Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
☐	☐	☐	☐

be required to comply with Mitigation Measure GS–1, which would ensure that the project would not be adversely affected by expansive soils.

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?	☐	☐	☐	X

Explanation: The proposed project would not directly generate wastewater, although it would indirectly result in an incremental increase in demand from the site for wastewater treatment. Because the project would increase the number of hours each week that the Minor Field would be used for baseball and other activities, more participants and spectators would be expected to use the adjacent bathroom facilities, which would incrementally increase wastewater flows from the site. However, the bathrooms are connected to the municipal sewer system; they do not and would not require the use of a septic or alternative wastewater disposal system.

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?	☐	☐	X	☐

Explanation: As discussed in Section III, Air Quality, operation of the project would have no direct emissions of air pollutants, including greenhouse gases (GHGs). While GHGs would be indirectly emitted by participants and spectators traveling in cars to and from the site, the (conservatively estimated) 35 vehicles traveling short distances would create a fraction of the vehicle trips generated by more typical land use development projects. Using the same land use examples previously cited in Section III-b for air pollutant emissions, BAAQMD's operational GHG screening threshold for a high-turnover restaurant is 7,000 square feet; for a discount superstore it is 17,000 square feet, and for a motel it is 106 rooms. While these screening thresholds for GHGs are considerably lower than the general air pollutant screening thresholds for the same land uses, they still represent far more vehicle use (which is the primary basis for the thresholds) than would occur from nighttime use of the Minor Field for Little League games or similar types of uses. When compared to these thresholds, it is clear that even the indirect operational GHG emissions from the proposed project would not be significant.

Similarly, the potential for emission of GHGs during construction would be quite low. There would be very limited operation of diesel-powered equipment for construction of the four light pole foundations and the electrical conduit trenches and erection of the light standards. It is estimated that approximately 1,500 square feet (0.034 acre) of ground would be disturbed during project construction. Relative to most construction projects, the potential for emission of GHGs during construction would be extremely low. For this reason, the AUSD determined that the effort and cost of quantifying the project's GHG emissions was not warranted. In a case such as this where a small project would clearly not have the potential to emit significant amounts of

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
☐	☐	☐	☐

GHGs, a lead agency may forego quantitative modeling and rely on a qualitative argument such as the one presented above.[23] Based on the considerations enumerated above, the project would have a less-than-significant impact from GHG emissions.

b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	X

Explanation: See the discussion in Section III, Air Quality. As noted in Section III-a, the project would not conflict with BAAQMD's *Clean Air Plan*, which is intended to reduce District-wide emissions of GHGs and other pollutants.

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?	☐	☐	☐	X

Explanation: The proposed project would not involve the routine transport, use, or disposal of hazardous materials.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	X

Explanation: The proposed project would not involve the use of hazardous materials and would have no potential to cause a release of hazardous materials into the environment.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	X

Explanation: The proposed project would not emit hazardous emissions or involve the use of hazardous materials or substances.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to	☐	☐	☐	X

[23] Sigalle Michael, Senior Environmental Planner, Bay Area Air Quality Management District (BAAQMD), personal communication, July 31, 2014.

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
☐	☐	☐	☐

Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Explanation: The project site is not included in a large database maintained by the California Department of Toxic Substances Control (DTSC) of sites associated with hazardous materials or hazardous waste generation, storage, or spills.[24] The DTSC database is a compilation of a variety of regulatory databases, including hazardous materials sites compiled pursuant to Government Code Section 65962.5. Furthermore, there are no hazardous materials sites within 2,000 feet of Wood Middle School. Additionally, there are no sites within 1,000 feet of the school identified in the database of hazardous materials release sites compiled by the State Water Resources Control Board.[25] Although there is one site listed on this database within 2,000 feet of the project site, related to contamination of groundwater with diesel fuel, the site was cleaned up and has a Case Closed status.

e) For a project within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	X

Explanation: There are no public airports within 2 miles of the project site; the nearest airport is Oakland International Airport, located approximately 3 miles southeast of the site. The nearest runway to the project site is used by cargo planes and is about 2.5 miles from the site. The project would not expose people to a safety hazard from airport operations.

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?	☐	☐	☐	X

Explanation: There are no private airstrips within 2 miles of the project site; the nearest private airstrip is the Alameda Naval Air Station, located about 3 miles northwest of the project site. The base was closed in 1997.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	X

[24] California Department of Toxic Substances Control, EnviroStor Database, accessed July 30, 2014 at: http://www.envirostor.dtsc.ca.gov/public/mapfull.asp?global_id=&x=-119&y=37&zl=18&ms=640,480&mt=m&findaddress=True&city=420 Grand Street, Alameda, CA&zip=&county=&federal_superfund=true&state_response=true&voluntary_cleanup=true&school_cleanup=true&ca_si.

[25] State Water Resources Control Board, GeoTracker Database, accessed July 30, 2014 at: http://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=420+Grand+Street,+Alameda,+CA.

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
☐	☐	☐	☐

Explanation: The proposed project would create any obstructions to emergency evacuation routes or otherwise have any potential to interfere with implementation of an emergency response or emergency evacuation plan.

h) Expose people or structures to 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?	☐	☐	☐	X

Explanation: The project is located in a fully urbanized environment; there are no wildlands in proximity to the site. There is therefore no potential to expose people or structures to a significant risk of wildland fires.

IX. HYDROLOGY AND WATER QUALITY — *Would the project:*

a) Violate any water quality standards or waste discharge requirements?	☐	☐	X	☐

Explanation: The proposed project would create a few hundred square feet, at most, of new impervious surfaces, consisting of the four light poles and their foundations. No vehicles would be parked or operated on these new impervious surfaces, which would have only an infinitesimal potential to generate polluted stormwater runoff, from eroded metals from the painted surfaces of the light fixtures.

Operational stormwater discharges from new development are regulated by the terms of each jurisdiction's municipal stormwater permits. In the City of Alameda, development projects must comply with the National Pollutant Discharge Elimination System (NPDES) permit (NPDES Permit No. CAS612008) issued to the Clean Water Program Alameda County (CWPAC) (formerly the Alameda Countywide Clean Water Program) and other Bay Area jurisdictions by the San Francisco Bay Regional Water Quality Control Board (RWQCB) (NPDES Order No. R2-2009-0074). The revised Municipal Regional Stormwater Permit (MRP) was issued on October 14, 2009 and replaced the previous permit originally issued in February 2003 with substantial new requirements for development and redevelopment projects.

Under the current MRP, any private or public development project that would create or modify 10,000 square feet or more of impervious surfaces must comply with Provision C.3. Projects subject to Provision C.3 must include low-impact development (LID) measures to treat stormwater runoff. The impervious surfaces created by the proposed project would fall well below the 10,000-square-foot threshold, and would not be subject to Provision C.3 requirements. Project operations would have a ***less-than-significant impact*** on water quality.

With respect to the potential for project construction activities to adversely affect water quality as a result of erosion of sediment, as discussed in more detail in Section VI-b, above, project construction would also have a ***less-than-significant impact*** on water quality.

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
☐	☐	☐	☐

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 of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?* ☐ ☐ ☐ **X**

Explanation: The project would not utilize groundwater supplies and would have virtually no effect on the amount of groundwater recharge that occurs at the site.

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?* ☐ ☐ ☐ **X**

Explanation: The project would not affect existing drainage patterns on the project site.

d) *Substantially alter the existing drainage pattern of the site or area, including through 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?* ☐ ☐ ☐ **X**

Explanation: The project would not alter the course of a stream or river and would not increase the volume or rate of surface runoff from the site. There is therefore no potential for the project to increase the risk of on- or off-site flooding.

e) *Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?* ☐ ☐ ☐ **X**

Explanation: The project would not increase the volume or rate of surface runoff from the site, and therefore would have no potential to exceed the capacity of existing or planned stormwater drainage systems. As discussed above in Section IX-a, the project's potential to create polluted stormwater runoff would be infinitesimally small.

f) *Otherwise substantially degrade water quality?* ☐ ☐ ☐ **X**

Explanation: The project would not otherwise have the potential to substantially degrade water quality.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?*	☐	☐	☐	☒

Explanation: The proposed project would not develop any housing.

h) *Place within a 100-year flood hazard area structures which would impede or redirect flood flows?*	☐	☐	☐	☒

Explanation: The project site is within a larger surrounding area mapped as Zone X by the Federal Emergency Management Agency (FEMA), which is the designation assigned to areas that have been determined to be outside of the 0.2 percent annual chance flood plain (i.e., the 500-year flood plain).[26] The project site is therefore not located within a 100-year or 500-year flood hazard area.

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?*	☐	☐	☐	☒

Explanation: The project site is not located within a dam failure inundation zone as mapped by the Association of Bay Area Governments (ABAG).[27]

j) *Inundation by seiche, tsunami, or mudflow?*	☐	☐	☒	☐

Explanation: Tsunamis (seismic sea waves) are long-period waves that are typically caused by underwater disturbances (landslides), volcanic eruptions, or seismic events. Areas that are highly susceptible to tsunami inundation tend to be located in low-lying coastal areas such as tidal flats, marshlands, and former bay margins that have been artificially filled but are still at or near sea level.

The project site is within a tsunami inundation hazard area as mapped by the California Emergency Management Agency.[28] However, these maps are prepared at a planning level of detail, and may exaggerate the potential for harm from a tsunamis inside San Francisco Bay. Any seismic-generated tsunamis would be quite constrained in reaching the shores of the inner bay. A tsunami originating in the Pacific Ocean would lose much of its energy passing through

[26] Federal Emergency Management Agency, Flood Insurance Rate Map, Alameda County, California and Incorporated Areas, Community Panel Number 06001C0069G, August 3, 2009.

[27] Association of Bay Area Governments (ABAG), Dam Failure Inundation Hazard Map for Alameda, 1995, Accessed August 2, 2014 at: http://www.abag.ca.gov/cgi-bin/pickdamx.pl.

[28] California Emergency Management Agency, California Geological Survey, and University of Southern California, "Tsunami Inundation Map for Emergency Planning, State of California, County of Alameda, Oakland West Quadrangle," December 9, 2009.

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
☐	☐	☐	☐

the relatively narrow Golden Gate and into the Bay. The project site is separated from the Golden Gate by more than 11 miles as well as by intervening land masses. Therefore, there is no potential for a direct tsunami wave at the project site. Inundation would occur, rather, from the run-up of water that would be temporarily displaced by the surge of the tsunami. While there is some potential for a tsunami to cause a temporary inundation of the project site, the proposed project would not increase this potential, and would not be subject to catastrophic damage in the event of inundation. The players and spectators who could be present during inundation of the site by tsunami would be exposed to the same risk that other people, including students and teachers, are exposed to on a daily basis at the school site. Any warning system and/or safety procedures currently in place at Wood Middle School would apply to users of the proposed project. This would therefore be a less-than-significant impact.

A seiche is a free or standing wave oscillation(s) of the surface of water in an enclosed or semi-enclosed basin that may be initiated by an earthquake. For the same reasons noted above for tsunami hazard, there is a similar potential for inundation of the site due to seiche.

Debris flows, mudslides, and mudflows begin during intense rainfall as shallow landslides on steep slopes. The rapid movement and sudden arrival of debris flows can pose a hazard to life and property during and immediately following a triggering rainfall. The project is essentially flat and is not located downslope of unstable areas that would be subject to mudflows. There is therefore no potential for mudslides or debris flows.

X. LAND USE AND PLANNING — *Would the project:*

a) Physically divide an established community?

☐	☐	☐	X

Explanation: The project site is currently developed with a baseball diamond. There is no established community on the site and no potential for the proposed lighting project to 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 purposed of avoiding or mitigating an environmental effect?

☐	☐	☐	X

General Plan: Land Use

The project site is located within the South Shore sector of the City of Alameda. The General Plan land use designation of the site is Public/Institutional/School. The General Plan defines this land use category merely as "schools and City facilities that have unique public character." Unlike other land uses, the General Plan does not specify allowed densities or other development standards for Public/Institutional uses, and does not promulgate any policies applicable to this type of land use.

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
☐	☐	☐	☐

All elements of the General Plan were reviewed to identify any policies that would be applicable to the proposed project. The only relevant policies identified were in the Health and Safety Element, including the following:

Seismic, Geologic, and Soil Hazards

Policy 8.1.e: Design underground utilities to minimize the effect of differential ground displacements.

Policy 8.1.f: Continue to provide for the identification and evaluation of existing structural hazards, and abate those hazards to acceptable levels of risk.

Policy 8.2.e: Require new development to plan underground utilities so disruption by earthshaking or other natural disasters is diminished.

A Geotechnical Engineering Investigation was conducted by Miller Pacific Engineering Group (MPEG) for the proposed project that included a liquefaction analysis, which determined that up to 1 to 2 inches of ground settlement could occur in the project vicinity under worst-case conditions. Because the liquefiable layers are discontinuous, MPEG concluded that it is unlikely that lateral spreading would occur at the project site.[29] The underground trenches that would be required to run electrical conduit to each of the light poles would not pose the same seismic risk as gravity-fed utility lines or pressurized water or gas lines. Any seismic-related settlement would be highly unlikely to exceed ½ inch to 1 inch at any location. The buried electrical conduit could withstand such settlement without breaking or being compromised.[30] The project would therefore be consistent with General Plan Policies 8.1.e and 8.2.e.

Although Policy 8.1.f is one that appears to be intended for implementation by the City, rather than proponents of development projects, the Geotechnical Engineering Investigation referenced above evaluates potential seismic and geologic hazards associated with the proposed project and recommends design criteria designed to minimize the risk from seismic/geologic hazards. (Additional details are provided in Section VI, Geology and Soils.) The project would therefore be consistent with Policy 8.1.f.

While the following policy from the Health and Safety Element is intended for the Planning and Public Works departments of the City of Alameda, both of which are assigned responsibility in the Noise Ordinance, the policy is relevant to the proposed project, which would include the occasional nighttime broadcast of baseball games on the existing PA system discussed in the Project Description.

Noise

Policy 8.7.i: Continue to enforce the Community Noise Ordinance.

As discussed in more detail in Section X, Noise, the proposed project would comply with the Community Noise Ordinance, and therefore would not conflict with Policy 8.7.i.

[29] Miller Pacific Engineering Group, *Response to DSA Comments, Wood Middle School – Baseball Field Lighting, Alameda, California*, File No. 1911.02bltr.doc, June 17, 2014.

[30] Daniel Caldwell, Geotechnical Engineer, Miller Pacific Engineering Group, personal communication, July 17, 2014.

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
☐	☐	☐	☐

Zoning Ordinance

The project site is currently zoned R-1 (One-Family Residential). The R-1 district is intended for areas that are subdivided and used, or designed to be used, for one-family residential development. In addition to one-family dwellings, permitted uses in the R-1 district include public parks, schools, playgrounds, libraries, fire stations, and other public buildings and uses included in the General Plan. Permitted uses also include day care homes, residential care facilities, second units, and transitional housing. Additional uses, such as churches, religious schools, day care centers, and more, are permitted subject to discretionary approval of a Use Permit.

The R-1 development regulations established in the Zoning Ordinance for parameters such as lot area, setbacks, building coverage, etc. would not apply to the proposed project. Although the Zoning Ordinance establishes a height limit of 30 feet in the R-1 district, the height limit applies to buildings and is not applicable to the proposed light towers.[31] No other provisions of the Zoning Ordinance were identified that would be applicable to the proposed project.

Although public agencies vary in their approach to addressing zoning and General Plan policy conflicts under CEQA, the rule of thumb employed in this analysis derives from the specific guidance provided by Appendix G of the CEQA Guidelines, which treats a conflict with any applicable land use plan or policy "adopted for the purpose of avoiding or mitigating an environmental effect" as a significant, adverse impact. No conflicts with such policies were identified for the proposed project. The project would therefore have no impact related to General Plan policy or zoning conflicts.

c)	*Conflict with any applicable habitat conservation plan or natural community conservation plan?*	☐	☐	☐	**X**

Explanation: There is no adopted habitat conservation plan or natural community conservation plan applicable to the project site.

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?*	☐	☐	☐	**X**

Explanation: No regionally significant mineral deposits have been mapped on the project site. The project site is classified Mineral Resource Zone MRZ-1 by the California Department of Conservation's Division of Mines and Geology (DMG).[32] The MRZ-1 designation is assigned to areas where sufficient data exists for a determination that no significant mineral deposits exist, or where it is judged that there is little likelihood for their presence.

[31] Andrew Thomas, Planning Manager, City of Alameda, personal communication, July 19, 2014.

[32] California Department of Conservation, Division of Mines and Geology, Generalized Mineral Land Classification Map of the South San Francisco Bay Production-Consumption Region (Plate 1 of 29), 1996.

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
☐	☐	☐	☐

The Alameda General Plan does not identify any areas of significant mineral deposits anywhere within the City. The project site is located in an area that has been fully developed with urban uses for many years, and would not be a viable location for extraction of mineral resources. Therefore, the proposed project would not have any effect on the availability of mineral resources in the region and 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?*	☐	☐	☐	X

Explanation: As noted above in Section X(a), the Alameda General Plan does not identify any areas of significant mineral deposits in the project area and the California Division of Mines and Geology has not mapped any mineral resources on or near the site. The proposed project would have no potential to adversely affect the availability of mineral resources.

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?00*	☐	☐	X	☐

Explanation:

Introduction to Noise Descriptors

Noise is defined as unwanted sound. Airborne sound is a rapid fluctuation of air pressure above and below atmospheric pressure. Sound levels are usually measured and expressed in decibels (dB) with 0 dB corresponding roughly to the threshold of hearing.

Most of the sounds that we hear in the environment do not consist of a single frequency, but rather a broad band of frequencies, with each frequency differing in sound level. The intensities of each frequency add together to generate a sound. The method commonly used to quantify environmental sounds consists of evaluating all of the frequencies of a sound in accordance with a weighting that reflects the facts that human hearing is less sensitive at low frequencies and extreme high frequencies than in the mid-range frequency. This is called "A" weighting, and the decibel level so measured is called the A-weighted sound level (dBA). In practice, the level of a sound source is conveniently measured using a sound level meter that includes an electrical filter corresponding to the A-weighting curve. Typical A-weighted levels measured in the environment and in industry are shown in Table N–1 for different types of noise.

Although the A-weighted noise level may adequately indicate the level of environmental noise at any instant in time, community noise levels vary continuously. Most environmental noise includes a conglomeration of noise from distant sources that create a relatively steady background noise in which no particular source is identifiable. To describe the time-varying character of environmental noise, the statistical noise descriptors, L_{01}, L_{10}, L_{50}, and L_{90}, are

commonly used. They are the A-weighted noise levels equaled or exceeded during 1 percent, 10 percent, 50 percent, and 90 percent of a stated time period. A single number descriptor called the L_{eq} is also widely used. The L_{eq} is the average A-weighted noise level during a stated period of time.

In determining the daily level of environmental noise, it is important to account for the difference in response of people to daytime and nighttime noises. During the nighttime, exterior background noises are generally lower than the daytime levels. However, most household noise also decreases at night and exterior noise becomes very noticeable. Further, most people sleep at night and are very sensitive to noise intrusion. To account for human sensitivity to nighttime noise levels, a descriptor, DNL (day/night average sound level), was developed. The DNL divides the 24-hour day into the daytime of 7:00 AM to 10:00 PM and the nighttime of 10:00 PM to 7:00 AM. The nighttime noise level is weighted 10 dB higher than the daytime noise level. The Community Noise Equivalent Level (CNEL) is another 24-hour average which includes both an evening and nighttime weighting.

Table N–1
Typical Noise Levels

Noise Level (dBA)	Outdoor Activity	Indoor Activity
90+	Gas lawn mower at 3 feet, jet flyover at 1,000 feet	Rock Band
80-90	Diesel truck at 50 feet	Loud television at 3 feet
70-80	Gas lawn mower at 100 feet, noisy urban area	Garbage disposal at 3 feet, vacuum cleaner at 10 feet
60-70	Commercial area	Normal speech at 3 feet
40-60	Quiet urban daytime traffic at 300 feet	Large business office, dishwasher next room
20-40	Quiet rural, suburban nighttime	Concert hall (background), library, bedroom at night
10-20		Broadcast/recording studio
0	Lowest threshold of human hearing	Lowest threshold of human hearing

Source: (modified from Caltrans Technical Noise Supplement, 2011)

Noise levels that are generally considered acceptable or unacceptable can characterize various environments. Lower levels are expected in rural or suburban areas than would be expected in commercial or industrial zones. Nighttime ambient levels in urban environments are about 7 decibels lower than the corresponding average daytime levels. The day–to–night noise level difference in rural areas away from roads and other human activity can be considerably less. Noise levels above 45 dBA at night can result in the onset of sleep interference.[33] At 70 dBA, sleep interference becomes considerable.

[33] U.S. Environmental Protection Agency, *Community Noise,* 1971.

Existing Noise Sources

The City's Health & Safety Element acknowledges that aircraft noise is Alameda's primary noise source followed secondarily by surface traffic noise. Noise sources in the vicinity of the project site include aircraft from Oakland International Airport and San Francisco International Airport, sports field noise from soccer practice and baseball games, batting cage noise, BART noise, and traffic noise. Sports field noise is generated both on the Wood Middle School property and at the adjacent Rittler Park. These sources were observed during attended noise measurements on May 22, May 28, and May 29, 2014. Individual noise events were identifiable for aircraft flyby's or flyovers,[34] crowd cheering, batting of baseballs, BART, train horns, and sirens. Other noise which was not identifiable as single-event noise but rather as a steady din is secondary highway and surface street traffic noise.

While aircraft noise is a primary noise source in the vicinity of the project, the project site is not within the high-noise contours around Oakland International Airport, and the site is outside the Airport Influence Area (AIA), as shown on Figure N–1.

Applicable Noise Policies of the General Plan

The City of Alameda through its General Plan adopted the noise and land use compatibility guidelines recommended by California Office of Planning and Research (OPR), which are shown on Figure N–2. The Health and Safety Element of the General Plan also includes the following policies that could be applicable to the proposed project:

> **Policy 8.7.b:** Require site and building design to achieve noise compatibility to the extent feasible.
>
> **Policy 8.7.c:** Recognize that residential, school, hospital, church, or public library properties in commercial areas and commercial development in industrial areas will be subject to noise levels associated with noisier permitted uses.
>
> **Policy 8.7.h:** In making a determination of impact under the California Environmental Quality Act (CEQA), consider the following impacts to be "significant":
>
> - An increase in noise exposure of 4 or more dB if the resulting noise level would exceed that described as normally acceptable for the affected land use, as indicated in Figure XII-1;
> - Any increase of +6 dB or more, due to the potential for adverse community response; or,
> - When evaluating noise impacts associated with new residential development, exposure to traffic noise in outdoor yard spaces shall not be considered a significant impact.
>
> **Policy 8.7.i:** Continue to enforce the Community Noise Ordinance also known as the Alameda Noise Regulations, which are codified in the City's Municipal Code.

Applicable Noise Regulations of the Alameda Municipal Code

The City of Alameda Noise Regulations are contained in the City's Municipal Code, Chapter IV, Article II.[35] The City's regulations are intended to protect residents from disturbance or

[34] Aircraft flyovers here refer to flight paths that are overhead or nearly overhead as opposed to flyby's which are in the distance or lower on the horizon. Of the two, flyovers tend to be relatively noisier but they occurred less frequently than flyby's during the noise measurements.

[35] City of Alameda Municipal Code. https://library.municode.com/index.aspx?clientId=16753&stateId=5&stateName=California.

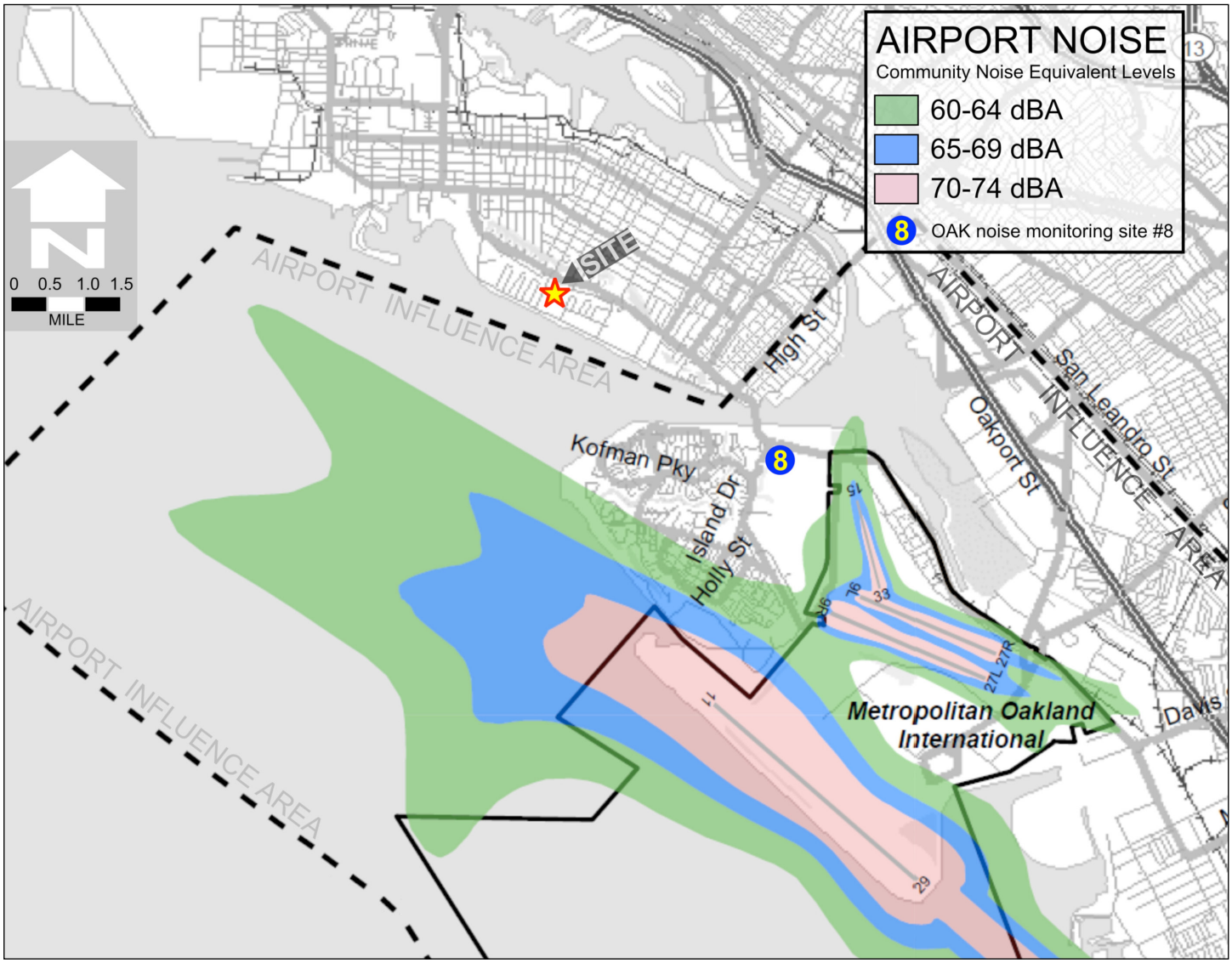

Figure N-1

Airport Noise Contours and Monitoring Sites

Source: Environmental Service, 2014

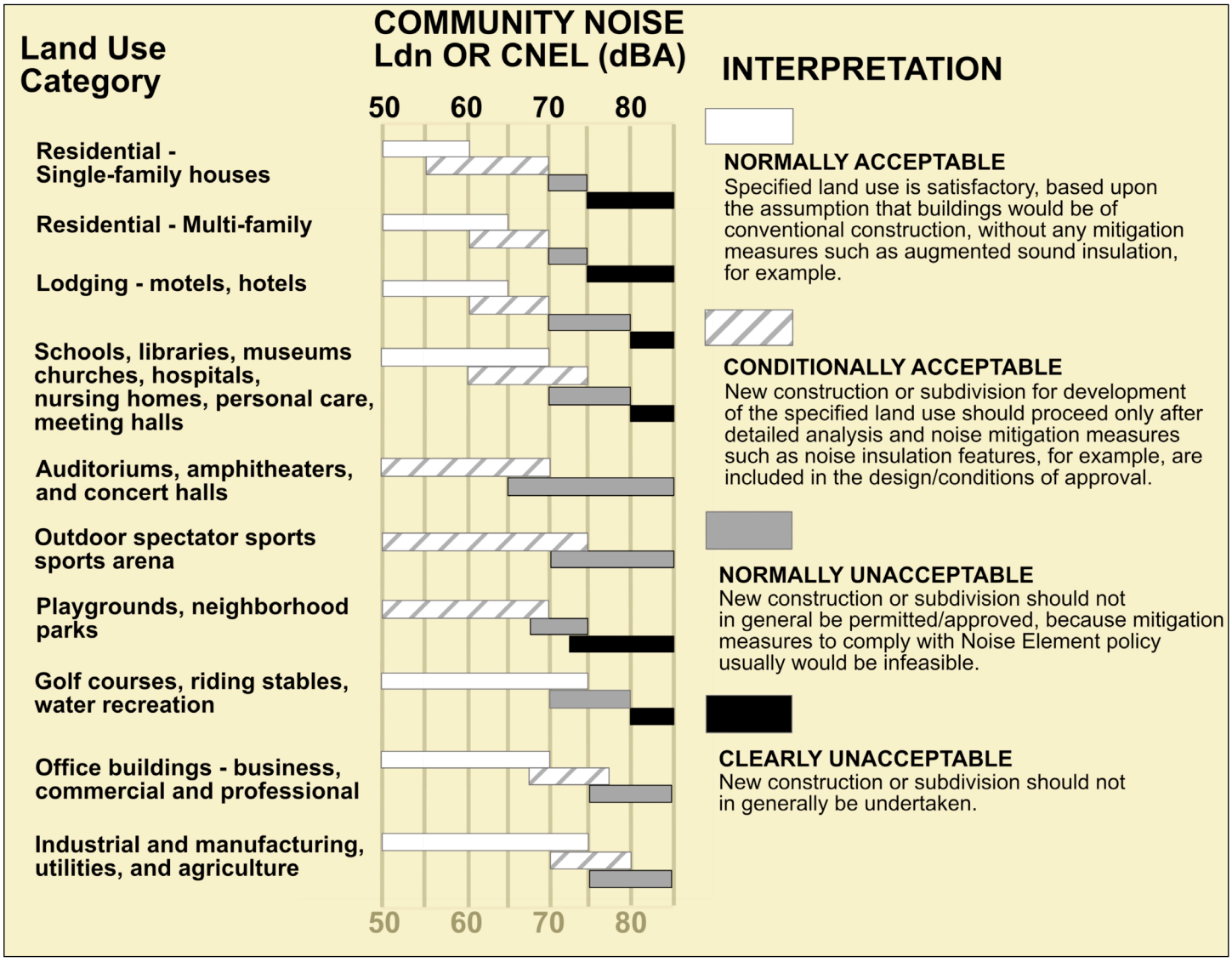

Figure N-2

Alameda Noise and Land Use Compatibilty Levels

Source: California OPR, 2003. General Plan Guidelines, Appendix C: Noise Element Guidelines, Figure 2, p. 250.

annoyance from intruding noise that is not part of the ambient background noise and that exceeds the limits prescribed in the regulations.

Definitions of "ambient noise level," "intruding noise level," and "noise disturbance" are taken from the Alameda Noise Regulations and follow here:

> *Ambient noise level* shall mean the all encompassing noise level associated with a given environment, being a composite of sounds from all sources, excluding the noise in question, at the location and approximate time at which a comparison with the noise in question is to be made.
>
> *Intruding noise level* shall mean the total sound level in decibels, created, caused, maintained or originating from the source of the noise in question at a specified location while the source of the noise in question is in operation.
>
> *Noise disturbance* shall mean any sound which endangers or injures the safety or health of human beings or annoys or disturbs a reasonable person of normal sensitivity. Factors which may be considered in determining whether a noise disturbance exists shall include, but not be limited to the following:
>
> a. Sound level of the objectionable noise relative to the ambient noise.
> b. Proximity of the objectionable noise to residential bedrooms or public camping facilities.
> c. Number of persons affected by the objectionable noise.
> d. Day of the week and time of day or night the objectionable noise occurs.
> e. Duration of the objectionable noise and its tonal, informational or musical content.
> f. Whether the objectionable noise is continuous, recurrent or intermittent.
> g. Nature and zoning of the area within which the objectionable noise emanates.
> h. Whether the objectionable noise can be heard two hundred (200) feet away from where it emanates, during the day; and one hundred (100) feet away from where it emanates, during the nighttime hours.
>
> *Noise in question* shall mean the objectionable noise suspected of exceeding the limits set forth in the Alameda Municipal Code, Chapter IV, Article II, Sub-section 4-10.4 (see Table XII-1).
>
> *Significant* shall mean annoying or disturbing to more than a small percentage of the people within the area impacted by the noise in question.

From these definitions, it can be seen that noise intrusion is partly determined by noise level, but also depends on other factors such as the quality of the noise, whether it is annoying to a reasonable person of normal sensitivity, the number of persons affected, and the nature of the area within which the noise emanates. In line with the latter qualification (i.e., the nature of the area within which the noise emanates), special provisions of the Alameda Municipal Code, Sub-section 4-10.7, make exceptions including the following:

> *4-10.7e. Construction.* The provisions of this section shall not apply to noise sources associated with construction provided the activities take place between the hours of 7:00 a.m. to 7:00 p.m. Monday through Fridays or 8:00 a.m. to 5:00 p.m. on Saturdays.
>
> *4-10.7e. City Parks.* The provisions of this Chapter shall not apply to recreational programs or activities conducted within City parks between the hours of 9:00 a.m. and 10:15 p.m.

In accordance with the Alameda Noise Regulations, a noise level measured outdoors at any receiving single-family or multiple-family residence, school, hospital, church, public library or commercial property in the City does not conform to the provisions of the regulations if it exceeds any of the noise levels set forth in Table N–2. The noise standards specified in Table N–2 are to be reduced by 5 dBA for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises.

Table N–2
City of Alameda Exterior Noise Standards at Receiving Land Uses
in A-Weighted Decibels (dBA)

Category	Cumulative No. of Minutes in Any One-Hour Period[1]	Daytime (7:00 a.m. to 10:00 p.m.)		Nighttime (10:00 p.m. to 7:00 a.m.)	
		Residential[2]	Commercial	Residential[2]	Commercial
1	30	55	65	50	60
2	15	60	70	55	65
3	5	65	75	60	70
4	1	70	80	65	75
5	0	75	85	70	80

Source: City of Alameda, Municipal Code Chapter IV, Article II, 4-10

Notes:

[1]For example (in Category 1), this means the measured noise level may not exceed 55 dBA for more than 30 minutes out of any one-hour time period.

[2]The Residential category includes single- and multi-family residential as well as school, hospital, church, and public library uses.

Existing Noise Measurements

Noise monitoring was performed by Environmental Service using an integrating, data-logging, precision sound level meter on May 22, May 23, May 28, and May 29, 2014.[36] Most of the measurements were performed at Wood Middle School in the buffer area around the Minor Field and Major Field. On May 22, 2014, noise monitoring was performed along the walkway between the Minor Field and Major Field; the monitoring locations are shown on Figure N–3. One set of measurements was performed on the walkway between the fields at approximately 140 feet from home plate (Location B on Figure N–3). On May 28th and 29th, several sets of measurements were performed outside right field of the Major Field in the buffer area, just outside the back yards of houses at 409 and 413 Kitty Hawk Road (Location C on Figure N–3). On May 29th, measurements were performed off the track in the buffer area, just outside the multi-family housing at 325 Kitty Hawk Road and 1801 Shoreline Drive (Location D on Figure

[36] The 3M Quest SoundPro DL-2-1/3 is a Class/Type 2 digital sound level meter with built-in real time analyzer, 1/3-octave band filter set, data-logging and memory card. Serial Number BIJ090043 (Pine Environmental Service, Inc., Instrument ID 17319) was calibrated to a NIST traceable standard on February 6, 2014, by Advanced Labs, Inc. The Quest SoundPro DL-2-1/3 was field calibrated on each day of measurement using a Quest QC-10 acoustic calibrator (Serial Number QIF100057, Pine Environmental Services ID 8716). Quest QC-10 acoustic calibrator itself was calibrated to a NIST traceable standard on August 2, 2013, by Advanced Labs, Inc.

Figure N-3

Noise Measurement Locations

Source: Environmental Service, 2014

N–3). For comparison purposes, noise measurements were also performed on May 23, 2014 at an evening baseball game played under the lights at Leydecker Park on Bay Farm Island. The results of the noise measurements are described below.

Baseball Activity L_{eq}: Measurements performed between 6:30 p.m. and 8:00 p.m. on May 28 and May 29, 2014 determined the L_{eq} noise level during baseball games to be approximately 60 dBA at 220 feet from home plate. This is the average over approximately 90 minutes of measurements during active play on May 28 and May 29, at a uniform reference distance of 220 feet from home plate. This level includes noise from non-baseball activity such as jet flyovers, BART trains, and other activities on the adjoining Rittler Park and the field inside the adjacent running track.[37]

Ambient L_{eq}: Monitoring performed between 6:30 p.m. and 8:00 p.m. on May 28 and May 29, 2014, determined the L_{eq} noise level immediately after baseball games to be approximately 51 dBA. This is the average over approximately 30 minutes of measurements after baseball play at a uniform reference distance of 220 feet from home plate. This noise level includes noise from non-baseball activity.

Single Event Noises: Measurements performed on May 22, May 28, and May 29, 2014, show that primary main noise sources which contribute substantially to measured L_{eq} include jet flyovers, spectator cheering and player chatter. Their relative contributions to measured noise depend mainly on location, with jet flyby's and flyovers being relatively more important farther away from the ball field. Within 98 feet (30 m) from home plate, the relative contribution of the baseball game spectator cheering is more than at 330 feet (100 m) from home plate.[38]

Secondary noise sources do not contribute substantially to measured L_{eq}. Measurements performed during May 22–29, 2014, show that secondary noise sources include single events which are noticeable and contribute qualitatively to the existing sound environment. Such single events include crack-of-the-bat, and BART train pass-by's, as well as general noise from Rittler Park and the neighborhood.

BART single events are noticeable mainly because wheel-rail noise has a high frequency component which distinguishes it from background noise; however, BART single events do not contribute substantially to the measured L_{eq} on the project site or in the buffer area. Crack-of-the-bat noise is noticeable because it is impulsive, attaining a high instantaneous noise level but only for a very brief time.[39] Crack-of-the-bat noises also do not contribute substantially to the measured L_{eq} on the project site or in the buffer area.

The primary noise sources at or near the project site are discussed more specifically as follow:

> **1. Cheering**—Cheering noise was monitored at Will C. Wood Middle School Minor Field and Major Field on May 22, 28, and 29, 2014, and was measured at Leydecker Park on May 23, 2014. Noise measurements were performed at various distances from home plate, from 90 feet to 360 feet. Fifty-five separate cheering events were logged during 250 minutes of observations.

[37] It was not practical to obtain measurements without this non-baseball activity.

[38] Bleachers for the spectators are located near home plate, behind the first base and third base lines.

[39] A ball-bat collision extends over about 0.0005 seconds (0.5 milliseconds). It would take an outfielder at 198 feet from home plate another 0.176 seconds before he could hear the sound. In comparison, spectator cheering and jet flyovers take place over several seconds and contribute substantially to the measured L_{eq}.

Cheering noise varies in general depending on the situation in a game, and varies specifically depending on location and distance from the spectators. Normalized to a uniform distance of 98 feet (30 m), spectator cheering noise attained levels in the range of 65–81 dBA, with an average of 74 dBA. Normalized to a uniform distance of 220 feet (67 m), spectator cheering noise attained levels in the range of 57–78 dBA, with an average of 66 dBA. Normalized to a distance of 330 feet (100 m), spectator cheering noise attained levels in the range of 53–71 dBA, with an average of 63 dBA. Figure N–4 illustrates cheering noise levels for the "face-on" orientation at three distances from home plate.

For the subject baseball field, the perception of cheering noise depends generally on location and direction from home plate. Relative maximum cheering noise levels occur in a forward or "face-on" orientation from the bleachers. At observation sites located a distance backside of the bleachers, cheering noise levels, although still audible, are measurably lower. At. Wood Middle School's Minor Field and Major Field, bleachers are located near home plate behind the first and third base lines. Owing to spectator viewing orientation, maximum cheering sound levels typically are projected toward home plate, first base, third base, or the pitcher's mound. In other words, cheering is generally directed toward the activity. Sound levels will be relatively highest forward of (west of) the plane containing the upper row of bleacher seats and relatively lower behind (east of) this plane (see Figure N–3).

2. Jet Flyovers—During the monitoring of baseball-related noise, 46 jet flyby events were logged. Figure N–4 illustrates the maximum noise levels attained for the 46 observations jet flyovers and flyby's, which generated noise levels in the range of 54–78 dBA, with an average of 63 dBA.[40] This is similar to spectator cheering noise at 330 feet from home plate, which attained levels in the range of 53–71 dBA, with an average of 63 dBA. Jet flyby's and flyovers tend to be longer in duration (9 to 16 seconds) than cheering events, which usually only last approximately 3 or 4 seconds; therefore, jet flyby and flyover noise contributes relatively more to the average L_{eq}, especially away from the ball field around the outer edge of the buffer area.

3. Long-Term Aircraft Noise—Measurements of long-term aircraft noise related to Oakland International Airport were obtained for the aircraft noise monitoring station located closest to the project site. Oakland International Airport's noise and operations monitoring system is currently configured with 14 Remote Monitoring Terminals (RMTs) dispersed in the communities surrounding the airport.[41] RMT #8 is located at Earhart Elementary School in Alameda, as shown on Figure N–1. RMT #8 has similar exposure or possibly slightly noisier exposure to aircraft noise compared to Wood Middle School. Other RMTs would be less representative of aircraft related noise conditions at the project site.

RMT #8 is exposed to a daily range of 46–59 dBA (CNEL), which on average was 53–54 dBA (CNEL) during April-June 2013. Daily CNEL during April-June 2013 ranged generally from 46 to 59 dBA, with a few outliers outside this range. The annual average

[40] For Wood Middle School, excluding data for Leydecker Park, jet flyby's and flyovers attained levels in the range of 54–67 dBA, with an average of 60 dBA (n=28).

[41] The Port of Oakland installed a state-of-the-art noise and operations monitoring system (NOMS) in 1990. NOMS automatically collects flight track data and flight identification data for a majority of all operations at the airport, and also measures and reports noise levels at specific locations.

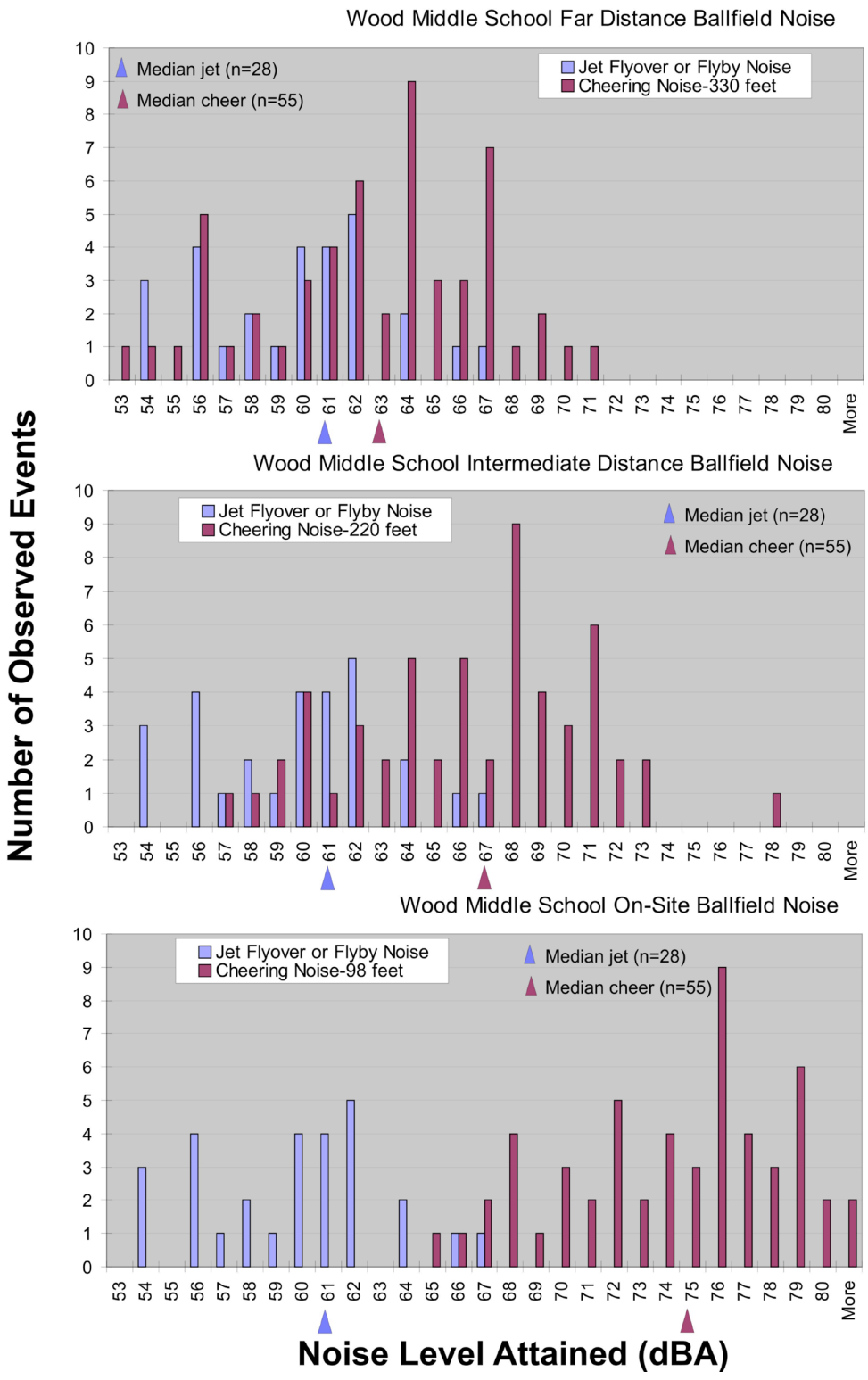

Figure N-4

Cheering and Jet Noise Levels

Source: Environmental Service, 2014

CNEL at RMT #8 for the fiscal year, July 1, 2012 through June 30, 2013, was 54 dBA (CNEL) based on the Quarterly Noise Monitoring Report April–June 2013.[42]

The measured average L_{eq} near Kitty Hawk Road during the evening hours was approximately 52 dBA after baseball activity (8:00 p.m.-8:30 p.m.) and 61 dBA during baseball games (7:00 p.m.-8:00 p.m.). Baseball games and other sports or park activities are excursionary, adding temporarily to long-term noise levels. After the baseball activity, noise levels revert to the long-term average levels generated by prevailing community noise sources.

Comparison to Alameda General Plan Adopted Noise Level

At the back yards of 409-13 Kitty Hawk Road, the measured L_{eq} during the evening period is 52 dBA (before the evening penalty) or 57 dBA (with the +5-dBA evening penalty).[43] This is the prevailing noise level with community noise sources such as jet flyovers and flyby's but without baseball. Baseball on the Major Field, combined with other community noise sources, adds approximately +9 dBA to the L_{eq}. With baseball on the Major Field, in addition to jet flyovers, jet flyby's, baseball on the adjoining Minor Field, and other community noise sources, the measured L_{eq} during the games in May 2014 was 61 dBA (before the evening penalty). In comparison, the adopted guidance for outdoor CNEL at new residences constructed without mitigation measures is 60 dBA. Although the +1-dBA overage is marginal, the +9-dBA difference relative to the prevailing background CNEL of 52 dBA without the baseball activity is substantial.

Comparison to Alameda Noise Regulations

The Alameda Noise Regulations are based on specified noise-time statistics rather than time-averaged CNEL, as shown in Table N–2. The table shows that the Alameda Noise Regulations set threshold noise levels not to be exceeded more than a specified number of minutes per hour. The time-noise statistics of the Alameda Noise Regulations coincide approximately with the L2 or noise level exceeded 2 percent of any hour (1 minute per hour), L8 or noise level exceeded 8 percent of any hour (5 minutes per hour), L25 or noise level exceeded 25 percent of any hour (15 minutes per hour), and L50 or noise level exceeded 50 percent of any hour (30 minutes per hour).

During noise measurements performed in May 2014, for baseball games played on the Major Field, noise-time statistics for noise levels exceeded 50 percent, 25 percent, 8 percent, and 2 percent of an hour were increased by +7.5 to +10 dBA near the back yards of 409-13 Kitty Hawk Road compared to the noise levels prevailing without baseball. Near 409-13 Kitty Hawk Road, at approximately 220 feet from home plate, baseball games played on the Major Field in combination with jet flybys, jet flyovers, and other existing community noise sources, added +8 dBA to the L25 prevailing without baseball games and +7.5 dBA to the L50 prevailing without baseball games. Game-related noise levels in combination with jet flyover noise, jet flyby noise, and other community noises were marginally consistent with the Alameda Noise Regulations for L2, L8, and L25 and were marginally inconsistent with the Alameda Noise Regulations L50, as shown in Table N–3. In relation to the Major Field, the back yards of 409 and 413 Kitty Hawk Road are considered to represent locations of maximum community noise impact because they

[42] Port of Oakland, *Quarterly Noise Monitoring Report April–June 2013, Metropolitan Oakland International Airport*, HMMH Report No. 302551.002.003-2, February 2014. http://flyquietoak.com//uploads/QuarterlyNoiseMonitoring/2013/2013_QuarterlyNoiseMonitoring_02.pdf

[43] The lot at 409 and 413 Kitty Hawk Road represent locations of maximum community noise impact relative to play on the Major Field. Play on the Minor Field would have substantially reduced effect on noise levels at 409 and 413 Kitty Hawk Road.

are directly in line with the bleacher seating for the Major Field and no other receivers are located closer to home plate of Major Field.

Measurements show that baseball games contribute substantially to the existing noise environment within approximately 220 feet from home plate and forward of the plane of bleacher seating. Farther away, baseball game noise fades owing to geometric spreading and ground absorption losses. Behind the plane of bleacher seating, noise levels are reduced because spectator cheering noise is directional and tends to be substantially lower in the reverse direction from the direction of cheering.

Table N–3 applies to the maximally exposed receiver location (Location C on Figure N–3) based on shortest source-receiver distance and face-on spectator orientation at Major Field. Measured existing noise levels are representative of the buffer zone at Location C as shown on Figure N–3. Existing noise levels reported in the table apply with baseball games on both the Minor Field and Major Field. However, the reported noise levels would not be representative of future baseball-related noise levels from the Minor Field, owing to the reverse orientation of the Minor Field. Predicted noise levels at Location C are expected to be reduced by at least -5 dBA compared to the noise levels reported in Table N–3. This expected reduction is attributed to bleacher/spectator orientation facing away from Location C.

Figures N–3 and N–4 illustrate the degree to which noise levels related to baseball depend on 1) location relative to the plane of the bleacher seating, and 2) distance from home plate. Figure N–3 shows noise level drop-offs expected for spectator cheering noise at receivers located side-on to the bleacher seating (0 to -2 dBA) and for spectator cheering noise at receivers located directly behind the bleacher seating (-4 to -6 dBA). As suggested by inspection of Figure N–4, the potential noise impact of extended evening hours baseball on the Minor Field would be reduced at more distant receiver locations farther than 220 feet from home plate.

Future Noise Levels

The proposed project entails lighting of the Minor Field, which would enable extended hours of play in the evening period, primarily by the Little League, but also on occasion by other groups. The adjacent Major Field would not be lighted and extended evening hours of play would not take place on this field located immediately to the east of the Minor Field.

The "evening" period is technically defined in the definition of CNEL, and includes the hours 7:00 p.m. to 10:00 p.m. Play which currently ends around 8 p.m. would be extended on the Minor Field up to 10 p.m. The proposed curfew of 10 p.m. is consistent with the Alameda Noise regulations for city-owned parks which consider park activities up to 10:15 p.m. as exceptions and, therefore, allowable under the regulations.

Noise was monitored in May 2014 with active games being played on both the Major Field and the Minor Field. For games played only on the Minor Field during extended evening hours, noise levels and noise-time statistics would be reduced 1) at the Kitty Hawk Road receivers which are located behind the plane of the Minor Field bleacher seating and 2) at 325 Kitty Hawk Road and 1801 Shoreline Drive receivers which are located behind the plane of the Minor Field bleacher seating and at increased distances of 330 feet, or farther, from home plate. For noise levels exceeded 50 percent, 25 percent, 8 percent, and 2 percent of an hour at 401, 405, 409, 413, 417, and 421 Kitty Hawk Road, 325 Kitty Hawk Road, and 1801 Shoreline Drive, evening games played on the Minor Field would add approximately +2 to +5 dBA relative to the prevailing levels without the baseball activity.

Table N–3
Existing Baseball Noise Levels and Comparison to Standards
in A-Weighted Decibels (dBA)

Date	Time	Receiver Location	Noise level without baseball					
			Leq	L2	L8	L25	L50	L90
No Baseball Game								
5/28/2014	8:02-8:15 PM	near 409-13 Kitty Hawk Rd back yard	54.1	60.5	57.9	54.5	52.0	46.6
5/28/2014	8:16-8:31 PM	near 409-13 Kitty Hawk Rd back yard	50.4	57.2	54.1	50.5	48.1	45.8
		Average without baseball	52	59	56	52	50	46
Active Baseball Game			**Noise level during baseball**					
Date	**Time**	**Receiver Location**	**Leq**	**L2**	**L8**	**L25**	**L50**	**L90**
5/28/2014	6:50-7:20 PM	near 409-13 Kitty Hawk Rd back yard	60.8	68.9	64.5	60.6	57.3	52.3
5/28/2014	7:21-7:31 PM	near 409-13 Kitty Hawk Rd back yard	60.9	70.0	65.1	60.1	56.9	51.5
5/28/2014	7:35-7:43 PM	near 409-13 Kitty Hawk Rd back yard	64.0	72.2	67.7	63.7	60.4	55.6
5/28/2014	7:51-8:02 PM	near 409-13 Kitty Hawk Rd back yard	60.2	66.5	64.2	60.8	57.6	53.5
5/29/2014	6:32-7:01 PM	near 409-13 Kitty Hawk Rd back yard	58.4	67.0	61.6	57.8	55.1	48.9
		Average during baseball	61	69	64	60	58	52
		Noise added by baseball combined with other sources	+9	+10	+8	+8	+8	+6
Existing Levels Compared to Standards			**Alameda Noise Regulations (ANR)**					
			CNEL	L2	L8	L25	L50	L90
Noise level limits during 2, 8, 25, or 50 percent of the time.			60	**70**	**65**	**60**	**55**	NA
Does existing level without baseball exceed ANR?			no	no	no	no	no	NA
Does existing level during baseball exceed ANR?			yes	no	no	no	**yes**	NA

Source: Environmental Service, July 2014

Notes:

[See text for additional explanation of this table.]

Primary noises sources during the measurements included jet flyby's, jet flyovers, and spectator cheering. Amplified sound from a public address (PA) system was not a contributing source.

L90, which refers to the noise level exceeded 90 percent of the time, is not among the thresholds set by the Alameda Noise Regulations. Information for L90 is presented here because L90 often is used by noise practitioners as an indication of the ambient or background noise level that would prevail in the absence of single events (e.g., jet flyovers, jet flyby's, BART, truck pass-by's, train horns, sirens, and spectator cheering).

For daytime and early evening baseball played on the Major Field, the back yards of 409 and 413 Kitty Hawk Road are considered to represent locations of maximum potential community noise impact because these receivers are oriented directly face-on to the bleacher seating of the Major Field and no other receivers are located closer to home plate of this ball field. For extended evening hours baseball played on the Minor Field, receivers located at 1801 Shoreline Drive represent locations of maximum potential community noise impact from baseball because these receivers are oriented side-on to the bleacher seating of the Minor Field and no other receivers are located closer to home plate of the Minor Field.

Consistency with CNEL Standards

Near the back yards of 409-13 Kitty Hawk Road, the measured background L_{eq} without baseball during the evening period is 52 dBA (before the evening penalty) or 57 dBA (with +5 evening penalty). This is the prevailing noise level with community noise sources such as jet flyovers and flybys but without baseball. The addition of the proposed evening baseball play under nighttime lighting would have the following effects:

In the back yards of 409-13 Kitty Hawk Road: Proposed evening baseball on the Minor Field could add approximately +2 dBA for an evening L_{eq} of 54 dBA (before evening penalty) or 59 dBA (with +5 evening penalty included).

In the back yards of 401-05 Kitty Hawk Road: Proposed evening baseball on the Minor Field could add approximately +3 dBA for an evening L_{eq} of 55 dBA (before evening penalty) or 60 dBA (with +5 evening penalty included).

In the back yards of 417-21 Kitty Hawk Road: Proposed evening baseball on the Minor Field could add approximately +3 dBA for an evening L_{eq} of 55 dBA (before evening penalty) or 60 dBA (with +5 evening penalty included).

Outdoors at 325 Kitty Hawk Road: Proposed evening baseball on the Minor Field could add approximately +2 dBA for an evening L_{eq} of 54 dBA (before evening penalty) or 59 dBA (with +5 evening penalty included).

Outdoors at 1801 Shoreline Drive: Proposed evening baseball on the Minor Field could add approximately +5 dBA for an evening L_{eq} of 57 dBA (before evening penalty) or 62 dBA (with +5 evening penalty included).

Proposed baseball activity would extend evening hours of play only on the Minor Field and would not extend evening hours of play on the Major Field. On the Minor Field, play would not extend after the defined "evening" period (7:00-10:00 p.m.) into the defined "nighttime" period (10:00 p.m.-7:00 a.m.). As the results above show, the 24-hour CNEL with baseball under the lights on the Minor Field would be consistent with the 60 CNEL standard for compatibility with single-family residential land use and with the 65 CNEL standard for compatibility with multi-family residential land use, the relevant Alameda standards shown on see Figure N–2. The proposed project would therefore be consistent with the City's CNEL land use compatibility standards.

Consistency with Alameda Noise Regulations

Table N–4 summarizes predicted noise levels exceeded 50 percent, 25 percent, 8 percent, and 2 percent of an hour. The addition of the proposed evening baseball play under nighttime lighting would have the following effects:

At the building face of 409-13 Kitty Hawk Road: Extended evening hours baseball on the Minor Field could have an L2-L8-L25-L50 of approximately 61-56-52-50, adding mainly to the L2 background.

At the building face of 401-05 Kitty Hawk Road: Extended evening hours baseball on the Minor Field could have an L2-L8-L25-L50 of approximately 61-57-53-50, adding mainly to the L2, L8, and L25 background levels.

At the building face of 417-21 Kitty Hawk Road: Extended evening hours baseball on the Minor Field could have an L2-L8-L25-L50 of approximately 62-57-53-50, adding mainly to the L2, L8, and L25 background levels.

At the building face of 325 Kitty Hawk Road: Extended evening hours baseball on the Minor Field could have an L2-L8-L25-L50 of approximately 62-58-54-51, adding to the L2, L8, L25, and L50 background levels.

Table N–4
Future Baseball Noise Levels and Comparison to Standards
in A-Weighted Decibels (dBA)

Condition		Noise level without baseball					
		L_{eq}[1]	L2	L8	L25	L50	L90
No Baseball Game							
Average background level without baseball		57	59	56	52	50	46
Active Baseball Game		**Noise level during baseball**					
Time	**Receiver Location**	L_{eq}	L2	L8	L25	L50	L90
8:00-10:00 PM	401-405 Kitty Hawk Rd at building face	60	61	57	53	50	46
8:00-10:00 PM	409-413 Kitty Hawk Rd at building face	59	61	56	52	50	46
8:00-10:00 PM	417-421 Kitty Hawk Rd at building face	60	62	57	53	50	46
8:00-10:00 PM	325 Kitty Hawk Rd at building face	59	62	58	54	51	46
8:00-10:00 PM	1801 Shoreline Drive at building face	62	63	59	55	52	47
Existing Levels Compared to Standards		**Alameda Noise Regulations (ANR)**					
		CNEL	L2	L8	L25	L50	L90
Noise level limits during 2, 8, 25, or 50 percent of the time.		60, 65[2]	**70**	**65**	**60**	**55**	NA
Would noise level during nighttime baseball exceed ANR?		yes	no	no	no	no	NA

Source: Environmental Service, July 2014

Notes:

[1] L_{eq} here includes +5-dBA penalty for the evening period.

[2] CNEL limit for single-family land use is 60 dBA; it is 65 dBA for multi-family land use.

At the building face of 1801 Shoreline Drive: Extended evening hours baseball on the Minor Field could have an L2-L8-L25-L50 of approximately 63-59-55-52, adding to the L2, L8, L25, and L50 background levels. The northwestern units at 1801 Shoreline Drive would receive relatively higher noise from the Minor Field in view of their distance and location relative to home plate.

These predicted levels are below the Alameda Noise Regulations (ANR) limits. Based on these results and the CNEL results presented above, under typical operating conditions, the proposed project would have a ***less-than-significant impact*** related to generating noise levels in excess of standards established in the General Plan and Noise Ordinance.

On the other hand, atypical operating conditions, which would include the infrequent use of the Little League PA system, could potentially produce a different result. The PA system, consisting of an amplifier with microphone and two large loudspeakers mounted on stands near the score boxes, is currently used for announcing of the opening and closing games of the season. With approval of the proposed project, the PA system would also be used for tournament games during the post-season, and would be used to announce the names of players.[44] The PA system could be operated up to eight evenings a year, but it would most likely be used less frequently.

The PA system was not in use at the time of the noise measurements conducted during preparation of this Initial Study, so no sound levels produced by the equipment were recorded. Because PA systems vary considerably in the sound levels they produce, it is difficult to estimate the sound levels that would be produced by the Little League PA system during its proposed post-season use. Because the venue is small and the spectator seating is limited to a single small bleacher adjacent to the first base line, it is assumed that the sound level from the PA system is not excessive. It is possible that the noise levels reported in Table N–4 that do not include use of the PA would be the same or very similar with the addition of PA use. The volume and orientation of the PA system speakers will influence degree of potential disturbance, if any is caused for the neighbors.

It could be argued that the limited use of the PA system, and the nighttime use of the Minor Field generally, would not be subject to the City's noise limits shown in Table N–2 because Section 4-10.7(i) of the City's Municipal Code explicitly exempts "recreational programs or activities conducted within City parks between the hours of 9:00 a.m. and 10:15 p.m." from the noise limits. The Little League conducts baseball games at the Wood Middle School ball fields simultaneously with games at the adjacent Rittler Park; in this regard, the Minor Field functions as a public park facility.

Nonetheless, for purposes of this analysis it is conservatively assumed that the proposed evening use of the Minor Field does not qualify as a recreational program conducted within a City park, and that the project would not be exempt from the ANR. The ANR include a provision for speech and music that lowers the allowable noise level by -5 dBA. Therefore, the maximum allowable noise levels for the L2, L8, L25 and L50 parameters would be 65, 60, 55, and 50 dBA, respectively, instead of 70, 65, 60, and 55, respectively, as shown in Table N–2. These provisions reflect the greater potential for disturbance potentially caused by noise that carries information such as recognizable speech or a discernible pattern such as a musical melody. (It should be noted that general cheering noises, including applause and whistling, are not similar to speech or music.)

[44] Ron Matthews, President, Alameda Little League, Inc., personal communication, August 1, 2014.

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
☐	☐	☐	☐

With the allowable noise levels reduced by 5 dBA, noise levels during extended hours evening baseball could be 63, 59, 55, 52 dBA, respectively, for the L2, L8, L25 and L50 parameters at the exterior building face of 1801 Shoreline Drive (see Table N–4), even without use of the PA system. Therefore, during operation of the PA system in conjunction with an evening baseball game, the L50 limits could be exceeded. This would be a ***potentially significant impact***, which would be reduced to a less-than-significant level with implementation of the following mitigation measure:

Mitigation Measure N–1: In accordance with Section 4-10.8 of the Alameda Noise Regulations, if any person files a complaint about the noise from the Little League public address (PA) systems with the Alameda Unified School District, Alameda Planning Department, or Alameda Public Works Department, the project sponsor shall modify use of the PA system such that it conforms with the standards established in Section 4-10.4 of the City of Alameda Municipal Code. To reduce the sound level experienced at nearby residential receptors during the Little League post-season (June 15 - July 10), the system volumes can be turned down. Speakers could also be relocated closer to the bleachers and directed toward the northwest so that the volume can be limited to approximately 70 dBA at 15 feet. This would result in an acceptable sound level of approximately 46 dBA at 240 feet (just outside the outfield fence), or 40-43 dBA at 240 feet behind the speakers.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	X	☐

Explanation: The construction of the project may generate vibration when heavy equipment is used to construct the light pole foundations and excavate the conduit trenches. The lighting standards would be anchored deeply into the ground by placing the anchoring segment of each pole into a bored hole and setting it in place with poured concrete, a construction method known as a direct-embedded pole. A drilling rig would be used to auger the four bore holes necessary for receiving Poles A1, A2, B1, and B2. Pole sections would be assembled on site, and then would be lifted and lowered into place using a crane. Sensitive receptors are located at least 220 feet from the construction site, a distance which is adequate to reduce any foreseeable groundborne vibration to imperceptible levels. During the proposed night games there would be no potential for generation of excessive groundborne vibration or noise. This would therefore be a less-than-significant impact.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	X

Explanation: The proposed project could cause a periodic increase in ambient noise levels during extended evening hours of 8:00 to 10:00 p.m. on days of baseball games (this effect is

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
☐	☐	☐	☐

evaluated in detail in Section XII-a, above). The increase would not be permanent as noise levels would revert to routine levels on non-game days and after 10 p.m. on days of games played "under the lights." See also Section XII-d, below.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	**X**	☐

Explanation: Although project-generated noise during night baseball games or other similar activities could be considered temporary noise, the effects of that noise are addressed in Section XII-a, above. This discussion focuses on the temporary noise effects from project construction.

Construction of the project would temporarily increase ambient noise levels in the immediate vicinity of the project site. The predicted L_{max} during construction at the nearest residential receiver would be 67 to 69 dBA outdoors, or approximately 47 to 49 dBA indoors with windows closed. As shown in Table N–1, this outdoor level would be comparable to a typical commercial area, while the indoor level would be similar to a dishwasher running in the next room. In any event, the Alameda Noise Regulations exempt construction activities from normal noise limits, provided that noise-generating construction activities are limited to the hours of 7:00 a.m. to 7:00 p.m. Monday through Friday and 8:00 a.m. to 5:00 p.m. on Saturdays. (Construction is prohibited on Sundays and holidays.) For purposes of this analysis, it is assumed that the construction contractor would comply with these limitations on construction hours. The temporary noise generated during project construction would therefore be a less-than-significant impact.

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?	☐	☐	☐	**X**

Explanation: There are no public airports within 2 miles of the project site; the nearest airport is Oakland International Airport, located approximately 3 miles southeast of the site. The project site is not located within an airport land use plan or within two miles of a public airport or public use airport and would not expose people residing or working in the project area to excessive noise levels from aircraft. As shown on Figure N–1, the project site is located outside the defined area known as Oakland International Airport Influence Area (AIA), also called the "referral area."[45] Policies of the Airport Land Use Compatibility Plan (ALUCP) apply only to lands located within the AIA.

[45] The AIA is defined based on political boundaries, noise contours and flight tracks in a planning process that is periodically updated. The most recent ALUCP and AIA for Oakland International Airport were developed by Alameda County Community Development Agency in 2010.

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
☐	☐	☐	☐

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 levels? ☐ ☐ ☐ **X**

Explanation: There are no private airstrips within 2 miles of the project site; the nearest private airstrip is the Alameda Naval Air Station, located about 3 miles northwest of the project site. The base was closed in 1997. The project would not expose people residing or working in the project area to excessive noise levels from aircraft.

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)? ☐ ☐ ☐ **X**

Explanation: The proposed project would not create any new housing or any new infrastructure that could facilitate growth. The project would be developed entirely within a site already devoted to recreational use; it would allow an extension of the hours the baseball diamond may be used for Little League games or similar uses by providing lighting for nighttime games. The benefits from this expansion in use would be realized primarily by existing Little League teams already utilizing the existing fields at Wood Middle School and/or the adjacent Rittler Park. Other uses that could be approved by AUSD would similarly be expected to be conducted by existing residents of the area. The proposed project would therefore have no potential to directly or indirectly induce population growth.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? ☐ ☐ ☐ **X**

Explanation: The project site does not contain any residential structures. Therefore, the project would not demolish or otherwise remove any existing housing units.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? ☐ ☐ ☐ **X**

Explanation: See Section XII(b), above.

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
☐	☐	☐	☐

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

a) Fire protection? ☐ ☐ **X** ☐

Explanation: Fire response to the project site would be provided by the Alameda Fire Department (AFD). The project site is served by Station No. 1, which is located at 2401 Encinal Avenue, about a mile northeast of the site; it is one of four fire stations located throughout the City. The station has an average response time throughout its service area of 4 minutes and 5 seconds. In addition to fire response, the AFD also provides emergency medical services with three full-time advanced life support (ALS) ambulances. All engine companies and ambulances are staffed with at least one paramedic each, providing quick ALS service to all areas of the city.[46]

The project would not increase the risk of fire at the project site, and therefore would have no impact on the AFD's provision of fire-protection services. There would be an incremental increase in the potential for medical emergencies during the extended hours of play on the Minor Field, which could increase the number of calls for emergency medical services. Increases in calls for emergency fire and medical services are generally related to new development, and the City of Alameda Municipal Code (Chapter 27-26) requires new development to pay fees to assist the AFD in maintaining level of service standards. These fees along with other funding allow the Department to provide adequate fire protection and emergency response services.

The proposed project would not require the construction of new facilities, or the alteration of existing facilities. Therefore, the project would have a less-than-significant impact on fire protection services.

b) Police protection? ☐ ☐ **X** ☐

Explanation: Police protection would be provided to the project by the Alameda Police Department (APD). The Department operates out of one station located at 1555 Oak Street, which is approximately 1 mile northeast of the project site. The APD currently has 88 sworn police officers and 32 non-sworn full-time personnel.

[46] City of Alameda Fire Department, website accessed July 30 2014, at: http://alamedaca.gov/fire.

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
☐	☐	☐	☐

The APD's patrol is based on a five-sector system. Seven days a week, 24 hours a day, officers are assigned to patrol the five sectors. There are typically one to four officers assigned to a sector at any given time of day or night. The project site is located in Sector 2, which extends from Willow Street on the east to Eighth Street on the west, and from Shoreline Drive on the south to the Oakland/Alameda Estuary on the north.

Similar to fire protection services discussed above, the project would have very limited potential to increase demand for police protection services. Although the extended hours of play would increase the amount of time that participants and spectators are present at the project site, which could increase the number of calls for police services, Little League games (the primary proposed use of the project) rarely result in a need for an APD response. The Little League President reports that over the past 20 years there have been very few instances when APD was called, and they were most often to report vandalism.[47] Since increased calls for police services are generally related to an increase in population or the introduction of uses that can draw criminal activity (e.g., an attractive nuisance) and the proposed project would entail neither of these components, the project would have a less-than-significant impact on police protection services.

c) Schools?

☐	☐	☐	X

Explanation: The proposed project would be developed on school property owned by the Alameda Unified School District (AUSD). However, implementation of the project would not require or result in construction of new or modified facilities, and there could therefore be no adverse physical impacts from construction or modification of such facilities. The project would have no impact on school services.

d) Parks?

☐	☐	☐	X

Explanation: Although the proposed project would be developed adjacent to Rittler Park, it would not directly or indirectly increase demand for use of the park. Similar to the preceding discussion on schools, the project would not require or result in construction of new or modified park facilities, and there could therefore be no adverse physical impacts from construction or modification of such facilities. The project would have no impact on parks.

e) Other public facilities?

☐	☐	☐	X

Explanation: The project would have no adverse effect on other public facilities, such as libraries.

[47] Ron Matthews, President, Alameda Little League, Inc., personal communication, July 31, 2014.

Potentially Significant Impact	Less Than Significant With 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?* ☐ ☐ **X** ☐

Explanation: The project site is not strictly speaking a public park, although it could be argued that it functions as such when used for baseball games by Alameda Little League. The project would increase use of the project site by allowing nighttime baseball games and other recreational activities to occur. However, such use would be consistent with existing use, and would not cause a substantial physical deterioration of the Minor Field and associated facilities. Other than this increased use of the Minor Field, the project would not increase use of other parks or recreational facilities. The project would have a less-than-significant effect on recreation facilities.

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?* ☐ ☐ **X** ☐

Explanation: The proposed project would add nighttime lighting to an existing baseball field that is used for recreational purposes, but would not expand the facilities or require construction of new facilities. The environmental impacts that could occur from the installation and use of the proposed lights are addressed throughout this Initial Study.

XVI. TRANSPORTATION/TRAFFIC — *Would the project:*

a) *Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?* ☐ ☐ **X** ☐

Explanation: The project site is served by Otis Drive, which is designated in the General Plan as an Island Arterial, and Grand Street and Shoreline Drive, both of which are designated as Island Collectors. Based on recent 2012 and 2014 traffic counts conducted by the Alameda Public Works Department, the average daily traffic on these roadways is as follows:

Otis Drive between Sandalwood Isle and Pond Isle	14,520 vehicles
Grand Street between Otis Drive and Shore Line Drive	3,360 vehicles
Shoreline Drive between Kitty Hawk Road and Willow Street	8,370 vehicles

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
☐	☐	☐	☐

Although the Public Works Department did not have calculated levels of service for these roadways, during an afternoon and early evening reconnaissance of the site, which included the peak PM commute period, traffic was observed to be very free-flowing with no vehicle delays, equivalent to Level of Service (LOS) A, as defined in the *Highway Capacity Manual*.

Little League baseball games, which represent the primary use that occur with implementation of the proposed project, generally start at 7:00 or 7:30 p.m., after the PM peak commute hour. The proposed project would allow one extra game per day to be played. With 12 to 13 players per team, or a total of up to 26 players, it is conservatively estimated that up to 35 vehicles could travel to and from the site to attend these games. These vehicles would generally be arriving and departing via Otis Drive, Grand Street, and/or Shoreline Drive outside the peak commute period. As noted above, all three of these roadways exhibit free-flowing conditions even during the PM peak hour. The addition of 35 vehicles to these roadways outside peak hours would have an imperceptible effect on traffic and would have no potential to result in congestion or exceed the capacity of the roadways. The project would therefore have a ***less-than-significant impact*** on traffic.

Although effects on parking are not currently considered to be environmental effects under CEQA, the AUSD recognizes that neighboring residents of Wood Middle School and Rittler Park may have concerns about the effects that Little League games and other recreational activities at these facilities may have on street parking in the vicinity. To assess the effect the proposed nighttime lighting project could have on street parking, a parking survey was conducted on May 21, 2014 when simultaneous Little League baseball games were being played on the two Wood Middle School playing fields and on the two Rittler Park fields. The survey was conducted along Grand Street, Otis Drive, Kitty Hawk Road, and various side streets that are located within easy walking distance of one or more of the four baseball diamonds. It also included the drop-off areas and staff parking lots both Wood Middle School and the adjacent Lum Elementary School. The results of the parking survey are presented in Table T–1.

With the exception of the drop-off turnouts and staff parking lots on the two school sites, on-street parking spaces are not delineated on the pavement. As a consequence, the number of spaces along certain stretches of roadway is somewhat open to interpretation, and can fluctuate depending on how close the cars are parked. In some instances, cars were spaced such that two vehicles occupied space that was clearly sufficient for three parked cars. Although there were few occurrences of this observed on the evening of the parking survey, in such instances they were counted as three available and three occupied spaces. In this regard, the number of occupied spaces may be slightly overestimated in Table T–1.

In many instances, all or most parking spaces were occupied on the south side of Otis Drive, closest to the playing fields, while vacant spaces were available on the opposite side of the street. Similarly, the short cul-de-sac streets extending from the north side of Otis Drive had plentiful available parking during the time that four ball games were being played.

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
☐	☐	☐	☐

Table T–1
Parking Utilization on a Typical Game Night

Location	Approximate Distance to Nearest Playing Field (feet)	No. of Spaces Available	Number of Occupied Spaces (Percent Occupied) May 21, 2014
Drop-Off Turnout at Wood Middle School	300-350	19[1]	19 (100%)
Staff Parking Lot at Wood Middle School	280-430	33[1]	30 (90%)
Drop-Off Turnout at Lum Elementary School	370-510	7	7 (100%)
Staff Parking Lot at Lum Elementary School	190-360	22[2]	21 (95%)
Grand Street Between Shoreline Drive and Otis Drive	50-1,000	83	74 (89%)
Grand Street North of Otis Drive for apx. 350 feet	330-640	24	2 (8%)
Otis Drive Between Grand Street and Rock Isle	320-700	11	4 (36%)
Otis Drive Between Grand Street and Pond Isle	260-1,230	78	51 (65%)
Fortress Isle	350-500	10	5 (50%)
Waterview Isle North of Otis Drive for apx. 200 feet	500-700	11	1 (9%)
Sandalwood Isle North of Otis Drive for apx. 200 feet	850-1,050	16	0 (0%)
Sandcreek Way East of Lum School for apx. 400 feet	550-850	33	32 (97%)
Kitty Hawk Place East of Kitty Hawk Road for apx. 250 feet	450-650	16	10 (62%)
Kitty Hawk Road South of Kitty Hawk Place for apx. 550 feet[3]	450-700	25	17 (68%)
TOTALS		**388**	**273 (70%)**

Source: Douglas Herring & Associates, 2014

Notes:

[1]Includes two handicap-accessible spaces.

[2]Includes five driveway spaces and one handicap-accessible space.

[3]See text discussion for additional information.

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
☐	☐	☐	☐

A certain amount of illegal parking was observed in the staff parking lots of the two schools. At Wood Middle School, cars were parked in unmarked spaces or areas with hatched pavement markings, indicating no parking is allowed in those areas. However, the cars did not block any access, and one of the handicap spaces was free. At Lum Elementary School, three cars were parked illegally in front of one of the classroom buildings on the evening of May 21st.

As indicated in Table T–1, the traffic survey along Kitty Hawk Road extended only 550 feet south from Kitty Hawk Place, despite the fact that this location (i.e., the southerly extent of the survey) is only about 300 feet south of the Major Field at Wood Middle School, and a walkway between the intervening houses provides easy access to the field. The primary reason the survey did not continue further to the south was that there was insufficient time during the two-hour game period to survey all of the surrounding streets within a reasonable walking distance of one or more of the four baseball diamonds in use at the time. However, the remainder of Kitty Hawk Road south of the survey stopping point is lined on both sides by apartment complexes. At the time of the survey, all of the on-street parking spaces south to Shoreline Drive were occupied. Although some of them were likely in use by parents and families attending one of the Little League games, this parking seemed to be used principally by residents and guests of the apartments, and several drivers were observed going to or coming from street parking and the neighboring apartments during the surveys. Shoreline Drive was also not surveyed due to time constraints, but parking on this roadway is most likely used by residents and guests of the adjacent apartments and by people accessing the adjoining shoreline of San Francisco Bay. Available parking closer to each of the baseball diamonds was observed during the surveys, indicating that Shoreline Drive is probably used by few if any drivers attending the Little League games. In any event, while counts of available and occupied spaces were not conducted along Shoreline Drive, a large number of empty parking spaces were observed along this roadway at the time of the surveys.

As shown in Table T–1, a total of 388 on-street and off-street parking spaces were counted during the parking survey and 273 of them were observed to be occupied, representing an occupancy rate of 70 percent. All four parking areas on school premises were at or close to fully occupancy, which increased the overall occupancy rate. While it wasn't possible to determine how much of this parking demand was generated by the Little League baseball games, the on-street parking was clearly being utilized for other purposes besides the baseball games. Four simultaneous baseball games were occurring at the time of the survey, so the proposed project, which would allow one night game to be played, would generate roughly one-quarter of the demand for on-street parking. Given that on-street parking was well under capacity even with four games in session, the street parking demand that could be generated by implementation of the proposed project could clearly be readily accommodated by existing parking. In fact, given the number of parking spaces available on school premises (81), it would be possible for all of the project-generated parking demand to be accommodated in the off-street parking spaces on school premises.

b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	**X**	☐

Explanation: The Alameda County Congestion Management Agency (CMA) only requires traffic impact analysis of potential impacts on the Metropolitan Transportation System (MTS)

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
☐	☐	☐	☐

regional network within the Congestion Management Program (CMP) if a proposed project would generate 100 or more peak-hour trips.[48] As noted in Section XVI-a, above, the project would generate no more than 35 vehicle trips, and most or all of them would occur outside the PM peak hour. The project would therefore have a ***less-than-significant impact*** on CMA roadways.

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?* ☐ ☐ ☐ **X**

Explanation: The project would have no effect on air traffic patterns or air traffic levels.

d) *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?* ☐ ☐ ☐ **X**

Explanation: The proposed project would not construct or alter any traffic-related facilities, and would therefore have no potential to increase traffic hazards due to design features.

e) *Result in inadequate emergency access?* ☐ ☐ ☐ **X**

Explanation: The proposed project would not construct or alter any traffic-related facilities, and would therefore have no potential to result in inadequate emergency access.

f) *Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?* ☐ ☐ ☐ **X**

Explanation: The proposed project would not construct or alter any traffic-related facilities, and would therefore have no potential to conflict with policies supporting alternative transportation.

XVII. UTILITIES AND SERVICE SYSTEMS — *Would the project:*

a) *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?* ☐ ☐ ☐ **X**

Explanation: The project would result in a minor incremental increase in wastewater generated at the site, from participants and spectators at the night games or other activities. Wastewater

[48] Alameda County Congestion Management Agency, *2009 Congestion Management Program*, page xiii, 2009.

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
☐	☐	☐	☐

from the project would be treated by the East Bay Municipal Utility District (EBMUD) at their Main treatment plant, located at the foot of the San Francisco-Oakland Bay Bridge in the City of Oakland, approximately 4.7 miles northwest of the project site. The wastewater treatment plant is permitted by the Regional Water Quality Control Board (RWQCB) and effluent from the plant is regularly monitored to ensure that water quality standards are not violated. The minor increase in wastewater flows from the site would not have the potential to cause the EBMUD treatment plant to exceed the RWQCB's wastewater treatment requirements.

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?	☐	☐	☐	X

Explanation: The minor incremental increase in water use and wastewater generation that would result from implementation of the project would not have the potential to require construction of new water or wastewater treatment facilities.

c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	X

Explanation: The proposed project would have no effect on stormwater drainage facilities.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	X

Explanation: The project would have a negligible effect on water consumption. There would be a minor incremental increase in water consumption associated with increased toilet flushing during night games, which would not significantly affect water supply.

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?	☐	☐	☐	X

Explanation: See Section XVII(b), above.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	X

Explanation: The proposed project would have no effect on landfill capacity.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
g) *Comply with federal, state, and local statutes and regulations related to solid waste?*	☐	☐	☐	☒

Explanation: The proposed project would not conflict with or interfere with the City's ability to implement its adopted solid waste programs and policies, including the Citywide integrated waste management plan and Chapter XXI, Section 21 of the City of Alameda Municipal Code, or Alameda County's Measure D. Any minor increase in solid waste generated at the site as a result of implementation of the project would be accommodated by existing waste collection activity. Because existing solid waste collection and disposal in Alameda complies with current federal, State, and local requirements, and because the project's solid waste would enter the same existing disposal stream, the proposed project would not violate any federal, State, or local statues or regulations related to solid waste.

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
☐	☐	☐	☐

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE —

a)	*Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*	☐	X	☐	☐

Explanation: There are no natural resources at the project site, and there is no potential for impacts to biological resources. There is a remote possibility for encountering buried historic/prehistoric cultural resources on the site, but mitigation measures have been identified to minimize potential impacts in the event such resources are encountered during project construction.

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.)*	☐	☐	☐	X

Explanation: No significant cumulative impacts were identified for the proposed project.

c)	*Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?*	☐	X	☐	☐

Explanation: The proposed project, consisting entirely of four light poles mounted with luminaires (flood lights), would not introduce any significant hazards to the project area. Measures have been identified to address potentially significant impacts associated with strong seismic shaking, differential settlement, and other seismic/geotechnical hazards. With implementation of all mitigation measures identified in this Initial Study, the project would not have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly.

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
☐	☐	☐	☐

REPORT PREPARATION—

This Initial Study/Mitigated Negative Declaration was prepared under the direction of Douglas Herring & Associates, with assistance from Environmental Service, as shown below.

Project Manager:	Douglas Herring & Associates 1331 Linda Vista Drive El Cerrito, CA 94530 Doug Herring, AICP, Principal
Nighttime Lighting/ Glare, and Noise:	Environmental Service 5789 Gold Creek Drive Castro Valley, CA 94552 Marc Papineau, R.E.A., Principal

MITIGATION MEASURES—

The following mitigation measures have been identified in this document to reduce potentially significant impacts to less-than-significant levels:

Cultural Resources

Mitigation Measure CR–1: If any cultural artifacts are encountered during site excavation, trenching, or other construction activities, all ground disturbance in the vicinity shall be halted until a qualified archaeologist can identify and evaluate the resource(s) and, if necessary, recommend mitigation measures to document and prevent any significant adverse effects on the resource(s). The archeological consultant shall immediately notify the Alameda Unified School District (AUSD) of the encountered archeological deposit. The archeological consultant shall prepare and implement a plan, subject to review and approval by the AUSD, for evaluation, recovery, and/or documentation of the discovered resource.

The results of any additional archaeological effort required through the implementation of Mitigation Measures CR–1 through CR–2 shall be presented in a professional-quality report, to be submitted to the AUSD and the Northwest Information Center at Sonoma State University in Rohnert Park. The AUSD shall fund and implement the mitigation in accordance with Section 15064.5(c)-(f) of the *CEQA Guidelines* and Public Resources Code Section 21083.2.

Mitigation Measure CR–2: In the event that any human remains are encountered during site disturbance, all ground-disturbing work shall cease immediately and a qualified archaeologist shall notify the Office of the Alameda County Coroner and advise that office as to whether the remains are likely to be prehistoric or historic period in date. If determined to be prehistoric, the Coroner's Office will notify the Native American Heritage Commission of the find, which, in turn, will then appoint a "Most Likely Descendant" (MLD). The MLD in consultation with the archaeological consultant and the AUSD, will advise and help formulate an appropriate plan for treatment of the remains, which might include recordation, removal, and scientific study of the remains and any associated artifacts. After completion of analysis and preparation of the report of findings, the remains and associated grave goods shall be returned to the MLD for reburial.

Mitigation Measure CR–3: If any paleontological resources are encountered during site grading or other construction activities, all ground disturbance shall be halted until the services of a qualified paleontologist can be retained to identify and evaluate the resource(s) and, if necessary, recommend mitigation measures to document and prevent any significant adverse effects on the resource(s). The project sponsor shall immediately notify Alameda Unified School

District staff upon discovery of paleontological resources. If a fossil find is confirmed, it shall be recorded with the U.S. Geological Survey and curated in an appropriate repository, as determined by the paleontologist.

Geology and Soils

Mitigation Measure GS–1: The proposed project design and construction shall incorporate all of the foundation design and other recommendations presented in the December 9, 2013 geotechnical investigation prepared for the project by Miller Pacific Engineering Group (MPEG), along with a supplemental June 17, 2014 Response to Comments document, unless modified during construction, based on field conditions, by MPEG or another qualified registered geotechnical or civil engineer. The foundations shall be designed to withstand the seismic load factors and drilled pier design criteria listed in the MPEG report. In addition, the final design plans shall be reviewed by MPEG to ensure that their geotechnical recommendations have been appropriately incorporated into the project plans and specifications. All design and construction shall conform to the requirements of the latest Uniform Building Code. During construction, MPEG shall observe and test the foundation excavations, grading, and other geotechnical-related construction to ensure that all work is performed in accordance with MPEG's recommendations and the approved plans for the project.

Noise

Mitigation Measure N–1: In accordance with Section 4-10.8 of the Alameda Noise Regulations, if any person files a complaint about the noise from the Little League public address (PA) systems with the Alameda Unified School District, Alameda Planning Department, or Alameda Public Works Department, the project sponsor shall modify use of the PA system such that it conforms with the standards established in Section 4-10.4 of the City of Alameda Municipal Code. To reduce the sound level experienced at nearby residential receptors during the Little League post-season (June 15 - July 10), the system volumes can be turned down. Speakers could also be relocated closer to the bleachers and directed toward the northwest so that the volume can be limited to approximately 70 dBA at 15 feet. This would result in an acceptable sound level of approximately 46 dBA at 240 feet (just outside the outfield fence), or 40-43 dBA at 240 feet behind the speakers.