

# BURGESS GYMNASIUM AND GYMNASTICS CENTER INITIAL STUDY



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November 2008

# BURGESS GYMNASIUM AND GYMNASTICS CENTER INITIAL STUDY

Submitted to:

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## **BURGESS GYMNASIUM AND GYMNASTICS CENTER PROJECT INITIAL STUDY**

**1. Project Title:**

Burgess Gymnasium and Gymnastics Center

**2. Lead Agency Name and Address:**

City of Menlo Park  
Public Works, Engineering Division  
701 Laurel Street  
Menlo Park, CA 94025  
(650) 330-6702

**3. Contact Person and Phone Number:**

Lawrence M. Johmann, Senior Civil Engineer  
City of Menlo Park, Engineering Division  
701 Laurel Street  
Menlo Park, CA 94025  
Phone Number: (650) 330-6740

**4. Project Location:**

The project sites are located on two portions of Burgess Park, which is situated in the City of Menlo Park in San Mateo County. The park is adjacent to the Civic Center Complex, which contains the City of Menlo Park offices and administrative buildings. The existing Burgess Gymnasium and Gymnastics Center (a single structure containing both uses) is located at 501 Laurel Street, and for the purposes of this Initial Study, is considered the north site. The south site is located on the southern portion of Burgess Park between the Recreation Center and Alma Street. Figure 1 shows the locations of the project sites.

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

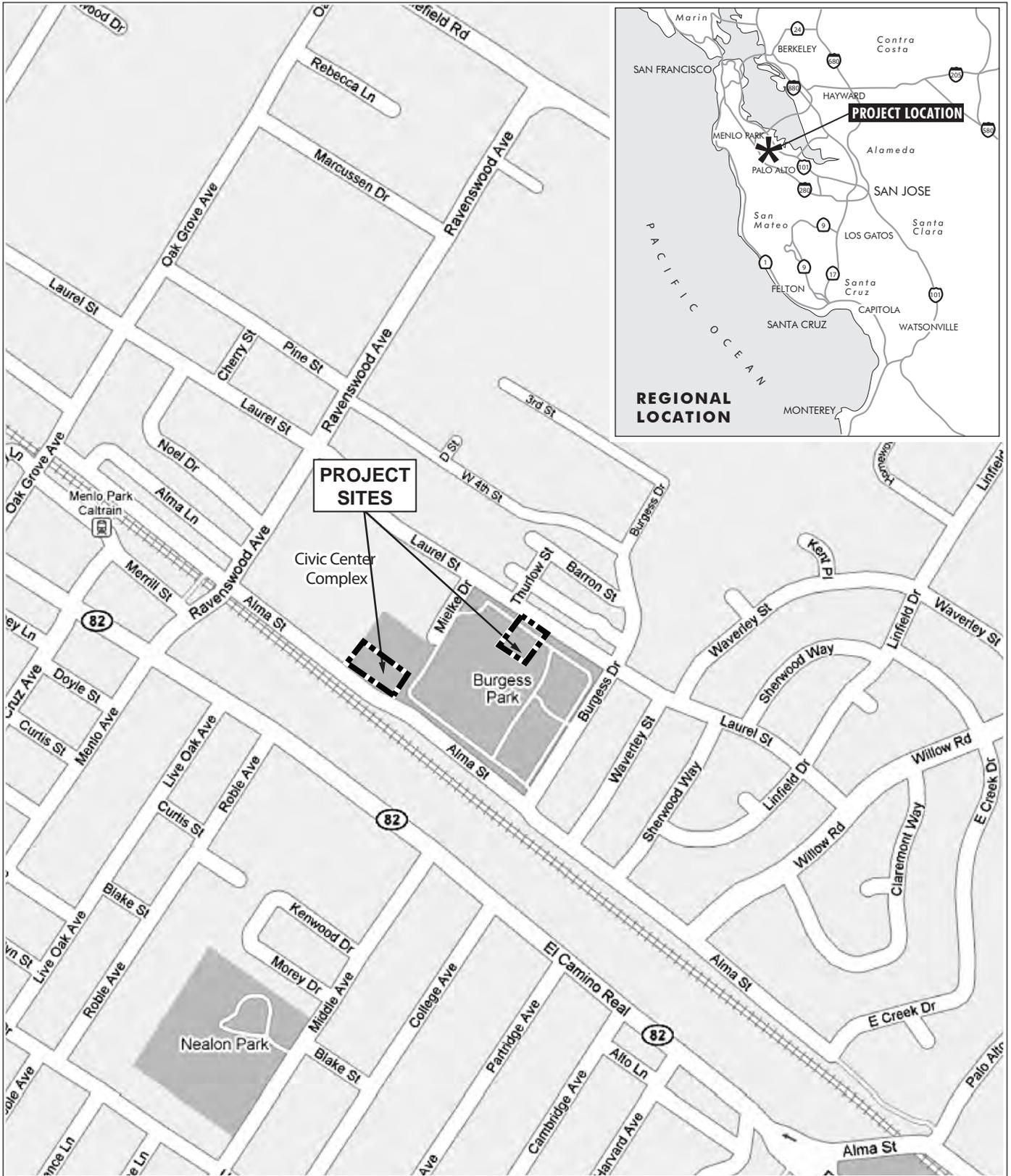
City of Menlo Park  
Public Works, Engineering Division  
701 Laurel Street  
Menlo Park, CA 94025

**6. General Plan Designation:**

Public Facilities District

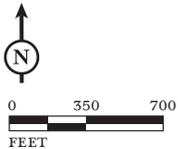
**7. Zoning:**

Public Facilities District



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FIGURE 1



 PROJECT SITES

*Burgess Gymnasium and Gymnastics Center Project Initial Study  
Project Vicinity and  
Regional Location Map*

## 8. Surrounding Land Uses and Setting:

The proposed project involves two sites within Burgess Park. The existing land uses surrounding each site are described below. Figure 2 is an aerial of the project area.

**North Site.** The north site is located on the northeastern portion of Burgess Park. Land uses north of this project site are primarily residential, though there are research and development uses located further north of the site across Laurel Street. Immediately east of the site is the aquatics center, tennis courts, and a parking lot, with Burgess Drive located further east. On the east side of Burgess Drive are residential land uses. South of the project site are baseball and soccer fields. Land uses to the west include a parking lot, police station, and City administrative buildings.

**South Site.** The south site is located on the southern portion of Burgess Park. To the north of the site is the Recreation Center, pond, City administration building; and associated landscaping. To the east is the skate park and basketball courts; to the west is a parking lot and library; and to the south of the project site is Alma Street and Caltrain railroad tracks.

## 9. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)

The City of Menlo Park approvals that are required for the project include:

- Public Works Permits
- Building Permits
- Architectural Control
- Heritage Tree Removal Permits (potential)

Other agencies whose approval is required include:

- Menlo Park Fire Protection District
- West Bay Sanitary District

## 10. Description of Project:

The Burgess Gymnasium and Gymnastics Center project (proposed project) proposes a new 18,700 square foot gymnastics facility at the location of the existing gymnasium and gymnastics building at the north site, and a new 26,900 square foot gymnasium in the vacant space between the existing Recreation Center and Alma Street at the south site. The proposed project includes the demolition of the existing Gymnasium and Gymnastics Center.

**a. Existing Conditions And Settings.** The proposed new gymnasium and gymnastics buildings would be located in Burgess Park in Menlo Park. Burgess Park is a 9.31 acre site located adjacent to the 12.4-acre Civic Center Complex. Burgess Park was purchased by the City in 1948 and was one of the first City-owned recreation areas in Menlo Park. Burgess Park currently contains a recreation center, aquatics center, gymnasium and gymnastics building, two baseball fields, a soccer field, tennis courts, a basketball court, a playground, picnic areas, and associated landscaping and parking lots. The Civic Center Complex contains City administrative buildings, Council Chambers, library, Menlo Children's Center, and associated landscaping and surface parking lots.

The current 17,400 square-foot gymnasium and gymnastics center is located on the northeastern portion of Burgess Park adjacent to Laurel Street. The single-story gymnasium was constructed in 1974 and was expanded in 1987. The brick and wood building has low sloping roofs of varying heights. The building currently contains the main gymnasium, two large gymnastics rooms, an office, entry lobbies, restrooms, locker and shower rooms, storage rooms, and a mechanical room.

**b. Project Background.** In November 2001, Menlo Park voters approved Measure T which issued a total of \$38 million in general obligation bonds phased over several years for the renovation and expansion of City parks and recreation facilities. In 2007, the Parks and Recreation Commission recommended the reconstruction of the Burgess Gymnasium and Gymnastics Center as a priority project.

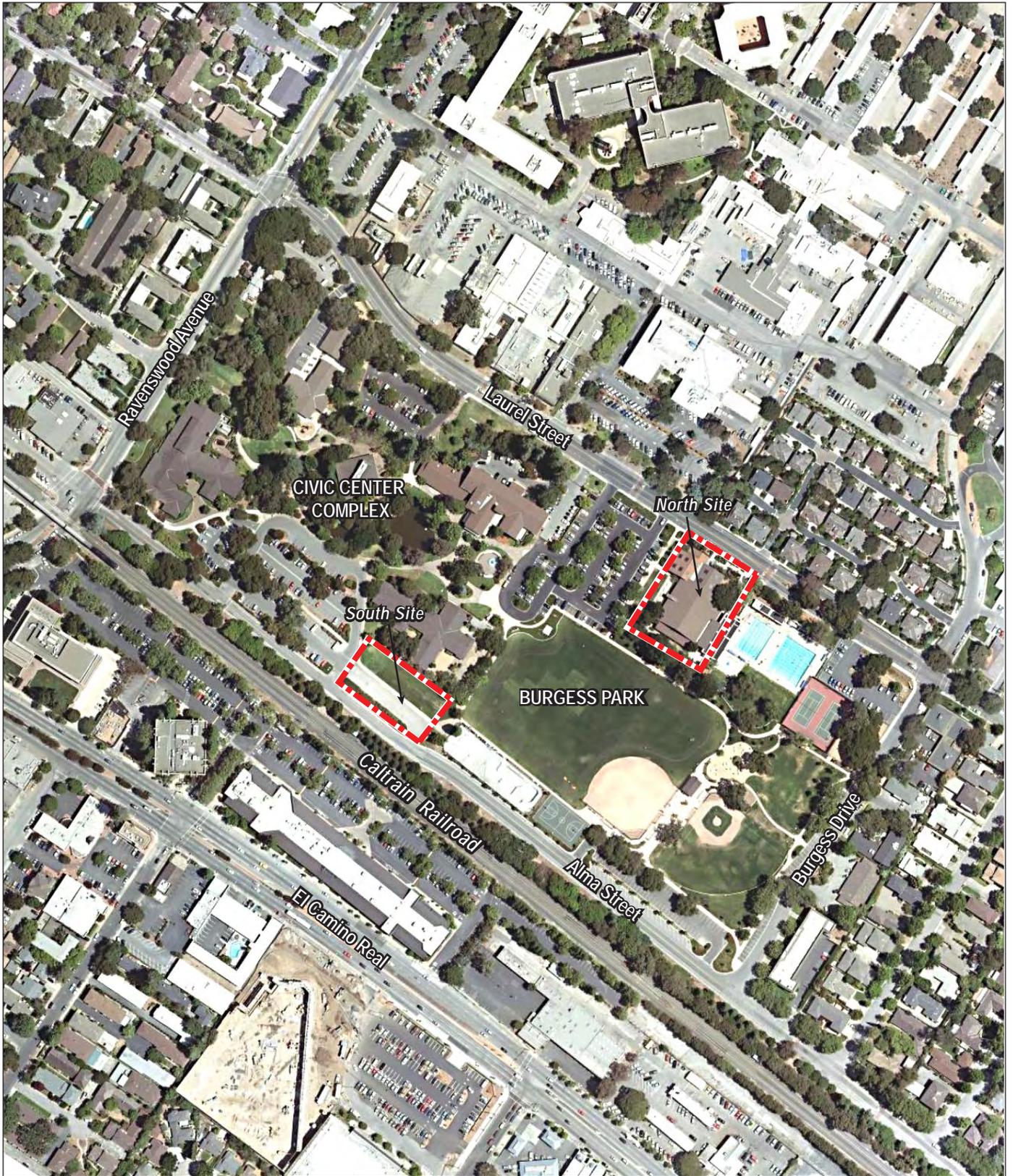
In 2007, the City Council approved a Parks and Recreation Commission recommendation to proceed with a programming study and conceptual design process for expanding and modernizing the Burgess Gymnasium and Gymnastics Center. The study began in early 2008 with an evaluation of the existing building's condition and use. This was followed by four focus group meetings (focus groups included City staff, gym users and neighbors) and a general community wide meeting. The study helped identify the needs, desires, and concerns of the gym and gymnastics facility users, City staff, neighboring residents, and the community at large. To further guide the conceptual design process, a project steering committee was formed. Members of the committee included a gym user, a parent of a gymnastics participant, a neighborhood resident, a City Council member, two Parks and Recreation Commission members, several City staff, and consulting architects. Initially, nine conceptual plans were developed. Through a vetting process that included a multitude of steering committee meetings, as well as two additional public meetings, a proposal to build a new gymnasium building adjacent to the existing Recreation Center Building and to build a new gymnastics center in place of the existing gym and gymnastics facility emerged as the preferred project.

**c. Proposed Project.** The City of Menlo Park (project applicant) is proposing to construct a new gymnasium and a gymnastics facility on two sites within Burgess Park. An aerial of the project site is shown in Figure 2. The project includes the following components:

- Construction of a new 26,900 square foot gymnasium at the south site;
- Demolition of the existing 17,400 square foot gymnasium and gymnastics center; and
- Construction of a new 18,700 square foot gymnastics center at the north site.

The project would result in the construction of approximately 28,200 net new square feet of gymnasium and gymnastics uses on the south and north project sites, and would result in a total building area of 45,600 square feet. Figure 3 shows the proposed site plan for the new gymnasium and gymnastics facilities.

**(1) Demolition.** Demolition activities would include the removal of the existing 17,400 square foot Gymnasium and Gymnastics Center on the north site. The proposed project would occupy a portion of undeveloped space located between the Recreation Center and Alma Street along with an unused, paved internal road on the south site.



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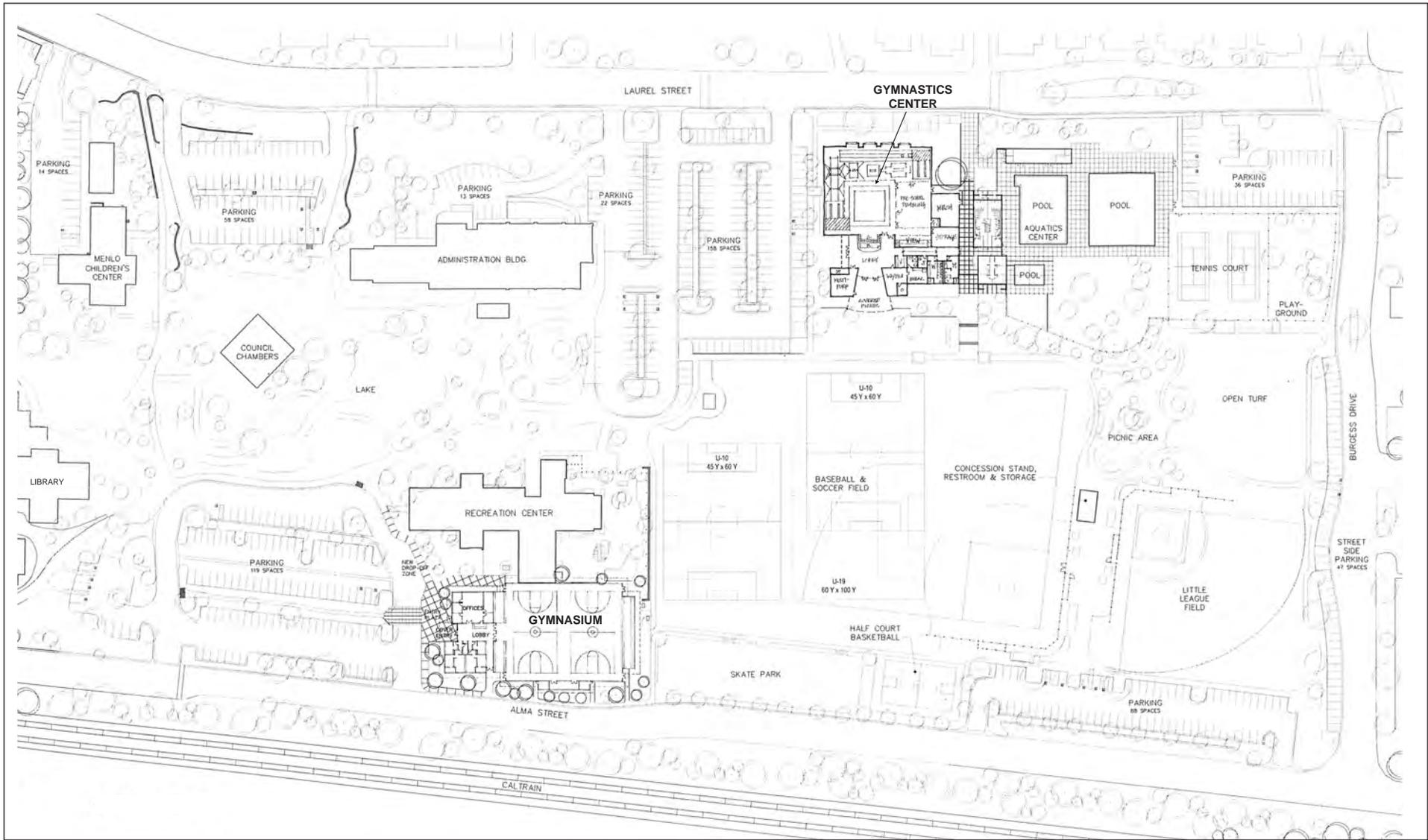
FIGURE 2



PROJECT SITE

*Burgess Gymnasium and Gymnastics Center Project Initial Study  
Aerial Photo of Project Site*

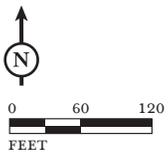
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FIGURE 3

*Burgess Gymnasium and Gymnastics Center Project Initial Study  
Proposed Conceptual Site Plan*



SOURCE: FIELD PAOLI, 2008.

I:\CMK0801 Burgess Gym\figures\Initial Study\Fig\_3.ai (11/6/08)

**(2) Proposed Gymnastics Center and Gymnasium.** The proposed 18,700 square foot gymnastics center would be located at the north site, and would contain a large gymnastics room, a smaller pre-school tumbling room, mechanical and storage rooms, multipurpose room, lobby, restrooms, and locker and shower rooms. In addition, the gymnastics complex would include a covered picnic area to the south of the building. The maximum building height would be 50 feet. The building design would be compatible with the other buildings in Burgess Park and the Civic Center Complex.

The proposed 26,900 square foot gymnasium would be located at the south site, and would include two basketball courts, a lobby, offices, restrooms, and locker and shower rooms. The building would also feature a new plaza and covered entry, as well as a new drop-off zone located in the parking lot between the proposed building and the existing Recreation Center. Figure 4 shows the proposed elevations for the gymnasium. The maximum building height would be 50 feet. Figure 5 shows a simulated view of the gymnasium from Alma Street looking to the northeast. The building design would be compatible with the other buildings in Burgess Park and the Civic Center Complex.

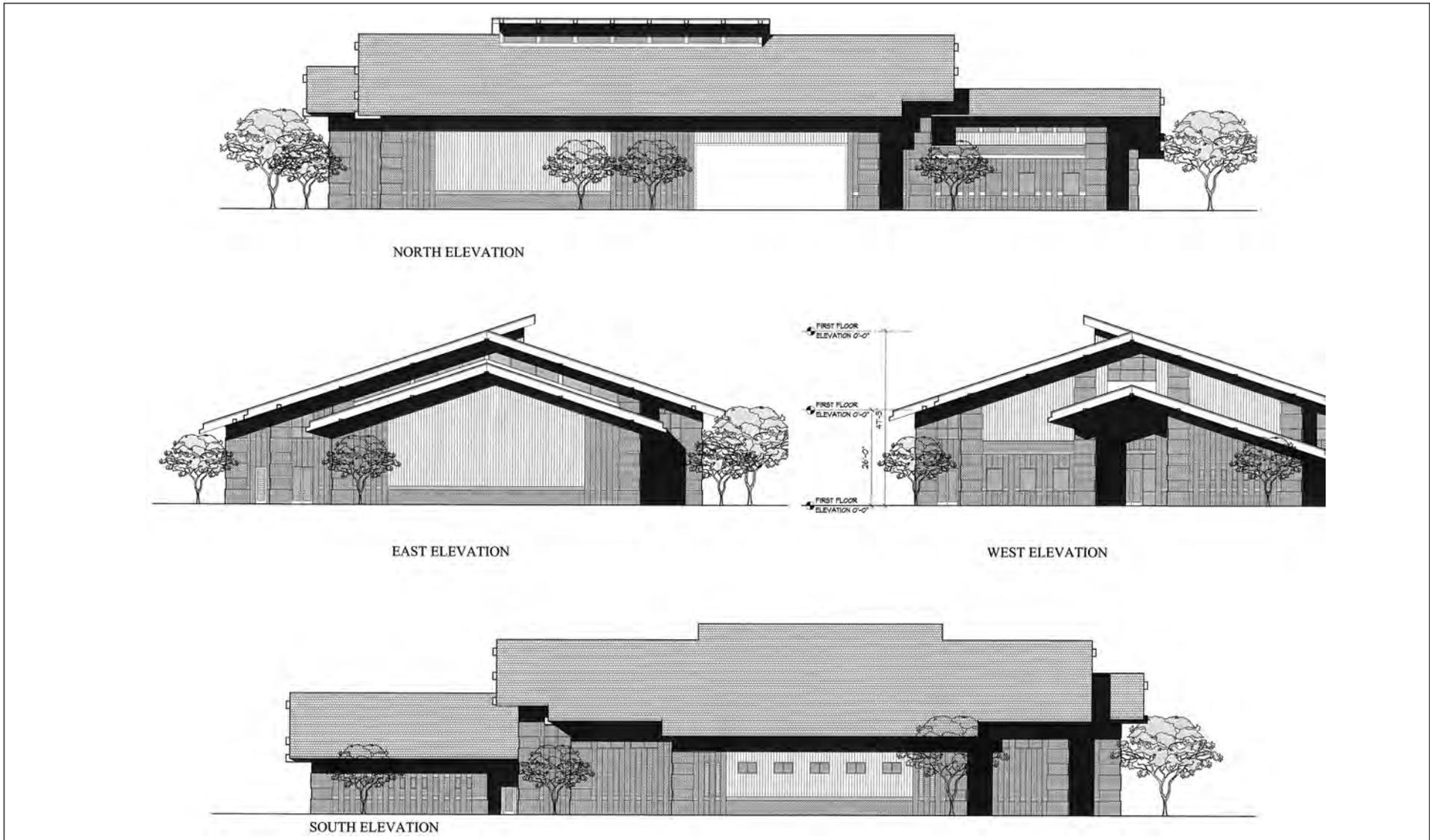
The proposed project would include landscaping and walkway connections to existing adjacent uses.

**(3) Circulation and Parking.** Vehicular access to the proposed gymnastics center would not be altered as part of the proposed project. The north site would continue to be accessible from Laurel Street and by the parking lot located immediately west of the north project site. The parking lot would continue to contain 158 parking spaces.

The proposed gymnasium would not alter vehicular access or parking around the south site. This site would continue to be accessible from Alma Street, and 119 parking spots would still be provided in the parking lot located to the west of the south site. Development on the south site would remove a small portion of an unused, paved internal road.

**(4) Utilities and Infrastructure.** The proposed project would be developed on sites currently served by public utilities and services systems. The project sites are served by the Menlo Park Municipal Water District and the West Bay Sanitary District. The proposed project would require water supply slightly greater than that currently demanded by the existing Gymnasium and Gymnastics Center, and would generate wastewater slightly greater than what is currently generated by the existing Gymnasium and Gymnastics Center. Development of the north and south sites would decrease pervious areas, decreasing stormwater runoff. Development of both sites would include bioretention areas to provide flow reduction, resulting in a further decrease in stormwater runoff.

**(5) Construction and Phasing.** Both of the sites are generally level and minimal grading is expected. Construction of the proposed gymnasium would require excavation to a depth of approximately 3 feet for building foundations. The City would work to balance cut and fill on site, and minimize or eliminate the need to haul soil from the site. Construction of the proposed gymnastic center is not anticipated to disturb soil beyond that which was previously disturbed during construction of the existing building. The proposed buildings would use slab foundations. Construction time for each new building is estimated at 9 to 12 months.



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FIGURE 4

*Burgess Gymnasium and Gymnastics Center Project Initial Study  
Conceptual Elevations of the Gymnasium*

NOT TO SCALE

The construction of the gymnasium will proceed first and is anticipated to begin in Summer 2009. A new fire alarm/sprinkler system would be added to the existing Recreation Center as part of project construction. Construction materials would be staged on the adjacent surface parking lot. Once construction of the gymnasium is complete, the programming of the existing Gymnasium and Gymnastics Center would be relocated to the new gymnasium. As the new gymnasium would be larger than the existing combined facility, and the existing programming would likely continue—the gym programming in one half of the new building and the gymnastics programming in the other half.

The existing Gymnasium and Gymnastics Center would then be demolished, and the new gymnastics center would be constructed in its place. Construction materials would be staged on the adjacent surface parking lot. Once construction of the new gymnastics center is complete, the gymnastics programming would be relocated to the new gymnastics facility at which time the programming would increase to take advantage of the new space. Likewise, gymnasium programming would expand to occupy the entire space in the new gymnasium.

While the proposed project would involve the removal of landscaping and trees on the sites, the proposed project would include replacement landscaping.



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FIGURE 5

*Burgess Gymnasium and Gymnastics Center Project Initial Study  
View of the Gymnasium from Alma Street*

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**Environmental Factors Potentially Affected:**

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

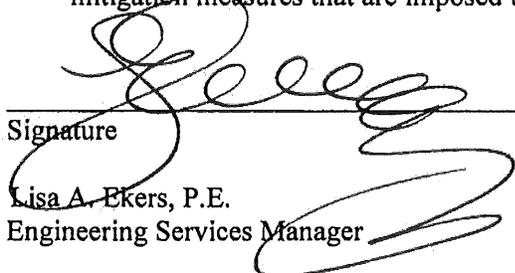
- |  |  |  |
|--|--|--|
| <input type="checkbox"/> Aesthetics                | <input type="checkbox"/> Cultural Resources    | <input type="checkbox"/> Air Quality                       |
| <input type="checkbox"/> Biological Resources      | <input type="checkbox"/> Hydrology/Water       | <input type="checkbox"/> Geology/Soils                     |
| <input type="checkbox"/> Hazards & Hazardous       | <input type="checkbox"/> Quality Materials     | <input type="checkbox"/> Land Use/Planning                 |
| <input type="checkbox"/> Mineral Resources         | <input type="checkbox"/> Noise                 | <input type="checkbox"/> Population/Housing                |
| <input type="checkbox"/> Public Services           | <input type="checkbox"/> Recreation            | <input checked="" type="checkbox"/> Transportation/Traffic |
| <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Mandatory Findings of |  |
| <input type="checkbox"/> Agricultural Resources    | <input type="checkbox"/> Significance          |  |

**Determination.**

On the basis of this initial evaluation:

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

Signature

  
Lisa A. Ekers, P.E.  
Engineering Services Manager

Date

11/17/08

## ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>I. AESTHETICS.</b> Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a) *Have a substantial adverse effect on a scenic vista? (No Impact)*

The Menlo Park General Plan<sup>1</sup> does not identify any scenic vistas. In addition, since the project sites are generally level and in an urban environment, there are no existing vistas from the site. As such, the proposed buildings would not impact any scenic vistas.

b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway? (No Impact)*

The project sites are not located in or within the vicinity of a State scenic highway. The closest officially designated scenic highway to the project site is Interstate 280,<sup>2</sup> which is located approximately 3.5 miles southwest of the project site. No portions of Burgess Park or the proposed buildings would be visible from this scenic highway. As such the proposed project would not damage scenic resources associated with a State scenic highway.

c) *Substantially degrade the existing visual character or quality of the site and its surroundings? (Less-than-Significant Impact)*

The project sites are visually characterized by the following land uses: recreational uses such as sports fields, an aquatics center, a basketball court, tennis courts and a skate park; City uses, such as the administration building and City Council chambers; surface parking lots; and landscaping. Implementation of the proposed project would demolish the existing Gymnasium and Gymnastics Center and construct new gymnasium and gymnastic centers on two separate sites. The proposed buildings would

<sup>1</sup> Menlo Park, City of, 1994. *City of Menlo Park General Plan*. November 30 and December 1.

<sup>2</sup> California Department of Transportation, 2008. California Scenic Highway Mapping System. Website: [www.dot.ca.gov/hq/LandArch/scenic\\_highways/index.htm](http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm). September 9.

not introduce any new land uses to the site. The proposed buildings would have a maximum height of 50 feet. In addition, the proposed buildings would be of a similar size, scale, massing and design as other existing buildings within Burgess Park and the Civic Center Complex. As such, the proposed project would not degrade the existing visual character of the site.

- d) *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? (Potentially Significant Unless Mitigation Incorporated)*

Exterior lighting would be included in the proposed project to provide for the safety of residents and visitors. The proposed building on the north site which replaces the existing gymnasium would create similar amounts of light and glare as the existing building. However, interior and exterior lighting, windows, building materials, and paving associated with the proposed project on the south site would create new sources of light and glare. The new light and glare generated by the proposed project could adversely affect views in the area. Implementation of the following mitigation measure would ensure this impact would be less than significant.

Mitigation Measure AES-1: A City approved lighting plan and corresponding photometric study are required prior to issuance of building permits for each structure.

	<b>Potentially Significant Impact</b>	<b>Potentially Significant Unless Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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**II. AGRICULTURAL RESOURCES.** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to a non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
- a) *Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to a non-agricultural use? (No Impact)*

No agricultural resources are located on or near the project site, and the site has not been subject to agricultural use in recent history. Burgess Park is classified as “Urban and Built-Up Land” by the State Department of Conservation.<sup>3</sup> Therefore, implementation of the proposed project would not convert agricultural land to non-agricultural uses.

*b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? (No Impact)*

The project sites are located in a developed area near downtown Menlo Park. The project sites are zoned for Public Facilities, which includes all public facilities operated for government or educational purposes by the City. The site is not zoned for agricultural uses and is not operated under a Williamson Act Contract.

*c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use? (No Impact)*

Implementation of the proposed project would not result in the extension of infrastructure to an underdeveloped area, the development of urban uses on a greenfield site, or other physical changes that would result in the conversion of farmland to non-agricultural uses.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>III. AIR QUALITY.</b> Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with the Bay Area Clean Air Plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<sup>3</sup> California Department of Conservation, Division of Land Resource Protection, 2004. Farmland Mapping and Monitoring Program, *Important Farmland in California*.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) *Conflict with the Bay Area Clean Air Plan? (No Impact)*

The main purpose of an air quality plan is to bring an area into compliance with the requirements of federal and State air quality standards. Such plans describe air pollution control strategies to be implemented by a city, county or region. The City of Menlo Park and the project sites are located in the San Francisco Bay air basin and are within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The latest air quality plan, the *Bay Area 2005 Ozone Strategy*, was developed in order to bring the region into compliance with State and federal air quality standards. The Menlo Park General Plan is consistent with the Ozone Strategy plan. The project is consistent with the General Plan land use designation for the site, and therefore would not conflict with the *Bay Area 2005 Ozone Strategy*.

b) *Violate any air quality standard or contribute substantially to an existing or projected air quality violation? (Potentially Significant Unless Mitigation Incorporated)*

Air pollutant emissions associated with the proposed project would occur over the short term in association with construction activities such as grading and vehicle/equipment use. Long-term emissions would result from vehicle trips to and from the project sites associated with employee trips to work. The discussion below describes potential air quality violations that could occur as a result of construction equipment exhaust emissions; fugitive dust; long-term vehicle emissions; and local carbon monoxide hot spots.

**Construction Equipment Exhaust Emissions.** Construction period emissions would result from implementation of the proposed project. Construction activities are a source of organic gas emissions. Solvents in adhesives, non-waterbased paints, thinners, some insulating materials and caulking materials would evaporate into the atmosphere and would participate in the photochemical reaction that creates urban ozone. Asphalt used in paving is also a source of organic gases for a short time after its application.

During construction various diesel-powered vehicles and equipment would be in use. In 1998, the California Air Resources Board (CARB) identified particulate matter from diesel-fueled engines as a toxic air contaminant (TAC). The CARB has completed a risk management process that identified potential cancer risks for a range of activities using diesel-fueled engines.<sup>4</sup> High volume freeways, stationary diesel engines and facilities attracting heavy and constant diesel vehicle traffic (e.g., distribution centers and truck stops) were identified as having the highest associated risk.

<sup>4</sup> California Air Resources Board (CARB), 2000. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*, October.

Health risks from TACs are a function of both concentration and duration of exposure. Unlike the above types of sources, construction diesel emissions are temporary, affecting an area for a period of days or perhaps weeks. Additionally, construction-related sources are mobile and transient in nature, and the emissions occur within the project sites. Children playing at Burgess Park during the construction phases could be exposed to health risks from TACs. However, due to their short duration and with implementation of Mitigation Measure AIR-1, below, health risks from construction emissions of diesel particulate would be less than significant.

***Construction Dust.*** Construction dust would affect local air quality at various times during construction of the proposed project. The dry, windy climate of the area during the summer months creates a high potential for dust generation if and when underlying soils are exposed. Clearing, grading and earthmoving activities have a high potential to generate dust whenever soil moisture is low and particularly when the wind is blowing. The project proposes the demolition of the existing 17,400 square foot gymnasium at the north project site, site preparation including minimal grading, and construction of two new structures.

Construction activities would result in increased dustfall and locally elevated levels of particulates downwind of construction activity. Construction dust has the potential to create a nuisance at nearby properties or at previously completed portions of the proposed project. In addition to nuisance effects, excess dustfall can increase maintenance and cleaning requirements and could adversely affect sensitive electronic devices.

Emissions of particulate matter or visible emissions are regulated by the BAAQMD under Regulation 6 "Particulate Matter and Visible Emissions." Specifically, visible particulate emissions are prohibited where the particulates are deposited on real property other than that of the person responsible for the emissions and cause annoyance.

Implementation of the following mitigation measure would reduce construction related impacts to a less-than-significant level.

Mitigation Measure AIR-1: Consistent with guidance from the BAAQMD, the following actions shall be required of construction contracts and specifications for the project. The following controls shall be implemented at all construction sites:

- Water all active construction areas at least twice daily and more often during windy periods; active areas adjacent to existing land uses shall be kept damp at all times, or shall be treated with non-toxic stabilizers to control dust;
- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least 2 feet of freeboard;
- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites;
- Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas at construction sites; water sweepers shall vacuum up excess water to avoid runoff-related impacts to water quality;

- Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets;
- Apply non-toxic soil stabilizers to inactive construction areas;
- Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.);
- Limit traffic speeds on unpaved roads to 15 mph;
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways;
- Replant vegetation in disturbed areas as quickly as possible;
- On-site idling of construction equipment shall be minimized as much as feasible (no more than 5 minutes maximum);
- All construction equipment shall be properly tuned and fitted with manufacturer’s standard level exhaust controls;
- Contractors shall consider using alternative powered construction equipment (i.e., hybrid, compressed natural gas, biodiesel, electric) when feasible;
- Contractors shall use add-on control devices such as diesel oxidation catalysts or particulate filters when feasible; and
- All contractors shall use equipment that meets California Air Resources Board’s (ARB) most recent certification standard for off-road heavy duty diesel engines.

**Long-Term Emissions.** Long-term air emission impacts would be those associated with changes in permanent usage of the project sites. Mobile source emissions would result from vehicle trips associated with the proposed project. The Urban Emissions Model (URBEMIS 2007) computer program, which is the most current air quality model available in California for estimating emissions associated with land use development projects, was used to calculate long-term mobile source emissions.

The BAAQMD has established a significance threshold for ozone precursors reactive organic gases (ROG) and nitrous oxide (NO<sub>x</sub>) and particulate matter of 10 microns or less (PM<sub>10</sub>) at 80 lbs/day. A significance threshold for PM<sub>2.5</sub> has not been established; PM<sub>2.5</sub> emissions are provided for informational purposes only. The emissions from daily vehicle trips associated with the existing conditions are illustrated in Table 1. The emissions from daily vehicle trips associated with the proposed project are illustrated in Table 2. The net emissions from daily vehicle trips (i.e., proposed project emissions minus existing emissions) are illustrated in Table 3. The Urban Emissions Model reports are provided in Appendix A. As shown in Table 3, the long-term vehicular emissions generated by the proposed

**Table 1: Existing Regional Emissions in Pounds Per Day**

	Reactive Organic Gases	Nitrogen Oxides	PM <sub>10</sub>	PM <sub>2.5</sub>
Regional Emissions	4.65	7.34	7.35	1.40
<b>BAAQMD Significance Threshold</b>	<b>80</b>	<b>80</b>	<b>80</b>	<b>NA</b>
<b>Exceed?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>NA</b>

Source: LSA Associates, Inc., 2008.

project are not anticipated to exceed the BAAQMD’s thresholds, and therefore the project would have a less-than-significant impact on local and regional air quality.

**Greenhouse Gas Emissions.** There is a general scientific consensus that global climate change is occurring, caused in whole or in part by increased emissions of greenhouse gases (GHGs) that keep the Earth’s surface warm by trapping heat in the Earth’s atmosphere. While many studies show evidence of warming over the last century and predict future global warming, the causes of such warming and its potential effects are far less certain. In its “natural” condition, the greenhouse effect is responsible for maintaining a habitable climate on Earth, but human activity has caused increased concentrations of these gases in the atmosphere, thereby contributing to an increase in global temperatures.

GHGs are present in the atmosphere naturally, are released by natural sources, or formed from secondary reactions taking place in the atmosphere. The six gases that are widely seen as the principal contributors to global climate change are: Carbon dioxide (CO<sub>2</sub>), Methane (CH<sub>4</sub>), Nitrous oxide (N<sub>2</sub>O), Hydroflourocarbons (HFCs), Perflourocarbons (PFCs), and Sulfur Hexaflouride (SF<sub>6</sub>). A memorandum to the City describing GHGs as well as their inventory and regulation is included in Appendix B.

The construction and operation of development projects, such as the proposed project, cause GHG emissions. GHG emissions occur in connection with many activities associated with development, including the use of construction equipment and building materials, vegetation clearing, natural gas usage, electrical usage (since electricity generation by conventional means is a major contributor to GHG emissions), water use (which relies on the use of electricity for water supply and conveyance, water treatment, water distribution, and wastewater treatment), and transportation. GHG emissions estimates are provided herein for informational purposes only, as there is no established quantified GHG emissions threshold. Table 4 shows that the proposed land uses would generate up to 1,460 tons per year of carbon dioxide equivalent (CO<sub>2</sub>eq).

**Table 2: Project Regional Emissions in Pounds Per Day**

	Reactive Organic Gases	Nitrogen Oxides	PM <sub>10</sub>	PM <sub>2.5</sub>
Regional Emissions	12.20	19.22	19.25	3.68
<b>BAAQMD Significance Threshold</b>	<b>80</b>	<b>80</b>	<b>80</b>	<b>NA</b>
<b>Exceed?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>NA</b>

Source: LSA Associates, Inc., 2008.

**Table 3: Net Regional Emissions in Pounds Per Day**

	Reactive Organic Gases	Nitrogen Oxides	PM <sub>10</sub>	PM <sub>2.5</sub>
Regional Emissions	7.55	11.88	11.9	2.28
<b>BAAQMD Significance Threshold</b>	<b>80</b>	<b>80</b>	<b>80</b>	<b>NA</b>
<b>Exceed?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>NA</b>

Source: LSA Associates, Inc., 2008.

**Table 4: Long-Term Project Operational Emissions of GHGs**

Emission Source	Emissions (tons per year)				Percent of Total Project Emissions
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> eq	
Vehicles	1,165	0.076	0.11	1,200	82%
Electricity Production <sup>a</sup>	200	0.0022	0.0012	200	14%
Natural Gas Combustion	60	0.0008	0.00076	60	4%
Solid Waste	N/A	N/A	N/A	0.37	0%
<b>Total Annual Emissions</b>				<b>1,460</b>	<b>100%</b>

<sup>a</sup> Includes water-related electricity consumption (project as planned).

Source: LSA Associates, Inc., 2008.

Because no applicable numeric thresholds have been defined, and because the precise causal link between an individual project’s emissions and global climate change has not been developed, it is reasonable to conclude that an individual development project cannot generate a high enough quantity of GHG emissions to affect global climate change. However, individual projects incrementally contribute toward the potential for global climate change on a cumulative basis in concert with all other past, present, and reasonably foreseeable future projects. The proposed project would be compliant with strategies to reduce California’s emissions to the levels proposed in Executive Order S-3-05 and AB 32 (see Table 2, Project Compliance with Greenhouse Gas Emission Reduction Strategies, in Appendix B). These strategies include energy efficiency measures, water conservation and efficiency measures, solid waste reduction measures, and transportation and motor vehicle measures. Overall, the project would implement GHG reduction strategies and not conflict with or obstruct implementation of reduction measures identified in AB 32, the Governor’s Executive Order S-3-05, and other strategies to help reduce GHG emissions to the level proposed by the Governor. Therefore, the project’s incremental contribution to climate change impacts would be less than significant.

c) *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard? (Less-than-Significant Impact)*

See III.b., above. Based on long-term emission estimates, the proposed project would not result in substantial increases to the levels of any criteria pollutants. Therefore, the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant.

d) *Expose sensitive receptors to substantial pollutant concentrations? (Potentially Significant Unless Mitigation Incorporated)*

Construction of the proposed project may expose surrounding, sensitive land uses to airborne particulates and fugitive dust, as well as pollutants associated with the use of construction equipment (e.g., diesel-fueled vehicles and equipment). Sensitive receptors are facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Since Burgess Park is frequently used by children, the project site would be considered a sensitive receptor. The single-family residences just north of the

project site are also sensitive receptors. Both the children playing at the park and the residents of the single-family homes could be exposed to increased pollutant concentrations, especially during construction. Implementation of the Mitigation Measure AIR-1 would reduce impacts to a less-than-significant level.

Air pollution associated with the proposed project would be primarily vehicle related, and would not necessarily be concentrated in the vicinity of the project sites. Therefore, implementation of the proposed project would not expose sensitive receptors to substantial pollutant concentrations.

e) *Create objectionable odors affecting a substantial number of people? (Less-than-Significant Impact)*

The proposed project would not contain any major sources of odor and would not be located in an area with existing odors. Therefore, the proposed project would not “create objectionable odors affecting a substantial number of people” and would have a less-than-significant impact in terms of odors.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>IV. BIOLOGICAL RESOURCES.</b> Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) Through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or State habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a) <i>Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? (Less-than-Significant Impact)</i>				

The project proposes buildings on two sites within Burgess Park. The north site is currently developed with a building that contains both gymnasium and gymnastics uses, while the south site currently contains a lawn and a paved area. The project sites are within an urban area that would not generally provide habitat for native plants and is likely to have low wildlife habitat value. While some native species do utilize urban areas for foraging, roosting, and/or nesting, these are expected to be common species that are adapted to urban conditions and would not be adversely affected by implementation of the propose project.

b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? (No Impact)*

No riparian areas or sensitive natural communities are located on or within the vicinity of the project sites.<sup>5</sup> Therefore, implementation of the proposed project would not impact riparian or other sensitive natural communities.

c) *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) Through direct removal, filling, hydrological interruption, or other means? (No Impact)*

The project sites are developed and do not contain any federally-protected wetlands. Therefore, implementation of the proposed project would not impact wetlands.

d) *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? (Less-than-Significant Impact)*

<sup>5</sup> City of Menlo Park General Plan, op. cit.

Burgess Park was acquired by the City in 1948,<sup>6</sup> and is located near downtown Menlo Park and other urban land uses. Any wildlife that would move through Burgess Park would be adapted to disturbed urban sites. In addition, the project area does not include any streams, rivers, or other means for providing movement of fish. Implementation of the proposed project would not substantially interfere with the movement of native wildlife species or impede the use of native wildlife nursery sites.

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

The City has a Heritage Tree Ordinance (Chapter 13.24 of the Menlo Park Municipal Code) that defines heritage trees as: 1) any tree having a trunk with a circumference of 47.1 inches (diameter of 15 inches) or more, measured at 54 inches above natural grade, 2) any oak tree native to California, with a circumference of 31.4 inches (diameter of 10 inches) or more, measured at 54 inches above natural grade, and 3) any tree or group of trees specifically designated by the City Council for protection because of its historical significance, special character or community benefit.<sup>7</sup>

Based on an initial reconnaissance of the project sites, LSA determined that there are 11 trees that qualify as heritage trees in proximity to the existing building on the north site. There are no heritage trees in proximity to the south site. These trees are show in Figure 6 and described in Table 4, in Section V.a. These trees have circumferences between 52 inches and 119 inches. Preliminary site plans indicate that the City would attempt to preserve these heritage trees. If the proposed project would require the removal of a heritage tree, it would be replaced at a 2:1 ratio. The Heritage Tree Ordinance allows for tree removal provided that the impacts associated with tree removal (including effects to the City's historical character) are weighed against potential benefits.

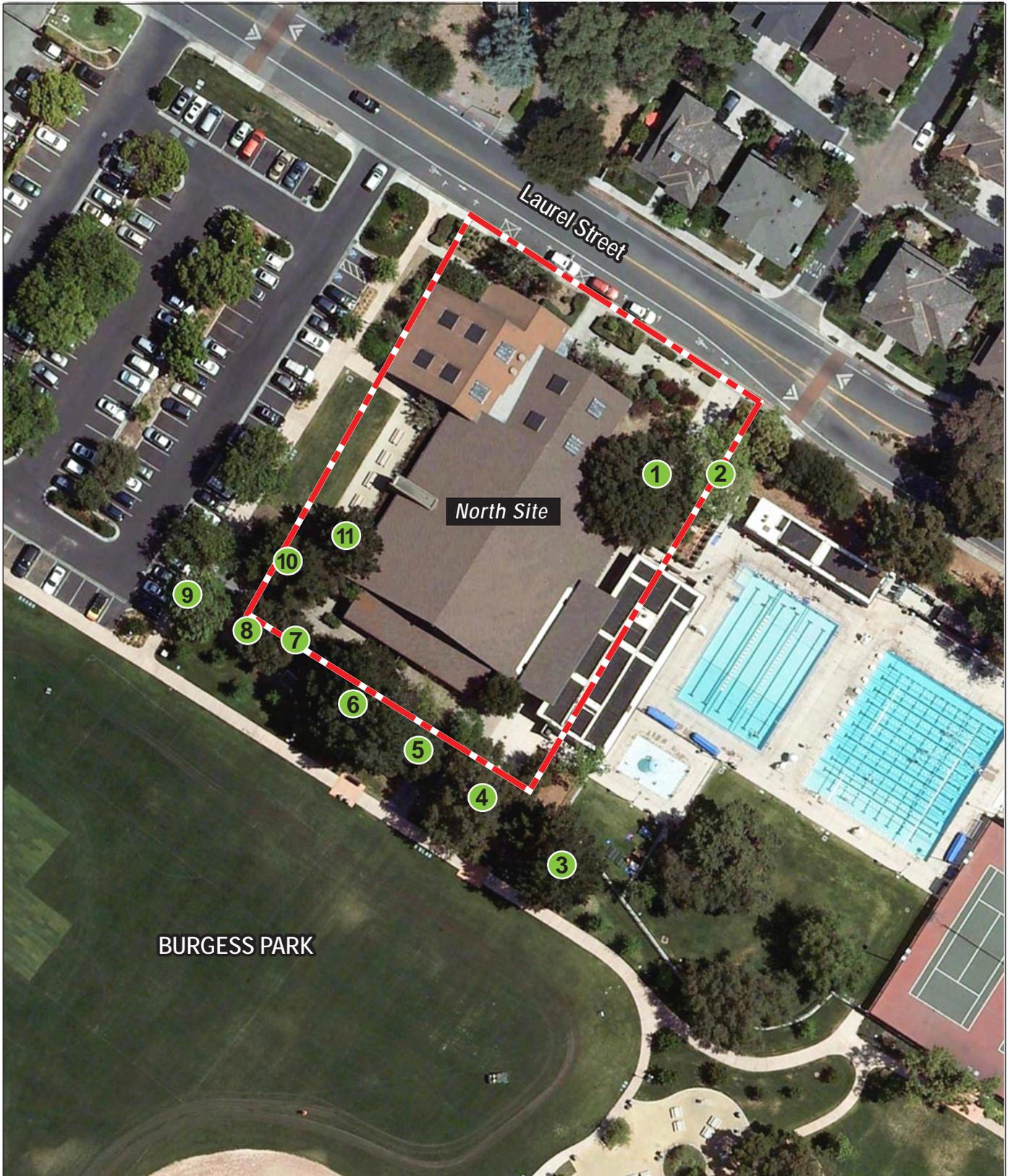
- f) *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or State habitat conservation plan? (No Impact)*

The project sites are not subject to any habitat conservation plans, natural community conservation plans, or other approved local, regional, or State habitat conservation plans.

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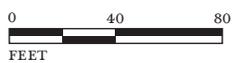
<sup>6</sup> Menlo Park, City of, 2008. *Burgess Park*. Website: [www.menlopark.org/departments/com/parks/burgess.htm](http://www.menlopark.org/departments/com/parks/burgess.htm). September 23.

<sup>7</sup> Menlo Park, City of, 2006. *Summary of Heritage Tree Ordinance*. May.



LSA

FIGURE 6



PROJECT SITE



HERITAGE TREES

*Burgess Gymnasium and Gymnastics Center Project Initial Study  
Heritage Trees on the North Site*

SOURCE: GOOGLE EARTH, 2008

F:\CMK0801 Burgess Gym\figures\Initial Study\Fig\_6.ai (11/6/08)

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	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>V. CULTURAL RESOURCES.</b> Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
a) <i>Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5? (Less-than-Significant Impact)</i>				

The existing gymnasium and gymnastics facility was built in 1974, and is not considered to be a historic resource as defined in *CEQA Guidelines* Section 15064.5. The proposed project would not result in the demolition of any identified historic resources.

Based on LSA’s initial review of the proposed project, 11 trees around the north site would qualify as heritage trees, per the City’s Heritage Tree Ordinance, and impacts to these trees could result in a significant impact to cultural resources. There are no heritage trees in proximately to the south site. The Heritage Tree Ordinance contains procedures for the permitted removal of heritage trees (Title 13.24, Section 030). As described in Section IV.e., above, heritage trees for the purposes of this analysis are defined as any tree having a trunk with a circumference of 47.1 inches (diameter of 15 inches) or more, measured at 54 inches above natural grade.

LSA staff conducted a preliminary inspection of the trees surrounding the north site and found that 11 trees have trunk circumference over 47.1 inches. Figure 6 shows the location of each heritage tree around the north site and Table 5 lists details concerning each identified tree.

It is the City’s intent to preserve the heritage trees around the site. If the proposed project would require the removal of a heritage tree, it would be replaced at a 2:1 ratio. Therefore, the project would not result in a significant impact to historic resources.

**Table 5: Ordinance-size Trees at the North Project Site**

Tree Number	Common Name	Circumference (inches)	Native
1	Coast Live Oak	119	Yes
2	Camphor	52	No <sup>a</sup>
3	Monterey Pine	76	Yes
4	Monterey Pine	93	Yes
5	Monterey Pine	92	Yes
6	Monterey Pine	101	Yes
7	Monterey Pine	73	Yes
8	Coast Live Oak	82	Yes
9	Tulip	68	No <sup>a</sup>
10	Monterey Pine	71	Yes
11	Monterey Pine	92	Yes

<sup>a</sup> Tree native to California, but not to this region.

Notes: The City of Menlo Park Heritage Tree Ordinance (Chapter 13.24 of the Menlo Park Municipal Code) defines ordinance-sized trees as any tree having a trunk with a circumference of 47.1 inches (diameter of 15 inches) or more measured at 54 inches above natural grade.

Source: LSA Associates, Inc., 2008.

*b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? (Less-than-Significant Impact)*

Based on archaeological studies conducted for projects in the vicinity of Burgess Park and downtown Menlo Park, the proximity of prehistoric archaeological resources indicates that the project sites could be sensitive to the presence of subsurface archaeological deposits, and that there is a possibility of encountering such subsurface deposits during project ground-disturbing activities.<sup>8</sup> Redevelopment of the north project site is not anticipated to disturb soil beyond that which was previously disturbed during the construction of the existing building. Development of the south site would require excavation to a depth of approximately 3 feet for building foundations. It is unlikely that the ground disturbance required for project construction would result in impacts to archaeological resources. In the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources would be halted and the City would consult with a qualified archaeologist or paleontologist to assess the significance of the find.

*c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? (Less-than-Significant Impact)*

Based on paleontological studies conducted for projects in the vicinity of the Burgess Park, Civic Center Complex, and downtown Menlo Park, it has been determined that the project sites could have a high sensitivity for paleontological resources. Four fossil localities have been identified within 5 miles of downtown Menlo Park. In addition, other locations with geological formations similar to those of sites in the vicinity of the project have produced significant vertebrate fossil deposits. As noted above, redevelopment of the north project site is not anticipated to disturb soil beyond that which was

<sup>8</sup> Menlo Park, City of, 2008. *1300 El Camino Real Project EIR, Administrative Draft #2*. April.

previously disturbed during the construction of the existing building and development of the south site would require excavation to a depth of approximately 3 feet. It is unlikely that the ground disturbance required for project construction would result in impacts to archaeological resources. In the event of an unanticipated discovery of a paleontological resource during construction, excavations within 50 feet of the find would be temporarily halted or diverted until the discovery is examined by a qualified paleontologist (per Society of Vertebrate Paleontology standards (SVP 1995,1996)).

d) *Disturb any human remains, including those interred outside of formal cemeteries? (Less-than-Significant Impact)*

As noted above, construction of the gymnasium and gymnastic centers would require a minimal amount of excavation. It is unlikely that the ground disturbance required for project construction would result in disturbance to human remains. In addition, California Health and Safety Code Section 7050.5 states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains are discovered has determined whether or not the remains are subject to the coroner's authority. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Native American Most Likely Descendant to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods.

Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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**VI. GEOLOGY AND SOILS.** Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a) <i>Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42; ii) Strong seismic ground shaking; iii) Seismic-related ground failure, including liquefaction; iv) Landslides?</i>				

*i.) Fault Rupture. (No Impact)*

The San Francisco Bay region is a seismically active region that is subject to large earthquakes. There are 30 known faults in the Bay Area that are considered capable of generating earthquakes. There are no known active faults within Menlo Park,<sup>9</sup> the closest active fault is the San Andreas Fault Zone situated approximately 6 miles southwest of Burgess Park. The proposed project would not impact persons or structures due to the rupture of a known earthquake fault.

*ii.) Groundshaking. (Potentially Significant unless Mitigation Incorporated)*

As discussed above, the San Francisco Bay region is a seismically active region and the San Andreas Fault is approximately 6 miles southwest of Burgess Park. The San Andreas Fault Zone is considered an active strike-slip fault with right-lateral motion according to the Alquist-Priolo Earthquake Fault Zones Act. While the site is not located within an Alquist-Priolo Fault Zone damage to structures could occur. Because it affects a much broader area, ground shaking, rather than surface fault rupture, is the cause of most damage during earthquakes. Three major factors affect the severity (intensity) of ground shaking at a site in an earthquake: the size (magnitude) of the earthquake; the distance to the fault that generated the earthquake; and the geologic materials that underlie the site. Thick, loose soils, such as bay mud, tend to amplify and prolong ground shaking.

<sup>9</sup> City of Menlo Park General Plan, Op. Cit.

The magnitude of a seismic event is a measure of the energy released by an earthquake, and it is assessed by seismographs that measure the amplitude of seismic waves.<sup>10</sup> The intensity of an earthquake is a subjective measure of the perceptible effects of a seismic event at a given point and varies with distance from the epicenter and local geologic conditions. The Modified Mercalli Intensity Scale (“MMI”) (Table 6) is the most commonly used scale to measure the subjective effects of earthquake intensity. Intensity can also be quantitatively measured using accelerometers (strong motion seismographs) that record ground acceleration at a specific location, a measure of force applied to a structure under seismic shaking.

Maps prepared by the Association of Bay Area Governments (ABAG) indicate that the area including the project sites would experience a Modified Mercalli Intensity of “VIII – Very Strong” to “IX – Violent”<sup>11</sup> shaking from the San Andreas Fault on the peninsula with a potential moment magnitude of 7.2. The potential for strong ground shaking from a major earthquake on any of the other known active faults in the region is high. This level of seismic shaking could cause extensive non-structural damage in buildings on the site. In addition, limited structural damage may occur. Implementation of the following mitigation measure would reduce this impact to a less-than-significant level:

Mitigation Measure GEO-1: Prior to the issuance of any site-specific grading or building permits for either the gymnastics center or the gymnasium, a design-level geotechnical investigation shall be prepared and submitted to the City of Menlo Park Building Division for review and confirmation that the proposed development fully complies with the California Building Code. The report shall determine the project site’s surface geotechnical conditions and address potential seismic hazards such as liquefaction and subsidence. The report shall identify building techniques appropriate to minimize seismic damage. In addition, the following requirement for the geotechnical and soils report shall be achieved:

- The analysis presented in the geotechnical report shall conform to the California Division of Mines and Geology recommendations presented in the *Guidelines for Evaluating Seismic Hazards in California*.<sup>12</sup>
- All mitigation measures, design criteria, and specifications set forth in the geotechnical and soils report shall be implemented as a condition of project approval.

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<sup>10</sup> In the past, the common standard for measurement of magnitude (M) by geologists and earthquake seismologists was the Richter Scale. However, due to limitations of the instrumentation used to measure Richter magnitude, moment magnitude ( $M_w$ ) is now commonly used to characterize seismic events. Moment magnitude is determined from the physical size (area) of the rupture of the fault plane, the amount of horizontal and/or vertical displacement along the fault plane, and the resistance of the rock type along the fault to rupture. The moment magnitude can be calculated following an earthquake or estimated for an expected earthquake if the fault rupture area and displacement and rock properties can be estimated accurately. Therefore, the magnitudes of expected earthquakes in the San Francisco Bay Area are more recently reported as moment magnitudes.

<sup>11</sup> Association of Bay Area Governments, 2008. Bay Area Shaking Maps. Website: [www.abag.ca.gov/bayarea/eqmaps/mapsba.html](http://www.abag.ca.gov/bayarea/eqmaps/mapsba.html). September 9.

<sup>12</sup> California Division of Mines and Geology (CDMG), 1997. *Guidelines for Evaluating Seismic Hazards in California*, CDMG Special Publication 117, 74 p.

**Table 6: Modified Mercalli Intensity (MMI) Scale**

I	Not felt except by a very few under especially favorable circumstances.
II	Felt only by a few persons at rest, especially on upper floors of buildings. Delicately suspended objects may swing.
III	Felt quite noticeably indoors, especially on upper floors of buildings, but many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibration like passing of truck. Duration estimated.
IV	During the day felt indoors by many, outdoors by few. At night some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
V	Felt by nearly everyone, many awakened. Some dishes, windows, etc., broken; a few instances of cracked plaster; unstable objects overturned. Disturbances of trees, poles, and other tall objects sometimes noticed. Pendulum clocks may stop.
VI	Felt by all, many frightened and run outdoors. Some heavy furniture moved; a few instances of fallen plaster or damaged chimneys. Damage slight.
VII	Everybody runs outdoors. Damage negligible in building of good design and construction; slight to moderate in well-built ordinary structures; considerable in poorly built or badly designed structures; some chimneys broken. Noticed by persons driving motor cars.
VIII	Damage slight in specially designed structures; considerable in ordinary substantial buildings, with partial collapse; great in poorly built structures. Panel walls thrown out of frame structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned. Sand and mud ejected in small amounts. Changes in well water. Persons driving motor cars disturbed.
IX	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb; great in substantial buildings, with partial collapse. Buildings shifted off foundations. Ground cracked conspicuously. Underground pipes broken.
X	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations; ground badly cracked. Rails bent. Landslides considerable from river banks and steep slopes. Shifted sand and mud. Water splashed (slopped) over banks.
XI	Few, if any, (masonry) structures remain standing. Bridges destroyed. Broad fissures in ground. Underground pipelines completely out of service. Earth slumps and land slips in soft ground. Rails bent greatly.
XII	Damage total. Practically all works of construction are damaged greatly or destroyed. Waves seen on ground surface. Lines of sight and level are distorted.

Source: California Geological Survey, 2002, How Earthquakes and Their Effects are Measured, Note 32.

It is acknowledged that seismic hazards cannot be completely eliminated, even with site-specific geotechnical investigation and advanced building practices (as provided in the mitigation measure above). However, exposure to seismic hazards is a generally accepted part of living in the earthquake-prone San Francisco Bay Area, and therefore the mitigation measure described above would reduce the potential hazards associated with seismic activity to a less-than-significant level.

*iii) Ground Failure and Liquefaction. (Potentially Significant unless Mitigation Incorporated)*

Soil liquefaction is a phenomenon primarily associated with saturated soil layers located close to the ground surface. These soils lose strength during ground shaking. Due to loss of strength, the soil acquires “mobility” sufficient to permit both horizontal and vertical movements. Soils that are most susceptible to liquefaction are clean, loose, uniformly graded, saturated, fine-grained sands that lie relatively close to the ground surface. However, loose sands that contain a significant amount of fines (silt and clay fraction) may also liquefy. According to the Environmental Data Resources Inc (EDR)

Radius Map Report conducted for Burgess Park, soils around the project sites are comprised of urban fill, orthents, and botella loam. These soils have slow to moderate infiltration rates and are a mix of fine-grained and coarse soils, silts, and clays.<sup>13</sup> According to ABAG liquefaction hazard maps, the project sites likely have moderate liquefaction susceptibility.<sup>14</sup>

The proposed project would be constructed in compliance with applicable construction codes and requirements intended to mitigate any adverse impacts resulting from ground failure and liquefaction. These measures, along with implementation of Mitigation Measure GEO-1 would ensure that the proposed project would not result in significant impacts to human safety associated with ground failure and liquefaction.

*iv.) Landslides. (No Impact)*

The project sites are situated on relatively flat topography and is not susceptible to landsliding.<sup>15</sup>

*b) Result in substantial soil erosion or the loss of topsoil? (Potentially Significant unless Mitigation Incorporated)*

The potential for soil erosion and loss of topsoil exists during the period of earthwork activities and between the time when earthwork is completed and new vegetation is established, or asphalt is laid. A Stormwater Pollution Prevention Plan (SWPPP) and Erosion Control Plan are a routine requirement for projects requiring grading permits. Mitigation Measures HYD-1a and HYD-1b in Section VIII.a would reduce impacts to soil erosion and the loss of top soil to a less-than-significant level.

*c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? (Potentially Significant unless Mitigation Incorporated)*

As discussed above, the site may be susceptible to liquefaction, differential compaction and/or ground lurching, due to the nature of these subsurface materials and the proximity of the San Andreas Fault. However, the effect of liquefiable soils can be adequately controlled with appropriate structural design of foundations and civil design of surface grades and gradients for gravity-flow pipes. With implementation of Mitigation Measure GEO-1, the proposed project would not result in any significant impacts related to ground instability that would endanger life or property.

*d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? (Potentially Significant unless Mitigation Incorporated)*

Based on reports for other project sites within the vicinity of Burgess Park and the General Plan, the

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<sup>13</sup> Environmental Data Resources Inc, 2008. *The EDR Radius Map Report with Geocheck for Burgess Park, 501 Laurel Street Menlo Park, Ca.* September 15

<sup>14</sup> Association of Bay Area Governments, 2008. Bay Area Liquefaction Maps. Website: [www.abag.ca.gov/bayarea/eqmaps/liquefac/liquefac.html](http://www.abag.ca.gov/bayarea/eqmaps/liquefac/liquefac.html). September 9.

<sup>15</sup> Association of Bay Area Governments, 2008. Bay Area Landslide Maps. Website: <http://www.abag.ca.gov/bayarea/eqmaps/landslide/> September 9.

site soils beneath the project sites are likely expansive and have a moderate shrink-swell potential. Structural damage, warping, and cracking of roads, driveways, parking areas, and sidewalk, and rupture of utility lines may occur if the potential expansive soils are not considered during design and construction of improvements. Implementation of the following mitigation measure would reduce this impact to a less-than-significant level:

Mitigation Measure GEO-2: In locations underlain by expansive soils and/or non-engineered fill, the designers of proposed building foundations and improvements (including sidewalks, roads, driveways, parking areas, and utilities) shall consider these conditions and design the project to prevent associated damage. The design-level geotechnical investigation (required in Mitigation Measure GEO-1) shall include measures to ensure that potential damage related to expansive soils and non-uniformly compacted fill is minimized. Mitigation options may range from removal of the problematic soils, and replacement, as needed, with properly conditioned and compacted fill, to design and construction of improvements to withstand the forces exerted during the expected shrink-swell cycles and settlements. All mitigation measures, design criteria, and specifications set forth in the geotechnical and soils report shall be implemented to reduce impacts associated with problematic soils to a less-than-significant level.

- e) *Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? (No Impact)*

Septic tanks and alternative wastewater disposal systems would not be installed on the project sites. Therefore, implementation of the proposed project would not result in impacts to soils associated with the use of such wastewater treatment systems.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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**VII. 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?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?                                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project located within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a) <i>Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? (Less-than-Significant Impact)</i>				

Implementation of the proposed project would result in the development of expanded gymnasium and gymnastics uses on the project sites. Although small quantities of commercially-available hazardous materials could be used within the facilities consistent with cleaning uses and landscape maintenance, these materials would not be used in sufficient quantities to pose a threat to human or environmental health. In addition, while gas and diesel fuel would typically be used by the construction vehicles, Best Management Practices (BMPs) would be utilized to ensure that no construction-related fuel hazards occur. Therefore, implementation of the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

As part of the building permit process, all plans are reviewed for compliance with applicable Building and Fire Department requirements, pursuant to the Uniform Building and Fire Codes, and all other related City requirements. No additional measures would be required.

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? (Less-than-Significant Impact)*

Implementation of the proposed project would not result in the release of substantial quantities of hazardous materials into the environment. As noted previously, an EDR Report was prepared for Burgess Park.<sup>16</sup> EDR Reports typically identify environmental risks within and around a given property. This report available for review at the City of Menlo Park, Engineering Division. The EDR Report for Burgess Park includes the following components: review of historical land use information, including aerial photographs and fire insurance maps; and a governmental records search for hazardous materials sites. The findings from the EDR Report and clarifications from City staff<sup>17</sup> are summarized below.

The historic land use information in the EDR Report indicates that the north site was first developed around 1965, and was developed with the current building in 1974. There is one underground storage tank at the Menlo Park Civic Center complex, a 2,500 gallon diesel fuel tank located in the basement of the Administrative Building used to fuel the building's emergency generator. The Administrative Building is greater than 250 feet from the north project site and 320 feet from the south project site. The City's Corporation Yard, located at 333 Burgess Drive, two blocks north of Burgess Park, currently has four USTs: two gasoline tanks (6,000 gallon and 10,000 gallon); one 10,000 gallon diesel fuel tank; and, one waste oil tank. These USTs are not located at the project sites, and would not be disturbed during construction or operational activities on the project sites.

In addition, the government record search identified hazardous material use or storage at the Recreation Center and at the Aquatics Center. The hazardous materials used and stored at these facilities are common materials associated with cleaning and other maintenance activities, and would not pose a hazard to construction workers or users of the proposed facilities.

As noted above, the existing gymnasium and gymnastics center was constructed in 1974, around the time that lead-based paint and asbestos was banned in new construction, and therefore would not contain lead-based paint and/or asbestos-containing materials. Demolition of this structure would not release lead particles and asbestos fibers into the air. As such, the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

- c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? (No Impact)*

There are no existing schools within one-quarter mile of the project sites.

- d) *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?(Less-than-Significant Impact)*

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<sup>16</sup> Environmental Data Resources Inc, 2008, op. cit.

<sup>17</sup> Johmann, Lawrence, 2008. Senior Civil Engineer, Capital Improvement Program, City of Menlo Park. Personal communication with LSA Associates, Inc. October 21.

According to the EDR Report, the project sites are not located on the list of hazardous materials sites prepared pursuant to Government Code Section 65962.5 and would not pose a significant health hazard to the public or the environment.<sup>18</sup> However, there are several sites within a quarter-mile of Burgess Park that are on the Cortese List. The City of Menlo Park has several listing on the Cortese list for underground storage tanks (USTs). At least one of these USTs has been closed since 1999, and would not present a hazard to the public and environment. As noted above, there is one UST at the Menlo Park Civic Center complex, in the basement of the Administrative Building, and four USTs at the City's Corporation Yard located at 333 Burgess Drive. These USTs are not located at the project sites, and would not be disturbed during construction or operational activities on the project sites.

In addition, a number of properties along El Camino Real, located south of the Caltrain railroad tracks, are listed as storing hazardous materials and/or small quantity generators. These properties include uses such as eye care facilities, dentists, photo labs, pharmacies, and car dealerships. These properties have a low probability of effect on Burgess Park because they are located across the railroad tracks and groundwater depth in the vicinity is approximately 20 to 30 feet and generally runs in an east and northeast direction (below the project sites and not towards the project sites).<sup>19</sup> Any potential contaminants from these properties would not be likely to be carried to Burgess Park through the groundwater.

- e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? (No Impact)*

The Palo Alto Airport, which is the closest airport, is located approximately 3.3 miles from the project sites. The project sites are not located within an airport land use plan or within two miles of a public airport. Therefore, implementation of the proposed project would not expose people to airport-related hazards.

- f) *For a project located within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? (No Impact)*

The project sites are not located within the vicinity of a private airstrip. Therefore, implementation of the proposed project would not expose the public to airport-related hazards.

- g) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (No Impact)*

The proposed project is the redevelopment of a recreational site; it would not impair implementation or physically interfere with an adopted emergency plan or emergency evacuation plan.

- h) *Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? (No Impact)*

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<sup>18</sup> Ibid.

<sup>19</sup> Ibid.

The project sites are in an urban area and development of the proposed project would not expose people or structures to an increased risk of wildland fires.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>VIII. HYDROLOGY AND WATER QUALITY.</b> Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding of as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>a) Violate any water quality standards or waste discharge requirements? (<i>Potentially Significant Unless Mitigation Incorporated</i>)</b>				

Water quality runoff is regulated by the National Pollutant Discharge Elimination System (NPDES) program (established through the Federal Clean Water Act); the NPDES program objective is to control and reduce pollutant discharges to surface water bodies. In California, the NPDES program is administered by the State Board, with local oversight provided by the local Water Board. The Water Board issued the City/County Association of Governments (C/CAG), as program manager for the San Mateo Countywide Water Pollution Prevention Program (SMCWPPP)<sup>20</sup> a municipal NPDES permit (NPDES Permit CAS0029921 as implemented and amended by Water Board Orders 99-059, R2-2003-0023 (C.3 Provisions), and R2-2007-0027 (Hydromodification Provisions)). The SMCWPPP maintains compliance with the NPDES Storm Water Discharge Permit and promotes stormwater pollution prevention within that context. Compliance with the NPDES Permit is mandated by State and federal statutes and regulations.<sup>21</sup>

Participating agencies (including the City of Menlo Park) must comply with the provisions of the County permit by ensuring that new development and redevelopment mitigate, to the maximum extent practicable, water quality impacts to stormwater runoff both during construction and operation periods of projects. Recent changes to the permit held by SMCWPPP are detailed in Water Board Order R2-2003-0023 (NPDES Permit No. CAS0029921).

New development and significant redevelopment projects that are subject to Provision C.3 of the RWQCB order are grouped into two categories based on project size. While all projects regardless of size are encouraged to consider incorporating appropriate source control and site design measures that minimize storm water pollutant discharges to the maximum extent practicable, new and redevelopment projects that do not fall into Group 1 or Group 2 are not subject to the requirements of Provision C.3. The general criteria for establishing whether a project is a Group 1 or Group 2 project is presented below (for a detailed definition, refer to the County NPDES permit (No. CAS0029831)):

- Group 1      New development and redevelopment projects that would create or replace more than 1 acre of impervious surface (e.g., roof area, streets, sidewalks, parking lots).

<sup>20</sup> Formerly known as the San Mateo County Countywide Pollution Prevention Program (STOPPP).

<sup>21</sup> City/County Association of Governments, 2006. *San Mateo County Stormwater Pollution Prevention Program*. Website: [www.flowstobay.org](http://www.flowstobay.org).

- Group 2            New development and redevelopment projects that would create or replace more than 10,000 square feet of impervious surface. Projects consisting of one single-family home are excluded from Group 2.

The proposed project would be considered a Group 2 project and therefore would be required to fill out the SMCWPPP NPDES Permit Impervious Surface Data Collection Worksheet and submit it to the Building Division at the point of building permit issuance.

New construction and intensified land uses at the project sites would result in increased vehicle use and potential discharge of associated pollutants. Leaks of fuel or lubricants, tire wear, and fallout from exhaust contribute petroleum hydrocarbons, heavy metals, and sediment to the pollutant load in runoff being transported to receiving waters. Runoff from the proposed landscaped areas may contain residual pesticides and nutrients. Long-term degradation of runoff water quality from the site could adversely affect water quality in the receiving waters and San Francisco Bay. Implementation of the following two-part mitigation measure would reduce this impact to a less-than-significant level:

Mitigation Measure HYD-1a: The City shall prepare a Storm Water Pollution Prevention Plan (SWPPP) for both project sites designed to reduce potential impacts to surface water quality through the construction period of the project. It is not required that the SWPPP be submitted to the Regional Water Quality Control Board (RWQCB), but must be maintained on-site and made available to RWQCB staff upon request. The SWPPP shall include specific and detailed Best Management Practices (BMPs) designed to mitigate construction-related pollutants. As outlined in the Stormwater Management Plan prepared for the project<sup>22</sup>, construction BMPs may include the following:

- Prepare and use erosion control plans
- Protect adjacent properties and undisturbed areas from construction impacts using sediment barriers, filters, fiber rolls or other measures as appropriate
- Use sediment control or filtration such as inlet protection and sediment barrier
- Limit construction access routes and stabilize designated access points using measures such as temporary gravel construction entrance
- Store, handle and dispose of construction materials and wastes properly
- Avoid cleaning, fueling or maintaining vehicles on-site except where runoff is contained and treated
- Avoid tracking dirt or other materials off-site
- Provide dust control measures

To educate on-site personnel and maintain awareness of the importance of storm water quality protection, site supervisors shall conduct regular tailgate meetings to discuss pollution prevention. The frequency of the meetings and required personnel attendance list shall be specified in the SWPPP.

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<sup>22</sup> BKF Engineers, 2008. Stormwater Management Plan, Burgess Gymnasium and Gymnastics Center Project.

The SWPPP shall specify a monitoring program to be implemented by the construction site supervisor, and shall include both dry and wet weather inspections. In addition, in accordance with State Water Resources Control Board Resolution No. 2001-046,<sup>23</sup> monitoring shall be required during the construction period for pollutants that may be present in the runoff that are “not visually detectable in runoff.”<sup>24</sup> The City shall conduct weekly inspections and provide written monthly reports for City permit files to ensure compliance with the SWPPP. RWQCB personnel, who may make unannounced site inspections, are empowered to levy considerable fines if it is determined that the SWPPP has not been properly prepared and implemented.

Mitigation Measure HYD-1b: The City shall fully comply with the San Mateo County Countywide Stormwater Pollution Prevention Program (STOPPP) which maintains compliance with the NPDES Storm Water Discharge Permit. Responsibilities include, but are not limited to, designing BMPs into the project features and operation to reduce potential impacts to surface water quality associated with operation of the project. These features shall be included in the project drainage plan and final development drawings. Specifically, the final design shall include measures designed to mitigate potential water quality degradation of runoff from all portions of the completed development. As outlined in the Stormwater Management Plan prepared for the project<sup>25</sup>, measures for site design, source control and treatment control would be incorporated into the proposed project.

Site design measures, measures to reduce impervious areas and reduce runoff and therefore pollutants that may be discharged, may include the following:

- Vegetated swales
- Bioretention areas
- Vegetated buffer strip
- Beneficial landscaping (native plants) to minimize irrigation, runoff, pesticides and fertilizers
- Directing runoff and roof leaders to landscaped areas
- Installing pervious pavement to minimize impervious areas where practicable

Source control measures, measures that reduce pollutants at their source, may include the following:

- Storm drain inlet cleaning
- Covered trash and recycling enclosure areas

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<sup>23</sup> State Water Resources Control Board, 2001. *Modification of Water Quality Order 99-08-DWQ State Water Resources Control Board (SWRCB) National Pollutant Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activity*.

<sup>24</sup> Construction materials and compounds that are not stored in water-tight containers under a water-tight roof or inside a building are examples of materials for which the discharger may have to implement sampling and analysis procedures.

<sup>25</sup> BKF Engineers, 2008. Stormwater Management Plan, Burgess Gymnasium and Gymnastics Center Project.

- Use of pervious pavement
- Efficient irrigation
- Labeling storm drain facilities using “No Dumping – Drains to Bay” stencil

Treatment control measures, which are considered necessary as a final element in stormwater quality protection for that quantity of runoff that cannot be managed through site design and source control measures, may include the following:

- Bioretention areas
- Vegetated bioswale areas
- Flow-through planter boxes
- Vegetated buffer strips

The City of Menlo Park Public Works Department and/or Building Division shall ensure that the SWPPP and drainage plan are prepared and are adequate prior to approval of the grading plan.

- 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 which would not support existing land uses or planned uses for which permits have been granted)? (Less-than-Significant Impact)*

According to data obtained from wells located near the project sites, groundwater in the area has shallow water depth of approximately 20 to 30 feet.<sup>26</sup> Water service for the project would be provided by the San Francisco Public Utilities Commission (SFPUC), whose water supply generally comes from the Sierra Nevada, delivered through Hetch Hetchy aqueducts. The project would not draw on or deplete groundwater supplies. Thus, the project would not result in significant impacts on groundwater supplies.

- 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? (Less-than-Significant Impact)*

Burgess Park does not include any streams or rivers. The project sites are generally level and the project would likely require minimal grading for utilities, infrastructure and building pads. It would not substantially change the direction of the drainage on the site or alter the drainage pattern on the site or area. The construction standards and permit requirements described in Mitigation Measure HYD-1a and 1b would further reduce less-than-significant impacts related to erosion or siltation.

- 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? (Less-than-Significant Impact)*

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<sup>26</sup> Environmental Data Resources Inc, 2008. op.cit.

The proposed project would likely require minimal grading after demolition of the existing building and landscaping on the north site, and removal of landscaping and a paved area on the south site. As noted above, both sites are relatively flat and do not contain any streams or rivers; the proposed project would not substantially alter drainage patterns on the sites. Development of the north and south sites would decrease pervious areas, decreasing stormwater runoff. Development of both sites would include bioretention areas to provide flow reduction, resulting in a further decrease in stormwater runoff.<sup>27</sup>

In addition, drainage systems proposed as part of the project would be reviewed by the City during the building permit review process. The Department of Public Works would be consulted to determine the adequacy of the drainage plan for the site. As such, the project would have a less-than-significant impact on the existing drainage pattern of the site.

- e) *Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? (Less-than-Significant Impact)*

Stormwater runoff from the north site is currently conveyed through various drainage inlets and catch basins to the storm drain system along Laurel Street. Stormwater runoff from the south site is currently conveyed to the storm drain system along Alma Street. The system ultimately connects and flows into San Francisquito Creek, a major waterway that drains a 42-mile water shed. As described above, development of the proposed project would result in a decrease in stormwater runoff from both the north and south project sites.

- f) *Otherwise substantially degrade water quality? (Potentially Significant Unless Mitigation Incorporated)*

See Section VIII.a, above.

- 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?(No Impact)*

The project sites are not located within a 100-year flood hazard area,<sup>28</sup> and the proposed project would not result in the placement of housing in a flood hazard area.

- h) *Place within a 100-year flood hazard area structures which would impede or redirect flood flows? (No Impact)*

Since the project sites are not located within a 100-year flood hazard area, the proposed project would not result in the placement of structures in a hazard area that would impede or redirect flood flows.

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<sup>27</sup> BKF Engineers. 2008. Stormwater Management Plan, Burgess Gymnasium and Gymnastics Center Project

<sup>28</sup> Association of Bay Area Governments, 2008. *Bay Area Flooding Hazards*. Website: [www.abag.ca.gov/bayarea/eqmaps/eqfloods/floods.html](http://www.abag.ca.gov/bayarea/eqmaps/eqfloods/floods.html). September 23.

- i) *Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding of as a result of the failure of a levee or dam? (Less-than-Significant Impact)*

The project sites are not located near a levee or dam, and as such, the project site has a low risk of floods as a result of the failure of a levee or dam.<sup>29</sup>

- j) *Inundation by seiche, tsunami, or mudflow? (Less-than-Significant Impact)*

The project sites are located approximately 4 miles from the San Francisco Bay and on a relatively flat site. Therefore, the potential for the project site to be inundated by seiche, tsunami, or mudflow is less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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**IX. LAND USE AND PLANNING.** Would the project:

- |   |                          |                          |                                     |                                     |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Physically divide an established community?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c) Conflict with any applicable habitat conservation plan or natural community conservation plan?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

- a) *Physically divide an established community? (No Impact)*

The project includes the development of a gymnasium and gymnastics center within Burgess Park. The proposed project would not divide an established community.

- b) *Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?(Less Than Significant Impact)*

The General Plan designation for this site is Public Facilities District, and the site is currently zoned as Public Facilities District. The proposed project would increase the intensity of gymnasium and

<sup>29</sup> Association of Bay Area Governments, 2008. *Bay Area Failure Inundation Maps*. Website: [www.abag.ca.gov/bayarea/eqmaps/damfailure/dfpickc.html](http://www.abag.ca.gov/bayarea/eqmaps/damfailure/dfpickc.html). September 23.

gymnastics uses on the project sites, it would not conflict with any applicable land use plans or policies.

- c) *Conflict with any applicable habitat conservation plan or natural community conservation plan? (No Impact)*

The project sites are not subject to a habitat conservation plan or natural community conservation plan.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>X. MINERAL RESOURCES.</b> 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- 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?*

No known mineral resources are present at the project sites.<sup>30</sup> As a result, implementation of the proposed project would not result in the loss of availability of a known mineral resource.

- 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?*

See Section X.a, above.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XI. NOISE.</b> 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<sup>30</sup> City of Menlo Park General Plan, Op. Cit.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a) <i>Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? (Potentially Significant Unless Mitigation Incorporated)</i>				

Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, or sleep. Several noise measurement scales exist that are used to describe noise in a particular location. A decibel (dB) is a unit of measurement that indicates the relative intensity of a sound. Sound levels in dB are calculated on a logarithmic basis. An increase of 10 dB represents a ten-fold increase in acoustic energy, while 20 dB is 100 times more intense and 30 dB is 1,000 times more intense. Each 10 dB increase in sound level is perceived as approximately a doubling of loudness. Sound intensity is normally measured through the A-weighted sound level (dBA). This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. The A-weighted sound level is the basis for 24-hour sound measurements which better represent how humans are more sensitive to sound at night. These measurements include the day/night sound level ( $L_{dn}$ ) and the Community Noise Equivalent Level (CNEL).<sup>31</sup>

<sup>31</sup>  $L_{dn}$  is the 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 10 decibels to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m. CNEL is the 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 5 decibels to sound levels occurring in the evening from 7:00 p.m. to 10:00 p.m. and after the addition of 10 decibels to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m. Source: Harris, Cyril M. 1998. *Handbook of Acoustical Measurement and Noise Control*.

The City of Menlo Park addresses noise in the noise control chapter of the Municipal Code.<sup>32</sup> The City also provides noise contours in the General Plan for existing and future roadway conditions for freeways, major arterials, and railways within the city. The Menlo Park General Plan states that noise levels up to 65 dBA  $L_{dn}$  are conditionally acceptable for neighborhood parks.

The Menlo Park Municipal Code also highlights that construction shall be allowed only between the hours of 8:00 a.m. and 6:00 p.m. on weekdays. Only residents and property owners personally undertaking construction activities to maintain or improve their property are permitted to conduct noise producing construction activities on Saturdays, Sundays or holidays between the hours of 9:00 a.m. and 5:00 p.m.

Short-term ambient noise monitoring was conducted on the project site on September 17, 2008 between the hours of 9:00 a.m. and 12:00 p.m. at four separate locations. The purpose of this noise monitoring was to document the existing noise environment and to capture the noise levels associated with operations and activities in the project vicinity. Table 7 lists the noise levels measured during the short-term 20-minute noise measurements. Maximum and minimum noise levels were recorded as well as the equivalent continuous noise level measure  $L_{eq}$ . The meteorological conditions at the time of each noise measurement are shown in Table 8. Figure 7 shows the monitoring locations.

**Table 7: Short-Term Ambient Noise Monitoring Results, dBA**

Site	Location Description	Start Time	$L_{eq}$ <sup>a</sup>	$L_{max}$ <sup>b</sup>	$L_{min}$ <sup>c</sup>	Noise Sources
1	27 feet north of Laurel Street, 9 feet west of property wall	9:32 a.m.	58.2	78.5	42.0	Vehicles on Laurel Street, children playing in gymnasium
2	27 feet south of Laurel Street, 30 feet east of parking lot	9:58 a.m.	57.2	77.1	43.9	Vehicles on Laurel Street and parking lot, children playing in gymnasium
3	11 feet north of parking lot, 44 feet west of the skate park fence	10:45 a.m.	62.3	83.6	44.5	Vehicles on Alma Street, Caltrain passing by with warning horn, children playing at skate park
4	23 feet north of parking lot, 26 feet southwest of duck pond	11:23 a.m.	58.3	77.8	42.9	Children playing at duck pond, vehicles at the parking lot

<sup>a</sup>  $L_{eq}$  represents the average of the sound energy occurring over the 20-minute time period.

<sup>b</sup>  $L_{max}$  is the highest instantaneous sound level measured during the 20-minute time period.

<sup>c</sup>  $L_{min}$  is the lowest instantaneous sound level measured during the 20-minute time period.

Source: LSA Associates, Inc., September 2008.

**Table 8: Meteorological Conditions During Ambient Noise Monitoring**

Site	Maximum Wind Speed (mph)	Average Wind Speed (mph)	Temperature (F)	Relative Humidity (%)
1	4.4	1.3	61.9	50
2	3.0	0.7	62.7	49
3	6.1	1.4	72.8	51
4	5.8	1.3	76.1	51

Source: LSA Associates, Inc., September 2008.

<sup>32</sup> Menlo Park, City of, 2008. *City of Menlo Park Municipal Code*, Chapter 8.06 Noise. September 18.

The results indicate that current conditions meet the City’s land use compatibility standards for new recreational land use development.

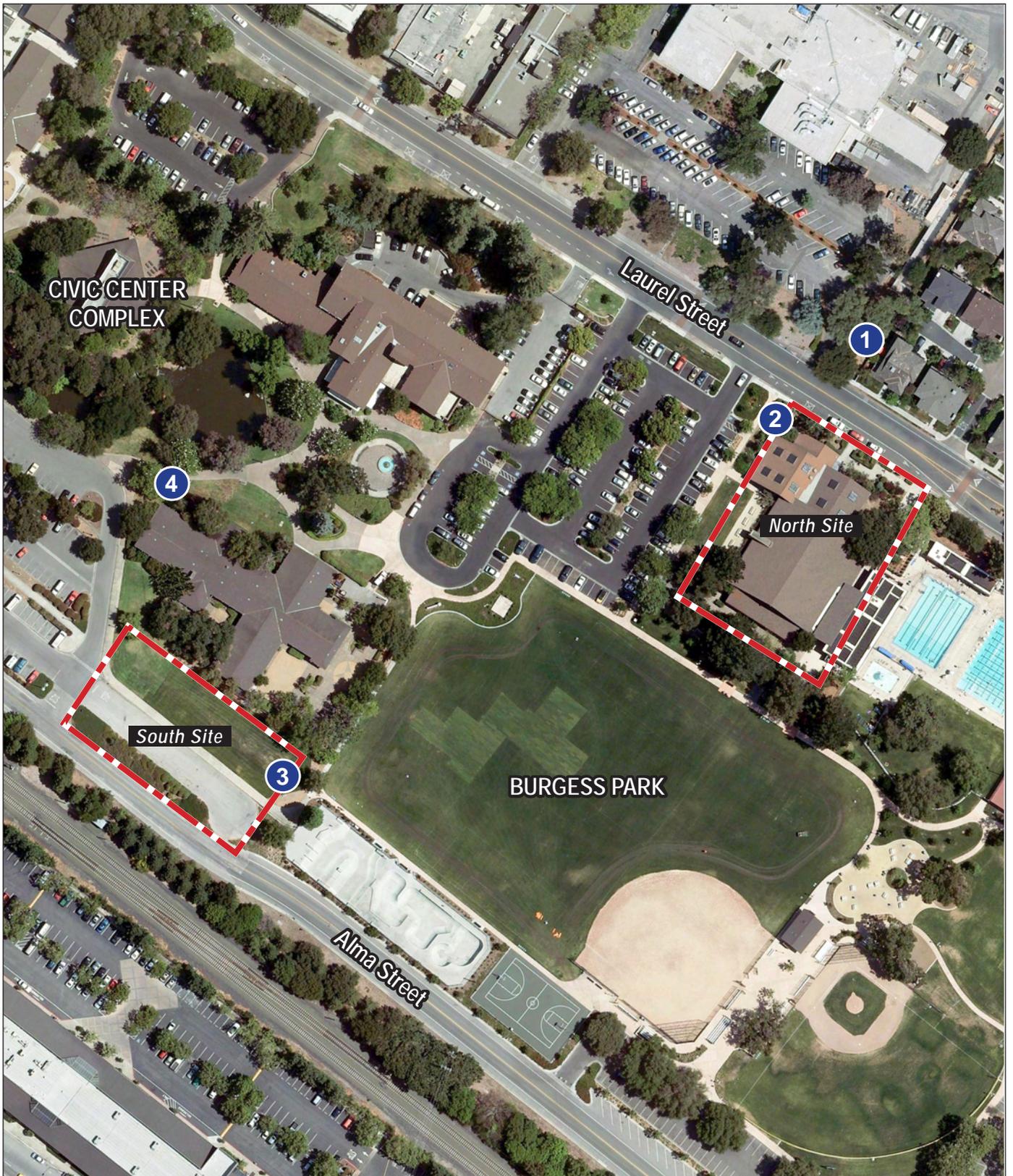
**Construction Noise Impacts.** Construction at the north site would require demolition of the existing 17,400 square foot gymnasium. Construction at the south site would remove a portion of lawn and paved area between the Recreation Center and Alma Street. Both sites would require minimal grading and slab foundations would be constructed. Construction is completed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on the site and, therefore, the noise levels surrounding the site as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction related noise ranges to be categorized by work phase. Table 9 lists typical construction equipment noise levels recommended for noise impact assessments, based on a distance of 50 feet between the equipment and a noise receptor. The site preparation phase, which includes excavation and grading of the site, tends to generate the highest noise levels, because the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes excavating machinery such as backhoes, bulldozers, draglines, and front loaders. Earthmoving and compacting equipment includes compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full-power operation followed by 3 or 4 minutes at lower power settings.

**Table 9: Typical Construction Equipment Maximum Noise Levels**

Type of Equipment	Range of Maximum Sound Levels (dBA at 50 feet)	Suggested Maximum Sound Levels for Analysis (dBA at 50 feet)
Pile Drivers	81 to 96	93
Rock Drills	83 to 99	96
Jackhammers	75 to 85	82
Pneumatic Tools	78 to 88	85
Pumps	74 to 84	80
Scrapers	83 to 91	87
Haul Trucks	83 to 94	88
Cranes	79 to 86	82
Portable Generators	71 to 87	80
Rollers	75 to 82	80
Dozers	77 to 90	85
Tractors	77 to 82	80
Front-End Loaders	77 to 90	86
Hydraulic Backhoe	81 to 90	86
Hydraulic Excavators	81 to 90	86
Graders	79 to 89	86
Air Compressors	76 to 89	86
Trucks	81 to 87	86

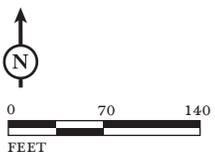
Source: Bolt, Beranek & Newman, 1987. Noise Control for Buildings and Manufacturing Plants.

As shown in Table 9, the typical maximum noise level generated by backhoes on the proposed project site is assumed to be 86 dBA  $L_{max}$  at 50 feet from the operating equipment. Assuming each piece of construction equipment operates at some distance apart from the other equipment, the worst-case combined noise level during the site preparation phase of construction would be 91 dBA  $L_{max}$  at a distance of 50 feet from an active construction area. The closest sensitive receptors adjacent to the proposed construction areas include the single-family residences approximately 85 feet north of the project site. At this distance, the closest receptors would be exposed to construction noise levels during this phase of construction of up to 86.4 dBA  $L_{max}$  when excavation occurs along the nearest property boundary lines.



LSA

FIGURE 7



-  PROJECT SITES
-  NOISE MONITORING LOCATIONS

*Burgess Gymnasium and Gymnastics Center Project Initial Study  
Noise Monitoring Locations*

SOURCE: GOOGLE EARTH, 2008

I:\CMK0801 Burgess Gym\figures\Initial Study\Fig\_7.ai (11/6/08)

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As previously stated, the proposed project would require minimal grading and slab foundations would be constructed. There would be no pile driving throughout construction of the proposed project.

Due to the short-term nature of this construction-related impact, implementation of the following mitigation measure would reduce construction related noise to a less-than-significant level.

Mitigation Measure NOISE-1: The project shall comply with the following noise reduction measures:

- General construction activities shall be allowed only between the hours of 8:00 a.m. to 6:00 p.m. on weekdays and 9:00 a.m. and 5:00 p.m. on weekends and holidays.
- All heavy construction equipment used on the project site shall be maintained in good operating condition, with all internal combustion, engine-driven equipment fitted with intake and exhaust mufflers that are in good condition.
- All stationary noise-generating equipment shall be located as far away as possible from neighboring property lines.
- Post signs prohibiting unnecessary idling of internal combustion engines.

**Traffic Noise Impacts.** The north project site is located approximately 50 feet from the centerline of Laurel Street. The south project site is located approximately 150 feet from the centerline of Alma Street. Laurel Street averages 4,537 trips per day and Alma Street averages 3,536 trips per day. The proposed project would generate 826 net daily trips.<sup>33</sup> Based on this moderate increase in traffic, a significant increase in ambient noise is not expected. Therefore, implementation of the proposed project would result in a less-than-significant noise impact for off-site sensitive receptors.

**Railroad Noise Impacts.** The Caltrain rail line passes within 200 feet of the southern boundary of Burgess Park. The closest at grade crossing where warning horns must be sounded is located on Ravenswood Avenue, approximately 700 feet from the south project site. Although warning horns are audible on the Park site (as documented by the noise monitoring results shown in Table 6) they do not cause the ambient noise levels in the Park vicinity to exceed the City's "conditionally acceptable" land use compatibility standard of 65 dBA L<sub>dn</sub> for new park development. The closest noise sensitive land uses (areas that would see frequent human use) to the rail line within the Park would be located approximately 200 feet from the railroad track centerline. At this distance noise associated with railroad operations would not expose persons to noise levels in excess of established standards and the railroad noise impact would be less than significant.

b) *Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels? (Potentially Significant Unless Mitigation Incorporated)*

Construction activities associated with implementation of the proposed project could temporarily expose persons in the vicinity of the project site to ground borne vibration or ground borne noise levels. Typical ground borne vibration levels measured at a distance of 50 feet from heavy construction equipment in full operation, such as vibratory rollers, range up to approximately 94 VdB. These vibration levels would not be expected to cause damage to residential buildings of normal northern California construction. The proposed project would not use pile driving activities and is expected to

<sup>33</sup> DKS Associates, Inc. 2008. *Burgess Park Gymnasium/Gymnastics Center Transportation Impact Analysis*.

have minimal grading and site preparation work. Implementation of Mitigation Measure NOISE-1 would reduce this impact to a less-than-significant level.

In addition, implementation of the proposed project has the potential to result in disturbance from ground borne vibration associated with development near the Caltrain railroad tracks. Disturbance due to ground borne vibration and noise, are usually contained to areas within about 100 feet of the vibration source.<sup>34</sup> Since the railroad track is located approximately 200 feet from the southern boundary of Burgess Park, ground borne vibration and ground borne noise levels resulting from Caltrain usage would be less than significant.

No permanent noise sources that would expose persons to excessive ground borne vibration or noise levels are proposed as part of the project. Therefore, implementation of the proposed project would not permanently expose persons within or around the project site to excessive ground borne vibration.

- c) *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? (**Less-than-Significant Impact**)*

The long-term uses associated with the proposed project would be indoor recreational uses. This land use would be very similar to the existing land use and would not generate additional ambient noise levels above those that already exist at the project sites. The project would not generate enough traffic to create a perceptible change in traffic noise in the vicinity of the project sites. Therefore, no substantial long-term increase in ambient noise levels is expected as a result of project implementation.

- d) *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? (**Potentially Significant Unless Mitigation Incorporated**)*

Construction activities associated with implementation of the proposed project could temporarily increase ambient noise levels. Increased ambient noise levels would be intermittent and short term, and would not be considered significant. Additionally, implementation of Mitigation Measure NOISE-1 would ensure that construction related noise would result in less-than-significant impacts.

- 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? (**No Impact**)*

The Palo Alto Airport, which is the closest airport, is located approximately 3.3 miles from the project sites. The proposed project would not be located in an airport land use plan or within 2 miles of a public or public use airport. Therefore, implementation of the proposed project would not expose persons within the project site to excessive aircraft-related noise levels.

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<sup>34</sup> U.S. Department of Transportation, Federal Transit Administration, 1995. *Transit Noise and Vibration Impact Assessment*. April.

- 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? (**No Impact**)

The project sites are not located within the vicinity of a private airstrip. Therefore, the proposed project would not expose persons on the project sites to excessive noise levels from a private airstrip.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XII. POPULATION AND HOUSING.</b> 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- 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)?

The proposed project would not add any residential units to Burgess Park. The project could indirectly induce population growth by introducing new jobs to the project site related to the increased gymnasium and gymnastics uses. The amount of increased development associated with the proposed project could generate a small number of jobs but would not result in a substantial population growth in the area. In addition, the proposed project would be located in an area that is already served by utilities and public service systems and would not necessitate road or other infrastructure extensions. The proposed project would not induce substantial population growth in this area resulting in a significant environmental impact.

- b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

The proposed project is the development of a gymnasium and a gymnastics center in Burgess Park. The proposed project would not result in the removal of housing or people, and would not necessitate the construction of replacement housing elsewhere.

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

The proposed project would not displace housing or people, and would not necessitate the construction of replacement housing elsewhere.

	<b>Potentially Significant Impact</b>	<b>Potentially Significant Unless Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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**XIII. PUBLIC SERVICES.**

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

i Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
v Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

*i) Fire Protection? (Less-than-Significant Impact)* Fire protection services to the project sites are currently provided by the City of Menlo Park Fire District, in San Mateo County. The Fire District has a mutual aid agreement with neighboring fire departments and districts, which ensures provision of fire services at appropriate levels even during periods of unusually high activity.

Either Fire Station 6 or Fire Station 1 would be the first responder to an emergency on the project sites. Fire Station 6 is located at 700 Oak Grove Avenue and Fire Station 1 is located at 300 Middlefield Road. Both stations are less than 1 mile from the project sites. Ambulance service in San Mateo

County is provided by American Medial Response, and the closest ambulance to the project sites is stationed at Fire Station 1.

Implementation of the proposed project could create a small increase in demand for emergency services. The proposed project would not require new fire department facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times, or other performance objectives for fire services.

In addition, as part of the building permit review process, all departments and agencies responsible for providing services are consulted to determine their ability to provide services to proposed development projects.

*ii) Police Protection? (Less-than-Significant Impact)* Police protection services are provided by the Menlo Park Police Department (MPPD). The MPPD has State-mandated mutual aid agreements with neighboring and regional police departments. The MPPD operates from one central station, at 701 Laurel Street, located immediately west of the north site in the Civic Center Complex, and maintains a staff of approximately 50 sworn police officers.

Implementation of the proposed project would increase the amount of gymnasium and gymnastics space on the project sites, which would marginally increase the demand for police services. However, the location of the MPPD central station adjacent to the north site would likely deter criminal activity and reduce the need for additional police services on the project site. Implementation of the proposed project would not result in substantial adverse physical impacts associated with the provision, need, or construction of new police facilities to maintain acceptable service levels, response times, or other performance objectives for police and fire protection.

In addition, as part of the building permit review process, all departments and agencies responsible for providing services are consulted to determine their ability to provide services to proposed development projects.

*iii) School Facilities? (No Impact)* The Menlo Park City Elementary School District serves parts of Menlo Park, Atherton and unincorporated San Mateo County and provides kindergarten through 8th grade education. The schools within the Menlo Park City School District include: Laurel School (Grades K-2); Oak Knoll School (Grades K-5); Encinal School (Grades 3-5); and Hill View Middle School (Grades 6-8). For the 2007/2008 school year, there were approximately 2,326 students enrolled in the Menlo Park City School District.<sup>35</sup> The Sequoia Union High School District provides high school education (Grades 9 to 12) for the City of Menlo Park. The enrollment for Sequoia Union High School District was 8,521 students for the 2007/2008 school year.<sup>36</sup>

Since the implementation of the proposed project would result in a new gymnasium and gymnastics center and does not include new residential development, the proposed project would not result in direct population increase. As such, the project would not increase demand for school services or require the construction or expansion of school facilities.

<sup>35</sup> California Department of Education, 2006. *Data Quest*. Website: <http://dq.cde.ca.gov/dataquest/>. September 9.

<sup>36</sup> Ibid.

iv) *Parks? (Less-than-Significant Impact)* The City of Menlo Park Community Services Department provides recreational and cultural programs for residents of the City. The Department’s facilities include 13 parks, two community centers, 2 swimming pools, 2 child care centers, and 2 gymnasiums.<sup>37</sup> There are over 236 acres of park and recreational facilities within the City.

The project proposes to demolish the existing gymnasium and gymnastics facility (a single facility) and construct separate facilities within Burgess Park. Burgess Park is a 9.31-acre park located adjacent to the Civic Center Complex. The Park was originally part of the Dibble Hospital Facilities and was purchased in 1948, making it one of the first City-owned recreation areas. In addition to the existing Gymnasium and Gymnastics Center, Burgess Park also contains the Recreation Center, Aquatics Center, two baseball fields, a soccer field, tennis courts, a basketball court, a playground, picnic areas, and associated landscaping and parking lots. The proposed gymnasium would be constructed first and uses from the existing facility would be relocated to the new gymnasium. The existing gymnasium and gymnastics center would then be demolished, the new gymnastics center constructed and gymnastic uses relocated to the new facility. The proposed phased project construction would ensure the continuation of these recreation programs.

The proposed project would result in the demolition of the existing 17,400 square foot Gymnasium and Gymnastics Center; construction of a new 18,700 square-foot gymnastics center at the north site; and construction of a new 26,900 square-foot gymnasium at the south site. Implementation of the proposed project would increase the facilities by 28,200 net square feet and would expand and improve the facilities at Burgess Park.

v) *Other Public Facilities? (No Impact)* Implementation of the proposed project would not result in a direct population increase, and as such, would not result in demand for other public services, including libraries, community centers, and public health care facilities.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XIV. RECREATION.</b>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<sup>37</sup> City of Menlo Park, 2008. *Community Services Department*. Website: [www.menlopark.org/departments/dep\\_comservices.html](http://www.menlopark.org/departments/dep_comservices.html). September 23.

- a) *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? (No Impact)*

The project would include demolition of the existing Gymnasium and Gymnastics Center (a single facility) and construction of separate and expanded facilities within Burgess Park. As previously stated, implementation of the proposed project would increase the net interior square footage of gymnasium and gymnastics uses on the project sites by 28,200 square feet. While the proposed project would expand and improve the facilities at Burgess Park it would not increase the use of other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. See also XIII.iv., above.

- 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? (Potentially Significant Unless Mitigation Incorporated)*

The proposed project involves the construction of new recreational facilities within Burgess Park. Implementation of all of the mitigation measures detailed in this Initial Study would ensure that the proposed project would not have an adverse physical effect on the environment.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XV. TRANSPORTATION/TRAFFIC.</b> 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)?	■	□	□	□
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency or designated roads or highways?	■	□	□	□
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	□	□	□	■
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	□	□	□	■
e) Result in inadequate emergency access?	□	□	□	■
f) Result in inadequate parking capacity?	■	□	□	□

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
g) Conflict with adopted polices, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	■	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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)? (Potentially Significant Impact)*

The proposed project could cause an increase in vehicle trip generation and traffic in and around Burgess Park. This potential impact, as well as mitigation measures if necessary, will be described and evaluated in the Burgess Gymnasium and Gymnastics Center Focused EIR.

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

Implementation of the proposed project could result in the exceedence of level of service standards on roads and highways in proximity to the project sites. This potential impact, as well as mitigation measures if necessary, will be described and evaluated in the Burgess Gymnasium and Gymnastics Center Focused EIR.

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? (No Impact)*

Implementation of the proposed project would not cause a change in air traffic patterns.

d) *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? (No Impact)*

The proposed project would not alter the existing circulation system around and within Burgess Park such that there would be a substantial increase in hazardous conditions due to a design feature or incompatible uses.

e) *Result in inadequate emergency access? (No Impact)*

The proposed project would not alter the existing circulation system around and within Burgess Park, and therefore would not result in inadequate emergency access.

f) *Result in inadequate parking capacity? (Potentially Significant Impact)*

The proposed project does not include construction of additional parking spaces, and implementation of the proposed project could result in an increase in parking demand. This potential impact, as well as

mitigation measures if necessary, will be described and evaluated in the Burgess Gymnasium and Gymnastics Center Focused EIR

- g) *Conflict with adopted polices, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)? (Potentially Significant Impact)*

The proposed project could conflict with adopted policies, plans, or programs supporting alternative transportation. Potential policy inconsistencies will be discussed in the Burgess Gymnasium and Gymnastics Center Focused EIR.

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

The West Bay Sanitary District (District) collects wastewater within the City of Menlo Park. All wastewater collected within the West Bay Sanitary District is transported via main line trunk sewers to the Menlo Park Pumping Station. The wastewater from the pumping station goes to the South Bayside System Authority Regional Treatment Plant (SBSA) in San Carlos.

The District's average daily flow during dry weather is approximately 6 million gallons per day (mgd).<sup>38</sup> The average flow substantially increases during wet weather due to rainwater infiltration into sewer lines. The District's dry weather allocation from the SBSA is approximately 6.6 mgd. The project sites are currently served by utility infrastructure, including sanitary sewer and water lines.

Implementation of the project would increase wastewater generation on the project sites. Fitness facilities generate approximately 0.5 gallons per day (gpd) per square foot.<sup>39</sup> The 28,200 square feet of net new gymnasium and gymnastics use would generate approximately 14,100 gallons per day of new wastewater.

The additional wastewater generated by the project represents less than 0.1 percent of the District's allocated treatment capacity of the SBSA. The increase in demand for wastewater treatment would comprise a small portion of the District's dry weather allocation from the SBSA. The wastewater would contain typical commercial wastes in concentrations that are routinely treated by the SBSA. As such, the project would not cause an exceedence in the Regional Water Quality Control Board's treatment standards.

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? (Less-than-Significant Impact)*

The Menlo Park Municipal Water District (MPMWD), which is part of the Department of Public Works, provides water service to the project sites and receives its water allocation from the San Francisco Public Utilities Commission (SFPUC). The SFPUC is contracted to provide 184 million gallons per day (mgd) annually to 29 Bay Area water suppliers, including MPMWD. MPMWD's individual Supply Assurance is 4.46 mgd. Annual water demand for the MPMWD service area is approximately 3.57 mgd.<sup>40</sup>

For the purposes of this analysis, wastewater generation is assumed to be approximately 90 percent of the total water usage (the 10 percent differential includes consumed water and water used for irrigation). Since the proposed project would generate approximately 14,100 gpd of additional wastewater on the site, it is assumed that the project would require 15,667 gallons of water per day (0.02 mgd). As MPMWD's 2005 water demand is approximately 0.89 mgd less than the Supply Assurance, water can be supplied to the project via existing entitlements. In addition, the 2005 Urban

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<sup>38</sup> West Bay Sanitary District, 2008. *Wastewater Treatment*. Website: <http://westbaysanitary.org/about.htm>. September 23.

<sup>39</sup> City of Foster City, 1999. *Civic Center Master Plan Study*. March.

<sup>40</sup> Menlo Park, City of, 2005. *Urban Water Management Plan 2005*. Website: [www.menlopark.org/departments/pwk/uwmp.pdf](http://www.menlopark.org/departments/pwk/uwmp.pdf)

Water Management Plan includes passive and active conservation programs and evaluations of alternative water supplies to improve existing and future water reliability.

As previously stated, the District's average daily wastewater flow during dry weather is approximately 6 mgd. The additional wastewater generated by the project represents less than 1.0 percent of the Districts allocated treatment capacity of the SBSA. Therefore, increased water demand and wastewater generated by the proposed project would not require the construction of new water or wastewater treatment facilities, or the expansion of existing facilities.

- c) *Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? (Less-than-Significant Impact)*

Development of the north and south sites would decrease pervious areas, decreasing stormwater runoff. Development of both sites would include bioretention areas to provide flow reduction, resulting in a further decrease in stormwater runoff. Refer to Section VIII for additional information on hydrology and water quality.

- d) *Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? (Less-than-Significant Impact)*

Refer to Section XV.b., above.

- 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? (Less-than-Significant Impact)*

Refer to Section XV.b., above.

- f) *Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? (Less-than-Significant Impact)*

Solid waste generated in Menlo Park is collected and disposed of by Allied Waste Company. Waste from the City is collected and transported to the San Carlos Transfer Station in San Carlos. The Transfer Station has a maximum allowable capacity of 3,000 tons of waste per day through the year 2010. Currently, the Transfer Station processes approximately 1,200 tons of waste per day.<sup>41</sup> After undergoing processing, waste from the Transfer Station is delivered to the Ox Mountain Sanitary Landfill in Half Moon Bay. The landfill handles construction, demolition, and mixed municipal waste. The landfill has a capacity of 37,900,000 cubic yards. In the year 2000, the total estimated capacity used was 6,746,148 cubic yards, or 17.8 percent. The landfill has a permitted throughput of 3,598 tons per day<sup>42</sup> and is anticipated to have sufficient capacity to operate until 2018.<sup>43</sup>

<sup>41</sup> Ibid.

<sup>42</sup> Permitted throughput is the maximum permitted amount of waste a landfill can handle and dispose of in one day. This figure is established in the current solid waste facilities permit issued by the Integrated Waste Management Board.

<sup>43</sup> California Integrated Waste Management Board, 2008. *Facility/Site Summary Details, Ox Mountain Sanitary Landfill*. Website: [www.ciwmb.ca.gov](http://www.ciwmb.ca.gov). August 6.

The project would generate approximately 440 tons of demolition and construction debris.<sup>44</sup> The City of Menlo Park has a construction and demolition debris recycling ordinance that requires that 60 percent of debris generated by certain construction and demolition activities be salvaged, recycled, or reused.<sup>45</sup> The remaining debris, approximately 176 tons, would be taken to the Transfer Station and then to the Ox Mountain Sanitary Landfill. The amount of solid waste generated by the demolition and construction phase of the proposed project would not exceed the capacity of the landfill.

The operational phase of the project would also generate additional solid waste on the project sites. The California Integrated Waste Management Board estimates an average waste generation rate of 4.2 pounds per employee per day. The proposed project would increase employment by one full time employee and five part time employees that could generate up to approximately 15 pounds (0.0075 tons) of solid waste a day. In addition, visitors to the gymnasium and gymnastics centers would also generate a marginal amount of waste. This amount of solid waste generated by the proposed project would represent less than 0.001 percent of the daily permitted waste intake at the Transfer Station and landfill. Therefore, there would be sufficient landfill capacity to accommodate additional waste generated by the proposed project. The proposed project's potential impact to landfill capacity would be less than significant.

g) *Comply with federal, State, and local statutes and regulations related to solid waste? (Less-than-Significant Impact)*

State-mandated solid waste diversion goals are established in the California Integrated Waste Management Act (AB 939), including source reduction, composting, and recycling. AB 939 required all municipalities in the State to divert at least 50 percent of their waste streams by 2000. Source reduction, which is given the highest priority, is defined as the act of reducing the amount of solid waste generated by waste producers. Recycling and composting are given the next highest priority. AB 939 specifies that all other waste that is not diverted be properly and safely disposed of in a landfill or through incineration. Menlo Park first achieved a diversion rate of over 50 percent in 2004. In addition, Menlo Park has a construction and demolition debris recycling and salvage ordinance that requires 60 percent of debris generated by certain construction and demolition activities be salvaged, recycled, or reused.

Recycling receptacles would be provided within the project sites, in accordance with all statutes and regulations related to solid waste. Therefore, the proposed project would comply with solid waste statutes and regulations.

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<sup>44</sup> Based on the City of Menlo Park Construction and Demolition Debris Recycling Program estimates for construction debris - 40 lbs per square foot for demolition and 4 lbs per square foot of new construction.

<sup>45</sup> Menlo Park, City of, 2008. *Construction and Demolition Debris Recycling and Salvage Requirements*. Website: <http://www.menlopark.org/departments/bld/condemor.pdf>. September 24.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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**XVII. 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? | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 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.)  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> |
| c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
- 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? (Potentially Significant Unless Mitigation Incorporated)*

The project sites are located in Burgess Park, in the City of Menlo Park. The area has experienced development since the early 1900s. While the Park does provide open space, it is located in a developed urban area and would not generally provide habitat for native plants and is likely to have low wildlife habitat value. Development of the proposed project would require a minimal level of excavation and would not result in impacts to archaeological or paleontological resources. Therefore, the project would not significantly degrade the quality of the environment.

- 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.) (Potentially Significant Impact)*

The proposed project could have cumulatively considerable environmental impacts related to transportation. This potential impact, as well as mitigation measures if necessary, will be described and evaluated in the Burgess Gymnasium and Gymnastics Center Focused EIR

- c) *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? (Potentially Significant Unless Mitigation Incorporated)*

The proposed project could result in adverse effects on human beings. These potential impacts, associated with hazardous materials and air quality, would be reduced to less-than-significant levels with the implementation of mitigation measures listed in this Initial Study.

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**APPENDIX A**  
**AIR QUALITY DATA**

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Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>
2007 TOTALS (lbs/day unmitigated)	6.08	44.15	25.46	0.00	4.01	2.71	6.73	0.84
2008 TOTALS (lbs/day unmitigated)	19.21	52.52	31.27	0.00	4.02	3.25	7.27	0.84

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	0.11	0.17	0.14	0.00	0.00	0.00	201.84

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	4.54	7.17	52.72	0.04	7.35	1.40	3,569.42

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	4.65	7.34	52.86	0.04	7.35	1.40	3,771.26

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## Summary Report:

## CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>
2007 TOTALS (lbs/day unmitigated)	6.18	44.54	25.59	0.00	10.47	2.73	13.19	2.19
2008 TOTALS (lbs/day unmitigated)	48.11	53.43	34.12	0.01	10.48	3.29	13.77	2.19

## AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	0.30	0.44	0.37	0.00	0.00	0.00	528.96

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	11.90	18.78	138.16	0.09	19.25	3.68	9,354.34

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	12.20	19.22	138.53	0.09	19.25	3.68	9,883.30

**APPENDIX B**

**GLOBAL CLIMATE CHANGE MEMORANDUM**



LSA ASSOCIATES, INC.  
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CARLSBAD  
FORT COLLINS  
FRESNO  
IRVINE

PALM SPRINGS  
POINT RICHMOND  
RIVERSIDE  
ROCKLIN

SAN LUIS OBISPO  
SEATTLE  
S. SAN FRANCISCO

## MEMORANDUM

**DATE:** October 28, 2008

**TO:** Larry Johmann, P.E. Senior Engineer

**FROM:** Shannon Allen, AICP, Associate  
Jason Paukovits, Air Quality Specialist

**SUBJECT:** Global Climate Change  
Burgess Gymnasium and Gymnastics Center

There is a general scientific consensus that global climate change is occurring, caused in whole or in part by increased emissions of greenhouse gases (GHGs) that keep the Earth's surface warm by trapping heat in the Earth's atmosphere. While many studies show evidence of warming over the last century and predict future global warming, the causes of such warming and its potential effects are far less certain. In its "natural" condition, the greenhouse effect is responsible for maintaining a habitable climate on Earth, but human activity has caused increased concentrations of these gases in the atmosphere, thereby contributing to an increase in global temperatures.

GHGs are present in the atmosphere naturally, are released by natural sources, or formed from secondary reactions taking place in the atmosphere. The six gases that are widely seen as the principal contributors to global climate change are as follows: Carbon dioxide (CO<sub>2</sub>), Methane (CH<sub>4</sub>), Nitrous oxide (N<sub>2</sub>O), Hydroflourocarbons (HFCs), Perflourocarbons (PFCs), and Sulfur Hexaflouride (SF<sub>6</sub>).

Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere, and enhancing the natural greenhouse effect, which is believed to be causing global warming. While manmade GHGs include naturally-occurring GHGs such as CO<sub>2</sub>, methane, and N<sub>2</sub>O, some gases, like HFCs, PFCs, and SF<sub>6</sub>, known collectively as chlorofluorocarbons (CFCs), are completely new to the atmosphere. Some gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05, establishing statewide GHG emission reduction targets. This order provides that by 2010, emissions shall be reduced to 2000 levels; by 2020, emissions shall be reduced to 1990 levels; and by 2050, emissions shall be reduced to 80 percent of 1990 levels. On August 31, 2006, the California Assembly passed Bill 32 (AB 32 – signed into law on September 27, 2006 which is also known as the Global Warming Solutions Act), which commits California to reduce GHG emissions to 1990 levels by 2020 and establishes a multi-year regulatory process under the jurisdiction of the CARB to establish regulations to achieve these goals.

Although these State-wide reductions are now mandated by law, no generally applicable GHG emission threshold has yet been established, nor is formal regulatory agency guidance on global climate change analysis in CEQA documents anticipated to be available until mid-2009. OPR has not issued any formal regulations as of September 2008. However, OPR did issue informal guidance in the form of a Technical Advisory in June 2008 on how to address climate change through CEQA review. The recommended approach for GHG analysis included in OPR's June 2008 release is to (1) identify and quantify GHG emissions, (2) assess the significance of the impact on climate change, and (3) if significant, identify alternatives and/or mitigation measures to reduce the impact below significance.<sup>1</sup> Neither the CEQA statute nor Guidelines prescribe thresholds of significance or a particular methodology for performing an impact analysis, and no State agency or local air quality management district has issued any regulations or standards of significance for the analysis of GHGs under CEQA; as with most environmental topics, significance criteria are left to the judgment and discretion of the lead agency.

Because no applicable numeric thresholds have yet been defined, and because the precise causal link between an individual project's emissions and global climate change has not been developed, it is reasonable to conclude that an individual development project cannot generate a high enough quantity of GHG emissions to affect global climate change. However, individual projects incrementally contribute toward the potential for global climate change on a cumulative basis in concert with all other past, present, and reasonably foreseeable future projects.

This memo analyzes whether the project would make a cumulatively significant contribution to the impact of global climate change if the proposed project would conflict with or obstruct the implementation of GHG reduction goals under AB 32 or other State regulations. If a project implements reduction strategies identified in AB 32, the Governor's Executive Order S-3-05, or other strategies to assist in reducing GHGs to the level proposed by the Governor, it could reasonably follow that the project would not result in a significant contribution to the cumulative impact of global climate change.

The construction and operation of development projects, such as the proposed project, cause GHG emissions. GHG emissions occur in connection with many activities associated with development, including the use of construction equipment and building materials, vegetation clearing, natural gas usage, electrical usage (since electricity generation by conventional means is a major contributor to GHG emissions), water use (which relies on the use of electricity for water supply and conveyance, water treatment, water distribution, and wastewater treatment), and transportation. GHG emissions estimates are provided herein for informational purposes only, as there is no established quantified GHG emissions threshold. Table 1 shows that the proposed land uses would generate up to 1,460 tons per year of carbon dioxide equivalent (CO<sub>2</sub>eq).

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<sup>1</sup> California, State of, 2008. Governor's Office of Planning and Research. *CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review*. June 19.

**Table 1: Long-Term Project Operational Emissions of GHGs**

Emission Source	Emissions (tons per year)				Percent of Total Project Emissions
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> eq	
Vehicles	1,165	0.076	0.11	1,200	82%
Electricity Production <sup>a</sup>	200	0.0022	0.0012	200	14%
Natural Gas Combustion	60	0.0008	0.00076	60	4%
Solid Waste	N/A	N/A	N/A	0.37	0%
Total Annual Emissions				1,460	100%

<sup>a</sup> Includes water-related electricity consumption (project as planned).

Source: LSA Associates, Inc., 2008.

The California Environmental Protection Agency Climate Action Team (CAT) and the California Air Resources Board (ARB) have developed several reports to achieve the Governor's GHG targets that rely on voluntary actions of California businesses, local government and community groups, and State incentive and regulatory programs. These include the CAT's 2006 "*Report to Governor Schwarzenegger and the Legislature*," ARB's 2007 "*Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California*," and ARB's "*Climate Change Draft Scoping Plan: a Framework for Change*." The reports identify strategies to reduce California's emissions to the levels proposed in Executive Order S-3-05 and AB 32 that are applicable to proposed project.

Table 2 identify strategies to reduce California's emissions to the levels proposed in Executive Order S-3-05 and AB 32 that are applicable to proposed project. The strategies listed in Table 2 are either part of the project, required mitigation measures, or requirements under local or State ordinances. With implementation of these strategies/measures, the project's contribution to cumulative GHG emissions would be reduced to a less-than-significant level.

With implementation of the strategies/measures, the project's GHG emissions would be reduced and minimized. Overall, the project would implement GHG reduction strategies and not conflict with or obstruct implementation of reduction measures identified in AB 32, the Governor's Executive Order S-3-05, and other strategies to help reduce GHG emissions to the level proposed by the Governor. Therefore, the project's incremental contribution to climate change impacts would be less than significant.

**Table 2: Project Compliance with Greenhouse Gas Emission Reduction Strategies**

Strategy	Project Compliance
<i>Energy Efficiency Measures</i>	
<p><b>Building Energy Efficiency Standards in Place and in Progress.</b><sup>2</sup> Public Resources Code 25402 authorizes the Energy Commission to adopt and periodically update its building energy efficiency standards (that apply to newly constructed buildings and additions to and alterations to existing buildings).</p> <p><b>Energy Efficiency.</b><sup>3</sup> Maximize energy efficiency building and appliance standards, and pursue additional efficiency efforts. Reductions could be achieved through enhancements to existing programs such as increased incentives and even more stringent building codes and appliance efficiency standards.</p>	<p><b>Compliant.</b> The proposed project would replace an older building with newer structures that would be built to current codes and updated Title 24 standards, improving energy efficiency at the site.</p>
<p><b>Appliance Energy Efficiency Standards in Place and in Progress.</b><sup>4</sup> Public Resources Code 25402 authorizes the Energy Commission to adopt and periodically update its appliance energy efficiency standards (that apply to devices and equipment using energy that are sold or offered for sale in California).</p>	<p><b>Compliant.</b> Appliances within the project site would be consistent with existing energy efficiency standards.</p>
<i>Water Conservation and Efficiency Measures</i>	
<p><b>Water Use Efficiency.</b><sup>5</sup> Approximately 19 percent of all electricity, 30 percent of all natural gas, and 88 million gallons of diesel are used to convey, treat, distribute and use water and wastewater. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions.</p>	<p><b>Compliant.</b> The project would design buildings to be water-efficient, including installation of water-efficient fixtures and appliances, including low-flow faucets, dual-flush toilets and waterless urinals.</p>
<i>Solid Waste Reduction Measures</i>	
<p><b>Increase Waste Diversion, Composting, and Commercial Recycling, and Move Toward Zero-Waste.</b> Increase waste diversion from landfills beyond the 50 percent mandate to provide for additional recovery of recyclable materials. Composting and commercial recycling could have substantial GHG reduction benefits. In the long term, zero-waste policies that would require manufacturers to design products to be fully recyclable may be necessary.</p>	<p><b>Compliant.</b> Data available from the California Integrated Waste Management Board (CIWMB) indicates that Menlo Park has exceeded the 50% diversion rate since 2004.</p>

<sup>2</sup> California Environmental Protection Agency. 2006. *Climate Action Team Report to Governor Schwarzenegger and the Legislature*. March.

<sup>3</sup> California Air Resources Board. 2008. *Climate Change Draft Scoping Plan: a framework for change*. June.

<sup>4</sup> California Environmental Protection Agency. 2006. *Climate Action Team Report to Governor Schwarzenegger and the Legislature*. March.

<sup>5</sup> Ibid.

Table 2 *Continued*

Strategy	Project Compliance
<i>Transportation and Motor Vehicle Measures</i>	
<p><b>Vehicle Climate Change Standards.</b><sup>6</sup>                      AB 1493 (Pavley) required the State to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of GHG emissions from passenger vehicles and light duty trucks. Regulations were adopted by the ARB in September 2004.</p> <p><b>Light-Duty Vehicle Efficiency Measures.</b>                      Implement additional measures that could reduce light-duty GHG emissions. For example, measures to ensure that tires are properly inflated can both reduce GHG emissions and improve fuel efficiency.</p> <p><b>Adopt Heavy- and Medium-Duty Fuel and Engine Efficiency Measures.</b>                      Regulations to require retrofits to improve the fuel efficiency of heavy-duty trucks that could include devices that reduce aerodynamic drag and rolling resistance. This measure could also include hybridization of and increased engine efficiency of vehicles.</p> <p><b>Low Carbon Fuel Standard.</b><sup>7</sup>                      ARB identified this measure as a Discrete Early Action Measure. This measure would reduce the carbon intensity of California's transportation fuels by at least 10% by 2020.</p>	<p><b>Compliant.</b>                      The project does not involve the manufacture, sale, or purchase of vehicles. However, vehicles that operate within and access the project site would comply with any vehicle and fuel standards that the ARB adopts.</p>
<p><b>Measures to Improve Transportation Energy Efficiency.</b><sup>8</sup>                      Builds on current efforts to provide a framework for expanded and new initiatives, including incentives, tools, and information that advance cleaner transportation and reduce greenhouse gas emissions.</p>	<p><b>Compliant.</b>                      The proposed project is the redevelopment and expansion of an existing use. It is an urban infill project, which is accessible by public transit.</p>
<p><b>Measures to Reduce High Global Warming Potential (GWP) Gases.</b>                      ARB has identified Discrete Early Action measures to reduce GHG emissions from the refrigerants used in car air conditioners, semiconductor manufacturing, and consumer products. ARB has also identified potential reduction opportunities for future commercial and industrial refrigeration, changing the refrigerants used in auto air conditioning systems, and ensuring that existing car air conditioning systems do not leak.</p>	<p><b>Compliant.</b>                      Products used, sold, or serviced in the project site would be comply with current and future ARB rules and regulations.</p>
<p><b>Anti-Idling Enforcement.</b><sup>9</sup>                      ARB adopted a diesel particulate air toxic control measure in June 2004 to control idling of diesel-fueled commercial motor vehicles. Enforcement commenced the following year. This rule prohibits, with some exceptions, the idling of diesel-fueled commercial motor vehicles for more than 5 minutes, and applies to both trucks and buses greater than 10,000 lbs. gross vehicle weight.</p>	<p><b>Compliant.</b>                      Vehicles that access the site would comply with all anti-idling regulations, including ARB's limits on diesel-fueled commercial motor vehicle idling.</p>

Source: LSA Associates, Inc., 2008.

<sup>6</sup> Ibid.

<sup>7</sup> California Air Resources Board. 2008. Op. Cit.

<sup>8</sup> Ibid.

<sup>9</sup> Ibid.