Appendix A

Initial Study, Notice of Preparation (NOP), and NOP Comments

Novato Unified School District

San Marin High School Stadium Lights Project

Initial Study

May 2017

rincon

Environmental Scientists Planners Engineers

San Marin High School
Stadium Lights Project

Initial Study

Prepared by:

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May 2017

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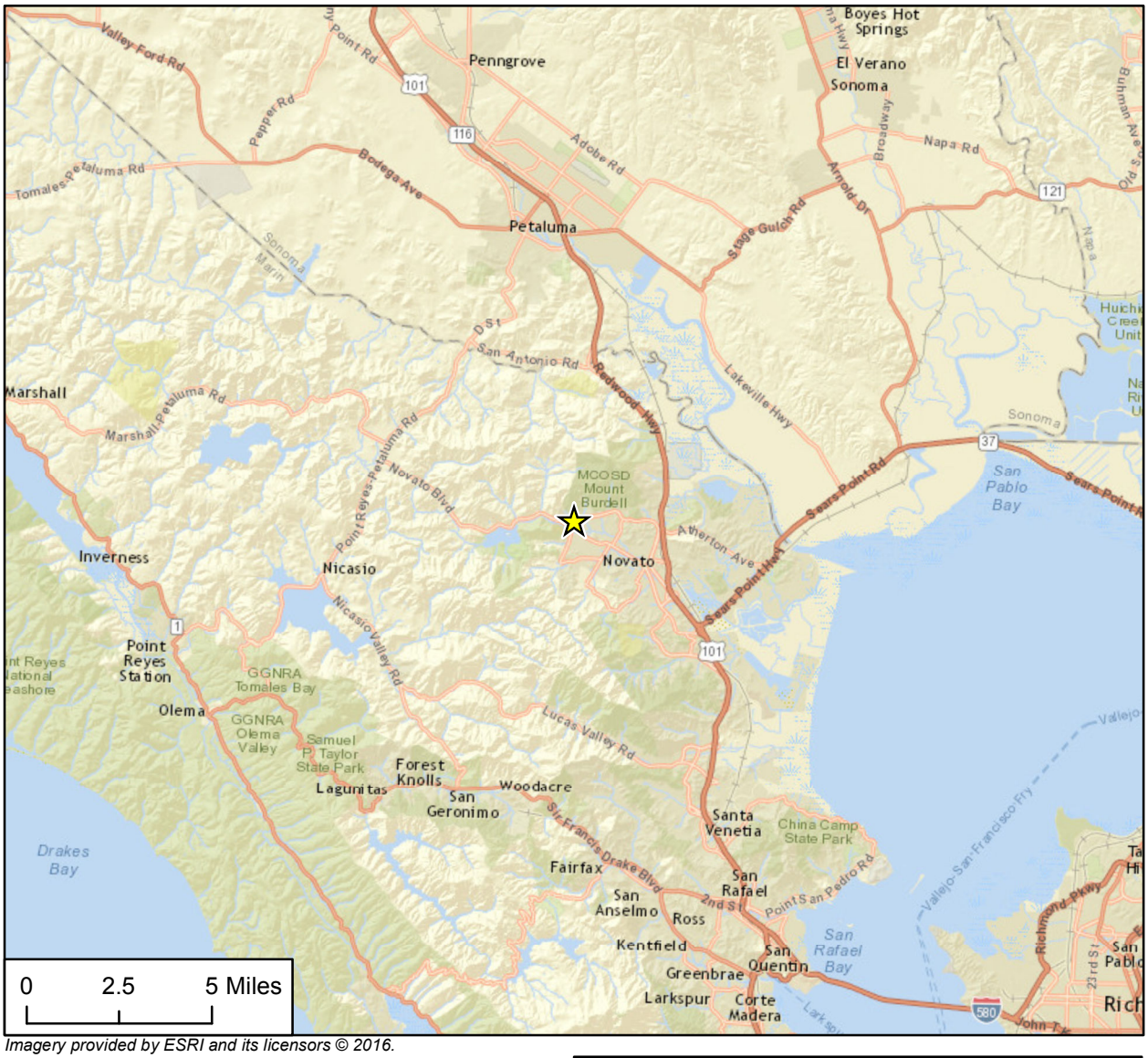
INITIAL STUDY

1. PROJECT TITLE	San Marin High School Stadium Lights Project
2. LEAD AGENCY NAME AND ADDRESS	Novato Unified School District 1015 7th Street Novato, California 94945
3. CONTACT PERSON AND PHONE NUMBER	Yancy Hawkins, Assistant Superintendent of Business and Operations (415) 897-4260
4. PROJECT LOCATION	The project location is the athletic field area in the northeastern portion of the San Marin High School campus, located at 15 San Marin Drive, just north of its intersection with Novato Boulevard, in the city of Novato. Figure 1 shows the project site's regional location and Figure 2 shows the location of the proposed athletic field improvements at the school site.
5. PROJECT SPONSOR'S NAME	Novato Unified School District (Same as Lead Agency)
6. GENERAL PLAN DESIGNATION	City of Novato: Community Facilities (CF)
7. ZONING	City of Novato: Community Facilities (CF)



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Project Location

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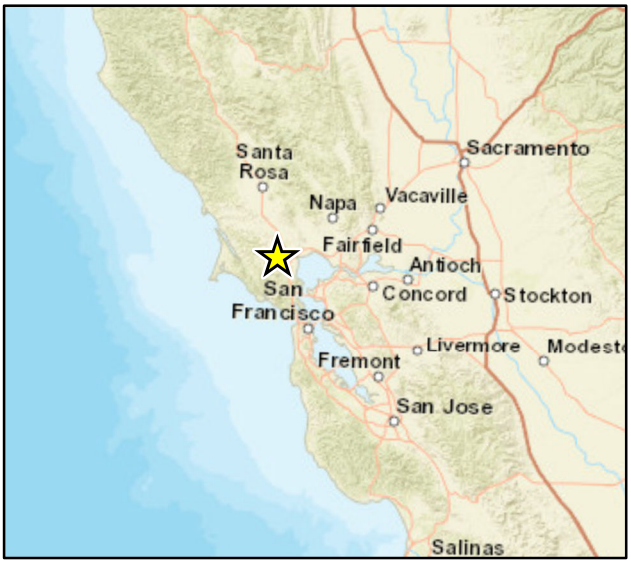

Regional Location

Figure 1

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San Marin High School Site Location Figure 2

8. DESCRIPTION OF PROJECT – PROJECT COMPONENTS

The proposed project would involve installation of athletic field lights, including an eight-pole stadium lighting system, and an upgraded public address system at San Marin High School. The project would also expand the hours of use for the athletic field by allowing use of the field during non-daylight hours and non-school hours. The stadium lights would not be used for community or non-school activities.

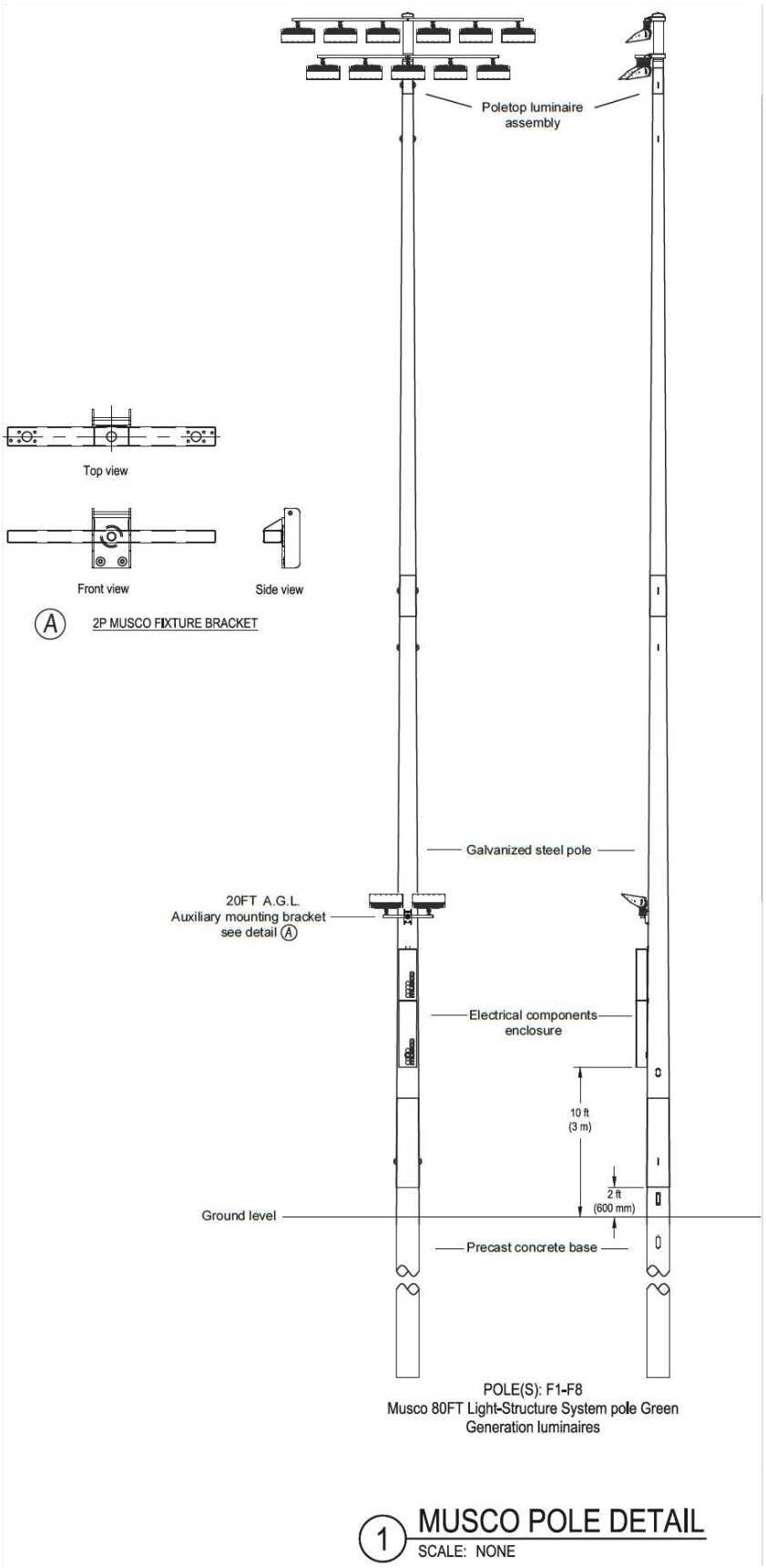
The Novato Unified School District (District) proposes to install permanent stadium lighting that would consist of a modern, energy-efficient, LED system that would minimize the glare of the stadium lights and reduce the amount of illumination outside of the stadium fields compared to older lighting systems. In addition, the proposed project would involve upgrades to the public address system. The current public address system creates unintended noise that is not properly directed within the stadium. The upgrade would allow the system to focus and contain sound within the stadium.

Lighting

The lighting installation at San Marin High School's stadium would generally consist of two sets of poles. The first set of poles would support lighting fixtures for illuminating the field during sports competitions, practices, and other events. These poles would be approximately 80 feet tall and would be installed at eight locations, arranged as four poles spaced evenly along each long side of the athletic field. The second set of poles would support lighting fixtures for illuminating the field during post-event egress, clean-up, and potentially during sports team practices. These poles would be up to approximately 30 feet tall and would be installed at up to 18 locations throughout the athletic field site to provide adequate lighting for safe egress.

The primary athletic field lights would consist of eight Musco 80-foot Light-Structure System poles with Green Generation LED luminaires (light fixtures). The luminaires would be mounted at up to three locations on each pole. Downward-facing luminaires would be mounted at 80 feet on each pole and would serve as the primary source of illumination for the field during sports events and other activities. Additional downward-facing luminaires may be mounted at 70 feet on some poles in order to provide consistent illumination across the field surface. Lower output, upward-facing luminaires would be mounted at 20 feet on each pole in order to illuminate airborne objects such as footballs during ~~punts and kickoffs.~~games. The upward-facing luminaires are necessary because the modern Musco lighting system provides highly focused light and minimizes glare to the extent that airborne objects such as footballs during kickoffs would not otherwise be visible to the players and spectators. The profile, elevation, and luminaire details for the Musco 80-foot Light-Structure System poles are shown on Figure 3.

A second set of lower output LED luminaires would be installed on up to 18 new and existing poles, each up to approximately 30 feet tall. These egress and clean-up lighting system poles would be spaced evenly around the perimeter of the track and ~~also~~ along pathways leading to ADA-compliant accessible parking spaces. The egress lights would be supplied with a back-up power source to maintain functionality during a power outage.



Lighting Pole Details Figure 3

Public Address System

Basic improvements to the existing public address system would be installed at the stadium. The upgraded public address system would consist of speakers mounted on up to 18 poles, each approximately 30 feet tall. These poles would be located behind the bleachers on either side of the athletic field. A public address speaker may be mounted on a pole that also supports an egress lighting luminaire. The speakers would be directed towards the spectators and the field, and they would be designed to minimize the amount of sound that would leave the stadium. The public address system would be controlled by an automixer/digital signal processor (DSP) and a control panel located in the press box. The DSP would be set to limit the sound level to conform to the requirements of the applicable local noise ordinance.

Additional Panaray 802 III loudspeakers would be installed at the stadium's press box and snack shack. These speakers would increase the volume of the public address system throughout the bleachers and field with focused coverage ~~so as~~ to minimize disturbance to neighbors. Drums or other band instruments would not be played at games with implementation of the proposed project.

Security, Crowd and Traffic Control, and Litter Removal

The District would assign staff to handle security, crowd concerns, and litter removal at home athletic events. In addition, the District would consider hiring, on an as-needed basis, security and outside cleaning companies for large events such as playoff games, rival games, and graduation ceremonies. A detailed safety plan is being developed by the District and will generally contain elements that address security, crowd control, traffic issues, and litter removal.

During San Marin athletic games and other District-sponsored events such as graduation ceremonies and middle-school track meets, parking demand may exceed on-site parking availability. Some off-site street parking on surrounding streets would be utilized during large events. With the exception of these large events, ~~all~~ no other uses of the stadium are ~~not~~ expected to result in demand for off-site parking. The project would not involve changes to the existing parking lot and driveway configuration at San Marin High School.

Trash receptacles would be provided inside and outside of the stadium. The school would remove game- or event-related trash from school property and properly dispose of all event-related trash immediately or no later than the following morning. In addition, the school would be responsible for checking the school grounds and adjacent properties for litter. All event-related litter would be removed immediately following each event or as soon as practically feasible.

Utilities

Electricity for the proposed stadium lights would be provided by Marin Clean Energy through existing service connections. New electrical conduits would be installed on-site through either open trench or jack and bore construction to provide power to the lighting system. The conduits would be run underground to form a circuit between the new lighting system poles. Pullboxes would be installed at each lighting pole, at certain control panel locations, and at other locations around the stadium as necessary for the construction and operation of the new electrical system.

No new off-site electrical infrastructure would be required, and the existing service connections would provide a sufficient amount of electricity to power the lighting and public address systems.

No restrooms, drinking fountains, sprinklers, or other sources of wastewater would be constructed as part of the project. Existing drinking fountains and water faucets within and near the stadium would remain unchanged. The solid waste generated by construction of the project would be limited to a very small amount of packaging waste from the lighting and public address equipment and concrete and soil that would be removed during pole installation and electrical conduit trenching. No new concession services are proposed as part of this project, and waste generated during evening athletic games, such as food and beverage containers, would likely represent a redistribution of the existing waste stream rather than the introduction of a new source of waste.

Construction Schedule and Details

If approved by the ~~NUSD~~District Board of ~~Trustees~~Education, project construction is estimated to last approximately three months no earlier than the fall of 2017. Construction activities would occur between September 1 and January 31, during the non-nesting season. Construction activities would include materials delivery, site preparation and minimal grading, excavation for pole foundation installation, trenching and boring for electrical conduit installation, installation via hydraulic crane of the lighting and PA speaker poles, mounting of the luminaires and speakers, and restoration of disturbed surfaces including pavement and vegetation that was removed during excavation and trenching.

Construction activities would be subject to approval of the Division of the State Architect (DSA). Because the proposed project is considered an improvement to educational facilities at a public school, the governing board of the District adopted Resolution No. 16-2016/17 to exempt the proposed project from local zoning ordinance requirements per Government Code Section 53094. Some ordinances are not exempt under 53094, and per Government Code Section 53097 the District must comply with a city or county ordinance (1) regulating drainage improvements and conditions, (2) regulating road improvements and conditions, or (3) requiring the review and approval of grading plans. The proposed project would not affect any stream, drainage, or other water of the state. The proposed project would not alter any roadways nor would it substantially change any roadway conditions. No grade changes would occur on the project site, total fill will be less than 100 cubic yards, and net fill will be zero. No building permits would be issued by the City as construction would be approved by DSA. The approval of footings for new light poles is a structural issue that does not fall within the limited grading, drainage, and street improvement jurisdiction of the City under Government Code 53097.

Ground disturbance would be limited to excavation for the lighting and speaker system pole foundations and trenching or boring for the electrical conduit installation. The conduit trenches would be approximately three feet deep and one foot wide at the base, and would have side slopes not steeper than 1.5 feet horizontal to 1.0 feet vertical. Foundation excavations for the 80-foot lighting poles would be 10 feet deep or less. Excavated soil would be reused to the maximum extent possible. Small amounts of clean fill, sand, and pea-gravel would be imported as necessary. The quantity of exported soil would be 50 cubic yards or less. Existing pavement above new conduit installation locations would be removed and replaced after completion of

trenching, or would be avoided using bore and jacking conduit installation. The project would not include any new landscaping. Landscaped areas (such as grassy lawns or other vegetated areas) that would be disturbed during trenching for electrical conduits would be restored to pre-construction conditions. The driplines of existing trees would be avoided to the maximum extent possible, and no tree removal is proposed. The construction equipment and the number days that each piece of equipment would be used are estimated as follows:

- Semi-truck and lowboy for materials delivery (4 each, scheduled as needed)
- Excavator mounted drill rig for 80′ pole foundation excavation (2 days)
- Small excavator or backhoe for site preparation and trenching (20 days)
- Skid steer drill rig for 30′ pole foundation excavation (5 days)
- Hydraulic horizontal boring machine for conduit tunnel boring (20 days)
- Hydraulic crane for pole installation and luminaire mounting (2 days)
- Concrete pump for foundations (2 days)
- Concrete trucks for foundations (2 days)

During the approximately three month construction period, equipment would be staged and stored in a secure, paved area on District property or would be stored off-site at the contractor's facilities, at their discretion, between periods of use.

9. DESCRIPTION OF THE PROJECT - SCHEDULES

Schedule of Events

The new stadium lighting system would allow for the expansion of evening and nighttime activities at the stadium site. These activities would generally end no later than 9:30 PM on Fridays and no later than 8:15 PM from Monday through Thursday, and the main competition-level lights would be turned off ~~no later~~ approximately 15 minutes after the end of a scheduled activity. The proposed schedule of events per school year and the associated start and end times for both lighting and public address system use are shown in Table 1 below and Table 2 provides a summary of the proposed frequency of events by month. While the timing of some events would shift to evening and nighttime hours, the frequency of events per school year would not significantly change from existing usage. The stadium lights would not be used for community or non-school activities.

Table 1
Proposed Schedule of Events

Event Type	Day of the Week	Frequency (on average)	Time of Year	PA Use?	Main Lights Off Time
PE Classes	Monday-Friday	180 days (school year)	August-June	No	No use
HS Football Games	Thursday & Friday	~~16~~ 22 (plus any playoff games)	August-November ~~(Lights: Oct –Nov)~~	Yes	8:30 PM (Thursday frosh games) 9:45 PM (Fridays)
HS Football Practices	Monday-~~Friday~~ Thursday	Daily	~~August~~October-November ~~(Lights: Oct –Nov)~~	No	8:00 PM
HS Soccer Games	Tuesday-Saturday	~~14~~24 (plus any playoff games)	November-February	2x	8:30 ~~8:00~~ PM
HS Soccer Practices	Monday-~~Saturday~~ Friday	Daily	November-February	No	8:00 PM
HS Track Meets	Wednesday-Thursday	2 (plus any finals)	~~February-May~~ March - April	Yes	8:30~~8:00~~ PM
HS Track Practices	Monday-Friday	Daily	February-May (Lights: Feb – March)	No	8:00 PM
HS Lacrosse Games	Monday-Saturday	~~16~~ 13 (plus any playoff games)	February-May (Lights: Feb – March)	2x	8:30 ~~8:00~~ PM
HS Lacrosse Practices	Monday-Saturday	Daily	February-May (Lights: Feb – March)	No	8:00 PM
Powder Puff Game	Friday	1 time	October	Yes	8:00 ~~9:45~~ PM
~~MS Track Meet~~	~~Friday~~	~~1 time~~	~~May~~	~~Yes~~	~~No use~~
Novato Youth Football~~Pop Warner~~ Games	Saturday	6	August-October~~November~~	Yes	No Use
~~Pop Warner Rally~~	~~Friday~~	~~1 time~~	~~August~~	~~Yes~~	~~No use~~
~~Youth Soccer Parade~~	Saturday	~~1 time~~	~~September~~	~~Yes~~	~~No use~~

Table 2
Proposed Frequency of Events

Month	Days with Light Usage*	Days with PA Usage	Notes
August	2	4	
September	5	8	
October	21	7	1 PA day is for Powder Puff Football Game
November	22	5	
December	22	0	
January	22	0	
February	24	6	2 of the PA days are for seniors day (about 10 minutes)
March	15	1	
April	7	3	2 of the PA days are for seniors day (about 10 minutes)
May	11	6	
June	1	1	Graduation
Total	**152**	**41**	**24 of the days with light usage and 14 of the days with PA usage are possible MCAL or NCS playoff games. During the 2015-16 school year SMHS hosted 4 playoff games; SMHS may host up to 3 playoff games in the 2016-17 school year.**

** Worst case scenario when not on Daylight Savings Time, includes possible Novato High School games. Rental of field with lights usage to outside organizations is not being considered or anticipated.*

Athletic practices would constitute the majority of evening stadium use at the project site~~.~~, specifically between the months of October and March. These practices could occur on any day from Monday to ~~Saturday~~Friday and could utilize the stadium lights until 8:00 PM. Currently, practices end by 5:30 PM from Monday to Friday and by 3:00 PM on Saturday. The public address system would not be used during practices. No spectators are expected to attend practices, and noise would be limited to students' and coaches' voices and potentially an occasional coach's whistle. The same as with school practices, the public address system would not be used during community athletic activities (with the exception of six Novato Youth Football game days on Saturdays in August, September, and October lasting until 6:00 PM) and noise would be limited to participants' voices and potentially an occasional referee's whistle. Additionally, the lights would not be in use during community athletic activities, including Novato Youth Football games.

High school football games would occur up to ~~16~~22 times per year, plus any playoff games, on Thursday and Friday evenings and would typically end at 9:30 PM~~.~~ on Fridays and by 8:15 PM on Thursdays. The main stadium lights would be turned off ~~no later than~~15 minutes after the end of a game, by approximately 9:45 PM on Fridays and by approximately 8:30 PM on Thursdays. Currently, home football games take place on Saturday and end by 4:00 PM. The football games would make full use of the proposed public address system and would involve running commentary. Spectator attendance at the football games would be substantially greater than for other high-school athletic games. Based on current attendance shown in Table 3~~2~~ (see page 14), it is anticipated that the crowd size would reach approximately ~~17%~~40 percent of the stadium's 2,400-seat bleacher capacity (~~400~~1,000 persons) at regular-season games and ~~63%~~60 percent of bleacher capacity (1,~~440~~500 persons) at playoff games.

High school soccer games could occur Tuesday through Saturday until 8:1530 PM, and high school lacrosse games could occur Monday through Saturday until 8:1530 PM. These soccer and lacrosse games would take place an average of 3037 times per year combined, plus any playoff games. The public address system would not be used during these games, except for senior night and any playoff games. Based on current attendance, crowds of about 50 people are expected at regular-season soccer and lacrosse games.

Evening school activities (such as graduation, rallies, or other special events) could occur up to four times per year and would involve the use of the stadium lights and public address system. The crowds for one or more of these special events may be comparable in size to those during an evening football game. The main stadium lights would be used for these events and would be turned off no later than 9:00 PM for graduation and by 9:45 PM for powder puff games.

10. SURROUNDING LAND USES AND SETTING

The District is responsible for the education of more than 7,600 students and operates seven elementary schools, one K-8 school, one K-8 charter school, two middle schools, two comprehensive high schools, an independent study program and continuation high school. San Marin High School was established in 1968 and enrolled 1,076 students as of the 2015-16 school year (CDE DataQuest, 2016). As shown on Figure 2, the athletic field is located on the northeast portion of the school property. The athletic field has a bleacher capacity of 2,400 persons with standing room around the field for an additional 1,600 persons. Table 32 estimates existing attendance per game at the stadium.

Table 32
Attendance at Current Sporting Events

Event	Regular-Season Game Attendance	Novato/MC/ Playoff Game Attendance
Football	400	1,400500
Soccer	50	100
Lacrosse	50	100
HS Track Meet	200	500
Powder Puff	300	-
MS Track Meet	1,200	-
Pop Warner Games	800	-
Youth Soccer	1,000	-

Currently, no permanent or portable athletic field lighting is used at the San Marin High School stadium. Existing permanent lighting is present at the softball field to the west of the football stadium. An existing public address system is used throughout the school year (generally on Thursdays through Sundays) for high school athletic contests and community sports events, including Pop Warner football games on Sundays.

Surrounding land uses are primarily residential. San Marin Drive borders the school to the east and Novato Boulevard borders the school to the south. Single-family residences and All Saints Lutheran Church are east of San Marin Drive. The City's approximately 98-acre O'Hair Park,

which includes equestrian facilities at Morning Star Farm, the Dogbone Meadow dog park, and trails through open space areas, is located across Novato Boulevard south of the school. The Dwarf Oak Trail to Mt. Burdell and single-family residences on Sandy Creek Way abut the school site to the west. Single-family residences on San Ramon Way are located north of the school, while multi-family residences on Aspen Drive are to the northeast. The nearest residences are located approximately 150 feet north and northeast of the stadium track.

Novato Creek runs through O'Hair Park approximately one-quarter mile south of the stadium.

11. OTHER PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED:

The project would require the approval of the District's Board of ~~Trustees~~Education. The ~~Division of the State Architect (~~DSA~~)~~ provides design and construction oversight for K-12 schools, community colleges, and other state-owned and leased facilities. The DSA provides plan review for structural safety, fire and life safety, and ADA accessibility compliance. Approval would not be required by any other public agencies.

ENVIRONMENTAL FACTORS AFFECTED

The environmental factors checked below, if checked, would be potentially affected by this Project, involving at least one impact that is "Potentially Significant" or "Potentially Significant Unless Mitigation Incorporated" as indicated by the checklist on the following pages.

■ Aesthetics	□ Agriculture and Forest Resources	■ Air Quality
□ Biological Resources	■ Cultural Resources	□ Geology/Soils
■ Greenhouse Gas Emissions	□ Hazards & Hazardous Materials	□ Hydrology/Water Quality
□ Land Use/Planning	□ Mineral Resources	■ Noise
□ Population/Housing	□ Public Services	□ Recreation
■ Transportation/Traffic	□ Utilities/Service Systems	■ Mandatory Findings of Significance

DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

■ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Yancy Hawkins, Assistant Superintendent
of Business and Operations
Novato Unified School District

Date

ENVIRONMENTAL CHECKLIST

The following impact evaluation is based on the *State CEQA Guidelines* Appendix G checklist. This checklist has been formulated by the State of California to determine the potential for the project to result in significant environmental effects.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
I. AESTHETICS				
-- 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) Substantially degrade the existing visual character or quality of the site and its surroundings?	■	☐	☐	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	■	☐	☐	☐

a) ***POTENTIALLY SIGNIFICANT IMPACT***. Scenic vistas occur throughout the San Francisco Bay Area and include some of the most iconic natural and built landscapes in California. These scenic vistas can be observed from numerous public viewing locations throughout the Bay Area, including along various streets within the proposed project area. Scenic resources visible from the project site and public viewing locations in its surroundings, as defined in the City's General Plan (adopted 1996), include ridgelines and hillsides that provide a backdrop for developed areas (Novato, 1996). Mt. Burdell, visible to the northwest of San Marin High School, is a scenic landmark in the open space network surrounding Novato. While there are no State-designated scenic highways in Marin County, U.S. Highway 101 (U.S. 101) is eligible for State designation as a scenic highway to the north of SR 37 in Novato (Caltrans, 2016). This segment of U.S. 101, located approximately 2.3 miles east of the project site, provides scenic views of hillsides and ridgelines to the south, west, and north, and of wetlands connected to San Pablo Bay to the east.

Construction and operation of the proposed project would introduce lighting and speaker poles at San Marin High School. These poles and associated lighting fixtures would rise to approximately 80 feet tall and could potentially alter or obstruct scenic vistas in the project area as seen from nearby public spaces, such as roadways or trails. These structures are not expected to substantially obstruct westward views of ridgelines and hillsides from U.S. 101 due to their relatively small mass and their distance from the highway; however, this potential adverse

effect will be analyzed further in an EIR. Potentially significant impacts on scenic vistas will be analyzed in an EIR.

b) ***LESS THAN SIGNIFICANT IMPACT***. U.S. 101, which is located approximately 2.3 miles east of the stadium, is eligible for State designation as a scenic highway to the north of SR 37 in Novato (Caltrans, 2016). However, construction of the proposed project would not damage scenic resources such as trees, rock outcroppings, or historic buildings. Construction of the project would involve the installation of free-standing poles to support new lighting and upgraded public address systems around the athletic field. Neither rock outcroppings nor historic buildings occur within or directly adjacent to the areas where the new light and speaker poles would be installed. No tree removal is proposed as part of this project. Minor trimming of some trees may be required in order to avoid interference with the new lighting systems. Any required trimming would not result in substantial damage to a scenic resource within a state scenic highway. This impact would be less than significant and no further analysis of this issue in an EIR is warranted.

c) ***POTENTIALLY SIGNIFICANT IMPACT***. The suburban, residential neighborhood around San Marin High School provides broad views of nearby hillsides and ridgelines with natural open space. In addition, the Dwarf Oak Trail provides public views the high school. Buildings adjacent to the school range in height from one to two stories. The project would involve installation of poles up to approximately 80 feet in height to support new lighting and upgraded public address systems at San Marin High School. By adding structures of such height at the existing athletic field, the project would alter the visual character of the project site and surrounding residential and open space areas. Impacts are potentially significant and will be analyzed further in an EIR.

d) ***POTENTIALLY SIGNIFICANT IMPACT***. The project site is located in a suburban area with moderate levels of existing lighting. Primary sources of light within the project site include headlights from vehicles travelling on local roadways; street lights; lighting from the existing school facilities adjacent to the stadium; bleacher lights around the stadium; and exterior lighting associated with nearby residential uses. The project would introduce new light sources in a sports lighting system at the San Marin High School stadium. Although modern sports lighting systems are substantially more focused and efficient than older lighting systems, the new lights would represent a potentially significant new source of light or glare that could adversely affect day or nighttime views and lighting levels in the area. Therefore, this issue will be analyzed in an EIR.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
II. AGRICULTURE AND FOREST RESOURCES				
-- In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. -- Would the project:				
a) Convert Prime Farmland, Unique Farmland, 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 use?	☐	☐	☐	■
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?	☐	☐	☐	■

a-e) ***NO IMPACT***. The entire project area is classified as Urban and Built-Up Land by the California Department of Conservation's Farmland Mapping and Monitoring Program (California Department of Conservation, 2014). No Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or agriculturally zoned land occurs within or adjacent to the project site. An equestrian facility adjacent to San Marin High School at Morning Star Farm, located approximately 750 feet south of the stadium, is mapped as grazing land and does not constitute Important Farmland. No land under Williamson Act contracts occurs within one mile of the project site (California Department of Conservation, Marin County Williamson Act FY 2015/2016, 2016). The proposed installation of poles to support new lighting and upgraded public address systems at San Marin High School would not result in the conversion of farmland or forestland to non-agricultural uses. For these reasons, the project would have no impact with respect to the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use; conflict with existing agricultural zoning or Williamson Act contract; the loss of forest land or conversion of forest land to non-forest use; or other conversion of farmland to non-agricultural use. No further analysis of this issue in an EIR is warranted.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
III. AIR QUALITY				
-- Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	■	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	■	☐	☐	☐
c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	■	☐	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	■	☐	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	■	☐

a) ***LESS THAN SIGNIFICANT IMPACT***. Vehicle use, energy consumption, and associated air pollutant emissions are directly related to population growth. A project may be inconsistent with the applicable air quality plan if it would result in either population or employment growth that exceeds growth estimates included in the plan. Such growth would generate emissions not accounted for in the applicable air quality plan emissions budget. Therefore,

projects need to be evaluated to determine whether they would generate population and employment growth and, if so, whether that growth would exceed the growth rates included in the applicable air quality plan. The most recent and applicable adopted air quality plan is the Bay Area Air Quality Management District (BAAQMD) 2010 Clean Air Plan (CAP). Therefore, consistent with the CEQA thresholds, the project would result in a significant impact if it would conflict with or obstruct with implementation of the 2010 CAP.

The project would not increase the available housing in the city of Novato. Construction would be limited to a period of approximately three months and would not result in a substantial amount of employment growth in the area. Therefore, the project would not induce population growth beyond the forecasts and would not exceed growth estimates in the CAP or otherwise interfere with implementation of the CAP. Impacts related to conflict or obstruction of applicable air quality plans would be less than significant. Further analysis of this issue in an EIR is not warranted.

b,c) ***POTENTIALLY SIGNIFICANT IMPACT***. The project would have a significant impact if it would result in direct and/or indirect operational emissions that exceed BAAQMD thresholds or contribute to a cumulative net increase for any criteria pollutant for which the region is currently in non-attainment. The project would generate temporary construction emissions (direct emissions) and long-term operational emissions (indirect emissions). The indirect operational emissions would result from electricity use for light fixtures and a potential increase in visitor traffic to evening and nighttime events at the stadium. Emissions associated with the project may result in a significant impact and therefore will be analyzed in an EIR.

d) ***POTENTIALLY SIGNIFICANT IMPACT***. As discussed above under subparts b and c of this section, the project may exceed BAAQMD thresholds for various pollutants; therefore, it may expose sensitive receptors to substantial pollutant concentrations. This potentially significant impact will be analyzed further in an EIR.

e) ***LESS THAN SIGNIFICANT IMPACT***. Odors are typically associated with industrial projects involving the use of chemicals, solvents, petroleum products, and other strong-smelling elements used in manufacturing processes, as well as sewage treatment facilities and landfills. Although construction of the proposed project would involve the use of construction equipment that may use diesel fuel, the construction activities would be temporary and would not generate objectionable odors that would affect a substantial number of people. Also, evening and nighttime events at the San Marin High School stadium would not generate objectionable odors. Athletic fields are not listed as a typical odor-generating land use in the BAAQMD's *CEQA Air Quality Guidelines* (BAAQMD, 2011). Therefore, impacts related to odor would be less than significant. No further analysis of this issue in an EIR is warranted.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES				
-- Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	■	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife 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?	☐	☐	☐	■

a) ***LESS THAN SIGNIFICANT IMPACT***. ~~Construction of the project would occur within previously disturbed areas on the San Marin High School campus. Ground disturbance would occur on~~The project site is situated in a suburban neighborhood in Novato, California within the campus of San Marin High School. The project site is bordered to south by a parking lot, to the east by a grass field, to the north by baseball fields, and to the west by the high school

campus. Residential neighborhood surrounds the high school campus on the south, east, and north. To the south and west, Novato Boulevard separates the high school campus from a riparian corridor along Novato Creek. Approximately 700 feet north of the stadium, and separated from the project site by the residential neighborhood, is open space consisting of oak/grassland vegetation community. Mature trees are present adjacent to the project site on the south and eastern sides and few scattered mature trees are present on the high school campus to the west of the project site. The closest mature trees are located over 100 feet away from the proposed locations for the main stadium light poles.

Sensitive Species

In order to determine the potential presence of sensitive species or habitat, Rincon Consultants reviewed regulatory agency databases, conducted a literature review, analyzed aerial imagery, and reviewed the construction plans. According to the California Natural Diversity Database (CNDDB 2016), there is potential for special status wildlife species to occur within a five-mile radius of the project site. The project site itself no longer supports habitat for any special status species and no special status species are expected to occur on the project site. Few special status birds and bats may fly through or over the project site, but project activities will not have a significant impact on any bird or bat species such that population size is reduced to a level below being self-sustaining.

This additional discussion is based on the preliminary results of light modeling conducted by Musco Lighting (Musco Lighting, 2017) which was provided after publication of the Draft EIR and discussed in more detail in the Final EIR (see Section 8.0). Light impacts can be analyzed by quantifying illuminance from the spillover of light, or "light trespass." Light trespass is measured on both the vertical plane (e.g., light shining through a window) and the horizontal plane (e.g., light falling on a bed), in terms of foot-candles (more detailed definitions can be found in Section 4.1, *Aesthetics,* of the EIR). Musco's light modeling found that vertical and horizontal foot-candles with the proposed stadium lights would less than 0.5, and mostly zero, at 100 feet from the stadium. For the trees closest to the stadium lights, only a few would experience vertical foot-candles over 0.3 and no trees would experience horizontal foot-candles above 0.1 (equivalent to approximately one tenth of a standard household flashlight). The modeling also determined that maximum candelas calculated for the project that would affect the trees to the east of the project site are 7,023 candelas at 300 feet from the nearest lights. For context, candela levels of 25,000 are equivalent to automobile high beam headlights, while candela levels of 250 are equivalent to a 100W incandescent light bulb. Therefore, 7,023 candelas would be equivalent to 28 percent of the intensity of an automobile high beam headlight viewed from 300 feet away. This level of lighting would only occur in a small range directly to the east of the stadium. Candela levels drop off rapidly to the north and south of that area.

Special Status and Other Bat Species. Native bats species that have not been identified as threatened or endangered may be present in the project area. Seven bat species that could potentially occur around the project site are considered California species of special concern (CSSC) either due to lacking information or because of suspected decline of the species range in California. These species (global and state ranking and CDFW special status included in parenthesis) include: the pallid bat (G5 S3; Class II), Townsend's big-eared bat (G3G4 S2; Class I), western red bat (G5 S3; Class II), fringed myotis (G4 S3; Class II), long-legged myotis (G5 S3; Class II), western mastiff bat (G5T4 S3S4; Class II), and big free-tailed bat (G5 S3; Class II). Two

additional species are placed on the Watch List (WL) because of restricted distribution and the need for additional field efforts to establish population trends. These two species include: the silver-haired bat (G5 S3S4) and the hoary bat (G5 S4). The CDFW lists the primary reasons for bat decline as closures, human disturbance, and direct extermination thought "pest control" measures at colony rooting sites (Bolster 1998). Additionally, unsustainable management practices of public and private forest lands for cavity-dwelling species, and farming practices such as removal of riparian forests and use of insecticides are notes as causes of bat declines. No evidence currently exists that would suggest the installation of the stadium lights would have a significant impact on bat populations.

Studies that have shown effects on species biology as a result of artificial light are generally related to long periods of lighting, for example streets and other city lights that are on all night (Rowse et al. 2016). The few hours each night that stadium lights will be on may have some effect on bat foraging behavior, but not to the level of a negative impact on the population. On the contrary, evidence exists that while not natural behavior, bat foraging around lights may have a positive effect by increasing foraging efficiency, especially for insectivorous species that hunt in open spaces above canopy or along vegetation edges (Rowse et al. 2016 and references therein). Many Myotis species have been found to simply avoid lit areas, seemingly preferring to forage in darkness. The open space to the north of the project site and along the riparian corridor associated with Novato Creek provides ample dark foraging opportunities.

Native bats use roosting habitats such as trees, bridges, and abandoned buildings. However, the proposed project plans do not include the removal of any nearby trees, and no other suitable habitat in proximity to the project site would be impacted. Furthermore, higher quality foraging and roosting habitat is located one quarter-mile south at Novato Creek, making it less likely that any bats would frequent the proposed project area. Bats that are roosting around the project site could generally be considered habituated to human activities and are unlikely to be disturbed by any increased activities associated with the stadium lighting. Bats have been shown to be very resilient to urbanization and urban activities and in some cases have been found to be more diverse and abundant in association with urban landscapes (Jung and Threlfall 2016).

It is possible that bats may forage around the lights during the brief periods lights are on. However, little to no evidence exists that bats would be specifically attracted to the lights (Evans Ogden, 1996) and the lack of light trespass beyond 100 feet from the stadium further reduces the likelihood that bats would be attracted to the lights. The brief period of illumination combined with the distance from any suitable bat roosting areas and lack of light trespass makes it unlikely for lighting to have a negative impact on bat behavior. As discussed in the introductory section to this Initial Study under *Description of Project – Project Components*, project activities would take place during the months of September through January. Since construction would occur early in general mating season for native bats, it would not impact maternity roosting colonies. Based on available information, no evidence exists that the project would negatively impacts bat behavior. Potential impacts to incidental foraging bats would be less than significant.

Nesting or Migratory Birds

Nesting birds and raptors are protected by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGC). Common avian species that have adapted to urban and

suburban environments, such as sparrows, finches, American crows, and barn owls, are present in the project area.

Construction. The nesting season in the area generally extends from February through August. As discussed in the introductory sections to this Initial Study under *Description of Project – Project Components*, project activities would take place during the months of September through January. Therefore, construction during this period would avoid the potential for impacts to nesting birds. In addition, construction of the project would occur within previously disturbed areas adjacent to the sports stadium and parking area on the San Marin High School campus. Work would occur on previously paved areas or areas that are landscaped with non-native vegetation, including non-native lawn grass. No activity would occur on previously undisturbed ground. Disturbed vegetation (consisting primarily of lawn) above trenches and bore pits would be restored to pre-construction conditions following installation of the electrical conduits. No tree removal ~~is proposed as part of this project. No biological habitats that would support any species identified as a candidate, sensitive, or special-status species would be affected by construction or operation of the project. No candidate, sensitive, or special-status wildlife, including bats or raptors are expected to be present on site. According to the California Natural Diversity Database (CNDDB) there is potential for special status wildlife such as roosting pallid bats (*Antrozous pallidus*) and burrowing owls (*Athene cunicularia*) to occur within a five-mile radius. However, no habitat exists for either of these species. Pallid bats require rocky areas for roosting habitat. There are no rocky areas in the proposed project area so no impacts are expected for this species. No impacts to candidate, sensitive, or special -status bats are expected to occur because no potential habitats would be impacted~~or trimming is proposed as part of this project. Therefore, no impacts during construction would occur.

~~Native bats that are not listed would require roosting habitats such as trees, bridges, and abandoned buildings. The proposed project plans do not include the removal of any nearby trees, and no other suitable habitat exists. Furthermore, higher quality foraging and roosting habitat is located one quarter-mile south at Novato Creek, making it unlikely that any bats would frequent the proposed project area. Potential impacts to bats would be less than significant on incidental foraging individuals.~~

~~Avian species protected by the Migratory Bird Treaty Act (MBTA) and California Department of Fish and Game (CDFG) code include nesting birds and raptors. The area is subject to regular human disturbance due to the existing athletic field. Common avian species such as sparrows, finches, American crows, and barn owls are resident species~~*Operation.* Once constructed, poles would be a maximum of 80 feet (24.3 meters) tall. Given the small surface area of their vertical and horizontal structure, poles would not have a significant impact on bird flight, including during migration.

Nighttime events at the stadium requiring lighting would occur approximately 152 or fewer times per year, with the majority of the light use occurring between October and May. Lighting would occur for approximately two hours per evening during week days (6 to 8 PM) to 3.75 hours during 15 or fewer Friday evenings (6 to 9:45 PM). Therefore, stadium light would be on for only short periods consisting of two to four hours a night for up to four months. There have been some cases where lighting has been shown to impact bird species; however, this has typically occurred where light is otherwise scarce, such as on offshore oil platforms (Huppop et al., 2015) and in forests (The Nature Conservancy, 2015). There is no evidence that shows birds

are attracted to urban ~~areas and are not expected to be affected by the project because the regular use of the existing athletic field would not be suitable~~lights (Evans Ogden 1996). Since lighting would occur during short durations and little light trespass would occur, stadium lights are unlikely to result in birds becoming trapped within the light zone, known as the "trapping effect" (Evans Ogden 1996), especially on diurnal (daytime active) birds (Outen 2002). In addition, lighting events would mostly occur during August through December which falls outside the usual nesting bird season. Therefore, lighting is optimally planned to have little to no impact on nesting ~~habitat. The existing owl~~birds (Gason et al. 2012).

Three owl boxes have been installed around the margin of the high school campus to the north and west, the nearest of which is approximately 700 feet from the project site, which is beyond the standard agency-required buffer distance of 500 feet between active raptor nests and active project construction activities. These owl boxes ~~near the proposed project area~~ would most likely be occupied by barn owls given the size and location of the owl boxes. Barn owls ~~are also highly adaptive~~adapted to ~~urban~~urbanized landscapes and any existing resident barn owls would already be ~~highly~~ tolerant and acclimated to the current level of human activities from the existing athletic field and surrounding residences. ~~Prey~~The addition of lights and sporting activities carry on for up to 3.75 hours after sunset would have no additional impact on nesting owls above that already occurring during day-time. Natural prey availability for owls, such as native small rodents, is ~~also~~ unlikely to occur in the athletic field area ~~due to~~ and owls are more likely to forage in open space to the north of the project site and along the ~~same level of human disturbance mentioned above. Potential~~riparian corridor to the west and south. Potential impacts to barn owls would be less than significant. Overall impacts to ~~birds~~nesting and ~~raptors~~migratory birds would be less than significant. Based on the project parameters discussed above, ~~I~~impacts associated with adverse effects on candidate, sensitive, or special-status species would be less than significant and further analysis of this issue in an EIR is not warranted.

b) ***LESS THAN SIGNIFICANT IMPACT***. Construction of the project would occur within previously disturbed areas on the San Marin High School campus. Ground disturbance during construction of the proposed project would be limited. Excavation would be required for the installation of pole foundations, and limited trenching and boring would be required for the installation of new electrical connections. This ground disturbance would occur on previously disturbed areas within and near the existing stadium. The nearest riparian area to the stadium is located approximately one-quarter mile to the south and southwest at Novato Creek in O'Hair Park. Although light pollution can adversely affect wildlife in riparian areas, the proposed light fixtures would be narrowly focused on the stadium and downcast~~, which would minimize spillover of light at the distance of Novato Creek~~. Light trespass from the stadium at the distance of Novato Creek would be approximately zero (Musco Lighting 2017). The lighting design for the project follows standard recommendations from The Nature Conservancy regarding downward facing design and reduced period when lights are on (The Nature Conservancy 2015, https://www.nature.org). Therefore, construction and operation of the project would not have a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulation, or by state or federal agencies. The impact on riparian habitat and sensitive natural communities would be less than significant, and further analysis of this issue in an EIR is not warranted.

c) ***NO IMPACT***. As described above, ground disturbance associated with construction of the project would occur on previously disturbed areas within and near the existing stadium. As shown on the U.S. Fish and Wildlife Service's National Wetlands Inventory, there are no federally protected wetlands on or adjacent to the stadium (USFWS, 2016). The nearest mapped wetland area is an intermittent stream that runs immediately north of the San Marin High School tennis courts, located approximately 600 feet southwest of the stadium. Limited ground disturbance within the stadium would not adversely affect this wetland area. Implementation of the project would not result in adverse effects on wetlands and further analysis of this issue in an EIR is not warranted.

d) ***LESS THAN SIGNIFICANT IMPACT***. Construction of the project would involve the installation of free-standing poles to support new lighting and upgraded public address systems and underground electrical conduits to supply electricity to those systems, all within the existing stadium. No fences, walls, or other linear obstructions to wildlife movement would be constructed. No streams would be affected. ~~No native wildlife nursery sites have been identified on any of the project site.~~

Trees near the project site and those in the riparian vegetation to the northwest may provide nesting opportunities for birds. However, as discussed in detail under subsection (a), no disturbance to birds nesting behavior would occur. Light disturbance levels at nearby trees that could support nesting would be low relative to ambient levels associated with the residential neighborhood and would be short-term in daily duration. Birds that may nest in the trees near the stadium (approximately 100 feet away from the main stadium light pole locations at the nearest) would likely be habituated to human activity and would not likely be disturbed by the increased activity level and lighting resulting from the project.

Implementation of the project would increase the frequency and intensity of evening and nighttime lighting at the stadium. Although the proposed modern lighting system would be designed to minimize glare and fugitive light, some illumination of nighttime skies would occur. Many migratory birds use the stars to orient themselves during the spring and fall migratory season (generally April through May and September through November). In overcast conditions or heavy fog, they can become disoriented and attracted to any elevated light source. The birds ~~will~~would fly around the light source rather than continuing to migrate and may excessively use up fat stores. While nighttime bird migration begins about one hour after sunset and continues until about 2:00 AM, peak activity generally occurs after 10:00 PM (Pettingill, 1985). Lighting would not occur after 9:45 PM and would occur that late nine or fewer times a year. Lighting would not have a significant impact on bird migratory behavior.

The project site lies within the general area known as the "Pacific Flyway," an area that extends across the width of California, though most migration occurs along the immediate coast and offshore and through the inland Sacramento and San Joaquin Valleys. The number of birds present at any one portion of the flyway at a particular time is dependent on a wide variety of conditions, including current weather patterns and the amount of available food resources as the birds need to "re-fuel" during daytime hours to continue their migration.

The project is not expected to "interfere substantially with the movement of any native resident or migratory fish or wildlife species" for multiple reasons. First, migratory bird kills as a result of athletic field lighting at O.co Coliseum in Oakland, Candlestick Park, AT&T Park and other

athletic fields in the Bay Area have not been reported. Second, because the project site is within an ~~urban~~a suburban area, available food resources for migratory species and most wildlife species are lacking on-site and large numbers of migratory birds do not occur at the project site or in the immediate vicinity. Third, current night lighting conditions for the area show bright light sources already present in the ~~urban~~suburban area of Novato (NASA, International Space Station, 2013~~), with even brighter light sources present in the greater Bay Area located along Highway 101 and Interstate 580/80 adjacent the bay, Alameda Naval Complex, downtown San Francisco, San Francisco International Airport, Oakland International Airport, and downtown Oakland.~~). Fourth, the proposed lights would be turned off before the peak time period of migratory activity (after 10:00 PM). Impacts related to substantial interference with the movement of any native or migratory fish or wildlife species or their established movement corridors would be less than significant, and further analysis of this issue in an EIR is not warranted.

e) ***LESS THAN SIGNIFICANT IMPACT***. Construction of the project would not result in impacts to environmentally sensitive biological resources. Vegetation removal would be limited to the areas above trenching sites bore pits for conduit installation. This vegetation would typically consist of non-native lawn grass. Any vegetation that is disturbed during conduit installation would be restored to pre-construction conditions after completion of the installation. Therefore, implementation of the project would not conflict with local policies or ordinances targeting these resources. No tree removal is proposed, so tree preservation ordinances or policies would not apply. This impact would be less than significant and no further analysis in an EIR is warranted.

f) ***NO IMPACT***. The project would not occur within the area of an adopted Habitat Conservation Plan or Natural Community Conservation Plan (CDFW, 2015). No other approved local, regional, or state habitat conservation plans have been identified on any of the project site. No further analysis of this issue in an EIR is warranted.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
V. CULTURAL RESOURCES				
-- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	■	☐
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	■	☐	☐	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
V. CULTURAL RESOURCES				
-- Would the project:				
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	■	☐	☐	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	■	☐	☐	☐

a) ***LESS THAN SIGNIFICANT IMPACT***. Historical resources include, but are not limited to buildings, structures, historic districts, or other objects of historical archaeological, scientific, educational, cultural, architectural, aesthetic, or traditional significance. Ground disturbance for the project would be limited to the installation of new poles to support lighting and public address systems and the installation of new electrical conduits to provide power to those poles. The new support poles would be free-standing, and no building or other historical structure would be altered by construction or operation of the project. Thus, the project would not cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5 and there would be a less than significant impact in this regard. No further analysis of this issue in an EIR is warranted.

b-d) ***POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED***. Although construction of the project would involve limited ground disturbance, the potential exists for disturbance of buried cultural resources. Excavation would be required for the installation of pole foundations, and limited trenching and boring would be required for the installation of new electrical connections. Ground disturbance associated with the installation of the pole foundations would occur on previously disturbed areas. However, the installation of the poles may exceed the depth of previous disturbances for the installation of the pole foundations. Therefore, the project does have the potential to impact previously unidentified cultural resources below the surface. The presence of several previously recorded sites within proximity of the project site indicates that the area is also sensitive for cultural resources (Novato, 2014). In addition, the project site is partially underlain by Pleistocene older alluvium (Qoa), a mapped geologic unit with a record of abundant and diverse vertebrate fauna throughout California (Agenbroad, 2003; Bell et al., 2004; Jefferson, 1988, 1991; Merriam, 1911; Reynolds et al., 1991; Rice et al., 2002; Savage et al., 1954; Scott and Cox, 2008; Springer et al., 2009; Wilkerson et al., 2011; Winters, 1954). This geologic unit is generally considered to have high paleontological sensitivity wherever it occurs. Impacts to paleontological resources resulting from ground disturbing construction activity could include damage or destruction of fossils, or loss of geologic context for fossils, and would be considered a significant impact without mitigation. Potentially significant impacts on cultural and paleontological resources will be analyzed further in an EIR.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
VI. GEOLOGY AND SOILS				
-- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	☐	■
ii) Strong seismic ground shaking?	☐	☐	■	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	■	☐
iv) Landslides?	☐	☐	■	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	■	☐
c) Be located on a geologic unit or soil that is unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	■	☐
d) Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code, creating substantial risks to life or property?	☐	☐	■	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	■

a.i) ***NO IMPACT***. The project site is not located within an identified Alquist-Priolo Earthquake Fault Zone (ABAG, 2016). No known fault lines are located on the project site. The nearest known fault to the project site is the Burdell Mountain Fault, a potentially active fault which is located outside of city limits approximately three miles north of San Marin High School (Novato, Existing Conditions Report, Figure 10-1, 2014). Therefore, no impact would occur due to rupture of a known earthquake fault on any of the project site and further analysis of this issue in an EIR is not warranted.

a.ii-a.iv) ***LESS THAN SIGNIFICANT IMPACT***. As noted above, the Burdell Mountain Fault is located approximately three miles north of San Marin High School. The San Andreas Rift Zone is located approximately 11.5 miles southwest of the project site. Activity on local faults, especially the San Andreas Fault, is capable of producing strong seismic ground shaking at the project site. The project would not involve construction of housing or habitable structures that could expose people to safety hazards from seismic ground shaking. The new athletic field lighting system would allow for an expanded schedule of athletic and community events at the project site. Therefore, the likelihood that people would be present at one of the project site during a strong seismic event would increase slightly with implementation of the project. However, athletes and visitors at the project site would primarily be travelling from nearby areas and would therefore likely be exposed to similar strong ground shaking as they would have been without implementation of the project.

In 1986, the California Legislature determined that buildings providing essential services should be capable of providing those services to the public after a disaster. Their intent in this regard was defined in legislation known as the Essential Services Buildings Seismic Safety Act of 1986 and includes requirements that such buildings shall be "designed and constructed to minimize fire hazards and to resist the forces of earthquakes, gravity and winds." Responsibility for enforcement of the act falls to the local building jurisdiction for locally owned or leased facilities and to the ~~Division of the State Architect (~~DSA~~)~~ for state owned or leased facilities. Therefore, the project would be subject to seismic safety review by the DSA and would be expected to withstand strong seismic ground shaking associated with movement along local faults.

Upland areas in Novato, including the project site, have a low to very low potential for liquefaction (Novato, Existing Conditions Report, 2014). The stadium at San Marin High School is located in an area mapped as having low liquefaction potential. In addition, the project site is located on relatively flat ground and has been mapped as having low landslide potential (Novato, 2014). Therefore, impacts related to strong seismic ground shaking, seismic-related ground failure, and landslides would be less than significant and further analysis in an EIR is not warranted.

b) ***LESS THAN SIGNIFICANT IMPACT***. Ground disturbance for the project would be limited to excavation for the support pole foundations and trenching or boring for installation of new electrical conduits. Although some soil would be disturbed during construction of the project, the potential for substantial soil erosion and loss of topsoil is small. The project site is relatively flat. Disturbed areas above trenching sites would be restored to pre-construction conditions following installation of the conduit. No new areas of loose or disturbed soil would remain after completion of construction activities. Due to the topography of the project site and the small amount of ground disturbance during construction, impacts related to substantial soil erosion or the loss of topsoil would be less than significant and further analysis of this issue in an EIR is not warranted.

c,d) ***LESS THAN SIGNIFICANT IMPACT***. The project would not involve construction of habitable structures that could expose people to unstable geologic units or soils. Installation of the proposed support poles and conduits would be subject to DSA review to ensure compliance with California Code of Regulations Title 24, also known as the California Building Standards Code. Compliance with applicable regulations would reduce the likelihood that project

components would be constructed on unstable or expansive soils. Furthermore, the school site is located in an area with a low potential for expansive soils (Novato, 2014). Due to the limited amount of ground disturbance associated with construction of the project and the previously disturbed nature of the project site, risks associated with unstable or expansive soils would be less than significant and further analysis of this issue in an EIR is not warranted.

e) ***NO IMPACT***. The project would not involve construction of wastewater systems or the introduction of land uses that would generate additional water demand or wastewater. No impact would occur and further analysis of this issue in an EIR is not warranted.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
VII. GREENHOUSE GAS EMISSIONS				
-- Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	■	☐	☐	☐
b) Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	■	☐	☐	☐

a,b) ***POTENTIALLY SIGNIFICANT IMPACT***. The project's construction activities, energy use, daily operational activities, and mobile sources (traffic) would generate greenhouse gas (GHG) emissions. These construction- and operations-related GHG emissions may be significant when combined with the emissions of other past, present, and reasonably foreseeable projects. Impacts related to consistency with applicable adopted GHG reduction plans and GHG emissions thresholds will be analyzed further in an EIR.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS				
-- Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	■	☐
b) Create a significant hazard to the public or the environment through reasonably	☐	☐	■	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS				
-- Would the project:				
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 ¼ mile of an existing or proposed school?	☐	☐	■	☐
d) Be located on a site which is included on a list of hazardous material 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 for people residing or working in the project area?	☐	☐	☐	■
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	■
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	■	☐
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	■	☐

a,b) ***LESS THAN SIGNIFICANT IMPACT***. The proposed lighting and public address systems at San Marin High School's stadium would allow for an expanded schedule of athletic and community events during evening and nighttime hours. These events would be similar to those that already take place at the stadium. High school and community athletic events typically do not involve the use or storage of large quantities of hazardous materials, other than minor amounts typically used for cleaning, maintenance and landscaping. Therefore, operation of the

project would not create a significant hazard to the public or the environment through the use, storage, transportation, or disposal of hazardous materials.

During construction of the project, the limited use of heavy machinery and equipment such as a backhoe, a small drill rig, and a small crane could result in a spill or accidental release of hazardous materials, including fuel, engine oil, engine coolant, and lubricants. However, due to the relatively short construction period, the small number of heavy construction vehicles that would be used, and the generally flat topography of the project site, the likelihood that spilled or leaked hazardous material would become mobilized and subsequently harm the public or the environment would be minor. Leaks or accidental spills would be quickly cleaned up and disposed of in accordance with applicable regulations.

In addition to the potential spill or accidental release of hazardous materials, construction of the project could encounter or mobilize previously unidentified existing contamination. The potential for existing contamination to be encountered is small due to the fact that project-related excavation, trenching, and boring would occur on a previously disturbed site that would have been evaluated for the presence of contaminated soil and remediated as necessary during past construction activities. As discussed in Item C below, no listed hazardous materials sites with soil or groundwater contamination occur within the stadium site. Previously unidentified contamination that is encountered during construction would be properly handled, transported, and disposed of at an appropriate disposal facility in accordance with applicable regulations. Impacts would be less than significant and further analysis of this issue in an EIR is not warranted.

c) ***LESS THAN SIGNIFICANT IMPACT***. The proposed athletic field upgrades would occur at San Marin High School. Therefore, all construction activities would occur within 0.25 mile of an existing school. However, construction and operation of the project would not involve the handling or use of acutely hazardous materials. A small amount of hazardous materials would be handled and used for a relatively short period of time during construction of the project. These materials would be the same as those utilized in a typical construction project and would include substances associated with construction machinery such as diesel, gasoline, engine oil, engine coolant, and lubricants. The areas under construction would be closed to students, staff, and the public during the active construction phase and therefore the direct exposure of students to hazardous materials during construction of the project is unlikely. Hazardous materials could be leaked or accidentally spilled during construction, potentially resulting in contamination of the ground surface and subsequent exposure of workers and the public. However, any leaks or spills would be cleaned up immediately and contaminated soil would be removed and disposed of in accordance with applicable regulations. Small amounts of fill, sand, and pea-gravel would be imported as necessary. However, the District and its contractors would use clean fill that does not contain contamination. Operation of the project would not involve the handling or use of hazardous materials other than those already present on the school campuses, such as typical substances used during cleaning and maintenance activities. The risk of exposure to hazardous materials during operation of the project would be minimal. This impact would be less than significant and further analysis in an EIR is not warranted.

d) ***LESS THAN SIGNIFICANT IMPACT***. The following databases were checked (July 26, 2016) for known hazardous materials contamination at the project site:

- *GeoTracker (California State Water Resources Control Board): list of leaking underground storage tank sites*
- *EnviroStor (California Department of Toxic Substances Control): list of hazardous waste and substances sites*
- *Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database*

Based on a review of the databases listed above, one active case involving known hazardous materials is located on the project site. This case involves a leaking waste oil tank that was removed from behind San Marin High School's auto shop in August 1989 (Harding Lawson Associates, 1990). At this time, soil samples were collected from beneath the removed tank. These samples indicated the presence of total petroleum hydrocarbons as diesel at a concentration of 26 parts per million (ppm) and total organic gas (TOG) ranging from 100 to 540 ppm. To date, the petroleum contamination has not been remediated (State Water Resources Control Board, GeoTracker, 2016). The San Francisco Bay Regional Water Quality Control Board has issued a Path to Closure Plan to test for methyl tertiary butyl ether (MTBE) and conduct site investigations to determine the extent of existing contamination.

Although this case remains active, construction of the proposed light and public address systems is not expected to result in exposure to potential petroleum contaminants from the former waste oil tank. All ground disturbance associated with the project would occur within and next to the athletic field, which is located at least 350 feet east from the tank site outside the school's auto shop. No other active cases involving hazardous materials are located within one-quarter mile of the athletic field. Therefore, the risk of exposure to existing hazardous materials would be less than significant and no further analysis of this issue in an EIR is warranted.

e,f) ***NO IMPACT***. The project site is located approximately three miles southwest of the nearest public use airport, Marin County Airport, which is north of Novato. San Marin High School is located outside of all aviation safety zones associated with Marin County Airport, as shown in its Airport Land Use Plan (Marin County Airport Land Use Commission, 1991). Pursuant to Code of Federal Regulations (CFR) Title 14 Part 77.9, notification of the Federal Aviation Administration about proposed construction would be required if new structures would exceed certain heights near the airport. However, the proposed light poles would not exceed a height of 200 feet above ground level and would not exceed an imaginary surface extending outward and upward of 100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest runway. Therefore, notification under CFR Title 14 Part 77.9 would not be required. Furthermore, the project site is not located in the vicinity of a private airstrip. Therefore, neither construction nor operation of the project would result in a safety hazard for people living or working in the project area. No impact would occur and further analysis of this issue in an EIR is not warranted.

g) ***LESS THAN SIGNIFICANT IMPACT***. The project would not involve the development of structures that could potentially impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. No changes to the local circulation or access patterns are proposed, and neither construction nor operation of the project would significantly change or impede existing traffic patterns or flow in a manner that would impair implementation of or physically interfere with an adopted emergency response plan or

emergency evacuation plan. A less than significant impact would occur and further analysis in an EIR is not warranted.

h) ***LESS THAN SIGNIFICANT IMPACT***. The San Marin High School stadium is within a Moderate Fire Hazard Severity Zone as shown on Cal Fire's Fire Hazard Severity Zones Maps (CAL FIRE, 2007). At this site, the proposed athletic field lighting system would allow for an expanded schedule of athletic and community events, slightly increasing the exposure of people to moderate fire hazards. However, the project site is within the urban area of Novato and is primarily surrounded by existing development. While natural open space is located near the stadium at O'Hair Park to the south and in the hills to the northwest, no wildlands are immediately adjacent to the stadium. Surrounding residential development would serve as a fire break in the event of a wildfire in nearby open space. Therefore, the project would have a less than significant impact related to fire hazards, and further analysis in an EIR is not warranted.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY				
-- Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	■	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering or the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	■
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	■	☐
d) Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	■	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY				
-- Would the project:				
e) 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?	☐	☐	■	☐
f) Otherwise substantially degrade water quality?	☐	☐	■	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	■
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	■
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	■
j) Result in inundation by seiche, tsunami, or mudflow?	☐	☐	☐	■

a,c,d-f) ***LESS THAN SIGNIFICANT IMPACT***. Construction of the project would involve the installation of poles to support new lighting and upgraded public address systems and the installation of conduit to provide power to those systems, within the Novato Creek watershed (Novato, 2014). Ground disturbance would be limited to excavation for the pole foundations and either trenching or boring to install the conduit. Any required project-related grading would be very minimal. Construction activities would require the limited use of heavy construction equipment, such as a backhoe, small drill rig, and a small crane. Use of this heavy construction equipment would involve the use and handling of hazardous materials, such as gasoline, engine oil, coolants, and lubricants. These hazardous materials could leak or be spilled onto the ground surface during construction of the project. However, due to the relatively short construction period, the small number of heavy construction vehicles that would be used, the generally flat topography of the project site, and the lack of any streams, wetlands, or other waterbodies at or adjacent to the stadium, the likelihood that spilled or leaked hazardous material would contaminate a waterbody is very low. Leaks or accidental spills would be quickly cleaned up and disposed of in accordance with applicable regulations. Neither the topography nor the hydrology of the project site would be altered substantially due to construction of the proposed project. Ground surfaces above trenching locations would be restored to pre-construction conditions after installation of the conduit, and no areas of bare or

disturbed soil would remain after completion of project construction. Support poles would be installed on pre-cast concrete pier foundations; new impervious surfaces would be very minimal. Assuming a six-foot diameter circle foundation and eight poles, a maximum of 226 square feet of impervious surfaces would be added. This would not substantially affect groundwater recharge or increase runoff rates or amounts. Neither the infiltration capacity nor the runoff volume or rate would be altered substantially at any of the project site. Project operation would not require any water use, and no new runoff would be created as a result of project construction or operation. No water quality standards or waste discharge requirements would be violated due to construction or operation of the project, and water quality in the Novato Creek watershed would not otherwise be degraded. Impacts would be less than significant and further analysis of these issues in an EIR is not warranted.

b) ***NO IMPACT***. Neither construction nor operation of the project would require the use of potable water or the extraction of groundwater. New impervious surfaces would be limited to the pre-cast concrete pier foundations for the lighting and public address system support poles. The total amount of new impervious surface at the project site would be very small and the infiltration capacity at each project site would not be adversely affected by implementation of the project. No impact would occur and further analysis of this issue in an EIR is not warranted.

g-j) ***NO IMPACT***. As shown in Figure 12-2 in the City's Existing Conditions Report, the project site is not located within a 100-year flood hazard area as mapped by the Federal Emergency Management Agency (Novato, 2014). The City's mapped dam inundation area for the Stafford Lake dam is restricted to the south of Novato Boulevard and east of San Marin Drive and excludes San Marin High School (Novato, 2014). Therefore, the project site would not be affected by flooding, and the proposed project structures would not obstruct flood flows. Furthermore, the project does not include the construction of housing that could be vulnerable to flooding. The project site also is not at risk of inundation by a tsunami, being located approximately 4.5 miles from the Petaluma River and 6.5 miles from the San Francisco Bay and elevated approximately 100 feet above sea level (CalEMA, 2009). In addition, the site is not located near a large inland body of water that could be subject to seiches, or standing waves.

The project site is generally flat and has been stabilized to support the existing structures and landscaping. Construction of the project would involve very minimal grading and would not substantially increase the steepness of any slopes or reduce the stability of existing slopes. The surrounding land is generally flat and is developed with residential uses. Therefore, the project site would not be at risk of significant inundation by mudflow. No impacts would occur and further analysis of these issues in an EIR is not warranted.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
X. LAND USE AND PLANNING				
-- Would the project:				
a) Physically divide an established community?	☐	☐	☐	■
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	■
c) Conflict with an applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	■

a) ***NO IMPACT***. No project components would be constructed outside of San Marin High School. New structures would be limited to poles within and near the existing stadium that would support new lighting and upgraded public address systems. No new fencing is included as part of the project. No new development, roads or other physical or regulatory features are proposed through established neighborhoods that would create a barrier or division in such areas. Impacts would be less than significant and no further analysis of these issues in an EIR is warranted.

b) ***NO IMPACT*.** Pursuant to Government Code Section 53094, the governing board of a school district may render a local zoning ordinance inapplicable to a proposed use of property by the school district, by a vote of two-thirds of its members. The Governing Board of NUSD made such a finding on November 15, 2016 (Resolution 16-2016-17). All construction and operation activities for the project would occur within Novato Unified School District property and would not be subject to local zoning ordinances. Construction equipment may be staged or stored on-site within secured, paved areas or at the construction contractors existing storage facilities at their discretion. This would not result in any land use conflicts as it would involve use at an existing storage facility. No changes to zoning or land use designations would be required. Operation of the project would be subject to the policies and regulations of the District's Board of Education. For project compliance in the areas of structural, fire and life safety, and ADA accessibility, the policies and regulations of the ~~Division of the State Architect~~DSA would apply.

Although the proposed project would not be subject to local zoning ordinances, this Initial Study and the EIR will evaluate the consistency of the proposed project with local noise and traffic ordinances as those effects of the project have the potential to affect areas outside of the project site and potentially conflict with applicable regulations and ordinances. Potential noise

impacts are evaluated in Section XII, *Noise,* and potential traffic impacts are evaluated in Section XVI, *Transportation/Traffic*.

c) ***NO IMPACT***. Construction and operation of the proposed light and public address systems would occur within the boundaries of the San Marin High School stadium on District property. The project would not occur within the area of an adopted Habitat Conservation Plan or Natural Community Conservation Plan (CDFW, 2015). Therefore, the project would not conflict with such a plan and no impact would occur. This issue does not warrant further analysis in an EIR.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XI. MINERAL RESOURCES				
-- Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	■
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	■

a,b) ***NO IMPACT***. Ground disturbance for this project would be limited to the installation of new poles to support lighting and public address systems and the installation of new electrical conduit to provide power to those poles. This ground disturbance would occur on previously disturbed areas within and near the existing stadium on District property. No new land would be paved or otherwise removed from the local mineral resource inventory. There are no known State-designated minerals of regional or statewide importance within the City of Novato (California Department of Conservation, 2013). No conflicts with the availability of regionally or locally important mineral resource recovery sites would occur. No impact to mineral resources would occur due to the construction or operation of the project, and no further analysis of this issue in an EIR is warranted.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XII. NOISE				
-- Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	■	☐	☐	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XII. NOISE				
-- Would the project result in:				
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	■	☐
c) A substantial permanent increase in ambient noise levels above levels existing without the project?	■	☐	☐	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	■	☐	☐	☐
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 expose people residing or working in the project area to excessive noise levels?	☐	☐	■	☐
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise?	☐	☐	☐	■

a) ***POTENTIALLY SIGNIFICANT IMPACT***. The main sources of existing noise on and adjacent to the project site are traffic noise from nearby roadways, especially San Marin Drive and Novato Boulevard, and noise from existing school activities such as daytime sports practices and games, rallies, assemblies, and lunch periods. The proposed expanded use of the San Marin High School stadium during evening and nighttime hours would introduce new sources of noise (such as crowd noise, noise from the public address systems, and traffic noise from event attendance) during those hours that could exceed applicable noise ordinance standards at adjacent land uses including residences, potentially resulting in significant impacts. This issue will be examined further in an EIR.

b) ***LESS THAN SIGNIFICANT IMPACT***. Vibration energy is carried through buildings, structures, and the ground, whereas ambient noise is carried through the air. Thus, vibration is generally felt rather than heard. Typically, groundborne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases and vibration rapidly diminishes in amplitude with distance from the source. The ground motion caused by vibration is measured as particle velocity in inches per second and is referenced as vibration decibels (VdB) in the U.S. The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between

barely perceptible and distinctly perceptible levels for many people. Most perceptible indoor vibration is caused by sources within buildings such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration from traffic is barely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration velocity, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings.

Construction of the project would include only limited ground disturbance. Excavation would be required for the installation of pole foundations, and limited trenching and boring would be required for the installation of new electrical connections. Construction equipment that would likely be required would include loaded trucks, a backhoe, a small drill rig, and a small crane; the types of equipment that cause vibration impacts such as pile drivers and large bulldozers would not be used. The nearest sensitive receptor to the project site is the classroom approximately 100 feet southwest of the stadium track. As shown in Table 4~~3~~, at 100 feet from the source, estimated vibration levels associated with the proposed construction equipment would be 74 VdB. As mentioned above 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Therefore, should construction occur while school is in session vibration would not be perceptible in the classroom. No pile-driving, use of explosives, or substantial grading or earth movement would occur during construction. Amplified sound through the proposed public address system would not create significant groundborne vibrations. This impact would be less than significant and further analysis of this issue in an EIR is not warranted.

Table 4~~3~~
Construction-Related Vibration levels

Equipment	Vibration Level at 25 Feet from Source (VdB)	Vibration Level at 100 feet from Source (VdB)
Loaded Truck	86	74
Jackhammer	79	67

Source: FTA 2006

c,d) ***POTENTIALLY SIGNIFICANT IMPACT***. Temporary noise increases would result from construction activities such as excavation, trenching, and pole installation. Long-term project-related changes in noise would be primarily due to increases in traffic volumes on nearby street segments, the introduction of an upgraded public address system, and the expansion of the evening and nighttime schedule of outdoor events at San Marin High School. These effects of the project could increase the ambient evening and nighttime noise levels during outdoor school events for sensitive receptors near the stadium. These impacts are potentially significant and will be examined further in an EIR.

e) ***LESS THAN SIGNIFICANT IMPACT***. As discussed in Section VIII, *Hazards and Hazardous Materials*, the project site is located approximately three miles southwest of the nearest public use airport, Marin County Airport. San Marin High School is located outside of all aviation safety zones associated with this airport, as shown in its Airport Land Use Plan (Marin County Airport Land Use Commission, 1991). While attendees of outdoor school events supported by

the proposed light and public address systems could be exposed to noise from aircraft approaching or leaving Marin County Airport, aircraft noise would not substantially contribute to ambient noise levels relative to school events and local traffic. Therefore, implementation of the project would not expose people residing or working in the area to excessive noise levels from aircraft. This impact would be less than significant and further analysis of this issue in an EIR is not warranted.

f) ***NO IMPACT***. The San Marin High School stadium is not located in the vicinity of a private airstrip. Therefore, construction and operation of the project would not expose people residing or working in the area to excessive noise as a result of proximity to a private airstrip. Further analysis of this issue in an EIR is not warranted.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XIII. POPULATION AND HOUSING				
-- Would the project:				
a) Induce substantial 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 housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	■
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	■

a-c) ***NO IMPACT***. Neither construction nor operation of the project would induce substantial population growth, either directly or indirectly. Construction would include the installation of poles to support new lighting and upgraded public address systems at the San Marin High School stadium. The project would not increase or facilitate an increase in school enrollment and would not include the construction of housing or generate a substantial number of new jobs. No housing or people would be displaced. Construction of the project would occur over a period of approximately three months and would not be expected to lead to a permanent relocation of workers to the project area. No impact to population and housing would occur as a result of implementation of the project and further analysis of this issue in an EIR is not warranted.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XIV. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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:				
i) Fire protection?	☐	☐	■	☐
ii) Police protection?	☐	☐	■	☐
iii) Schools?	☐	☐	■	☐
iv) Parks?	☐	☐	■	☐
v) Other public facilities?	☐	☐	■	☐

a.i-a.v) ***LESS THAN SIGNIFICANT IMPACT***. Construction of the project would include the installation of poles to support new lighting and upgraded public address systems and the installation of conduit to provide power to those systems. The new lighting systems would allow for an expanded schedule of high school athletic and community events during evening and nighttime hours. Construction of the project would not involve the construction of housing or other facilities or the expansion of seating capacity at the stadium. No population growth would be induced by construction or operation of the project, and enrollment levels at San Marin High School would not be affected by implementation of the project. Although operation of the project would result in a concentration of athletes and spectators at the stadium during evening and nighttime events, those people would travel from the surrounding area where they would have required the same level of police and fire protection had they not attended an evening or nighttime event at the project site. Also, the number of people in attendance at any one evening or nighttime event generally would not exceed the number of students that attend San Marin High School each weekday. Therefore, neither the total population served by existing police and fire protection services nor the periodic concentration of that population on the project site would change relative to existing conditions. There is currently adequate police protection in the project area ~~and according to Novato Police Captain, Jamie Knox and his staff, the community benefit of the project would outweigh any additional burden to the Novato Police Department~~ (personal communication with Novato Police Department Captain Jamie Knox, October 18, 2016). Furthermore, the department stated that aside from minor additional

patrol in the beginning they do not see a reason for elevated crime associated with the project. Existing levels of police and fire protection would remain sufficient with implementation of the project and no new police or fire stations would need to be constructed. Implementation of the project would not induce population growth and therefore would not result in the need for new schools or parks or the physical deterioration of existing schools or parks. In fact, the expansion of evening and nighttime availability for athletic and community events at San Marin High School may help to reduce some demand at nearby parks. Impacts related to public services would be less than significant and further analysis of this issue in an EIR is not warranted.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XV. RECREATION				
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?	☐	☐	☐	■

a) ***NO IMPACT***. Because construction and operation of the project would not induce population growth in the project area, as discussed above in Section XIII, *Population and Housing*, the project would not increase demand for recreational facilities. The project would expand the availability of recreational facilities available for public use and attendance at the San Marin High School stadium. Rather than resulting in a detrimental increase in the use of existing neighborhood or regional parks, the expanded availability of a high school recreational facility would help to alleviate some excess demand on nearby recreational facilities. The athletic field that would be upgraded as part of the project is designed for frequent use by high-school athletes and would not experience accelerated physical deterioration as a result of the proposed expanded schedule of events. No impact would occur and further analysis of this issue in an EIR is not warranted.

b) ***NO IMPACT***. The proposed project is in and of itself a recreational facility project. The athletic field improvement project would not involve the construction of any new recreational facilities or the expansion of any existing recreational facilities. Construction of the project would be limited to the installation of support poles for new lighting and upgraded public address systems and electrical conduits to provide power to those systems. The potential adverse physical effects on the environment that would result from implementation of the proposed project are analyzed throughout this document. No additional adverse effects beyond those already analyzed and disclosed would occur. For a discussion of potentially significant impacts related to construction and operation of the project, please see Section I, *Aesthetics*;

Section II, *Air Quality*; Section VII, *Greenhouse Gas Emissions*; Section XII, *Noise*; and Section XVI, *Transportation/Traffic*.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XVI. TRANSPORTATION/TRAFFIC				
-- Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit?	■	☐	☐	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	■	☐	☐	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	■	☐
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	☐	☐	■	☐
e) Result in inadequate emergency access?	☐	☐	■	☐
f) Conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities?	☐	☐	■	☐

a,b) ***POTENTIALLY SIGNIFICANT IMPACT.*** Construction of the proposed light and public address systems at San Marin High School would generate temporary traffic. After construction, the upgraded athletic field would shift the timing of vehicle trips from the daytime to the evening and nighttime while potentially increasing overall vehicle trips during large events such as evening and nighttime football games. Nearby roads and highways have various levels of existing congestion. Construction and operation of the project could either

individually or cumulatively adversely affect the performance of the circulation system, conflict with a congestion management program, or conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities. These impacts are potentially significant and will be analyzed further in an EIR.

c) ***LESS THAN SIGNIFICANT IMPACT***. Construction and operation of the project would not result in an increase in air traffic levels or a change in air traffic location that would result in a substantial safety risk. As discussed in Section VIII, *Hazards and Hazardous Materials*, the project site ~~also~~ is located outside of all aviation safety zones associated with nearby airports and would not introduce structures that pose hazards to air traffic (Marin County Airport Land Use Commission, 1991). Therefore, impacts on air traffic patterns would be less than significant and further analysis of this issue in an EIR is not warranted.

d) ***LESS THAN SIGNIFICANT IMPACT***. Construction of the proposed light and public address systems at San Marin High School would not include changes to any roads, driveways, intersections, stop signs, traffic signals, or parking areas. The project would not introduce any transportation-related design features such as sharp curves or dangerous intersections. Transportation infrastructure surrounding the project site would remain unchanged. No uses incompatible with traffic (such as farm equipment) are proposed. This impact would be less than significant and further analysis in an EIR is not warranted.

e) ***LESS THAN SIGNIFICANT IMPACT***. As described above under Item D, construction of the project would not alter the existing transportation infrastructure. Emergency access routes for San Marin High School and surrounding areas would remain accessible, and no changes to emergency vehicle ingress and egress points would occur. Structures associated with construction of the project would be limited to support poles for new lighting and upgraded public address systems and underground electrical conduit. The poles would be located within and adjacent to existing athletic field. No structures would be placed in a roadway, driveway, or other vehicle access route. Although operation of the project would result in increased traffic levels at the start and finish of evening and nighttime hours, particularly during football games, traffic levels would be within the range of what can be expected in the urban area of Novato, and emergency vehicles would be expected to negotiate congestion as they do in many places citywide. This impact would be less than significant and further analysis in an EIR is not warranted.

f) ***LESS THAN SIGNIFICANT IMPACT***. As described above under Items D and E, construction of the project would not alter the existing transportation infrastructure. No trails, walkways, bikeways, including the Dwarf Oak Trail adjacent to San Marin High School, or public transit rights-of-way would be encroached upon, blocked, re-routed, temporarily closed, or otherwise affected. Ground disturbance for the project would be limited to excavation for the support pole foundations and trenching or boring for installation of new electrical conduits. This disturbance would occur within or adjacent to the existing athletic field. In general, the project would shift bicycle, pedestrian, and transit demand to a different time of day. The project is not expected to affect existing transit operations as transit is expected to play a very small role in travel to the athletic field for events. This impact would be less than significant and further analysis in an EIR is not warranted.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XVII. UTILITIES AND SERVICE SYSTEMS				
-- Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	■
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	■
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	■
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	■
e) 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?	☐	☐	☐	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	■	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	■

a,b,e) ***NO IMPACT***. Construction of the project includes the installation of support poles for new lighting and upgraded public address systems and the installation of electrical conduits to provide power for those systems. No restrooms, drinking fountains, sprinklers, or other sources of wastewater would be constructed as part of the project, and no uses that would increase water demand are proposed. Thus, no wastewater would be generated that could exceed the treatment requirements of the San Francisco Bay Regional Water Quality Control Board, result in the construction of new water or wastewater treatment facilities or the expansion of existing facilities, or exceed the capacity of any existing wastewater treatment provider. No impact would occur and further analysis of this issue in an EIR is not warranted.

c) ***NO IMPACT***. Ground disturbance for this project would be limited to the installation of support poles for new lighting and upgraded public address systems and the installation of electrical conduits to provide power for those systems. The electrical conduit would be installed underground via trenching or jack and bore installation. Following installation of the underground conduit, all ground surfaces would be restored to pre-construction conditions. The support poles would be installed on pre-cast concrete pylon bases. No building pads or other extensive areas of impermeable surface would be created as a result of implementation of the project. Very little grading would be required for the project, and the existing topography and hydrology of the athletic field would not be altered substantially. Therefore, neither the amount of stormwater runoff nor the runoff patterns across the project site would be altered substantially. No new stormwater drainage facilities or the expansion of existing facilities would be required. No impact would occur and further analysis of this issue in an EIR is not warranted.

d) ***NO IMPACT***. The project would not require the use of potable water. Existing drinking fountains and water faucets within and near the stadium would remain unchanged and no new drinking fountains, water faucets, or water supply lines would be constructed as part of the project. Thus, the project would not generate a need for new or expanded water entitlements. No impact on water supplies would occur and further analysis of this issue in an EIR is not warranted.

f) ***LESS THAN SIGNIFICANT IMPACT***. The project would generate a very small amount of solid waste during construction from the removal of soil and/or concrete for the installation of the lighting and public address system support poles and for the installation of the underground conduit. Excavated soil would be reused on-site to the maximum extent feasible. Operational waste would be limited to concession-related crowd waste, such as food and beverage containers. No new concession services are proposed as part of this project. While implementation of the project would result in additional evening and nighttime events throughout the year (such as up to 15 regular-season football games plus any playoff games) at San Marin High School, the project would not directly generate any new waste. Waste disposal associated with the evening and nighttime events that the project would enable likely would represent a redistribution of the existing waste stream rather than the introduction of a new source of waste generation.

Solid waste from Novato is disposed of at the Redwood Landfill and Recycling Center (Redwood Landfill), located at 8950 Redwood Highway, north of the Novato city limit. The Redwood Landfill has a permitted throughput of 2,300 tons per day, a remaining capacity reported in 2008 of approximately 26 million cubic yards, and an estimated closure year of 2024 (CalRecycle, SWIS, 2016). Based on the landfill's receipt of 187,400 tons of solid waste in 2014 (CalRecycle, 2014 Landfill Summary Tonnage Report, 2016), the most recently assessed complete year, the relatively small amount of construction and operational waste that the project would generate would not substantially increase the existing amount of solid waste entering the landfill on an annual basis. Therefore, the project would not contribute to an exceedance of landfill capacity. Solid waste impacts would be less than significant and further analysis of this issue in an EIR is not warranted.

g) ***NO IMPACT***. The project would be required to comply with all applicable federal, state, and local statutes and regulations related to solid waste. No impact would occur and further analysis of this issue in an EIR is not warranted.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self- sustaining levels, 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) Does the project 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) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	■	□	□	□

a) ***POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED***. As discussed under Section IV, *Biological Resources*, the project would not substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self- sustaining levels, eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. However, as discussed in Section V, *Cultural Resources,* ground disturbance during construction of the project could have a significant impact on buried cultural resources, such as important examples of the major periods of California history or prehistory. This potentially significant impact will be further analyzed in an EIR.

b) ***POTENTIALLY SIGNIFICANT IMPACT***. The project could result in a significant cumulative impact for air quality, greenhouse gases, and traffic. These potential cumulative impacts will be discussed further in an EIR.

c) ***POTENTIALLY SIGNIFICANT IMPACT***. In general, impacts to human beings are associated with air quality, hazards and hazardous materials, and noise impacts. The proposed project may have potentially significant impacts with respect to air quality and noise. Impacts to human beings will be further analyzed in an EIR.

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