]

Sensitive receptors are designed as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses.

Construction-Generated Air Contaminants

Construction-related activities would result in temporary, short-term proposed project-generated emissions of diesel particulate matter (DPM), ROG, NO_x, CO, and PM₁₀ from the exhaust of off-road heavy-duty diesel equipment for site preparation (e.g., clearing, grading); soil hauling truck traffic; paving; and other miscellaneous activities. The portion of the SoCAB which encompasses the project area is designated as a nonattainment area for federal O₃ and PM_{2.5} standards and is also a nonattainment area for the state standards for O₃, PM_{2.5}, and PM₁₀ standards. Thus, existing O₃, PM₁₀, and PM_{2.5} levels in the SoCAB are at unhealthy levels during certain periods. However, as shown in Table 5.2-8 and Table 5.2-9, proposed project construction would not exceed the South Coast AQMD regional or localized significance thresholds for emissions. The proposed project construction would not result in a potentially significant contribution to regional concentrations of nonattainment pollutants and would not result in a significant contribution to the adverse health impacts associated with those pollutants. Impacts would be less than significant.

Operational Air Contaminants

Operation of the proposed project would not result in the development of any substantial sources of air toxics. There are no stationary sources associated with the operations of the proposed project; nor would the proposed project attract additional mobile sources that would spend long periods queuing and idling at the site. Onsite project emissions would not result in significant concentrations of pollutants at nearby sensitive receptors. Therefore, impacts would be less than significant.

Carbon Monoxide Hot Spots

It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when idling at intersections. Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Under certain meteorological conditions, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Given the high traffic volume potential, areas of high CO concentrations, or “hot spots,” are typically associated with intersections that are projected to operate at unacceptable levels of service during the peak commute hours. However, transport of this criteria pollutant is extremely limited, and CO disperses rapidly with distance from the source under normal meteorological conditions. Furthermore, vehicle emissions standards have become increasingly more stringent in the last 20 years.

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A CO “hot spot” would occur if an exceedance of the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm were to occur. The analysis prepared for CO attainment in the South Coast Air Quality Management District’s 1992 Federal Attainment Plan for Carbon Monoxide in Los Angeles County and a Modeling and Attainment Demonstration prepared by the SCAQMD as part of the 2003 AQMP can be used to demonstrate the potential for CO exceedances of these standards. The South Coast AQMD conducted a CO hot spot analysis as part of the 1992 CO Federal Attainment Plan at four busy intersections in Los Angeles County during the peak morning and afternoon time periods. The intersections evaluated included Long Beach Boulevard and Imperial Highway (Lynwood), Wilshire Boulevard and Veteran Avenue (Westwood), Sunset Boulevard and Highland Avenue (Hollywood), and La Cienega Boulevard and Century Boulevard (Inglewood). The busiest intersection evaluated was at Wilshire Boulevard and Veteran Avenue, which has a traffic volume of approximately 100,000 vehicles per day.

Despite this level of traffic, the CO analysis concluded that there was no violation of CO standards. To establish a more accurate record of baseline CO concentrations affecting the Los Angeles, a CO “hot spot” analysis was conducted in 2003 at the same four busy intersections in Los Angeles at the peak morning and afternoon time periods. This “hot spot” analysis did not predict any violation of CO standards. The highest one-hour concentration was measured at 4.6 ppm at Wilshire Boulevard and Veteran Avenue and the highest eight-hour concentration was measured at 8.4 ppm at Long Beach Boulevard and Imperial Highway. Thus, there was no violation of CO standards.

No additional school sports programs would be added with implementation of the proposed project, and therefore, the number of students and staff at the school would remain the same. Additionally, the proposed project could capture existing trips of community users that now must travel to remote facilities due to the absence of lighted facilities at La Quinta High School. As such, the number of community users or vehicle miles traveled in the City would not increase as a result of the proposed project. Lighting of the athletic facilities on campus would provide additional recreational sources for the local population. Therefore, the proposed project would not generate traffic volumes at any intersection of more than 100,000 vehicles per day, and there is no likelihood of the proposed project’s traffic exceeding CO values. Impacts would be less than significant.

Impact 5.2-4: The proposed project would not result in other emissions (such as those leading to odors) that would adversely affect a substantial number of people. [Threshold AQ-4]

The threshold for odor is if a project creates an odor nuisance pursuant to South Coast AQMD Rule 402, Nuisance, which states:

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

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operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch plants, chemical manufacturing, and food manufacturing facilities. The proposed project does not include any of these uses.

Construction activities could also generate odors from construction equipment, such as diesel exhaust, and from VOCs from architectural coatings and paving activities. However, these odors would be temporary, confined to the immediate vicinity of the construction equipment, and rapidly dissipate and be diluted by the atmosphere downwind of the emission sources. They are not expected to affect a substantial number of people. Therefore, impacts related to objectionable operational and construction-related odors would be less than significant.

5.2.4 Cumulative Impacts

In accordance with South Coast AQMD's methodology, any project that produces a significant project-level regional air quality impact in an area that is in nonattainment contributes to the cumulative impact. Consistent with the methodology, projects that do not exceed the regional significance thresholds or localized significance thresholds would not result in significant cumulative impacts. In addition, projects that do not exceed the cancer risk or chronic hazard thresholds based on the latest guidance from OEHHA (2015) would not result in significant cumulative impacts. Cumulative projects in the local area include new development and general growth in the project area. The greatest source of emissions in the SoCAB is mobile sources. Due to the extent of the area potentially impacted by cumulative emissions (i.e., the SoCAB), South Coast AQMD considers a project cumulatively significant when project-related emissions exceed the South Coast AQMD regional emissions thresholds or risk thresholds. The Garden Grove Unified School District plans to add competitive sports lighting to other comprehensive high schools in its District. The District's plan to add sports lighting to the other high schools in the District area would result in similar construction and operational impacts as the proposed project and would not exceed South Coast AQMD's significance thresholds. Therefore, the proposed project would not be cumulatively considerable.

5.2.5 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, all impacts would be less than significant.

5.2.6 Mitigation Measures

No mitigation measures are required.

5.2.7 Level of Significance After Mitigation

Impacts would be less than significant.

5.2.8 References

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5.3 CULTURAL AND PALEONTOLOGICAL RESOURCES

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the proposed Sports Facilities Lighting at La Quinta High School Project (proposed project) to impact cultural and paleontological resources at La Quinta High School. With the update of the CEQA Guidelines approved in December 2018, impacts to paleontological resources moved to the Geology and Soils section of the Appendix G checklist. However, geology and soils questions have been scoped out of the DEIR. Therefore, this DEIR analyzes paleontological resources as part of this section. See Chapter 8, *Impacts Found Not to Be Significant*, for an analysis of the project impacts to geology and soils.

Cultural resources consist of archaeological and historical resources. Paleontological resources are the fossilized remains of plants and animals. Archaeology is the branch of paleontology that studies human artifacts, such as places, objects, and settlements that reflect a group or individual religious, cultural, or everyday activities. Historical resources include sites, structures, objects, or places that are at least 50 years old and are significant for their engineering architecture, cultural use or association, etc. In California, historic resources cover human activities over the past 12,000 years. Cultural resources provide information on scientific progress, environmental adaptations, group ideology, or other human advancements.

5.3.1 Environmental Setting

5.3.1.1 REGULATORY BACKGROUND

Federal

National Historic Preservation Act

The National Historic Preservation Act of 1966 coordinates public and private efforts to identify, evaluate, and protect the nation's historic and archaeological resources. The act authorized the National Register of Historic Places, which lists districts, sites, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and culture.

Section 106 (Protection of Historic Properties) of the National Historic Preservation Act requires federal agencies to take into account the effects of their undertakings on historic properties. Section 106 Review ensures that historic properties are considered during federal project planning and implementation. The Advisory Council on Historic Preservation, an independent federal agency, administers the review process with assistance from state historic preservation offices.

National Register of Historic Places

The National Register of Historic Places (NRHP) is authorized by the National Historic Preservation Act of 1966 (Code of Federal Regulations, Title 36, Chapter I, Part 60). It is the nation's official list of buildings, structures, objects, sites, and districts worthy of preservation because of their significance in American history, architectures, archaeology, engineering, and culture. The NRHP recognizes resources of local, state, and national significance that have been documented and evaluated according to uniform standards and criteria.

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The NRHP is administered by the National Park Service. Properties are nominated to the NRHP by the State Historic Preservation Officer of the state in which the property is located, by the Federal Preservation Officer for properties under federal ownership or control, or by the Tribal Historic Preservation Officer if a property is on tribal lands.

To be eligible for listing in the National Register, a resource must meet at least one of the following criteria:

- A. Is associated with events that have made a significant contribution to the broad patterns of history.
- B. Is associated with the lives of persons in our past.
- C. Embodies the distinctive characteristics of a type, period, or method of construction; represents the work of a master; possesses high artistic values; or represents a significant and distinguishable entity whose components may lack individual distinction.
- D. Has yielded, or may be likely to yield, information important in prehistory or history.

A final critical component of eligibility is “integrity.” Integrity refers to the ability of a property to convey its significance and the degree to which the property retains the identity, including physical and visual attributes, for which it is significant under the four basic criteria. The NRHP criteria recognize seven aspects or qualities of integrity: location, design, setting, materials, workmanship, feeling, association.

Archaeological Resources Protection Act

The Archaeological Resources Protection Act of 1979 regulates the protection of archaeological resources and sites on federal and Indian lands.

Paleontological Resources Preservation Act

The Paleontological Resources Preservation Act was established in the Omnibus Public Land Management Act of 2009 and regulates the management, collection, and curation of paleontological resources from national forest systems’ lands.

Preservation of American Antiquities

The Federal Antiquities Act of 1906 was enacted with the primary goal of protecting cultural resources in the United States. It explicitly prohibits appropriation, excavation, injury, and destruction of any “historic or prehistoric ruin or monument, or any object of antiquity” on lands owned or controlled by the federal government without permission of the secretary of the federal department with jurisdiction. It also established criminal penalties for these acts, including fines and/or imprisonment. Neither the Antiquities Act itself nor its implementing regulations specifically mention paleontological resources. However, several federal agencies—including the National Park Service, the Bureau of Land Management, and the US Forest Service—have interpreted objects of antiquity to include fossils. Consequently, the Antiquities Act also represents an early cornerstone for efforts to protect the nation’s paleontological resources.

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Native American Graves Protection and Repatriation Act

NAGPRA is a federal law passed in 1990 that mandates museums and federal agencies to return certain Native American cultural items—such as human remains, funerary objects, sacred objects, or objects of cultural patrimony—to lineal descendants or culturally affiliated Indian tribes.

State

California Register of Historical Resources

The State Historical Resources Commission designed this program for state and local agencies, private groups, and citizens to identify, evaluate, register, and protect California's historical resources. The California Register of Historical Resources (CRHR) is the authoritative guide to the state's significant historical and archaeological resources.

The CRHR program encourages public recognition and protection of resources of architectural, historical, archaeological, and cultural significance; identifies historical resources for state and local planning purposes; determines eligibility for state historic preservation grant funding; and affords certain protections under CEQA.

To be eligible for listing in the CRHR, a resource must meet at least one of the following criteria:

- A. Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.
- B. Associated with the lives of person important to local, California or national history.
- C. Embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of a master or possesses high artistic values.
- D. Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation. (California Public Resources Code [PRC] Section 5024.1[c])

In addition to having significance, resources must have integrity for the period of significance. The period of significance is the date or span of time within which significant events transpired or significant individuals made their important contributions. Integrity is the authenticity of a historical resource's physical identity as evidenced by the survival of characteristics or historic fabric that existed during the resource's period of significance. Alterations to a resource or changes in its use over time may have historical, cultural, or architectural significance. In summary, resources must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the CRHR if, under Criterion D, it maintains the potential to yield significant scientific or historical information or specific data.

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California Public Resources Code

Archaeological, paleontological, and historical sites are protected under a wide variety of state policies and regulations in the California Public Resources Code. In addition, cultural and paleontological resources are recognized as nonrenewable resources and receive protection under the PRC and CEQA.

PRC Sections 5020 to 5029.5 continued the former Historical Landmarks Advisory Committee as the State Historical Resources Commission. The commission oversees the administration of the CRHR and is responsible for designating State Historical Landmarks and Historical Points of Interest.

PRC Sections 5079 to 5079.65 define the functions and duties of the Office of Historic Preservation, which administers federal- and state-mandated historic preservation programs in California as well as the California Heritage Fund.

PRC Sections 5097.9 to 5097.991 provide protection to Native American historical and cultural resources and sacred sites; identify the powers and duties of the Native American Heritage Commission; require that descendants be notified when Native American human remains are discovered; and provide for treatment and disposition of human remains and associated grave goods.

Local

City of Westminster General Plan

Community Design Element

The Community Design Element includes the following goals and policies related to cultural and paleontological resources:

- Goal CD-5: Cultural Resources. An understanding and acceptance of the City's ethnic diversities and preservation of the rich, historical context of Westminster's past.
 - Policy CD-5.3: Historic Resources. Evaluate of the condition of historical buildings, the costs of rehabilitation, and the feasibility of preservation or conservation alternatives when considering the demolition or movement of historic structures; when possible, encourage the adaptive re-use of the historic structure.
 - Policy CD-5.7: Paleontologic Resources. In order to protect paleontologic resources in the City, projects that would involve extensive grading or grading of large areas to depths of more than ten feet below grade, should be conditioned to immediately stop grading activities if paleontological or archaeological resources are encountered. At this point a qualified paleontologist approved by the City should be enlisted to investigate the resources and conduct a preliminary assessment to determine whether a paleontologic impact report will be required.

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City of Westminster Municipal Code

The duties and authority of the Design Review Board, as indicated in Section 17.600.020, Design Review Board, include the following:

1. **Residential.** The construction of a new residential project of 7 or more units or the addition to an existing residential project that would result in 7 or more units, or the demolition of one or more historic structure.
2. **Nonresidential.** Construction of a new building of 3,000 gross square feet of floor area or more, or the addition of 3,000 gross square feet or more to an existing building within a one-year period; exterior architectural modifications, including change in color or materials to a 3,000 gross square foot or larger building; wireless communication facilities not screened or designed as “stealth facilities;” demolition of historic structures; or redevelopment of a historic structure.
3. **Referral.** Any project that is referred to the Board by an approval authority.

5.3.1.2 EXISTING CONDITIONS

According to the Westminster General Plan, there are approximately 100 historical buildings in the City that are listed on the California Historical Resources Inventory. Additionally, the Westminster General Plan indicates that Westminster is home to very limited paleontological and archaeological resources. The City has no known archaeological resources. The project site is fully developed as a high school, and no known cultural or paleontological resources are known to exist on the project site.

5.3.2 Thresholds of Significance

CEQA Guidelines Section 15064.5 provides direction on determining significance of impacts to archaeological and historical resources. Generally, a resource shall be considered “historically significant” if the resource meets the criteria for listing on the CRHR:

- Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
- Is associated with the lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history. (PRC Section 5024.1; California Code of Regulations, Title 14, Section 4852)

The fact that a resource is not listed in the CRHR, not determined to be eligible for listing, or not included in a local register of historical resources does not preclude a lead agency from determining that it may be a historical resource.

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According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- C-1 Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.
- C-2 Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.
- C-3 Disturb any human remains, including those interred outside of dedicated cemeteries.
- C-4 Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

5.3.3 Environmental Impacts

5.3.3.1 IMPACT ANALYSIS

Impact 5.3-1: Development of the proposed project would not impact an identified historic resource. [Threshold C-1]

The proposed sports lighting would be installed at the existing athletic facilities at the high school. La Quinta High School is not listed as historical resources in the National Register of Historic Places, California Historical Landmarks and Points of Historical Interest, or State Historic Structures, and the proposed project would not demolish any structures that can potentially meet any of the criteria listed above (NPS 2022; OHP 2022). Therefore, there are no resources on the project site that would be considered “historically significant.” No impact to historical resources would occur.

Impact 5.3-2: Development of the proposed project could impact archaeological resources. [Threshold C-2]

Implementation of the proposed project would result in limited soil disturbance to install light poles and utilities. Augers would be used to drill holes to install light poles within the existing sports facilities. No grading or excavation would be required. The proposed project would occur within the existing high school boundaries that have already been developed with various buildings and athletic facilities; therefore, the potential discovery of archaeological resources would be minimal. However, if any buried resources are unearthed during any of the ground-disturbing activities, a custom caution and a halt-work would be required to ensure that adverse impacts to archaeological resources do not occur. Impacts would be potentially significant.

Impact 5.3-3: Grading activities could potentially disturb human remains, but compliance with existing regulations would ensure that impacts are less than significant. [Threshold C-3]

The proposed project would not require grading or excavation. Augers would be used to drill holes to install light poles within the existing sports facilities. In the unlikely event that human remains are uncovered during project construction, Government Code Sections 27460 et seq. mandates that there shall be no further

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excavation or soil disturbance until the county coroner has determined that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner, and cause of death, and the required recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in PRC Section 5097.98.

Pursuant to California Health and Safety Code Section 7050.5, the coroner shall make his or her determination within two working days of notification of the discovery of the human remains. If the coroner determines that the remains are not subject to his or her authority and has reason to believe that they are those of a Native American, he or she shall contact the Native American Heritage Commission within 24 hours. Compliance with existing regulations would ensure that impacts to human remains would be less than significant.

Impact 5.3-4: Development of the proposed project could impact paleontological resources or unique geologic features. [Threshold C-4]

La Quinta High School is anticipated to be underlain by Young Alluvial Fan Deposits (Qyf) from Holocene to Late Pleistocene (DOC 2022). These younger Quaternary deposits typically do not contain significant fossils. Additionally, implementation of the proposed project would not require grading or excavation, and no unique geologic features would be impacted. However, soil borings to characterize soil types at the high school were not conducted, and the type of soils underlying the site have not been confirmed. Therefore, the potential for discovering paleontological resources. Impacts would be potentially significant.

5.3.4 Cumulative Impacts

Other projects in the region could demolish or otherwise alter historical, archaeological, and paleontological resources. Other projects would be required to comply with CEQA Guidelines Section 15064.5, which requires the lead agency to determine if discovered resources are unique or historically significant, and if so, to avoid or mitigate impacts to such resources in accordance with the provisions of PRC Section 21083.2. The project would not result in a cumulatively considerable impact to cultural or paleontological resources.

5.3.5 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, some impacts would be less than significant: 5.3-1 and 5.3-3.

Without mitigation, these impacts would be **potentially significant**:

- **Impact 5.3-2** Development of the project could result in the discovery of subsurface archaeological resources.
- **Impact 5.3-4** Development of the project could result in the discovery of paleontological resources.

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5.3.6 Mitigation Measures

Impact 5.3-2

CUL-1 If cultural resources are encountered during ground-disturbing activities, work in the immediate area shall cease, and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) shall be contacted immediately to evaluate the find(s). If the discovery proves to be significant under CEQA, additional work such as data recovery excavation may be warranted and will be reported to the Garden Grove Unified School District.

Impact 5.3-4

CUL-2 A qualified paleontologist shall be on call in the event that paleontological resources are found during ground-disturbing activities. The paleontologist shall be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediments that are likely to contain the remains of small fossils. The paleontologist shall be empowered to temporarily halt or divert equipment to allow for the removal of abundant or large specimens in a timely manner.

5.3.7 Level of Significance After Mitigation

Upon implementation of Mitigation Measure CUL-1 and Mitigation Measure CUL-2, impacts would be less than significant.

5.3.8 References

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CULTURAL AND PALEONTOLOGICAL RESOURCES

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5.4 ENERGY

This section of the Draft Environmental Impact Report (DEIR) evaluates the Sports Facilities Lighting at La Quinta High School Project's (proposed project's) anticipated energy needs, impacts, and conservation measures. Information found herein, as well as other aspects of the proposed project's energy implications, are discussed in Chapter 3, *Project Description*, Section 5.2, *Air Quality*, and Section 5.5, *Greenhouse Gas Emissions*.

5.4.1 Environmental Setting

5.4.1.1 REGULATORY BACKGROUND

Federal, state, and local laws, regulations, plans, or guidelines related to energy that are applicable to the proposed project are summarized in this section.

Federal

Federal Energy Policy and Conservation Act

The Energy Policy and Conservation Act of 1975 was established in response to the 1973 oil crisis. The act created the Strategic Petroleum Reserve, established vehicle fuel economy standards, and prohibited the export of U.S. crude oil (with a few limited exceptions). It also created Corporate Average Fuel Economy (CAFE) standards for passenger cars starting in model year 1978. The CAFE standards are updated periodically to account for changes in vehicle technologies, driver behavior, and/or driving conditions.

The federal government issued new CAFE standards in 2012 for model years 2017 to 2025 that required a fleet average of 54.5 miles per gallon (mpg) for model year 2025. However, on March 30, 2020, the United States Environmental Protection Agency (EPA) finalized an updated CAFE and greenhouse gas (GHG) emissions standards for passenger cars and light trucks and established new standards, covering model years 2021 through 2026, known as the Safer Affordable Fuel Efficient (SAFE) Vehicles Final Rule for Model Years 2021 through 2026. Under SAFE, the fuel economy standards will increase 1.5 percent per year compared to the 5 percent per year under the CAFE standards established in 2012. Overall, SAFE requires a fleet average of 40.4 mpg for model year 2026 vehicles (SAFE 2020). However, per Executive Order 13990 issued by President Biden on January 20, 2021, the EPA is reconsidering SAFE for the purpose of rescinding the rule. The reconsideration process is ongoing. A planned public hearing occurred on June 2, 2021, which also started the public comment period that ended on July 6, 2021.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (Public Law 110-140) seeks to provide the nation with greater energy independence and security by increasing the production of clean renewable fuels; improving vehicle fuel economy; and increasing the efficiency of products, buildings, and vehicles. It also seeks to improve the energy performance of the federal government. The act sets increased CAFE standards; the renewable fuel standard; appliance energy-efficiency standards; building energy-efficiency standards; and accelerated research and development tasks on renewable energy sources (e.g., solar energy, geothermal

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energy, and marine and hydrokinetic renewable energy technologies), carbon capture, and sequestration (US EPA 2019).

State

Warren-Alquist Act

Established in 1974, the Warren-Alquist Act created the California Energy Commission (CEC) in response to the energy crisis of the early 1970s and the state's unsustainable growing demand for energy resources. The CEC's core responsibilities include advancing State energy policy, encouraging energy efficiency, certifying thermal power plants, investing in energy innovation, developing renewable energy, transforming transportation, and preparing for energy emergencies. The Warren-Alquist Act is updated annually to address current energy needs and issues, and its latest edition was in January 2020.

Renewables Portfolio Standard

The California Renewables Portfolio Standard (RPS) was established in 2002 under Senate Bill (SB) 1078 and was amended in 2006, 2011, and 2018. The RPS program requires investor-owned utilities, electric service providers, and community choice aggregators to increase the use of eligible renewable energy resources to 33 percent of total procurement by 2020. The California Public Utilities Commission (CPUC) is required to provide quarterly progress reports on progress toward RPS goals. This has accelerated the development of renewable energy projects throughout the state. Per the 2020 annual report, the three largest retail energy utilities—Pacific Gas and Electric, Southern California Edison, and San Diego Gas & Electric—provided 31, 38, and 39 percent, respectively, of their supplies from renewable energy sources (CPUC 2020). Since 2003, these three utilities have contracted over 21,000 megawatts (MW) of renewable capacity (CPUC 2020).¹ SB 350 (de Leon) was signed into law September 2015 and established tiered increases to the RPS—40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. SB 350 also set a new goal to double the energy-efficiency savings in electricity and natural gas through energy efficiency and conservation measures. SB 100 (de Leon) passed in 2018 puts California on the path to 100-percent fossil-fuel-free electricity by the year 2045 (CEC 2017a).

Senate Bill 350

SB 350 (de Leon) was signed into law September 2015 and established tiered increases to the RPS—40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. SB 350 also set a new goal to double the energy-efficiency savings in electricity and natural gas through energy efficiency and conservation measures.

Senate Bill 100

On September 10, 2018, SB 100 was signed, replacing the SB 350 requirements. Under SB 100, the RPS for publicly owned facilities and retail sellers will consist of 44-percent renewable energy by 2024, 52 percent by 2027, and 60 percent by 2030. SB 100 also established a new RPS requirement of 50 percent by 2026.

¹ Renewable capacity is defined as the maximum power-generating capacity of power plants that use renewable energy sources to produce electricity.

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Furthermore, the bill established an overall State policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045. Under the bill, the State cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100-percent carbon-free electricity target.

Appliance Efficiency Regulations

California's Appliance Efficiency Regulations (California Code of Regulations [CCR] Title 20, Parts 1600–1608) contain energy performance, energy design, water performance, and water design standards for appliances (including refrigerators, ice makers, vending machines, freezers, water heaters, fans, boilers, washing machines, dryers, air conditioners, pool equipment, and plumbing fittings) that are sold or offered for sale in California. These standards are updated regularly to allow consideration of new energy-efficiency technologies and methods (CEC 2017b).

Title 24, Part 6, Energy-Efficiency Standards

Energy conservation standards for new residential and non-residential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the CEC) in June 1977 and most recently revised in 2019 (CCR Title 24, Part 6). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy-efficiency technologies and methods. The 2019 Building Energy-Efficiency Standards, which were adopted on May 9, 2018, went into effect January 1, 2020.

The 2019 standards focus on four key areas: (1) smart residential photovoltaic systems; (2) updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa); (3) residential and nonresidential ventilation requirements; and (4) nonresidential lighting requirements (CEC 2018).

Title 24, Part 11, Green Building Standards

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards—CALGreen (CCR Title 24, Part 11)—as part of the California Building Standards Code. It includes mandatory requirements for new residential and nonresidential buildings throughout California. CALGreen is intended to (1) reduce GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the governor. The mandatory provisions of CALGreen became effective January 1, 2011 and were last updated in 2019. The 2019 CALGreen update became effective on January 1, 2020.

Overall, CALGreen is established to reduce construction waste, make buildings more efficient in the use of materials and energy, and reduce environmental impacts during and after construction. CALGreen has requirements for construction site selection, stormwater control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation conservation, and more. The code provides for design options allowing the designer to determine how best

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to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for verifying that all building systems (e.g., heating and cooling equipment and lighting systems) are functioning at their maximum efficiency (CBSC 2019). On August 11, 2021, the CEC adopted the 2022 Energy Code, which will be presented to the California Building Standards Commission for approval into the California Building Standards Code in December 2021. The 2022 Building Energy Efficiency Standards (Energy Code) would improve upon the 2019 Energy Code for new construction of and additions and alterations to residential and nonresidential buildings. If approved, the 2022 Energy Code will go into effect on January 1, 2023.

5.4.1.2 EXISTING CONDITIONS

Electricity

Electricity is quantified using kilowatts (kW) and kilowatt-hours (kWh). A kW is a measure of 1,000 watts of electrical power and a kWh is a measure of electrical energy equivalent to a power consumption of 1,000 watts for one hour. The kWh is commonly used as a billing unit for energy delivered to consumers by electric utilities. According to the CEC's "Tracking Progress" regarding statewide energy demand, total electric energy usage in California was 279,402 gigawatt hours in 2019 (CEC 2021a). A gigawatt is equal to one billion (10⁹) watts or 1,000 megawatts (1 megawatt = 1,000 kW).

The electricity supply for the project site is provided by Southern California Edison (SCE). Total electricity consumption in SCE's service area in gigawatt-hours (GWh) was 105,162 GWh in 2019 (CEC 2021a). Sources of electricity sold by SCE in 2019, the latest year for which data are available, were:

- 35 percent renewable, consisting mostly of solar and wind
- 8 percent large hydroelectric
- 16 percent natural gas
- 8 percent nuclear
- 42 percent unspecified sources, that is, not traceable to specific sources (SCE 2020)

Operation of the existing high school consumes electricity for various purposes, including, but not limited to, operation of electrical systems, lightings, and use of on-site equipment and appliances.

Natural Gas

Gas is typically quantified using the "therm," which is a unit of heat energy equal to 100,000 British thermal units (BTU) and is the energy equivalent of burning 100 cubic feet of natural gas. The Southern California Gas Company (SoCalGas) provides natural gas to the project site. SoCalGas' service area spans much of the southern half of California, from Imperial County on the southeast to San Luis Obispo County on the northwest, to part of Fresno County on the north to Riverside County, and most of San Bernardino County on the east (CEC 2021b). Total natural gas supplies available to SoCalGas for years 2020 through 2022 are 3.175 billion cubic feet per day. Total natural gas consumption in SoCalGas' service area is forecast to be 2.103 billion cubic feet per day in 2035 (SoCalGas 2020). The existing sport fields, including football field and track and field, do not require use of natural gas.

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5.4.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- E-1 Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.
- E-2 Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

5.4.3 Environmental Impacts

Impact 5.4-1: The proposed project would not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. [Threshold E-1]

Short-Term Construction Impacts

Construction of the proposed project would create a temporary increase in demand for electricity and vehicle fuels compared to existing conditions and would result in short-term transportation-related energy use.

Electrical Energy

Electricity use during construction of the proposed project would vary during different phases of construction. Light pole installation could result in the use of electricity-powered equipment, but mostly construction equipment is anticipated to be gasoline- or diesel-powered. Therefore, electricity usage during construction activities would be minimal, and project-related construction activities would not result in wasteful or unnecessary electricity demands. Impacts would be less than significant.

Natural Gas Energy

It is not anticipated that construction equipment used for the proposed project would be powered by natural gas, and no natural gas demand is anticipated during construction. No impact with respect to wasteful natural gas usage would occur.

Transportation Energy

Transportation energy use during construction of the 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 equipment. It is anticipated that most of the off-road construction equipment, such as is used during demolition and site preparation, would be gasoline or diesel powered. The use of energy resources by these vehicles would fluctuate according to the phase of construction.

To limit wasteful and unnecessary energy consumption, the construction contractors are anticipated to minimize nonessential idling of construction equipment during construction, in accordance with 13 California Code of Regulations (CCR) Section 2449. In addition, construction trips would not result in

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unnecessary use of energy since the school is 1.75-mile east of I-405 which provides a direct route from various areas of the region. Furthermore, electrical energy would be available for use during construction from existing power lines and connections, precluding the use of less efficient generators. All construction equipment would cease operating upon completion of project construction. Thus, energy use during construction of the proposed project would not be considered inefficient, wasteful, or unnecessary. Impacts would be less than significant.

Long-Term Impacts During Operation

Operation of the proposed project would generate additional demand for electricity for the new sports facilities lighting surrounding the stadium.

Transportation Energy and Natural Gas Energy

The proposed project would not result in new sport programs or community events or increase students and staff to generate new trips that would consume additional transportation energy or natural gas energy. The proposed project could have the potential to capture trips that now must travel to remote facilities due to the absence of lighted facilities at La Quinta High School. Energy consumption related to natural gas and transportation would be less than significant.

Electrical Energy

Operation would consume electricity to power the proposed light poles. Electrical service to the proposed project would be provided by Southern California Edison (SCE) through connections to existing off-site electrical lines and new on-site infrastructure.

Though the proposed project would increase electricity demand, lights would be limited to after sunset which would occur at 4:45 pm or 5:50 pm November to February, 7 pm March to October, and 8 pm from June to July. However, all student athletic activities are scheduled to end by 6:30 pm.

Community use of these lighted facilities may occur when not scheduled for student use. While District policy on community use has not yet been established, it is assumed for this analysis that such use may continue as late as 9 pm. The proposed lights are programmable, meaning they will be on only when scheduled for use and dimmed when appropriate. Therefore, operation of the proposed project would not result in wasteful or unnecessary electricity demands and would not result in a significant impact related to electricity.

Impact 5.4-2: The proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. [Threshold E-2]

The following discusses consistency of the proposed project with state plans pertaining to renewable energy and energy efficiency.

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California Renewables Portfolio Standard

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. Executive Order S-14-08, signed in November 2008, expanded the state's renewable portfolios standard (RPS) to 33 percent renewable power by 2020. This standard was adopted by the legislature in 2011 (SB X1-2). SB 350 (de Leon) was signed into law September 2015 and establishes tiered increases to the RPS—40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. SB 350 also set a new goal to double the energy-efficiency savings in electricity and natural gas through energy efficiency and conservation measures. In 2018, Governor Brown signed SB 100, which supersedes the SB 350 requirements. The RPS for publicly owned facilities and retail sellers now consists of 44 percent renewable energy by 2024, 52 percent by 2027, and 60 percent by 2030. Additionally, SB 100 established a new RPS requirement of 50 percent by 2026. The bill also established a state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045. Under SB 100 the state cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

The statewide RPS goal is not directly applicable to individual development projects, but to utilities and energy providers such as SCE, which is the utility that would provide all of electricity needs for the proposed project. Therefore, implementation of the proposed project would not conflict or obstruct plans for renewable energy and energy efficiency, and no impact would occur.

5.4.4 Cumulative Impacts

The area considered for cumulative impacts to electricity is the service area of SCE. Other projects would generate increased electricity demands. However, all projects in the SCE service area would be required to comply with the Building Energy-Efficiency Standards and CALGreen, which would contribute to minimizing wasteful energy consumption and promoting renewable energy sources. Therefore, cumulative impacts would be less than significant, and proposed project impacts would not be cumulatively considerable.

5.4.5 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, all impacts would be less than significant.

5.4.6 Mitigation Measures

No mitigation measures are required.

5.4.7 Level of Significance After Mitigation

Impacts would be less than significant.

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5.4.8 References

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5.5 GREENHOUSE GAS EMISSIONS

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Sports Facilities Lighting at La Quinta High School Project (proposed project) to cumulatively contribute to greenhouse gas (GHG) emissions impacts. Because no single project is large enough to result in a measurable increase in global concentrations of GHG, climate change impacts of a project are considered on a cumulative basis.

Greenhouse gas emissions modeling is included in Appendix B, *Air Quality and Greenhouse Gas Emissions Assessment*, of this DEIR. The modeling shown in Appendix B was performed for Rancho Alamitos High School, another high school within the District that would also include sports facilities lighting on its campus. As both projects would result in similar levels of construction and operations, the modeling is applicable to the proposed project at La Quinta High School.

5.5.1 Environmental Setting

Terminology

The following are definitions for terms used throughout this section.

- **Greenhouse gases (GHG).** Gases in the atmosphere that absorb infrared light, thereby retaining heat in the atmosphere and contributing to a greenhouse effect.
- **Global warming potential (GWP).** Metric used to describe how much heat a molecule of a greenhouse gas absorbs relative to a molecule of carbon dioxide (CO₂) over a given period of time (20, 100, and 500 years). CO₂ has a GWP of 1.
- **Carbon-dioxide equivalent (CO₂e).** The standard unit to measure the amount of greenhouse gases in terms of the amount of CO₂ that would cause the same amount of warming. CO₂e is based on the GWP ratios between the various GHGs relative to CO₂.
- **MTCO₂e.** Metric ton of CO₂e.
- **MMTCO₂e.** Million metric tons of CO₂e.

Scientists have concluded that human activities are contributing to global climate change by adding large amounts of heat-trapping gases, known as GHG, to the atmosphere. Climate change is the variation of Earth's climate over time, whether due to natural variability or as a result of human activities. The primary source of these GHG is fossil fuel use. The Intergovernmental Panel on Climate Change (IPCC) has identified four major GHG—water vapor,¹ carbon (CO₂), methane (CH₄), and ozone (O₃)—that are the likely cause of an increase in global average temperatures observed within the 20th and 21st centuries. Other GHG identified by the IPCC that contribute to global warming to a lesser extent include nitrous oxide (N₂O), sulfur

¹ Water vapor (H₂O) is the strongest GHG and the most variable in its phases (vapor, cloud droplets, ice crystals). However, water vapor is not considered a pollutant, but part of the feedback loop rather than a primary cause of change.

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hexafluoride (SF_6), hydrofluorocarbons, perfluorocarbons, and chlorofluorocarbons (IPCC 2001).² The major GHG applicable to the proposed project are briefly described below.

- **Carbon dioxide (CO_2)** enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and respiration, and also as a result of other chemical reactions (e.g. manufacture of cement). Carbon dioxide is removed from the atmosphere (sequestered) when it is absorbed by plants as part of the biological carbon cycle.
- **Methane (CH_4)** is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and from the decay of organic waste in municipal landfills and water treatment facilities.
- **Nitrous oxide (N_2O)** is emitted during agricultural and industrial activities as well as during combustion of fossil fuels and solid waste.
- **Fluorinated gases** are synthetic, strong GHGs that are emitted from a variety of industrial processes. Fluorinated gases are sometimes used as substitutes for ozone-depleting substances. These gases are typically emitted in smaller quantities, but because they are potent GHGs, they are sometimes referred to as high global-warming-potential (GWP) gases.
 - **Chlorofluorocarbons (CFCs)** are GHGs covered under the 1987 Montreal Protocol and used for refrigeration, air conditioning, packaging, insulation, solvents, or aerosol propellants. Since they are not destroyed in the lower atmosphere (troposphere, stratosphere), CFCs drift into the upper atmosphere where, given suitable conditions, they break down ozone. These gases are also ozone-depleting gases and are therefore being replaced by other compounds that are GHGs covered under the Kyoto Protocol.
 - **Perfluorocarbons (PFCs)** are a group of human-made chemicals composed of carbon and fluorine only. These chemicals (predominantly perfluoromethane [CF_4] and perfluoroethane [C_2F_6]) were introduced as alternatives, along with HFCs, to the ozone-depleting substances. In addition, PFCs are emitted as by-products of industrial processes and are used in manufacturing. PFCs do not harm the stratospheric ozone layer, but they have a high global warming potential.
 - **Sulfur Hexafluoride (SF_6)** is a colorless gas soluble in alcohol and ether, slightly soluble in water. SF_6 is a strong GHG used primarily in electrical transmission and distribution systems as an insulator.

² Black carbon contributes to climate change both directly, by absorbing sunlight, and indirectly, by depositing on snow (making it melt faster) and by interacting with clouds and affecting cloud formation. Black carbon is the most strongly light-absorbing component of particulate matter (PM) emitted from burning fuels such as coal, diesel, and biomass. Reducing black carbon emissions globally can have immediate economic, climate, and public health benefits. California has been an international leader in reducing emissions of black carbon, with close to 95 percent control expected by 2020 due to existing programs that target reducing PM from diesel engines and burning activities (CARB 2017a). However, state and national GHG inventories do not yet include black carbon due to ongoing work resolving the precise global warming potential of black carbon. Guidance for CEQA documents does not yet include black carbon.

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- **Hydrochlorofluorocarbons (HCFCs)** contain hydrogen, fluorine, chlorine, and carbon atoms. Although ozone-depleting substances, they are less potent at destroying stratospheric ozone than CFCs. They have been introduced as temporary replacements for CFCs and are also GHGs.
- **Hydrofluorocarbons (HFCs)** contain only hydrogen, fluorine, and carbon atoms. They were introduced as alternatives to ozone-depleting substances to serve many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are also used in manufacturing. They do not significantly deplete the stratospheric ozone layer, but they are strong GHGs (IPCC 2001).

GHGs are dependent on the lifetime or persistence of the gas molecule in the atmosphere. Some GHGs have stronger greenhouse effects than others. These are referred to as high GWP gases. The GWP of GHG emissions are shown in Table 5.5-1, *GHGs and Their Relative Global Warming Potential Compared to CO₂*. The GWP is used to convert GHGs to CO₂-equivalence (CO₂e) to show the relative potential that different GHGs have to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. For example, under IPCC's Fourth Assessment Report (AR4) GWP values for CH₄, a project that generates 10 metric tons (MT) of CH₄ would be equivalent to 250 MT of CO₂ (IPCC 2007).

Table 5.5-1 GHGs and Their Relative Global Warming Potential Compared to CO₂

GHGs	Second Assessment Report (SAR) Global Warming Potential Relative to CO ₂ ²	Fourth Assessment Report (AR4) Global Warming Potential Relative to CO ₂ ^{2,3}	Fifth Assessment Report (AR5) Global Warming Potential Relative to CO ₂ ²
Carbon Dioxide (CO ₂)	1	1	1
Methane (CH ₄) ¹	21	25	28
Nitrous Oxide (N ₂ O)	310	298	265

Source: IPCC 1995, 2007, 2013.

Notes:

¹ The methane GWP includes direct effects and indirect effects due to the production of tropospheric ozone and stratospheric water vapor. The indirect effect due to the production of CO₂ is not included.

² Based on 100-year time horizon of the GWP of the air pollutant compared to CO₂.

³ The GWP values in the IPCC's Fifth Assessment Report (IPCC 2013) reflect new information on atmospheric lifetimes of GHGs and an improved calculation of the radiative forcing of CO₂. However, the AR4 GWP values were used to maintain consistency in statewide GHG emissions modeling. In addition, the 2017 Scoping Plan Update was based on the AR4 GWP values.

Human Influence on Climate Change

For approximately 1,000 years before the Industrial Revolution, the amount of GHGs in the atmosphere remained relatively constant. During the 20th century, however, scientists observed a rapid change in the climate and the quantity of climate change pollutants in the Earth's atmosphere that is attributable to human activities. The amount of CO₂ in the atmosphere has increased by more than 35 percent since preindustrial times and has increased at an average rate of 1.4 parts per million per year since 1960, mainly due to combustion of fossil fuels and deforestation (IPCC 2007). These recent changes in the quantity and concentration of climate change pollutants far exceed the extremes of the ice ages, and the global mean temperature is warming at a rate that cannot be explained by natural causes alone. Human activities are directly altering the chemical composition of the atmosphere through the buildup of climate change pollutants (CAT 2006). In the past, gradual changes in the earth's temperature changed the distribution of

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species, availability of water, etc. However, human activities are accelerating this process so that environmental impacts associated with climate change no longer occur in a geologic time frame but within a human lifetime (IPCC 2007).

Like the variability in the projections of the expected increase in global surface temperatures, the environmental consequences of gradual changes in the Earth's temperature are hard to predict. Projections of climate change depend heavily on future human activity. Therefore, climate models are based on different emission scenarios that account for historical trends in emissions and on observations of the climate record that assess the human influence of the trend and projections for extreme weather events. Climate-change scenarios are affected by varying degrees of uncertainty. For example, there are varying degrees of certainty on the magnitude of the trends for:

- Warmer and fewer cold days and nights over most land areas.
- Warmer and more frequent hot days and nights over most land areas.
- An increase in the frequency of warm spells and heat waves over most land areas.
- An increase in frequency of heavy precipitation events (or proportion of total rainfall from heavy falls) over most areas.
- Larger areas affected by drought.
- Intense tropical cyclone activity increases.
- Increased incidence of extreme high sea level (excluding tsunamis).

Potential Climate Change Impacts for California

Observed changes over the last several decades across the western United States reveal clear signs of climate change. Statewide, average temperatures increased by about 1.7°F from 1895 to 2011, and warming has been greatest in the Sierra Nevada (CCCC 2012). The years from 2014 through 2016 showed unprecedented temperatures, with 2014 being the warmest (OEHHA 2018). By 2050, California is projected to warm by approximately 2.7°F above 2000 averages, a threefold increase in the rate of warming over the last century. By 2100, average temperatures could increase by 4.1 to 8.6°F, depending on emissions levels (CCCC 2012).

In California and western North America, observations of the climate have shown: 1) a trend toward warmer winter and spring temperatures; 2) a smaller fraction of precipitation falling as snow; 3) a decrease in the amount of spring snow accumulation in the lower and middle elevation mountain zones; 4) advanced shift in the timing of snowmelt of 5 to 30 days earlier in the spring; and 5) a similar shift (5 to 30 days earlier) in the timing of spring flower blooms (CAT 2006). Overall, California has become drier over time, with five of the eight years of severe to extreme drought occurring between 2007 and 2016, and with unprecedented dry years in 2014 and 2015 (OEHHA 2018). Statewide precipitation has become increasingly variable from year to year, with the driest consecutive four years occurring from 2012 to 2015 (OEHHA 2018). According to the California Climate Action Team—a committee of state agency secretaries and the heads of agencies, boards,

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and departments, led by the Secretary of the California Environmental Protection Agency—even if actions could be taken to immediately curtail climate change emissions, the potency of emissions that have already built up, their long atmospheric lifetimes (see Table 5.5-1), and the inertia of the Earth's climate system could produce as much as 0.6°C (1.1°F) of additional warming. Consequently, some impacts from climate change are now considered unavoidable. Global climate change risks to California are shown in Table 5.5-2, *Summary of GHG Emissions Risks to California*, and include impacts to public health, water resources, agriculture, coastal sea level, forest and biological resources, and energy.

Table 5.5-2 Summary of GHG Emissions Risks to California

Impact Category	Potential Risk
Public Health Impacts	Heat waves will be more frequent, hotter, and longer Fewer extremely cold nights Poor air quality made worse Higher temperatures increase ground-level ozone levels
Water Resources Impacts	Decreasing Sierra Nevada snow pack Challenges in securing adequate water supply Potential reduction in hydropower Loss of winter recreation
Agricultural Impacts	Increasing temperature Increasing threats from pests and pathogens Expanded ranges of agricultural weeds Declining productivity Irregular blooms and harvests
Coastal Sea Level Impacts	Accelerated sea level rise Increasing coastal floods Shrinking beaches Worsened impacts on infrastructure
Forest and Biological Resource Impacts	Increased risk and severity of wildfires Lengthening of the wildfire season Movement of forest areas Conversion of forest to grassland Declining forest productivity Increasing threats from pest and pathogens Shifting vegetation and species distribution Altered timing of migration and mating habits Loss of sensitive or slow-moving species
Energy Demand Impacts	Potential reduction in hydropower Increased energy demand

Sources: CEC 2006, 2009; CCCC 2012; CNRA 2014.

5.5.1.1 REGULATORY BACKGROUND

Federal, state, and local laws, regulations, plans, or guidelines related to greenhouse gases that are applicable to the proposed project are summarized in this section.

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Federal

United State Environmental Protection Agency

The US Environmental Protection Agency (EPA) announced on December 7, 2009, that GHG emissions threaten the public health and welfare of the American people and that GHG emissions from on-road vehicles contribute to that threat. The EPA's final findings responded to the 2007 US Supreme Court decision that GHG emissions fit within the Clean Air Act definition of air pollutants. The findings did not in and of themselves impose any emission reduction requirements but allowed the EPA to finalize the GHG standards proposed in 2009 for new light-duty vehicles as part of the joint rulemaking with the Department of Transportation (USEPA 2009).

To regulate GHGs from passenger vehicles, the EPA was required to issue an endangerment finding. The finding identifies emissions of six key GHGs—CO₂, CH₄, N₂O, hydrofluorocarbons, perfluorocarbons, and SF₆—that have been the subject of scrutiny and intense analysis for decades by scientists in the United States and around the world. The first three are applicable to the project's GHG emissions inventory because they constitute the majority of GHG emissions; and, per South Coast AQMD guidance, are the GHG emissions that should be evaluated as part of a project's GHG emissions inventory.

State

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in Executive Order S-03-05, Executive Order B-30-15, Assembly Bill (AB) 32, Senate Bill (SB) 32, and SB 375.

Executive Order S-03-05

Executive Order S-03-05, signed June 1, 2005, set the following GHG reduction targets for the state:

- 2000 levels by 2010
- 1990 levels by 2020
- 80 percent below 1990 levels by 2050

Assembly Bill 32, the Global Warming Solutions Act (2006)

Current State of California guidance and targets for reductions in GHG emissions are generally embodied in AB 32. AB 32 was passed by the California state legislature on August 31, 2006, to place the state on a course toward reducing its contribution of GHG emissions. AB 32 follows the 2020 tier of emissions reduction goals established in Executive Order S-03-05.

CARB 2008 Scoping Plan

The first Scoping Plan was adopted by the California Air Resources Board (CARB) on December 11, 2008. The 2008 Scoping Plan identified that GHG emissions in California were anticipated to be 596 MMTCO₂e in 2020. In December 2007, CARB approved a 2020 emissions limit of 427 MMTCO₂e for the state (CARB 2008). To effectively implement the emissions cap, AB 32 directed CARB to establish a mandatory reporting system to track and monitor GHG emissions levels for large stationary sources that generate more than 25,000 MTCO₂e

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per year, prepare a plan demonstrating how the 2020 deadline could be met, and develop appropriate regulations and programs to implement the plan by 2012.

Executive Order B-30-15

Executive Order B-30-15, signed April 29, 2015, sets a goal of reducing GHG emissions in the state to 40 percent below 1990 levels by year 2030. Executive Order B-30-15 also directed CARB to update the Scoping Plan to quantify the 2030 GHG reduction goal for the state and requires state agencies to implement measures to meet the interim 2030 goal as well as the long-term goal for 2050 in Executive Order S-03-05. It also requires the Natural Resources Agency to conduct triennial updates of the California adaptation strategy, “Safeguarding California,” in order to ensure climate change is accounted for in state planning and investment decisions.

Senate Bill 32 and Assembly Bill 197

In September 2016, Governor Brown signed SB 32 and AB 197, making the Executive Order goal for year 2030 into a statewide, mandated legislative target. AB 197 established a joint legislative committee on climate change policies and requires the CARB to prioritize direct emissions reductions rather than the market-based cap-and-trade program for large stationary, mobile, and other sources.

2017 Climate Change Scoping Plan

Executive Order B-30-15 and SB 32 required CARB to prepare another update to the Scoping Plan to address the 2030 target for the state. On December 24, 2017, CARB approved the 2017 Climate Change Scoping Plan Update, which outlines potential regulations and programs, including strategies consistent with AB 197 requirements, to achieve the 2030 target. The 2017 Scoping Plan establishes a new emissions limit of 260 MMTCO₂e for the year 2030, which corresponds to a 40 percent decrease in 1990 levels by 2030 (CARB 2017b).

California’s climate strategy will require contributions from all sectors of the economy, including enhanced focus on zero- and near-zero-emission (ZE/NZE) vehicle technologies; continued investment in renewables such as solar roofs, wind, and other types of distributed generation; greater use of low carbon fuels; integrated land conservation and development strategies; coordinated efforts to reduce emissions of short-lived climate pollutants (methane, black carbon, and fluorinated gases); and an increased focus on integrated land use planning to support livable, transit-connected communities and conserve agricultural and other lands. Requirements for GHG reductions at stationary sources complement local air pollution control efforts by the local air districts to tighten emissions limits on criteria air pollutants and toxic air contaminants from a broad spectrum of industrial sources. Major elements of the 2017 Scoping Plan framework include:

- Implementing and/or increasing the standards of the Mobile Source Strategy, which include increasing ZE buses and trucks.
- Low Carbon Fuel Standard (LCFS) with an increased stringency (18 percent by 2030).
- Implementation of SB 350, which expands the Renewables Portfolio Standard (RPS) to 50 percent RPS and doubles energy efficiency savings by 2030.

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- California Sustainable Freight Action Plan, which improves freight system efficiency and utilizes near-zero emissions technology and deployment of ZE trucks.
- Implementing the proposed Short-Lived Climate Pollutant Strategy, which focuses on reducing methane and hydrofluorocarbon emissions by 40 percent and anthropogenic black carbon emissions by 50 percent by year 2030.
- Post-2020 Cap-and-Trade Program that includes declining caps.
- Continued implementation of SB 375.
- Development of a Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

In addition to these statewide strategies, the 2017 Climate Change Scoping Plan identified local governments as essential partners in achieving the state's long-term GHG reduction goals and recommended local actions to reduce GHG emissions—for example, statewide targets of no more than 6 MTCO₂e or less per capita by 2030 and 2 MTCO₂e or less per capita by 2050. CARB recommends that local governments evaluate and adopt locally appropriate, robust, and quantitative goals that align with the statewide per capita targets and sustainable development objectives and develop plans to achieve the local goals. The statewide per capita goals were developed by applying the percentage reductions necessary to reach the 2030 and 2050 climate goals (40 percent and 80 percent, respectively) to the state's 1990 emissions limit established under AB 32. For CEQA projects, CARB states that lead agencies have discretion to develop evidenced-based numeric thresholds (mass emissions, per capita, or per service population) consistent with the Scoping Plan and the state's long-term GHG goals. To the degree a project relies on GHG mitigation measures, CARB recommends that lead agencies prioritize on-site design features that reduce emissions—especially from vehicle miles traveled (VMT)—and direct investments in GHG reductions in the project's region that contribute potential air quality, health, and economic co-benefits. Where further project design or regional investments are infeasible or not proven to be effective, CARB recommends mitigating potential GHG impacts through purchasing and retiring carbon credits.

The Scoping Plan scenario is set against what is called the “business-as-usual” yardstick—that is, what would the GHG emissions look like if the state did nothing at all beyond the existing policies that are required and already in place to achieve the 2020 limit, as shown in Table 5.5-3, *2017 Climate Change Scoping Plan Emissions Reductions Gap*. It includes the existing renewables requirements, advanced clean cars, the “10 percent” LCFS, and the SB 375 program for more vibrant communities, among others. However, it does not include a range of new policies or measures that have been developed or put into statute over the past two years. Also shown in the table, the known commitments are expected to result in emissions that are 60 MMTCO₂e above the target in 2030. If the estimated GHG reductions from the known commitments are not realized due to delays in implementation or technology, the post-2020 Cap-and-Trade Program would deliver the additional GHG reductions in the sectors it covers to ensure the 2030 target is achieved.

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Table 5.5-3 2017 Climate Change Scoping Plan Emissions Reductions Gap

Modeling Scenario	2030 GHG Emissions MMTCO ₂ e
Reference Scenario (Business-as-Usual)	389
With Known Commitments	320
2030 GHG Target	260
Gap to 2030 Target	60

Source: CARB 2017b.

Table 5.5-4, *2017 Climate Change Scoping Plan Emissions Change by Sector*, provides estimated GHG emissions compared to 1990 levels, and the range of GHG emissions for each sector estimated for 2030. The following sectors would be applicable to the proposed project: residential and commercial, electric power, recycling and waste, and transportation.

Table 5.5-4 2017 Climate Change Scoping Plan Emissions Change by Sector

Scoping Plan Sector	1990 MMTCO ₂ e	2030 Proposed Plan Ranges MMTCO ₂ e	% Change from 1990
Agricultural	26	24-25	-8% to -4%
Residential and Commercial	44	38-40	-14% to -9%
Electric Power	108	30-53	-72% to -51%
High GWP	3	8-11	267% to 367%
Industrial	98	83-90	-15% to -8%
Recycling and Waste	7	8-9	14% to 29%
Transportation (including TCU)	152	103-111	-32% to -27%
Net Sink ¹	-7	TBD	TBD
Sub Total	431	294-339	-32% to -21%
Cap-and-Trade Program	NA	24-79	NA
Total	431	260	-40%

Source: CARB 2017b.

Notes: TCU = Transportation, Communications, and Utilities; TBD = to be determined.

¹ Work was underway through 2017 to estimate the range of potential sequestration benefits from the natural and working lands sector.

Senate Bill 375

In 2008, the Sustainable Communities and Climate Protection Act, SB 375, was adopted to connect the GHG emissions reductions targets established in the 2008 Scoping Plan for the transportation sector to local land use decisions that affect travel behavior. Its intent is to reduce GHG emissions from light-duty trucks and automobiles (excludes emissions associated with goods movement) by aligning regional long-range transportation plans, investments, and housing allocations to local land use planning to reduce VMT and vehicle trips. Specifically, SB 375 required CARB to establish GHG emissions reduction targets for each of the 18 metropolitan planning organizations (MPO). The Southern California Association of Governments (SCAG) is the MPO for the Southern California region, which includes the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial.

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Pursuant to the recommendations of the Regional Transportation Advisory Committee, CARB adopted per capita reduction targets for each of the MPOs rather than a total magnitude reduction target. SCAG's targets are an 8 percent per capita reduction from 2005 GHG emission levels by 2020 and a 13 percent per capita reduction from 2005 GHG emission levels by 2035 (CARB 2010). The 2020 targets are smaller than the 2035 targets because a significant portion of the built environment in 2020 has been defined by decisions that have already been made. In general, the 2020 scenarios reflect that more time is needed for large land use and transportation infrastructure changes. Most of the reductions in the interim are anticipated to come from improving the efficiency of the region's transportation network. The targets would result in 3 MMTCO_{2e} of reductions by 2020 and 15 MMTCO_{2e} of reductions by 2035. Based on these reductions, the passenger vehicle target in CARB's Scoping Plan (for AB 32) would be met (CARB 2010).

2017 Update to the SB 375 Targets

CARB is required to update the targets for the MPOs every eight years. In June 2017, CARB released updated targets and technical methodology and released another update in February 2018. The updated targets consider the need to further reduce VMT, as identified in the 2017 Scoping Plan Update, while balancing the need for additional and more flexible revenue sources to incentivize positive planning and action toward sustainable communities. Like the 2010 targets, the updated SB 375 targets are in units of percent per capita reduction in GHG emissions from automobiles and light trucks compared to 2005. This excludes reductions anticipated from implementation of state technology and fuels strategies and any potential future state strategies such as statewide road user pricing. The proposed targets call for greater per capita GHG emission reductions from SB 375 than are currently in place, which for 2035, translates into proposed targets that either match or exceed the emission reduction levels in the MPOs' currently adopted sustainable communities strategies (SCS). As proposed, CARB staff's proposed targets would result in an additional reduction of over 8 MMTCO_{2e} in 2035 compared to the current targets. For the next round of SCS updates, CARB's updated targets for the SCAG region are an 8 percent per capita GHG reduction in 2020 from 2005 levels (unchanged from the 2010 target) and a 19 percent per capita GHG reduction in 2035 from 2005 levels (compared to the 2010 target of 13 percent) (CARB 2018). CARB adopted the updated targets and methodology on March 22, 2018. All SCSs adopted after October 1, 2018, are subject to these new targets.

Transportation Sector Specific Regulations

Assembly Bill 1493

California vehicle GHG emission standards were enacted under AB 1493 (Pavley I). Pavley I is a clean-car standard that reduces GHG emissions from new passenger vehicles (light-duty auto to medium-duty vehicles) from 2009 through 2016 and is anticipated to reduce GHG emissions from new passenger vehicles by 30 percent in 2016. California implements the Pavley I standards through a waiver granted to California by the EPA. In 2012, the EPA issued a Final Rulemaking that sets even more stringent fuel economy and GHG emissions standards for model years 2017 through 2025 light-duty vehicles (see also the discussion on the update to the Corporate Average Fuel Economy standards in Section 5.5.1.1 under "Federal"). In January 2012, CARB approved the Advanced Clean Cars program (formerly known as Pavley II) for model years 2017 through 2025. The program combines the control of smog, soot, and global warming gases with requirements for greater numbers of ZE vehicles into a single package of standards. Under California's

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Advanced Clean Car program, by 2025 new automobiles will emit 34 percent less global warming gases and 75 percent less smog-forming emissions.

Executive Order S-01-07

On January 18, 2007, the state set a new LCFS for transportation fuels sold in the state. Executive Order S-01-07 sets a declining standard for GHG emissions measured in CO₂e gram per unit of fuel energy sold in California. The LCFS requires a reduction of 2.5 percent in the carbon intensity of California's transportation fuels by 2015 and a reduction of at least 10 percent by 2020. The standard applies to refiners, blenders, producers, and importers of transportation fuels, and would use market-based mechanisms to allow these providers to choose how they reduce emissions during the "fuel cycle" using the most economically feasible methods.

Executive Order B-16-2012

On March 23, 2012, the state identified that CARB, the California Energy Commission (CEC), the Public Utilities Commission, and other relevant agencies worked with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to accommodate ZE vehicles in major metropolitan areas, including infrastructure to support them (e.g., electric vehicle charging stations). The executive order also directed the number of ZE vehicles in California's state vehicle fleet to increase through the normal course of fleet replacement so that at least 10 percent of fleet purchases of light-duty vehicles are ZE by 2015 and at least 25 percent by 2020. The executive order also establishes a target for the transportation sector of reducing GHG emissions 80 percent below 1990 levels.

Renewables Portfolio: Carbon Neutrality Regulations

Senate Bills 1078, 107, X1-2, and Executive Order S-14-08

A major component of California's Renewable Energy Program is the renewables portfolio standard established under Senate Bills 1078 (Sher) and 107 (Simitian). Under the RPS, certain retail sellers of electricity were required to increase the amount of renewable energy each year by at least 1 percent in order to reach at least 20 percent by December 30, 2010. Executive Order S-14-08, signed in November 2008, expanded the state's renewable energy standard to 33 percent renewable power by 2020. This standard was adopted by the legislature in 2011 (SB X1-2). Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. The increase in renewable sources for electricity production will decrease indirect GHG emissions from development projects, because electricity production from renewable sources is generally considered carbon neutral.

Senate Bill 350

Senate Bill 350 (de Leon) was signed into law September 2015 and establishes tiered increases to the RPS—40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. SB 350 also set a new goal to double the energy-efficiency savings in electricity and natural gas through energy efficiency and conservation measures.

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Senate Bill 100

On September 10, 2018, Governor Brown signed SB 100, which raises California's RPS requirements to 60 percent by 2030, with interim targets, and 100 percent by 2045. The bill establishes a state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045. Under the bill, the state cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

Executive Order B-55-18

Executive Order B-55-18, signed September 10, 2018, sets a goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." Executive Order B-55-18 directs CARB to work with relevant state agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. The goal of carbon neutrality by 2045 is in addition to other statewide goals, meaning not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions should be offset by equivalent net removals of CO_{2e} from the atmosphere, including through sequestration in forests, soils, and other natural landscapes. CARB is currently updating the Scoping Plan to address the State's carbon neutrality goals.

Executive Order N-79-20

On September 23, 2020, Governor Newsom signed Executive Order N-79-20, whose goal is that 100 percent of in-state sales of new passenger cars and trucks will be ZE by 2035. Additionally, the fleet goals for trucks are that 100 percent of drayage trucks are ZE by 2035, and 100 percent of medium- and heavy-duty vehicles in the state are ZE by 2045, where feasible. The Executive Order's goal for the state is to transition to 100 percent ZE off-road vehicles and equipment by 2035, where feasible.

Energy Efficiency Regulations

California Building Code: Building Energy Efficiency Standards

Energy conservation standards for new residential and nonresidential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the CEC) in June 1977 and revised tri-annually (Title 24, Part 6, of the California Code of Regulations [CCR]). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. The 2019 Building Energy Efficiency Standards, which were adopted on May 9, 2018, go into effect starting January 1, 2020. On August 11, 2021, the CEC adopted the 2022 Energy Code which will be presented to the California Building Standards Commission for approval into the California Building Standards Code in December 2021. If approved, the 2022 Energy Code will go into effect on January 1, 2023.

The 2019 standards focus on four key areas: 1) smart residential photovoltaic systems; 2) updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa); 3) residential and nonresidential ventilation requirements; 4) and nonresidential lighting requirements (CEC 2018a). Under the 2019 standards, nonresidential buildings are 30 percent more energy efficient than under the 2016 standards,

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and single-family homes are 7 percent more energy efficient (CEC 2018b). When accounting for the electricity generated by the solar photovoltaic system, single-family homes would use 53 percent less energy compared to homes built to the 2016 standards (CEC 2018b).

California Building Code: CALGreen

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (24 CCR, Part 11, known as "CALGreen") was adopted as part of the California Building Standards Code. CALGreen established planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants.³ The mandatory provisions of the California Green Building Code Standards became effective January 1, 2011, and were last updated in 2019. The 2019 CALGreen standards became effective January 1, 2020. CALGreen § 5.508 also requires that at least 65 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse.

2006 Appliance Efficiency Regulations

The 2006 Appliance Efficiency Regulations (20 CCR §§ 1601–1608) were adopted by the CEC on October 11, 2006, and approved by the California Office of Administrative Law on December 14, 2006. The regulations include standards for both federally regulated appliances and non–federally regulated appliances. Though these regulations are now often viewed as "business as usual," they exceed the standards imposed by all other states, and they reduce GHG emissions by reducing energy demand.

Solid Waste Diversion Regulations

Assembly Bill 939: Integrated Waste Management Act of 1989

California's Integrated Waste Management Act of 1989 (AB 939) set a requirement for cities and counties throughout the state to divert 50 percent of all solid waste from landfills by January 1, 2000, through source reduction, recycling, and composting (Public Resources Code §§ 40050 et seq.). In 2008, the requirements were modified to reflect a per capita requirement rather than tonnage. To help achieve this, the act requires that each city and county prepare and submit a source reduction and recycling element. AB 939 also established the goal for all California counties to provide at least 15 years of ongoing landfill capacity.

Assembly Bill 341

AB 341 (Chapter 476, Statutes of 2011) increased the statewide goal for waste diversion to 75 percent by 2020 and requires recycling of waste from commercial and multifamily residential land uses. CALGreen § 5.508 also requires that at least 65 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse.

Assembly Bill 1327

The California Solid Waste Reuse and Recycling Access Act (AB 1327) requires areas to be set aside for collecting and loading recyclable materials in development projects (Public Resources Code §§ 42900 et seq.).

³ The green building standards became mandatory in the 2010 edition of the code.

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The act required the California Integrated Waste Management Board to develop a model ordinance for adoption by any local agency requiring adequate areas for collection and loading of recyclable materials as part of development projects. Local agencies are required to adopt the model or an ordinance of their own.

Assembly Bill 1826

In October 2014, Governor Brown signed AB 1826, requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses and multifamily residential dwellings that consist of five or more units. Organic waste means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste.

Water Efficiency Regulations

Senate Bill X7-7

The 20x2020 Water Conservation Plan was issued by the Department of Water Resources (DWR) in 2010 pursuant to Senate Bill 7, which was adopted during the 7th Extraordinary Session of 2009–2010 and therefore dubbed “SBX7-7.” SBX7-7 mandated urban water conservation and authorized the DWR to prepare a plan implementing urban water conservation requirements (20x2020 Water Conservation Plan). In addition, it required agricultural water providers to prepare agricultural water management plans, measure water deliveries to customers, and implement other efficiency measures. SBX7-7 requires urban water providers to adopt a water conservation target of 20 percent reduction in urban per capita water use by 2020 compared to 2005 baseline use.

Assembly Bill 1881: Water Conservation in Landscaping Act

The Water Conservation in Landscaping Act of 2006 (AB 1881) requires local agencies to adopt the updated DWR model ordinance or an equivalent. AB 1881 also requires the CEC to consult with the DWR to adopt, by regulation, performance standards and labeling requirements for landscape irrigation equipment, including irrigation controllers, moisture sensors, emission devices, and valves to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.

Short-Lived Climate Pollutant Reduction Strategy

Senate Bill 1383

On September 19, 2016, the governor signed SB 1383 to supplement the GHG reduction strategies in the Scoping Plan to consider short-lived climate pollutants, including black carbon and methane. Black carbon is the light-absorbing component of fine particulate matter produced during incomplete combustion of fuels. SB 1383 required the state board, no later than January 1, 2018, to approve and begin implementing that comprehensive strategy to reduce emissions of short-lived climate pollutants—to reduce methane by 40 percent, hydrofluorocarbon gases by 40 percent, and anthropogenic black carbon by 50 percent below 2013 levels by 2030. The bill also established targets for reducing organic waste in landfill. On March 14, 2017, CARB adopted the “Final Proposed Short-Lived Climate Pollutant Reduction Strategy,” which identifies the

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state's approach to reducing anthropogenic and biogenic sources of short-lived climate pollutants. Anthropogenic sources of black carbon include on- and off-road transportation, residential wood burning, fuel combustion (charbroiling), and industrial processes. According to CARB, ambient levels of black carbon in California are 90 percent lower than in the early 1960s despite the tripling of diesel fuel use (CARB 2017b). In-use on-road rules were expected to reduce black carbon emissions from on-road sources by 80 percent between 2000 and 2020. South Coast AQMD is one of the air districts that requires air pollution control technologies for chain-driven broilers, which reduces particulate emissions from these char broilers by over 80 percent (CARB 2017b). Additionally, South Coast AQMD Rule 445 limits installation of new fireplaces in the SoCAB.

Regional

SCAG's Regional Transportation Plan / Sustainable Communities Strategy

SB 375 requires each MPO to prepare a sustainable communities strategy in its regional transportation plan. For the SCAG region, the draft 2020-2045 RTP/SCS (Connect SoCal) was adopted on May 7, 2020, for the limited purpose of transportation conformity (SCAG 2020). The Connect SoCal Plan was fully adopted in September 2020. In general, the SCS outlines a development pattern for the region that, when integrated with the transportation network and other transportation measures and policies, would reduce vehicle miles traveled from automobiles and light duty trucks and thereby reduce GHG emissions from these sources.

Connect SoCal focuses on the continued efforts of the previous RTP/SCSs to integrate transportation and land use strategies in development of the SCAG region through horizon year 2045 (SCAG 2020). Connect SoCal forecasts that the SCAG region will meet its GHG per capita reduction targets of 8 percent by 2020 and 19 percent by 2035. Additionally, Connect SoCal also forecasts that implementation of the plan will reduce VMT per capita in year 2045 by 4.1 percent compared to baseline conditions for that year. Connect SoCal includes a "core vision" that centers on maintaining and better managing the transportation network for moving people and goods while expanding mobility choices by locating housing, jobs, and transit closer together and increasing investments in transit and complete streets.

5.5.1.2 EXISTING CONDITIONS

California's GHG Sources and Relative Contribution

In 2021, the statewide GHG emissions inventory was updated for 2000 to 2019 emissions using the GWPs in IPCC's AR4 (IPCC 2013). Based on these GWPs, California produced 418.2 MMTCO_{2e} GHG emissions in 2019. California's transportation sector was the single largest generator of GHG emissions, producing 39.7 percent of the state's total emissions. Industrial sector emissions made up 21.1 percent, and electric power generation made up 14.1 percent of the state's emissions inventory. Other major sectors of GHG emissions include commercial and residential (10.5 percent), agriculture and forestry (7.6 percent), high GWP (4.9 percent), and recycling and waste (2.1 percent) (CARB 2021).

Since the peak level in 2004, California's GHG emissions have generally followed a decreasing trend. In 2016, California statewide GHG emissions dropped below the AB 32 target for year 2020 of 431 MMTCO_{2e} and

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have remained below this target since then. In 2019, emissions from routine GHG-emitting activities statewide were almost 13 MMTCO_{2e} lower than the AB 32 target for year 2020. Per capita GHG emissions in California have dropped from a 2001 peak of 14.0 MTCO_{2e} per person to 10.5 MTCO_{2e} per person in 2019, a 25 percent decrease.

Transportation emissions continued to decline in 2019 statewide as they had done in 2018, with even more substantial reductions due to a significant increase in renewable diesel. Since 2008, California's electricity sector has followed an overall downward trend in emissions. In 2019, solar power generation continued its rapid growth since 2013. Emissions from high-GWP gases made up 4.9 percent of California's emissions in 2019. This continues the increasing trend as the gases replace ozone-depleting substances being phased out under the 1987 Montreal Protocol. Overall trends in the inventory also demonstrate that the carbon intensity of California's economy (the amount of carbon pollution per million dollars of gross domestic product) has declined 45 percent since the 2001 peak, though the state's gross domestic product grew 63 percent during this period (CARB 2021).

Project Site

The project site is located at the La Quinta High School campus at 10372 West McFadden Avenue in the City of Westminster, Orange County. The project site encompasses athletic facilities, hardcourts, parking lot, paved walkways, utility infrastructure, and buildings. La Quinta High School currently generates GHG emissions from transportation (student and staff vehicle trips and bus use), area sources (consumer products and cleaning supplies), energy use, water use/wastewater generation, and solid waste disposal.

5.5.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- GHG-1 Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- GHG-2 Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

South Coast Air Quality Management District

South Coast AQMD adopted a significance threshold of 10,000 MTCO_{2e} per year for permitted (stationary) sources of GHG emissions for which South Coast AQMD is the designated lead agency. To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, South Coast AQMD convened a GHG CEQA Significance Threshold Working Group. Based on the last Working Group meeting in September 2010 (Meeting No. 15), South Coast AQMD identified a tiered approach for evaluating GHG emissions for development projects where South Coast AQMD is not the lead agency (South Coast AQMD 2010a). The following tiered approach has not been formally adopted by South Coast AQMD.

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- **Tier 1.** If a project is exempt from CEQA, project-level and contribution to significant cumulative GHG emissions are less than significant.
- **Tier 2.** If the project complies with a GHG emissions reduction plan or mitigation program that avoids or substantially reduces GHG emissions in the project's geographic area (e.g., city or county), project-level and contribution to significant cumulative GHG emissions are less than significant.
- **Tier 3.** If GHG emissions are less than the screening-level criterion, project-level and contribution to significant cumulative GHG emissions are less than significant.

For projects that are not exempt or where no qualifying GHG reduction plans are directly applicable, South Coast AQMD requires an assessment of GHG emissions. Project-related GHG emissions include on-road transportation, energy use, water use, wastewater generation, solid waste disposal, area sources, off-road emissions, and construction activities. The South Coast AQMD Working Group decided that because construction activities would result in a "one-time" net increase in GHG emissions, construction activities should be amortized into the operational phase GHG emissions inventory based on the service life of a building. For buildings in general, it is reasonable to look at a 30-year time frame, since this is a typical interval before a new building requires the first major renovation. South Coast AQMD identified a screening-level threshold of 3,000 MTCO_{2e} annually for all land use types. The bright-line screening-level criteria are based on a review of the Governor's Office of Planning and Research database of CEQA projects. Based on review of 711 CEQA projects, 90 percent of CEQA projects would exceed the bright-line thresholds. Therefore, projects that do not exceed the bright-line threshold would have a nominal and less than cumulatively considerable impact on GHG emissions. South Coast AQMD recommends use of the 3,000 MTCO_{2e} interim bright-line screening-level criterion for all project types (South Coast AQMD 2010b).

- **Tier 4.** If emissions exceed the screening threshold, a more detailed review of the project's GHG emissions is warranted.⁴

The South Coast AQMD Working Group identified an efficiency target for projects that exceed the screening threshold of 4.8 MTCO_{2e} per year per service population (MTCO_{2e}/year/SP) for project-level analyses and 6.6 MTCO_{2e}/year/SP for plan-level projects (e.g., program-level projects such as general plans) for the year 2020.⁵ The per capita efficiency targets were based on the AB 32 GHG reduction target and 2020 GHG emissions inventory prepared for CARB's 2008 Scoping Plan.⁶

⁴ South Coast AQMD had identified an efficiency target for projects that exceed the bright-line threshold: a 2020 efficiency target of 4.8 MTCO_{2e} per year per service population (MTCO_{2e}/year/SP) for project-level analyses and 6.6 MTCO_{2e}/year/SP for plan-level projects (e.g., general plans). Service population is generally defined as the sum of residential and employment population of a project. The per capita efficiency targets are based on the AB 32 GHG reduction target and 2020 GHG emissions inventory prepared for CARB's 2008 Scoping Plan.⁴

⁵ It should be noted that the Working Group also considered efficiency targets for 2035 for the first time in this Working Group meeting.

⁶ South Coast AQMD took the 2020 statewide GHG reduction target for land use only GHG emissions sectors and divided it by the 2020 statewide employment for the land use sectors to derive a per capita GHG efficiency metric that coincides with the GHG reduction targets of AB 32 for year 2020.

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The South Coast AQMD Working Group's bright-line screening-level criterion of 3,000 MTCO₂e per year is used as the significance threshold for this project. If the project operation-phase emissions exceed this criterion, GHG emissions would be considered potentially significant without mitigation measures.

5.5.3 Environmental Impacts

5.5.3.1 METHODOLOGY

GHG emissions-related impacts were assessed in accordance with methodologies recommended by the South Coast AQMD. Where GHG emissions quantification was required, emissions were modeled using CalEEMod, version 2020.4.0. CalEEMod is a statewide land use emissions computer model designed to quantify potential GHG emissions associated with both construction and operations from a variety of land use projects. Project construction-generated air pollutant emissions were calculated using CalEEMod model defaults for Orange County. Operational air pollutant emissions are discussed qualitatively.

5.5.3.2 IMPACT ANALYSIS

Impact 5.5-1: Implementation of the proposed project would not generate a net increase in GHG emissions, either directly or indirectly, that would have a significant impact on the environment. [Threshold GHG-1]

Global climate change is not confined to a particular project area and is generally accepted as the consequence of global industrialization over the last 200 years. A typical project, even a very large one, does not generate enough greenhouse gas emissions on its own to influence global climate change significantly; hence, the issue of global climate change is, by definition, a cumulative environmental impact.

Construction

Construction-related activities that would generate GHG emissions include worker commute trips, haul trucks carrying supplies and materials to and from the project site, and off-road construction equipment (e.g., dozers, loaders, excavators). Table 5.5-5, *Construction-Related Greenhouse Gas Emissions*, shows the specific construction generated GHG emissions that would result from construction of the proposed project. Once construction is complete, the generation of these GHG emissions would cease.

Table 5.5-5 Construction-Related Greenhouse Gas Emissions

Emissions Source	CO ₂ e (Metric Tons/Year)
Construction Year One	91
South Coast AQMD Significance Threshold	3,000
Exceed South Coast AQMD Threshold?	No

Source: ECORP 2022

As shown in Table 5.5-5, project construction would result in the generation of approximately 91 MTCO₂e over the course of construction and would not exceed the South Coast AQMD threshold. Once construction is complete, the generation of these GHG emissions would cease and impacts would be less than significant.

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Operation

The proposed project would add competitive sports lighting to the athletic facilities at La Quinta High School. No additional school sports programs would be added, and therefore, the number of students and staff would remain the same. The project simply shifts existing student activities into evening hours. The proposed project is expected to capture trips that would have to travel to remote facilities once SB 328 takes effect if lighted facilities were not added at the school as proposed by the project. Capture of these trips would reduce GHG emissions associated with the new law, as vehicle miles traveled would not increase.

Lighting of the athletic facilities on campus would provide additional recreational sources for the local population. While community use of these facilities during non-school hours would generate GHG travel-related emissions, these facilities represent infill development as they are located within communities, near existing residences and again, provide an opportunity to capture trips that now must travel to more distant athletic facilities. The operational GHG emissions would solely be generated from the lighting of the sports fields and would have a negligible contribution to existing conditions. Therefore, by its very nature, the proposed project would not generate quantifiable criteria GHG emissions from project operations. Impacts would be less than significant.

Impact 5.5-2: Implementation of the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. [Threshold GHG-2]

Applicable plans adopted for the purpose of reducing GHG emissions include CARB's Scoping Plan and SCAG's RTP/SCS. A consistency analysis with these plans is presented below.

CARB Scoping Plan

CARB's 2017 Scoping Plan is California's GHG reduction strategy to achieve the state's GHG emissions reduction target established by SB 32, which is to reduce GHG emissions to 40 percent below 1990 emission levels by year 2030. The CARB Scoping Plan is applicable to state agencies and is not directly applicable to cities/counties or individual projects. Nonetheless, the Scoping Plan has been the primary tool that is used to develop performance- and efficiency-based CEQA criteria and GHG reduction targets for climate action planning efforts.

Statewide strategies to reduce GHG emissions include the Low Carbon Fuel Standard, California Appliance Energy Efficiency regulations, California Renewable Energy Portfolio standard, changes in the Corporate Average Fuel Economy 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 and SB 32. New buildings are required to comply with the latest applicable Building Energy Efficiency Standards and CALGreen. While measures in the Scoping Plan apply to state agencies and not the proposed project, the proposed project's GHG emissions would be reduced by statewide compliance with measures that have been adopted since AB 32 and SB 32 were adopted. Additionally, as indicated above, the proposed project would not exceed the 3,000 MTCO_{2e} South Coast AQMD threshold. Therefore, the proposed project would not obstruct implementation of the CARB Scoping Plan, and impacts would be less than significant.

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SCAG's Regional Transportation Plan / Sustainable Communities Strategy

SCAG adopted the 2020-2045 RTP/SCS (Connect SoCal) in September 2020. Connect SoCal finds 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 allow for the games and events at the La Quinta High School sports facilities to be lighted after sunset hours. Additionally, the proposed project would not increase student enrollment the high school. Therefore, the proposed project would not interfere with SCAG's ability to implement the regional strategies in Connect SoCal, and impacts would be less than significant.

5.5.4 Cumulative Impacts

Project-related GHG emissions are not confined to a particular air basin but are dispersed worldwide. Therefore, Impact 5.5-1 is not a project-specific impact, but the proposed project's contribution to a cumulative impact. Implementation of the proposed project would not result in annual emissions that would exceed South Coast AQMD's bright-line threshold. Therefore, project-related GHG emissions and their contribution to global climate change would not be cumulatively considerable, and GHG emissions impacts would be less than significant.

5.5.5 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, all impacts would be less than significant.

5.5.6 Mitigation Measures

No mitigation measures are required.

5.5.7 Level of Significance After Mitigation

Impacts would be less than significant.

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5.6 NOISE

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the proposed project at La Quinta High School to result in noise and vibration impacts at nearby noise sensitive receptors. Appendix D of this DEIR contains the Noise Analysis for the proposed project.

5.6.1 Environmental Setting

5.6.1.1 NOISE AND VIBRATION FUNDAMENTALS

Noise is defined as unwanted sound and is known to have several adverse effects on people, including hearing loss, speech and sleep interference, physiological responses, and annoyance. Although sound can be easily measured, the perception of noise and the physical response to sound complicate the analysis of its impact on people. People judge the relative magnitude of sound sensation in subjective terms such as “noisiness” or “loudness.” The following are brief definitions of terminology used in this section:

Technical Terminology

- **Sound.** A disturbance created by a vibrating object, which, when transmitted by pressure waves through a medium such as air, is capable of being detected by a receiving mechanism, such as the human ear or a microphone.
- **Noise.** Sound that is loud, unpleasant, unexpected, or otherwise undesirable.
- **Decibel (dB).** A unitless measure of sound on a logarithmic scale.
- **A-Weighted Decibel (dBA).** An overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.
- **Equivalent Continuous Noise Level (L_{eq}); also called the Energy-Equivalent Noise Level.** The value of an equivalent, steady sound level which, in a stated time period (often over an hour) and at a stated location, has the same A-weighted sound energy as the time-varying sound. Thus, the L_{eq} metric is a single numerical value that represents the equivalent amount of variable sound energy received by a receptor over the specified duration.
- **Statistical Sound Level (L_n).** The sound level that is exceeded “n” percent of time during a given sample period. For example, the L_{50} level is the statistical indicator of the time-varying noise signal that is exceeded 50 percent of the time (during each sampling period); that is, half of the sampling time, the changing noise levels are above this value and half of the time they are below it. This is called the “median sound level.” The L_{10} level, likewise, is the value that is exceeded 10 percent of the time (i.e., near the maximum) and this is often known as the “intrusive sound level.” The L_{90} is the sound level exceeded 90 percent of the time and is often considered the “effective background level” or “residual noise level.”

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- **Day-Night Sound Level (L_{dn} or DNL).** The energy-average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the sound levels occurring during the period from 10:00 pm to 7:00 am.
- **Community Noise Equivalent Level (CNEL).** The energy average of the A-weighted sound levels occurring during a 24-hour period, with 5 dB added from 7:00 pm to 10:00 pm and 10 dB from 10:00 pm to 7:00 am. For general community/environmental noise, CNEL and L_{dn} values rarely differ by more than 1 dB (with the CNEL being only slightly more restrictive, that is, higher than the L_{dn} value). As a matter of practice, L_{dn} and CNEL values are interchangeable and are treated as equivalent in this assessment.
- **Sensitive Receptor.** Noise- and vibration-sensitive receptors include land uses where quiet environments are necessary for enjoyment and public health and safety. Residences, schools, motels and hotels, libraries, religious institutions, hospitals, and nursing homes are examples.
- **Peak Particle Velocity (PPV).** The peak rate of speed at which soil particles move (e.g., inches per second) due to ground vibration.

Sound Fundamentals

Sound is a pressure wave transmitted through the air. It is described in terms of loudness or amplitude (measured in decibels), frequency or pitch (measured in Hertz [Hz] or cycles per second), and duration (measured in seconds or minutes). The standard unit of measurement of the loudness of sound is the decibel (dB). Changes of 1 to 3 dBA are detectable under quiet, controlled conditions and changes of less than 1 dBA are usually indiscernible. A 3 dBA change in noise levels is considered the minimum change that is detectable with human hearing in outside environments. A change of 5 dBA is readily discernable to most people in an exterior environment, and a 10 dBA change is perceived as a doubling (or halving) of the sound.

The human ear is not equally sensitive to all frequencies. Sound waves below 16 Hz are not heard at all and are “felt” more as a vibration. Similarly, while people with extremely sensitive hearing can hear sounds as high as 20,000 Hz, most people cannot hear above 15,000 Hz. In all cases, hearing acuity falls off rapidly above about 10,000 Hz and below about 200 Hz. Since the human ear is not equally sensitive to sound at all frequencies, a special frequency dependent rating scale is usually used to relate noise to human sensitivity. The A-weighted decibel scale (dBA) performs this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

Sound Measurement

Sound pressure is measured through the A-weighted measure to correct for the relative frequency response of the human ear. That is, an A-weighted noise level de-emphasizes low and very high frequencies of sound similar to the human ear’s de-emphasis of these frequencies.

Unlike linear units such as inches or pounds, decibels are measured on a logarithmic scale, representing points on a sharply rising curve. On a logarithmic scale, an increase of 10 dBA is 10 times more intense than 1 dBA,

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while 20 dBA is 100 times more intense, and 30 dBA is 1,000 times more intense. A sound as soft as human breathing is about 10 times greater than 0 dBA. The decibel system of measuring sound gives a rough connection between the physical intensity of sound and its perceived loudness to the human ear. Ambient sounds generally range from 30 dBA (very quiet) to 100 dBA (very loud).

Sound levels are generated from a source and their decibel level decreases as the distance from that source increases. Sound dissipates exponentially with distance from the noise source. This phenomenon is known as “spreading loss.” For a single point source, sound levels decrease by approximately 6 dBA for each doubling of distance from the source. This drop-off rate is appropriate for noise generated by on-site operations from stationary equipment or activity at a project site. If noise is produced by a line source, such as highway traffic, the sound decreases by 3 dBA for each doubling of distance in a hard site environment. Line source noise in a relatively flat environment with absorptive vegetation decreases by 4.5 dBA for each doubling of distance.

Time variation in noise exposure is typically expressed in terms of a steady-state energy level equal to the energy content of the time varying period (called L_{eq}), or alternately, as a statistical description of the sound level that is exceeded over some fraction of a given observation period. For example, the L_{50} noise level represents the noise level that is exceeded 50 percent of the time. Half the time the noise level exceeds this level and half the time the noise level is less than this level. This level is also representative of the level that is exceeded 30 minutes in an hour. Similarly, the L_2 , L_8 , and L_{25} values represent the noise levels that are exceeded 2, 8, and 25 percent of the time or 1, 5, and 15 minutes per hour. These “L” values are typically used to demonstrate compliance for stationary noise sources with a city’s noise ordinance, as discussed below. Other values typically noted during a noise survey are the L_{min} and L_{max} . These values represent the minimum and maximum root-mean-square noise levels obtained over the measurement period.

Because community receptors are more sensitive to unwanted noise intrusion during the evening and at night, an artificial dBA increment is added to quiet time noise levels in a 24-hour noise descriptor called the Community Noise Equivalent Level (CNEL) or Day-Night Noise Level (L_{dn}). The CNEL descriptor requires that an artificial increment of 5 dBA be added to the actual noise level for the hours from 7:00 pm to 10:00 pm and 10 dBA for the hours from 10:00 pm to 7:00 am. The L_{dn} descriptor uses the same methodology except that there is no artificial increment added to the hours between 7:00 pm and 10:00 pm. Both descriptors give roughly the same 24-hour level with the CNEL being only slightly more restrictive (i.e., higher).

Psychological and Physiological Effects of Noise

Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA. Exposure to high noise levels affects our entire system, with prolonged noise exposure in excess of 75 dBA increasing body tensions, and thereby affecting blood pressure, functions of the heart and the nervous system. In comparison, extended periods of noise exposure above 90 dBA could result in permanent hearing damage. When the noise level reaches 120 dBA, a tickling sensation occurs in the human ear even with short-term exposure. This level of noise is called the threshold of feeling. As the sound reaches 140 dBA, the tickling sensation is replaced by the feeling of pain in the ear. This is called the threshold of pain. Table 5.6-1, *Typical Noise Levels*, shows typical noise levels from familiar noise sources.

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Table 5.6-1 Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Onset of physical discomfort	120+	
	110	Rock Band (near amplification system)
Jet Flyover at 1,000 feet		
	100	
Gas Lawn Mower at three feet		
	90	
Diesel Truck at 50 feet, at 50 mph		Food Blender at 3 feet
	80	Garbage Disposal at 3 feet
Noisy Urban Area, Daytime		
	70	Vacuum Cleaner at 10 feet
Commercial Area		Normal speech at 3 feet
Heavy Traffic at 300 feet	60	
		Large Business Office
Quiet Urban Daytime	50	Dishwasher Next Room
Quiet Urban Nighttime	40	Theater, Large Conference Room (background)
Quiet Suburban Nighttime		
	30	Library
Quiet Rural Nighttime		Bedroom at Night, Concert Hall (background)
	20	
		Broadcast/Recording Studio
	10	
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing

Source: Caltrans 2013.

Vibration Fundamentals

Vibration is an oscillating motion in the earth. Like noise, vibration is transmitted in waves, but in this case through the earth or solid objects. Unlike noise, vibration is typically of a frequency that is felt rather than heard. Vibration amplitudes are usually described in terms of either the peak particle velocity (PPV) or the root mean square (RMS) velocity. PPV is the maximum instantaneous peak of the vibration signal, and RMS is the square root of the average of the squared amplitude of the signal. PPV is more appropriate for evaluating potential building damage and RMS (typically expressed in VdB) for potential annoyance. The units for PPV are normally inches per second (in/sec). Typically, groundborne vibration generated by human activities attenuates rapidly with distance from the source of the vibration.

The way in which vibration is transmitted through the earth is called propagation. As vibration waves propagate from a source, the energy is spread over an ever-increasing area such that the energy level striking a

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given point is reduced with the distance from the energy source. This geometric spreading loss is inversely proportional to the square of the distance. The amount of attenuation provided by material damping varies with soil type and condition as well as the frequency of the wave.

5.6.1.2 REGULATORY BACKGROUND

The proposed project is within the City of Westminster, but because the project site borders the City of Garden Grove, applicable regulations from both cities are summarized below.

Federal

There are no federal regulations that are directly relevant to the proposed project.

State

General Plan Guidelines

The State of California, through its General Plan Guidelines, discusses how ambient noise should influence land use and development decisions and includes a table of normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable uses at different noise levels expressed in CNEL. A conditionally acceptable designation implies new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements for each land use is made and needed noise insulation features are incorporated in the design. By comparison, a normally acceptable designation indicates that standard construction can occur with no special noise reduction requirements. Local municipalities adopt these compatibility standards as part of their General Plan and modify them as appropriate for their local environmental setting. The City of Westminster's land use compatibility standards are discussed below and summarized in Table 5.6-2, *Community Noise and Land Use Compatibility Table*.

City of Westminster

City of Westminster General Plan

Westminster's General Plan Noise Element includes noise and vibration goals and policies that aim to minimize the impact of noise and vibration sources found in the city. The applicable noise goals and policies to the proposed project are listed below:

Goal LU-7: Community noise and vibration levels that balance the need for peaceful environments for sensitive land uses with the needs of local businesses and regional land uses.

Policy LU-7.1 Land Use Noise Compatibility. Assess the compatibility of proposed land uses with the noise environment when preparing, revising, or reviewing development project applications.

Policy LU-7.8 Interjurisdictional Coordination. Coordinate with Orange County and the cities of Seal Beach, Huntington Beach, Garden Grove, and Fountain Valley to minimize noise conflicts between land uses along the City's boundaries.

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Table 5.6-2 Community Noise and Land Use Compatibility Table

Categories	dBA CNEL						
	<55	55	60	65	70	75	80
Amphitheater, concert hall, auditorium, meeting hall	B	B	C	C	D	D	D
Mobile homes	A	A	B	C	C	D	D
Hospital, library, school, faith/religious uses	A	A	B	C	C	D	D
Hotel, motel, transient lodging	A	A	B	B	C	C	D
Single family, multifamily, faith/religious uses	A	A	B	B	C	D	D
Parks	A	A	A	B	C	D	D
Office building, research & development, professional office, city office building, and hotel	A	A	A	B	B	C	D
Amusement park, miniature golf, go-cart track, health club, equestrian center	A	A	A	B	B	D	D
Golf courses, nature centers, cemeteries, wildlife reserves, wildlife habitat	A	A	A	A	B	C	C
Commercial retail, bank, restaurant, movie theater	A	A	A	A	B	B	C
Automobile service station, auto dealer, manufacturing, warehousing, wholesale, utilities	A	A	A	A	B	B	B
Agriculture	A	A	A	A	A	A	A

Source: City of Westminster

Notes: Compatibility zones indicate the degree to which the land uses listed are compatible with the noise levels (CNEL) shown in the table.

Zone A. Clearly Compatible. Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

Zone B. Normally Compatible. New construction or development should be undertaken only after detailed analysis of the noise reduction requirements are made and needed noise insulation features in the design are determined. Conventional construction, with closed windows and fresh air supply systems or air conditioning, will normally suffice.

Zone C. Normally Incompatible. New construction or development should normally be discouraged. If new construction or development does proceed, a detailed analysis or noise reduction requirements must be made and needed noise insulation features must be included in the design.

Zone D. Clearly Incompatible. New construction or development should generally not be undertaken

City of Westminster Municipal Code

The City of Westminster Municipal Code Chapter 8.28, Noise Control, provides community-wide noise standards. Section 8.28.040, Exterior Noise, provides exterior noise standards for noise zones.. The nearest sensitive receptors fall within Zone 1 based on the City's Zoning Map. The exterior noise standard for Zone 1 is 55 dBA during both daytime and nighttime hours, except when the measured ambient noise level exceeds the presumed ambient. Then the measured ambient shall become the new exterior noise standard. In addition, the Municipal Code states that the noise levels shall not exceed:

- The noise standard for a cumulative period of more than 30 minutes (L_{50})
- The noise standard plus 5 dBA for a cumulative period of more than 15 minutes (L_{25})
- The noise standard plus 10 dBA for a cumulative period of more than 5 minutes (L_8)
- The noise standard plus 15 dBA for a cumulative period of more than 1 minute (L_2)

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- The noise standard plus 20 dBA for any period of time (L_{\max})

Section 8.28.060 exempts noise from activities conducted on any public or private schools and activities conducted on any park or playground owned and operated by a public entity.

City of Garden Grove Municipal Code

The proposed project is next to the city of Garden Grove border to the east where there are residential receptors. Therefore, Garden Grove's noise standards are applied to those receptors. The City of Garden Grove Municipal Code Chapter 8.47, Noise Control, provides community-wide noise standards. Section 8.47.040, Ambient Base Noise Levels, provides presumed ambient base noise levels (exterior noise standards) for different land use designations. However, when the measured ambient noise level exceeds the presumed ambient, the measured ambient shall become the new baseline ambient (new exterior noise standard). For residential uses, the presumed ambient is 55 dBA between 7:00 am to 10:00 pm and 50 dBA from 10:00 pm to 7:00 am. However, Section 8.47.070 exempts community activities including school bands and athletic events from the noise code.

5.6.1.3 EXISTING CONDITIONS

Ambient Noise Measurements

To determine a baseline noise level at different environments in the project area, ambient noise monitoring was conducted by PlaceWorks on Tuesday, April 26, 2022. Three short-term (15-minute) measurements were made during the weekday in the evening hours of 6:45 pm and 8:00 pm in the vicinity of the project site. Meteorological conditions during the measurement periods were favorable for outdoor sound measurements and were noted to be typical for the season. With average winds up to 5 mph and temperatures of 71 degrees Fahrenheit.

The sound level meter used (Larson Davis LxT) for noise monitoring satisfied the American National Standards Institute (ANSI) standard for Type 1 instrumentation. The sound level meter was set to "slow" response and "A" weighting (dBA). The meter was calibrated prior and after the monitoring period. All measurements were at least 5 feet above the ground and away from reflective surfaces. The results of the short-term noise monitoring are summarized in Table 5.6-3, *Short-Term Noise Measurement Summary*. The noise measurement location is shown in Figure 5.6-1, *Approximate Noise Monitoring Locations*.

- **Short-Term Location 1 (ST-1)** was conducted onsite behind 15610 Irene Way (residence). A 15-minute noise measurement took place beginning at 6:46 pm on Tuesday, April 26, 2022. The noise environment is characterized by birds chirping and tennis practice (during time of measurement). Noise levels from these primary noise sources ranged from 43 to 51 dBA. Secondary noise sources included aircraft over flights (helicopter) measuring up to 63 dBA.
- **Short-Term Location 2 (ST-2)** was conducted next to 15631 Ward Street across the high school's football field, approximately 25 feet east from the nearest northbound travel lane centerline. A 15-minute noise measurement took place beginning at 7:37 pm on Tuesday, April 26, 2022. The noise environment

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is characterized primarily by traffic from Ward Street. Traffic noise from vehicle pass bys along Ward Street measured up to 75 dBA.

- **Short-Term Location 3 (ST-3)** was conducted onsite behind 15762 Las Lunas Street (residences). A 15-minute noise measurement took place beginning at 7:03 pm on Tuesday, April 26, 2022. The noise environment is characterized by birds chirping and faint voices from students on campus across the playfields. Noise levels generally ranged from 41 to 56 dBA.

Table 5.6-3 Short-Term Noise Measurements Summary in A-weighted Sound Levels

Monitoring Location	Description	15-minute Noise Level, dBA						
		L _{eq}	L _{max}	L _{min}	L ₅₀	L ₂₅	L ₈	L ₂
ST-1	Behind 15610 Irene Way 04/26/2022, 6:46 pm	48.8	67.4	41.8	57.6	51.4	47.9	45.8
ST-2	Next to 15631 Ward Street Courts 04/26/2022, 7:37 pm	63.4	75.7	43.4	70.3	68.5	64.8	59.1
ST-3	Behind 15762 Las Lunas Street 04/26/2022, 7:03 pm	44.7	57.4	40.2	53.6	45.8	43.7	42.7

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Figure 5.6-1 Approximate Noise Monitoring Locations

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Sensitive Receptors

Certain land uses, such as residences, schools, and hospitals, are particularly sensitive to noise and vibration. Sensitive noise receptors include residences, senior housing, schools, places of worship, and recreational areas. These uses are regarded as sensitive because they are where citizens most frequently engage in activities which are likely to be disturbed by noise, such as reading, studying, sleeping, resting, working from home, or otherwise engaging in quiet or passive recreation. The nearest off-site noise-sensitive receptors to the proposed project are adjacent residential uses to the west and south within the City of Westminster and residences to the east across Ward Street in the City of Garden Grove. Further receptors include Thomas Paine Elementary school to the southeast. On-campus noise sensitive receptors include school classrooms that are analyzed for temporary construction noise impacts.

5.6.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would result in:

- N-1 Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
- N-2 Generation of excessive groundborne vibration or groundborne noise levels.
- N-3 For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, if the project would expose people residing or working in the project area to excessive noise levels.

5.6.3 Environmental Impacts

5.6.3.1 METHODOLOGY

Construction noise modeling was conducted using the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM). Vibration impacts are assessed using methodology included in the FTA guidance document on noise and vibration impact assessment (FTA 2018).

5.6.3.2 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance. The applicable thresholds are identified in brackets after the impact statement.

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Impact 5.6-1: Construction activities would not result in substantial temporary noise increases in the vicinity of the proposed project. [Threshold N-1]

Two types of short-term noise impacts could occur during construction: (1) mobile-source noise from transport of workers, material deliveries, and debris and soil haul and (2) stationary-source noise from use of construction equipment.

Construction Vehicles

The transport of workers and materials to and from the construction site could potentially increase noise levels along local access roadways to the project site. Individual construction vehicle passes-bys and haul trucks may create momentary and short-lived noise levels of up to 85 dBA (L_{max}) at 50 feet from the vehicle. However, daily construction trips would be minimal and temporary.

Construction Equipment

Existing uses surrounding the project site would be exposed to temporary construction noise. Construction equipment for the installation of light poles typically includes a crane, backhoe, concrete saw/jackhammer, and a drill rig. A concrete saw or jackhammer would not be used at every proposed pole location, but on an as-needed basis, such as where concrete would have to be removed to install a light pole. Neither blasting nor pile-driving techniques would be required.

The District proposes to install the temporary lights in July of 2022 and begin use in August of 2022. Construction associated with the installation of the permanent lights is anticipated to take about six months and is scheduled to start on March 1, 2023, and finish by August 30, 2023. Permanent lighting is proposed at the tennis courts, baseball field, softball field, football field, and the soccer field. A total of 23 light poles—six 50-foot poles, two 60-foot poles, eleven 70-foot poles, and three 80-foot poles would be installed. The light pole locations are shown on Figure 3-7, *Lighting Plan*.

Noise generated during construction is based on the type of equipment used, the location of the equipment relative to sensitive receptors, and the timing and duration of the noise-generating activities. Noise levels from construction activities are dominated by the loudest piece of construction equipment. The dominant noise source is typically the engine, although work piece noise (such as dropping of materials) can also be noticeable.

The noise produced at each activity is dominated by the loudest piece of equipment needed for light pole installation. Construction noise quite often exhibits a high degree of variability because factors such as noise attenuation due to distance, type of equipment, and the load and power requirements to accomplish tasks result in different noise levels at a given sensitive receptor. Some heavy-duty equipment can have maximum, short-duration noise levels of 85 dBA at 50 feet. Construction noise impacts at sensitive receptors are determined based on loudness and noise exposure duration at a sensitive receptor. This would be if the project would generate construction noise levels greater than 80 dBA L_{eq} for a prolonged period of time (FTA 2018).

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Offsite Receptors

Based on PlaceWorks experience with previous lighting projects, the installation schedule of a single light pole takes approximately one week to complete. Initially workers drill at the proposed light pole location and set the concrete pole bases on the first day. The cement base sits for approximately 4 days to cure, and workers return to install the light pole with the use of a crane. Most of the noise generated would occur during the first and last day of this process. It is assumed that workers would drill and set the base of other light pole locations while cement cures.

The anticipated construction equipment (auger drill rig, backhoe, concrete saw, and a crane) were modeled using the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM). RCNM modeling indicates that the loudest piece of equipment (concrete saw) would be up to 83 dBA L_{eq} at a distance of 50 feet. The second loudest piece of equipment (drill rig) would be up to 77 dBA L_{eq} at a distance of 50 feet. Table 5.6-4, *Project-Related Construction Noise dBA L_{eq}* , shows the approximate noise levels at the nearest sensitive receptors to proposed light poles. Noise levels could potentially exceed 80 dBA L_{eq} . However, there are existing sound wall along the property line at the nearest residences that block the line of sight which would reduce noise levels by at least 5 decibels. With this reduction noise levels would be attenuated to less than 80 dBA L_{eq} . Additionally, the receptors would experience elevated noise levels for a 2-day period during the drilling and installation of the light pole. Construction would be very short-term. Therefore, impacts would be less than significant.

Table 5.6-4 Project-Related Construction Noise dBA L_{eq}

Equipment	RCNM Reference	Residences to South	Residences to the West
<i>Distance in feet</i>	50	35	NA
Drill Rig No Wall	77	83	NA
Drill Rig with Existing 6.5-foot Wall	72	78	NA
<i>Distance in feet</i>	50	NA	60
Concrete Saw	83	NA	81
Concrete Saw with Existing 6.5-foot Wall	78	NA	76
Maximum Noise Level at Receptors		78	76
Exceed 80 dBA FTA L_{eq} Threshold?		No	No
Source: RCNM			

On-Site Receptors

The closest proposed light pole to a classroom building is approximately over 300 feet away at which the loudest pieces of equipment would attenuate to 67 dBA L_{eq} or less. Though construction noise could temporarily elevate interior noise levels at the nearest classrooms, elevated noise levels would be limited to the first and last day of light pole installation. Therefore, temporary construction noise would not substantially interfere with the learning environment. On-site construction noise impacts would be less than significant.

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Impact 5.6-2 Project implementation would not result in long-term operation-related noise that would cause substantial increases in ambient noise levels. [Threshold N-1]

Traffic Noise

As mentioned above, the proposed lighting project would not result in an increase of in students, but the extended hours could result in additional trips from community groups after school hours. However, these trips would be minimal and would not substantially increase the overall daily traffic. Therefore, the project would not result in a substantial CNEL noise increase. Traffic noise impacts would be less than significant.

Outdoor Playfields

All student activities are proposed to end by 6:30 pm and no new school sports programs are proposed. As with the existing conditions, the newly lit athletic facilities would be available for use by community groups after school hours when the facilities are not in use by students and during weekends (as provided by the District's use policy under the Civic Center Act). However, the shifting of the school schedule could result in an ambient noise increase during the winter months where the light poles would be used after dark as late as 6:30 pm, when all student activities are scheduled to end. Any approved community use of the playfields would end no later than 9:00 pm. All activities would still take place during the daytime hours of 7:00 am to 10:00 pm, as defined in Chapter 8.28 of the Westminster Municipal Code and no installation of public address system or speakers is proposed.

PlaceWorks staff have collected noise measurement data at various sports fields. Noise levels for various playfields (soccer, tennis, softball, and baseball) vary between 49 and 60 dBA L_{eq} at 50 feet (see Table 5.6-5). The nearest noise sensitive receptors to the existing playfields are within 50 and 130 feet. As shown in Table 5.6-5, *Project-Related Recreational Noise dBA L_{eq}* , noise levels could potentially exceed the City of Westminster daytime exterior noise standard of 55 dBA at the residences west of the softball field. However, there is an existing seven-foot wall along the residences next to the softball field blocking the line of sight. This would provide at least a 5 dBA attenuation and reduce levels to 55 dBA or less. In addition, Section 8.28.060 of the Westminster Municipal Code exempts noise from community activities including school bands and athletic events. Therefore, noise from afterschool field activities due to the proposed project would be less than significant.

Table 5.6-5 Project-Related Recreational Noise dBA L_{eq}

Noise Source	Noise Level at 50 Feet	Nearest Receptors (Residences)	Attenuated Noise Level at Receptors, dBA L_{eq}
Softball/Baseball/	60	50 feet to south ^b	60 ^{d/55^e}
Tennis Courts	52	115 feet to west ^b	44
Soccer	49	130 feet to west ^b	41
Football ^a	60	140 feet to east ^c	51

^a Softball/Baseball noise levels assigned to football practices as noise levels would be similar.

^b Within Westminster city limits.

^c Within Garden Grove City limits

^d Noise levels without accounting for existing sound wall along property line.

^e Noise levels accounting for existing sound wall along property line (5 dBA attenuation).

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Impact 5.6-3: The project would not create excessive groundborne vibration and groundborne noise. [Threshold N-2]

Construction Vibration

Potential vibration impacts associated with development projects are usually related to the use of heavy construction equipment during the demolition and grading phases of construction. Construction can generate varying degrees of ground vibration depending on the construction procedures and equipment. Construction equipment generates vibration that spreads through the ground and diminishes with distance from the source. The effect on buildings in the vicinity of the construction site varies depending on soil type, ground strata, and receptor-building construction. The effects from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight structural damage at the highest levels. Vibration from construction activities rarely reaches the levels that can damage structures. Pile driving is not proposed.

For reference, a peak particle velocity of 0.20 in/sec PPV is used as the limit for nonengineered timber and masonry buildings, which would apply to the off-site surrounding residential structures (FTA 2018). Table 5.6-6, *Vibration Impact Levels for Typical Construction Equipment*, shows typical construction equipment vibration levels at a reference distance of 25 feet and estimated vibration levels at the nearest sensitive receptors to the south at approximately 25 feet. Proposed light pole locations are shown in Figure 6, *Lighting Plan*. At 25 feet, construction vibration levels would be up to 0.089 in/sec PPV, which would not exceed the threshold of 0.2 in/sec PPV. Therefore, construction vibration impacts would be less than significant.

Table 5.6-6 Vibration Impact Levels for Typical Construction Equipment

Equipment	Reference Levels at 25 Feet (in/sec PPV)	Residences at 25 Feet South ¹ (in/sec PPV)
Large Bulldozer	0.089	0.089
Caisson Drilling	0.089	0.089
Loaded Trucks	0.076	0.076
Jackhammer	0.035	0.035
Small Bulldozer	0.003	0.003

Source: FTA 2018.\

In/sec PPV = inches per second peak particle velocity

¹ As measured from the edge of construction site using Google Earth Pro.

Operational Vibration

The operation of the proposed project would not include any substantial long-term vibration sources. Thus, no significant vibration effects from operations sources would occur.

Impact 5.6-4: The proximity of the project site to an airport or airstrip would not result in exposure of future workers to excessive airport-related noise. [Threshold N-3]

The nearest airport to the project site is the John Wayne Airport approximately 6 miles to the southeast. There are no airports or private airstrips within 2 miles of the project site. The project would not expose people working in the project area to excessive noise levels. There would be no impact.

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5.6.4 Cumulative Impacts

Operation

There are no other nearby sources of stationary noise in the project area that would significantly contribute to the ambient noise environment during evening use of the practice fields by students or the community. Therefore, there would be **no cumulative operational stationary noise impacts**.

A significant cumulative traffic noise increase would be identified if project traffic noise were to substantially contribute to cumulative plus project conditions. However as mentioned above, the extended hours could result in additional trips from community groups after school hours but, these trips would be minimal and would not substantially increase the overall daily traffic. Therefore, cumulative impacts due to implementation of the proposed project would be **less than significant**.

Construction

No impact. The area around the project site is an urban built out neighborhood. There would be no major construction project nearby and the proposed project would be completed within 6 months or less. Therefore, no cumulative construction noise impacts would occur.

5.6.5 Level of Significance Before Mitigation

The following impacts would be less than significant: 5.6-1, 5.6-2, 5.6-3, and 5.6-4.

5.6.6 Level of Significance After Mitigation

Less than significant.

5.6.7 References

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5.7 TRANSPORTATION

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential impacts of the Sports Facilities Lighting at La Quinta High School Project (proposed project) to traffic and transportation conditions at the campus and surrounding community.

5.7.1 Environmental Setting

5.7.1.1 REGULATORY BACKGROUND

State, regional, and local laws, regulations, plans, or guidelines related to transportation that are applicable to the proposed project are summarized in this section.

State

Assembly Bill 1358: The California Complete Streets Act

The California Complete Streets Act of 2008 (AB 1358) was signed into law on September 30, 2008. Beginning January 1, 2011, AB 1358 required circulation elements to address the transportation system from a multimodal perspective. The bill states that streets, roads, and highways must “meet the needs of all users in a manner suitable to the rural, suburban, or urban context of the general plan.” Essentially, this bill requires a circulation element to plan for all modes of transportation where appropriate, including walking, biking, car travel, and transit.

The Complete Streets Act also requires circulation elements to consider the multiple users of the transportation system, including children, adults, seniors, and the disabled. For further clarity, AB 1358 tasked the Governor’s Office of Planning and Research to release guidelines for compliance with this legislation by January 1, 2014.

Senate Bill 375: Sustainable Communities and Climate Protection Act

The Sustainable Communities and Climate Protection Act (SB 375) was signed into law on September 30, 2008. The SB 375 regulation provides incentives for cities and developers to bring housing and jobs closer together and to improve public transit. The goal behind SB 375 is to reduce automobile commuting trips and length of automobile trips, thus helping to meet the statewide targets for reducing greenhouse gas emissions set by AB 32, the California Global Warming Solutions Act of 2006. SB 375 requires each metropolitan planning organization to add a broader vision for growth, called a “sustainable communities strategy” (SCS), to its transportation plan. The SCS must lay out a plan to meet the region’s transportation, housing, economic, and environmental needs in a way that enables the area to lower greenhouse gas emissions. The SCS should integrate transportation, land use, and housing policies to plan for achievement of the regional emissions target.

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Senate Bill 743

On September 27, 2013, SB 743 was signed into law. The legislature found that with the adoption of SB 375, the state had signaled its commitment to encourage land use and transportation planning decisions and investments that reduce vehicle miles traveled (VMT) and thereby contribute to the reduction of greenhouse gas (GHG) emissions, as required by AB 32. Additionally, AB 1358, described above, requires local governments to plan for a balanced, multimodal transportation network that meets the needs of all users.

SB 743 started a process that fundamentally changes transportation impact analysis as part of California Environmental Quality Act (CEQA) compliance. These changes include the elimination of auto delay, level of service (LOS), and similar measures of vehicular capacity or traffic congestion as the basis for determining significant impacts. As part of the new CEQA Guidelines, the new criteria “shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses” (California Public Resources Code section 21099[b][1]). On January 20, 2016, the Governor’s Office of Planning and Research (OPR) released proposed revisions to its CEQA Guidelines for the implementation of SB 743. OPR developed alternative metrics and thresholds based on VMT. The guidelines were certified by the Secretary of the Natural Resources Agency in December 2018. As of July 1, 2020, lead agencies were required to consider VMT as the metric for determining transportation impacts. The guidance provided relative to VMT significance criteria is focused primarily on land use projects, such as residential, office, and retail uses. However, as noted in the updated CEQA Guidelines, agencies are directed to choose metrics that are appropriate for their jurisdiction to evaluate the potential impacts of a project in terms of VMT.

Regional

Southern California Association of Governments

SCAG’s Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) provides a regional transportation plan for six counties in Southern California: Orange, San Bernardino, Riverside, Los Angeles, Ventura, and Imperial. The primary goal of the regional transportation plan is to increase mobility for the region. With recent legislation, this plan also encompasses sustainability as a key principle in future development. Current and recent transportation plan goals generally focus on balanced transportation and land use planning that:

- Maximize mobility and accessibility for all people and goods in the region.
- Ensure travel safety and reliability for all people and goods in the region.
- Preserve and ensure a sustainable regional transportation system.
- Maximize the productivity of our transportation system.
- Protect the environment and health of residents by improving air quality and encouraging active transportation (e.g., bicycling and walking).
- Encourage land use and growth patterns that facilitate transit and active transportation.

On September 3, 2020, SCAG’s Regional Council unanimously voted to approve and fully adopt Connect SoCal (2020–2045 RTP/SCS) and the addendum to the Connect SoCal Program EIR. Connect SoCal is a long-range visioning plan that builds upon and expands land use and transportation strategies established

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over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. The 2020-2045 RTP/SCS focuses on the continued efforts for an integrated approach in transportation and land uses strategies in development of the SCAG region through horizon year 2045. It projects that the SCAG region will meet its GHG per capita reduction targets of 8 percent by 2020 and 19 percent by 2035. Additionally, it is projected that implementation of the plan would reduce VMT per capita for year 2045 by 4.1 percent compared to baseline conditions for the year. The 2020-2045 RTP/SCS includes a “core vision” that centers on maintaining and better managing the transportation network for moving people and goods while expanding mobility choices by locating housing, jobs, and transit closer together and increasing investments in transit and complete streets.

Local

City of Westminster General Plan

Mobility Element

The Mobility Element includes the following goals and policies related to transportation:

- Goal M-1: Complete Streets. A safe, efficient, and accessible transportation system that serves the mobility needs of all users of all ages and abilities.
 - Policy M-1.3: Level of Service. Maintain level of service (LOS) D for vehicles at intersections and roadways when vehicles are considered a prioritized mode of travel (see Figure 5-1). When vehicles are not prioritized, LOS E for vehicles at intersections and roadways (operating at capacity) shall be acceptable.
 - Policy M-1.5: Mobility Impacts. Evaluate potential mobility impacts associated with proposed new developments and require the implementation of appropriate mitigation measures.
- Goal M-2: Active Transportation. A first rate network of bicycle and pedestrian infrastructure that supports the City’s complete street goals and provides safe, efficient, and accessible connectivity for active modes of travel.
 - Policy M-2.3: Development Projects. Require the provision of adequate bicycle and pedestrian access for new development projects through the site plan review process and update the development standards to include this provision.
 - Policy M-2.9: Construction Activities. Project bicyclist and pedestrian travel paths during public and private sector construction activities and provide safe and accessible alternate routes where necessary.

Parks and Recreation Element

The Parks and Recreation Element includes the following goals and policies related to transportation:

- Goal PR-2: Parks and Recreation Facility Management. Park and recreational facilities that are well maintained and safe to meet the short- and long-term recreational needs of the City.

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- Policy PR-2.5: Joint-Use Agreements. Work with local school districts, private developers, institutional uses, nonprofits, and other organizations to develop joint-use agreements to expand the park and recreation facility offerings in the City.
- Goal PR-3: Recreational Programming. A variety of recreational services, programs, facilities, and activities that are responsive to Westminster's needs and preferences.
 - Policy PR-3.1: Access to Programs. Encourage recreational programs that are accessible to Westminster residents of all ages, abilities, and incomes.

5.7.1.2 EXISTING CONDITIONS

Street Network

The streets that provide access to La Quinta High School are McFadden Avenue to the north and Ward Street to the east.

McFadden Avenue

McFadden Avenue is a four-lane east-west street that abuts the northern boundary of the campus. Orange County Transportation Authority (OCTA) bus route # 66 operates along McFadden Avenue. There are five school access driveways on McFadden Avenue. There are bike lanes along McFadden Avenue.

Ward Street

Ward Street is a two-lane north-south street that abuts the eastern boundary of the campus. There are two school access driveways on Ward Street. There are bike lanes along Ward Street.

5.7.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- | | |
|-----|---|
| T-1 | Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. |
| T-2 | Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b). |
| T-3 | Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). |
| T-4 | Result in inadequate emergency access. |

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5.7.3 Environmental Impacts

5.7.3.1 IMPACT ANALYSIS

Impact 5.7-1: The proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. [Threshold T-1]

Construction of the proposed project would entail large construction equipment, transportation of equipment to and from the construction sites, and worker vehicles. However, construction traffic would be temporary, and all construction activity and staging areas would occur within the existing campus of La Quinta High School. Therefore, the proposed project would not obstruct traffic lanes or have any long-term effects on the circulation system.

At project completion, the proposed project would allow existing athletic programs to continue without interruption even with the later start school hours. The proposed project would mainly serve students already on campus, and the new lights would allow students to participate in practices and games after daylight hours. No new student programs or uses are proposed with the newly lit sports facilities at the high school, and no increase in participants or attendance are anticipated; the proposed project could have the potential to capture trips that now must travel to remote facilities due to the absence of lighted facilities at La Quinta High School. The ability to capture trips for local residents is consistent with the City's General Plan policies related to both parks and recreation, and transportation, such as Policy PR-3.1 which calls for encouraging accessibility to recreation programs for all residents in the City. Therefore, the proposed project would not conflict with any programs, plans, ordinances, or policies addressing the circulation system. Impacts would be less than significant.

Impact 5.7-2: The proposed project would not conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b). [Threshold T-2]

CEQA Guidelines Section 15064.3 eliminates auto delay, LOS, and similar measures of vehicular capacity or traffic congestion as the basis for determining significant impacts:

Generally, vehicle miles traveled is the most appropriate measure of transportation impacts. For the purposes of this section, "vehicle miles traveled" refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Except as provided ... (regarding roadway capacity), a project's effect on automobile delay shall not constitute a significant environmental impact.

The proposed project would not increase student use of the athletic facilities but would simply shift these activities to later in the day but installing lights. This shift in time would not increase vehicle miles traveled (VMT). Lighting of the athletic facilities on campus would provide additional recreational sources for the local population. The area is served by various parkland and recreational facilities, and the enhanced campus facilities presents the potential to capture trips that now must travel to remote facilities due to the absence of lighted facilities at La Quinta High School. The ability to capture trips for local residents is consistent with the

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City's General Plan policies related to both parks and recreation, and transportation, such as Policy PR-3.1 which calls for encouraging accessibility to recreation programs for all residents in the City. The project site is located within a Transit Priority Area, as shown in Figure 5-4 of the Westminster General Plan, and its impact is beneficial from a VMT efficiency perspective. Therefore, impacts would be less than significant.

Impact 5.7-3: The proposed project would not create hazardous conditions (sharp curves, etc.), or result in potential conflicting uses, and emergency access. [Thresholds T-3 and T-4]

Traffic Hazards and Incompatible Uses

The proposed project would not develop new driveway access points onto the public right-of-way and access points would be the same as existing conditions. The proposed project would not modify the existing on- or off-site circulation systems, and no new land uses would be created that could potentially increase or impact any design features of the existing high school facilities. The proposed project would not create sharp curves or dangerous intersections.

Community access to these athletic facilities outside of school hours and on weekends would be through McFadden Avenue. As shown in Figure 3-8, *La Quinta High School Community Access*, parking would be provided in the northwestern parking lot. As such, community members would not need to park on adjacent streets as this parking lot provides the closest and most direct access to the sports facilities. Community use of these facilities is controlled by District policy under the Civic Center Act. Therefore, impacts would be less than significant.

Emergency Access

The existing access and circulation features at La Quinta High School, including the onsite roadways, parking lots, and fire lanes, would continue to accommodate emergency ingress and egress by fire trucks, police units, and ambulance/paramedic vehicles, and the proposed project would not impact emergency access onsite. The proposed lights would be programmable and would allow for light to be provided after the end of events to allow safe exit. Impacts would be less than significant.

5.7.4 Cumulative Impacts

The proposed project is part of a District-wide project to add competitive sports lighting to its comprehensive high schools. The proposed project would not result in an increase in students and therefore, would not result in an increase in student trips generated. While the proposed project has the ability to capture trips for local residents that would otherwise travel to remote facilities due to the absence of lights at La Quinta High School, this would not result in an increase in trips; the proposed project would not result in any cumulative VMT impacts. The proposed project would be consistent with adopted plans, policies, and programs regarding circulation, and would not result in hazardous conditions or result in impacts to emergency access. Therefore, the proposed project would not contribute to a cumulative impact, and cumulative impacts would be **less than significant**.

5. Environmental Analysis TRANSPORTATION

5.7.5 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, all impacts would be less than significant.

5.7.6 Mitigation Measures

No mitigation measures are required.

5.7.7 Level of Significance After Mitigation

Impacts would be less than significant.

5. Environmental Analysis

5.8 TRIBAL CULTURAL RESOURCES

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of Sports Facilities Lighting at La Quinta High School Project (proposed project) to impact tribal cultural resources. This section discusses state laws and regulations protecting resources, along with the existing cultural resource conditions on and near the project site.

5.8.1 Environmental Setting

5.8.1.1 REGULATORY BACKGROUND

Federal

National Register of Historic Places

The National Register of Historic Places recognizes properties that are significant at the national, state, and/or local levels and includes districts, sites, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and culture.

Properties are nominated to the National Register by the State Historic Preservation Officer of the state in which the property is located, by the Federal Preservation Officer for properties under federal ownership or control, or by the Tribal Historic Preservation Officer if a property is on tribal lands.

The criteria for listing in the National Register follow the standards for determining if properties, sites, districts, structures, or landscapes of potential significance are eligible for nomination. In addition to meeting any or all of the following criteria, properties nominated must also possess integrity of location, design, setting, feeling, workmanship, association, and materials:

- Associated with events that have made a significant contribution to the broad patterns of history.
- Associated with the lives of persons significant in our past.
- Embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; possess high artistic values; or represent a significant and distinguishable entity whose components may lack individual distinction.
- Yield, or may be likely to yield, information important in prehistory or history.

National Historic Preservation Act

The National Historic Preservation Act supplements the provisions of the Antiquities Act of 1906 and established laws for historic resources to “preserve important historic, cultural, and natural aspects of our national heritage, and to maintain, wherever possible, an environment that supports diversity and a variety of individual choice.” The law makes it illegal to destroy, excavate, or remove from federal or Indian lands any archaeological resources without a permit from the land manager. Regulations for the ultimate disposition of materials recovered as a result of permitted activities state that archaeological resources excavated on public

5. Environmental Analysis

TRIBAL CULTURAL RESOURCES

lands remain the property of the United States. Archaeological resources excavated from Indian lands remain the property of the Indian or Indian tribe having rights of ownership over such resources.

American Indian Religious Freedom Act

The American Indian Religious Freedom Act of 1978 proclaims that the US government will respect and protect the rights of Indian tribes to freely exercise their traditional religions. The courts have interpreted this as requiring agencies to consider the effects of their actions on traditional religious practices.

Archaeological Resources Protection Act

The Archaeological Resources Protection Act (US Code, Title 16, Sections 470aa–mm) became law on October 31, 1979, and has been amended four times. It regulates the protection of archaeological resources and sites that are on federal and Indian lands.

Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act (US Code, Title 25, Sections 3001 et seq.) is a federal law passed in 1990 that provides a process for museums and federal agencies to return certain Native American cultural items—such as human remains, funerary objects, sacred objects, or objects of cultural patrimony—to lineal descendants and culturally affiliated Indian tribes.

State

Assembly Bill 52

The Native American Historic Resource Protection Act (Assembly Bill (AB) 52 took effect July 1, 2015 and incorporates tribal consultation and analysis of impacts to tribal cultural resources (TCR) into the CEQA process. It requires TCRs to be analyzed like any other CEQA topic and establishes a consultation process for lead agencies and California tribes. Projects that require a notice of preparation of an EIR or notice of intent to adopt a negative declaration or mitigated negative declaration are subject to AB 52. A significant impact on a TCR is considered a significant environmental impact and requires feasible mitigation measures.

TCRs must have certain characteristics:

- 1) Sites, features, places, cultural landscapes (must be geographically defined), sacred places, and objects with cultural value to a California Native American tribe that are either included or determined to be eligible for inclusion in the California Register of Historic Resources or included in a local register of historical resources. (Public Resources Code [PRC] Section 21074(a)(1))
- 2) The lead agency, supported by substantial evidence, chooses to treat the resource as a TCR. (PRC § 21074(a)(2))

The first category requires that the TCR qualify as a historical resource according to PRC Section 5024.1. The second category gives the lead agency discretion to qualify that resource—under the conditions that it support

5. Environmental Analysis

TRIBAL CULTURAL RESOURCES

its determination with substantial evidence and consider the resource's significance to a California tribe. The following is a brief outline of the process in PRC Sections 21080.3.1 to .3.3.

1. A California Native American tribe asks agencies in the geographic area with which it is traditionally and culturally affiliated to be notified about projects. Tribes must ask in writing.
2. Within 14 days of deciding to undertake a project or determining that a project application is complete, the lead agency must provide formal written notification to all tribes who have requested it.
3. A tribe must respond within 30 days of receiving the notification if it wishes to engage in consultation.
4. The lead agency must initiate consultation within 30 days of receiving the request from the tribe.
5. Consultation concludes when both parties have agreed on measures to mitigate or avoid a significant effect to a TCR, *or* a party, after a reasonable effort in good faith, decides that mutual agreement cannot be reached.
6. Regardless of the outcome of consultation, the CEQA document must disclose significant impacts on TCRs and discuss feasible alternatives or mitigation that avoid or lessen the impact.

Native American Historic Resource Protection Act

PRC 5097.993

- a) (1) A person who unlawfully and maliciously excavates upon, removes, destroys, injures, or defaces a Native American historic, cultural, or sacred site, that is listed or may be eligible for listing in the California Register of Historic Resources pursuant to Section 5024.1, including any historic or prehistoric ruins, any burial ground, any archaeological or historic site, any inscriptions made by Native Americans at such a site, any archaeological or historic Native American rock art, or any archaeological or historic feature of a Native American historic, cultural, or sacred site, is guilty of a misdemeanor if the act was committed with specific intent to vandalize, deface, destroy, steal, convert, possess, collect, or sell a Native American historic, cultural, or sacred artifact, art object, inscription, or feature, or site, and the act was committed as follows:
 - i. On public land.
 - ii. On private land, by a person, other than the landowner, as described in subdivision (b).
- 2) A violation of this section is punishable by imprisonment in the county jail for up to one year, by a fine not to exceed ten thousand dollars (\$10,000), or by both that fine and imprisonment.
- b) This section does not apply to any of the following:
 - (1) An act taken in accordance with, or pursuant to, an agreement entered into pursuant to subdivision (l) of Section 5097.94.

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(2) An action taken pursuant to Section 5097.98.

(3) An act taken in accordance with the California Environmental Quality Act (Division 13 (commencing with Section 21000)).

(4) An act taken in accordance with the National Environmental Policy Act of 1969 (42 U.S.C. Sec. 4321 et seq.).

(5) An act authorized under the Z'berg-Nejedly Forest Practice Act of 1973 (Chapter 8 (commencing with Section 4511) of Part 2 of Division 4).

(6) An action taken with respect to a conservation easement in accordance with Chapter 4 (commencing with Section 815) of Division 2 of the Civil Code, or any similar nonperpetual enforceable restriction that has as its purpose the conservation, maintenance, or provision of physical access of Native Americans to one or more Native American historic, cultural, or sacred sites, or pursuant to a contractual agreement for that purpose to which most likely descendants of historic Native American inhabitants are signatories.

(7) An otherwise lawful act undertaken by the owner, or an employee or authorized agent of the owner acting at the direction of the owner, of land on which artifacts, sites, or other Native American resources covered by this section are found, including, but not limited to, farming, ranching, forestry, improvements, investigations into the characteristics of the property conducted in a manner that minimizes adverse impacts unnecessary to that purpose, and the sale, lease, exchange, or financing of real property.

(8) Research conducted under the auspices of an accredited postsecondary educational institution or other legitimate research institution on public land in accordance with applicable permitting requirements or on private land in accordance with otherwise applicable law. (Added by renumbering Section 5097.995 by Stats. 2004, Ch. 286, Sec. 9. Effective January 1, 2005.)

PRC 5097.994.

- a) A person who violates subdivision (a) of Section 5097.993 is subject to a civil penalty not to exceed fifty thousand dollars (\$50,000) per violation.
- b) A civil penalty may be imposed for each separate violation of subdivision (a) in addition to any other civil penalty imposed for a separate violation of any other provision of law.
- c) In determining the amount of a civil penalty imposed pursuant to this section, the court shall take into account the extent of the damage to the resource. In making the determination of damage, the court may consider the commercial or archaeological value of the resource involved and the cost to restore and repair the resource.
- d) A civil action may be brought pursuant to this section by the district attorney, the city attorney, or the Attorney General, or by the Attorney General upon a complaint by the Native American Heritage Commission.

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- e) (1) All moneys collected from civil penalties imposed pursuant to this section as a result of an enforcement action brought by a city or county shall be distributed to the city or county treasurer of the city or county that brought the action. These moneys shall be first utilized to repair or restore the damaged site, and the remaining moneys shall be available to that city or county to offset costs incurred in enforcing this chapter.
- (2) All moneys collected from civil penalties imposed pursuant to this section as a result of an enforcement action brought by the Attorney General shall be first distributed to, and utilized by, the Native American Heritage Commission to repair or restore the damaged site, and the remaining moneys shall be available to the Attorney General to offset costs incurred in enforcing this chapter. (Added by renumbering Section 5097.996 by Stats. 2004, Ch. 286, Sec. 10. Effective January 1, 2005.)

Human Remains

California Health and Safety Code Section 7050.5 requires that if human remains are discovered in the project site, disturbance of the site shall halt and remain halted until the coroner has conducted an investigation into the circumstances, manner, and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative. If the coroner determines that the remains are not subject to his or her authority and has reason to believe they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

California Register of Historical Resources

The California Register is the state version of the National Register of Historic Places. It was enacted in 1992 and became official January 1, 1993. The California Register was established to serve as an authoritative guide to the state's significant historical and archaeological resources. Resources that may be eligible for listing include buildings, sites, structures, objects, and historic districts. According to subsection (c) of PRC Section 5024.1, a resource may be listed as a historical resource in the California Register if it meets any of the four criteria listed under "National Register of Historic Places," above.

Local

Westminster General Plan

Community Design Element

The Community Design Element includes the following goals and policies related to cultural and historic resources:

- Goal CD-5: Cultural Resources. An understanding and acceptance of the City's ethnic diversities and preservation of the rich, historical context of Westminster's past.
 - Policy CD-5.3: Historic Resources. Evaluate of the condition of historical buildings, the costs of rehabilitation, and the feasibility of preservation or conservation alternatives when considering the demolition or movement of historic structures; when possible, encourage the adaptive re-use of the historic structure.

5. Environmental Analysis

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- Policy CD-5.6: Cultural Center. Encourage the continued operation of a physical venue for community arts groups, local ethnic groups, schools, as well as a variety of music, dance, and theatrical events.

City of Westminster Municipal Code

The duties and authority of the Design Review Board, as indicated in Section 17.600.020, Design Review Board, include the following:

1. **Residential.** The construction of a new residential project of 7 or more units or the addition to an existing residential project that would result in 7 or more units, or the demolition of one or more historic structure.
2. **Nonresidential.** Construction of a new building of 3,000 gross square feet of floor area or more, or the addition of 3,000 gross square feet or more to an existing building within a one-year period; exterior architectural modifications, including change in color or materials to a 3,000 gross square foot or larger building; wireless communication facilities not screened or designed as “stealth facilities;” demolition of historic structures; or redevelopment of a historic structure.
3. **Referral.** Any project that is referred to the Board by an approval authority.

5.8.1.2 EXISTING CONDITIONS

The District has not received notification from California Native American tribes per Public Resources Code section 21080.3.1 and therefore, the provisions for consultation have not been triggered.

5.8.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- TCR-1 Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
- i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
 - ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

5. Environmental Analysis

TRIBAL CULTURAL RESOURCES

5.8.3 Environmental Impacts

Impact 5.8-1: The proposed project would not cause a substantial adverse change in the significance of a tribal cultural resource that is 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). [Threshold TCR-1.i]

The proposed sports lighting would be installed on the existing athletic facilities. The area to be disturbed by the proposed project is not in the listings or eligible for listing on the California Register of Historical Resources, or in a local register of historical resources. Therefore, implementation of the proposed project would not impact tribal cultural resources pursuant to Public Resources Code Section 21074(a)(1). No impact to historical resource would occur.

Impact 5.8-2: The proposed project could cause a substantial adverse change in the significance of a tribal cultural resource that is determined by the lead agency to be significant pursuant to criteria in Public Resources Code section 5024.1(c). [Threshold TCR-1.ii]

As part of the AB 52 process, Native American tribes must submit a written request to the District to be notified of projects within their traditionally and culturally affiliated area. District must provide written, formal notification to those tribes within 14 days of deciding to undertake a project. The tribe must respond to the District within 30 days of receiving this notification if they want to engage in consultation on the project, and the District must begin the consultation process within 30 days of receiving the tribe's request. Consultation concludes under these circumstances 1) the parties agree to mitigation measures to avoid a significant effect on a tribal cultural resource; 2) a party, acting in good faith and after reasonable effort, concludes mutual agreement cannot be reached; or 3) a tribe does not engage in the consultation process or provide comments.

The District has not been contacted, per AB 52, and the consultation process has not been triggered. Furthermore, the proposed project would result in minimal ground disturbance and excavation at the project site which currently operates as an existing high school.

The high school is not identified as historically significant in a California Register of Historic Resources or meets any of the criteria for listing in the National Register of Historic Places. The proposed project would install 19 light poles at the high school, and each pole would disturb about 9 square feet of area. Therefore, approximately 162 square feet of areas within the existing sports facilities would be disturbed. Additionally, approximately 18-inch-wide and 24-inch-deep utilities trenching would be necessary to provide connection from the poles to electrical panels. Because the campus has already been developed, the utilities trenching would occur within the artificial fill layer of the soil and would not disturb native soils that may contain tribal cultural resources. However, although the likelihood of discovering tribal cultural resources is minimal, the potential for discovering previously unidentified subsurface tribal cultural resources exists. Therefore, Mitigation Measure TCR-1 has been incorporated to reduce impacts to a less than significant level.

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5.8.4 Cumulative Impacts

Each related cumulative project would be required to comply with CEQA Guidelines Section 15064.5, which addresses accidental discoveries of archaeological sites and resources, including tribal cultural resources. Therefore, any discoveries of TCRs caused by the project or related projects would be mitigated to a less than significant level. Project impacts would not be cumulatively considerable.

5.8.5 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: Impact 5.8-1.

5.8.6 Mitigation Measures

TCR-1 Prior to any ground disturbing construction activities, the Garden Grove Unified School District (District) shall retain a Native American monitor. The tribal monitor shall only be present on-site during the construction phases that involve ground-disturbing activities. Ground-disturbing activities are defined as activities that may include, but are not limited to, pavement removal, potholing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching within the project area. The tribal monitor will complete daily monitoring logs that will provide descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when the grading and excavation activities are completed or when the tribal representatives and monitor have indicated that the project site has a low potential for affecting tribal cultural resources.

Upon discovery of any tribal cultural resources, construction activities shall cease in the immediate vicinity of the find until the tribal monitor can assess the find. The evaluation of all tribal cultural resources unearthed by project construction activities shall be evaluated by a qualified archaeologist and/or tribal monitor. If the resources are Native American in origin, the tribal monitor shall coordinate with the District regarding treatment and curation of these resources as well as notifying local tribes of the find. Typically, the tribe(s) will request reburial or preservation for educational purposes. The District may continue work on other parts of the project site while evaluation and, if necessary, mitigation takes place (CEQA Guidelines Section 15064.5[f]). If the tribal monitor determines a resource to constitute a "historical resource" or "unique archaeological resource," time and funding sufficient to allow for implementation of avoidance measures or appropriate mitigation must be available. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and Public Resources Code Section 21083.2(b) for unique archaeological resources. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. The District shall be responsible for ensuring that a public, nonprofit institution with a research interest in the materials, such as the Natural Museum of Los Angeles County or the Fowler Museum, curate any historic archaeological

5. Environmental Analysis

TRIBAL CULTURAL RESOURCES

material that is not Native American in origin if such an institution agrees to accept the material. If no institution accepts the archaeological material, the District shall offer it to a local historical society for educational purposes or retain the material and use it for educational purposes.

5.8.7 Level of Significance After Mitigation

Impacts would be less than significant with the implementation of Mitigation Measure TCR-1.

6. Significant Unavoidable Adverse Impacts

At the end of Chapter 1, *Executive Summary*, is a table that summarizes the impacts, mitigation measures, and levels of significance before and after mitigation. Mitigation measures would reduce the level of impact, but the following impacts would remain significant, unavoidable, and adverse after mitigation measures are applied:

Aesthetics

- Impact 5.1-3: The proposed project would generate additional light and glare. [Threshold AE-4]

6. Significant Unavoidable Adverse Impacts

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7. Alternatives to the Proposed Project

7.1 INTRODUCTION

7.1.1 Purpose and Scope

The California Environmental Quality Act (CEQA) requires that an environmental impact report (EIR) include a discussion of reasonable project alternatives that would “feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any significant effects of the project and evaluate the comparative merits of the alternatives” (CEQA Guidelines § 15126.6[a]). As required by CEQA, this chapter identifies and evaluates potential alternatives to the proposed project.

Section 15126.6 of the CEQA Guidelines explains the foundation and legal requirements for the alternatives analysis in an EIR. Key provisions are:

- “[T]he discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.” (15126.6[b])
- “The specific alternative of ‘no project’ shall also be evaluated along with its impact.” (15126.6[e][1])
- “The no project analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the ‘no project’ alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.” (15126.6[e][2])
- “The range of alternatives required in an EIR is governed by a ‘rule of reason’ that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project.” (15126.6[f])
- “Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries..., and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)” (15126.6[f][1]).
- “Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.” (15126.6[f][2][A])

7. Alternatives to the Proposed Project

- “An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative.” (15126.6[f][3])

For each development alternative, this analysis:

- Describes the alternative.
- Analyzes the impact of the alternative as compared to the proposed project.
- Identifies the impacts of the project that would be avoided or lessened by the alternative.
- Assesses whether the alternative would meet most of the basic project objectives.
- Evaluates the comparative merits of the alternative and the project.

According to Section 15126.6(d) of the CEQA Guidelines, “[i]f an alternative would cause...significant effects in addition those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed.”

7.1.2 Project Objectives

As described in Section 3.2, the following objectives have been established for the proposed project and will aid decision makers in their review of the project, the project alternatives, and associated environmental impacts.

1. Maintain opportunities for access to student athletic facilities while adjusting to the State’s late start requirements under SB 328.
2. Provide lighting to allow for safe night use of athletic facilities to accommodate school events and activities.
3. Provide lighting to allow after-school community use of school athletic facilities subject to District use policies and the Civic Center Act.

7.2 ALTERNATIVES CONSIDERED AND REJECTED DURING THE SCOPING/PROJECT PLANNING PROCESS

The following is a discussion of the land use alternatives considered during the scoping and planning process and the reasons why they were not selected for detailed analysis in this EIR.

7.2.1 Alternative Development Areas

CEQA requires the discussion of alternatives to focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project. The key question and first step in the analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR (CEQA Guidelines § 15126[5][B][1]). Key factors in evaluating the feasibility of potential off-site locations for EIR project alternatives include:

7. Alternatives to the Proposed Project

- If it is in the same jurisdiction.
- Whether development as proposed would require a general plan amendment.
- Whether the project applicant could reasonably acquire, control, or otherwise have access to the alternative site (or the site is already owned by the proponent). (CEQA Guidelines § 15126.6[f][1])

The District owns other properties in the city, but the proposed lighting is site-specific because its purpose is to accommodate athletic programs and events that would take place after daylight due to the later start time initiated by SB 328. The District is adding competitive sports lighting to all its high schools; overall, the development of the size and type proposed by the proposed would have similar effects on air quality, energy, greenhouse gas emissions, noise, transportation, and tribal cultural resources.

It was determined, therefore, that it is unlikely that there is an alternative project site that could potentially meet the objectives of the proposed project and reduce significant impacts of the project as proposed.

7.3 ALTERNATIVES SELECTED FOR FURTHER ANALYSIS

Based on the criteria listed above, the following two alternatives have been determined to represent a reasonable range of alternatives which have the potential to feasibly attain most of the basic objectives of the project, but which may avoid or substantially lessen any of the significant effects of the project. These alternatives are analyzed in detail in the following sections.

- No Project Alternative
- Use of Offsite Facilities Alternative

An EIR must identify an “environmentally superior” alternative and where the No Project Alternative is identified as environmentally superior, the EIR is then required to identify as environmentally superior an alternative from among the others evaluated. Each alternative's environmental impacts are compared to the proposed project and determined to be environmentally superior, neutral, or inferior. Section 7.6 identifies the Environmentally Superior Alternative. The preferred land use alternative (proposed project) is analyzed in detail in Chapter 5 of this DEIR.

7.4 NO PROJECT ALTERNATIVE

The CEQA Guidelines require analysis of a No Project Alternative. The purpose of this alternative is to describe and analyze a scenario under which the proposed project is not implemented so that decision makers can compare the impacts of approving the proposed project with the impacts of not approving the proposed project. The No Project Alternative analysis must discuss the existing site conditions as well as what would reasonably be expected to occur in the foreseeable future based on any current plans, and it must be consistent with available infrastructure and community services.

7. Alternatives to the Proposed Project

Under the No Project Alternative, the proposed improvements at La Quinta High School would not be implemented. The existing athletic facilities on campus would not be lighted, and athletic programs and events would take place in the dark.

7.4.1 Aesthetics

Under this alternative, the athletic facilities on the project site would not include lighting. Since no physical or operational changes would occur at the project site, this alternative would result in no impact to visual/aesthetic resources. Specifically, this alternative would not create new sources of light and glare as a result of installing light poles. As a result, this alternative would eliminate the proposed project's significant and unavoidable impacts to light and glare.

7.4.2 Air Quality

No construction would occur under this alternative, and no new emissions would be generated. This alternative would eliminate the proposed project's less than significant impacts.

7.4.3 Cultural and Paleontological Resources

No construction would occur under this alternative, as no ground-disturbing activities would occur. This alternative would eliminate the proposed project's potentially significant impacts, and no mitigation measures would be required.

7.4.4 Energy

No construction would occur under this alternative, and no new energy consumption would be generated. This alternative would eliminate the proposed project's less than significant impacts.

7.4.5 Greenhouse Gas Emissions

No construction would occur under this alternative, and no new emissions that could contribute to climate change would be generated. This alternative, compared to the proposed project, would eliminate the proposed project's less than significant impacts to greenhouse gas emissions.

7.4.6 Noise

No construction noise and vibration would be generated under this alternative. Operational noise under the proposed project and this alternative would be the same. This alternative, compared to the proposed project, would eliminate the proposed project's less than significant impacts related to temporary and operational noise and vibration.

7.4.7 Transportation

The proposed project has the ability to capture trips that now must travel to remote facilities due to the absence of lighted facilities at La Quinta High School, and therefore, the proposed project would not result in an

7. Alternatives to the Proposed Project

increase in VMT. Under this alternative, the consolidation of trips would not occur, and impacts would be greater than the proposed project, but would continue to be less than significant.

7.4.8 Tribal Cultural Resources

No earthwork or soil disturbance would occur under this alternative, and any undiscovered subsurface cultural resources at the project site would not be altered. This alternative, compared to the proposed project, would eliminate the potentially significant impacts to tribal cultural resources that would require mitigation measures.

7.4.9 Conclusion

The No Project Alternative would eliminate impacts to all the environmental resources analyzed in the EIR. However, the No Project Alternative would not meet any of the project objectives.

Project Objectives	Ability to Meet Project Objectives	Explanation
1. Maintain opportunities for access to student athletic facilities while adjusting to the State's late start requirements under SB 328.	No	This alternative would not install lighting at La Quinta High School, and therefore, students would not be able to use the athletic facilities after sunset.
2. Provide lighting to allow for safe night use of athletic facilities to accommodate school events and activities.	No	This alternative would not install lighting at La Quinta High School, and therefore, school events and activities would not be able to be held at the athletic facilities after sunset.
3. Provide lighting to allow after-school community use of school athletic facilities subject to District use policies and the Civic Center Act.	No	This alternative would not install lighting at La Quinta High School, and therefore, community members would not be able to use the athletic facilities after sunset.

7.5 USE OF OFFSITE FACILITIES ALTERNATIVE

Under the Use of Offsite Facilities Alternative, the proposed light poles would not be installed on the project site, and the District would seek use of lighted City parks and facilities within the surrounding area, if available. This would require transporting students from La Quinta High School to offsite City parks and facilities to accommodate the school's athletic programs.

7.5.1 Aesthetics

Under this alternative, the proposed light poles would not be installed on campus as students would travel offsite for athletic activities and events. As such, the proposed project would not result in aesthetic impacts onsite, including introducing new light and glare sources. Therefore, this alternative would eliminate the proposed project's significant and unavoidable impacts to light and glare.

7.5.2 Air Quality

No construction would occur under this alternative, and no new emissions would be generated. However, as this alternative would require transporting students offsite to lighted City parks and facilities, if available, VMT

7. Alternatives to the Proposed Project

under this alternative would be greater than the proposed project. Therefore, this alternative would result in greater air quality impacts compared to the proposed project's less than significant impacts to air quality.

7.5.3 Cultural and Paleontological Resources

No construction would occur under this alternative, as no ground-disturbing activities would occur. This alternative would eliminate the proposed project's potentially significant impacts, and no mitigation measures would be required.

7.5.4 Energy

No construction would occur under this alternative, and no new energy consumption would be generated. However, as this alternative would require transporting students offsite to lighted City parks and facilities, if available, VMT under this alternative would be greater than the proposed project. Therefore, this alternative would result in greater energy impacts compared to the proposed project's less than significant impacts.

7.5.5 Greenhouse Gas Emissions

No construction would occur under this alternative, and no new emissions that could contribute to climate change would be generated. However, as this alternative would require transporting students offsite to lighted City parks and facilities, if available, VMT under this alternative would be greater than the proposed project. Therefore, this alternative would be greater than the proposed project's less than significant impacts to greenhouse gas emissions.

7.5.6 Noise

No construction noise and vibration would be generated under this alternative. Depending on the proximity of sensitive receptors to lighted City parks and facilities, relocating athletic activities and events offsite could result in increases to noise. This alternative, compared to the proposed project, could result in greater impacts compared to the proposed project's less than significant impacts related to temporary and operational noise and vibration.

7.5.7 Transportation

Under this alternative, the proposed light poles would not be installed on campus, and therefore, students would have to travel offsite to use lighted City parks and facilities within the surrounding area, if available. Transporting students offsite would result in an increase in VMT compared to existing conditions. Therefore, compared to the proposed project, this alternative would result in greater impacts to transportation.

7.5.8 Tribal Cultural Resources

No earthwork or soil disturbance would occur under this alternative, and any undiscovered subsurface cultural resources at the project site would not be altered. This alternative, compared to the proposed project, would eliminate the potentially significant impacts to tribal cultural resources that would require mitigation measures.

7. Alternatives to the Proposed Project

7.5.9 Conclusion

The Use of Offsite Facilities Alternative would eliminate the proposed project's impacts to aesthetics, cultural and paleontological resources, and tribal cultural resources, but would result in greater impacts to air quality, energy, greenhouse gas emissions, noise, and transportation compared to the proposed project. This alternative would not meet any of the project objectives.

Project Objectives	Ability to Meet Project Objectives	Explanation
4. Maintain opportunities for access to student athletic facilities while adjusting to the State's late start requirements under SB 328.	No	This alternative would not install lighting at La Quinta High School, and therefore, students would not be able to use the athletic facilities after sunset but would have to travel to offsite facilities.
5. Provide lighting to allow for safe night use of athletic facilities to accommodate school events and activities.	No	This alternative would not install lighting at La Quinta High School, and therefore, school events and activities would not be able to be held at the athletic facilities after sunset. Under this alternative, school events and activities that would occur after sunset would have to be held at offsite facilities.
6. Provide lighting to allow after-school community use of school athletic facilities subject to District use policies and the Civic Center Act.	No	This alternative would not install lighting at La Quinta High School, and therefore, community members would not be able to use the athletic facilities after sunset but would have to travel to offsite facilities.

7.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires a lead agency to identify the "environmentally superior alternative" and, in cases where the "No Project" Alternative is environmentally superior to the proposed project, the environmentally superior development alternative must be identified. One alternative has been identified as "environmentally superior" to the proposed project:

■ Use of Offsite Facilities Alternative

The Use of Offsite Facilities Alternative has been identified as the environmentally superior alternative. While this alternative would eliminate the significant and unavoidable impact related to light and glare to the residences adjacent to the site's southern boundary, it would result in greater impacts to air quality, energy, greenhouse gas emissions, noise, and transportation. Additionally, this alternative would not meet any of the project objectives.

"Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts" (CEQA Guidelines § 15126.6[c]).

Table 7-1, *Summary of Proposed Project and Alternatives*, provides a summary of the alternative analysis.

7. Alternatives to the Proposed Project

Table 7-1 Summary of Proposed Project and Alternatives

Topic	Proposed Project	No Project Alternative	Use of Offsite Facilities Alternative
5.1 Aesthetics	SU	-	-
5.2 Air Quality	LTS	-	+
5.3 Cultural and Paleontological Resources	LTS/MM	-	-
5.4 Energy	LTS	-	+
5.5 Greenhouse Gas Emissions	LTS	-	+
5.6 Noise	LTS	-	+
5.7 Transportation	LTS	-	+
5.8 Tribal Cultural Resources	LTS/MM	-	-

Notes: LTS: Less Than Significant; LTS/MM: Less Than Significant with Incorporation of Mitigation Measures; SU: Significant and Unavoidable

(-) The alternative would result in less of an impact than the proposed project.

(+) The alternative would result in more of an impact than the proposed project.

(=) The alternative would result in the same or similar impact as the proposed project.

8. Impacts Found Not to Be Significant

California Public Resources Code Section 21003 (f) states: “...it is the policy of the state that...[a]ll persons and public agencies involved in the environmental review process be responsible for carrying out the process in the most efficient, expeditious manner in order to conserve the available financial, governmental, physical, and social resources with the objective that those resources may be better applied toward the mitigation of actual significant effects on the environment.” This policy is reflected in the California Environmental Quality Act (CEQA) Guidelines (Guidelines) Section 15126.2(a), which states that “[a]n EIR [environmental impact report] shall identify and focus on the significant environmental impacts of the proposed project” and Section 15143, which states that “[t]he EIR shall focus on the significant effects on the environment.” Guidelines Section 15128 requires that an EIR contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the Draft EIR.

Impacts to agriculture and forestry resources, biological resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, population and housing, public services, recreation, utilities and service systems, and wildfire were determined to be less than significant during scoping for the EIR. The following sections provide the thresholds of significance and a brief analysis supporting the determination of no impact or less than significant impacts. Threshold letters correspond to the lettering in Appendix G of the CEQA Guidelines.

8.1 AGRICULTURE AND FORESTRY RESOURCES

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

Would the project:

- 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?**

No Impact. The proposed project would install nighttime sports lighting on an existing high school to serve existing sport facilities. There are no agricultural uses within the La Quinta High School, and the proposed

8. Impacts Found Not to Be Significant

project would not convert any specially designated farmland identified on the state's Farmland Mapping and Monitoring Program. The high school campus is designated as Urban and Built-Up Land (DOC 2022a). No impact would occur.

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

No Impact. The proposed project would install nighttime sports lighting on an existing high school in Westminster to serve existing sport facilities, and the campus is not zoned for agricultural use. La Quinta High School is zoned for P/SP (Public/Semi-Public) and the general plan land use designation for the campus is Public/Semi-Public Facilities. Implementation of the proposed project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. No impact would occur.

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))?

No Impact. The proposed project would occur within the boundaries of an existing high school and the campus is not zoned for forest land or timberland. Implementation of the proposed project would not conflict with existing zoning for forest land or timberland. No impact would occur.

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

No Impact. The proposed project would occur within the boundaries of an existing high school and no forest land would be converted. No impact would occur.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. The proposed project would occur within the boundaries of the existing high school and no farmland or agricultural land would be converted to nonagricultural use or non-forest use. No impact would occur.

8.2 BIOLOGICAL RESOURCES

Would the project:

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?

Less Than Significant Impact. Special status species include those listed as endangered or threatened under the federal Endangered Species Act or California Endangered Species Act; species otherwise given

8. Impacts Found Not to Be Significant

certain designations by the California Department of Fish and Wildlife; and plant species listed as rare by the California Native Plant Society. The areas to be disturbed by the proposed project are developed with the existing athletic facilities. The City of Westminster's Infrastructure and Natural Resources Element notes that the City is largely urbanized with few remaining natural open spaces with landscapes that primarily consist of nonnative ornamental species. The project site is already disturbed and developed as part of an existing high school campus and there is no suitable breeding or foraging habitat on-site for any sensitive species. Project development would not impact any special status species. Impacts would be less than significant.

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?

No Impact. Sensitive natural communities are natural communities that are considered rare in the region by regulatory agencies; that are known to provide habitat for sensitive animal or plant species; or are known to be important wildlife corridors. Riparian habitats are those occurring along the banks of rivers and streams. There are no riparian habitats mapped on the National Wetlands Mapper maintained by the US Fish and Wildlife Service within the boundaries of the high school (USFWS 2022). The proposed lighting installation would occur within the limits of an existing high school and would not impact the adjacent drainage channels. The project site does not contain any sensitive natural community or riparian habitat. No impact would occur.

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?

No Impact. Wetlands are defined under the federal Clean Water Act as land that is flooded or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that normally does support, a prevalence of vegetation adapted to life in saturated soils. Wetlands include areas such as swamps, marshes, and bogs. There are no wetlands mapped on the National Wetlands Mapper maintained by the US Fish and Wildlife Service within the boundaries of the high school (USFWS 2022). Implementation of the proposed project would not impact any wetlands.

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?

No Impact. Wildlife movement corridors facilitate movement of species between large patches of natural habitat. The proposed project would provide sports lighting to existing sports facilities at an existing high school in Westminster. The high school operates as an existing campus, and the project site is already disturbed and being used for various sports activities which do not provide connection for wildlife populations. The proposed project would not remove any trees, which can be used by migratory birds. No impact would occur.

8. Impacts Found Not to Be Significant

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

No Impact. The proposed project would not require removal of any trees. No impact would occur.

- f) **Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

No Impact. The proposed project would install sports lighting within the boundaries of the high school. The proposed project would not conflict with the provisions of a habitat conservation plan or natural community conservation plan. No impact would occur.

8.3 GEOLOGY AND SOILS

Would the project:

- 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.**

Less Than Significant Impact. The Alquist-Priolo Earthquake Fault Zoning Act was signed into California law in 1972 to reduce losses from surface fault rupture. California created this law following the destructive 1971 San Fernando earthquake (magnitude 6.6), which was associated with extensive surface fault ruptures that damaged numerous structures.

Alquist-Priolo earthquake fault zones are regulatory zones surrounding the surface traces of active faults in California.¹ Wherever an active fault exists, if it has the potential for surface rupture, a structure for human occupancy cannot be placed over the fault and must be a minimum distance from the fault (generally 50 feet). An active fault, for the purposes of the Alquist-Priolo Act, is one that has ruptured in the last 11,000 years (DOC 2022b).

According to the City's General Plan, there are no active faults running through the City, and there are no faults mapped within the campus or immediate surrounding area; La Quinta High School is not located within an Alquist-Priolo Earthquake study zone (DOC 2022c). Additionally, provided that the light poles are installed in accordance with the applicable California Building Code (CBC) and Division of the State Architect (DSA) criteria for seismic safety, less than significant impacts from these major faults are anticipated.

¹ A trace is a line on the earth's surface defining a fault.

8. Impacts Found Not to Be Significant

ii) Strong seismic ground shaking?

Less Than Significant Impact. Southern California is a seismically active region. Impacts from ground shaking could occur many miles from an earthquake epicenter. The potential severity of ground shaking depends on many factors, including the distance from the originating fault, the earthquake magnitude, and the nature of the earth materials beneath a given site. Although there are no active faults running through the City, all of southern California is a seismically active area and shaking from nearby faults could result in significant damage. According to the City's General Plan, Westminster could be affected by the Newport-Inglewood Fault (2 miles to the southwest), Whittier-Elsinore Fault (15.6 miles to the north), the Chino Fault (24.3 miles to the northeast), the Palos Verdes Fault (13 miles to the southwest), the San Jacinto Fault (45 miles to the northeast), and the San Andreas Fault (47 miles to the northeast). Considering the seismic history of the region and the nearby faults, the project would be designed in compliance with seismic requirements of the CBC and the DSA criteria for seismic safety. Compliance with established standards would reduce the risk of structural collapse or other shaking-related hazards to a less than significant level.

iii) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Liquefaction refers to loose, saturated sand or gravel deposits that lose their load-supporting capability when subjected to intense shaking. According to the California Department of Conservation Data Viewer map, much of the City is susceptible to liquefaction. Therefore, the potential for liquefaction exists for the high school. However, the proposed project would be designed in compliance with seismic requirements of the CBC and the DSA criteria for seismic safety, including from liquefaction impacts. Compliance with established standards would reduce the risk of liquefaction hazards to a less than significant level.

iv) Landslides?

Less Than Significant Impact. Landslides are a type of erosion in which masses of earth and rock move downslope as a single unit. Susceptibility of slopes to landslides and lurching (earth movement at right angles to a cliff or steep slope during ground shaking) depend on several factors that are usually present in combination—steep slopes, condition of rock and soil materials, presence of water, formational contacts, geologic shear zones, and seismic activity. The La Quinta High School campus and adjacent properties are flat and exhibit no unusual geographic features or slopes. In the absence of significant ground slopes, the potential for landslides is considered negligible. Furthermore, the California Department of Conservation does not map the campus within a landslide zone. The proposed light poles would not impact the stability of the adjacent soils by grading or excavation. The proposed project would be designed in compliance with seismic requirements of the CBC and the DSA criteria for seismic safety, and the proposed project would not result in significant safety impacts due to landslides. Impacts would be less than significant.

8. Impacts Found Not to Be Significant

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

Less Than Significant Impact. Erosion is a normal and inevitable geologic process whereby earthen materials are loosened, worn away, decomposed, or dissolved and removed from one place and transported to another. The project site is developed with buildings and athletic facilities. Implementation of the proposed project would require limited softscape and hardscape demolition to drill holes for the installation of the light poles and trenching for the utilities. The areas to be disturbed would be approximately nine square feet per pole, with a total of 23 poles for La Quinta High School. Therefore, the area disturbed for the project would be approximately 207 square feet. Utilities trenching would be approximately 18 inches wide and 24 inches deep and total about 0.12 to 0.18 acre. Considering the limited areas to be disturbed and exposed, the proposed project would not result in substantial soil erosion or the loss of topsoil. Impacts would be less than significant.

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?

Less Than Significant Impact. As discussed in Sections 3.7.a.iii and 3.7.a.iv, impacts from liquefaction and landslides would be less than significant since the light poles would be installed in compliance with the applicable seismic requirements of the CBC and DSA.

Lateral spreading is a phenomenon where large blocks of intact, nonliquefied soil move downslope on a large, liquefied substratum. The mass moves toward an unconfined area, such as a descending slope or stream-cut bluff, and has been known to move on slope gradients as little as one degree. The topography of the sports facilities at La Quinta High School is generally flat. Therefore, impacts from lateral spreading would be less than significant.

Subsidence and collapse are generally due to substantial overdraft of groundwater or underground petroleum reserves. Collapsible soils may appear strong and stable in their natural (dry) state, but they rapidly consolidate under wetting, generating large and often unexpected settlements. Seismically induced settlement consists of dynamic settlement of unsaturated soil (above groundwater) and liquefaction-induced settlement (below groundwater). These settlements occur primarily in low-density sandy soil due to the reduction in volume during and shortly after an earthquake. The City of Westminster and La Quinta High School campus are in areas of recorded subsidence due to groundwater pumping (USGS 2022). However, the light poles would be installed in compliance with the applicable CBC and DSA requirements. Therefore, potential impacts related to subsidence and collapsible soil would be reduced to a less than significant level.

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?

Less Than Significant Impact. Highly expansive soils swell when they absorb and shrink as they dry, and can cause structural damage to building foundations. Therefore, they are less suitable for development than nonexpansive soils. The soils on campus consist of San Emigdio, Hueneme, and Bolsa (UCDavis 2022). These are poorly drained except for San Emigdio which is well-drained sandy soil with low to very low

8. Impacts Found Not to Be Significant

runoff class rates and low shrink-swell or expansion characteristics. Moreover, the light poles would be installed in compliance with the applicable CBC and DSA requirements. Therefore, potential impacts related to subsidence and collapsible soil would be reduced to a less than significant level.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. The proposed project would not use any septic tanks or alternative wastewater disposal system. No impact would occur.

8.4 HAZARDS AND HAZARDOUS MATERIALS

Would the project:

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

No Impact. Installation of nighttime sports lighting at the existing high school would not require extensive use of hazardous materials or substances. No routine transport, use, or disposal of hazardous materials currently occurs on-site, and no new or expanded handling of hazardous materials would result from project implementation. No impact is anticipated.

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?

No Impact. Installation and operation of nighttime sports lighting at the project site would not create a significant hazard to the public or the environment. The location of the existing sports facilities would not change, and the proposed project would not place students or public any closer to existing hazardous conditions or materials. Use of hazardous materials during construction or operation of the proposed project is not anticipated. No impact would occur.

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

Less Than Significant Impact. Installation and operation of nighttime sports lighting at the project site would not emit hazardous emissions or involve handling hazardous materials, substances, or waste. Construction of sports lighting facilities would not involve hazardous materials other than diesel fuels used for construction equipment such as backhoes, augers, concrete saws, etc. Therefore, impacts would be less than significant.

8. Impacts Found Not to Be Significant

- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

No Impact. California Government Code Section 65962.5 requires the California Environmental Protection Agency to compile a list (updated at least annually) of hazardous waste and substances release sites, known as the Cortese List or California Superfund. Section 65962.5 requires compiling lists of the following types of hazardous materials sites: hazardous waste facilities; hazardous waste discharges for which the State Water Quality Control Board has issued certain types of orders; public drinking water wells containing detectable levels of organic contaminants; underground storage tanks with reported unauthorized releases; and solid waste disposal facilities from which hazardous waste has migrated. Five environmental lists were searched for hazardous materials sites on the project site.

- GeoTracker. State Water Resources Control Board (SWRCB 2022)
- EnviroStor. Department of Toxic Substances Control (DTSC 2022).
- EJScreen. US Environmental Protection Agency (USEPA 2022a).
- EnviroMapper. US Environmental Protection Agency (USEPA 2022b).
- Solid Waste Information System. California Department of Resources Recovery and Recycling (CalRecycle 2022).

The project site is not listed on any of the databases. The project would not create a hazard to the public because of a hazardous materials site pursuant to Government Code Section 65962.5. No impact is anticipated.

- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles or 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?**

No Impact. The La Quinta High School is outside of any airport influence area. The nearest airport to the campus is the John Wayne Airport, located approximately 5.8 miles southeast of the project site. The John Wayne Airport's influence area is restricted to within the immediate surroundings of the airport and does not extend near Westminster or the project site. The proposed project would not interfere with inbound or outbound flights of any airport. Implementation of the proposed project would not result in safety hazards or excessive noise impacts for people residing or working in the project area. No impact would occur.

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

Less Than Significant Impact. The proposed project would occur within the existing high school boundaries, and operation of the lighted sports facilities would not impair or interfere with any existing

8. Impacts Found Not to Be Significant

vehicular or pedestrian emergency response plan or evacuation plan. The parking lot on campus would be open for community members to park their vehicles while they use the sports facilities, thereby ensuring that surrounding roadways and site access are not impaired. All construction staging would be within the high school boundaries, and no off-site roadway or lane closures are anticipated. Therefore, impacts would be less than significant.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Less Than Significant Impact. La Quinta High School is not in or near a very high fire hazard severity zone (FHSZ) on the California Department of Forestry and Fire Protection's (CAL FIRE) FHSZs map (CAL FIRE 2022). Installation of sports lighting at the existing athletic fields would not change the existing school boundaries to place the sports facilities or students any closer to wildland fires. Impacts would be less than significant.

8.5 HYDROLOGY AND WATER QUALITY

Would the project:

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

Less Than Significant Impact. A significant impact would occur if the project discharges water that does not meet the quality standards of agencies that regulate surface water quality and discharges into the stormwater drainage system. During construction, water quality impacts could occur from discharge of soil through erosion, sediments, and other pollutants. The State Water Resources Control Board's National Pollutants Discharge Elimination System (NPDES) program regulates industrial pollutant discharges, including construction activities for sites larger than one acre. Because each pole would disturb about 9 square feet, the proposed project would disturb from about 207 square feet (9 square feet x 23 poles) of impervious areas at the campus, the NPDES program would not be applicable, and a significant construction water quality impact is not anticipated. Also, after the holes for the light poles are drilled, they would be cured with concrete, so soil erosion and sediment impacts would be minimized. Utilities trenching would also be temporary and limited. Construction of the proposed project would not violate any water quality standards.

The proposed project would not change the land uses of the existing sports facilities causing a violation of any water quality standards or waste discharge requirements. Long-term water quality impacts generally result from impervious surfaces (e.g., buildings, roads, parking lots, and walkways), which prevent water from soaking into the ground and can increase the concentration of pollutants in stormwater runoff, such as oil, fertilizers, pesticides, trash, soil, and animal waste. The project would be constructed on an existing high school campus, and the impervious surfaces created by the proposed project would be negligible (up to 207 square feet). Impacts would be less than significant.

8. Impacts Found Not to Be Significant

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

No Impact. The high school campus is not used for intentional groundwater recharge, and the proposed project would not create additional demand for groundwater because it would accommodate existing sports programs for students already attending the school. The project does not include new groundwater wells that would extract groundwater from the aquifer. Construction and operation of the proposed project would not lower the groundwater table or deplete groundwater supplies. Therefore, the project would not interfere with groundwater recharge. No impact would occur.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

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

Less Than Significant Impact. Erosion is a normal and inevitable geologic process whereby earthen materials are loosened, worn away, decomposed or dissolved, and moved from one place to another. Precipitation, running water, waves, and wind are all agents of erosion. Ordinarily, erosion proceeds imperceptibly, but when the natural equilibrium of the environment is changed, the rate of erosion can greatly accelerate. This can create aesthetic as well as engineering problems on undeveloped sites. Accelerated erosion in an urban area can cause damage by undermining structures; blocking storm drains; and depositing silt, sand, or mud on roads and in tunnels. Eroded materials can eventually be deposited in local waters, where the carried silt remains suspended in the water for some time, constituting a pollutant and altering the normal balance of plant and animal life.

The project site is already developed with an existing campus and various sports facilities that are subject to imperceptible urban erosion and siltation. The areas disturbed by the proposed project would be limited to 23 poles at the school. It is anticipated that each hole drilled for the light pole would be approximately 9 square feet, and once the hole is drilled, it would be backfilled with concrete and cured within a week. Therefore, impacts from erosion or siltation from installation of poles would be less than significant.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

Less Than Significant Impact. The project site is already developed with sports facilities. The areas impacted by the proposed project would be limited to 23 poles. Considering that each pole with concrete base would impact approximately 9 square feet, the proposed project would result in an additional 207 square feet (9 square feet x 23 poles). Assuming that the tennis courts are already covered by impervious surfaces, the actual softscape areas to be developed with light poles would be less than 207 square feet. Therefore, considering the total acreage of the high school, the increase in impervious areas is negligible, and the proposed project would not substantially increase the rate or amount of surface runoff to result in on- or off-site flooding. Impacts would be less than significant.

8. Impacts Found Not to Be Significant

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?

Less Than Significant Impact. The proposed project would result in a negligible increase in the overall impervious surface areas of the high school. Therefore, the proposed project would not substantially change the volume and quality of the runoff from existing sports facilities. The areas impacted by the proposed project would be limited to the number of poles installed, which would be 23 poles. Considering that each pole's concrete base would impact approximately 9 square feet, the proposed project would result in an additional 207 square feet (9 square feet x 23 poles) of impervious areas. Assuming that the tennis courts are already covered by impervious surfaces, the actual softscape areas that would be developed with light poles would be less than 207 square feet. Therefore, implementation of the proposed project would not substantially increase runoff water to existing drainage systems compared to existing conditions. Project-related changes to the existing sport facilities at the high school would not create additional sources of polluted runoff. Impacts would be less than significant.

iv) Impede or redirect flood flows?

Less Than Significant Impact. La Quinta High School is within Flood Zone A (FEMA Map ID# 06059C0252J) (FEMA 2009). As discussed in 3.10(c)(ii), the proposed project would not substantially increase the overall quantity of impervious areas or runoff speed, and any impacts on flooding would be negligible. The proposed project would not increase the flooding hazard at the school. The project would not impede or redirect flood flows. Impacts would be less than significant.

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

No Impact. A seiche is a surface wave created when a body of water is shaken, usually by earthquake activity. Seiches are of concern relative to water storage facilities because inundation from a seiche can occur if the wave overflows a containment wall, such as the wall of a reservoir, water storage tank, dam, or other artificial body of water. La Quinta High School is not within a dam inundation area (CDWR 2022). Furthermore, the proposed project would serve the existing sports programs and would not expose more people or structures to potential inundation impacts. As discussed in Section 3.10(c)(ii), the proposed project would not increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site. Additionally, the campus is 6.1 miles north of the Pacific Ocean and would not increase the risk of exposure to a tsunami. The proposed project would not increase the risk of releasing pollutants due to project inundation. No impact would occur.

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

No Impact. The proposed project would not obstruct or conflict with the implementation of a water quality control plan or sustainable water management plan. Considering the size and scale of the proposed project, the proposed project would not create substantial water quality impacts during construction and operation, and therefore would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. No impact would occur.

8. Impacts Found Not to Be Significant

8.6 LAND USE AND PLANNING

Would the project:

a) **Physically divide an established community?**

No Impact. The proposed project would occur within the boundaries of an existing high school to serve its existing athletic facilities. No community would be physically divided, and no impact would occur.

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?**

No Impact. The proposed project would occur on an existing high school to serve its athletic facilities. No land use changes would occur. The addition of lighting would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

8.7 MINERAL RESOURCES

Would the project:

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?**

No Impact. In 1975, the State legislature adopted the Surface Mining and Reclamation Act (SMARA). This designated Mineral Resources Zones that were of statewide or regional importance. The classifications used to define MRZs are:

- **MRZ-1:** Areas where the available geologic information indicates no significant mineral deposits or a minimal likelihood of significant mineral deposits.
- **MRZ-2:** Areas where the available geologic information indicates that there are significant mineral deposits or that there is a likelihood of significant mineral deposits.
- **MRZ-3:** Areas where the available geologic information indicates that mineral deposits are likely to exist, however, the significance of the deposit is undetermined.
- **MRZ-4:** Areas where there is not enough information available to determine the presence or absence of mineral deposits.

The California Department of Conservation Division of Geological Survey produces Mineral Land Classification studies that identify areas with potentially important mineral resources. The Department of Conservation Mineral Land Classification Map shows that the area where La Quinta High School is located is mapped within an MRZ-3 (DOC 2022d). Although the high school is in an area where mineral deposits are likely to exist, this site is an existing high school, and no mineral resources are being extracted. Implementation of the proposed project would not result in the loss of availability of a known mineral resource. No impact to known mineral resources would occur.

8. Impacts Found Not to Be Significant

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?

No Impact. Although La Quinta High School is located within an MRZ-3 where there could be mineral resources, this site is developed as a high school and is not a locally important mineral resource recovery site. Implementation of the proposed project would not result in the loss of a locally important mineral resource recovery site. No impact would occur.

8.8 POPULATION AND HOUSING

Would the project:

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)?

No Impact. The proposed project would be served by existing roads and other infrastructure. No new roads, expanded utility lines, or housing would be constructed or required as part of the project. The proposed project would serve students already living in the area. No impacts related to population growth would occur.

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

No Impact. No housing exists on the high school campus. The proposed project would not require relocation or construction of replacement housing; therefore, no impact would occur.

8.9 PUBLIC SERVICES

Would the project:

a) Fire protection?

Less Than Significant Impact. The Orange County Fire Authority (OCFA) provides fire and emergency medical services to the City of Westminster, including the project site. The nearest OCFA station to La Quinta High School is the OCFA Fire Station 66, which is 1.06-mile northwest of the high school.

The proposed project is intended to extend usable hours of the existing sports facilities by installing lighting so that existing sports programs are not impacted by the passage of SB 328, which requires high schools to start no earlier than 8:30 am. Therefore, the proposed project would not increase enrollment or capacity of high school, including bleacher seat capacity. Additionally, the proposed project would not modify any existing fire lanes at the school. The project site is already served by OCFA, and the proposed project would accommodate the existing school programs and students. Therefore, the nighttime use of the school sports facilities would not substantially increase the fire protection demands compared to the existing conditions. Project implementation would have a less than significant impact on fire protection facilities.

8. Impacts Found Not to Be Significant

b) Police protection?

Less Than Significant Impact. La Quinta High School and surrounding areas are already served by existing police forces, and the proposed project would not substantially increase the need for police protection services because the student enrollment and capacity would not increase. This project would not require Westminster Police Department to expand or build new facilities, and impacts would be less than significant.

c) Schools?

No Impact. The proposed project would not increase the demand for new or expanded public schools. No impact would occur.

d) Parks?

Less Than Significant Impact. Impacts to public parks are generally caused by population or employment growth. The proposed project would provide improvements to an existing high school's athletic facilities and would not induce growth or influence housing in the area to create additional demands for parks. Therefore, no physical impacts to parks and recreation would occur.

e) Other public facilities?

No Impact. Physical impacts to public services are usually associated with population in-migration and growth, which increase the demand for public services and facilities. The project would not result in impacts associated with the provision of other new or physically altered public facilities (e.g., libraries, hospitals, childcare, teen or senior centers). The project would not induce population growth. No impacts to other public facilities would occur.

8.10 RECREATION

Would the project:

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?

No Impact. Implementation of the proposed project would allow extended use of the existing District sports facilities by installing nighttime sports lighting at the high school. The proposed project would accommodate the existing school programs and students already served by the District. The proposed lighting would allow additional community use of these facilities, but this use is limited and would not result in substantial physical deterioration. Implementation of the proposed project would not increase the number of people served by the existing parks or other recreational facilities or displace existing recreational facilities so that the use of other parks or recreational facilities would be increased. No impact would occur.

8. Impacts Found Not to Be Significant

- 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?

Less Than Significant Impact. Implementation of the proposed project would allow extended use of the existing District sports facilities by installing nighttime sports lighting at La Quinta High School. Physical effects of providing sports lighting are addressed throughout this DEIR. No other construction or expansion of recreational facilities other than the proposed project would be required as part of the proposed project. As discussed in various sections of this DEIR, the proposed project would not result in adverse physical effect on the environment with mitigation. Impacts would be less than significant.

8.11 UTILITIES AND SERVICE SYSTEMS

Would the project:

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

Less Than Significant Impact.

Water Treatment

The Westminster Water Division provides water services to the city, including the La Quinta High School campus. The proposed project involves installation of sports lighting to existing athletic facilities within the footprint of the existing high school campus. The proposed project would not increase the existing student capacity or expand school programs to require additional water demand. Therefore, the overall demand for water treatment would not increase. The proposed project would not require the relocation or construction of new or expanded water treatment facilities; impacts would be less than significant.

Wastewater Treatment

The Orange County Sanitation provides wastewater collection and treatment services to the City, including La Quinta High School. The project site is part of an existing high school that is served by existing wastewater facilities. Installation of sports lighting to existing athletic facilities would not increase wastewater demands. The proposed project would not increase the existing student capacity or expand school programs. The project would not require the relocation or construction of new or expanded wastewater treatment facilities; impacts would be less than significant.

Stormwater Drainage

Installation of sports lighting to existing athletic facilities at La Quinta High School would not result in substantial increase of impervious surfaces at existing campuses. A total of 23 poles would be installed at athletic facilities on the campus, and each pole would cover approximately nine square feet. Assuming that

8. Impacts Found Not to Be Significant

light poles on the tennis courts would be installed on hardscapes, the increase in impervious surfaces due to installation of light poles would be negligible² and would not change the stormwater volume, rate, or pattern. The proposed project would not result in the relocation or construction of storm water drainage. Impacts would be less than significant.

Electric Power

Electricity is provided by Southern California Edison. The proposed project would require connecting to existing and new electric power infrastructure for operation. Trenching for power lines would be necessary to connect to existing electrical facilities within the campus. Though the proposed project would result in a higher electricity demand than existing conditions, the increase would be negligible to a regional provider like SCE. The proposed project would use LED luminaires that are energy efficient and last longer than metal halide or high-pressure sodium lights. Implementation of the proposed project would not result in major construction related to electrical power facilities that could cause significant environmental impacts. Impacts would be less than significant.

Natural Gas

Natural gas service is provided by the Southern California Gas Company. The proposed project would not require use of natural gas during operation. However, if necessary, there are available SoCalGas lines to connect to because the site is already developed and operating as a high school. The project would not require the construction of new or expanded facilities. No impact would occur.

Telecommunications

There are existing telecommunications facilities and services in the immediate area for the proposed project to connect to, if necessary. However, the proposed project would not require additional telecommunications facilities demand. The project would not require off-site construction or relocation of utilities, and therefore would not cause significant environmental effects from such action. Impacts would be less than significant.

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

No Impact. The proposed project involves installation of sports lighting to existing athletic facilities within an existing high school. The proposed project would not increase the existing student capacity or expand school programs to require additional water demand. No impact to existing water supplies would occur.

² 9 square feet per pole x 23 poles = 207 square feet.

8. Impacts Found Not to Be Significant

- c) **Result in a determination by the waste water 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?**

No Impact. The proposed project involves installation of sports lighting to existing athletic facilities within an existing high school. No restrooms or other facilities generating wastewater would be developed as part of the proposed project. The proposed project would not increase the existing student capacity or expand school programs to require additional wastewater demand. No impact would occur.

- 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?**

Less Than Significant Impact. The proposed project involves installation of sports lighting to existing athletic facilities within an existing high school campus. During construction, the proposed project would generate some demolition debris from clearance and waste and debris from construction. However, construction solid waste generation would be minimal due to the relatively small-scale construction effort and lack of any buildings on the project site to be disturbed by the proposed project. CALGreen Section 5.408.1.1 requires that at least 65 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse. The proposed project would comply with the required regulation pertaining to construction and demolition waste and would not exceed the capacity of regional landfills or impair the attainment of solid waste reduction goals in the city. The proposed project would not increase the existing student capacity or expand school programs that may result in increased demand for solid waste. Therefore, the proposed project would not result in additional solid waste during operation. Impacts would be less than significant.

- e) **Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

Less Than Significant Impact. The proposed project is required to comply with federal, state, and local statutes and regulations related to solid waste and would continue this practice. CALGreen Section 5.408 requires that at least 65 percent of the nonhazardous construction and demolition waste from nonresidential construction operation be recycled and/or salvaged for reuse. Solid waste demand from the proposed sports lighting at the high school would be minimal and would not impact the City's ability to comply with AB 939 and maintain the 15-year countywide solid waste landfill capacity. Project development would not conflict with laws governing solid waste disposal, and impacts would be less than significant.

8.12 WILDFIRE

Would the project:

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

Less Than Significant Impact. La Quinta High School is not in or near a very high fire hazard severity zone (FHSZ) on the California Department of Forestry and Fire Protection's (CAL FIRE) FHSZs map (CAL

8. Impacts Found Not to Be Significant

FIRE 2022). Furthermore, installation of sports lighting at existing athletic facilities at the existing high school would not increase student capacity or other school programs that would affect the existing emergency response plan or emergency evacuation plan. Impacts would be less than significant.

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?

Less Than Significant Impact. La Quinta High School is not in or near a very high FHSZ (CAL FIRE 2022). Installation of sports lighting at existing athletic fields would not exacerbate wildfire risks. The light poles are made of steel on a concrete base and would be installed on flat ground. The proposed project would not result in increased exposure to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Impacts would be less than significant.

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?

Less Than Significant Impact. La Quinta High School is not in or near a very high FHSZ (CAL FIRE 2022). Additionally, the project site is an existing high school served by existing infrastructure. Installation of sports lighting and necessary utility lines would not exacerbate fire risk or result in temporary or ongoing impacts to the environment. Impacts would be less than significant.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Less Than Significant Impact. La Quinta High School is not in or near a very high FHSZ (CAL FIRE 2022). Installation of sports lighting and necessary utility lines would have minimal impact on the existing drainage and runoff. The sports lighting would be installed on flat surfaces of existing sports facilities, and no slope instability would occur. Implementation of the proposed project would not expose people or structures to significant downslope or downstream flooding or landslide. Impacts would be less than significant.

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8. Impacts Found Not to Be Significant

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9. Significant Irreversible Changes Due to the Proposed Project

The CEQA Guidelines requires that an Environmental Impact Report (EIR) describe any significant irreversible environmental changes that would be caused by the proposed project should it be implemented. Specifically, Section 15126.2(c) of the CEQA Guidelines states:

Use of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highways improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

The following significant irreversible changes would be caused by implementation of the proposed project:

- Construction of the proposed light poles would require the commitment of nonrenewable and/or slowly renewable energy resources, including gasoline, diesel fuel, and electricity; human resources; and natural resources such as sand and gravel, steel and other metals, and water.
- Operation of the proposed project would require continued use of electricity, petroleum-based fuels, fossil fuels, and water, similar to existing school operations.
- Operation of the proposed project would require a continued commitment of social services and public maintenance services (e.g., police, fire, electricity).

The commitment of resources required for the construction of the proposed project and associated improvements would limit the availability of resources for future generations or for other uses during the life of the project.

9. Significant Irreversible Changes Due to the Proposed Project

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10. Growth-Inducing Impacts of the Proposed Project

Pursuant to Sections 15126(d) and 15126.2(d) of the CEQA Guidelines, this section is provided to examine ways in which the proposed project could foster economic or population growth or the construction of additional housing in the surrounding environment, either directly or indirectly. Also required is an assessment of other projects that would foster other activities which could affect the environment, individually or cumulatively. To address this issue, potential growth-inducing effects will be examined through analysis of the following questions:

- Would this project remove obstacles to growth, e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area, or through changes in existing regulations pertaining to land development?
- Would this project result in the need to expand one or more public services to maintain desired levels of service?
- Would this project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?
- Would approval of this project involve some precedent-setting action that could encourage and facilitate other activities that could significantly affect the environment?

Please note that growth-inducing effects are not to be construed as necessarily beneficial, detrimental, or of little significance to the environment. This issue is presented to provide additional information on ways in which this project could contribute to significant changes in the environment, beyond the direct consequences of developing the land use concept examined in the preceding sections of this EIR.

Would this project remove obstacles to growth, e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area, or through changes in existing regulations pertaining to land development?

The proposed project would result in the construction of light poles at the various athletic facilities to allow for events to take place beyond daylight hours. The proposed project would not increase student enrollment and would not generate new games nor events; the proposed project could have the potential to capture trips that now must travel to remote facilities due to the absence of lighted facilities at La Quinta High School. The project site is in an urbanized area served by existing infrastructure, including water and sewer mains and electricity and natural gas services. The improvements would only affect the existing school site and would not remove obstacles to growth or affect population growth.

10. Growth-Inducing Impacts of the Proposed Project

Would this project result in the need to expand one or more public services to maintain desired levels of service?

The proposed project would provide lighting at the athletic facilities at the project site and would not result in an increase in student population or school events at the site. The proposed project would not result in the need for additional public government services or expanded utility infrastructure. See Chapter 8, *Impacts Found Not to be Significant*, of this DEIR.

Would this project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?

Construction of the proposed project would generate short-term employment that would be absorbed from the regional labor force, so it would not attract new workers to the region. There would be no operational changes under the proposed project compared to existing conditions.

Would approval of this project involve some precedent-setting action that could encourage and facilitate other activities that could significantly affect the environment?

The proposed project would support athletic programs at the school. District approval would not set a precedent that could encourage and facilitate local and regional activities and government actions that could significantly affect the environment. School construction activities to enhance educational and athletic programs are common state- and nationwide.

11. Qualifications of Persons Preparing EIR

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