## **Chapter 6. School Site Alternatives**

#### INTRODUCTION

The City is working with the Davis Joint Unified School District (DJUSD) in the development of a new junior high school in the community. The objective of the DJUSD is to develop a 35-acre junior high school site and a 10-acre buffer (with a 45-acre remainder piece) that is in a location offering convenient access to its service area, including access by students walking or bicycling to and from school. The school site would have lighted recreational facilities that can be jointly used by the city. As part of this EIR, the City has included a project-level environmental assessment of the impacts associated with DJUSD's acquisition of a site for the development of a proposed new junior high school. It is the intent of the DJUSD to use this EIR as the project-level environmental assessment for school site acquisition under CEQA. The DJUSD's specific development proposal for the new junior high school will undergo separate environmental review. An analysis of the cumulative and growth-inducing impacts related to this project is included in Chapter 7 of this EIR.

In developing a preferred project, the DJUSD performed an evaluation of a number of potential locations. As a result of this assessment, the school district decided to proceed with a site at the intersection of Mace and Covell Boulevards as their preferred site alternative (Figure 6-1). The school district refers to this site as the Signature site. The Signature site, including two potential layouts, was included in the assessment of Alternatives 4 and 5 in this EIR.

The following chapter presents additional project specific impact information regarding the Signature site as well as a CEQA-related analysis of three additional alternatives that have been considered by the school district (Figure 6-1). The DJUSD has determined that acquiring any one of the three alternative sites to be infeasible as explained in the "Suitability Analysis" section at the end of this chapter.

A fourth alternative, the Willowbank site, was examined early on to assess the potential for a site in South Davis. However, this alternative has been found to be infeasible and has been dropped from further environmental consideration. The prospective site is located near the northwest intersection of Mace Boulevard and Montgomery Avenue. However, the site is unavailable for use as a school because it has an approved tentative tract map and final plan development review that allow residential development.

The three alternative sites are:

- Mace Ranch Alternative. This alternative is sited on two properties designated as an elementary school site and a neighborhood park site as part of the Mace Ranch development. This site is located at the corner of Alhambra and Loyola Drives. In order to develop a junior high school at this site, the site would need to be enlarged to handle the larger campus space needs of a junior high school.
- Covell Alternative. This alternative would locate the junior high school on a parcel within the Covell Center Property. A potential location would be near the intersection of Pole Line Road and Donner Avenue. This site is near the existing Holmes Junior High School.
- Shriners Alternative. This alternative would be located near the intersection of Covell Boulevard and a northerly extension of Alhambra Drive. The property is agricultural, and outside the City limits, but is within the City's sphere of influence as adopted by LAFCO.

## **Regulatory Setting**

In addition to the regulations discussed in the other portions of this EIR, the following apply to school financing, acquisition and construction.

## **Local Zoning Exemption**

Pursuant to California Government Code Section 53094, a school district may exempt classroom facilities from the city zoning ordinance. This requires the affirmative vote of two-thirds of the school board.

## Seismic Safety

After the deadly Long Beach earthquake in the 1920s, the State enacted a series of measures to ensure that school buildings will protect their occupants in case of an earthquake. Commonly known as the "Field Act," Title 24 of the California Code of Regulations establishes seismic safety standards for the construction of school buildings which must be followed by all school districts. These regulations require school districts to employ construction standards that will ensure that schools, although they may be damaged, do not collapse in an earthquake. These standards are more stringent than those applicable to residential and commercial construction.

Figure 6-1 New Junior High School Site Alternatives

JJ Jones & Stokes Associates, Inc.

#### Hazardous Materials

State law, effective January 1, 2000, requires that as a condition of receiving construction funding under the Leroy F. Greene School Facilities Act of 1998 school districts must conduct a Phase I environmental assessment prior to acquiring a school site (Education Code Section 17213.1). A Phase I environmental assessment is a preliminary assessment of the property to determine whether there has been a release of hazardous material or whether there is an occurring hazardous material present. A Phase I assessment can include data base searches, visual surveys of the property, review of relevant agency files, and interviews with current and previous owners of the property. If the Phase I assessment concludes that a preliminary endangerment assessment is needed, the school district must contract to have one done and enter into an agreement with the State Department of Toxic Substances Control to provide oversight and assistance, or not acquire the property. A preliminary endangerment assessment involves sampling and analysis of the site, a preliminary determination of the type and extent of contamination, and a preliminary risk evaluation. The district must take additional actions pursuant to the recommendations of the assessment, under the supervision of the Department of Toxic Substances Control and State Department of Education, to ensure that no new school is built on contaminated ground without prior analysis and remediation.

#### **School Financing**

The passage of Proposition 1A by California voters in November 1998 and legislative passage of the companion Senate Bill (SB) 50 (Chapter 407, Statutes of 1998), effectively rewrote the book on financing school construction. The resultant Leroy F. Greene School Facilities Act of 1998 authorizes the expenditure of State general obligation bonds totaling \$9.2 billion through 2002, primarily for the modernization and rehabilitation of older school facilities and the construction of new school facilities related to new growth. Of the \$9.2 billion, \$6.7 billion is targeted for K-12 facilities throughout the State. It also strictly limits the use of developer fees and Mello-Roos taxes to pay for school construction.

Of the \$6.7 billion available, \$2.9 is earmarked for new construction, \$2.1 is for modernization of older schools, \$1.0 billion is for districts in hardship situations, and \$700 million is for class size reduction. The new construction money is available through a 50/50 state/local match program. The modernization money is available through an 80/20 state/local match program.

The Leroy F. Greene School Facilities Act of 1998:

- Establishes the statutory limit (indexed for inflation) of allowable developer fees at \$1.93 per square foot for residential construction and \$0.31 per square foot for commercial construction (also described as "Level One" fees).
- Prohibits school districts, cities, and counties from imposing school impact mitigation fees or other requirements in excess of or in addition to those provided in the statute.

- Suspends for a period of at least 8 years, a series of court decisions allowing cities and counties to deny or condition development approvals on grounds of inadequate school facilities when acting on certain types of entitlements.
- Establishes alternative fee schedules where outstanding need is documented by the school district in accordance with state criteria ("Level Two" fees) or where state school money is unavailable ("Level Three" fees).

The prior School Facilities Act of 1986, now superseded by the 1998 Greene Act, statutorily limited the amount of any fee or other requirement imposed on a development project for the mitigation of impacts on school facilities. Three court decisions effectively held that this limitation applied only to administrative land use approvals (such as tentative maps, use permits, and building permits), not to land use approvals requiring a legislative action (such as general plan amendments and rezonings). These court decisions became known as the *Mira-Hart-Murietta* trilogy. In reliance on these decisions, many cities and counties required payment of school fees that exceeded the statutory limits as a condition to granting approval of general plan amendments, specific plans, rezonings, and other legislative approvals.

The new law overturns the *Mira-Hart-Murietta* cases by expressly prohibiting local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any "legislative or adjudicative act ... involving ... the planning, use, or development of real property" (Government Code 65996(b)). In other words, the new regulations explicitly prohibit local agencies from imposing school impact fees in excess of those authorized by statute.

Additionally, a local agency cannot require developer participation in a Mello-Roos Community Facilities District which would levy a special tax for school facilities. The statutory fee is reduced by the amount of any voluntary participation in a Mello-Roos as well.

Proposition 1A/SB 50 has resulted in full State preemption of the school impact mitigation field. Satisfaction of the statutory requirements by a developer is deemed to be "full and complete mitigation" of impacts, under the law.

#### **ENVIRONMENTAL ANALYSIS**

The following assesses the environmental impacts associated with development of a new junior high school. As stated above, the proposed Signature site is assessed as part of Alternatives 4 and 5 in this EIR. The following section summarizes this information about the Signature Site from Chapter 5 and provides some additional site-specific assessment of the proposed Signature site, as well as an assessment of the alternative sites in compliance with the requirements of CEQA.

For many of the environmental resources evaluated in this EIR, potential impacts associated with acquiring a new junior high school would be similar for the preferred site and for each of the

three alternative sites. The following section identifies potential impacts common among all four sites, as well as those impacts that are unique to the proposed Signature site.

## Potential Environmental Impacts Common among All Four Sites

The construction and operation of a new junior high school is expected to result in several impacts that would be similar regardless of the site location. These are discussed below.

## **Aesthetics and Hazardous Materials**

Chapter 5A provides information on existing land use, aesthetics (e.g., light and glare), and hazardous materials conditions in the planning area and identifies potential impacts associated with implementation of Alternative 4 or 5, each of which includes a new junior high school on the Signature site.

The inclusion of lighting for athletic fields and recreational facilities will introduce a new source of light and glare. This is considered a *significant* impact at all four sites. Since the proposed project has not been designed at this time, the future location of such lighting is unknown. Given each of the proposed site's proximity to residential uses and location to the various urban edges of the City, such lighting would create an additional source of light and glare with a significant impact on nearby residences. This impact may be reduced to a *less than significant* level, but not completely avoided, by the following mitigation measure:

## LU-1 Implement Light Control Measures for Schools

The DJUSD shall ensure that all school development that includes the use of specialized lighting during school-related activities or events by City or private recreation groups comply with the intent and provisions of the City's Outdoor Lighting Control Ordinance. Specific measure that could be used to limit the amount of light trespass and glare include the use of shielding and/or directional lighting methods to ensure that spillover light does not exceed 0.5 foot candles at the schools' property line. Review of these measures shall occur as specific construction and/or development plans are submitted to the Davis Joint Unified School District.

Funding Source: DJUSD Implementing Party: DJUSD

Monitoring Agency: DJUSD

Timing: Prior to the DJUSD approval of a site's development plan

Construction of the new junior high school could involve the use of hazardous materials during construction-related activities and could expose construction workers to an increased risk of exposure to these materials. This construction-related effect is considered a *short-term significant* 

*impact*. This impact would be reduced to *less than significant* by implementing mitigation measure LU-2.

#### LU-2 Implement a Hazardous Materials Management Plan

The DJUSD shall ensure that a hazardous materials management plan for construction activities on sites identified as having potential hazardous materials contamination is in place. The plan shall identify the proper handling and disposal of materials used or produced onsite, such as petroleum products, concrete, and sanitary waste, shall be established prior to the commencement of construction-related activities and shall be strictly enforced by the DJUSD.

Funding Source:

**DJUSD** 

Implementing Party: Monitoring Agency:

DJUSD DJUSD

Timing:

Prior to the DJUSD approval of a site's development plan

Construction of the new school could also result in long-term impacts related to hazardous materials if the Signature site was known to contain hazardous materials from past uses. The DJUSD has not found any evidence indicating that past uses of this site involved the use, storage, or disposal of hazardous materials. This potentially *long-term significant impact* would be reduced to *less than significant* with implementation of mitigation measure LU-3.

The location of the school near agricultural fields would potentially place students and facility in contact with hazardous materials such as pesticides. However, the use of these chemicals is closely regulated by the County Agricultural Commissioner under the authority of Title 3, Division 6 (commencing with Section 6000) of the California Code of Regulations. No aerial application of pesticides will be allowed and pesticides will be limited to the least toxic products available to do the job. (Chambers pers. comm.) Accordingly, there will be *no significant impact* as a result of the project.

## LU-3 Conduct Phase 1 Hazardous Materials Environmental Assessment

Prior to certification of this EIR, the DJUSD will conduct a phase 1 assessment of the Signature site to document the environmental compliance status of the site and adjacent areas through a data base search of existing records, historical aerial photo review of the study area, and site reconnaissance. Potential hazardous materials issues will be identified, and mitigation measures will identify the need for further investigations, if required.

Funding Source:

**DJUSD** 

Implementing Party: Monitoring Agency: DJUSD DJUSD

Timing:

Prior to EIR certification

## Population and Housing

Chapter 5B provides information on existing population and housing conditions in the planning area and identifies potential impacts associated with implementation of Alternative 4 or 5, each of which includes a new junior high school on the Signature site.

The proposed project would not result in significant impacts associated with population and housing. Each of the four sites is located on undeveloped land that would not require displacement of housing or people. The purpose of the project is to accommodate existing and projected enrollment demands for a junior high school. The impacts would be *less than significant*.

Development of the various sites for a junior high school is required to accommodate the demands identified in existing buildout projections and plans. Developing the school itself is not considered to be growth inducing. The areas overall shift to residential land uses (in particular the Mace Ranch development) is seen as the major growth inducing development in the area. While the development of the sites will incrementally add to this growth inducement, this project is not seen as causing a significant change in the existing environment.

#### **Public Services and Utilities**

Chapter 5C provides information on existing conditions related to the provision of public services and utilities in the planning area and identifies potential impacts associated with implementation of Alternative 4 or 5.

The proposed project may result in a demand for additional public services. The creation of a new school would place some additional demands on fire and police services related to a new facility, although the student population would be the same regardless of whether a new junior high school were built and the students were put into the two existing junior high schools.

The proposed project would not adversely affect existing recreational resources. Each of the sites is currently undeveloped and does not contain any recreational resources that would be displaced. Additionally, construction of the school would not overtax the use of existing recreational facilities. The proposed project would include recreational resources for the students, and these facilities would be available to the community through an agreement with the City. A separate impact related to use of a site designated for a park under the Mace Ranch is discussed in impacts specific to the Mace Ranch alternative later in this chapter.

The proposed new school project is not expected to have significant impacts on utilities and service systems. It is expected that adequate utilities are available to each of the sites or in close proximity to the sites where connections can be made with minimal impacts. Impacts are expected to be *less than significant*.

## Air Quality

Chapter 5E provides information on existing air quality conditions in the planning area and identifies potential impacts associated with implementation of Alternative 4 or 5, each of which include a new junior high school on the Signature site.

Construction of the proposed project could result in emissions of fugitive dust from grading and site preparation activities. This could potentially result in the generation of significant adverse air quality effects and exceedance of air quality standards for particulate matter (PM10). Construction equipment also could produce exhaust emissions that could contribute to adverse air quality effects associated with (CO) and ( $NO_x$ ).

During operations of the proposed school, heating and boiler units could contribute to  $NO_x$  emissions. Additionally, buses and automobile trips to the site could generate CO and  $NO_x$  emissions. Operation-related air quality effects are expected to be less-than-significant, although this project will add cumulatively to significant impacts related to the General Plan program.

It is expected that standard mitigation measures can be implemented to reduce potentially significant construction-related air quality impacts to *less-than-significant* levels. The DJUSD shall mitigate for air quality impacts by implementing the following mitigation measures.

## AQ-1. Implement Fugitive Dust Control Measures

The DJUSD shall ensure that the construction contractor reduce dust emissions related to construction by applying water or dust suppressants to exposed earth surfaces during clearing, grading, earthmoving, and other site preparation work. Water should be applied twice per day to minimize dust generation and dust-suppression materials should be applied as needed.

A dust suppressant that has a minimal impact on biological resources (such as lignin sulfonate or water) should be used. Proof will be provided to the YSAQMD that an adequate and reliable supply of dust suppressant can be made available to all contractors. Mud and dirt carried out on truck-wheels from construction sites onto public streets should be cleaned up daily. On completion of site preparation activities, all disturbed areas should be planted or paved to reduce windblown dust.

Funding Source:

DJUSD

Implementing Party: Monitoring Agency:

DJUSD DJUSD

Timing:

During grading and construction

# AQ-2. Ensure that all Stationary and Mobile Construction Equipment are in Proper Running Order

The DJUSD shall ensure that the construction contractor requires that all internal combustion equipment is properly maintained and well tuned according to the manufacturer's specifications. This strategy shall be incorporated into the construction contracts to reduce high levels of NOx emissions associated with heavy-duty construction equipment. To the fullest extent feasible, diesel-powered construction equipment should be replaced with equipment powered by electricity or alternative fuels such as natural gas, and ensure that contractors maintain all stationary and mobile construction equipment in proper running order.

Funding Source:

**DJUSD** 

Implementing Party:

DJUSD

Monitoring Agency:

**DJUSD** 

Timing:

During grading and construction

#### Noise

Chapter 5F provides information on noise conditions and identifies potential impacts associated with implementation of Alternative 4 or 5.

Construction of the proposed school sites and operation of the facilities would result in adverse noise effects on surrounding areas. Construction of the junior high school would result in temporary noise impacts from construction equipment and other construction activities. Residential areas are located adjacent to the sites that could experience increases in noise levels. Adherence to the City's Noise Ordinance would reduce the adversity of construction-related noise impacts, but for any given project site, it is possible that neither significance measure can be met. Therefore, construction noise is considered to be a short-term, *significant and unavoidable* impact.

Additionally, noise would be generated from increased traffic generated to the site, increased outdoor activity of children at the site, outdoor paging systems and bells, and use of recreation facilities during and after school hours. This is considered a *significant and unavoidable* impact at all four sites. However, this impact may be reduced, but not completely avoided, by the following mitigation measures:

## NOI-1. Prepare a Site-Specific Acoustical Analysis

The DJUSD shall ensure that an acoustic study is prepared for all proposed projects that would have noise exposure exceeding the City Noise Ordinance standards for construction activities or impacts after development that would be greater than normally acceptable as indicated by Figure 37 of the General Plan update.

Funding Source:

**DJUSD** 

Implementing Party: Monitoring Agency:

DJUSD DJUSD

Timing:

Prior to the DJUSD approval of a site's development plan

#### NOI-2. Placement of Noise-Generating Uses/Devices

The DJUSD shall ensure the following design features are included in the proposed project.

- All sound generating devices at the school (i.e., buzzers, loudspeakers, etc.) shall be located to face inward to the campus.
- To the fullest extent possible, outdoor recreation areas, parking lots, and loading/unloading areas will be located away for adjacent residential uses. If loudspeakers are installed at recreational facilities, they shall be directed away from adjoining residences.
- Activities at the school and outdoor recreation areas shall be limited to the hours of operation set out in the noise ordinance of the City of Davis.

Funding Source:

DJUSD

Implementing Party:

DJUSD

Monitoring Agency:

D.JUSD

Timing:

Prior to the DJUSD approval of a site's development plan

## **Hydrology and Water Quality**

Chapter 5G provides information on existing hydrologic and water quality conditions in the planning area and identifies potential impacts associated with implementation of General Plan update Alternative 4 or 5.

Each of the four sites has the potential to impact water quality and hydrology. Each of the sites is currently undeveloped. Development of the proposed project would increase impermeable surfaces. This increase is expected to be negligible from a groundwater recharge perspective. However, increased urban runoff could occur which could contribute to increased flooding and urban pollutant loadings into water resources. Additionally, construction activities could result in increased erosion from the site that could potentially affect water quality. However, water quality impacts are addressed by the specific policies identified in the proposed General Plan update (which include the NPDES requirements) and by City grading regulations. Thus water quality impacts are expected to be *less than significant*.

None of the sites have been identified as being within a floodplain. Thus flooding impacts are expected to be *less than significant*.

#### **Biological Resources**

Chapter 5H provides information on biological resource conditions and identifies potential impacts associated with implementation of Alternatives 4 or 5.

Development at each of the four sites may result in impacts associated with noxious weeds. Impacts related to noxious weeds could occur as a result of construction activities and the inadvertent introduction of noxious weed species during landscaping activities or other land management activities associated with development of the schools sites. Federal, state, and local agencies; private individuals; and environmental organizations are concerned about noxious weed infestation and dispersal that could cause damage to agricultural areas, sensitive habitats, special-status species, and other resources. Overall, this significant impact can be mitigated to *less-than-significant* levels with imposition of the following mitigation measure to all future development projects.

#### BIO-1. Survey and Avoid Impacts from Noxious Weeds

The DJUSD shall ensure that impacts from noxious weeds are minimized through implementation of the steps outlined in BIO-7.1 which is more fully described in Chapter 5H "Biological Resources".

Funding Source: Implementing Party:

DJUSD DJUSD

**DJUSD** 

Monitoring Agency: Timing:

Ongoing as part of land management

Additional information on site-specific biological resources are discussed under the site-specific assessment later in this chapter.

## Soils, Geology, and Mineral Resources

Chapter 5I provides information on existing soil and geologic conditions in the planning area and identifies potential impacts associated with implementation of Alternative 4 or 5.

The geology of the area is similar for each alternative site and geology is a regional characteristic. However, minimal geotechnical differences could occur on a site-specific level. According to the California Department of Conservation (1999), the City of Davis, and most of Yolo County, is not within an Alquist Priolo Earthquake Fault Zone. The area is not seismically active and would not likely be affected by seismic-related effects. The site may have soils subject to expansive soils, which would require appropriate construction to avoid impact.

Because the proposed project is a school site, it would be required to be built in accordance with Title 24 of the California Code of Regulations (CCR) (1998 California Building Code), Title 5 of the CCR (Education), and Title 2 of the California Education Code. Compliance with these required regulations would minimize potential geologic impacts. Additionally, prior to final design,

the project would require detailed geotechnical engineering studies. Conformance to the recommendations provided by a California Certified Engineering Geologist would further reduce impacts to *less-than-significant* levels.

#### **Cultural Resources**

Chapter 5J provides information on existing cultural resources conditions in the planning area and identifies potential impacts associated with implementation of Alternative 4 or 5.

The development of the proposed project could potentially affect unknown cultural resources. Each of the alternative sites is vacant and does not currently contain any known historic or archaeological resources. However, due to the undeveloped nature of the sites, there is the potential to discover unknown resources during construction site preparation and excavation activities. While these potential effects could be potentially significant, the following mitigation measure will reduce potential impacts to *less-than-significant* levels.

## CR-1. Protection of Unknown Cultural Resources

The DJUSD shall ensure that a cultural resources survey shall be required for development sites where cultural resource conditions are not known (as required by the Planning and Building Department). Resources within a project site that cannot be avoided should be evaluated. Additional research and test excavations, where appropriate, should be undertaken to determine whether the resource(s) meets CEQA and/or NRHP significance criteria. Impacts to significant resources that cannot be avoided will be mitigated using one or more of the following mitigation measures:

- a data recovery program consisting of archaeological excavation to retrieve the important data from archaeological sites;
- development and implementation of public interpretation plans for both prehistoric and historic sites:
- preservation, rehabilitation, restoration, or reconstruction of historic structures according to Secretary of Interior Standards for Treatment of Historic Properties;
- construction of new structures in a manner consistent with the historic character of the region; and
- treatment of historic landscapes according to the Secretary of Interior Standards for Treatment of Historic Landscapes."

Funding Source:

DJUSD

Implementing Party:

DJUSD

Monitoring Agency:

**DJUSD** 

Timing:

Prior to construction of the site

## Potential Environmental Impacts Unique to the Signature Site

#### Land Use and Aesthetics

Development of the preferred junior high school would result in impacts to agricultural resources. The site is currently used for agricultural activities and is designated for agricultural use on the City's existing General Plan. It is outside the current Davis City limit, but is within the City's sphere of influence. Typically, conversion of farmland is considered to be a potentially significant loss. This site is a remnant parcel that is adjacent to residential uses on the south and west, and bordered by an urban arterial roadway on the north and east. Nonetheless, the loss of this agricultural land would be a *significant and unavoidable* impact.

The school would have a *less-than-significant* effect on agricultural operations. Because of the proximity of the Mace Ranch development, the County Agricultural Commissioner already limits the use of pesticides and aerial application in this area. Construction of a school would continue these limitations. The limitations require farmers to more closely monitor potential pest outbreaks so that irrigation can be stopped and the fields dried to allow the entry of machinery to apply pesticides. (Chambers pers. comm.)

For purposes of the school site analysis only, it is assumed that the Urban Reserve area adjoining the Signature site will develop during the time frame of the General Plan update. This recognizes that construction of full street improvements to serve the school would be dependent upon development of the Urban Reserve lands adjoining the school. Therefore, development of the Urban Reserve is not as speculative at this site as at the others analyzed in the EIR and would be a *less-than-significant* impact.

The Signature site is presented in two possible configurations in both Alternatives 4 and 5 of the City's General Plan update (it remains as agriculture in Alternatives 2 and 3). The first variation would located the school site adjacent to the existing residential development. A new street would be installed along the western and southern edges of the site. The school would front on Covell Boulevard. The eastern 55 acres of the site would be designated as Urban Reserve. If this land were eventually designated as low-density residential, it would support from 158 to 422 dwelling units.

The second variation would place the school at the confluence of Mace and Covell Boulevards. An L-shaped area between the school and the existing residential neighborhood would be designated Urban Reserve. In this configuration, the school would be separated from the Urban Reserve by a street. If this land were eventually designated as low-density residential, it would support from 158 to 422 dwelling units.

Aesthetically, development of the proposed school on this vacant site would result in a *less-than-significant* change in the existing visual character of the site and surrounding area. This is due to the existing residential development adjacent to the site and the bordering roadway. Thus aesthetic impacts are expected to be *less than significant*.

#### **Public Services and Utilities**

Fire and emergency response service is provided to this site by the City of Davis Fire Department. In order to ensure appropriate response to emergencies, the City of Davis utilizes a 5-minute response time from a fire station to a site. The proposed Signature site is within a 5-minute response zone. Therefore, this project will have *no impact* on existing fire infrastructure needs and can be adequately served by the City.

#### **Traffic and Circulation**

This section is a summary of the traffic study that was prepared for the Signature site. The complete traffic study is provided in Appendix B-2 of this document.

Two versions for site development have been evaluated. Version A assumes development on the "western" portion of the site (see Figure 3-6). A single access onto Covell Boulevard would be created under this alternative. Version B locates the school in the northeastern corner of the site (see Figure 3-6). Under this plan access would be provided to both Covell Boulevard and Mace Boulevard via a loop street that would circle the southern and western school boundaries. Under the Version A, the balance of the Signature site would likely remain in urban reserve through the General Plan's year 2010 planning horizon. Under Version B, it has been conservatively assumed that the creation of the new loop street would accommodate development of the adjoining 45 acres, and for this analysis 180 single family residences have been assumed to be developed in this area.

As indicated in Table 6-1, 1,160 daily trips are anticipated by development of the preferred school site. Of that total, roughly one-third would occur in the morning peak hour period (i.e., 368 trips). Under this analysis, it is assumed that the trip generation at the Signature site will be dependent on the extension of adequate bicycle and pedestrian facilities to the site. Without the extension of these services, the preferred school site would generate a larger number of vehicle trips during the morning peak hour (Table 6-1).

Table 6-1. Trip Generation Volumes

|  |               | AM Peak Hour Trips |     |       |  |  |
|--|---------------|--------------------|-----|-------|--|--|
| Land Use   | Daily Trips   | In                 | Out | Total |  |  |
| 800 student school with adequate bicycle / pedestrian    | 1,160         | 210                | 158 | 368   |  |  |
| 800 student school without adequate bicycle / pedestrian | Not available | 310                | 234 | 544   |  |  |

As a result of the traffic analysis, if traffic signals are not installed, very long delays can be expected during the peak morning period with Version A (i.e., single access) regardless of the presence or absence of bicycle facilities (i.e., with either 0.46 or 0.68 automobile trips per student). If Version B is selected and adequate bicycle and pedestrian facilities are in place (i.e, 0.46 trip per student), resulting Levels of Service do not exceed LOS "D". However, without adequate bicycle and pedestrian facilities (i.e, 0.68 trips per student), the Level of Service for outbound left turns at the Covell Boulevard access could reach LOS "F" under the eastern alternative. Overall, if Version A is selected, a *significant and unavoidable* traffic impact could occur; however, development of school site Version B would result in a *less-than-significant* impact.

## **Air Quality**

CO modeling was prepared using CALINE4 for the intersections entering the new junior high school. The analysis was prepared using traffic data provided by the traffic analysis.

Two receptors were modeled for Version A and four receptors were modeled under Version B. The location of these receptors is shown in Figure 5E-2. No violation of either the 1-hour or the 8-hour CO standard was found. For Version A, the highest 1-hour concentration is 6 ppm and the highest 8-hour concentration is 1.8 ppm. For Version B, the highest 1-hour concentration is 5 ppm and the highest 8-hour concentration is 1.2 ppm. In both cases, concentrations are much lower than the 1-hour and 8-hour state standard of 20 ppm and 9 ppm, respectively. The complete modeling results are provided in Appendix C. Impacts are considered to be *less than significant*.

## **Biological Resources**

The Signature site is currently vacant and used for agricultural operations. Because the site is not in a natural condition, it is not likely that sensitive biological species occur onsite. However, the agricultural areas could serve as habitat and/or foraging areas for biological resources such as the Swainson's hawk. Development of the site could result in significant impacts to biological resources; however, these impacts would be reduced to a *less-than-significant* level with implementation of the following mitigation measure:

#### BIO-2. Biological Resources Measures

The DJUSD shall ensure the following measures are implemented.

- Project design shall demonstrate that avoidance of sensitive resources has been integrated into project design. Where avoidance is not feasible, the project proponent shall compensate for the loss or disturbance within Yolo County. The type and amount of compensation shall be determined in conjunction with the appropriate local, state, and/or federal regulatory agency involved."
- The DJUSD shall require a biological survey be prepared by a qualified biologist for proposed development areas that may contain sensitive resources as defined by the City or appropriate state or federal regulatory agencies. The biological study shall be prepared as a requirement of the environmental assessment of a given project unless the City's Planning Director determines, based on previous studies or other evidence, that the site's current state would preclude the finding of sensitive resources. Agricultural use or plowing of a site does not eliminate the probability of sensitive resources.

Such studies, when required, shall include:

- surveys and mapping of special-status plants and wildlife during the appropriate identification periods;
- mapping and quantification of sensitive habitat loss; and
- delineation and quantification of waters of the U.S., including vernal pools, swales, alkali wetlands, seasonal wetlands, and other wetlands shall be done use the current USACE wetland delineation manual.

For areas of non-native grassland, ruderal, developed, or agricultural lands that are determined to contain no special-status species, inclusions of alkali grassland, meadow and scrub, native perennial grassland, or wetlands, no further mitigation will be required. If sensitive habitats are identified, please refer to the mitigation measure(s) below pertaining to that resource to avoid, minimize, or compensate significant effects on these resources accordingly."

- If a biological study of a site determines the presence of sensitive biological resources, the project proponent will retain a qualified biologist, approved by the agency(s) with regulatory responsibility, to monitor construction activities in sensitive biological resource areas."
- Sensitive biological resources located in or adjacent to the construction area will be protected by placing orange construction barrier fencing, or stakes and flags, including buffer zones (where appropriate and depending on the type of resource). Adjacent

resources that may require protection include oak woodland, riparian woodland and scrub vegetation, drainages, vernal pools and swales, other wetlands, native grassland, special-status species populations, and elderberry shrubs."

Funding Source:

DJUSD

Implementing Party:

DJUSD

Monitoring Agency:

DJUSD

Timing:

Prior to construction of the site

## Potential Environmental Impacts Unique to the Mace Ranch Alternative

#### Land Use and Aesthetics

This site is currently designated as Public/Semi-Public and Parks/Recreation use with surrounding areas designated as Parks/Recreation, Neighborhood Retail, and Residential-Medium density land uses. The current school site was planned for an elementary school, and would not have the land area needed to develop a junior high school. Under this alternative, the DJUSD would work with the City to jointly develop and use the adjacent park site that is currently undeveloped. Development of the school at this location would be consistent with the Public/Semi-Public land use designation, but only partially consistent with the Parks/Recreation designation (shared play areas would be consistent, but school only facilities would not). The proposed project would require amendment of the General Plan designation to public/semi-public. It would also require amendment of the development agreement between the City and the Mace Ranch developer. The loss of parkland and inconsistency with existing development agreements would be a *significant and unavoidable* impact.

Development of the proposed school at this site would not result in impacts to agricultural resources. No agricultural uses exist onsite that could be affected by the proposed project. Consequently, impacts are considered to be *less than significant*.

Schools are generally not considered highly intensive uses. The project site is within the urban area and would be aesthetically consistent with surrounding uses and would therefore result in a *less-than-significant* impact to aesthetics.

#### **Public Services and Utilities**

Fire and emergency response service is provided to this site by the City of Davis Fire Department. In order to ensure appropriate response to emergencies, the City of Davis utilizes a 5-minute response time from a fire station to a site. The proposed Mace Ranch site is outside of the 5-minute response zones of existing or proposed stations. Therefore, this project will have a *significant and unavoidable* impact related to impacts on existing fire infrastructure needs and inability to serve the site in a timely manner.

#### **Traffic and Circulation**

On a daily basis 1,160 trips are anticipated as a result of the development of the proposed junior high school. Of that total, roughly one-third could occur in the morning peak hour (i.e., 360 trips). The development of a new school at this site would require greater use of Loyola Boulevard and Alhambra Drive. It is likely that the baseline traffic volume on each of these streets could increase by 200 to 300 ADT. As indicated in Table 6-2, the volume of background traffic on each of these streets results in satisfactory LOS, and increases of this magnitude would not result in any location exceeding the General Plan standard.

Table 6-2. Year 2010 ADT Comparisons for the Mace Ranch Alternative

| Street              | Location                          |        |       | Year 2010 General Plan Conditions |     |        |     |  |
|---------------------|-----------------------------------|--------|-------|-----------------------------------|-----|--------|-----|--|
|                     |                                   | Street |       | "Low"                             |     | "High" |     |  |
|                     |                                   | Class  | Lanes | ADT                               | LOS | ADT    | LOS |  |
| Loyola Drive        | Eighth Street to Alhambra Drive   | Co     | 2     | 2,320                             | A   | 3,220  | Α   |  |
| Alhambra<br>Drive   | Covell Boulevard to Eighth Street | Mi     | 2+    | 6,400                             | Α   | 8,100  | A   |  |
|                     | Eighth Street to Mace Boulevard   | Mi     | 2+    | 8,400                             | Α   | 11,000 | С   |  |
| Covell<br>Boulevard | Pole Line Road to Alhambra (W)    | Ma     | 4+    | 19,000                            | A   | 21,500 | A   |  |
|                     | Alhambra (W) to Alhambra (E)      | Ma     | 4+    | 9,800                             | Α   | 10,500 | A   |  |
| Mace<br>Boulevard   | Alhambra (E) to 2nd Street        | Ma     | 4+    | 22,500                            | В   | 26,900 | C   |  |

Co = Collector Street

As noted earlier, development of a new school at this site would require greater use of Loyola Boulevard and Alhambra Drive. As neither street has fronting residences in the immediate vicinity of the school site, the impacts of a school on adjacent neighborhoods would be minimal. Because of the peak traffic characteristics of a school, however, it is likely that residents living along Loyola Drive, (west of Monarch Lane) will experience higher traffic volume levels during the a.m. peak hour. While the street itself has the capacity to accommodate school traffic, impacts to residential 'quality of life may occur'. It is likely that a traffic signal will be needed at the Alhambra Drive/Loyola Drive intersection in order to accommodate automobile traffic and pedestrians. *No significant impacts* are anticipated.

Ma = Major Arterial

Mi = Minor Arterial

## **Biological Resources**

The site is currently undeveloped and could potentially serve as habitat and/or foraging areas for several biological resources. In particular, this site has documented burrowing owl nests in fairly high concentration. Development of the site could result in significant impacts to biological resources, however, these impacts can be mitigated to *less-than-significant* levels through application of the following mitigation measure:

#### BIO-2. Biological Resources Measures

## Potential Environmental Impacts Unique to the Covell Alternative

#### Land Use and Aesthetics

This alternative site is located in the north central portion of the City, on the urban edge. The site is currently used for agricultural activities, and is part of a larger and viable agricultural parcel. The loss of this agricultural land would result in a *significant and unavoidable* impact.

Development of the proposed school on this vacant site would result in a substantial change to the existing character of the site and the surrounding area. Nearby residents, motorists, and other passers-by along Pole Line Road and L Street will be affected by the change in views, as a result of development on the site. This would result in a *significant and unavoidable* impact.

#### **Public Services and Utilities**

Fire and emergency response service is provided to this site by the City of Davis Fire Department. In order to ensure appropriate response to emergencies, the City of Davis utilizes a 5-minute response time from a fire station to a site. The proposed Covell Center site is outside of the existing 5-minute response zones, but will be within the 5-minute coverage of Station 30, which is proposed for development near this site. Therefore, this project will have a short term *significant* and unavoidable impact related to impacts on existing fire infrastructure needs and inability to serve the site in a timely manner. In the long term, this site would have no impact on service.

#### **Traffic and Circulation**

Development of a school in this area may increase the projected traffic volume on the Covell Center internal circulation system and on the portion of Pole Line Road north of Covell Boulevard. These streets are projected to deliver good LOS (Table 6-3). It is unlikely that a school at this site would substantially change the volume of traffic on Pole Line Road south of Covell Boulevard or Covell Boulevard west of Pole Line Road.

Table 6-3. 2010 ADT Comparisons at Covell Center

| Street                       | Location                         |                 |       | Year 2010 General Plan Conditions |     |        |     |
|------------------------------|----------------------------------|-----------------|-------|-----------------------------------|-----|--------|-----|
|                              |                                  | Street<br>Class | Lanes | "Low"                             |     | "High" |     |
|                              |                                  |                 |       | ADT                               | LOS | ADT    | LOS |
| Covell<br>Boulevard          | Pole Line Rd to Alhambra (W)     | Ma              | 4+    | 19,000                            | A   | 21,500 | A   |
|                              | Pole Line Road to F Street       | Ma              | 4+    | 28,100                            | С   | 29,500 | D   |
|                              | Covell Boulevard to City Limits  | Ma              | 4+    | 13,400                            | A   | 15,400 | A   |
|                              | Covell Boulevard to Loyola Drive | Mi              | 2+    | 12,900                            | Е   | 16,400 | F   |
| Ma = Major A<br>Mi = Minor A |                                  |                 |       |                                   |     |        |     |

Development of a school in Covell Center could be accommodated without impacting adjacent neighborhoods. Access via Crossroads Boulevard would permit development of a signalized access to both Covell Boulevard and Pole Line Road, and pedestrian crossings could be created at both locations. *No significant impacts* are anticipated.

## **Biological Resources**

The Covell site is considered to be suitable habitat for 10 special-status wildlife species, including Swainson's hawk, burrowing owl, giant garter snake, valley elderberry longhorn beetle, and vernal pool fairy and tadpole shrimp. The precise location of these resources relative to a future school site is currently unknown and would not be known until a potential site were surveyed.

The Covell site is currently largely undeveloped but is actively used for agriculture and could potentially serve as habitat and/or foraging areas for several biological resources. Development of the site could result in significant impacts to biological resources, however, these impacts can be mitigated to *less-than-significant* levels through application of the following mitigation measure

## BIO-2. Biological Resources Measures

## Potential Environmental Impacts Unique to the Shriners Alternative

#### **Land Use and Aesthetics**

The site is currently designated for agricultural land use and is outside the urban development line of the City and the current City limits. The southern boundary of the site is designated as an agricultural buffer. Low-density residential land uses are located to the south of

the site across Covell Boulevard. Residential uses also exist some distance to the west. Development of the proposed school at this location would not be consistent with either the existing land use designation or the agricultural designation proposed in all of the alternatives considered under the City's General Plan update. The project would be compatible with residential land uses to the south and west, but not with adjoining agricultural uses to the north and east. The project would require amendment of the General Plan designation from agriculture to public/semi-public.

This alternative site is located in the northeastern portion of the planning area. The site is currently undeveloped and is used for agricultural purposes as part of a larger agricultural parcel. Development of the proposed school on this site would result in a substantial change from the existing character of the site and surrounding area. The loss of this agricultural land would result in a *significant and unavoidable* impact.

Development of the proposed school on this vacant site would result in a substantial change to the existing character of the site and the surrounding area. Nearby residents, and motorists will be affected by the change in views, as a result of development on the site. This would result in a *significant and unavoidable* impact.

#### **Public Services and Utilities**

Fire and emergency response service is provided to this site by the City of Davis Fire Department. In order to ensure appropriate response to emergencies, the City of Davis utilizes a 5-minute response time from a fire station to a site. The proposed Shriners site is outside of the existing 5-minute response zones, but will be within the 5-minute coverage of Station 30, which is proposed for development near this site. Therefore, this project will have a short term *significant* and unavoidable impact related to impacts on existing fire infrastructure needs and inability to serve the site in a timely manner. In the long term, this site would have no impact on service.

#### Traffic and Circulation

On a daily basis, 1,160 trips are anticipated to be generated for each alternative. Of that total, roughly one-third could occur in the morning peak hour (i.e., 360 trips).

The development of this site would result in traffic in the same roads as those used by the Signature site. Given the quality of traffic flow projected at these locations, it is unlikely that placing the site at this location would change the volume of traffic on these streets (Table 6-4).

Table 6-4. Year 2010 ADT Comparisons at the Shriners Site

| Street              | Location                       | Street<br>Class |       | Year 2010 General Plan Conditions |     |        |     |
|---------------------|--------------------------------|-----------------|-------|-----------------------------------|-----|--------|-----|
|                     |                                |                 | Lanes | "Low"                             |     | "High" |     |
|                     |                                |                 |       | ADT                               | LOS | ADT    | LOS |
| Covell<br>Boulevard | Pole Line Road to Alhambra (W) | Ма              | 4+    | 19,000                            | Α   | 21,500 | Α   |
|                     | Alhambra (W) to Alhambra (E)   | Ma              | 4+    | 9,800                             | Α   | 10,500 | Α   |
| Mace<br>Boulevard   | Alhambra (E) to 2nd Street     | Ma              | 4+    | 22,500                            | В   | 26,900 | С   |

The access suitability of this location would be similar to the Signature site, however, the site's proximity to the Covell Boulevard / Alhambra Boulevard intersection may restrict opportunities for access. A major access route serving the site may be developed by extending Alhambra Boulevard to the north. Additionally, a traffic signal would eventually be needed at this location based on the number of automobiles and potential pedestrian activity. Alternative site access to Covell Boulevard would need to be located far enough to the east to permit signalization. Ideally signalized intersection spacing of ¼ mile is desirable on arterial streets, but spacing of 700 to 800 feet may be workable. *No significant impacts* are anticipated

## **Biological Resources**

The site is currently undeveloped and could potentially serve as habitat and/or foraging areas for several biological resources. Development of the site could result in significant impacts to biological resources, however, these impacts can be mitigated to *less-than-significant* levels through application of the following mitigation measure:

#### BIO-2. Biological Resources Measures

#### SUITABILITY ANALYSIS

The three alternative sites have been found infeasible for location of the proposed junior high school for the following reasons:

- Mace Ranch The available elementary school site is too small for a junior high school campus. To make this site usable, the DJUSD would propose to utilize the adjacent neighborhood park site as well. Expanding the site would require amending the development agreement between the City and the Mace Ranch developer. In addition, this site is not within an acceptable response time for fire/emergency response.
- Covell The site would be located in close proximity to the existing Holmes Junior High School. This would increase the distance which students in east Davis would need to

travel to reach the school, reducing their ability to walk or bicycle to school. Development of the site would potentially impact numerous biological resources.

• Shriners – The site is outside the City's urban area and supports a viable agricultural operation. Development of the site would significantly impact agricultural resources and establish a precedent for development outside the urban line. Street access is problematic.

## THIS PAGE INTENTIONALLY LEFT BLANK