# INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION

# for the

# MARINA HIGH SCHOOL MULTI-USE FIELD PROJECT

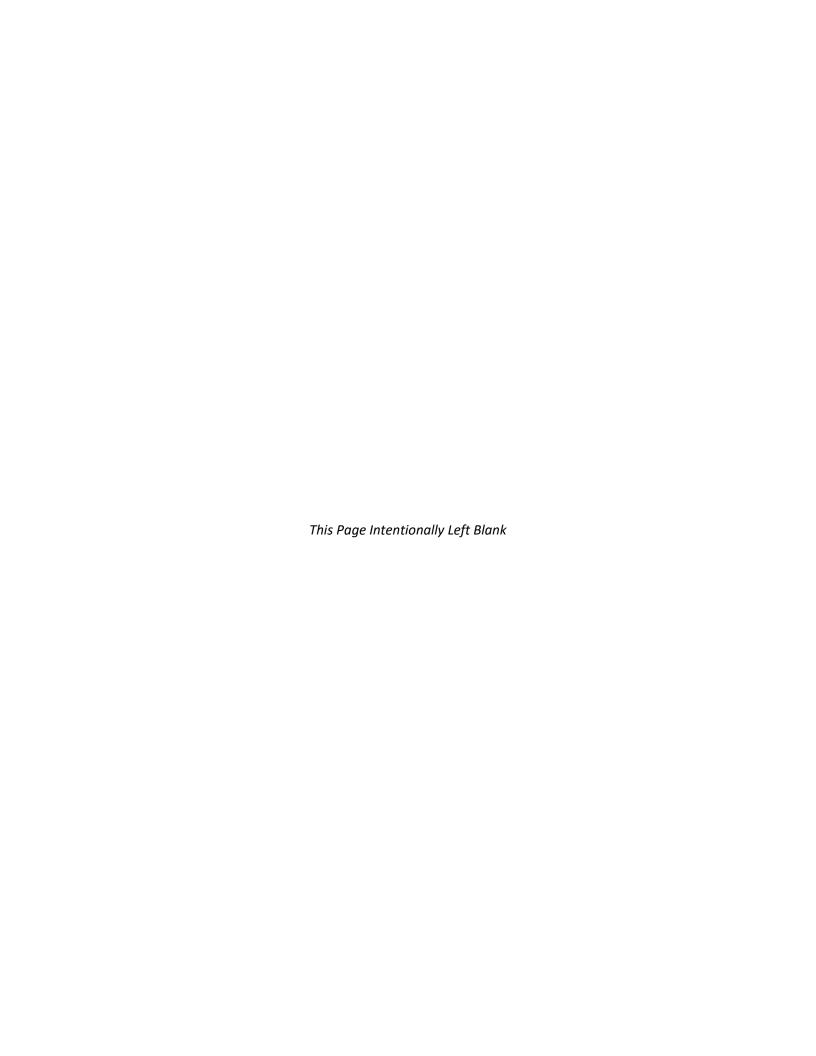
**Prepared for:** 

Monterey Peninsula Unified School District

**Prepared by:** 

Denise Duffy & Associates

January 3, 2024



# **Table of Contents**

CHAPTER 1. INTRODUCTION AND PROJECT DESCRIPTION	1
1.1 Introduction	1
1.2 Project Location and Existing Setting	2
1.3 Project Description	9
1.4 Project Approvals	
CHAPTER 2. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED	31
CHAPTER 3. DETERMINATION	
CHAPTER 4. INITIAL STUDY ENVIRONMENTAL CHECKLIST	35
4.1 Aesthetics	
4.2 Agricultural and Forest Resources	60
4.3 Air Quality	
4.4 Biological Resources	68
4.5 Cultural Resources	
4.6 Energy	
4.7 Geology and Soils	
4.8 Greenhouse Gas Emissions	
4.9 Hazards and Hazardous Materials	
4.10 Hydrology and Water Quality	
4.11 Land Use and Planning	
4.12 Mineral Resources	
4.13 Noise	
4.14 Population and Housing	
4.15 Public Services	
4.16 Recreation	
4.17 Transportation	
4.18 Tribal Cultural Resources	
4.19 Utilities and Service Systems	
4.20 Wildfire	
4.21 Mandatory Findings of Significance	
CHAPTER 5. REFERENCES	129
TABLES	
Table 1. Historic and Projected Attendance for Marina High School Sporting Events	26
Table 2. Projected Event Information, Frequency, and Timing	
Table 3. North Central Coast Air Basin Attainment Status	
Table 4. Construction Air Quality Emissions	66
Table 5. Operational Air Quality Emissions	66
Table 6. Noise Levels Generated by Construction Equipment	104
Table 7. AMBAG 2015 VMT and 2040 Forecasted Daily VMT	
FIGURES	
Figure 1. Regional Map	3
Figure 2. Vicinity Map	
Figure 3. Site Photos	
Figure 4.Habitat Map	
Figure 5. Site Plan	
Figure 6. Bleacher Plans	
Figure 7. Elevations	
Figure 8. Grading and Drainage Plan	
Figure 9. Landscape Plan	

Figure 10. Visual Simulations	39
Figure 11. Spillage Map	57
APPENDICES	
Appendix A. CalEEMod Results	
Appendix B. Biological Assessment	
Appendix C. Arborist Report	
Appendix D. Geotechnical Investigation Report	
Appendix E. FEMA Flood Map	
Appendix F. Assembly Bill 52 Consultation	
Appendix G. MUSCO Light Spillage Maps	
Appendix H. IDSA Phase 1 Certification Letter	

## **Chapter 1. Introduction and Project Description**

Project Title	Marina High School Multi-Use Field Project				
<b>Lead Agency Contact Person and Phone Number</b>	Monterey Peninsula Unified School District				
	Ryan Altemeyer, Associate Superintendent of				
	Business Services				
	700 Pacific Street				
	Monterey, CA 93942				
Date Prepared	January 3, 2024				
Prepared by	Denise Duffy & Associates, Inc.				
	947 Cass Street, Suite 5				
	Monterey, CA 93940				
Project Location	Marina High School				
	298 Patton Parkway				
	Marina, CA 93933				
	APN: 031-021-006-000				
Project Sponsor Name and Address	Monterey Peninsula Unified School District				
	700 Pacific Street				
	Monterey, CA 93942				
General Plan Designation (City of Marina)	Public Facilities				
Zoning (City of Marina)	Public Facility District (PF-E)				

#### 1.1 Introduction

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared to evaluate the potential environmental effects associated with the Marina High School Multi-Use Field Project (project or proposed project), in Marina, California. This IS/MND has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code §21000 et. seq., and the State CEQA Guidelines, California Code of Regulations (CCR) §15000 et. seq.

An IS/MND is an informational document prepared by a lead agency to determine if a project may have a significant effect on the environment (CEQA Guidelines §15063, subd. (a)). If there is substantial evidence that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) must be prepared, in accordance with CEQA Guidelines §15064(a). However, if the lead agency determines that revisions in the project plans or proposals made by or agreed to by the applicant mitigate the potentially significant effects to a less-than-significant level, an Initial Study/Mitigated Negative Declaration may be prepared instead of an EIR (CEQA Guidelines §15070, subd. (b)). In this instance, the lead agency prepares a written statement describing the reasons a proposed project would not have a significant effect on the environment and, therefore, why an EIR need not be prepared. This IS/MND conforms to the content requirements under CEQA Guidelines §15071.

The Monterey Peninsula Unified School District (District or MPUSD) is acting as the Lead Agency pursuant to CEQA Guidelines §15050(a). As the Lead Agency, the District oversaw preparation of this IS/MND pursuant to CEQA Guidelines §15063, §15070, and §15152. This IS/MND will be circulated for agency and public review during a 30-day public review period pursuant to CEQA Guidelines §15073. Comments received by the District on this IS/MND will be reviewed and considered as part of the deliberative process in accordance with CEQA Guidelines §15074.

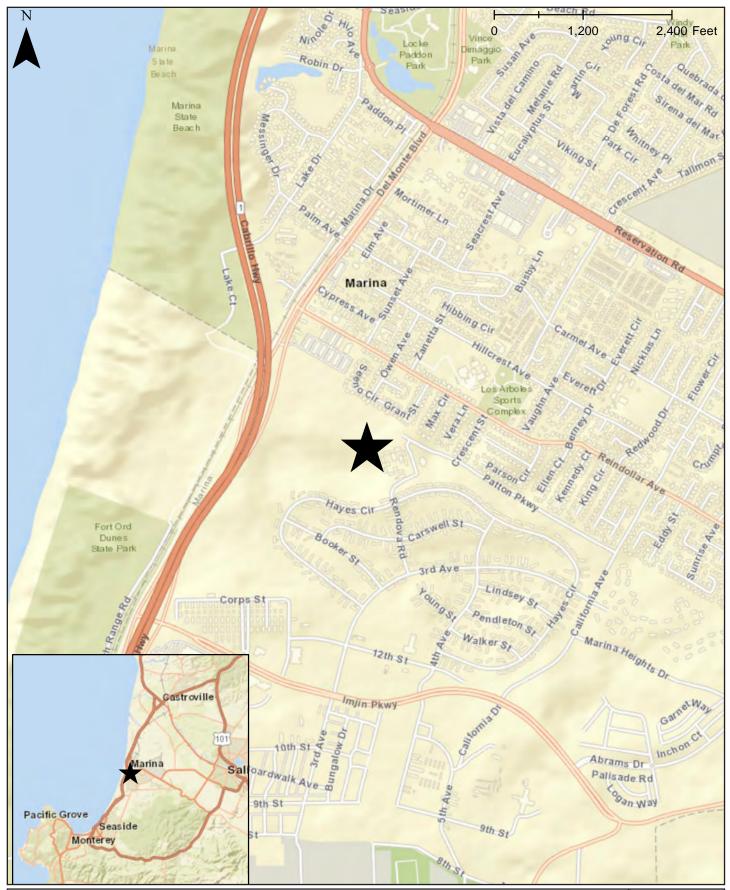
The following section is consistent with the requirements of CEQA Guidelines §15124 to the extent that it is applicable to the project. This section contains a detailed description of the project location, existing setting, project components and relevant project characteristics, and applicable regulatory requirements.

## 1.2 Project Location and Existing Setting

The project site consists of a single 5.71-acre parcel (APN 031-021-006-000). The project site is located on the existing Marina High School (Marina High School or Marina High) campus located at 298 Patton Parkway in the City of Marina. Marina High School is operated by the Monterey Peninsula Unified School District (MPUSD). The project is zoned as Public Facility District (PF-E) and carries a general plan designation of Public Facilities. **Figure 1** presents the regional location of the project site, while **Figure 2** presents an aerial photograph of the project site.

The project site consists of the existing athletic fields located in the northwestern area of the Marina High School campus, the existing parking lot on the northeast side of campus, and the existing basketball courts located near the center of campus. The existing athletic fields consist of grass fields, dirt, fencing, a few trees, and a baseball field with various portable bleachers, storage areas, and two team dugouts. The existing parking lot consists of a paved parking area for student vehicles, fencing, a student drop-off area, security lighting, sandy, undeveloped areas, and various trees and shrubs. The existing basketball area consists of paved areas, basketball hoops and painted court, fencing, and grassy sandy areas with sparse trees and shrubs. The existing athletic field is used for football and soccer practice. Marina High School's football "home games" are currently played at off-site locations such as Monterey Peninsula College's Community Field and Seaside High School as the existing athletic fields are unsuitable for such events. The existing athletic fields currently lack a public address (PA) system. Photographs of the existing project site conditions are provided in **Figure 3a** — **Figure 3c**.

The project site is part of the Marina High School campus as discussed above. The project site is bordered by open space and trails to the north and west. Existing residential land uses are located to the north and the east of the project site, and defunct residential units associated with the former Fort Ord military facility are located to the south (as shown on **Figure 2**). Habitat types on the project site consist of landscaped/developed (4.8 acres), ruderal/disturbed (0.9 acres), and Monterey pine forest (0.2 acres), see **Figure 4**.



Regional Map

Marina High School Multi-Use Field Project Initial Study

Figure 1



Vicinity Map

Figure 2



Photo #1: East facing view of property from north side of project site.



Photo #3: Southeast facing view of property from northwest side of project site.



Photo #2: West facing view of property from northwest side of project site.



Photo #4: East facing view of north side of property from north side of project site.



Photo #5: North facing view of property from south side of project site.



Photo #7: Southeast facing view of property from center of project site.



Photo #6: Northeast facing view of property from south side of project site.



Photo #8: South facing view of property from south side of project site.



Photo #9: Southeast facing view of property from north side of project site.



Photo #11: West facing view of property from east side of project site. Source: Google

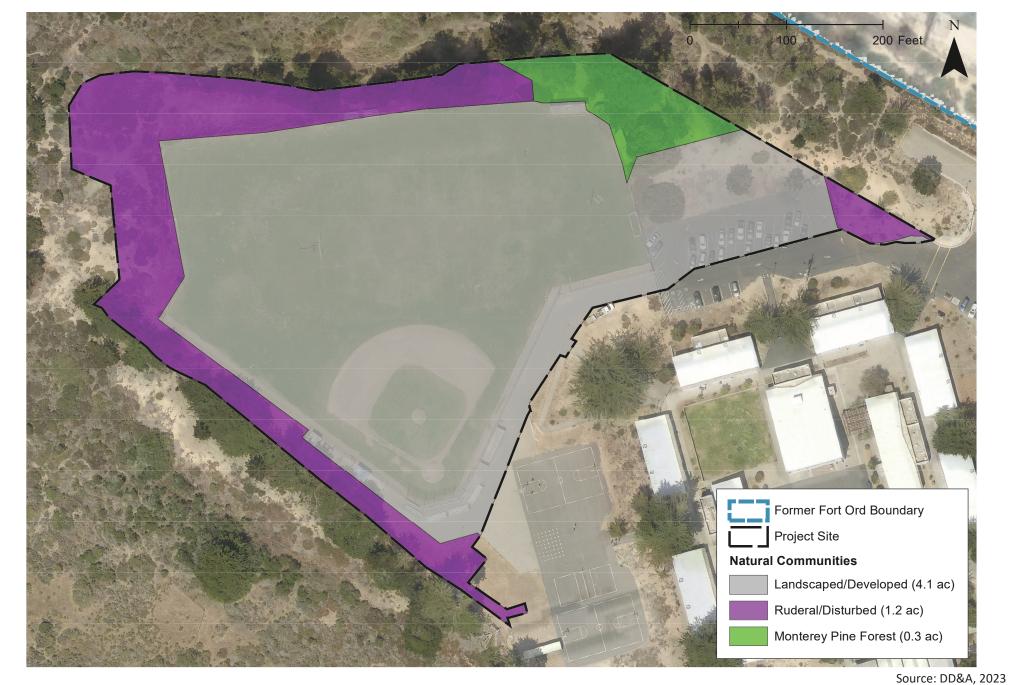


Photo #10: East facing view of property from center of project site.



Photo #12: West facing view of property from east side of project site.

Source: Google



Habitat Map

Figure

Marina High School Multi-Use Field Project Initial Study

## 1.3 Project Description

The Monterey Peninsula Unified School District (District) intends to construct various improvements to the existing athletic fields at Marina High. The Marina High School Multi-Use Field Project (proposed project) consists of the following components:

- New field lighting consisting of up to seven (7) MUSCO-designed light emitting diode (LED) (models TLC-BT-575, TLC-LED 400, TLC-LED 600, TLC-LED900, and TLC-LED-1500) ranging from 46,500 lumens to 160,000 in strength. The proposed field lighting would be dimmable from 30 percent to as much as 17 percent (for the TLC-LED-1500) to allow for reduced intensity of lighting. The MUSCO lighting is designed to minimize light spillage and glare and meets the guidelines set by the International Dark-Sky Association. These lights would be mounted on four (4) approximately 80-foot-high lighting poles, two (2) approximately 99-foot-high lighting poles, and one (1) approximately 70-foot-high lighting pole, located at the north, southeast, and southwest of the existing athletic fields;
- New 686-seat bleachers at the north edge of existing athletic fields and 213-seat bleachers at the southern corner of the existing athletic fields. The 686-seat bleachers would have an enclosed, 24 feet by 8 feet dedicated sound booth for athletic events, consisting of a PA system and controls for the scoreboard. The 213-seat bleachers would replace the current bleachers at the baseball field and would not include a sound booth but would contain the necessary infrastructure to install one in the future. In addition, 22 assisted listening devices would be installed in the bleachers at the north edge of the athletic fields and nine (9) assisted listening devices would be installed in the bleachers at the southern corner of the athletic fields;
- New scoreboards, one (1) above the sound booth on the northern bleachers for football and soccer, and one (1) at the southeast side of the site for baseball;
- New sun sails located at the northeastern corner of the existing athletic fields;
- Installation of moveable field goals for football and goal posts for soccer to replace existing goal
  posts, and new rubber track surfacing along the north and west boundaries of the athletic fields
  (including four (4) lanes for the 100-yard dash);
- Improvements to the existing baseball field, including new olive core in-field (a sustainable alternative to traditional rubber surfaces, primarily consisting of shredded olive pits mixed with sand), installation of artificial turf, moveable outfield fencing, batting cage, and reconfigured dugouts, bullpens, and storage areas;
- Dedicated storage units for track and field, lacrosse/field hockey, football, and soccer at the north side of the site, as well as a dedicated storage unit for baseball on the southwestern side of the site;
- Stormwater treatment facilities, consisting of standard conveyance methods comprised of inlets
  and solid storm drainpipe in compliance with Regional Water Quality Control Board standards
  (see Section 4.10 Hydrology and Water Quality for additional discussion);
- Reconfiguration of the existing parking lot and addition of a new parking lot with new ADA and electric vehicle parking to the east of the lower athletic fields;<sup>1</sup>
- A total of 34,100 sf of new impervious surfaces;
- A total of 7,889 sf of new synthetic turf;

<sup>&</sup>lt;sup>1</sup> The existing basketball courts would be reconfigured to accommodate the new parking area.

- New marquee sign at the entrance to the fields;
- Removal of 13 trees and planting of 74 trees; and
- New plaza to the east of the existing athletic fields, including a flagpole, wrap around bench, and decorative inlaid lettering, replacing a portion of the existing upper parking lot currently in this area.

Though not included in the initial construction phase of this project, this environmental document also analyzes the future development of a 2,000 sf new concessions stand and restroom to be located near the new plaza.<sup>2</sup> Figures 5a – Figure 6b illustrate the proposed site plans and Figure 7a-7c show the proposed lighting polls and elevations.

#### **CONSTRUCTION ACTIVITIES AND SCHEDULE**

Construction of the proposed project is anticipated to begin in November 2023 and would last 14 months. The earliest operational date of the proposed project is January 2025. Construction of the proposed project is expected to include site preparation, grading, installation of new surfaces (pavement, artificial turf, and olive core baseball field), installation of the new field lighting and bleachers, and construction of the baseball dugouts, plaza, and concessions stand. No demolition of structures is proposed, however, portions of the existing fencing, asphalt parking lot, and the basketball court would be removed and/or reconfigured.

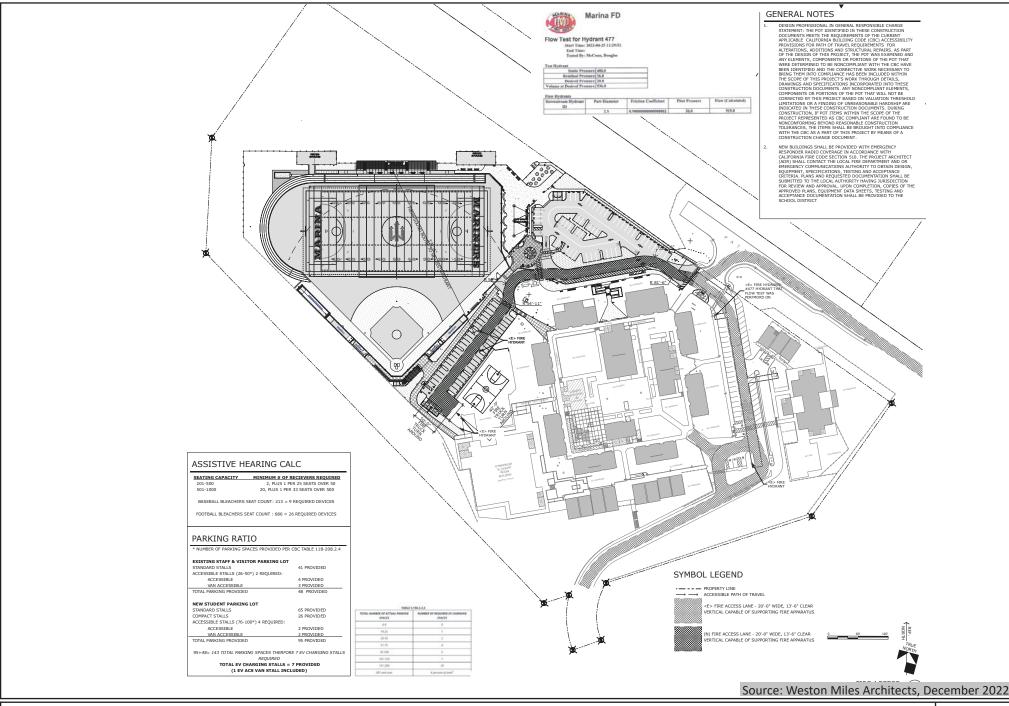
#### **GRADING**

The proposed project would require grading as part of site preparation. The proposed project would result in a total of 5,520 cubic yards (CY) of cut and 12,785 CY of fill; 7,265 CY of fill would be imported from an offsite location. The maximum excavation associated with site grading is anticipated to be 4.8 feet below surface. The proposed grading and drainage plans are illustrated in **Figure 8a-Figure 8c**.

#### LIGHTING

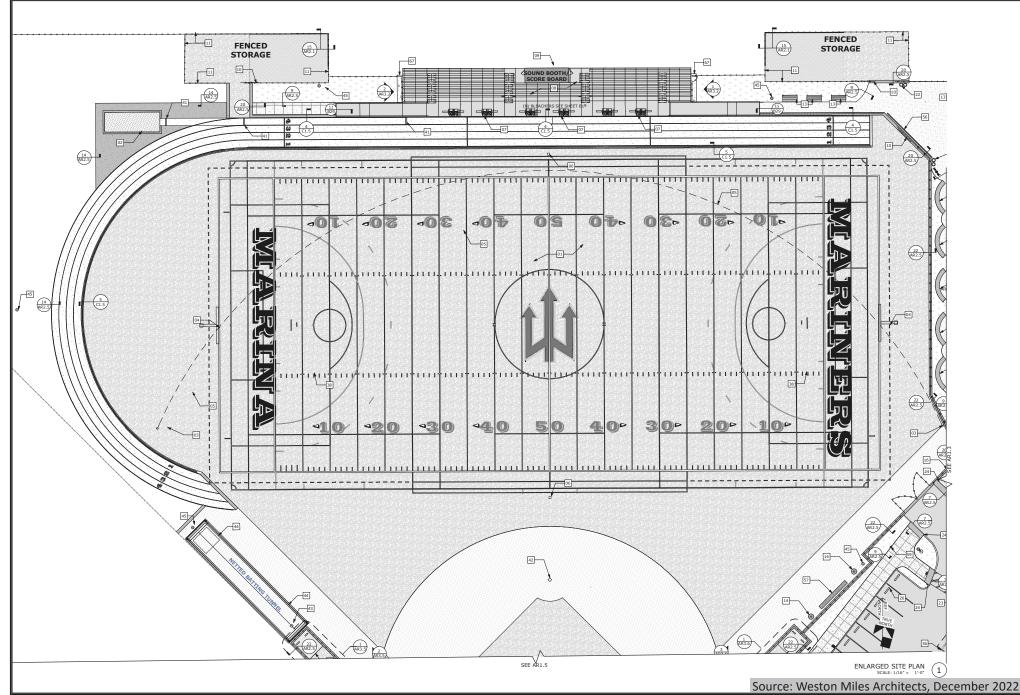
The proposed project includes the installation of up to seven (7) new field lighting poles and associated LED lights to illuminate the athletic fields for outdoor events. MUSCO would provide the LED field lighting, which would consist of models TLC-BT-575, TLC-LED 400, TLC-LED 600, TLC-LED900, and TLC-LED-1500. The strength of these lights would range from 46,500 lumens to 160,000 lumens in strength. A total of seven lighting polls are proposed to illuminate both the football and baseball areas of the athletic fields. The seven (7) field lighting polls are also developed by MUSCO Lighting and consists of three different models. Four (4) of the proposed field lighting poles are the LSS80B-9 model, two (2) are the LSS100B-13 model, and the remaining pole is the LSS70A-4. Of these polls, the LSS80B-9 model is approximately 80 feet in height, the LSS100B-13 is approximately 99 feet in height, and the LSS70A-4 is approximately 70 feet in height. Foundation depths would be 16 feet for the LSS80B-9 model, 18 feet for the LSS100B-13 model, and 12 feet for the LSS70A-4 model. The foundations for each of the three lighting poll types would be 36-inches in diameter.

<sup>&</sup>lt;sup>2</sup> If future design of the concessions stand/restroom exceeds 2,000 sf, then additional environmental review under CEQA may be required.



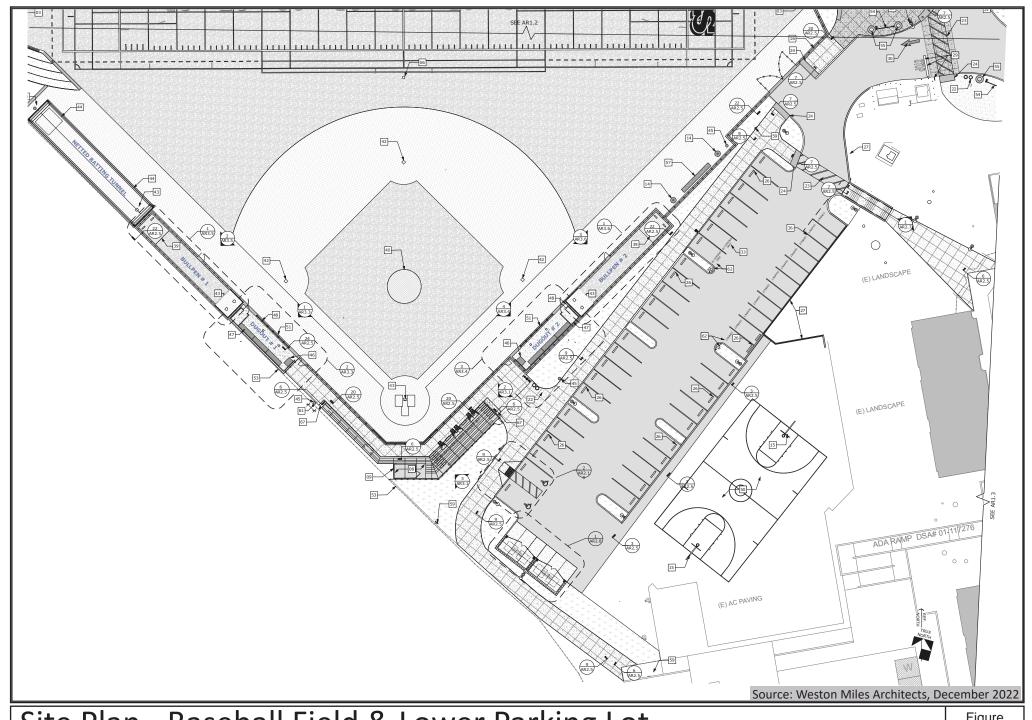
Site Plan - Overall

Figure 5a



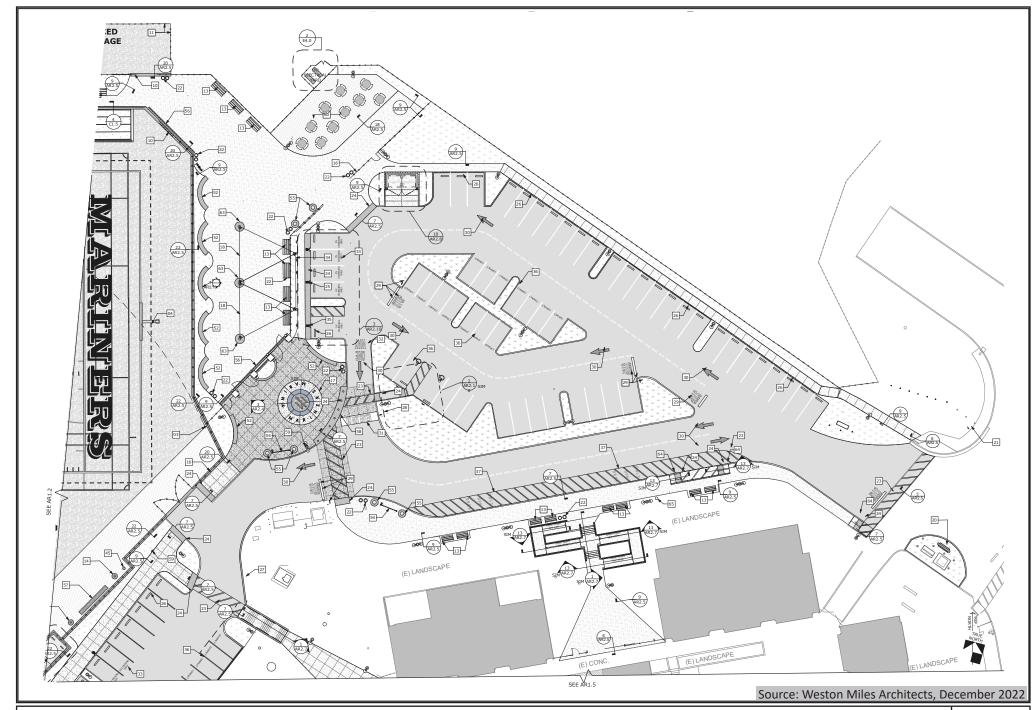
Site Plan - Football Field

Figure 5b



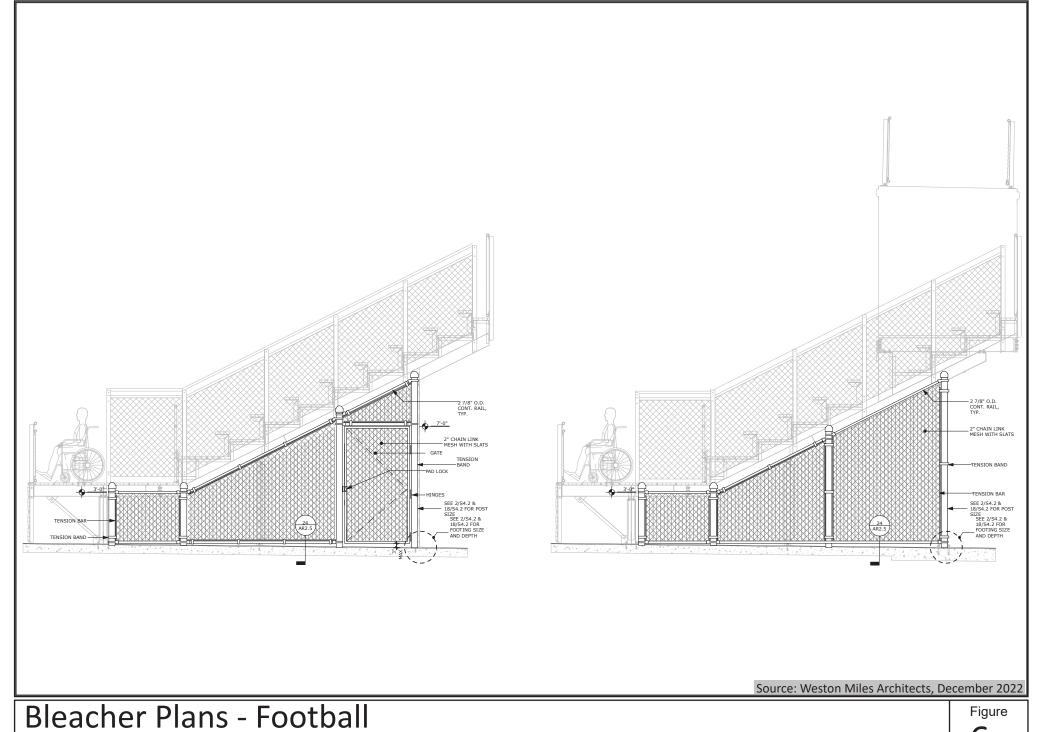
Site Plan - Baseball Field & Lower Parking Lot

Marina High School Multi-Use Field Project Initial Study Figure 5C



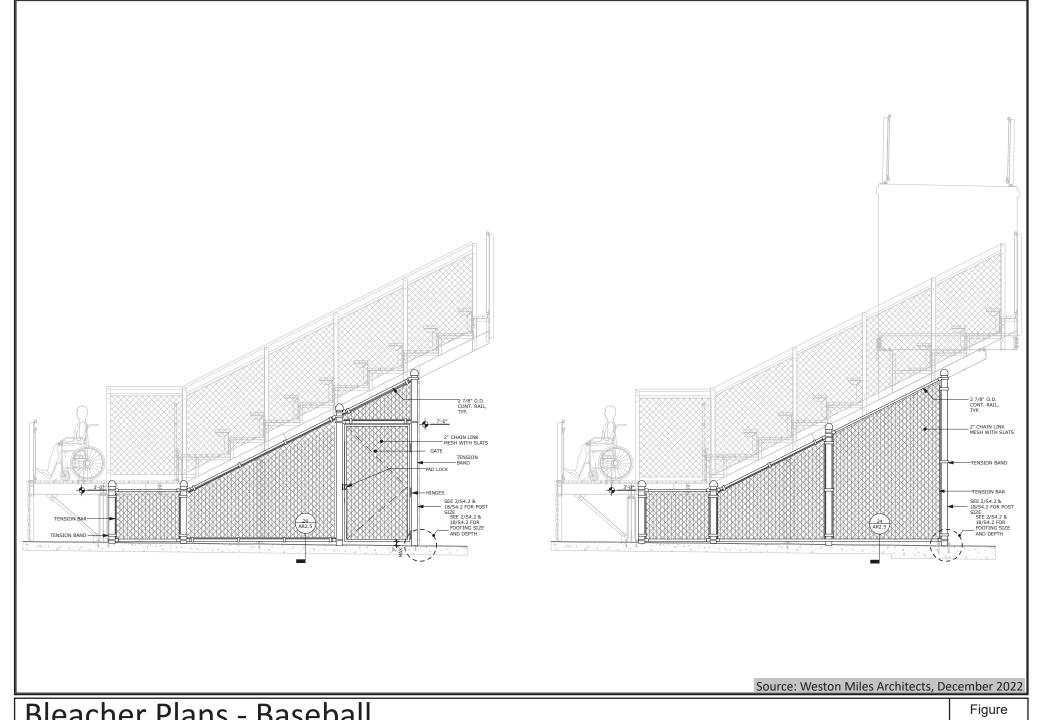
Site Plan - Upper Parking Lot & Entry

Figure 5d



Marina High School Multi-Use Field Project Initial Study

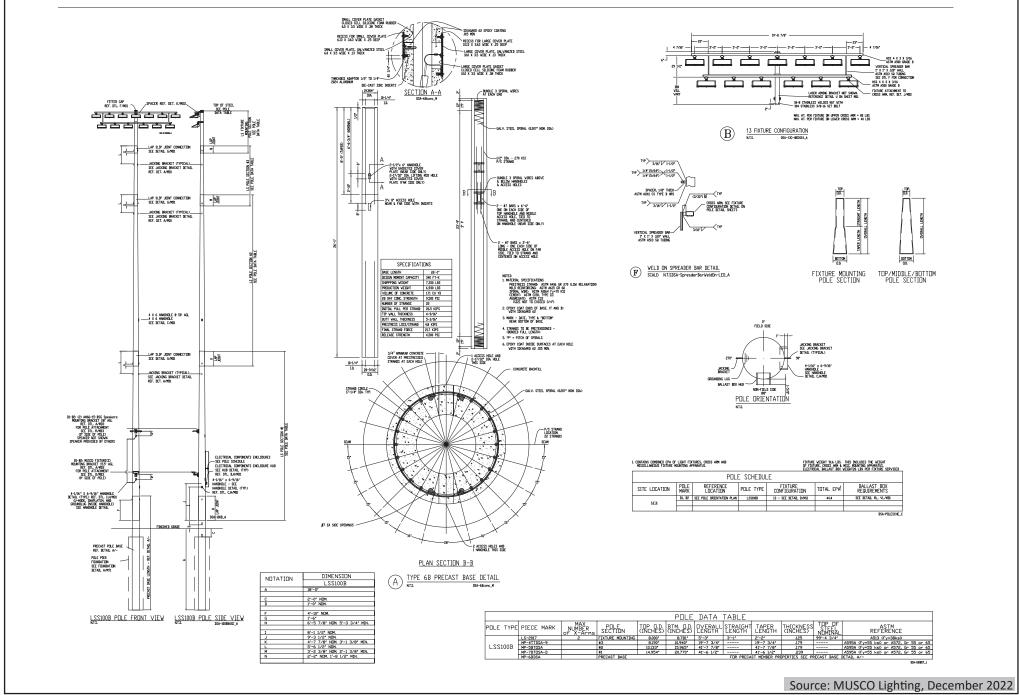
6a



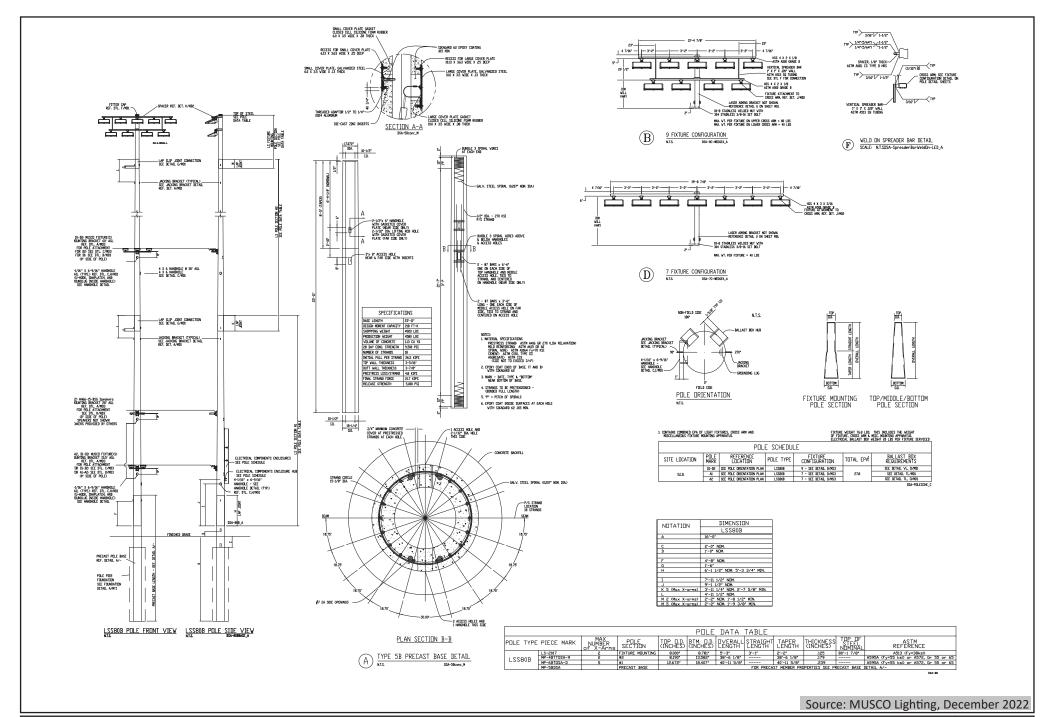
Bleacher Plans - Baseball

Marina High School Multi-Use Field Project Initial Study

6b

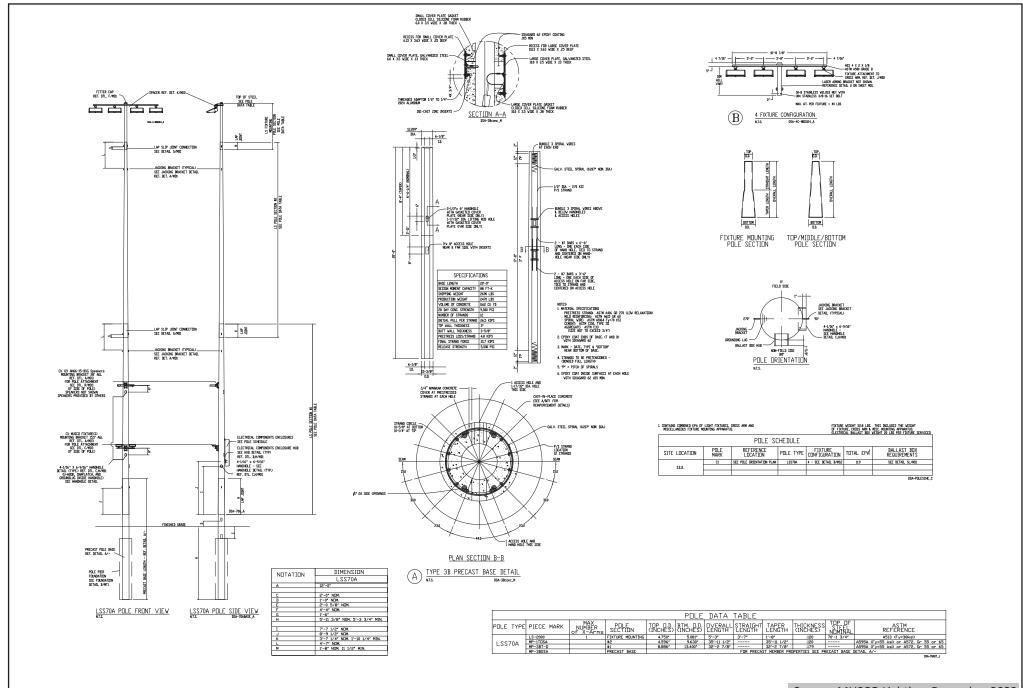


Elevations & Details - Lighting Poll 100B



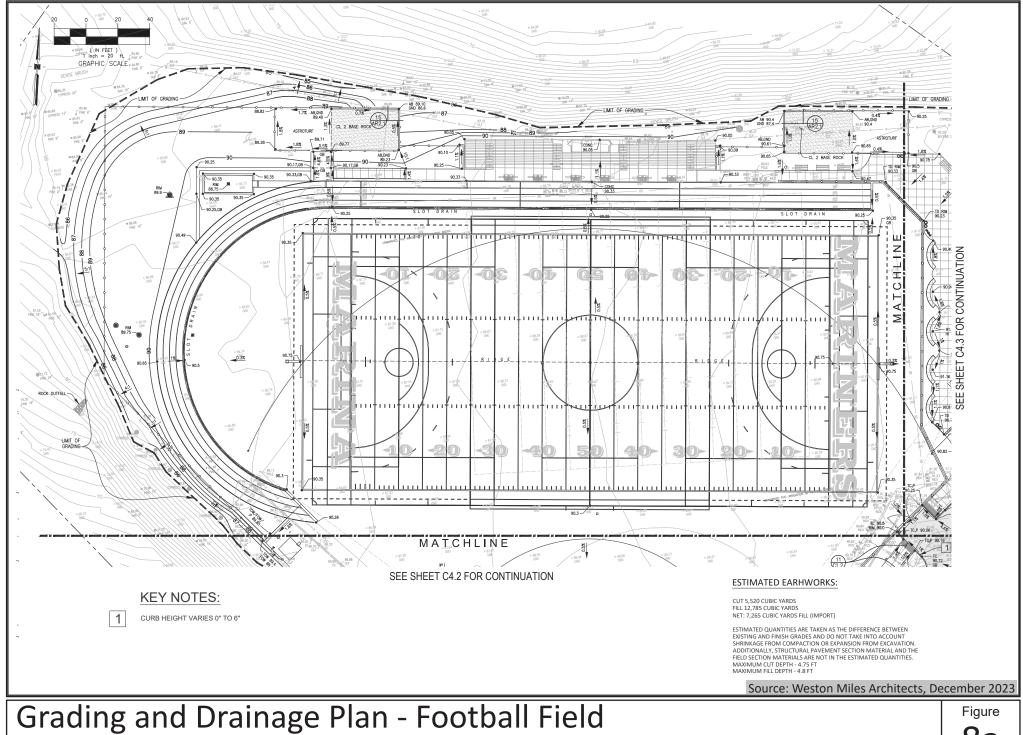
Elevations & Details - Lighting Poll 80B

Figure 7b



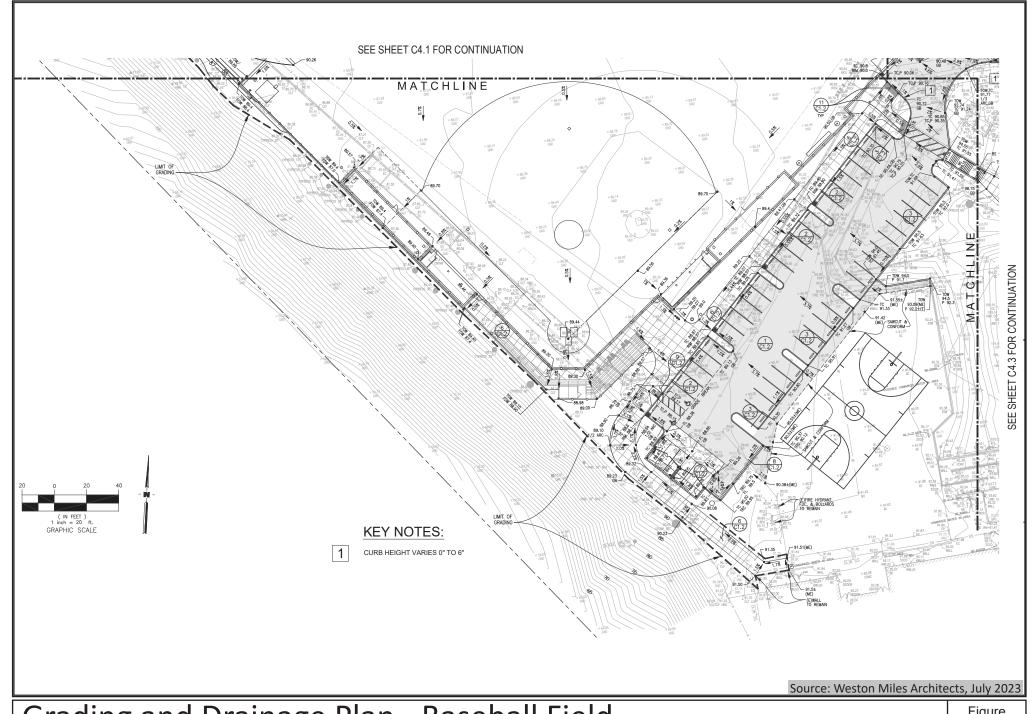
Elevations & Details - Lighting Poll 70A

Source: MUSCO Lighting, December 2022
Figure



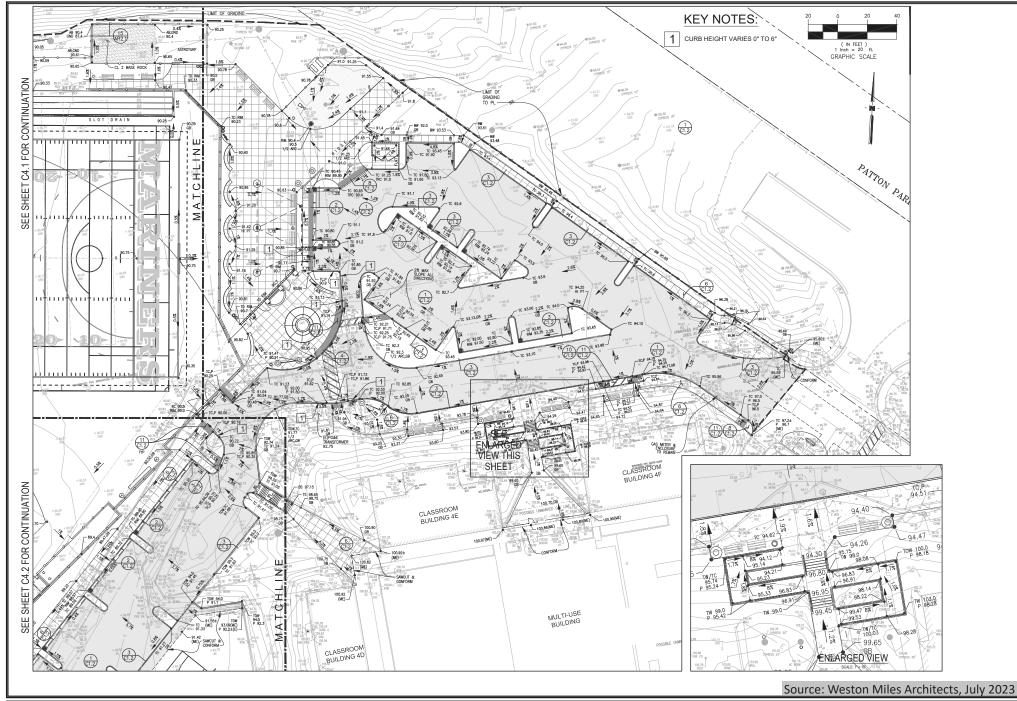
Marina High School Multi-Use Field Project Initial Study

8a



Grading and Drainage Plan - Baseball Field

Figure 8b



Grading and Drainage Plan - Upper Parking Lot

Figure

The proposed field lighting is designed to focus light on the athletic fields and minimize light spillage on adjacent areas and properties. The field lighting has been designed by MUSCO to comply with the regulations and standards published by the International Dark Sky Association.<sup>3</sup>

The proposed project is intended to expand the timing and use of the existing school field facilities for several sports teams including the following: football, soccer, baseball, lacrosse, hockey and track and field. See **Table 2** for a detailed anticipated event lighting schedule provided by the MPUSD, which provides a summary of the anticipated uses of the fields after the lights are installed. No uses of the fields are proposed before sunrise. Proposed lighting would be used on select evenings to accommodate athletic practices and competitions, primarily during the winter months when the sun sets early or during home football games. Thus, use of the field lighting would be limited to the months of August through March. Lights would be utilized for practices, which would be scheduled to conclude no later than 8pm. Use of the field lighting for school-related games would not last past 8pm, with the exception of six (6) football games a year where events would be scheduled to conclude by 10:30pm. Lighting would be reduced to the dimmest possible setting to allow safe exit of participants and attendees and to allow maintenance crews sufficient visibility for clean-up activities and is anticipated to be used no later than 11:00pm.

The proposed project also includes security lighting throughout the upper parking lot, student drop off area, plaza, concession/restroom area, and lower parking lot. All of the proposed security lighting is designed to limit offsite light spillage. The lighting poll designs and elevations for the proposed project are provided in **Figures 7a – Figure 7c**.

#### **ACCESS AND PARKING**

The proposed project includes various improvements and reconfiguration of the existing upper parking lot, including new trash enclosure in the northwest corner, new student drop-off area, new decorative fencing and security gate, security lighting, new cross walk, and new stairs and ADA ramp configuration. The reconfigured parking lot would have a total of 48 spaces, including four (4) ADA-compliant spaces and three (3) ADA-compliant van accessible spaces. As part of the reconfiguration of the existing upper parking lot, the existing student drop-off area and traffic flow would also be reconfigured (see **Figure 5d**). Project plans, including the reconfigured parking lot site plans, are subject to review and approval by the Division of the State Architect.

The proposed project would also include the creation of a new parking lot located east of the lower portion of the existing athletic fields. The new lower parking lot would consist of 95 new parking spaces, including 26 compact spaces, two (2) ADA-compliant spaces, and two (2) ADA-compliant van accessible spaces. A reconfiguration of the existing basketball court would occur as part of the proposed project to accommodate the new lower parking lot. The lower parking lot would also include a new retaining wall, trash enclosure, and 10-foot-wide ADA-compliant sidewalk to connect the existing gymnasium to the athletic fields.

For events where large crowds are anticipated, such as certain football games and graduation ceremonies, additional off-site parking would be provided at MPUSD's Los Arboles Middle School campus and other available MPUSD parking areas as needed.

<sup>&</sup>lt;sup>3</sup> International Dark Sky Association standards for certification are discussed under Aesthetics Section. Generally, designing outdoor lighting to program standards protects the natural night environment by controlling light pollution. <a href="https://darksky.org/">https://darksky.org/</a>

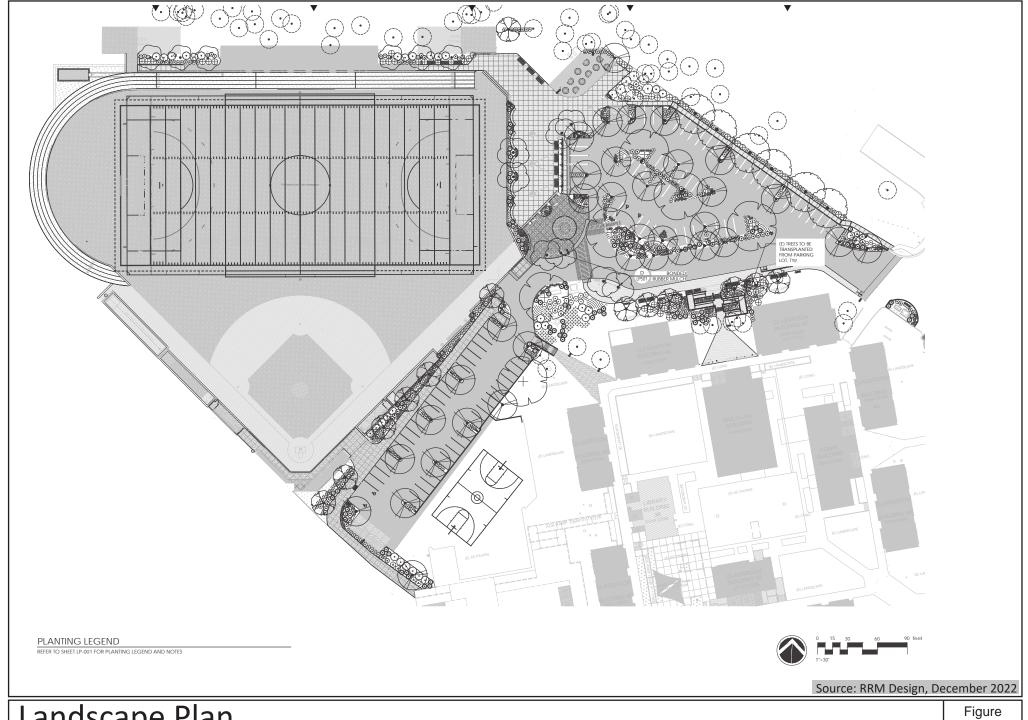
#### LANDSCAPE AND TREE REMOVAL

The proposed project includes landscaping, consisting of planting trees, shrubs, and groundcover. The proposed project includes the removal of 13 trees and planting of 74 replacement trees. The City of Marina requires a tree removal permit to remove, relocate, or damage a living tree within its limits. Replacement tree species are anticipated to include purple-leaf bailey acacia, marina strawberry tree, Monterey cypress, New Zealand Christmas tree, Monterey pine, and valley oak. Trees would be located throughout the reconfigured upper parking lot, the new lower parking lot, the plaza area, and behind the football bleachers. A landscape plan is provided in **Figure 9**.

#### ATTENDANCE AND EVENT SCHEDULE

The proposed project is anticipated to continue to accommodate regular physical education (PE) classes, as well as athletic events for students and the community.

The proposed project would accommodate events and/or practices for Marina High's existing Baseball, Football, Soccer, Track and Field, and Cheer, as well as non-athletic events including school rallies and graduation. In addition, the proposed project would potentially be used for newly organized Marina High teams for sports such as Lacrosse, Girls' Flag Football, and Field Hockey. The proposed project would be utilized on a near-daily basis on weekdays during the school year; in addition, community athletic leagues or clubs would potentially use the site during weekend hours (see Table 2 for proposed event types and frequency of events). While the proposed project would be used for track and field practice, no formal events are anticipated to be held at the proposed project site for track and field as a complete track circuit suitable for competitive track and field events is not included as part of the proposed project. Marina High School track and field meets would continue to be held offsite. The estimated attendance for athletic competitions upon installation of the proposed field lights would vary by sport and other factors, such as level of competition (e.g., regular season vs. postseason) and weather conditions. Currently, Marina High football and soccer teams play "home games" at alternate facilities located at Seaside High School and Monterey Peninsula College. An increase in number of Home Games is anticipated with the installation of the field lights, as Marina High football and soccer teams would be able to host events at their home field. An increase in attendance resulting from the Proposed Project is expected by having games at night as opposed to afternoon events. The projected increase in attendees for each school-affiliated sport is presented in Table 1. Nighttime games and practices would be scheduled to end at 8:00 pm, except for up to six (6) football games per year that would be scheduled to end at 10:30 pm. Following conclusion of nighttime events, the field lighting would be reduced to the dimmest possible setting to allow safe exit of participants and attendees and to allow maintenance crews sufficient visibility for clean-up activities (assumed to be a minimum reduction of 50 percent); the field lighting would be turned off at the earliest possible time following conclusion of these activities. The field lighting would also be operated at the dimmest possible setting during practices to allow for safe visibility for participants (assumed to be a minimum reduction of 50 percent).



Landscape Plan

Marina High School Multi-Use Field Project Initial Study

Table 1 Historic and Projected Attendance for Marina High School Sporting Events									
Sport Existing Use? Historic Attendance Projected Attendance Attendance Increase									
Baseball	Yes	50	50	0					
Soccer	Yes	20	50	+30					
Football	Yes*	100	300	+200					
Field Hockey	No	0	50	+50					
Lacrosse	No	0	50	+50					

See  ${\bf Table~2}$  for number of games per year with expected lighting by event.

In addition, the proposed project could be utilized as a site for both non-athletic school events and community athletic events. Non-athletic school events would include graduation ceremonies and homecoming rallies; school rallies would have the highest projected attendance of all non-athletic events, with an estimated 720 participants (see Table 2). School rallies and graduation ceremonies are currently held at the school and would not represent an increase in use, but would provide for use of the new PA system. Non-athletic school events would occur only during the day and would not require use of the field lights. Community athletic leagues or clubs would potentially use the site during weekend hours. Community groups would be able to utilize the proposed project from 8am to sunset during the period of April to September, and 8am to 8pm between October to March, on a weekly basis during weekend days when school is not in session. The facility would be open to the community for use during after-school hours, school breaks, and on weekends. Use of the field lights and PA is not proposed for most community events, which are anticipated to end at 4pm. However, the proposed project could host additional community events up until 8pm that would utilize the field lighting between October-March during times when school is not in session. A complete list of events, including projected frequency of use, date ranges, days of the week, start and end times, number of participants, and use of field lights and PA, is provided in Table 2.

<sup>\*</sup> Currently practice only

					Table 2						
Activity	Frequency of Use	Currently Held On-Campus?	Project Months of Use	Days of Use	Start & End Times	use of Use of Field Lights Proposed?	Anticipated # of Events Using Field Lights	Use of PA Proposed?	Anticipated # of Participants	Net New Participants	
Current School Activities											
School Rally	4 times per year	Yes	Sept, Jan, March, and June	N/A	12:00pm - 1:30pm	No	N/A	Yes	720	0	
Graduation	Once per Year	Yes	June	N/A	TBD	No	N/A	Yes	150	0	
PE	Daily	Yes	August–June	M-F	8:30 am - 5:30 pm	No	N/A	No	80	0	
Football Games	6 times per year	No	Sept–Jan	Friday	3:30pm – 10:00pm	Yes until 10:30pm	6	Yes	80	80	
Soccer Games	10 times per year	Yes	Nov–Feb	M-F, Select Saturdays	3:30pm - 8:00pm (varsity and JV)	Yes until 8:00pm	10	Yes	38	0	
Baseball Games	12 times per year	Yes	Feb-June	M-F, Select Saturdays	3:30pm- 6:00pm (5:00pm- 8:00pm select night games)	Yes Select Games until 8:00pm	Up to 12	No	25	0	
Football Practice	Daily	Yes	June – Jan	M-F, Select Saturdays	3:30pm- 6:30pm (with occasional 5:00pm - 8:00pm practice)	Yes August - November until 8:00pm	TBD	No	80	0	
Track and Field Practice	Daily	No	Feb-June	M-F, Select Saturdays	3:30pm – 6:00pm	No	N/A	No	55	55	
Soccer Practice	Daily	Yes	Nov–Feb	M-F, Select Saturdays	3:30pm- 6:30pm (with occasional 5:00pm -	Yes October- March until 8:00pm	TBD	No	38	0	

					Table 2					
Activity	Frequency of Use	Currently Held On-Campus?	Proje  Months of Use	Days of Use	Start & End Times	Use of Field Lights Proposed?	Anticipated # of Events Using Field Lights	Use of PA Proposed?	Anticipated # of Participants	Net New Participants
					8:00pm practice)	(some practices may run from 5:00pm-8:00pm)	<b>5</b>			
Baseball Practice	Daily	Yes	Feb-June	M-F, Select Saturdays	3:30pm – 6:00pm	No	N/A	No	25	0
Cheer	Daily	Yes	Aug-June	M-F, Select Saturdays	3:30pm – 6:00pm	No	N/A	No	22	0
				Potential	<b>Future Schoo</b>	l Activities			•	
Girls' Flag Football Games	6 times per year	No	Aug-Nov	M-F, Select Saturdays	3:30pm – 6:00pm (6:30pm- 8:00pm select night games)	Yes Oct-Nov until 8:00pm	TBD	Yes	25	25
Field Hockey Games	6 times per year	No	Aug-Nov	M-F, Select Saturdays	3:30pm – 6:00pm (6:30pm- 8:00pm select night games)	Yes Oct-Nov until 8:00pm	TBD	Yes	25	25
Lacrosse Games	12 times per year	No	Jan-May	M-F, Select Saturdays	3:30pm – 6:00pm (6:30pm- 8:00pm select night games)	Yes Jan-March until 8:00pm	TBD	Yes	25	25

Table 2 Projected Event Information, Frequency, and Timing										
Activity	Frequency of Use	Currently Held On-Campus?	Months of Use	Days of Use	Start & End Times	Use of Field Lights Proposed?	Anticipated # of Events Using Field Lights	Use of PA Proposed?	Anticipated # of Participants	Net New Participants
				Anticipate	d Community	Activities*				
Marina Youth Soccer	Weekly	No	Aug-Oct	Sat/Sun	8:00am- 4:00pm	No	N/A	No	200	200
Marina Youth Baseball	Weekly	No	Feb-June	Sat/Sun	8:00am- 4:00pm	No	N/A	No	150	150

<sup>\*</sup> Additional community activities/uses could potentially use the proposed project between 8:00am to sunset between April to September and 8:00am to 8:00pm between October to March when school is not in session. Lighting use for community events would be limited to October to March.

Use of the proposed field lights would be specific to select evenings to accommodate athletic practices and competitions, primarily during the winter months when the sun sets early or during home football and soccer games. Practices for all sports would be scheduled to end by 8pm and use of the field lighting would be limited to the hours after sunset and before 8pm for these regular events. As described above in **Table 2**, soccer games and baseball games are not new uses as home games have previously been held on-site and do not represent an expanded use under the proposed project. The project will change the time for these events to allow for later scheduling. Estimated attendance for baseball is not expected to change, while the attendance for soccer games is estimated to increase from 20 to 50 spectators as shown on **Table 1**.

## 1.4 Project Approvals

MPUSD is the CEQA lead agency for the proposed project and, as a result, has the primary authority for approval for the proposed project. The City of Marina is a responsible agency under CEQA. Additional approvals for the proposed project would be required from the following state and local agencies:

- Division of the State Architect (DSA) Approval of Construction Drawings
- Central Coast Regional Water Quality Control Board (RWQCB) National Pollution Discharge Elimination Permit (NPDES)
- RWQCB Construction General Permit
- City of Marina Tree Removal Permit

The RWQCB would be a responsible agency as defined by CEQA. In addition, the field lighting component of the proposed project will be seeking a Fixture Seal of Approval from the International Dark Sky Association (IDSA) to ensure the proposed project would be consistent with policies for reducing nighttime light pollution, minimizing glare, and reducing light trespass. IDSA reviewed the initial plans for the proposed project and provided feedback to improve the design aspects relating to light pollution and spillage. Project plans were revised by the project architect to ensure that the final plans would be IDSA compliant. IDSA issued a Phase 1 letter of design compliance on October 26, 2023. IDSA will perform a Phase 2 field review of the installed field lights following construction to verify installation compliance with IDSA standards.

# **Chapter 2. Environmental Factors Potentially Affected**

The environmental factors identified below are discussed within **Chapter 4. Initial Study Environmental Checklist.** Sources used for analysis of environmental effects are cited in parenthesis after each discussion and are listed in **Chapter 5. References**.

	Aesthetics		Agricultural and Forest Resources	Air Quality
$\boxtimes$	Biological Resources		Cultural Resources	Energy
	Geology/Soils		Greenhouse Gas Emissions	Hazards/Hazardous Materials
$\boxtimes$	Hydrology/Water Quality		Land Use/Planning	Mineral Resources
$\boxtimes$	Noise	$\boxtimes$	Population and Housing	Public Services
$\boxtimes$	Recreation		Transportation	Tribal Cultural Resources
$\boxtimes$	Utilities and Service Systems	$\boxtimes$	Wildfire	Mandatory Findings of Significance

This Page Intentionally Left Blank

# **Chapter 3. Determination**

On the	basis of this initial evaluation:	
	I find that the proposed project COULD NOT ha NEGATIVE DECLARATION will be prepared.	ve a significant effect on the environment, and a
	I find that although the proposed project could there will not be a significant effect in this case by or agreed to by the project proponent. A MI prepared.	because revisions in the project have been mad
	I find that the proposed project MAY have a sig ENVIRONMENTAL IMPACT REPORT is required.	nificant effect on the environment, and an
	I find that the proposed project MAY have a "posignificant unless mitigated" impact on the enviadequately analyzed in an earlier document pubeen addressed by mitigation measures based sheets. An ENVIRONMENTAL IMPACT REPORT is that remain to be addressed.	ronment, but at least one effect 1) has been suant to applicable legal standards, and 2) has on the earlier analysis as described on attached
	I find that although the proposed project could because all potentially significant effects (a) have NEGATIVE DECLARATION pursuant to applicable mitigated pursuant to that earlier EIR or NEGAT mitigation measures that are imposed upon the	re been analyzed adequately in an earlier EIR or estandards, and (b) have been avoided or IVE DECLARATION, including revisions or
Signatur	el Diffenbaugh	Date  Monterey Peninsula Unified School District
Printed	Name	For

This Page Intentionally Left Blank

# **Chapter 4. Initial Study Environmental Checklist**

The following chapter assesses the environmental consequences associated with the proposed project. Mitigation measures, where appropriate, are identified to address potential impacts.

#### **EVALUATION OF ENVIRONMENTAL IMPACTS**

- 1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on project-specific screening analysis).
- 2. All answers must take into account the whole action involved, including offsite as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.
- 5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (Section 15063(c)(3)(D)). In this case, a brief discussion should identify the following:
  - a) Earlier Analysis Used. Identify and state where they are available for review.
  - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures, which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6. Lead agencies are encouraged to incorporate information sources for potential impacts (e.g., general plans, zoning ordinances) into the checklist references. Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7. Supporting Information Sources: A source list should be attached, and other sources used, or individuals contacted should be cited in the discussion.

- 8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9. The explanation of each issue should identify:
  - a) The significance criteria or threshold, if any, used to evaluate each question; and
  - b) The mitigation measure identified, if any, to reduce the impact to less than significance.

#### 4.1 Aesthetics

#### 4.1.1 Environmental Setting

The coastal landscape of Monterey County is aesthetically rich and visually diverse, and some areas, such as the Monterey Peninsula, are recognized and highly regarded for their aesthetic quality. The proposed project is located on the existing Marina High School campus, in Marina, California. Views in and around the proposed project site include sand dunes to the west, the Marina High School campus to the south, the existing parking lot to the east, and wooded areas to the north.

#### 4.1.2 Environmental Impacts

Environmental Impacts		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
AES	THETICS. Would the project:				
a)	Have a substantial adverse effect on a scenic vista?				
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area would the project conflict with applicable zoning and other regulations governing scenic quality?				
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				

#### 4.1.3 Explanation

a-b) **Less than Significant Impact.** The proposed project consists of reconfiguration of the existing athletic fields and the installation of new field lighting, bleachers, concessions stand, restrooms, and other improvements. *Policy 4.126.3* of the City of Marina General Plan states that "The visual character and scenic resources of the Marina Planning Area shall be protected for the enjoyment of current and future generations. To this end, ocean views from Highway One shall be maintained to the greatest possible extent". There are no scenic vistas located on the proposed project site, as the project site is occupied by Marina High School. Ocean views across the proposed project site are not widely available from adjacent land due to topography and vegetation. The proposed project is located east of State Route 1, which is designated by Caltrans as an eligible Scenic

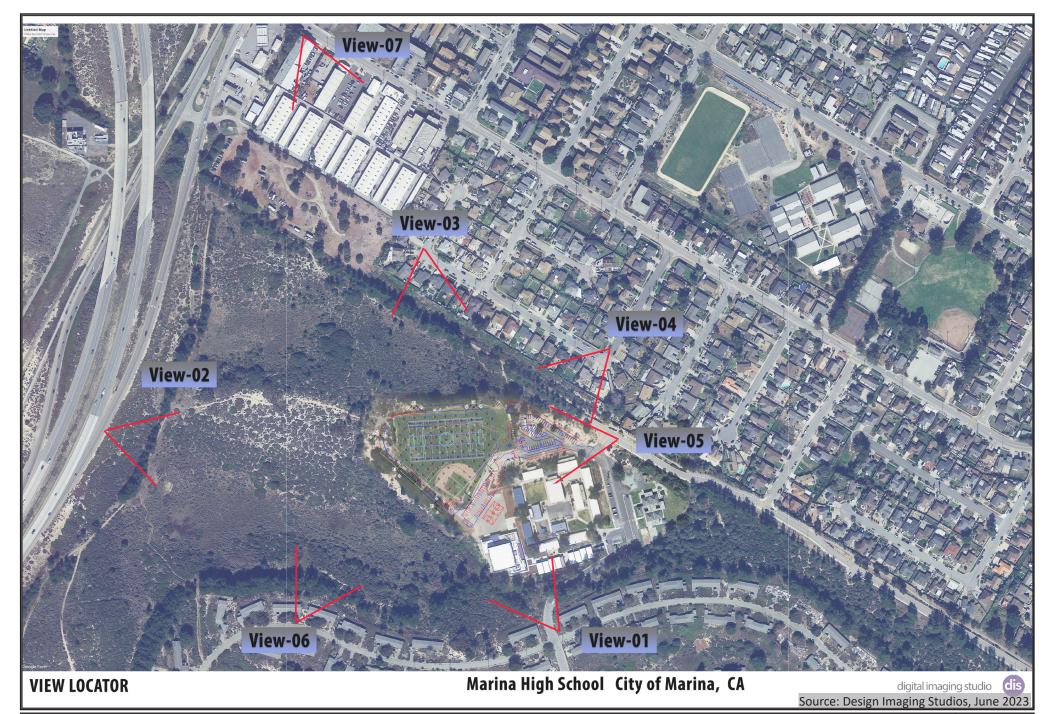
Highway. However, due to existing topography and landscaping, views of the proposed project site are minimal from State Route 1. More specifically, the only component of the proposed project that would be visible from State Route 1 would be the light poles. As discussed above, the portion of State Route 1 nearest to the project site is not a designated scenic highway, and scenic resources would not be significantly impacted by the proposed project.

The proposed project would not require the removal of any rock outcroppings or historic buildings. While tree removal is anticipated, none of the trees marked for removal carry any designation as a scenic resource. All tree removal would be conducted per the requirements of a tree removal permit issued by the City of Marina (**Appendix C**). The proposed project would have less than significant impacts related to views of scenic vistas or damaging scenic resources visible from a scenic highway. (1, 2, 3, 4, 5, 7)

c) Less than Significant Impact. The proposed project is located in an urbanized area within the City of Marina. The City of Marina's General Plan states that new development should maintain continuity with the City's history and be responsive to the climate and the natural and scenic features of the local and regional setting (City of Marina, 2023). In addition, the City of Marina's General Plan highlights that landscape screening and restoration shall be provided as appropriate for new development, which should be sited and designed to retain scenic views of inland hills from State Route 1. Construction activities would temporarily alter the visual character of the proposed project site. However, presence of construction equipment would be temporary, as equipment would be removed following completion of construction. Therefore, the short-term visual impacts from construction activities would remain less than significant.

As previously stated, the proposed project would be largely screened from view from State Route 1 by existing vegetation and topography, which also screens views of inland hills from the portion of State Route 1 adjacent to the project site. However, as shown on Figures 10a-10o, the proposed field lighting would be visible from adjacent viewpoints, including from State Route 1 in the vicinity of the Del Monte Avenue exit (see Figure 10e) and the existing residential areas located to the east and north (see Figures 10g and 10i). Due to existing tree plantings and topography, as well as the speed of vehicles travelling the highway, the portion of State Route 1 where the proposed field lighting would be visible would be limited in duration.

As shown on **Figure 2, Vicinity Map**, the nearest homes to Marina High School are located on Grant Street approximately 250 feet northeast of the proposed project and approximately 315 feet from the nearest proposed field lighting. The proposed project sits at a higher elevation than the surrounding single-family residential neighborhoods of the City of Marina. The field lights would be visible from the public views of the City neighboring single-family neighborhoods (see **Figures 10g** and **10i**). However, views of the proposed project from these locations would be broken up by the intervening landform, road and slope, and existing landform and landscape trees. Additionally, the poles would be of a small diameter (particularly as viewed from a distance) and the light silver/grey color of the steel poles would tend to blend in with the sky background when not in use. When the field lighting is in use offsite glare and light spillage would be minimized as discussed further under impact d). Therefore, the proposed light poles would not substantially degrade the existing visual character or quality of public views of the viewshed from nearby roadways and this impact would be less than significant.



Visual Simulation - Viewpoint Map

Figure 10a



VIEW -01 Existing Day

Marina High School City of Marina, CA digital imaging studio dis

Source: Design Imaging Studios, June 2023

Visual Simulation - View 1 - Daytime Existing

Figure



VIEW -01 Proposed Night

Rendova Rd.

Marina High School City of Marina, CA digital imaging studio dis



Source: Design Imaging Studios, November 2023

Visual Simulation - View 1 - Nighttime Proposed

Figure 10c



**VIEW-02 Existing Day** 

Cabrillo Hwy Exit 409 Del Monte Blvd

Source: Design Imaging Studios, June 2023

Visual Simulation - View 2 - Daytime Existing

Figure 10d



**VIEW -02 Proposed Night** 

Cabrillo Hwy Exit 409 Del Monte Blvd

Source: Design Imaging Studios, November 2023

Visual Simulation - View 2 - Nighttime Proposed

Figure



VIEW -03 Existing Day

Seeno Circle Grant Dr.

Source: Design Imaging Studios, June 2023

Visual Simulation - View 3 - Daytime Existing

Figure 10f



**VIEW -03 Proposed Night** 

Seeno Circle Grant Dr.

Marina High School City of Marina, CA digital imaging studio dis



Source: Design Imaging Studios, November 2023

Visual Simulation - View 3 - Nighttime Proposed

Figure



Visual Simulation - View 4 - Daytime Existing

Figure



**VIEW -04 Proposed Night** 

Talcott Av.

Marina High School City of Marina, CA digital imaging studio dis

Source: Design Imaging Studios, November 2023

Visual Simulation - View 4 - Nighttime Proposed

Figure 10i



**VIEW -05 Existing Day** 

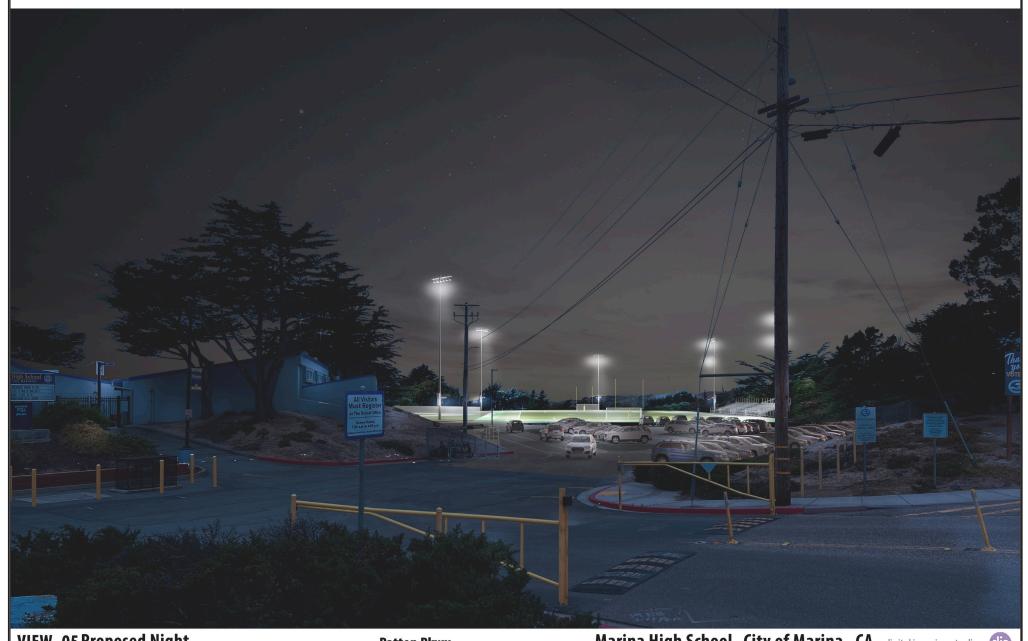
**Patton Pkwy.** 

Marina High School City of Marina, CA digital imaging studio dis

Source: Design Imaging Studios, June 2023

Visual Simulation - View 5 - Daytime Existing

Figure 10j



**VIEW -05 Proposed Night** 

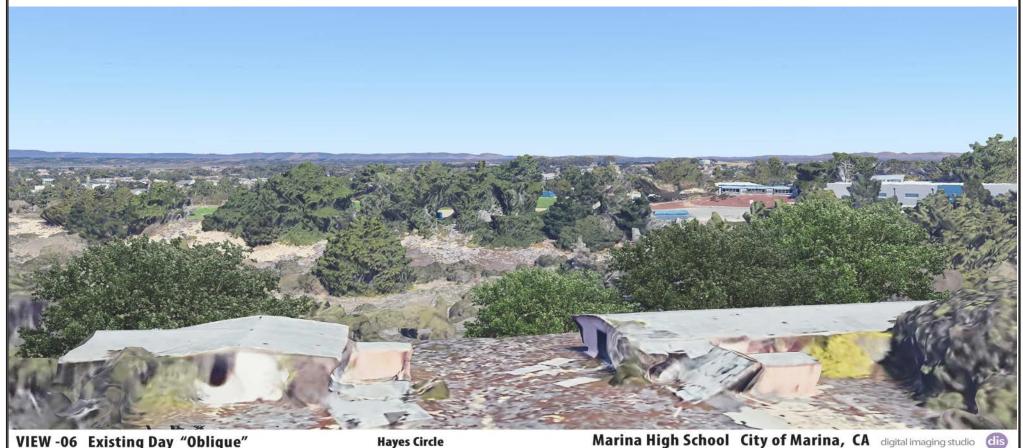
Patton Pkwy.

Marina High School City of Marina, CA digital imaging studio dis

Source: Design Imaging Studios, November 2023

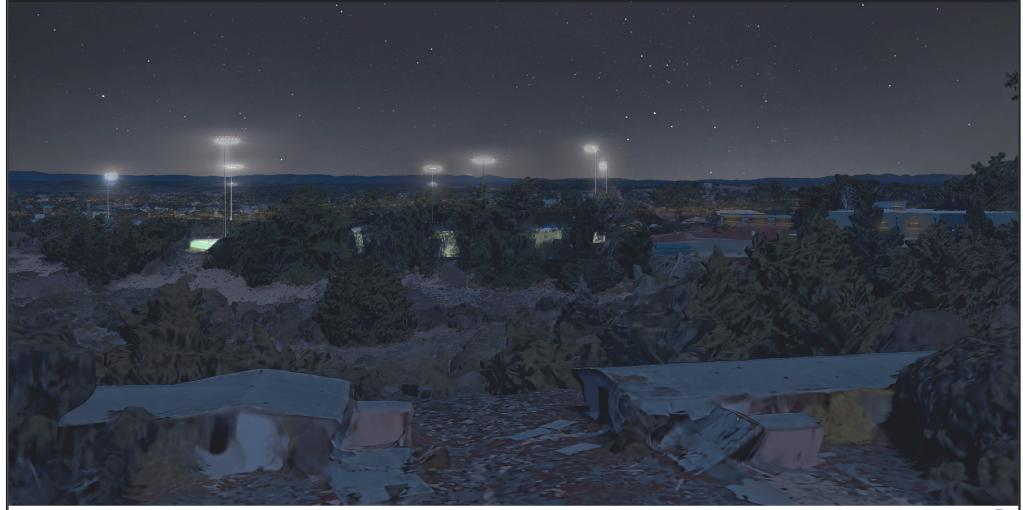
Visual Simulation - View 5 - Nighttime Proposed

Figure 10k



VIEW -06 Existing Day "Oblique"

Source: Design Imaging Studios, June 2023



VIEW -06 Proposed Night "Oblique"

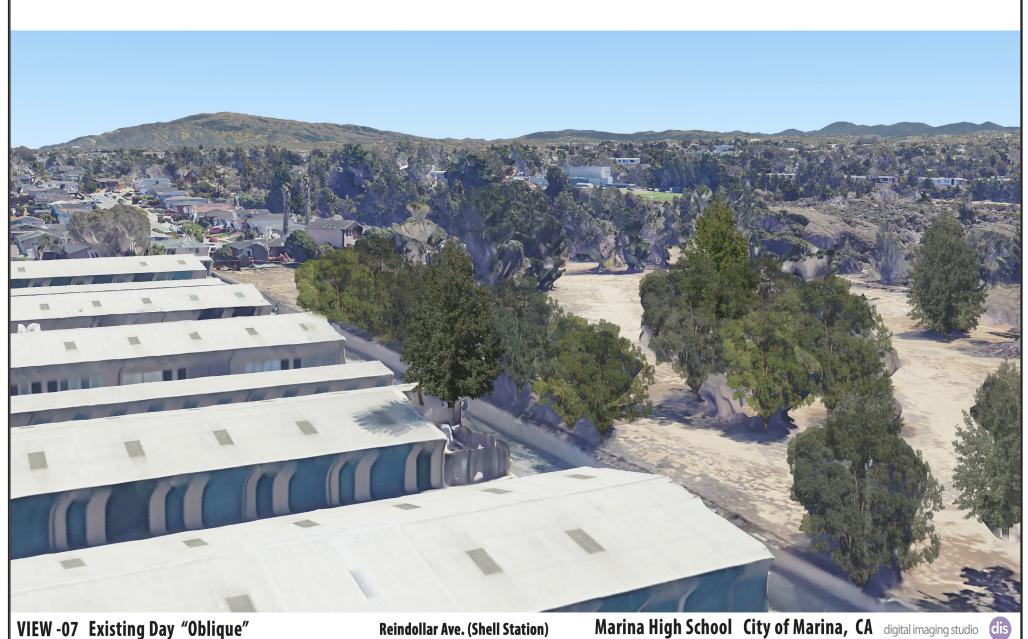
**Hayes Circle** 

Marina High School City of Marina, CA digital imaging studio dis

Source: Design Imaging Studios, November 2023

Visual Simulation - View 6 - Nighttime Proposed

Figure



VIEW -07 Existing Day "Oblique"



Source: Design Imaging Studios, June 2023

Visual Simulation - View 7 - Daytime Existing

Figure 10n



VIEW -07 Proposed Night "Oblique"

**Reindollar Ave. (Shell Station)** 

digital imaging studio



Source: Design Imaging Studios, November 2023

Visual Simulation - View 7 - Nighttime Proposed

Figure 100

The proposed project would not conflict with regulations governing scenic quality. This represents a less than significant impact. (1, 2, 3, 4,5)

d) **Less than Significant with Mitigation Incorporated.** Construction Impacts: The proposed project would not require nighttime construction, for this reason, the proposed project would have a less than significant impact related to creation of a new source of substantial light or glare which would adversely affect day or nighttime views in the area during construction.

Operational Impacts. The proposed project includes new field lighting for nighttime events during operation. The new field lighting would be considered a new source of substantial light or glare which could adversely affect nighttime views. As shown on **Figure 2**, **Vicinity Map**, the nearest homes to Marina High School are located on Grant Street approximately 250 feet northeast of the proposed project and approximately 315 feet from the nearest proposed field lighting. The proposed project sits at a higher elevation than the surrounding neighborhood and State Route 1 to the north. Views of the proposed project site are partially screened due to topography, vegetation to the north and east, and sand dunes to the west. Additionally, the poles would be of a small diameter (particularly as viewed from a distance) and the light silver/grey color of the steel poles would tend to blend in with the sky background when not in use.

Digital Imaging Studios performed a "before-and-after" visual simulation to determine visual impacts from the proposed field lighting from nearby public vantage points. Image editing software was utilized to transpose the proposed field lighting onto the project site, consistent with the exact locations of each lighting poll and the specific lighting equipment proposed for the project, and lighting conditions were altered to reflect future views at dusk. A viewpoint map of the visual simulations is provided in **Figure 10a**, and before-and-after visual simulations from each of the identified viewpoints are provided in **Figures 10b-10o**.

As shown on **Figures 10b-10o**, the proposed field lighting would be visible during nighttime operations from the identified adjacent viewpoints (see **Figures 10e, 10g, 10i,** and **10k**) and would represent a new source of light during nighttime operations.

The field lighting has been designed to focus light on the athletic fields and minimize light pollution, including ambient light pollution and spillage onto adjacent properties (see Figures 7a-7c for information on lighting design and Appendix G for a depiction of light spillage during operation of the field lighting). Figures 10e, 10g, 10i, and 10k provide photo simulations to demonstrate potential for the light generated by the field lighting component of the proposed project during nighttime use. Impacts from light and glare as viewed from off-site viewing locations would be minimized through distance from viewing areas and use of IDSA compliant lighting fixtures.

As discussed previously, the proposed field lighting is specifically designed to be focused on the athletic fields and to minimize offsite spillage and glare. The proposed project sought certification from the IDSA. The IDSA is a non-profit group that provides objective, third-party certifications for "products, designs, and completed projects that minimize glare, reduce light trespass, and don't pollute the night sky."<sup>4</sup> To achieve compliance with IDSA standards, lighting design and installed lighting projects must minimize glare, reduce light trespass, and reduce light pollution. To be certified, design and installed lighting must:

<sup>&</sup>lt;sup>4</sup> https://darksky.org/what-we-do/darksky-approved/

- Restrict the amount of upward-directed light;
- Avoid glare;
- Avoid over-lighting;
- Utilize dimming and other appropriate lighting controls; and
- Minimize short-wavelength (bluish) light in the nighttime environment.

IDSA reviewed the initial plans for the proposed project and provided feedback to improve the design aspects relating to light pollution and spillage. Project plans were revised by the project architect to ensure that the final plans would be IDSA compliant. IDSA issued a letter of design compliance on October 26, 2023 (**Appendix H**). The IDSA letter affirms that the field lighting component of the proposed project would:

- Minimize neighborhood nuisance light by greatly reducing spill light and glare in the local area.
- Manage high angle light, thus dramatically decreasing offsite light trespass and sky glow.
- Mitigate neighborhood light pollution and sky glow, which will benefit the environment, the astronomy community, and others impacted by poorly designed outdoor sports facilities.
- Minimize light output, thereby reducing energy consumption and avoiding over lighting.

IDSA will perform a further field review of the installed field lights following construction to verify installation compliance with IDSA standards (see **MM AES-1**, below).

A simulation showing nighttime use of the field lighting and the resulting light spillage was prepared for the proposed project by MUSCO and is provided in **Appendix G**. **Appendix G** measures the light intensity from the field lighting component of the proposed project in "footcandles".<sup>5</sup> For comparison purposes, typical lighting levels measured horizontally at ground level consist of the following:

• Clear, sunny daylight: 8,000-10,000 footcandles

Cloudy sky: 1,000-1,500 footcandles

• Street lighting: from 1 to 2 footcandles

Moonlight: 0.03 footcandles

As shown in **Appendix G**, the light spillage associated with the field lighting component would be at 0.0 footcandles (no light spillage) at the parking lot to the east and the vegetated area north of the proposed project. Spillage from the field lighting component of the proposed project would be limited to the existing campus and vegetated area to the north and would not reach the residential uses north or east of the proposed project. The brightness at these nearby sensitive visual receptors resulting from light spillage from operation of the field lighting would be less than the brightness from moonlight under normal ambient conditions.

<sup>&</sup>lt;sup>5</sup> A footcandle is a measurement of light intensity. One (1) footcandle represents the amount of light required to saturate a one-foot square with one lumen of light.

For the purposes of this environmental analysis, the proposed project's compliance with IDSA requirements is assumed to represent a less than significant impact under CEQA. To ensure a less than significant impact, the proposed project includes the following mitigation measure:

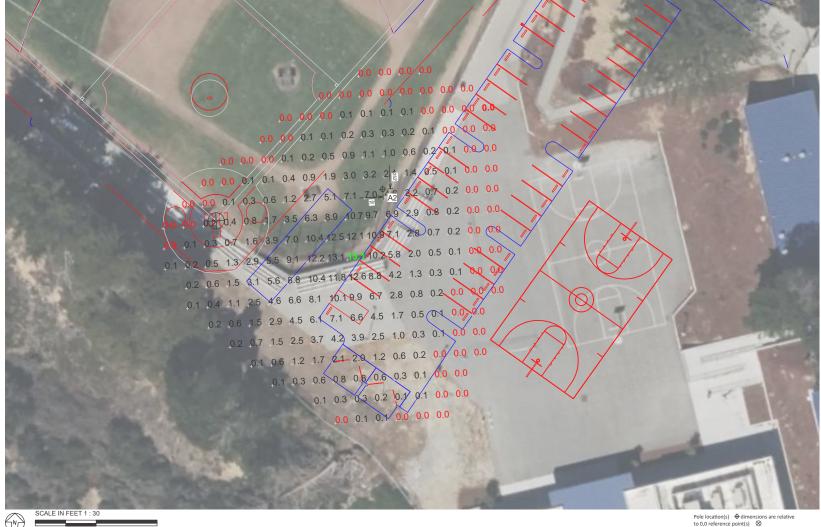
Impact AES-1: The proposed project could result in new sources of nighttime light as viewed from public vantage points from operation of the field lighting. This impact would be reduced through limited nighttime use as proposed by the High School, as well as the following mitigation.

MM AES-1: Prior to operation of the field lighting component of the proposed project, the District shall initiate Phase 2 of the IDSA Fixture Seal of Approval process. This would consist of retaining IDSA to perform a field visit and inspection of the constructed field lighting to confirm that the lighting was constructed in accordance with the requirements of the IDSA Fixture Seal of Approval issued for the proposed project. The IDSA will verify the proposed project's compliance with IDSA standards by issuing a "DarkSky Approved certificate" for the proposed project. If the installation is not in compliance with IDSA standards, the affected components of the field lighting will be removed and reinstalled based on IDSA recommendations. Operation of the field lighting component of the proposed project shall not occur until a DarkSky Approved certificate is issued for the proposed project.

In addition, the District has identified that operation of the proposed field lighting would be used for a maximum of six (6) home football games and up to 22 evening nighttime baseball and soccer games (not including practices) per year during October to March, with nighttime events scheduled to end at 10:30pm for football games or earlier for all other uses (refer to **Table 2**). The field lighting would be visible from sensitive residential receptors to the east and north (see **Figures 10g** and **10i**); however, no direct spillage would occur on these receptors as described above (see **Figures 11a** and **11b**, as well as **Appendix G**). However, to address potential impacts related to nighttime light and glare, the proposed project includes **MM AES-2** to limit the number of events where the field lighting would be utilized.

- **Impact AES-2**: Use of the field lighting would create a new source of light or glare which would adversely affect nighttime views of the area.
- MM AES-2: MPUSD shall implement the following restrictions to limit the use of the field lighting component of the proposed project.
  - Use of Field Lighting for Games: While lights may be used for all evening football games, lights shall be used only for up to 22 total games played by each of the other field sports (soccer and baseball) during the months of October to March. This would consist of up to 12 baseball games and up to ten (10) soccer games. Any future additional athletic uses at the athletic fields occurring between October and March would be limited to four (4) events requiring use of the stadium lighting. Field sport games other than football shall end by 8:00 p.m. and lights shall be turned off by 8:30 p.m. Lights shall not be used for any games during the months of April through September.

EQI	EQUIPMENT LIST FOR AREAS SHOWN							
	Pole Luminaires							
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS	OTHER GRIDS
1	A2	80'	0'	15.46'	TLC-BT-575	1	0	1
				60'	TLC-LED-400	1	1	0
				80'	TLC-LED-900	7	0	7
1	TOTALS				9	1	8	



# Marina High School Sports Fields Marina,CA

GILLO SOLVILVIAILI			
Name:	BB Path of Egress		
Size:	360' x 160'		
Spacing:	10.0' x 10.0'		
Height:	3.0' above grade		
ILLUMINATION SUMMARY			

ILLUMINATION S	ILLUMINATION SUMMARY				
MAINTAINED HORIZONTA	AL FOOTCANDLES				
	Entire Grid				
Scan Average:	1.98				
Maximum:	13				
Minimum:	0				
Avg / Min:	15640.05				
Max / Min:	103316.25				
UG (adjacent pts):	36.20				
CU:	1.00				
No. of Points:	226				
LUMINAIRE INFORMATIO	N				
Applied Circuits:	C				
No. of Luminaires:	1				
Total Load:	0.4 kW				

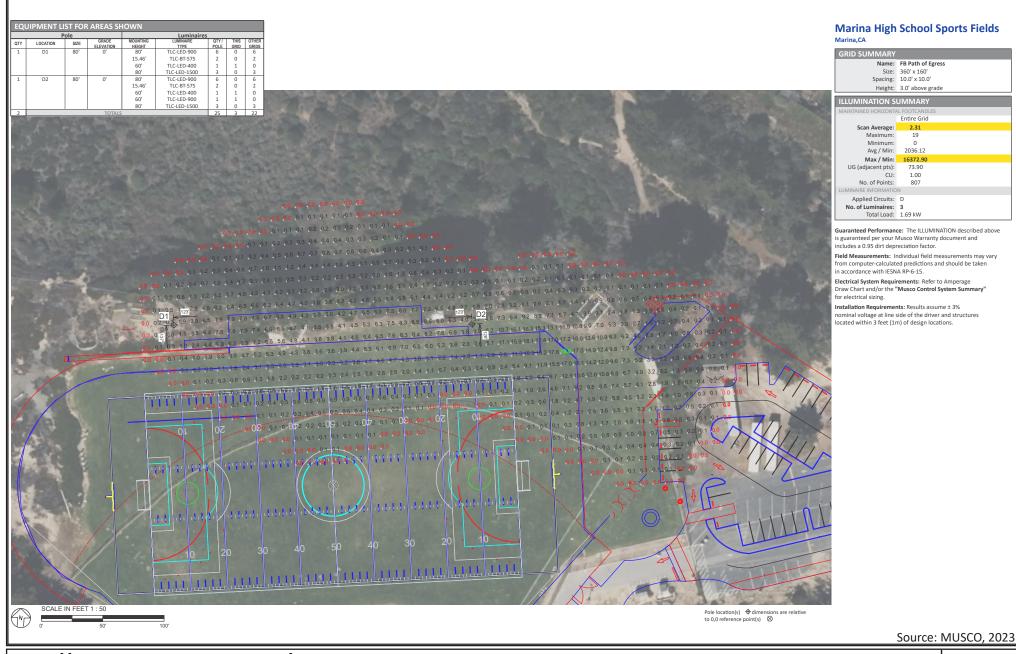
Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

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.

Source: MUSCO, 2023



Spillage Map - North

Figure 11b

- Use of Field Lighting for Practices: Lights shall be used for field sports practices only during the months of October to March. Field sports practices shall end by 8:00 p.m. and lights shall be turned off by 8:30 p.m. Lights shall not be used for any practices during the months of April through September.
- Weekday use: Any use of the athletic fields by non-school related groups shall end by 6:00 p.m.
- Weekend use: On weekends, use of the athletic fields for school-related activities shall end by 6:00 p.m. or sunset (whichever occurs first) and nonschool related activities shall end by 4:00 p.m. Use of the field lighting shall be prohibited on weekends.

MUSCO has designed the field lighting system in compliance with IDSA standards. **Appendix G** demonstrates that the proposed project would not result in light spillage on adjacent residential land uses. Furthermore, compliance with IDSA requirements and issuance of a IDSA certification as required under **Mitigation Measure AES-1** and additional measures restricting use of the field lighting under **MM AES-2** would ensure that the proposed project would have a less than significant impact with respect to creating a new source of substantial light or glare which would adversely affect day or nighttime views in the area. (1, 2, 3, 4, 5)

# 4.2 Agricultural and Forest Resources

#### 4.2.1 Environmental Setting

In California, agricultural land is given consideration under CEQA. According to Public Resources Code §21060.1, "agricultural land" is identified as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland as defined by the U.S. Department of Agriculture land inventory and monitoring criteria, as modified for California. CEQA also requires consideration of lands that are under Williamson Act contract. The California Department of Conservation, under the Farmland Mapping and Monitoring Program (FMMP), produces maps and statistical data that are used for analyzing impacts on California's agricultural resources. The FMMP produces Important Farmland Maps, which identify five agricultural related categories plus two non-agricultural listings, each category is summarized below:

- Prime Farmland is land that has the best combination of physical and chemical characteristics for crop production. It has the soil quality, growing season, and moisture needed to produce sustained high yields of crops when appropriately treated and managed.
- Farmland of Statewide Importance is land other than Prime Farmland that has a good combination of physical and chemical characteristics for crop production.
- Unique Farmland is land that does not meet the criteria for Prime Farmland or Farmland of Statewide Importance which has been used for the production of specific high economic value crops.
- Farmland of Local Importance is either currently producing crops, or has the capacity of production, and does not meet the criteria of the categories above.
- Grazing Land is land which the existing vegetation, grown naturally or through management, is suited for the grazing of livestock.
- Urban Land is land which is currently occupied by structures with a building density of at least 1
  unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel.
- Other Land is land not included in any mapping category which may be low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry, or aquaculture facilities; strip mines and borrow pits; and water bodies smaller than forty acres. Vacant and non-agricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

#### 4.2.2 Environmental Impacts

Environmental Impacts		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
AGRICULTURAL AND FOREST RESOURCES. In determining whether impacts to agricultural resources as significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Sit Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use 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?				
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				
d)	Result in the loss of forest land or conversion of forest land to non-forest uses?				
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?				$\boxtimes$

#### 4.2.3 Explanation

a) **No Impact.** The entirety of the proposed project site is designated as "Urban or Built Up Land" on the Important Farmlands Map for Monterey County. The proposed project site is not zoned for agricultural use and is not located on or near land mapped as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance under the California Department of Conservation's (DOC) Farmland Mapping and Monitoring Program (DOC, 2018). For these reasons, the proposed project

<sup>&</sup>lt;sup>6</sup> https://maps.conservation.ca.gov/DLRP/CIFF/

- would not result in the conversion of farmland to non-agricultural use and no impact would occur. (1, 2, 8)
- b) **No Impact.** There are no known Williamson Act contracts in the proposed project area or within the project vicinity. Thus, the proposed project would not lead to conflicts with Williamson Act contracts and would result in no impact. (1, 2)
- c-d) **No Impact.** The project site does not contain any forest land as defined in Public Resources Code § 12220(g), timberland as defined by Public Resources Code § 4526, or property zoned for Timberland Production as defined by Government Code § 51104(g). As a result, there would be no impact related to the loss of forest resources, the rezoning of forest land or timberland, or the conversion of forest land to non-forest use. (1, 2)
- e) **No Impact.** As discussed above, the proposed project area does not include any parcels designated as Farmland. The proposed project involves reconfiguration of the existing athletic fields and the installation of new field lighting, bleachers, concessions stand, restrooms, and other improvements. As a result, the proposed project would have no impact related to other changes in the existing environment which could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use. (1, 2, 8)

## 4.3 Air Quality

#### 4.3.1 Environmental Setting

The federal Clean Air Act and the California Clean Air Act mandate the control and reduction of certain air pollutants. Under these Acts, the United States Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (CARB) have established ambient air quality standards for specific "criteria" pollutants. These pollutants are carbon monoxide (CO), ozone ( $O_3$ ), sulfur dioxide ( $SO_2$ ), nitrogen oxides ( $SO_3$ ), particulate matter less than 10 microns in diameter ( $PM_{10}$ ), lead, and particulate matter less than 2.5 microns in diameter ( $PM_{2.5}$ ).

The project site is located within the North Central Coast Air Basin (NCCAB), which is comprised of Santa Cruz, San Benito, and Monterey Counties, and is regulated by the Monterey Bay Air Resources District (MBARD), which was formally known as the Monterey Bay Unified Air Pollution Control District.

The U.S. EPA administers the National Ambient Air Quality Standards (NAAQS) under the Federal Clean Air Act. The U.S. EPA sets the NAAQS and determines if areas meet those standards. Violations of ambient air quality standards are based on air pollutant monitoring data and evaluated for each air pollutant. Areas that do not violate ambient air quality standards are considered to have attained the standard. The NCCAB is in attainment for all NAAQS and for all California Ambient Air Quality Standards (CAAQS) except  $O_3$  and PM<sub>10</sub>. The primary sources of  $O_3$  and PM<sub>10</sub> in the NCCAB are from automobile engine combustion. To address exceedance of these CAAQS, MBARD has developed and implemented several plans including the 2005 Particulate Matter Plan, the 2007 Federal Maintenance Plan, and the 2012-2015 Air Quality Management Plan (AQMP), a revision to the 2012 Triennial Plan. NCCAB Attainment Status to National and California Ambient Air Quality can be found in **Table 3** below.

	Table 3				
North Central Coast Air Basin Attainment Status					
Pollutant	State Designation <sup>1</sup>	National Designation <sup>2</sup>			
Ozone (O <sub>3</sub> )	Nonattainment - Transitional	Attainment/Unclassified <sup>3</sup>			
Inhalable Particulates (PM <sub>10</sub> )	Nonattainment	Attainment			
Fine Particulates (PM <sub>2.5</sub> )	Attainment	Attainment/Unclassified <sup>4</sup>			
Carbon Monoxide (CO)	Unclassified	Attainment/Unclassified			
Nitrogen Dioxide (NO <sub>2</sub> )	Attainment	Attainment/Unclassified <sup>5</sup>			
Sulfur Dioxide (SO <sub>2</sub> )	Attainment	Attainment <sup>6</sup>			
Lead	Attainment	Attainment/Unclassified <sup>7</sup>			

#### Notes:

Non attainment designations shown in Bold.

- 1) The State Designations apply to the entire NCCAB and are based on air quality data from 2017. Source: Monterey Bay Air Resources District Air Quality Management Plan 2012-2015; https://www.mbard.org/files/6632732f5/2012-2015-AQMP\_FINAL.pdf
- 2) The National Designations apply to Monterey County only and are based on air quality data from as recent as January 31, 2021. Source: California Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants; <a href="https://www3.epa.gov/airquality/greenbook/anayo\_ca.html">https://www3.epa.gov/airquality/greenbook/anayo\_ca.html</a>
- 3) On March 12, 2008, EPA adopted a new 8-hour ozone standard of 0.075 ppm. In April 2012, EPA designated the NCCAB attainment/unclassified based on 2009-2011 data.
- 4) This includes the 2006 24-hour standard of 35  $\mu$ g/m<sup>3</sup> and the 2012 annual standard of 12  $\mu$ g/m<sup>3</sup>.
- 5) In 2012, EPA designated the entire state as attainment/unclassified for the 2010 NO<sub>2</sub> standard.
- 6) In June 2011, the ARB recommended to EPA that the entire state be designated as attainment for the 2010 primary SO<sub>2</sub> standard. Final designations to be addressed in future EPA actions.
- 7) On October 15, 2008 EPA substantially strengthened the national ambient air quality standard for lead by lowering the level of the primary standard from 1.5  $\mu$ g/m³ to 0.15  $\mu$ g/m³. Final designations were made by EPA in November 2011.

Plans to attain these standards already accommodate the future growth projections available at the time these plans were prepared. Any development project capable of generating air pollutant emissions exceeding regionally established criteria is considered a significant impact for purposes of CEQA, whether or not such emissions have been accounted for in regional air planning. Any project that would directly cause or substantially contribute to a localized violation of an air quality standard would generate substantial air pollution impacts. The same is true for a project that generates a substantial increase in health risks from toxic air contaminants.

Sensitive receptors are more susceptible to the effects of air pollution than the general population. Land uses that are considered sensitive receptors include residences, schools, and health care facilities. Off-site sensitive receptors in the vicinity of the project site consist of existing residential units to the north and northeast.<sup>7</sup>

#### 4.3.2 Environmental Impacts

Env	rironmental Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
	<b>QUALITY.</b> Where available, the significance criteria e pollution control district may be relied upon to make t	· · · · · · · · · · · · · · · · · · ·			_
a)	Conflict with or obstruct implementation of the applicable air quality plan?				
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?				
c)	Expose sensitive receptors to substantial pollutant concentrations?				
d)	Result in substantial emissions (such as those leading to odors) adversely affecting a substantial number of people?				

#### 4.3.3 Explanation

a) Less than Significant Impact. CEQA Guidelines §15125(b) requires an evaluation of project consistency with applicable regional plans, including the AQMP. As stated above, MBARD has developed and implemented several plans to address exceedance of State air quality standards, including the 2012-2015 AQMP. MBARD is required to update their AQMP once every three years; the most recent update was the 2012-2015 AQMP (MBARD, 2017) which was approved in March of 2017. This plan addresses attainment of the State ozone standard and federal air quality standard. The AQMP accommodates growth by projecting growth in emissions based on population forecasts prepared by the Association of Monterey Bay Area Governments (AMBAG)

<sup>&</sup>lt;sup>7</sup> Residential units are also located to the south of the existing campus. However, these units are unoccupied.

and other indicators. The proposed project would not result in any increase in employment, nor would the proposed project result in increased population growth. The proposed project would be consistent with the MBARD 2012-2015 AQMP. For these reasons, implementation of the proposed project is not anticipated to result in a substantial increase in either direct or indirect emissions that would conflict with or obstruct implementation of the AQMP. This impact is considered less-than-significant. (1, 2, 9, 10)

b) Less than Significant Impact. The MBARD 2016 CEQA Air Quality Guidelines ("Guidelines") contains thresholds of significance for evaluating potential air quality effects of projects subject to the requirements of CEQA. According to MBARD, a project will not have a significant air quality effect on the environment, if the following criteria are met:

#### Construction of the project will:

- Emit (from all sources, including exhaust and fugitive dust) less than;
  - $\circ$  137 pounds per day of oxides of nitrogen (NO<sub>x</sub>);
  - 137 pounds per day of reactive organic gases (ROG);
  - o 82 pounds per day of respirable particulate matter (PM<sub>10</sub>);
  - o 55 pounds per day of fine particulate matter (PM<sub>2.5</sub>); and,
  - 550 pounds per day carbon monoxide (CO).

#### Operation of the project will:

- Emit (from all project sources, mobile, area, and stationary) less than;
  - o 137 pounds per day of oxides of nitrogen (NO<sub>x</sub>)
  - o 137 pounds per day of reactive organic gases (ROG)
  - 82 pounds per day of PM<sub>10</sub>
  - 55 pounds per day of PM<sub>2.5</sub>
  - 550 pounds per day carbon monoxide (CO)
- Not cause or contribute to a violation of any California or National Ambient Air Quality Standard;
- Not result in a cumulatively considerable net increase of any criteria pollutant for with the project region is non-attainment;
- Not exceed the health risk public notification thresholds adopted by the MBARD;
- Not create objectionable odors affecting a substantial number of people; and,
- Be consistent with the adopted federal and state Air Quality Plans (MBARD, 2016).

#### Construction

The MBARD Guidelines for evaluating impacts during construction state that if a project generates less than 82 lb./day of PM<sub>10</sub> emissions, the project is considered to have less than significant impacts (MBARD, 2016). The Guidelines also state that a project will result in less than significant impacts if daily ground-disturbing activities entail less than 8.1 acres of minimal earthmoving, or less than 2.2 acres of grading and excavation per day. Construction projects below these acreage thresholds would be below the applicable MBARD 82 lb./day threshold of significance and would constitute a less than significant effect for the purposes of CEQA (MBARD, 2016). The proposed project would require 7,625 CY of fill, and grading of 6.5 acres. The proposed project would not generate more than 2.2 acres of grading and excavation per day or 8.1 acres of minimal earthmoving per day, as the 6.5-acres to be graded over ten working days would result in an

average of 0.65-acres graded per day. As a result, the proposed project would result in a less than significant construction-related air quality effect.

Construction of the proposed project would result in temporary increases in emissions of inhalable particulates ( $PM_{2.5}$  and  $PM_{10}$ ), VOC, CO, and  $NO_x$  associated with construction-related activities. **Table 4. Construction Air Quality Emissions** below, provides detailed information on these construction emissions (see also **Appendix A**). Construction-related fugitive dust emissions associated with the proposed project would be generated from site grading and construction. In addition to construction-related fugitive dust, exhaust emissions associated with construction vehicles and equipment would also be generated. The proposed project includes the following standard best management practices to reduce construction air quality emissions:

- Limiting vehicle speeds on unpaved roads and services to five (5) mph.
- Daily sweeping of paved surfaces.
- Use of high efficiency lighting.
- Daily watering of unpaved surfaces.

**Table 4. Construction Air Quality Emissions** 

	Emissions in Pounds/Day				
	NO <sub>x</sub>	PM <sub>2.5</sub>	PM <sub>10</sub>	ROG	СО
Significance Threshold (MBARD)	137*	55	82	137*	550
Emissions generated by the Project	36	7.74	52.9	3.73	33.7
Exceed Threshold?	No	No	No	No	No

Emissions Source: Appendix A

Significance Threshold Source: MBARD, 2016

As described above in **Table 4**, the proposed project would not exceed MBARD's daily thresholds for criteria pollutant emissions during construction. The proposed project would result in a less than significant impact related to construction air quality emissions.

#### Operation

Operation of the proposed project would result in air quality emissions associated with use of the field lighting, maintenance, and vehicle trips to and from the proposed project during athletic events. All components of the proposed project have been designed in accordance with applicable regulatory requirements limiting air quality emissions. As shown below in **Table 5**, all operational emissions of the proposed project would be below applicable MBARD thresholds of significance.

**Table 5. Operational Air Quality Emissions** 

•		,				
	Emissions in Pounds/Day					
	NO <sub>x</sub> PM <sub>2.5</sub> PM <sub>10</sub> ROG CO					
Significance Threshold (MBARD)	137	55	82	137	550	
Emissions generated by the Project	7.39	6.75	53.3	10.7	53.1	
Exceed Threshold?	No	No	No	No	No	

Emissions Source: Appendix A

Significance Threshold Source: MBARD, 2016

<sup>\*</sup> Applies to non-typical construction equipment (i.e., well drilling) MBARD has identified that construction projects using typical construction equipment such as dump trucks, scrapers, bulldozers, compactors and front-end loaders that temporarily emit precursors of ozone (i.e., VOC or NO<sub>x</sub>), are accommodated in the emission inventories of Stateand federally-required air plans. Temporary emissions associated with the operation of construction equipment have been accommodated in State- and federally-required air plans.

As described above in **Table 5**, the proposed project would not exceed MBARD's daily thresholds for criteria pollutant emissions during construction. The proposed project would result in a less than significant impact related to construction air quality emissions. (1, 2, 9, 10, 11)

- c) Less than Significant Impact. A "sensitive receptor" is generally defined as any residence including private homes, condominiums, apartments, or living quarters; education resources such as preschools and kindergarten through grade twelve ("k-12") schools; daycare centers; and health care facilities such as hospitals or retirement and nursing homes. The proposed project is located in the existing Marina High School campus and surrounded by residential uses. Therefore, impacts to sensitive receptors could occur, but would be minimized with implementation of the following standard construction best management practices ("BMPs"):
  - Water all active construction areas as required with non-potable sources to the extent feasible; frequency should be based on the type of operation, soil, and wind exposure and minimized to prevent wasteful use of water and non-stormwater runoff.
  - Prohibit grading activities during periods of high wind (over 15 mph).
  - Hand sweep daily within paved areas.
  - Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.
  - Enclose, cover, or water daily exposed stockpiles (dirt, sand, aggregate, etc.).
  - Replant vegetation in disturbed areas as quickly as possible.
  - Provide stabilized construction entrances/exits to limit sediment tracking from the site.

In addition, as identified above, the proposed project would not exceed applicable MBARD thresholds of significance during construction. Therefore, with implementation of the above BMPs, construction of the proposed project would result in a less than significant impact related to exposure of sensitive receptors to substantial pollutant concentrations. Operation of the proposed project would not likely result in increased air quality impacts beyond existing levels. (1, 2, 9, 10, 11)

d) Less than Significant Impact. Construction of the proposed project could generate temporary odors from construction equipment (e.g., diesel exhaust) which could be noticeable at times to residences, students, and faculty in the proposed project's vicinity. These odors would cease upon completion of construction. Traffic to and from home games would result in increased temporary odors from vehicles compared to existing conditions. These odors would be infrequent and would cease following the end of the scheduled game and the exit of attendees. The proposed project is a reconfiguration of an existing athletic fields and would not include any new uses that would introduce sources of odor or other types of emissions adversely impacting a significant number of people. This represents a less than significant impact. (1, 2, 3, 9, 10)

## 4.4 Biological Resources

#### 4.4.1 Environmental Setting

DD&A biologists Patric Krabacher, Liz Camilo, Kimiya Ghadiri, and Rikki Lougee conducted biological surveys of the project site on November 10 and November 23, 2022, and April 14, June 20, and July 19, 2023. Biological surveys consisted of a reconnaissance-level survey of the project site to characterize habitats present within the site, including any potentially sensitive habitats, and to identify any special-status plant or wildlife species or suitable habitat for these species within the site, and focused botanical surveys to identify presence or absence of special-status plant species within the site. Survey methods included walking the entire project site to identify these resources. The results of this survey are summarized in **Appendix B** of this Initial Study. DD&A biologists also conducted a tree inventory of the project site on October 14, 2022. The results of this tree inventory are summarized in **Appendix C** of this Initial Study. In addition, DD&A had previously conducted focused surveys for Monterey gilia within a portion of the proposed project site in 2021. Data collected during these surveys were used to assess the environmental conditions of the project site and its surroundings, evaluate environmental constraints in the site and within the local vicinity, and provide a basis for recommendations to minimize and avoid impacts.

However, as described in **Appendix B**, much of the proposed project site contains two (2) natural communities, ruderal/disturbed and planted Monterey pine forest. No sensitive habitats occur within or directly adjacent to the site. Four special-status plant species, sandmat manzanita, Monterey ceanothus, Monterey spineflower, and Monterey gilia are known to occur within the project site. In addition, several special-status wildlife species, including Townsend's big-eared bat, Monterey dusky-footed woodrat (MDFW), Northern California legless lizard, coast horned lizard, and raptors and other nesting birds also have the potential to occur within the site. Finally, trees which are protected by the City are present within and adjacent to the project site.

#### 4.4.2 Environmental Impacts

Environmental Impacts		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
BIOL	OGICAL RESOURCES. Would the project:				
tl ic s re	Have a substantial adverse effect, either directly or through habitat modifications, on any species dentified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
h	Have a substantial adverse effect on any riparian nabitat or other sensitive natural community identified n local or regional plans, policies, or regulations or by				$\boxtimes$

Environmental Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				

### 4.4.3 Explanation

a) Less than Significant with Mitigation Incorporated. As described in Appendix B, three non-Habitat Management Plan (HMP) special-status wildlife species (Townsend's big-eared bat, MDFW, and coast horned lizard) and one HMP wildlife species (Northern California legless lizard) have the potential to occur within and directly adjacent to the project site. In addition, raptors and other nesting birds have the potential to nest within any of the large trees present within and directly adjacent to the project site. If present within or directly adjacent to the site, construction activities could result in injury, nest abandonment, or mortality of individuals. This represents a potentially significant impact. However, with implementation of Mitigation Measures BIO-1 through BIO-6, impacts to Townsend's big-eared bat, MDFW, coast horned lizard, and raptors and other nesting birds would be reduced to a less than significant level.

As described in **Appendix B**, impacts within development parcels to special-status species addressed in the HMP are considered less than significant if the recipients of former Fort Ord land are in compliance with the Fort Ord HMP and 2017 Programmatic BO. The 2017 Programmatic BO and HMP require the identification of sensitive botanical resources within the development parcels that may be salvaged for use in restoration activities in reserve areas (Service, 2017 and ACOE, 1997). In addition, pursuant to HMP and deed covenants, the local land use jurisdictions that receive disposed land with restrictions or management guidelines identified in the HMP, including the City of Marina, are required to prepare their respective resource management plans

(RMPs) within six (6) months of land transfer and acquisition. However, in 1997, instead of preparing RMPs, the local jurisdictions jointly initiated a base-wide incidental take permit application process with the Service that included the preparation of a habitat conservation plan, which effectively incorporated the requirements of the HMP. Thus, in coordination with the Service, over a period of over 20 years, the local jurisdictions prepared a Draft Fort Ord Habitat Conservation Plan (HCP). In June 2020, the local jurisdictions decided not to approve the Fort Ord HCP and not to collectively pursue base-wide incidental take permits. As a result, the Service has requested that the local jurisdictions initiate the steps necessary to comply with the HMP now that the Fort Ord HCP and base-wide incidental take permits are no longer proposed. The City of Marina is currently preparing their RMP and anticipate approval by the Service and CDFW in Spring of 2024, which would comply with the requirements of the HMP. Therefore, if the City of Marina is in compliance with the HMP and 2017 Programmatic BO at the time of project approval and adoption of the IS/MND and MMRP (i.e., the City has an approved RMP), impacts to Northern California legless lizard within the project site would be less than significant because the impacts to this species were addressed and mitigated through implementation of the HMP. However, if the City of Marina is not in compliance with the HMP and 2017 Programmatic BO at the time of project approval and adoption of the IS/MND and MMRP, impacts to Northern California legless lizard would be potentially significant. The implementation of Mitigation Measures BIO-1 through BIO-3 would reduce impacts to Northern California legless lizard to a less-than-significant level.

- Impact BIO-1: The proposed project could 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 CDFW or the Service.
- **MM BIO-1**: The following best management practices will be implemented during construction (i.e., pre-, during, and post-construction) to reduce impacts to special-status species:
  - A qualified biologist will conduct an Employee Education Program for the construction crew prior to any construction activities. The qualified biologist will meet with the construction crew at the onset of construction at the project site to educate the construction crew on the following: 1) the appropriate access route(s) in and out of the construction area and review project boundaries; 2) how a biological monitor will examine the area and agree upon a method which will ensure the safety of the monitor during such activities, 3) the special-status species and sensitive habitats that are known or may be present; 4) the specific mitigation measures that will be incorporated into the construction effort; 5) the general provisions and protections afforded by the Service and CDFW; and 6) the proper procedures if a special-status species is encountered within the project site.

- Trees and vegetation not planned for removal or trimming will be protected prior to and during construction to the maximum possible with exclusionary fencing, such as Environmentally Sensitive Area (ESA) fencing for herbaceous and shrubby vegetation or protective wood barriers for trees. Only certified weed-free straw will be used to avoid the introduction of non-native, invasive species. A biological monitor will supervise the installation of protective fencing and monitor at least once per week until construction is complete to ensure that the protective fencing remains intact.
- Following construction, disturbed areas will be restored to pre-project contours to the maximum extent possible and will be revegetated using locally occurring native species and native erosion control seed mix, per the recommendations of a qualified biologist.
- Grading, excavating, and other activities that involve substantial soil disturbance will be planned and implemented in consultation with a qualified hydrologist, engineer, or erosion control specialist, and will utilize standard erosion control techniques to minimize erosion and sedimentation to native vegetation (pre-, during, and post-construction).
- No firearms will be allowed on the project site at any time.
- All food-related and other trash will be disposed of in closed containers and removed from the project site at least once a week during the construction period, or more often if trash is attracting avian or mammalian predators. Construction personnel will not feed or otherwise attract wildlife to the area.

#### MM BIO-2

MPUSD will retain a qualified biologist to monitor all ground disturbing construction activities (i.e., vegetation removal, grading, excavation, or similar activities) to protect any special-status species encountered. Any handling and relocation protocols of special-status wildlife species will be conducted by a qualified biologist with an appropriate scientific collection permit. After ground disturbing project activities are complete, the qualified biologist will train an individual from the construction crew to act as the on-site construction biological monitor. The construction biological monitor will be the contact for any specialstatus wildlife species encounters, will conduct daily inspections of equipment and materials stored on site and any holes or trenches prior to the commencement of work, and will ensure that all installed fencing stays in place throughout the construction period. The qualified biologist will then conduct regular scheduled and unscheduled visits to ensure the construction biological monitor is satisfactorily implementing all appropriate mitigation protocols. The qualified biologist and the construction monitor shall complete a daily log summarizing activities and environmental compliance throughout the duration of the project. The log will also include any special-status wildlife species observed and relocated.

MM BIO-3 The following measures will be implemented to reduce the introduction and spread of non-native, invasive species:

- Any landscaping or replanting required for the project will not use species listed as noxious by the California Department of Food and Agriculture (CDFA) or invasive by the California Invasive Plant Council (Cal-IPC).
- Bare and disturbed soil will be landscaped with CDFA recommended seed mix or plantings from locally adopted species to preclude the invasion of noxious weeds in the project site.
- Construction equipment will be cleaned of mud or other debris that may contain invasive plants and/or seeds and inspected to reduce the potential of spreading noxious weeds, before mobilizing to arrive at the construction site and before leaving the construction site.
- All non-native, invasive plant species will be removed from disturbed areas prior to replanting.

#### MM BIO-4

To avoid and reduce impacts to Townsend's big-eared bat, any tree limbing or removal operations should occur between September 15 and November 1. If tree limbing or removal operations must occur outside the period of September 15 through November 1, MPUSD will retain a qualified biologist to conduct a survey for roosting bats, as follows:

- For any trees, snags, or buildings that could provide roosting space for cavityor foliage-roosting bats, potential bat roost features shall be thoroughly evaluated to determine if bats are present. Visual inspection and/or acoustic surveys shall be utilized as initial techniques.
- If roosting bats are found, the biologist shall develop and implement acceptable passive exclusion methods in coordination with or based on CDFW recommendations. If feasible, exclusion shall take place during the appropriate windows (September 15 and November 1) to avoid harming bat maternity roosts and/or winter hibernacula. Authorization from CDFW is required to evict winter hibernacula for bats.
- If established maternity colonies are found, the biologist will coordinate with CDFW to establish a buffer around the colony that protects pre-volant young from construction disturbances until the young can fly or to implement other measures acceptable to CDFW.
- If a tree is determined not to be an active roost site for roosting bats, it may be immediately limbed or removed. If foliage- roosting bats are determined to be present, limbs shall be lowered, inspected for bats by a qualified biologist, and chipped immediately or moved to a dump site. Alternately, limbs may be lowered and left on the ground until the following day, when they can be chipped or moved to a dump site. No logs or tree sections shall be dropped on downed limbs or limb piles that have not been in place since the previous day.

#### MM BIO-5

Not more than thirty (30) days prior to the start of construction, a qualified biologist shall conduct a survey of suitable habitat within the project site to locate existing MDFW nests. Any MDFW nests identified within the project site shall be mapped and flagged for avoidance. Graphics depicting all MDFW nests shall be provided to the construction contractor. Any MDFW nests that cannot be avoided shall be relocated according to the following procedures:

- Each active nest shall be disturbed by the qualified biologist to the degree that the woodrats leave the nest and seek refuge elsewhere.
- Nests shall be dismantled during the non-breeding season (between October 1 and December 31), if possible.
- If a litter of young is found or suspected, nest material shall be replaced and the nest left alone for 2-3 weeks; after this time, the nest will be rechecked to verify that young are capable of independent survival before proceeding with nest dismantling.

#### MM BIO-6

Construction activities that may directly (e.g., vegetation removal) or indirectly (e.g., noise/ground disturbance) affect protected nesting avian species will be timed to avoid the breeding and nesting season. Specifically, vegetation and/or tree removal can be scheduled after September 15 and before February 1. Alternatively, a qualified biologist will be retained by the project applicant to conduct pre-construction surveys for nesting raptors and other protected avian species within 500 feet of proposed construction activities if construction occurs between February 1 and September 15. Pre-construction surveys will be conducted no more than 14 days prior to the start of construction activities during the early part of the breeding season (February through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through September). Because some bird species nest early in spring and others nest later in summer, and because some species breed multiple times in a season, surveys for nesting birds may be required to continue during construction to address new arrivals. The necessity and timing of these continued surveys will be determined by the qualified biologist based on review of the final construction plans.

If raptors or other protected avian species nests are identified during the preconstruction surveys, the qualified biologist will notify MPUSD and an appropriate no-disturbance buffer will be imposed within which no construction activities or disturbance should take place (generally 500 feet in all directions for raptors; other avian species may have species-specific requirements) until the young of the year have fledged and are no longer reliant upon the nest or parental care for survival, as determined by a qualified biologist.

Operation of the field lights component of the proposed project would result in new light source in the area. Research indicates that urban nighttime lighting can adversely affect birds. There is evidence to show that in some cases, lighting can impact bird species by drawing them toward development, where they may collide with structures; however, these studies largely relate to sources of light that are substantially prominent and intense in comparison to their surroundings,

such as offshore oil platforms (Huppop et al., 2016) and the light beams that are part of the September 11 memorial in New York City (Furuya, 2017). The latter study found that the light installation "strongly concentrates and disorients migrants flying over a heavily urbanized area" (Furuya, 2017). Even if birds do not collide with structures, there is a concern that once a bird is within a light beam, they are reluctant to return to darker areas and will fly until exhaustion (Ogden, 1996). The lighting component of the proposed project would be directly focused on the field and would be designed to minimize light spillover (see *Section 4.1 Aesthetics* for additional information). Field lighting would be limited to the months of August through March, outside of the peak bird nesting season (approximately May through July), and would generally not be used past 8pm with the exception of up to six (6) football games per year, where lights would be used for events scheduled to end by 10:30 pm (refer to **Section 1.3 Project Description**). In addition, the project site lies directly adjacent to existing residential and commercial uses, which are also sources of diffuse light. As a result, the project does not mimic the conditions in studies of avian deaths associated with light sources.

Foraging bats have the potential to occur within the project site. Nighttime lighting can adversely affect bats while foraging at night. For example, insects may be attracted to certain kinds of light, which would then attract bats and expose them to predators. Some bat species avoid LED lights, so they are unable to cross or feed at sites with artificial lighting. Nighttime lighting studies generally focus on overall urban lighting (e.g., Rowse et al., 2015), although at least one study has focused on sport stadiums and concluded that light pollution at stadiums may homogenize urban bat diversity by favoring select urban exploiter species (Schoeman, 2015) However, similar to lighting impacts to birds described above, lighting at the site would be directly focused on the field and would be designed to minimize light spillover into adjacent habitat, and the number of nighttime activities would be limited in quantity and duration (refer to **Section 1.3 Project Description**). As a result, the project has been sufficiently designed such that nighttime lighting would not result in significant impact to foraging bats or on bat diversity. Therefore, operational impacts to wildlife would be less than significant and no mitigation is required.

Three HMP plant species, sandmat manzanita, Monterey ceanothus, and Monterey spineflower, are known to occur within the project site; eight (8) individuals plus approximately 1,336 square feet of sandmat manzanita, two (2) individuals plus approximately 130 square feet of Monterey ceanothus, and one Monterey spineflower individual were observed within the project site during focused botanical surveys in 2022 and 2023. In addition, a population of 137 Monterey gilia plants was observed directly abutting the project site. These species are also known to occur directly adjacent to the project site in suitable habitat. Where present within or directly adjacent to the site, construction activities could result in adverse impacts to these species, including loss of individuals, soil compaction, dust, loss of habitat, erosion, and introduction and spread of nonnative, invasive species. The project could also result in impacts to special-status plant populations outside of the project site if construction activities occur outside of the proposed work limits. Impacts to Monterey gilia would be considered take of a state listed species. This is a potentially significant impact.

As described above and in the Approach to Analysis within **Appendix B**, impacts within development parcels to special-status species addressed in the HMP are considered less than significant if the former Fort Ord land recipients are compliance with the HMP and 2017 Programmatic BO. Therefore, if the City of Marina is in compliance with the HMP and 2017

Programmatic BO at the time of project approval and adoption of the IS/MND and MMRP, impacts to sandmat manzanita, Monterey ceanothus, Monterey spineflower, and Monterey gilia would be less than significant. However, the take of Monterey gilia would still be prohibited under the California Endangered Species Act ("CESA") without authorization from the CDFW and, therefore, impacts to this species would require an incidental take permit. The project has been designed to avoid impacts to Monterey gilia. Implementation of **Mitigation Measures BIO-1** through **BIO-3** and **BIO-7** and **BIO-8** would further avoid all potential project impacts to Monterey gilia and preclude the need for an ITP.

If the City of Marina is in compliance with the HMP and 2017 Programmatic BO at the time of project approval and adoption of the IS/MND and MMRP, while not required to reduce a significant impact, Mitigation Measures BIO-1 through BIO-3 and BIO-9 and BIO-10 would be implemented to further reduce less-than-significant impacts to other special-status HMP plant species within the project site. Mitigation Measure BIO-10 acknowledges that MPUSD will determine whether salvage of special-status HMP plant populations which would be impacted by the project is feasible and if so, seed and topsoil salvage would occur to support reseeding and restoration efforts on- or off-site. However, if the City of Marina is not in compliance with the HMP and 2017 Programmatic BO at the time of project approval and adoption of the IS/MND and MMRP, implementation of Mitigation Measures BIO-1 through BIO-3 and BIO-9 would reduce impacts to a less-than-significant level by requiring education; protective measures during construction; monitoring; invasive species control; avoidance; and, if avoidance if all individuals is not possible, replacement of any individuals impacted following construction.

**Impact BIO-2**: The proposed project is located within the boundaries of the HMP and could have a substantial adverse effect on special-status HMP plant species with the potential to occur within the project site.

#### **MM BIO-7**:

To avoid all impacts to the Monterey gilia population abutting the project site, the population shall be enclosed with temporary ESA fencing prior to vegetation removal and ground-disturbing activities. Fencing shall be installed under the supervision of a qualified biologist. A qualified biologist shall be onsite throughout all initial vegetation removal and ground-disturbing activities to ensure the Monterey gilia population is avoided. Following initial vegetation removal and ground-disturbing activities, a qualified biologist shall train a member of the construction crew to act as the daily on-site monitor, and the qualified biologist shall monitor protective fencing at least once per week throughout the duration of construction to ensure that fencing remains intact and the Monterey gilia population remains undisturbed. Any damaged fencing shall be repaired immediately. The qualified biologist shall keep daily logs and shall prepare monthly reports documenting the status of protective fencing and the Monterey gilia population.

#### **MM BIO-8**:

To prevent impacts to special-status plant populations outside of the project site, temporary ESA fencing shall be installed along the entire perimeter of the project site where it abuts natural (i.e., not developed or landscaped) habitat prior to construction. Construction activities, including access or staging, shall be prohibited beyond the fenceline. A qualified biologist shall monitor the installation of protective fencing and shall monitor fencing at least once per week

throughout the duration of construction to ensure that fencing remains intact, and that adjacent habitat remains undisturbed. Any damaged fencing shall be repaired immediately. The qualified biologist shall prepare monthly reports documenting the status of protective fencing.

#### MM BIO-9

Sandmat manzanita, Monterey ceanothus, and Monterey spineflower shall be avoided to the greatest extent feasible. Individuals or populations within or adjacent to the project site which are not scheduled for removal shall be protected prior to and during construction to the maximum possible through the use of exclusionary fencing or flagging. A biological monitor will supervise the installation of protective fencing and monitor at least once per week until construction is complete to ensure that the protective fencing remains intact. If avoidance is not feasible, the impacted area for each species shall be quantified during final design and each species shall be replaced at a 1:1 success ratio for the acreage or individuals impacted (depending on species impacted), and a Restoration Plan shall be prepared by a qualified biologist and implemented. The plan shall include, but is not limited to:

- A description of the baseline conditions of the habitats within the work site, including the presence of any special-status species, their locations, and densities;
- Procedures to control and/or eliminate non-native invasive species within the work site;
- A detailed description of on-site and/or off-site restoration areas, salvage of seed and/or soil bank, plant salvage, seeding and planting specifications, which may include but is not limited to, an increased planting ratio to ensure the 1:1 success ratio; and
- A monitoring program that describes annual monitoring efforts which incorporate success criteria and contingency plans if success criteria are not met.

#### MM BIO-10:

Salvage efforts for HMP species that do not require take authorization from the Service or CDFW (i.e., sandmat manzanita, Monterey ceanothus, and Monterey spineflower) shall be evaluated by a qualified biologist in coordination with MPUSD to further reduce impacts per the requirements of the HMP and BO. Where salvage is determined feasible and proposed, seed collection should occur from plants within the project site and/or topsoil should be salvaged within occupied areas to be disturbed. Seeds shall be collected during the appropriate time of year for each species by qualified biologists. The collected seeds and topsoil shall be used to revegetate temporarily disturbed construction areas and reseeding and restoration efforts on- or off-site, as determined appropriate by the qualified biologist and MPUSD.

Implementation of the mitigation measures identified above would reduce these impacts to less than significant. (1, 2, 3, 6, 12)

- b) **No Impact.** The proposed project site does not contain any riparian habitats or any other sensitive habitat types (**Appendix B**). As a result, the proposed project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations. (1, 2, 6)
- c) **No Impact**. The proposed project site does not contain any state or federally protected wetlands or other waters (**Appendix B**). As a result, the proposed project would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act. (1, 2, 6)
- d) Less than Significant Impact. As described in Appendix B, wildlife movement corridors are pathways or habitat linkages that connect discrete areas of natural open space otherwise separated or fragmented by topography, changes in vegetation, and other natural or man-made factors, such as urbanization. The fragmentation of natural habitat creates isolated "islands" of vegetation that may not provide sufficient area or resources to accommodate sustainable populations for a number of species, and therefore, adversely affect both genetic and species diversity. Corridors often partially or largely mitigate the adverse effects of fragmentation by 1) allowing animals to move between remaining habitats to replenish depleted populations and increase the gene pool available; 2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (e.g., fire and disease) will result in population or species extinction; and 3) serving as travel paths for individual animals moving throughout their home range in search of food, water, mates, and other needs, or for dispersing juveniles in search of new home ranges.

The 2010 Monterey County General Plan EIR identified a number of significant wildlife movement corridors and linkages within the vicinity of the former Fort Ord, including Linkage 308: Fort Ord – Ventana; Linkage 322: Highway 68 Western Crossing; Linkage 350: Sierra de Salinas – Toro Peak; Linkage 339: Salinas Valley Floor; and Linkage 378: Salinas River – Pinnacles National Monument (County, 2010). The HMP considered conservation area connectivity as an essential component of the design of the conservation areas and corridors within the former Fort Ord. The HMP created conservation areas and corridors with the purpose of linking the plant and animal populations in the northern portion of the former base at the Marina Municipal Airport to the populations in the south at the Fort Ord National Monument and the El Toro Creek undercrossing of Highway 68. The implementation of the HMP preserves over 18,500 acres of a variety of habitats supporting a variety of common and special-status plant species and maintains a north-south wildlife corridor across the former Fort Ord lands to connect with the primary, significant wildlife linkages. The General Plan for the City of Marina does not specify important wildlife corridors.

The project site is not located within any of the significant wildlife movement corridors or linkages identified above. As discussed in **Appendix B**, most of the project site is comprised of ruderal and/or developed areas. In addition, the project site lies adjacent to existing roads and residential uses, which in general isolates the project site from other undeveloped areas. As such, the project site provides little use as a corridor for wildlife movement. Therefore, the proposed project would not disconnect, fragment, or otherwise impeded wildlife movement in the area. This impact is less than significant, and no mitigation is required. (1, 2, 3, 6, 12, 13)

e) Less than Significant Impact. DD&A identified 78 trees within and directly adjacent to the project site (DD&A, 2022). Construction of the proposed project could result in permanent impacts to

trees within the project site. The proposed project includes the removal of 13 trees and planting of 74 replacement trees. As discussed in **Appendix C**, the City of Marina requires a tree removal permit to remove, relocate, or damage a living tree within its limits. MPUSD will comply with Marina Code and obtain a tree removal permit prior to construction. Therefore, all tree removal would occur according to applicable City tree policies and ordinance and no mitigation is required. This represents a less than significant impact. (1, 2, 3, 7)

f) Less than Significant with Mitigation. The project site is not located within an approved Habitat Conservation Plan (HCP) or Natural Community Conservation Planning (NCCP) area. However, the site is located within the former Fort Ord and the plan area of the HMP. As described in the "Approach to Analysis", the proposed land use is consistent with the approved HMP as it is located within parcels designated for "development". The project will comply with the requirements of the HMP, as applicable. Therefore, this impact is less than significant. Additionally, while not required to reduce a significant impact, implementation of Mitigation Measure BIO-10 (which acknowledges that MPUSD will determine whether salvage of special-status HMP plants is feasible and if so, seed and topsoil salvage would occur to support reseeding and restoration efforts onor off-site) will further ensure compliance with the HMP. (1, 2, 12)

# 4.5 Cultural Resources

### 4.5.1 Environmental Setting

The project site is located on a portion of the existing Marina High School campus. The potential for cultural resources on the project site was previously analyzed in the *Monterey Peninsula Unified School District, Draft Environmental Impact Report for the Marina Middle School, High School & Joint Use Community Recreation Facilities*; no archaeological resources are known to exist on the site.<sup>8</sup> Native American consultation was also conducted in accordance with Assembly Bill 52, as discussed in **Section 4.18 Tribal Cultural Resources**.

### 4.5.2 Environmental Impacts

En	vironmental Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
cu	LTURAL RESOURCES. Would the project:				
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to 15064.5?				
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?				
c)	Disturb any human remains, including those interred outside of dedicated cemeteries?				

# 4.5.3 Explanation

a) **No Impact**. CEQA Guidelines §15064.5 describes a historical resources as: 1) any resource that is listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources; 2) a resource included in a local register of historical resources; and, 3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant based on substantial evidence in light of the whole record. A substantial change includes the physical demolition, destruction, relocation, or alteration of a resource or its immediate surroundings such that the significance would be materially impaired (CEQA Guidelines §15064.5(b)).

The proposed project would not cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5. The project site does not contain any historic resources listed in the California Inventory of Historical Resources, California Historical Landmarks, or the National Register of Historic Places. The proposed project consists of reconfiguration of the existing athletic fields and the installation of new field lighting, bleachers, concessions stand, restrooms, and other improvements, and implementation of the project would

<sup>&</sup>lt;sup>8</sup> Monterey Peninsula Unified School District, Draft Environmental Impact Report for the Marina Middle School, High School & Joint Use Community Recreation Facilities. January 2010

not have an impact on a historical resource as defined in accordance with the requirements of CEQA. There would be no impact as a result of the proposed project. (1, 2, 3)

b) Less than Significant Impact with Mitigation Incorporated. Public Resources Code §21083.2 requires that lead agencies evaluate potential impacts to archaeological resources. Specifically, lead agencies must determine whether a project may have a significant effect or cause a substantial adverse change in the significance of an archaeological resource.

The proposed project is located on a previously disturbed site and there are no known archaeological resources located on the site. However, the proposed project would involve ground-disturbing activities, including excavation, that could potentially impact sub-surface archaeological resources. In order to reduce potential impacts to a less-than-significant level, mitigation is necessary. The implementation of the following mitigation measures would ensure that potential adverse impacts would be reduced to a less than significant level. (1, 2, 3, 14)

**Impact CR-1**: The proposed project involves subsurface activity that has the potential to disturb previously unknown archaeological resources.

#### Mitigation

#### MM CR-1A

Prior to commencement of construction activities, all project personnel conducting ground-disturbing activities shall receive training from a qualified archaeologist regarding the potential for exposing subsurface cultural resources, appropriate work practices for implementing mitigation measures and complying with applicable laws and regulations, and how to recognize possible buried resources. The training shall include a presentation of procedures to follow upon discovery or suspected discovery of cultural resource materials, including Native American remains and their treatment, and actions that may be taken if there is violation of applicable laws.

#### MM CR-1B

In the event that any prehistoric or historic-era subsurface archaeological features or deposits, including locally darkened soil ("midden"), that could conceal cultural deposits are discovered during construction, all ground-disturbing activity within 100 feet of the resources shall be halted and a qualified professional archaeologist shall be retained to assess the significance of the find. An exclusion area shall be established with signage and protective barriers. Entry into the area shall be limited to authorized personnel and a qualified cultural resources specialist or archaeologist, and the contractor shall immediately notify MPUSD.

Preservation in place (avoidance) is the preferred method of mitigation for impacts on cultural resources (CEQA Guidelines section 15126.4(b)(3)(A)) and is required unless the cultural resources specialist or qualified archaeologist determines that another method would provide superior mitigation of impacts to the resource. No additional mitigation is necessary if the resource can be completely avoided, but the resource shall be recorded on DPR 523 forms, which shall be filled with the Northwest Information Center.

The qualified cultural resources specialist or archaeologist shall follow the procedures below if the resource cannot be completely avoided.

- Determine if the resource is a pre-historic or historical resource: The qualified cultural resources specialist or archaeologist shall determine if there is a potential for the resource to be a pre-historic or historical resource. Work can resume if there is no potential for the resource to qualify as a historical resource. If there is a potential for the resource to be a pre-historic or historic resource, the qualified cultural resources specialist or archaeologist shall prepare an Evaluation Plan.
- Prepare an Evaluation Plan: The Evaluation Plan shall be prepared specific to the resource and shall contain procedures used to determine if the discovered resource is an historical resource. The Evaluation Plan shall include enough discussion of background and context to provide for evaluation of the resource under the historical resource criteria. The Plan shall include a description of procedures that will be used to gather information for the evaluation, which may include but not be limited to excavation, written documentation, interviews, and photography. For any archaeological resource testing, the Evaluation Plan shall describe testing procedures, such as surface collection, test excavations, analysis methods, and reporting procedure.
- Implement Evaluation Plan: The evaluation plan shall be implemented in the field, and the subsequent report shall evaluate the resource based on the criteria contained in the Evaluation Plan, making a conclusion whether the resource is historical. If the resource is not historical, protective barriers can be removed and work can continue in the area. If the resource is historical, the qualified cultural resources specialist or archaeologist shall prepare a Data Recovery Plan.
- Prepare a Data Recovery Plan: A Data Recovery Plan shall be prepared consistent with CEQA Guidelines Section 15126.4(b)(3)(C) and Public Resources Code Section 21083.2. The Data Recovery Plan will contain a description of how data recovery will mitigate impacts to the resource to less than significant. The Plan shall contain a description of level of effort (e.g., quantity of excavation units), excavation procedures, laboratory methods, types of samples to be collected (e.g., sediment), and the techniques that will be used to obtain information about the features of the site that meet the criteria of a historical resource. Additionally, the Data Recovery Plan shall include a description of the reporting procedure. Once the Data Recovery Plan is completed, field work can commence. Work can resume in the area once the qualified cultural resources specialist/archaeologist determines that no additional information needs to be recovered to satisfy fieldwork, reporting, and documentation requirements to reduce impacts to less than significant.
- Prepare a Data Recovery Report: A Data Recovery Report shall be prepared following completion of data recovery field work. The Report shall present results of data recovery, including field methods used, location and size of excavations, and analysis of materials recovered. The Report shall contain

conclusions made based on the field work as well as where any recovered artifacts, samples, and documentation will be curated. Curation facilities must meet requirements of 36 Code of Federal Regulations 79. The Data Recovery Report shall be submitted to the Northwest Information Center, with all impacted known resources recorded on DPR 523 forms.

With implementation of the mitigation measures identified above, the proposed project would have a less than significant impact on archaeological resources.

- c) Less than Significant Impact with Mitigation Incorporated. No human remains, including those interred outside of formal cemeteries, are known to occur within the project site. While the likelihood of human remains, including those interred outside of a formal cemetery, within the project site is low, it is possible that previously unknown human remains may be present. Previously unknown human remains could be impacted during construction. To reduce potential impacts to a less-than-significant level, mitigation is necessary. The implementation of the following mitigation measure would ensure that potential adverse impacts with respect to disturbing human remains located outside of formal cemeteries would be reduced to a less than significant level. (1, 2, 3)
  - **Impact CR-2**: The proposed project involves subsurface activity that has the potential to disturb previously unknown human remains located outside of a formal cemetery.

## Mitigation

#### MM CR-2

In the event that human remains are discovered during ground-disturbing activities, all ground disturbing work will cease immediately in accordance with California Health and Safety Code Section 7050.5. The project contractor would then immediately notify the County Coroner, and ground disturbance shall not resume until the coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site and provide recommendations for treatment to the landowner within 48 hours of being granted access.

# 4.6 Energy

### 4.6.1 Environmental Setting

The State's 100 Percent Clean Energy Act of 2018 sets a State policy that eligible renewable energy and zero-carbon resources supply 100 percent of all retail sales of electricity in California by 2045. Executive Order (EO) B-55-18 was also issued in September 2018 establishing a new statewide goal to achieve "carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." 9

Starting in 2018, all PG&E customers within Monterey, San Benito, and Santa Cruz Counties were automatically enrolled in Central Coast Community Energy (3CE, originally called Monterey Bay Community Power). 3CE is a locally controlled public agency providing carbon-free electricity to residents and businesses. Formed in February 2017, 3CE is a joint powers authority, and is based on a local energy model called community choice energy. 3CE partners with PG&E, which continues to provide billing, power transmission and distribution, customer service, grid maintenance services and natural gas services to Monterey County. 3CE's standard electricity offering, is carbon free and is classified as 31 percent renewable (3CE, 2021).

## 4.6.2 Environmental Impacts

Environmental Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
ENERGY. Would the project:				
a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy during project construction or operation?				
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				

## 4.6.3 Explanation

a) Less than Significant Impact. The proposed project is located on the existing Marina High School campus, which consumes energy in the form of electricity and natural gas during operations. The proposed project involves reconfiguration of the existing athletic fields and the installation of new field lighting, bleachers, and other improvements. The anticipated construction schedule assumes the project would be built out over a period of approximately 14 months. Construction of the proposed project would result in a temporary increase in energy consumption associated with site preparation, grading, and construction activities. Petroleum-based fuels such as diesel fuel and gasoline would be the primary sources of energy for these tasks. The construction energy use has not been determined at this time. However, the overall construction schedule and process is

<sup>9</sup> https://www.ca.gov/archive/gov39/wp-content/uploads/2018/09/9.10.18-Executive-Order.pdf

designed to be efficient in order to avoid excess monetary costs, as equipment and fuel are not typically used wastefully due to the added expense associated with renting, maintaining, and fueling of construction equipment. As a result, construction of the proposed project would have a less than significant impact related to wasteful, inefficient, or unnecessary consumption of energy during project construction or operation.

Operation of the proposed project would result in increased energy consumption compared to existing conditions. However, the increase in energy use from the proposed project would be offset by the reduction in off-site energy consumption associated with hosting and travelling to "home games" at alternate facilities (i.e., Seaside High School or Monterey Peninsula College). In addition, all energy-consuming uses associated with the proposed project would be used only for scheduled school and community events and would not result in excessive energy use from daily use. All field lighting fixtures to be installed would be rated at a minimum of 95% efficiency (Musco Datasheets, 2022). As a result, operation of the proposed project would have a less than significant impact related to wasteful, inefficient, or unnecessary consumption of energy during project construction or operation. (1, 2, 3, 4, 9, 10, 11)

b) Less than Significant Impact. Operation of the proposed project would consume energy during operation of the proposed project and from trips to and from the project site during school and community athletic events. As stated above under impact a), increased energy use resulting from the proposed project would be offset due to the reduction in off-site energy consumption associated with hosting and travelling to "home games" at alternate facilities. In addition, the proposed project would be designed and constructed to the standards of all applicable state and local standards for renewable energy and energy efficiency. This represents a less than significant impact. (1, 2, 3, 4, 9, 10, 11)

# 4.7 Geology and Soils

Cleary Consultants, Inc. (Cleary) prepared a *Preliminary Geotechnical Recommendations* technical memorandum for the proposed project. This memorandum was followed up by a full Geotechnical and Geologic Hazards Investigation. This section is based, in part, on the findings of these technical documents. Copies of both documents are provided as **Appendix D**.

#### 4.7.1 Environmental Setting

## **Regional Overview**

Geologic structure in Central California is primarily the result of tectonic events that have occurred during the past 30 million years. It is widely believed that the numerous faults in this area are related to movements along the boundary between the Pacific and North American tectonic plates. The relative motion between these two tectonic plates is taken up largely along the northwest-trending San Andreas Fault system, which defines the regional boundary between the two plates. Changes in sea level and tectonic uplift resulted in a complicated depositional environment that produced the complex geology of the Monterey Bay region. Faulting and folding have deformed and displaced the geologic units in the region, and the granitic basement and overlying tertiary deposits have been juxtaposed along many of the northwest/southeast-trending faults.

According to the Monterey County General Plan, the County is located in one of the most seismically active regions in the world. The largest earthquake fault in the region is the San Andreas, a major active fault which traverses the eastern portion of the County and located about 19 miles northeast of the proposed project area. No major earthquakes have occurred on these faults during the past 100 years. Many areas within the County are susceptible to seismic hazards such as strong ground shaking, liquefaction, and earthquake-induced landslides. In addition, erosion hazards are present in the agricultural areas of the Salinas and Pajaro Valleys (Monterey County, 2010).

# Site-Specific Conditions

#### **Subsurface Conditions**

Cleary performed site visits to the project site on September 20<sup>th</sup> through September 22<sup>nd</sup> and on October 6<sup>th</sup>, 2022. Cleary performed 19 exploratory borings at the project site at a maximum depth of 45 feet. The exploratory borings generally encountered interbedded medium dense to very dense sand, as well as silty sand layers. The near-surface soils encountered in the borings are considered to have a low expansion potential (**Appendix D**).

#### Groundwater

Free groundwater was not encountered in the exploratory borings within the maximum depth explored (45 feet). However, as noted in **Appendix D**, borings were only open for a period of a few hours, and this may not have been sufficiently long to establish the stabilized water table conditions. A search of the California State Water Resources Control Board (SWRCB) GeoTracker website did not provide relevant groundwater data in the vicinity of the project site.

## Liquefaction, Soil Densification, and Landslides

A review of the Monterey County Geologic Hazards Map shows that the project site is located in an area with low susceptibility to liquefaction. Cleary's investigation found that the project site is generally underlain by medium dense to very dense older stabilized clean dune sand and silty sand to the maximum depth explored (45 feet). Soil samples were obtained and subjected to laboratory testing to determine

liquefaction characteristics. (**Appendix D**). Cleary concluded that there was no risk seismically induced liquefaction at the project site.

A review of the Monterey County Geologic Hazards Map also shows that the project site is located in an area with low susceptibility for landslides.

# 4.7.2 Environmental Impacts

Environmental Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
GEOLOGY AND SOILS. Would the pro	oject:				
a) Directly or indirectly cause   adverse effects, including the r death involving:					
i) Rupture of a known eadelineated on the most Earthquake Fault Zoning Ma Geologist for the area of substantial evidence of a k Division of Mines and Geolo 42.	recent Alquist-Priolo up issued by the State or based on other nown fault? Refer to				
ii) Strong seismic ground shaki	ng?				
iii) Seismic-related ground liquefaction?	failure, including			$\boxtimes$	
iv) Landslides?					
b) Result in substantial soil erosion	or the loss of topsoil?		$\boxtimes$		
c) Be located on a geologic unit or or that would become unstabl project, and potentially result landslide, lateral spreading, sub or collapse?	e as a result of the tin on- or off-site				
d) Be located on expansive soil, 18-1-B of the Uniform Building of substantial direct or indirect risk	Code (1994), creating			$\boxtimes$	
e) Have soils incapable of adequate of septic tanks or alternative systems where sewers are no disposal of wastewater?	wastewater disposal				

Environmental Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
GEOLOGY AND SOILS. Would the project:				
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				

### 4.7.3 Explanation

- a.i) Less than Significant Impact. As described in Appendix D, no active or potentially active faults are mapped either crossing or projecting toward the proposed project site. In addition, the project site is not located within a fault rupture hazard zone as mapped by the California Division of Mines and Geology. As a result, the proposed project would not be affected by the rupture of a known fault. The proposed project would have a less than significant impact with respect to damage or loss of life as a result of rupture of a known earthquake fault. (1, 2, 15)
- a.ii) Less than Significant Impact. Due to its location in a seismically active region, the proposed project would be subject to strong seismic ground shaking during their design life in the event of a major earthquake on any of the region's active faults. This could pose a risk to structures and infrastructure included under the proposed project. Seismic impacts will be minimized by implementation of standard engineering and construction techniques in compliance with the requirements of the California and Uniform Building Codes, and consistent with the design recommendations discussed in the geotechnical report (Appendix D). The proposed project would have a less than significant impact related to damage or loss of life as a result of strong seismic ground shaking. (1, 2, 16, 17)
- a.iii) Less than Significant Impact. As described above, the project site may be subject to strong ground shaking in the event of a major earthquake. No known active or potentially active faults cross or project towards the project site, and the project site is not located within a fault rupture hazard zone based on mapping available from the California Division of Mines and Geology (Appendix D). The Monterey County Geologic Hazards Map indicates that the site is located in an area with low susceptibility to liquefaction. Cleary performed laboratory testing of soil samples, as described above, and determined that there was no risk seismically induced liquefaction at the project site (Appendix D). The proposed project would be designed in accordance with the requirements of the California and Uniform Building Codes, and consistent with the design recommendations discussed in the geotechnical report (Appendix D) which would further reduce impacts related to seismic ground failure. This represents a less than significant impact. (1, 2, 16, 17)
- a.iv) Less than Significant Impact. As stated above, the project site is located in an area mapped for low risk of landslides. The proposed project would be constructed according to all recommendations of the site-specific geotechnical report (Appendix D). Construction and operation of the proposed project would not expose risk of loss, injury, or death as a result of landslides. This represents a less than significant impact. (1, 2, 16, 17)

b) Less than Significant Impact with Mitigation Incorporated. The proposed project would require grading that could increase erosion on the project site compared to existing conditions. Construction of the proposed project would require the export of 5,520 cubic yards (CY) of cut and the import of 12,785 CY of fill. While the amount of grading on the site is anticipated to be minimal, implementation of the following mitigation measure would ensure that temporary erosion related to site preparation would result in a less than significant impact. (1, 2, 16, 17)

## **Mitigation Measures**

- **Impact GEO-1**: The proposed project involves grading that could result in a temporary increase in erosion during construction.
- MM GEO-1 During construction activities, the construction contractor shall implement the following erosion control measures and associated BMPs to reduce soil disturbance and the potential for erosion and sedimentation as a result of the project:
  - Stockpiling and disposing of demolition debris, concrete, and soil.
  - Protecting existing storm drain inlets and stabilizing disturbed areas.
  - Hydroseeding/re-vegetating disturbed areas.
  - Minimizing areas of impervious surfaces.
  - Implementing runoff controls (e.g., percolation basins and drainage facilities).
  - Properly managing construction materials in accordance with the California Building Code.
  - Managing waste, aggressively controlling litter, and implementing sediment controls.
  - Limiting grading to the minimum area necessary for construction and operation of the project.

The City of Marina shall verify the conditions identified above are shown on project plans prior to issuance of any grading or building permit.

With implementation of the mitigation identified above, the proposed project would have a less than significant impact related to soil erosion or the substantial loss of topsoil.

- c) Less than Significant Impact. As described above, soils at the project site typically consists of medium dense to very dense sand, as well as silty sand layers (Appendix D). A review of the Monterey County Geologic Hazards Map shows that the project site is located in an area with low susceptibility to liquefaction. Cleary performed laboratory testing of soil samples, as described above, and determined that there was no risk seismically induced liquefaction at the project site (Appendix D). This represents a less than significant impact. (1, 2, 16, 17)
- d) Less than Significant Impact. The near-surface soils encountered during geotechnical borings were determined to have a low expansion potential based on their plasticity characteristics (Appendix D). As a result, the potential for direct or indirect impacts from expansive soils is considered low. In addition, the proposed project would be designed and constructed according to site specific recommendations identified in Appendix D. This represents a less than significant impact. (1, 2, 16, 17)

- e) **No Impact.** The proposed project would not result in any potential adverse effects due to soils being incapable of supporting septic disposal since the proposed project would not involve the construction of septic systems. No septic systems are known to exist on the site. No impact would occur. (1, 2)
- f) **No Impact**. There are no known paleontological resources or unique geologic features within the proposed project area. The project site is not listed within an area identified as containing paleontological resources nor is it located in close proximity to any known paleontological resources per the City of Marina's General Plan EIR<sup>10</sup>. Moreover, a review of nearly 700 known fossil localities within the County of Monterey was conducted by paleontologists in 2001; 12 fossil sites were identified as having outstanding scientific value (Rosenberg, 2001). The proposed project site is not located on or near any of those sites. Excavation activities associated with the project would be limited to 4.8 feet in depth and would be unlikely to encounter any paleontological resources. The proposed project would not impact any paleontological resources or unique geological features since none are known to occur in the project area. (1, 2, 3)

<sup>&</sup>lt;sup>10</sup> City of Marina, *Final Environmental Impact Report on the Draft Marina General Plan*, August 2000. Available at: https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidld=

# 4.8 Greenhouse Gas Emissions

#### 4.8.1 Environmental Setting

Various gases in the earth's atmosphere, classified as atmospheric greenhouse gases (GHGs), play a critical role in determining the earth's surface temperature. Solar radiation enters the atmosphere from space and a portion of the radiation is absorbed by the earth's surface. The earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. Greenhouse gases, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, the radiation that otherwise would have escaped back into space is retained, resulting in a warming of the atmosphere known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect, or climate change, are carbon dioxide ( $CO_2$ ), methane ( $CH_4$ ),  $O_3$ , water vapor, nitrous oxide ( $N_2O$ ), and chlorofluorocarbons (CFCs). Human-caused emissions of these GHGs in excess of natural ambient concentrations are responsible for enhancing the greenhouse effect. In California, the transportation sector is the largest emitter of GHGs.

The proposed project is located in the NCCAB, where air quality is regulated by MBARD. Neither the state, MBARD, nor Monterey County have adopted GHG emissions thresholds or a GHG emissions reduction plan that would apply to the proposed project. However, it is important to note that other air districts within the State of California have adopted recommended CEQA significance thresholds for GHG emissions. For instance, on March 28, 2012, the San Luis Obispo Air Pollution Control District (SLOAPCD) approved thresholds of significance for the evaluation of project-related increases of GHG emissions. The SLOAPCD's significance thresholds include both qualitative and quantitative threshold options, which include a qualitative threshold that is consistent with the AB 32 scoping plan measures and goals and a quantitative bright-line threshold of 1,150 metric tons of carbon dioxide equivalent (MTCO2e) per year. The GHG significance thresholds are based on AB 32 GHG emission reduction goals, which take into consideration the emission reduction strategies outlined in the California Air Resources Board's Scoping Plan. Development projects located within these jurisdictions that would exceed these thresholds would be considered to have a potentially significant impact on the environment which could conflict with applicable GHG-reduction plans, policies, and regulations. Projects with GHG emissions that do not exceed the applicable threshold would be considered to have a less-than-significant impact on the environment and would not be anticipated to conflict with AB 32 GHG emission reduction goals. Given that the MBARD has not yet adopted recommended GHG significance thresholds, the above thresholds are relied upon for evaluation of projects.

#### 4.8.2 Environmental Impacts

Env	ironmental Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
GRE	ENHOUSE GAS EMISSIONS. Would the project:				
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			$\boxtimes$	

Env	ironmental Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
GRE	ENHOUSE GAS EMISSIONS. Would the project:				
b)	Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.				

# 4.8.3 Explanation

a) Less than Significant Impact. The project is located in the NCCAB, where air quality is regulated by MBARD. MBARD has determined that if a project emits less than 10,000 metric tons per year (MT/yr) of Carbon Dioxide equivalent (CO<sub>2</sub>e), then its impact would be considered less than significant. This calculation is determined by combining the estimated greenhouse gas emissions generated by construction, amortized over a 30-year period, with the estimated annual GHG emissions resulting from the operation of the project.

The proposed project would result in minor temporary emissions due to construction-related activities. Due to the short construction period, proposed minor earthmoving, and overall temporary construction impacts, the project would not generate greenhouse gases that would have a significant impact on the environment.

The reconfigured athletic fields would be utilized most frequently by daytime physical education classes consisting of Marina High students. Day-to-day operations of the reconfigured athletic fields associated with school use would be comparable to existing uses and would not result in increased vehicle trips or other activities that would lead to increased operational GHG emissions. Operational emissions from evening use would also occur as a result of vehicle trips to and from the site associated with athletic events. This occurrence would represent increased usage of the athletic fields compared to existing conditions and would generate additional vehicle trips that would lead to increased operational GHG emissions. Operational emissions of CO<sub>2</sub>e are quantified in **Appendix A**. The estimated amortized annual greenhouse gas emissions generated by the operation of the proposed project would be 1,917 MT/year of CO<sub>2</sub>e, which is below the threshold of 10,000 MT/year of CO<sub>2</sub>e. Therefore, operational emissions associated with the proposed project would be less than significant. (1, 2, 9, 10)

b) **No Impact**. As stated above, the proposed project is located in the NCCAB, where air quality is regulated by MBARD. Neither the State nor MBARD have adopted a GHG emissions reduction plan that would apply to the proposed project. The City of Marina has not adopted a Climate Action Plan or equivalent document to regulate GHG emissions. The proposed project would therefore not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions, as no such plans would apply to the proposed project. No impact would occur. (1, 2)

# 4.9 Hazards and Hazardous Materials

## 4.9.1 Environmental Setting

Hazardous materials, as defined by the California Code of Regulations, are substances with certain physical properties that could pose a substantial present or future hazard to human health or the environment when improperly handled, disposed, or otherwise managed. Hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. Hazardous materials and waste can result in public health hazards if improperly handled, released into the soil or groundwater, or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer.

The California Department of Toxic Substances Control (DTSC) uses databases such as EnviroStor GeoTracker, and Cortese to map the location of hazardous waste sites including sites that have been remediated, sites currently undergoing remediation, and sites that require cleanup. The DTSC EnviroStor Database indicates that there were 28 contaminated sites in Monterey County that are listed in federal or state databases (Monterey County, 2010). Based on a search of the above databases, no hazardous materials contamination has been documented within the project site.

The California Department of Forestry and Fire Protection (CalFire) prepares maps of Fire Hazard Severity Zones (FHSZ), which are used to develop recommendations for local land use agencies and for general planning purposes. The project site is located in a local responsibility area (LRA). The project site is not located in a moderate, high, or very high fire hazard severity zones, as delineated by CalFire.

## 4.9.2 Environmental Impacts

En	vironmental Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
НА	ZARDS AND HAZARDOUS MATERIALS. Would the proje	ect:			
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				

En	vironmental Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
HA	ZARDS AND HAZARDOUS MATERIALS. Would the proje	ct:			
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment				
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			$\boxtimes$	

# 4.9.3 Explanation

- a) Less than Significant Impact. The proposed project consists of reconfiguration of the existing athletic fields and the installation of new field lighting, bleachers, concessions stand, restrooms, and other improvements. Operation of the proposed project would not involve the routine transport, use or disposal of hazardous materials. Construction of the proposed project would require the temporary transport, use and disposal of potentially hazardous materials during construction activities. However, this would be temporary and would cease upon completion of the proposed project. All hazardous materials would be transported, used, and disposed of in accordance with all manufacturers' recommendations. As a result, this represents a less than significant impact. (1, 2, 3)
- b) Less than Significant Impact. The proposed project consists of reconfiguration of the existing athletic fields and the installation of new field lighting, bleachers, concessions stand, restrooms, and other improvements, located within the existing Marina High School Campus. Land use on the site has consisted of athletic events and outdoor physical education classes associated with the school. No historical use of hazardous materials or chemicals is known to have occurred on the project site. Construction of the proposed project would require the temporary transport, use and disposal of potentially hazardous materials during construction activities. All hazardous materials would be transported, used, and disposed of in accordance with all manufacturers' recommendations. Operation of the proposed project would not utilize hazardous materials that

would have the potential to be accidentally released into the environment. This represents a less than significant impact. (1, 2, 3)

- c) Less than Significant Impact. The proposed project is located entirely on the existing Marina High School campus and is therefore located within a quarter mile of an existing school. In addition, Los Arboles Middle School is located about 1,000 feet north of the site. Operation of the proposed project would not require the handling or emissions of hazardous materials. However, construction activities would require temporary handling of potentially hazardous materials. Although, as described under impact a), all hazardous materials would be transported, used, and disposed of in accordance with all manufacturers' recommendations. In addition, areas under construction would be off limits to students and faculty throughout construction. This represents a less than significant impact. (1, 2, 3)
- d) **No Impact**. The proposed project site does not include any locations listed on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.5. There would be no impact in connection with the proposed project. (1, 2, 18)
- Less than Significant Impact. The Marina Municipal Airport is located approximately 1.8 miles e) east of the proposed project site. The proposed project is located within the Airport Influence Area (Zone 7) identified in the Marina Municipal Airport's Land Use Plan<sup>11</sup>. The Airport Influence Area (AIA) is defined as an area where airport-related factors may significantly affect land uses or necessitate restrictions on those uses as determined by an Airport Land Use Commission, but where the aircraft accident risk level is considered low. The AIA includes prohibited land uses such as flight hazards, outdoor stadiums, and other forms of high intensity uses. However, the proposed project is a modification to an existing, non-conforming use as defined by Section 4.1.4.1 of the Marina Municipal Airport Land Use Compatibility Plan (ALUCP)<sup>12</sup>, The ALUCP states that objects shorter than 100 feet generally are not airspace obstructions unless they are at a ground elevation far above that of the airport. The airport elevation is approximately 140 feet above mean sea level, while the proposed project site is about 90 feet above mean sea level. The field lighting component of the proposed project would have a maximum height of 99 feet and would not represent a flight hazard. Additionally, the proposed project is not located within the runway safety zone for Marina Municipal Airport.

The ALUCP states that the maximum non-residential intensity inside the AIA is 300 persons per acre. The proposed project would have a maximum seating capacity of 686 for a single-event across a 5.71-acre site, which is below the maximum non-residential intensity is 300 persons per acre. The maximum number of attendees/participants at a single event would be 720 persons for school rallies, which is also below the maximum non-residential intensity is 300 persons per acre. The proposed project would be consistent with the maximum non-residential intensity outlined in the ALUCP.

Caltrans regulates the development of new school sites within two nautical miles of existing or planned airport runways under California Code of Regulations, Title 21, Section 3570. However, the proposed project represents improvements to an existing school site and would not be subject to further review by Caltrans. There would be a less than significant impact in connection with the proposed project. (1, 2, 3, 19)

<sup>&</sup>lt;sup>11</sup> Coffman Associates, Inc., Final Airport Master Plan for Marina Municipal Airport, May 2018.

<sup>&</sup>lt;sup>12</sup> Coffman Associates, Inc., Marina Municipal Airport Land Use Compatibility Plan, May 2019

- f) No Impact. The major evacuation route in the vicinity of the proposed project is State Route 1. Construction of the proposed project would take place on the existing Marina High School grounds and would not require any road closures that would impair implementation or physically interfere with an adopted emergency response plan or emergency evacuation plan. The operation of the proposed project would increase the frequency of athletic events and the overall attendance at athletic events compared to existing conditions. Therefore, operation of the proposed project would result in increased traffic on State Route 1 (the closest major evacuation route) in the event of a local or regional emergency. However, attendance at athletic events would be less than attendance during regular school hours and would not be expected to generate traffic exceeding the capacity of nearby roadways. The proposed project would have no impact with respect to interfering with an adopted emergency response plan. (1, 2, 3, 13)
- g) Less than Significant Impact. The proposed project consists of reconfiguration of the existing athletic fields and the installation of new field lighting, bleachers, concessions stand, restrooms, and other improvements on the existing Marina High School campus. The proposed project is located in an LRA and is not identified as a Very High Fire Hazard Severity Zone (VHFHSZ) by CalFire. The proposed use would be similar to existing uses and would not introduce new sensitive land uses that could be impacted by wildfire. This represents a less than significant impact. (1, 2, 20)

# 4.10 Hydrology and Water Quality

# 4.10.1 Environmental Setting

# **Flooding**

The Federal Emergency Management Agency (FEMA) Flood Map for the project area indicated that the project site is within Flood Hazard Zone X. (**Appendix E**). Flood Zone X is defined as an area of "Minimal Flood Hazard".

The proposed project site is not located within the mapped inundation area of any dams.<sup>13</sup> The project site is outside of the runup zone resulting from a seismically generated tsunami (State of California Tsunami Inundation Map, 2021). The project site is also not within the vicinity of any lakes or reservoirs, therefore there is not a hazard at the site from seiches.

# 4.10.2 Environmental Impacts

Env	ironmental Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
НҮС	PROLOGY 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?		$\boxtimes$		
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i)	Result in substantial erosion or siltation on- or off- site;				
ii)	Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;				

<sup>&</sup>lt;sup>13</sup> California Department of Water Resources. Inundation Map Viewer. Available at: https://fmds.water.ca.gov/webgis/?appid=dam\_prototype\_v2

Env	ironmental Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
HYD	PROLOGY AND WATER QUALITY. Would the project:				
iii)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or				
iv)	Impede or redirect flood flows?				
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				

#### 4.10.3 Explanation

a) Less than Significant with Mitigation Incorporated. The proposed project would increase the amount of impervious surfaces on the site by 34,100 SF compared to existing conditions. As a result, the proposed project would increase site runoff, which would have the potential to degrade surface or groundwater quality in violation of water quality and/or waste discharge requirements. The proposed project would disturb more than one (1) acre and would be required to obtain a State NPDES Construction General Permit. Compliance with the requirements of the NPDES Construction General Permit would ensure that the potential water quality impacts from construction of the proposed project would be minimized. In addition, the project includes Mitigation Measure GEO-1 to reduce impacts related to erosion to a less than significant level.

The proposed project would include stormwater retention facilities to manage flood flows during project operation. These facilities would consist of standard conveyance methods comprised of inlets and solid storm drainpipe. Runoff would be conveyed from the paved areas to an infiltration system composed of open bottom arched pipes underlain with open graded gravel which allows for infiltration into the site soils, which have a very high natural infiltration rate of well over 10 inches per hour. The first row of the chamber system would act as a trash capture system, which would be cleaned via access ports. These facilities are designed to provide filtration in accordance with Regional Water Quality Control Board requirements to manage worst case flooding scenarios. In addition, this system has been designed in conformance with engineering standards and practices (including those set by the American Association of State Highway and Transportation Officials) regarding both storm water quality and storm water discharge rates. As a result, the proposed project would not violate any water quality standards or waste discharge requirements. This represents a less than significant impact. (1, 2)

b) Less than Significant Impact. The proposed project site is currently served by MCWD and would not represent an intensification of water use on the site compared to existing conditions.

Improvements to the existing baseball field, including new olive core in-field (a sustainable alternative to traditional rubber surfaces), running track, and installation of artificial turf on the field areas would reduce water use compared to existing conditions. Minor water use would be associated with operation of the concessions stand and restroom components of the proposed project during events, however, this would be offset by the reduction of irrigated turf and installation of artificial surfaces not requiring regular irrigation. MCWD's water supply is sourced primarily from the Salinas Valley Groundwater Basin, subbasin 180/400. Groundwater extraction is closely regulated and monitored by the Monterey County Water Resources Agency (MCWRA) and the Salinas Valley Groundwater Sustainability Agency (SVGWSA). The proposed project includes 7,889 sf of new synthetic turf to replace existing natural turf, which would result in a net decrease in water use as the synthetic turf would not need to be irrigated. While the specific reduction in overall water use associated with the proposed project is not known at this time, the proposed project would reduce water use compared to conditions and water use associated with operation of the proposed project would fall within the existing allocation of water for Marina High School. This represents a less than significant impact. (1, 2)

ci-iv) Less than Significant Impact. The proposed project is located on the existing Marina High School campus. There are no steams or rivers located within or immediately adjacent to the proposed project site. The proposed project includes grading as well as the addition of 34,100 sf of new impervious surfaces. These changes to the existing site conditions have the potential to result in the impediment or redirection of flood flows on the site.

The proposed project would utilize temporary erosion control measures during construction to prevent erosion and siltation and manage runoff. These temporary measures are anticipated to include, but are not limited to, sandbags, twice daily watering of exposed dirt stockpiles, and covering of truck trips importing or exporting soils to or from the site.

The proposed project includes stormwater retention facilities, as described under impact a), above, to manage flood flows during project operation. These facilities are designed to manage worst case flooding scenarios. Changes to the onsite flood flow would be accommodated by these stormwater retention facilities and would not result in hazardous conditions related to the impediment or redirection of flood flows on the site. Redirection of flood flows to these facilities would minimize erosion potential or siltation both on and off-site during project operation. This represents a less than significant impact. (1, 2)

- d) **No Impact.** The proposed project is located in FEMA Flood Zone X, which is identified as an area of "Minimal Flood Hazard" (**Appendix E**). As a result, the risk of flooding at the site is considered low. The site is not located in a tsunami or seiche zone. Flood flows on the site would be directed to new and existing treatment facilities. The proposed project would have no impact due to the release of pollutants as a result of site flooding. (1, 2, 21)
- e) Less than Significant Impact. The proposed project would result in changes to the existing runoff characteristics of the project site. Changes in runoff characteristics have the potential to result in a conflict or obstruction of implementation of a water quality control plan or sustainable groundwater management plan. The SVGWSA is the agency responsible for implementing the Groundwater Sustainability Plan for the Salinas Valley Groundwater Basin. As stated above, the proposed project would be required to acquire an NPDES permit for runoff and erosion control. Adherence to the requirements of the NPDES permit would ensure that the proposed project

# 4.11 Land Use and Planning

### 4.11.1 Environmental Setting

The proposed project is located within the City of Marina. The proposed project site is designated PF – Public Facilities under the City's General Plan. The site carries a corresponding zoning designation of Public Facility District (PF-E).

## 4.11.2 Environmental Impacts

Environmental Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?				$\boxtimes$
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?				

## 4.11.3 Explanation

- a) **No Impact**. As described above, the proposed project involves the reconfiguration of the existing athletic fields and the installation of new field lighting, bleachers, concessions stand, restrooms, and other improvements. The proposed project would be located entirely within the existing grounds of Marina High School and would not physically divide an established community. No impact would occur. (1, 2)
- b) **No Impact**. As stated above, the proposed project is zoned Public Facility District (PF-E) and carries a corresponding General Plan designation of PF Public Facilities. The proposed project involves reconfiguration of the existing athletic fields and the installation of new field lighting, bleachers, concessions stand, restrooms, and other improvements, which would be consistent with the existing land use, as well as the zoning and general plan designations of the site. The proposed project would be consistent with the ALUCP for the Marina Municipal Airport as described in Section 4.9 Hazards and Hazardous Materials. No impact would occur. (1, 2, 3)

# 4.12 Mineral Resources

# 4.12.1 Environmental Setting

Historic mineral production in Monterey County included sand and gravel mining for construction materials, mining for industrial materials (diatomite, clay, quartz, and dimension stone) and metallic minerals (chromite, placer gold, manganese, mercury, platinum, and silver). The Monterey County 2010 General Plan identifies areas of mineral resource significance in the vicinity of the Cities of Marina, Sand City and Seaside. All other areas either do not contain aggregate resources or have not been classified. The City's General Plan EIR identifies that the City is located largely within mineral resource zone 2 (MRZ-2) as designated by the State Mining and Geology Board<sup>14</sup>.

### 4.12.2 Environmental Impacts

Environmental Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
MINERAL RESOURCES. Would the project:				
Result in the loss of availability of a known mine resource that would be of value to the region and t residents of the state?				
b) Result in the loss of availability of a locally-importa mineral resource recovery site delineated on a loc general plan, specific plan, or other land use plan?			×	

### 4.12.3 Explanation

a-b) Less than Significant Impact. No known mineral resources in Monterey County are located within the proposed project area. However, the proposed project area is located in an area underlain by MRZ-2 as shown on the Department of Conservation's Mineral Land Classification Maps. MRZ-2 is defined as "Areas where geologic information indicates the presence of significant construction aggregate resources" 15. However, the proposed project site is located on an existing public school facility and would not be an appropriate location for future mineral extraction. Therefore, the proposed project would not result in 1) the loss of availability of a known mineral resource that would be of value to the region and residents of the state or 2) the loss of availability of a locally important mineral resources recovery site delineated on a local general plan, specific plan, or other land use plan. The proposed project would have a less than significant impact on mineral resources. (1, 2, 22)

<sup>&</sup>lt;sup>14</sup> Marina, City of, *Final Environmental Impact Report on the Draft Marina General Plan*, August 2000. Available at: <a href="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidld="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidld="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidld="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidld="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidld="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidld="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidld="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidld="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidld="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidld="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidld="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidld="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidld="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidld="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidld="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidld="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidld="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidld="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf."https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf.

<sup>&</sup>lt;sup>15</sup> California Department of Conservation, Mineral Resource Zone Map for Construction Aggregate in the Monterey Bay Production-Consumption Region, 2021.

## **4.13** Noise

#### 4.13.1 Environmental Setting

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air. Noise is defined as unwanted sound. Environmental noise is frequently measured in decibels (dB). The Aweighted decibel (dBA) is used to reflect the human ear's sensitivity to sounds of different frequencies. On this scale, the sound level of normal talking is about 60 to 65 dBA. Because people are more sensitive to nighttime noise, sleep disturbance usually occurs at 40 to 45 dBA.

The most commonly used measurement scale used to account for a person's increased sensitivity to nighttime noise is the Community Noise Equivalent Level (CNEL). The CNEL is a noise scale used to describe the overall noise environment of a given area from a variety of sources. The CNEL applies a weighting factor to evening and nighttime values.

Generally, noise levels diminish as distance from the noise source increases. Some land uses are more sensitive to noise than others. Noise sensitive land uses are generally defined as residences, transient lodging, schools, hospitals, nursing homes, churches, meeting halls, and office buildings. Noise sensitive receptors in the vicinity of the project site consist of existing residences to the north and northwest, as close as 250 feet from the project site.

The predominant sources of noise at the project site would be vehicle noise from State Route 1, as well as activities at the Marina High School campus. In addition, the project is partially within the area identified in the Airport Master Plan for the Marina Municipal Airport.

Construction noise is a temporary noise source that is generated from a variety of construction activities occurring both on- and off-site. These activities can include demolition, hauling of materials, grading, building construction, and construction traffic. Generally, construction equipment can generate noise levels in the range of 70 to 90 decibels at a distance of 50 feet. However, construction noise is generally not constant during the daytime hours. The proposed project would not require nighttime construction.

## 4.13.2 Environmental Impacts

En	vironmental Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
NC	DISE. Would the project result in:				
a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
b)	Generation of excessive groundborne vibration or groundborne noise levels?				

Environmental Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
NOISE. Would the project result in:				
c) For a project located within the vicinity of a private airstrip or an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				

### 4.13.3 Explanation

a) Less than Significant with Mitigation Incorporated. The City of Marina's General Plan establishes land use compatibility criteria in terms of the Community Noise Equivalent Level (CNEL) to describe noise exposure for noise compatibility planning purposes. <sup>16</sup> The City of Marina's General Plan identifies an acceptable maximum exterior noise level of 60 dB and a conditionally acceptable maximum noise level of 70 dB for residential receptors. The General Plan also identifies a maximum interior noise level of 45 dB for residential receptors.

However, the Section 9.24.050 of the City's municipal code offers exemptions from noise restrictions, including for "activities on or in publicly owned property and facilities, or by public employees...are exempt provided that such activities have been authorized by the owner of such property or facilities or its agent". The reconfigured athletic fields at the Marina High School campus, a publicly owned facility, would be considered a use authorized by MPUSD, a public agency. Therefore, operation of the proposed project would be exempt from City regulations governing noise compliance. However, to address potential community concerns related to noise generated by the proposed project, operational noise from the proposed project is still analyzed below based on the conditionally acceptable outdoor maximum noise level of 70 dB identified by the City's General Plan for residential uses.

#### **Construction Noise**

Construction of the proposed project would generate increased temporary noise. Noise impacts resulting from construction depend upon the noise generated by various pieces of construction equipment, the timing and duration of noise-generating activities, and the distance between construction noise sources and noise-sensitive areas. Construction noise impacts primarily result when construction activities occur during noise-sensitive times of the day (e.g., early morning, evening, or nighttime hours), the construction occurs in areas immediately adjoining noise-sensitive land uses, or when construction lasts over extended periods of time.

<sup>&</sup>lt;sup>16</sup> CNEL is defined as the time-weighted energy average noise level for a 24-hour day with a 5 dB (technically 4.77 dB) penalty added to noise levels occurring during the evening hours between 7:00 p.m. and 10:00 p.m. and a 10 dB penalty added to noise levels occurring during the nighttime hours between 10:00 p.m. and 7:00 a.m. The CNEL represents cumulative exposure to noise over an extended period of time and is therefore calculated based upon annual average conditions.

Construction equipment required for the proposed project is expected to consist of a scraper/blade, backhoes, rollers, excavators, haul trucks, welders, and generators. **Table 6** provides typical noise levels of heavy equipment likely to be used in construction activity based on Federal Highway Administration (FHWA) standards. The concrete/industrial saw would generate the highest noise level at 90 dB. Construction-generated noise levels drop off at a rate of about 6 dBA per doubling of the distance between the source and receptor.

Т	able 6		
Noise Levels Generated by Construction Equipment			
Equipment Type	Typical Noise Level (dB) at 50 feet		
Backhoe	80		
Concrete/Industrial Saw	90		
Concrete Mixer	85		
Concrete Pump	82		
Dozer	85		
Dump Truck	84		
Excavator	85		
Front Loader	80		
Generator	82		
Grader	85		
Jackhammer	85		
Paver	85		
Pneumatic Tools	85		
Scraper	85		
ource: FHWA 2006:3			

Construction activities occurring in the evening and nighttime hours would result in increased noise levels at nearby residential receptors. Construction of the proposed project is expected to last approximately 14 months. Existing noise-sensitive receptors that could be exposed to construction-noise include the single-family homes located about 250 feet northeast of the project site on Grant Street, as well as residences on Max Court to the East, and high school buildings on the existing campus. Construction activities would be located 200 feet or more from the nearest residential receptors. As stated above, construction-generated noise levels drop off at a rate of about 6 dBA per doubling of the distance between the source and receptor, which means the loudest piece of equipment (concrete/industrial saw at 90 dB) would be expected to result in a maximum noise level of 66dB or less at the nearest residential receptors. This distance. combined with the existing topography and vegetation between the project site and the sensitive residential receptors, would result in construction levels below the 70dB conditionally acceptable maximum noise level for residential receptors. In addition, the construction noise would not represent a permanent increase in noise levels. While construction-related noise would be temporary in nature, temporary impacts to residential receptors may occur, which could represent a significant impact. This would be reduced to a less than significant impact with implementation of the following mitigation measure.

- **Impact NSE-1**: The proposed project could result in temporary evening and nighttime noise impacts at nearby sensitive receptors associated with construction activities.
- **MM NSE-1**: The following noise reduction measures would be applied to the proposed project throughout construction:

- Noise generating construction operations shall be limited to the hours of 7:00

   a.m. to 7:00 p.m. Monday through Friday, 8:00 a.m. to 6:00 p.m. Saturday
   and 10:00 a.m. to 5:00 p.m. Sunday.
- All internal combustion engine-driven equipment shall be equipped with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Unnecessary idling of internal combustion engines shall be prohibited.
- Stationary noise-generating equipment (including, but not limited to, air compressors and portable power generators) shall be located as far as possible from sensitive receptors when in operation.
- The construction contractor shall construct temporary noise barriers to screen stationary noise-generating equipment when located near adjoining sensitive land uses.
- Prior to construction, the construction contractor shall notify all adjacent business, residences, and other noise-sensitive land uses of the construction schedule, in writing, and provide a written schedule of "noisy" construction activities to the adjacent land uses and nearby residences.
- The construction contractor shall designate a "disturbance coordinator" who shall be responsible for responding to any complaints received regarding construction noise. The disturbance coordinator shall determine the cause of the noise complaint and work to implement reasonable measures to correct the problem. The telephone number for the disturbance coordinator shall be posted at the construction site and included in the notice sent to adjacent business, residences, and other noise-sensitive land uses.

Incorporation of the mitigation measure above would ensure that construction noise does not impact nearby sensitive receptors during construction. In addition, it is important to note that no single construction activity would take place in the same location for the entire 14-month construction period.

## **Operational Noise**

Use of the proposed stadium would result in increased noise during evening events. The project includes the installation of new field lighting to facilitate evening and nighttime athletic events. The primary sources of noise during athletic events at the stadium are crowd noise and speech and music amplified on the public address system. Athletic events would occur on an infrequent basis as noted in **Table 2**. Noise levels from these events would be lessened by the existing topography and vegetation located between the proposed project and sensitive receptors located at nearby residences. However, these events could still result in increased noise levels exceeding the conditionally acceptable maximum exterior noise level of 70 dB for residential receptors. To reduce this impact to a less than significant level, the following mitigation is proposed.

**Impact NSE-2**: The proposed project would result in temporary evening and nighttime noise impacts at nearby sensitive receptors associated with athletic events.

- MM NSE-2: Prior to operation of the proposed project for nighttime athletic events, MPUSD shall prepare a noise reduction plan based on City of Marina General Plan's noise standards to deal with evening and nighttime noise impacts. The noise reduction plan shall include, at a minimum, the following restrictions that shall be placed on all nighttime athletic events.
  - Prohibit use of the public address system when it is not specifically necessary for a game, event, or other activity. For example, safety-related announcements, announcements required by governing leagues, and announcements regarding game play such as scoring summaries are necessary and shall be allowed. Announcements that are meant to induce cheering by the crowd, however, are not necessary. This direction shall be posted at the control station for the public address system.
  - The public address system shall be designed to focus the sound within the bleacher areas and minimize spillover to adjacent residential areas. This shall involve specifying the direction and height of the loudspeakers, as well as using the minimum volume levels required for intelligibility over background crowd noise.
  - Events shall be scheduled to conclude before 10:30 p.m. or earlier.

The noise reduction plan shall be made publicly available on the MPUSD and Marina High School websites and shall identify a point of contact for noise-related complaints associated with evening and nighttime use of the proposed project.

Implementation of the mitigation measure above, combined with the existing topography and vegetation between the project site and the sensitive receptors, would ensure that intermittent noise levels from operation of the proposed project would be below the conditionally acceptable maximum exterior noise level of 70 dB for residential receptors. In addition, the proposed project would be considered exempt as an authorized public use under Section 9.24.050 of the City's municipal code. Therefore, the proposed project would have a less than significant impact on operational noise with incorporation of mitigation. (1, 2, 3)

b) Less than Significant with Mitigation Incorporated. Construction of the proposed project would generate vibrations as a result of grading, earthmoving, and other activities. Vibration generated in the construction process is groundborne and diminishes in intensity as distance from the source of the vibration increases. Low levels of groundborne vibration are typically imperceptible, while moderate levels of vibration can result in low rumbling sounds and detectable vibrations. High levels of vibration can cause annoyance and sleep disturbance at receptors.

## **Construction Vibration**

Construction of the proposed project would not utilize pile drivers. Construction activities utilizing dozers or other large equipment would generate the highest levels of vibration. Construction equipment can generate ground vibration levels of 0.089 in/sec peak particle velocity (PPV) at a distance of 25 feet based on Federal Transit Administration (FTA) guidance. <sup>17</sup> Caltrans notes that vibration levels exceeding 0.2 PPV can result in structural damage to conventional structures

 $<sup>^{17}\</sup> https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123\_0.pdf$ 

within a radius of 15 feet. No buildings are located within 15 feet of the edge of the construction area, with the exception of two classrooms on the north side of the campus that would be within 15 feet of sidewalk that would be replaced as part of the proposed project. Heavy equipment use associated with sidewalk replacement has the potential to result in structural damage at these two classrooms. This represents a potentially significant impact. **Mitigation Measure NSE-3**, below, would be implemented to reduce impacts to a less than significant level.

Impact NSE-3: Construction of the project would generate vibration levels exceeding the Caltrans threshold of 0.2 in/sec PPV or more at buildings of normal conventional construction within 15 feet of the project site.

# MM NSE-3: Prior to the initiation of ground disturbing activities, MPUSD shall retain a qualified consultant to prepare a construction vibration monitoring plan. The construction vibration monitoring plan shall include the following measures to be implemented during construction of the proposed project where vibration levels due to construction activities would exceed 0.2 in/sec PPV at adjacent conventional buildings.

- Schedule construction activities within 15 feet of conventional structures in periods where these structures are unoccupied, if feasible.
- Place operating equipment on the construction site as far as possible from vibration-sensitive receptors.
- Where feasible, smaller equipment to minimize vibration levels to below 0.2 in/sec PPV shall be used during vibration producing construction activities occurring within 15 feet of an existing conventional building.
- Avoid using vibratory rollers and clam shovel drops near sensitive areas.
- If feasible, select demolition methods not involving impact tools.
- Modify/design or identify alternative construction methods to reduce vibration levels below the limits.
- Avoid dropping heavy equipment and use alternative methods for breaking up existing pavement, such as a pavement grinder, instead of dropping heavy objects, within 30 feet of adjacent buildings.
- Designate a person responsible for registering and investigating claims of excessive vibration. The contact information of such person shall be clearly posted on the construction site.

The adjacent classrooms are defined as "Category 3" in the FTA's Transit Noise and Vibration Impact Assessment Manual. Category 3 receptors are defined as receptors where an impact would occur when exposed to vibration velocity (vdB) exceeding 83 vdB within a distance of 35 feet. Assuming school is in session, or the classroom is otherwise occupied during replacement of the adjacent asphalt path, occupants of these classrooms could be exposed to construction vibration exceeding 83 vdB during heavy construction activity, which would represent a potentially significant impact. The proposed project would implement the **Mitigation Measure NSE-3** to reduce impacts on sensitive receptors from groundborne vibration to a less than significant level.

## **Operational Vibration**

Operation of the proposed project would generate additional vibration during athletic events compared to existing conditions. However, athletic events would be located on the athletic fields, which are more than 200 feet away from the nearest residential receptors and more than 100 feet away from the nearest structure. As a result, operational impacts related to vibration would be less than significant. (1, 2, 3)

c) Less Than Significant Impact. The proposed project is located approximately 1.8 miles from the Marina Municipal Airport. According to the Airport Master Plan for the Marina Municipal Airport, the eastern portion of the project site is within Zone 6 – Airport Influence Area (City of Marina, 2018). However, the project is located outside the arrival and departure tracks shown in the Airport Master Plan and would not be subject excessive airport noise levels. In addition, the proposed project consists of reconfiguration of the existing athletic fields and would not result in the introduction of new land uses that would be exposed to aircraft noise. This represents a less than significant impact. (1, 2, 19)

# 4.14 Population and Housing

## 4.14.1 Environmental Setting

In 2020, AMBAG published a new regional growth forecast projecting a 2025 population of 452,761 and 2035 population of 476,028 for Monterey County. The proposed project would not include any new housing or result in the need for any new housing.

# 4.14.2 Environmental Impacts

Env	ironmental Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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)?				
b)	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				

## 4.14.3 Explanation

- a) **No Impact**. Under CEQA, a project can have direct and/or indirect growth inducement potential. A project would directly induce growth by resulting in construction of new housing that would result in new residents in the project area. A project may indirectly induce growth in a number of ways, including:
  - Substantial stimulation of economic activity which would result in the need for additional housing and services to support new employment demand; and/or
  - Removal of an obstacle to additional growth and development, such as removing a constraint
    on a required public utility or service; for example, construction of a major sewer line with
    excess capacity through an undeveloped area.

Typically, the growth-inducing potential of a project would be considered significant if it fosters growth or a concentration of population above what is assumed in local and regional land use plans, or in projections made by regional planning authorities.

The proposed project consists of reconfiguration of the existing athletic fields and the installation of new field lighting, bleachers, concessions stand, restrooms, and other improvements on the existing Marina High School Campus. The proposed project would not directly lead to population growth as it does not propose any new housing units or new sources of employment. The proposed project would not indirectly lead to population growth through the expansion of

- infrastructure, as no major infrastructure is included. The proposed population would not induce population growth and no impact would occur. (1, 2)
- b) **No Impact.** The proposed project would not displace any individuals or result in the requirement of replacement housing elsewhere in the community. The proposed project involves reconfiguration of the existing athletic fields and the installation of new field lighting, bleachers, concessions stand, restrooms, and other improvements, and does not involve any new housing or infrastructure, nor does the proposed project propose any activities that would change, or otherwise affect regional communities, populations, or residences. As a result, there would be no impact related to the displacement of individuals or replacement of existing housing. (1, 2)

# 4.15 Public Services

## 4.15.1 Environmental Setting

Fire Protection: Fire protection to the proposed project site is provided by the City of Marina Fire Department (Fire Department). The Fire Department operates out of a single location located at 211 Hillcrest Avenue. The Fire Department consists of 15 sworn personnel and one non-sworn support staff<sup>18</sup>.

Police Protection: Police protection to the proposed project site is provided by the City of Marina Police Department (Police Department). The Fire Department operates out of a single location located at 211 Hillcrest Avenue. The Fire Department consists of 29 sworn personnel and nine non-sworn support staff<sup>19</sup>.

*Schools:* Public schools within the City, including the proposed project site, are operated by the District. As discussed previously, the proposed project site is located on the existing Marina High School campus.

*Parks*: Parks service within the City is provided by the City of Marina Recreation and Cultural Services Department (Recreation Department). The Recreation Department operates a youth center, teen center, and senior center, as well as a skate park, various community events, and several parks.

# 4.15.2 Environmental Impacts

Environmental Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>PUBLIC SERVICES.</b> Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
a) Fire protection?			$\boxtimes$	
b) Police protection?			$\boxtimes$	
c) Schools?				
d) Parks?				
e) Other public facilities?				

# 4.15.3 Explanation

a) Less than Significant Impact. The proposed project would consist of reconfiguration of the existing athletic fields and the installation of new field lighting, bleachers, concessions stand, restrooms, and other improvements. The Fire Department currently provides fire protection services to the proposed project site, including during practices and games currently held at the site. While construction of the proposed project would result in intensification of use on the

<sup>&</sup>lt;sup>18</sup> City of Marina. Fire Department. Available at: https://cityofmarina.org/24/Fire-Department

<sup>&</sup>lt;sup>19</sup> City of Marina. Police Department. Available at: https://www.cityofmarina.org/17/Police-Department

proposed project site compared to existing conditions, this construction would not result in a substantial increase in demand on fire services compared to existing conditions and would not require new or expanded fire protection facilities. This represents a less than significant impact. (1, 2, 3, 22)

- b) Less than Significant Impact. The proposed project would consist of reconfiguration of the existing athletic fields and the installation of new field lighting, bleachers, concessions stand, restrooms, and other improvements. The Police Department currently provides law enforcement services to the proposed project site, including during practices and games currently held at the site. While construction of the proposed project would result in some intensification of use on the proposed project site compared to existing conditions, this would not result in a substantial increase in demand on law enforcement services compared to existing conditions and would not require new or expanded police facilities. This represents a less than significant impact. (1, 2, 3, 24)
- No Impact. The proposed project would consist of reconfiguration of the existing athletic fields and the installation of new field lighting, bleachers, concessions stand, restrooms, and other improvements. The proposed project is located on the existing Marina High School campus. Construction of the proposed project would not result in increased demand on school services compared to existing conditions and would not require new or expanded educational facilities beyond what is included under the proposed project. No impact would occur. (1, 2)
- d) **No Impact.** The proposed project would consist of reconfiguration of the existing athletic fields and the installation of new field lighting, bleachers, concessions stand, restrooms, and other improvements and would not result in increases in population that would increase demand on local parks. No impact would occur. (1, 2)
- d) **No Impact.** The proposed project would consist of reconfiguration of the existing athletic fields and the installation of new field lighting, bleachers, concessions stand, restrooms, and other improvements and would not result in increases in population that would increase demand on other public services. No impact would occur. (1, 2)

# 4.16 Recreation

## 4.16.1 Environmental Setting

The parks service within the City is provided by the City's Recreation Department. The Recreation Department operates a youth center, teen center, and senior center, as well as a skate park, various community events, and several parks.

## 4.16.2 Environmental Impacts

En	vironmental Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
RE	CREATION. 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?				
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?				

# 4.16.3 Explanation

- a) **No Impact.** The proposed project consists of reconfiguration of the existing athletic fields and the installation of new field lighting, bleachers, concessions stand, restrooms, and other improvements. Construction of a new multi-use sports field on the Marina High School site would not result in increased use of existing neighborhood or regional park facilities compared to existing conditions. No impact would occur. (1, 2)
- b) Less than Significant Impact with Mitigation Incorporated. The proposed project consists of reconfiguration of the existing athletic fields and the installation of new field lighting, bleachers, concessions stand, restrooms, and other improvements on the existing Marina High School site. The proposed project consists of improvements to an existing school field and related onsite recreational facilities, which would result in adverse physical effects on the environment. However, mitigation (MMs BIO-1 through BIO-9, CR-1A and CR-1B, CR-2, GEO-1, and NSE-1 through NSE-3) has been provided as identified throughout this initial study to reduce this impact to a less than significant level. (1, 2)

# 4.17 Transportation

## 4.17.1 Environmental Setting

The proposed project is located on the existing Marina High School Campus. The project site is accessed via Patton Parkway, a two-lane, two-directional east-west roadway with a pedestrian sidewalk on the southern side and a bicycle trail on the northern side. Regional access to the project site is provided by State Route 1, a four-lane, two-directional north-south highway. Transit service to the Marina community is provided by Monterey-Salinas Transit (MST). The proposed project is served most directly by MST routes 17, 18, and 23, which stops along Del Monte Boulevard, approximately 2,000 feet to the northwest.

According to previous CEQA guidelines, a Project may have a significant effect on the environment if it would cause an increase in traffic that is substantial in relation to the street system's existing traffic load and capacity. Vehicle Miles Travelled (VMT) is now the metric to evaluate project impacts on transportation and circulation. VMT measures the number of miles travelled by motor vehicles that can be attributed to a project, regardless of passenger count. At the time of publication of this document, neither the City of Marina, MPUSD, nor the County of Monterey have established a methodology or thresholds of significance for VMT.

AMBAG's 2040 Metropolitan Transportation Plan/Sustainable Communities Strategy provided a VMT forecast for Monterey County, San Benito County, and Santa Cruz County for the year 2040 utilizing 2015 conditions as a baseline. AMBAG forecasts an approximately 24 percent increase in VMT in 2040 compared to 2015 measurements, as described in **Table 7** below.

Table 7 AMBAG 2015 VMT and 2040 Forecasted Daily VMT						
County 2015 2040 Forecast						
Monterey	9,764,441	12,091,679				
San Benito	1,382,599	2,119,312				
Santa Cruz	4,688,870	5,476,518				
AMBAG Regional Total 15,835,910 19,687,508						
Source: AMBAG, 2040 Metropolitan Tran	Source: AMBAG, 2040 Metropolitan Transportation Plan/Sustainable Communities Strategy, June 2018					

The Governor's Office of Planning and Researched prepared a Technical Advisory on Evaluating Transportation Impacts (OPR 2018) to provide guidance on conducting analyses consistent with SB 743 and the revised CEQA Guidelines. <sup>20</sup> Per the Technical Advisory, projects that would reduce vehicle trips compared to existing conditions generally may be assumed to cause a less-than-significant transportation impact, providing that there is no substantial evidence indicating otherwise (OPR 2018).

<sup>&</sup>lt;sup>20</sup> https://opr.ca.gov/docs/20190122-743\_Technical\_Advisory.pdf

## 4.17.2 Environmental Impacts

En	vironmental Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
TR	ANSPORTATION/TRAFFIC. Would the project:				
a)	Conflict with a plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?			$\boxtimes$	
b)	Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?			$\boxtimes$	
c)	Substantially increase hazards due to a geometric design feature (for example, sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
d)	Result in inadequate emergency access?				

## 4.17.3 Explanation

a) Less than Significant Impact. The proposed project consists of the reconfiguration and improvement of the existing athletic fields at Marina High School. No work on public roadways would occur as a result of the proposed project. As a result, the direct impacts of construction would not substantially impact the area's public roadways. Construction will not require any temporary closure of any lane or any other part of the City's circulation system. Construction-related vehicle trips would be generated from a variety of sources during construction of the project including, but not limited to, haul trucks, material delivery trucks, and construction workers. Given temporary duration of construction activity and existing capacity on local roadways, project construction is not anticipated to conflict with any applicable plan, policy or ordinance related to the transportation system that could result in a substantial adverse environmental effect.

A reconfiguration and expansion of the existing parking lot is included as part of the proposed project. However, the parking lot would not be considered a public roadway due to its location entirely within the Marina High School campus. The proposed project would result in a change of time for certain school games and a minimal increase in traffic during athletic events, as described in **Table 2**. However, the increased traffic would largely be confined to the Marina High School campus and associated with specific evening events. In addition, the proposed project would take existing trips from Marina to Monterey Peninsula College and Seaside High School for off-site "home" football games and convert these to shorter trips to Marina High School. The proposed project would not substantially impact local transit, roadways, or bicycle and pedestrian facilities. As a result, the proposed project would have a less than significant impact with respect to conflicting with a program, plan, ordinance, or policy addressing the circulation system. (1, 2, 3)

- b) Less than Significant Impact. VMT was adopted as the appropriate metric for evaluating transportation impacts with the adoption of State CEQA Guidelines Section 15064.3 on December 28, 2018. The VMT metric replaced the previously widespread Level of Service (LOS) evaluation with the intent to shift the focus of transportation impact analysis from traffic congestion to total greenhouse gas emissions from vehicle travel. CEQA Guidelines Section 15064.3 subdivision (b) contains four criteria for analyzing the transportation impacts from a project. The proposed project's consistency with these criteria is evaluated below:
  - Section 15064.3(b)(1) addresses land use projects. The proposed project consists of the reconfiguration and improvement of the existing athletic fields at Marina High and would be considered a land use project. CEQA Guidelines Section 15064.3(b)(1) describes that projects with specified proximity to "major" or "high quality" transit should be presumed to cause a less than significant transportation impact. As discussed above, the proposed project is served most directly by MST routes 17, 18, and 23, which stops along Del Monte Boulevard, approximately 2,000 feet to the northwest. The proposed project site is not located near a major transit hub. As a result, the transit service in the vicinity of the project would not be considered "major" or "high quality". Therefore, this aspect of CEQA Guidelines Section 15064.3 subdivision (b)(1) does not apply to the proposed project.

This section also states that projects which would decrease VMT compared to existing conditions would be presumed to have a less than significant impact. Traffic studies conducted for Valley High Sports Complex in Santa Ana Unified School District, St. Vincent Sports Complex at St. Ambrose University, and Carmel High School Stadium in Carmel, California, observed average vehicle occupancy of five, four, and 3.24 persons per vehicle, respectively (Kimley Horn 2023). Current attendance for off-site "home" football games is estimated to be 100 people, and attendance is projected to increase to 300 people with implementation of the proposed project. Assuming that trips would originate from the approximate center of the City of Marina's downtown area (assumed to be the 200 block of Reservation Road)21, the trip length for off-site home games at Seaside High would be approximately 6.4 miles and the trip length for off-site home games at Monterey Peninsula College would be approximately 9.7 miles, compared to a trip length of approximately 1.4 miles for future games at Marina High. Assuming an average vehicle occupancy of approximately four persons per vehicle (25 total vehicles) and a trip length of approximately ten (10) miles, regular season home football games at MPC currently generate 50 one-way traffic trips (accounting for 25 trips to and 25 trips from MPC) and 500 VMT under existing conditions. Assuming an average vehicle occupancy of approximately four persons per vehicle (25 total vehicles) and a trip length of approximately 6.4 miles, regular season home football games at Seaside High currently generate 50 one-way traffic trips (accounting for 25 trips to and 25 trips from Seaside High) and 320 VMT under existing conditions. With implementation of the proposed project, home games would be held at Marina High, with a vehicle occupancy of approximately four persons per vehicle (75 total vehicles) and a trip length of 1.4 miles, regular season home football games currently generate 150 one-way traffic trips (accounting for 75 trips to and 75 trips from Marina High) and 210 VMT six times per year as identified in Table 2. Therefore, the proposed project would reasonably be expected to result in decreased

<sup>&</sup>lt;sup>21</sup> This location was chosen due to its central location in the City's downtown area and the proximity of high-density residential uses.

VMT per trip when comparing the length of the existing vehicle trips occurring to Seaside High School and Monterey Peninsula College (associated with Marina High School's six current "home" football games) compared to the length of vehicle trips to future home games at Marina High School, resulting in an overall decrease in VMT for specific events with the proposed project compared to existing conditions. For these reasons, the proposed project is consistent with this aspect of CEQA Guidelines Section 15064.3 subdivision (b)(1), as discussed further below.

- Section 15064.3(b)(2) addresses transportation projects. The proposed project consists of the reconfiguration and improvement of the existing athletic fields at Marina High and does not include any new public transportation or roadway systems. Therefore, this section does not apply to the proposed project.
- Section 15064.3(b)(3), Qualitative Analysis, states that if existing models or methods are not available to estimate the vehicle miles traveled for the project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. As stated above, neither the City of Marina, MPUSD, nor the County of Monterey have officially established or adopted a methodology or thresholds of significance for VMT. A qualitative analysis is provided herein and therefore the proposed project is consistent with this aspect of CEQA Guidelines Section 15064.3 subdivision (b).
- Section 15064.3(b)(4), Methodology, states that lead agencies such as MPUSD have discretion to choose the most appropriate methodology to evaluate VMT subject to other applicable standards such as CEQA Guidelines Section 15151 (standards of adequacy for EIR analyses). The proposed project uses the screening threshold for small projects recommended in OPR's MPUSD has not formally adopted VMT thresholds to date. Therefore, the 2018 VMT Technical Advisory is used for the proposed project and no alternate threshold is proposed. Therefore, the proposed project is consistent with this aspect of CEQA Guidelines Section 15064.3 subdivision (b).

As discussed above, per OPR's 2018 VMT Technical Advisory, projects which decrease VMT compared to existing conditions generally may be assumed to cause a less-than-significant transportation impact, providing that there is no substantial evidence indicating otherwise (OPR 2018). Therefore, the VMT attributable to the project would result in a less-than-significant VMT impact if it would decrease VMT compared to existing conditions, which represent the thresholds of significance for VMT for the proposed project.

## Construction

Construction of the proposed project could generate vehicle trips associated with hauling equipment and materials to and from the site, as well as trips associated with construction worker commute. The number of trips would vary based on the phase and duration of the construction activities and are not known with certainty at this time. However, the proposed project consists of the reconfiguration of an existing athletic field, the reconfiguration of the existing parking lot, and the addition of a concession stand, restroom, and plaza over a period of 14 months. The scale and intensity of the proposed project would not be expected to result in vehicle trips meeting or exceeding 110 new vehicle trips per day due to construction activities being spread out through the overall 14-month length of the construction period and the limited overall scale of construction activities associated with the proposed project. In addition, these trips are

temporary in nature and would cease upon completion of the proposed project. Therefore, construction period vehicle trips would not result in a permanent VMT increase compared to existing conditions. As a result, the proposed project would have a less than significant VMT impact during construction.

## Operation

The proposed project would introduce new athletic facilities, field lighting, and other improvements to the existing Marina High School campus. These improvements would allow for additional athletic events, most notably nighttime football games, that would not be possible under existing conditions. The proposed field lighting would allow Marina High School to host night-time football games which are currently hosted at Monterey Peninsula College (approximately seven miles south of the site) or Seaside High (approximately four miles south of the site). The Marina High School football season occurs between August and November with six (6) home games typically occurring on Fridays. The proposed field lighting would allow these games to be played at Marina High School rather than offsite locations. Game spectators typically consist of Marina High School students, family members, and students and family members of the visiting team. Games would typically be scheduled to start shortly after the conclusion of regular school hours, with junior varsity games being played first and varsity games to follow. The District estimated that home football games would attract an average crowd of 300 spectators as noted in **Table 1**. Based on the Kimley Horn study cited previously, the average vehicle occupancy is anticipated to be four (4) persons per vehicle.

Using the estimated attendance provided by the District, each home game could result in approximately 75 vehicle trips per game. Spread over a year, the proposed project would result in approximately 450 total vehicle trips previously traveling to and from Monterey Peninsula College or Seaside High School accessing the Marina High School site instead.

It is important to note that a minimum of 25 of these vehicle trips would not be considered "new" trips as the trips would already occur to the events previously held at Monterey Peninsula College or Seaside High School and would be diverted to Marina High School as a result of the proposed project. These events would continue to be scheduled annually with or without implementation of the proposed project. The overall increase in attendance at home football games is anticipated to increase from 100 to 300 as a result of the proposed project. However, due to the distance to Marina High School compared to Monterey Peninsula College or Seaside High School, the overall VMT would be less with implementation of the proposed project compared to current conditions as Marina High School students and families would have to travel a lesser distance to games at Marina High School. As discussed above, assuming that trips would originate from 200 block of Reservation Road, as a central point within the City's downtown area in close proximity to highdensity residential uses, the trip length for off-site home games at Seaside High would be approximately 6.4 miles and the trip length for off-site home games at Monterey Peninsula College would be approximately ten (10) miles without the proposed project, compared to a trip length of approximately 1.4 miles for future games at Marina High with the proposed project. Additionally, playing games at Marina High School would further reduce trips as some students would stay on campus following the conclusion of the school day. The proposed project would facilitate nighttime use of the athletic fields for practices and games for other school sports including baseball and soccer as described in Table 2. However, these events would take place immediately following school hours and the participants would already be located on campus.

The average VMT per vehicle trip would decrease from either ten (for games at MPC) or 6.4 (for games at Seaside High) to 1.4 (for games at Marina High) and the overall VMT per game would decrease from either 500 (for games at MPC) or 320 (for games at Seaside High) to 210 (for games at Marina High). Therefore, even with the increase in average attendance from 100 to 300 persons per game, both the average VMT per vehicle trip and overall VMT per game would be substantially lower with the operation of the proposed project compared to existing conditions as the home athletic events would be held at Marina High School and would no longer be held at further away offsite locations such as Seaside High School and Monterey Peninsula College.

The proposed project would clearly lessen overall VMT compared to existing conditions due to home athletic events being located at Marina High School compared to further away, offsite locations such as Seaside High School and Monterey Peninsula College. Therefore, using OPR guidance, because the project would reduce overall VMT compared to existing conditions, this impact related to VMT would not conflict or be inconsistent with CEQA Guidelines section 15064.3(b).

### Conclusion

Based on the analysis above, the project would be consistent with State CEQA Guidelines Section 15064.3 subdivision (b), representing a less than significant impact. (1, 2, 3, 25)

- c) Less than Significant Impact. The proposed project would reconfigure the existing parking lot and add a new parking lot south of the athletic fields, (Figures 5a-5d) but would not result in any changes to public roadways. The reconfigured parking lot has been designed to improve safety for student drop-off during both regular school hours and after-school events compared to existing conditions, including limiting portions of the lot to one-way traffic. Pedestrian crosswalks for the lower parking lot would be constructed to allow maximum visibility of pedestrians to vehicles accessing the lower parking lot. The reconfigured parking lot would not substantially increase hazards due to a geometric design feature or an incompatible use. This represents a less than significant impact. (1, 2, 3)
- d) Less than Significant Impact. As stated above in impact c), the proposed project would not result in changes to public roads that would be used for emergency response at the project site. The reconfigured parking lot would provide emergency vehicle access. Final design of emergency vehicle access would require approval from the Department of State Architect, which would ensure that the proposed project provides adequate access to emergency vehicles. This represents a less than significant impact. (1, 2, 3, 4)

# 4.18 Tribal Cultural Resources

# 4.18.1 Environmental Settings

California Assembly Bill (AB) 52, in effect since July 2015, provides CEQA protections for tribal cultural resources. All lead agencies approving projects under CEQA are required, if formally requested by a culturally affiliated California Native American Tribe, to consult with such tribe regarding the potential impact of a project on tribal cultural resources before releasing an environmental document. Under California Public Resources Code §21074, tribal cultural resources include site features, places, cultural landscapes, sacred places, or objects that are of cultural value to a tribe and that are eligible for or listed on the California Register of Historical Resources (CRHR) or a local historic register, or that the lead agency has determined to be of significant tribal cultural value.

On February 7, 2023, MPUSD contacted the Native American Heritage Commission (NAHC) to request a search of the Sacred Lands File of Native American cultural resources and the current list of Native American contacts for the project location in order to initiate consultation under AB 52. The NAHC responded on February 19, 2023, that the search of the Sacred Lands File for the immediate area of the project was negative. The NAHC also provided a list of Native American Contacts.

MPUSD contacted the nine Native American groups and/or individuals identified by NAHC in fulfillment of AB 52 requirements. MPUSD sent letters to these contacts via certified USPS mail on February 24, 2023. A sample letter is presented in **Appendix F**. These letters consisted of the project description and objective and a project location map. The parties contacted were asked to consider the letter and project information as notification of a proposed project as required under CEQA and AB 52. Comments were requested in writing within 30 days. Return contact information was provided to facilitate multiple options for responses by letter, email, or phone. Two letters were returned undelivered. MPUSD attempted to contact the recipients by phone. No responses were received to the initial or the subsequent AB 52 outreach.

## 4.18.2 Environmental Impacts

Environmental Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>TRIBAL CULTURAL RESOURCES.</b> Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or				

Environmental Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>TRIBAL CULTURAL RESOURCES.</b> Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section5024.1, the lead agency shall consider the significance of the resource to a California Native America Tribe.				

# 4.18.3 Explanation

- a) **No Impact.** As discussed in **Section 4.5.3**, there are no historical structures or resources within or adjacent to the proposed project site. The project consists of the reconfiguration of the existing athletic fields and the installation of new field lighting, bleachers, concessions stand, restrooms, and other improvements and does not involve the removal of any existing structures or impacts to historic resources, as none occur within or adjacent to the site. As a result, the proposed project would have no impact on eligible historic resources. (1, 2, 3)
- b) Less than Significant Impact with Mitigation Incorporated. As discussed above, MPUSD contacted the nine Native American groups and/or individuals identified by NAHC in fulfillment of AB 52 requirements. MPUSD sent letters to these contacts via certified USPS mail on February 24, 2023. No requests for consultation were received in response to the AB 52 outreach letters sent out to identified tribal contacts. As a result, no tribal resources are known or expected to occur on the site. However, previously undocumented tribal resources could potentially be discovered on the site during ground disturbing activities. The project would implement Mitigation Measures CR-1 and CR-2 (see Section 4.5.3) to reduce impacts related to the discovery of unknown cultural and/or tribal resources to a less than significant level. (1, 2, 3)

# 4.19 Utilities and Service Systems

# 4.19.1 Environmental Setting

Utilities and services are furnished to the project area by the following providers:

Wastewater Treatment: Monterey One Water (M1W)

Water Service: Marina Coast Water District (MCWD)

Solid Waste: GreenWaste Recovery

■ Natural Gas & Electricity: 3CE, PG&E

# 4.19.2 Environmental Impacts

En	vironmental Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
UT	ILITIES 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 would cause significant environmental effects?				
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?				
c)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
d)	Generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				
e)	Comply with federal, state, and local management and reduction statuses and regulations related to solid waste?				

## 4.19.3 Explanation

- a) Less than Significant Impact. The proposed project consists of reconfiguration of the existing athletic fields and the installation of new field lighting, bleachers, concessions stand, restrooms, and other improvements, including the addition of a new concessions stand and restrooms. These project components would require additional water and wastewater service. However, Marina High School has existing water and wastewater infrastructure in place. These project components would be connected to the existing utility systems and would not require the construction of new water treatment facilities or the expansion of any existing facilities. The proposed project has been designed so as to not interfere with any existing utilities and would not require relocation of any existing utilities. This represents a less than significant impact. (1, 2, 3)
- b) Less than Significant Impact. Water service to Marina High School is provided by MCWD. As stated above, the proposed project includes construction of a new concessions stand and restrooms which would use potable water. This would increase water use on the project site compared to existing conditions. The restrooms and concessions stand would connect to the existing water infrastructure currently serving Marina High School and would represent a minor increase in the school's water demand. The proposed project also includes the replacement of the existing grass athletic fields with 7,889 sf of new synthetic turf that does not require irrigation, which would offset the increase in water use from the concessions stand and restroom (see also Section 4.10 Hydrology and Water Quality). In addition, MCWD has indicated they have ample water supplies to serve their existing customers, including Marina High School, for foreseeable normal, dry, and multiple dry years. This represents a less than significant impact. (1, 2, 26)
- c) Less than Significant Impact. Wastewater treatment service to Marina High School is provided by M1W. As stated above, the proposed project includes construction of a new concessions stand and restrooms which would generate wastewater. The restrooms would connect to the existing wastewater infrastructure currently serving Marina High School and would represent a minor increase in the school's overall wastewater demand. As a result, the proposed project would have a less than significant impact related to increasing wastewater generation. (1, 2)
- d) Less Than Significant Impact. Solid waste produced during construction and demolition, as well as operations of the proposed project would be sent to the Monterey Peninsula Landfill and Materials Recovery Facility located north of the City of Marina. The Monterey Peninsula Landfill has an estimated remaining capacity of 48,560,000 cubic yards (CY)<sup>23</sup>. The proposed project is located within the existing Marina High School campus, which is served by the Monterey Peninsula Landfill. The proposed project would result in a minimal increase in solid waste generation compared to existing conditions. This represents a less than significant impact. (1, 2, 27)

<sup>22</sup> https://www.mcwd.org/docs/engr\_files/edfp/uwmp/MCWD\_2020\_UWMP\_20210630.pdf

<sup>&</sup>lt;sup>23</sup> CalRecycle, SWIS Facility/Site Activity Details - Monterey Peninsula Landfill (27-AA-0010). Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2642?siteID=1976

e) Less Than Significant Impact. The California Integrated Waste Management Act (AB 939) requires cities and counties to divert a minimum of 50 percent of their solid waste from landfills. Waste disposal for the proposed project would be provided by GreenWaste Recovery, consistent with the existing service for Marina High School. GreenWaste transfers collected waste for processing at the Monterey Regional Waste Management District (MRWMD) at the Monterey Peninsula Landfill. MRWMD meets or exceeds the 50 percent diversion rate mandated by AB 939.<sup>24</sup> (1, 2, 28)

<sup>24</sup> https://regenmonterey.org/materials-recovery-facility/#1510161385263-418f4e78-ad16

# 4.20 Wildfire

## 4.20.1 Environmental Setting

The proposed project site is located within a Local Responsibility Area according to the CalFire fire hazard severity zone map viewer<sup>25</sup>. The project site is not located within a very high fire severity zone (VHFSZ).

# 4.20.2 Environmental Impacts

En	vironmental Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
	LDFIRE. If located in or near state responsibility areas or ould the project:	lands classifie	ed as very high fi	re hazard sever	ity zones,
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?				
b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				
c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impact to the environment?				
d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability or drainage changes?				

# 4.20.3 Explanation

a-d) **No Impact.** The proposed project is not located in or near a state responsibility area and is not located on lands classified as a very high fire hazard severity zone. As a result, the proposed project would have no impact with respect to impairing an adopted emergency response plan, exacerbating wildfire due to slope and other factors, requiring installation or maintenance of infrastructure that would exacerbate fire risk, or exposing people or structures to significant risk as a result of runoff, post-fire slope instability, or drainage changes. (1, 2, 3, 29)

<sup>&</sup>lt;sup>25</sup> CalFire, Fire Hazard Severity Zones Map. Available at: <a href="https://egis.fire.ca.gov/FHSZ/">https://egis.fire.ca.gov/FHSZ/</a>

# 4.21 Mandatory Findings of Significance

# 4.21.1 Environmental Impacts

Environmental Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
MANDATORY FINDINGS OF SIGNIFICANCE. Does the project	t:			
a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number, or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			$\boxtimes$	

## 4.21.2 Explanation

a) Less than Significant Impact with Mitigation. The proposed project would not 1) degrade the quality of environment, 2) substantially reduce the habitat of a fish or wildlife species, 3) cause a fish or wildlife population to drop below self-sustaining levels, 4) threaten to eliminate a plant or animal community, 5) reduce the number or restrict the range of a rare or endangered plant or animal, or 6) eliminate important examples of major periods of California history or prehistory. The proposed project would result in temporary construction-related impacts that would be mitigated to a less-than-significant level through the incorporation of mitigation measures identified in this Initial Study. All operational impacts associated with the proposed project would also be reduced to a less-than-significant level through the incorporation of mitigation.

The proposed project could result in potentially significant impacts on candidate, sensitive, or special status species. However, implementation of **Mitigation Measures BIO-1** and **BIO-10** identified above under **Section 4.4 Biological Resources**, would reduce these impacts to less-than-significant levels.

The proposed project site is not known to contain unique archaeological or tribal cultural resources. However, construction of the proposed project could result in the discovery of previously unknown archaeological or tribal cultural resources. However, implementation of Mitigation Measures CR-1A, CR-1B, and CR-2 identified above under Section 4.5 Cultural Resources, would reduce these impacts to less-than-significant levels.

The proposed project could result in potentially significant temporary noise and vibration impacts during construction. However, implementation of **Mitigation Measures NSE-1** and **NSE-3** identified above under **Section 4.13 Noise**, would reduce these impacts to less-than-significant levels. In addition, the proposed project could result in potentially significant evening and nighttime noise impacts at nearby sensitive receptors associated with athletic events. However, implementation of **Mitigation Measure NSE-2** identified above under **Section 4.13 Noise**, would reduce this impact to a less-than-significant level. (Source 1-29)

- b) Less than Significant Impact. In order to determine whether a cumulative effect requires an EIR, the lead agency shall consider whether the impact is significant and whether the effects of the project are cumulatively considerable (CEQA Guidelines §15064(h)(1). This IS/MND contains mitigation to ensure that all impacts would be minimized to a less-than-significant level. As a result, construction and operation of the proposed project would be required to comply with identified mitigation and applicable policies as described in this IS/MND.
  - CEQA allows a lead agency to determine that a project's contribution to a potential cumulative impact is not considerable and thus not significant when mitigation measures identified in the initial study will render those potential impacts less than considerable (CEQA Guidelines 15064(h)(2). The proposed project would not result in cumulatively considerable impacts. Noise impacts were found to be less than cumulatively considerable. Other impacts, including criteria air emissions, would be less than cumulatively considerable with adherence to development standards and regulations. (Source 1-29)
- c) Less than Significant Impact. The proposed project consists of the reconfiguration of the existing athletic fields and the addition of field lighting at the existing Marina High School campus. The Proposed Project could result in adverse environmental effects that could result in substantial adverse direct or indirect impacts on human beings. Specifically, the proposed project would result in impacts from generation of noise exceeding established thresholds at nearby sensitive receptors during construction and operation of the proposed project, and impacts related to vibration at sensitive receptors during construction. However, implementation of Mitigation Measures NSE-1 through NSE-3 would reduce these impacts to a less than significant level. (Source 1-29)

This Page Intentionally Left Blank

# **Chapter 5. References**

### **LEAD AGENCY**

## **Monterey Peninsula Unified School District**

Ryan Altemeyer, Associate Superintendent of Business Services Heidi Lizarbe, Senior Administrative Assistant

#### REPORT PREPARATION

# Denise Duffy & Associates, Inc.

Denise Duffy, Principal
Patric Krabacher, Senior Environmental Scientist/Certified Arborist
Robyn Simpson, Associate Planner
Liz Camilo, Associate Environmental Scientist
Oliviya Wyse, Associate Planner
Troy Lawson, Assistant Planner
Luke Hiserman, Assistant Planner

## **Design Imaging Studios**

Patrick Ghiringhelli, 3D Design Director

## **PROJECT TEAM**

## **Weston Miles Architects**

Lesley Miles AIA, LEED AP, Principal Charles Weston, Principal Designer Sharon Morris, CID, Senior Designer/Project Manager

# **MUSCO Sports Lighting, LLC**

Bob Crookham, Sales Executive Alicia Dieleman, Sales Coordinator Bryce Miles, Project Engineer

# **Aurum Consulting Engineers**

Jhim Handrex Meza, P.E., Electrical Engineer II Najib Anwary, Senior Project Manager

# RGM Kramer, Inc.

Rick Mickey, Senior Project Manager Nadov Rader, Project Manager

## **BIBLIOGRAPHY**

CalFire, Fire Hazard Severity Zones Map. Available at: <a href="https://egis.fire.ca.gov/FHSZ/">https://egis.fire.ca.gov/FHSZ/</a>

- California Department of Conservation, California Important Farmland Finder, 2023. Available at: <a href="https://maps.conservation.ca.gov/DLRP/CIFF/">https://maps.conservation.ca.gov/DLRP/CIFF/</a>
- California Department of Conservation, EQ Zapp: California Earthquake Hazards Zone Application, 2023. Available at: https://www.conservation.ca.gov/cgs/geohazards/eq-zapp
- California Department of Conservation, Mineral Resource Zone Map for Construction Aggregate in the Monterey Bay Production-Consumption Region, 2021.
- California Department of Water Resources. Inundation Map Viewer. Available at: <a href="https://fmds.water.ca.gov/webgis/?appid=dam\_prototype\_v2">https://fmds.water.ca.gov/webgis/?appid=dam\_prototype\_v2</a>
- CalRecycle, SWIS Facility/Site Activity Details Monterey Peninsula Landfill (27-AA-0010). Available at: <a href="https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2642?siteID=1976">https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2642?siteID=1976</a>
- Cleary Consultants, Inc., Preliminary Geotechnical Recommendations, Multi-Use Sports Field Improvements Project, 2022.
- Cleary Consultants, Inc., Environmental Soil Screening Test Results, New Multi-Sports Synthetic Field, 2023.
- Coffman Associates, Inc., Final Airport Master Plan for Marina Municipal Airport, May 2018.
- Coffman Associates, Inc., Marina Municipal Airport Land Use Compatibility Plan, May 2019
- Denise Duffy & Associates, *Arborist Report for the Marina High School Multi-Sports Field Project*, December 2023.
- Denise Duffy & Associates, Marina High School Multi-Sports Field Project Biological Resources Report, December 2023.
- Department of Toxic Substance Control, DTSC's Hazardous Waste and Substances Site List Site Cleanup (Cortese List), 2023.
- Digital Imaging Studios, Visual Simulation, June 2023.
- Federal Emergency Management Agency, *Flood Insurance Rate Map, Map Number 06053C0191H, Panel 191 of 2050*, 2017.
- Furuya, Alex, We Finally Know How Bright Lights Affect Birds Flying at Night, Audubon, 2017 http://www.audubon.org/news/we-finally-know-how-bright-lights-affect-birds-flying-night.
- Huppop, O., Huppop, K., Dierschke, J., Hill, R., Bird collisions at an offshore platform in the North Sea. British Trust for Ornithology, 2016.
- International DarkSky Association, Official Website, 2023. Available at: <a href="https://darksky.org/what-we-do/darksky-approved/">https://darksky.org/what-we-do/darksky-approved/</a>
- Kimley-Horn. 2023. Jesuit High School Stadium Lighting Local Transportation Analysis. March 10, 2023.

Marina, City of, *Final Environmental Impact Report on the Draft Marina General Plan*, August 2000. Available at: <a href="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidId="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidId="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidId="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidId="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidId="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidId="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidId="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidId="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidId="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidId="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidId="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidId="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidId="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidId="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidId="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidId="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidId="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidId="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidId="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf?bidId="https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf."https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf."https://www.cityofmarina.org/DocumentCenter/View/1158/final-eir-pdf.

\*\*The content of the content of the

Marina, City of, Fire Department. Available at: https://cityofmarina.org/24/Fire-Department

Marina, City of, Police Department. Available at: https://www.cityofmarina.org/17/Police-Department

Marina, City of, Marina Municipal Airport Rules and Regulations, 2014.

Marina Coast Water District, 2020 Urban Water Management Plan, June 2021.

Monterey, County of, 2010 Monterey County General Plan, 2010.

Monterey Bay Air Resources District, CEQA Air Quality Guidelines, Revised February 2008.

Monterey Bay Air Resources District. 2017. 2012-2015 Air Quality Management Plan.

Monterey Peninsula Unified School District, *Marina High School & Joint Use Community Recreation Facilities*, July 2007.

Monterey Peninsula Unified School District, *Draft Environmental Impact Report for the Marina Middle School, High School & Joint Use Community Recreation Facilities.* January 2010

Ogden, Lesley J. Evans, Collision Course: The Hazards of Lighted Structures and Windows to Migrating Birds, 1996

ReGen Monterey, *Materials Recovery Facility 2.0*, 2023. Available at: https://regenmonterey.org/materials-recovery-facility/#1510161385263-418f4e78-ad16

Rosenberg, Lewis, I. and Clark, Joseph, C. 2001. Paleontological Resources of Monterey County, California. Available at http://purl.standford.edu/xc583rw0668.

Rowse, E.G., Lewanzik, D., Stone, E.L., Harris, S., Jones, G, Dark Matters: The Effects of Artificial Lighting on Bats. Bats in the Anthropocene: Conservation of Bats in a Changing World, 2015.

Schoeman, M.C., Light pollution at stadiums favors urban exploiter bats. Animal Conservation. Volume 19, Issue 2, 2015.

- U.S. Army Corps of Engineers, *Installation-Wide Multispecies Habitat Management Plan for Former Fort Ord, California*, 1997.
- U.S. Census, City of Marina, Commuting Characteristics, 2023. Available at: https://data.census.gov/table?q=Marina+city;+California+commute&tid=ACSST5Y2021.S0801

## **CHECKLIST SOURCES**

- 1. CEQA Guidelines and professional expertise of consultant.
- 2. Project Plans
- 3. City of Marina General Plan & EIR

- 4. MUSCO Lighting Product Information
- 5. Visual Simulation
- 6. Biological Resources Report
- 7. Arborist Report
- 8. Important Farmland Finder
- 9. MBARD 2012-2015 AQMP
- 10. MBARD CEQA Guidelines
- 11. CalEEMod Modeling
- 12. Fort Ord HMP
- 13. County General Plan
- 14. Marina High School & Joint Use Community Recreation Facilities Initial Study
- 15. EQZAPP
- 16. Preliminary Geotechnical Recommendations
- 17. Environmental Soil Screening Test Results
- 18. Cortese HazMat Listings
- 19. Marina Airport Plans
- 20. CalFire Hazard Severity Zone Map
- 21. FEMA Flood Map
- 22. Mineral Resource Zone Map for Construction Aggregate in the Monterey Bay Production-Consumption Region, 2021
- 23. Marina Fire Department Website
- 24. Marina Police Department Website
- 25. US Census Bureau Website
- 26. MCWD UWMP
- 27. SWIS Facility Details Monterey Peninsula Landfill
- 28. ReGen Monterey Website
- 29. CalFire Hazard Severity Zone Viewer