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DRAFT SUBSEQUENT EIR

# SUHSD NEW HIGH SCHOOL #5 CONSTRUCTION

Subsequent to the Rogge Road High School Site Acquisition EIR  
State Clearinghouse Number 2005081011

PREPARED FOR

Salinas Union High School District

October 18, 2011

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Draft Subsequent EIR

Supplemental to the Rogge Road High School Site Acquisition EIR  
State Clearinghouse Number 2005081011

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October 18, 2011

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# SUMMARY

## CEQA REQUIREMENTS

CEQA Guidelines section 15123 requires an EIR to contain a brief summary of the proposed project and its consequences. The summary identifies each significant effect and the proposed mitigation measures and alternatives to reduce or avoid that effect; areas of controversy known to the lead agency; and issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects.

## SETTING, IMPACTS AND MITIGATION MEASURES

### *Purpose and Scope of the EIR*

This Subsequent EIR (SEIR) provides an analysis of the environmental effects associated with construction of the Salinas Union High School District New High School #5. The purpose of an EIR is to identify the proposed project's significant environmental effect, to identify alternatives to the project to reduce or eliminate significant environmental effects, and to indicate the manner in which those significant effects can be mitigated or avoided (CEQA Guidelines 21002.1(a)). The lead agency, the Salinas Union High School District (hereinafter "School District") focused the discussion in this SEIR on those potential effects on the environment resulting from the proposed project that are or may be significant. Based in part on the results of public input generated during the Notice of Preparation response period for the project, Section 2.0, Environmental Setting, Impacts and Mitigation Measures of the SEIR focuses upon aesthetics/visual resources, air quality, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, and traffic and circulation.

## ***Location***

The 38.97-acre project site is located at 1100 Rogge Road, Assessor's Parcel Number 211-011-011, in the northeastern portion of the City of Salinas, Monterey County. The project site is located on the south side of Rogge Road, with San Juan Grade Road located approximately 3,000 feet to the west, Natividad Road located approximately 2,000 feet to the east, and U.S. Highway 101 located approximately 1.5 miles to the west.

## ***Project Background***

In 2006, the School District prepared the Rogge Road High School Site Acquisition EIR (hereinafter "Acquisition EIR"). The Acquisition EIR allowed the School District to acquire the property for future construction of a high school. That EIR analyzed, to the extent possible, the environmental impacts associated with acquisition and future development of a high school. However, because development of a site plan and construction of the school was not anticipated for several years, the EIR could not fully evaluate impacts associated with aesthetics and lighting, air quality, land use, noise, hydrology, and traffic and circulation.

The Acquisition EIR assumed that subsequent environmental analysis would be required when the School District was ready to design the school and consider construction. Therefore, this EIR is subsequent to the Acquisition EIR, addressing the issues that could not be addressed at the time the Acquisition EIR was prepared in 2006.

## ***Proposed Project***

The School District is now proposing to construct the new high school located on the project site. The site has been approved by the California Department of Education for 1,500 students.

The proposed project would include a two-story, L-shaped classroom building consisting of 54 classrooms, including eight science labs, three computer labs, a library and media center, a text book storage room, and administrative offices. A 400-seat performing arts auditorium will be located directly to the east of the classroom buildings and will include two music rooms, a green room/drama classroom, dressing rooms, and a TV studio, along with an outdoor stage located in the campus' inner quad. A gymnasium building will be located to the south of the performing arts building and will include a main gym, a small gym, a wrestling gym, a weight room, attached boys and girl's locker rooms, and an athletic training room. A food service building will be located south of the classroom building and west of the gymnasium. The food service building will include a 300-seat food court, an attached kitchen, and two trade related classrooms. Outdoor athletic facilities will include a large lighted stadium used for football, soccer, and track and field competition, eight tennis courts, six outdoor basketball courts, one

baseball field, three softball fields, and two soccer fields. Parking for approximately 453 vehicles would be provided in several lots throughout the project site. The proposed project would include improvements to Rogge Road and five driveway providing access to and from the project site.

## ***Summary of Environmental Impacts***

This Subsequent EIR identifies significant or potentially significant environmental impacts in several areas as identified below. [Table S-1, Significant Impacts and Mitigation Measures Summary](#), presents a summary of the project impacts and mitigation measures that would reduce, minimize, or avoid impacts. In the table the resulting level of significance of each environmental impact is indicated after the application of the recommended mitigation measure(s). For detailed discussions of all project impacts and mitigation measures, the reader is referred to topical environmental analysis in Chapter 2.0, Environmental Setting, Impacts and Mitigation Measures of this EIR.

### **Less Than Significant Project Effects with Implementation of Mitigation Measures**

Less than significant project effects with implementation of mitigation measures are anticipated in the following areas:

- Hazardous Materials (pesticide exposure)
- Hydrology (operational-related runoff and off-site drainage improvements)
- Hydrology (on-site flooding)
- Traffic (operations at nearby intersections)
- Traffic (operations at project driveways)
- Traffic (bicycle and pedestrian safety issues)
- Traffic (inadequate left-turn storage)
- Traffic (inadequate left-turn channelization)

## ***Significant Unavoidable Impacts***

Significant and unavoidable impacts are anticipated in the following areas:

- Aesthetics (degradation of existing visual character)

- Air Quality (contribution to cumulative air pollutants)
- Climate Change (contribution to cumulative greenhouse gas emissions)

## ***Growth Inducing Effects***

The proposed project is located within the City of Salinas and provides a public service based on existing and future anticipated need. Therefore, the proposed project would be growth accommodating and not growth-inducing.

## ***Areas of Controversy***

CEQA Guidelines section 15123(b)(2) requires an EIR summary to identify areas of controversy known to the lead agency including issues raised by agencies and the public. The City of Salinas and the property owners to the south and east have expressed concern regarding the orientation of the school. The current design orients the school toward Rogge Road and the existing residential neighborhood; however the City and the property owners have indicated that they would like to see the school oriented towards to the south and east, in the direction of the City's Future Growth Area. This area is currently in agricultural crop production. This issue is addressed in several sections of the document.

## ***Project Alternatives Considered***

Project alternatives are presented, discussed, analyzed and compared in Section 4.0, Alternatives. The following alternatives to the proposed project are considered in this subsequent EIR.

- Alternative 1: No project-No Development. This alternative assumes that the project site would remain in its existing condition as farmland.
- Alternative 2: No project-Residential Development. This alternative assumes that a residential neighborhood could be developed here if the School District chose not to build a school here.
- Alternative 3: Site Redesign A. This alternative design was prepared in response to the City's request to consider fronting the school where the Salinas General Plan identifies the future Russell Road extension. Refer to Figure 5, City of Salinas General Plan Land Use and Circulation Map, for the planned location of the Russell Road extension.
- Alternative 4: Site Redesign B. This alternative design was also prepared in response to the City's request to consider fronting the school where the Salinas General Plan identifies the

future Russell Road extension. Refer to Figure 5, City of Salinas General Plan Land Use and Circulation Map, for the planned location of the Russell Road extension.

### **Environmentally Superior Alternative**

CEQA Guidelines Section 15126.6(e)(2) requires that the environmentally superior alternative be identified. The guidelines state that if the environmentally superior alternative is the no project alternative, the EIR shall also identify an environmentally superior alternative among other alternatives. In this case, Alternative 2: “No Project-Residential Development” represents the next environmentally superior alternative and would result in a lesser degree of environmental impact as compared to the proposed project.

### ***Issues to be Resolved***

All environmental impacts known to the School District at the time of publication of the Draft Subsequent EIR have been evaluated and disclosed in this EIR. Upon closure of the 45-day public review period for this Draft Subsequent EIR, a Final Subsequent EIR will be prepared, which will include responses to the environmental issues raised during the 45-day public review period. The School District Board of Trustees will then be asked to consider certifying this EIR as prepared in accordance with CEQA and its implementing guidelines, and whether to approve the proposed project or one of the alternatives.

### ***Impacts and Mitigations Summary***

The proposed project’s significant effects and mitigation measures are summarized in [Table S-1, Significant Impacts and Mitigations Summary](#). This table incorporates the mitigation measures in the Acquisition EIR and mitigation monitoring program adopted by the School District Board of Trustees in 2006.

**Table S-1 Significant Impacts and Mitigation Measure Summary**

<b>Area of Concern</b>	<b>Significant Impact</b>	<b>Mitigation Number</b>	<b>Mitigation Measure Summary</b>	<b>Residual Impact</b>
<b>Aesthetics</b>	Substantial Degradation of Existing Visual Character of the Site	None	There are no mitigation measures that would reduce the significance of this impact.	Significant and Unavoidable
<b>Aesthetics</b>	Compatibility with Adjacent Uses	CUM-AE-1	Preparation and implementation of a landscape plan	Less than Significant
<b>Aesthetics</b>	Compatibility with Adjacent Uses	CUM-AE-2	Design High School with “Traditional Neighborhood Development” characteristics	Less than Significant
<b>Air Quality</b>	Contribution to Cumulative Air Quality Emissions	CUM-AQ-1	Incorporate into final improvement plans Monterey Bay Unified Air Pollution Control District measures	Significant and Unavoidable
<b>Climate Change</b>	Inconsistency with Applicable GHG Reduction Plan	None	Several measures have been incorporated into the project description, but sufficient mitigation to reduce the impact to a less than significant level are not feasible.	Significant and Unavoidable
<b>Hazards and Hazardous Materials</b>	Pesticide Exposure	HZ-1	Notification of the Monterey County Agricultural Commissioner and adjacent property owners to ensure that adjacent farmers only apply pesticides according to existing regulations.	Less than Significant



Area of Concern	Significant Impact	Mitigation Number	Mitigation Measure Summary	Residual Impact
<b>Hazards and Hazardous Materials</b>	Pesticide Exposure	HZ-2	Incorporation of fencing and landscaping along the eastern and southern boundaries of the site to ensure students do not have direct access to the adjacent agricultural fields.	Less than Significant
<b>Hydrology</b>	Operational Related Runoff	HY-1	Integration into project design all applicable Low Impact Development features	Less than Significant
<b>Hydrology</b>	Storm Water Runoff Quality	HY-2	Infiltration rate testing and preparation of a detailed site grading plan for infiltration measures. Integration of Integrated Management Practices.	Less than Significant
<b>Hydrology</b>	On-site Flooding	HY-3	Construction of new drainage channel along the eastern edge of the project site.	Less than Significant
<b>Traffic</b>	Traffic Operations at San Juan Grade Road/Rogge Road Intersection	T-1	Adjust the starting time of the high school.	Less than Significant
<b>Traffic</b>	Traffic Operations at High School Driveway 1 and Rogge Road	T-2	Revise site and access plans to achieve acceptable traffic operations	Less than Significant
<b>Traffic</b>	Bicycle and Pedestrian Safety Issues	T-3	School District to provide pedestrian and bicycle facilities improvements	Less than Significant

SUMMARY

Area of Concern	Significant Impact	Mitigation Number	Mitigation Measure Summary	Residual Impact
<b>Traffic</b>	Inadequate Left-turn Storage on Northbound	T-4	School District to pay their fair share of improving the left-turn storage on northbound Natividad at Rogge Road to the responsible agency	Less than Significant
<b>Traffic</b>	Traffic Operations Natividad Road/Rogge Road intersection	CUM-T-1	School District will pay appropriate fair share of transportation improvements to the appropriate agency	Less than Significant
<b>Traffic</b>	Traffic Operations at San Juan Grade Road/Penzance Street intersection	CUM-T-1	School District will pay appropriate fair share of transportation improvements to the appropriate agencies	Less than Significant
<b>Traffic</b>	Traffic Operations at San Juan Grade Road/Rogge Road intersection	CUM-T-1	School District will pay appropriate fair share of transportation improvements to the appropriate agencies	Less than Significant

*Source:* EMC Planning Group Inc. 2011

## INTRODUCTION

### 1.1 PROJECT DESCRIPTION

#### ***Project Site Location***

The 38.97-acre project site is located at 1100 Rogge Road, Assessor's Parcel Number 211-011-011, in the northeastern portion of the City of Salinas, Monterey County. The project site is located on the south side of Rogge Road, with San Juan Grade Road located approximately 3,000 feet to the west, Natividad Road located approximately 2,000 feet to the east, and U.S. Highway 101 located approximately 1.5 miles to the west. [Figure 1, Regional Location](#), presents the regional location, and [Figure 2, Site Vicinity](#), presents the project site in relation to the City of Salinas and adjacent network of streets.

#### ***Project Site Existing Conditions***

The project site is relatively flat and ranges in elevation from about 140 to about 150 feet above mean sea level. The project site is currently used for agricultural row crops. Improvements on the site include three wells used for the property and adjoining properties, an unused wooden water tank on a 20-foot platform, a green plastic above-ground water tank for potable water supply, and one farmhouse, as well as several accessory structures used for storage. One well is located at the farmhouse complex, one well is located on Rogge Road between the farmhouse complex and the western property boundary, and one is located at the southwest corner of the property.

The accessory structures include a two-car garage, farm machinery shed, and granary. The residence was constructed in 1940 to 1941 and includes a private septic system for wastewater disposal. Several irrigation system structures are located on site. There is an electrical box located north of the water tanks, which is used to power the irrigation pump located about 30 feet east.

Electrical power distribution and transmission lines are located adjacent to the project site. The distribution lines are 12 kilo volts along the south and north project boundaries, and not a significant concern. The power transmission lines are 60 kV and located along the eastern boundary of the project site (perpendicular to Rogge Road). The school siting conditions require a school to be setback at least 100 feet from an easement for a 50 to 133 kV power transmission line. School facilities within 100 feet of the easement could potentially pose a significant health risk to exposed pupils.

The 100-foot setback from the transmission line right-of-way is approximately 20 feet inside the eastern property line near the northern area of the site (adjacent to Rogge Road), and approximately 115 feet inside the eastern property line in the southeast area of the site.

Rogge Road, a rural two-lane road with gutter improvements but no sidewalks, runs along the northern boundary of the site. Rogge Road provides direct driveway access to the existing residence. The site may also be accessed via a dirt agricultural road perpendicular to Rogge Road. An artificial drainage runs along Rogge Road at the northern property line, and north-south along the property perimeter. Site drainage generally flows to the southwest toward the lower site elevations. There are no other creeks or drainages located on site.

### ***Project Vicinity Existing Conditions***

Adjacent land uses include a residential subdivision to the west and row crops to the north, east and south. Rogge Road runs along the northern perimeter. Beyond Rogge Road is agricultural land, a harvesting business with an equipment storage yard, a bus storage yard, and two single-family dwellings. The adjacent subdivision includes single-family tract homes, and the La Joya Elementary School, located at 55 Rogge Road, approximately one-quarter mile from the project site. Across Rogge Road, the recently constructed Bolsa Knolls Middle School, which opened in March 2011, is located at 1031 Rogge Road, approximately one-quarter mile from the project site. Strawberries are the primary agricultural crop in the vicinity. [Figure 3, Aerial Photograph](#), presents the existing project site and surrounding area, and [Figure 4, Site Photographs](#), show the existing conditions on the site. [Figure 5, Land Use and Circulation Policy Map](#), shows the City of Salinas General Plan land use designations of the project site and surrounding area. The project site is within the planned Future Growth Area for the City of Salinas, which was annexed to the City in September 2008. The boundaries of the Future Growth Area are delineated in Figure 5, and are generally Rogge Road and the future Russell Road Extension to the north, Boronda Road to the south, an area east of Williams Road to the east, and San Juan Grade Road to the west.



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0 3,250 feet

Project Site

Source: Google Earth 2009

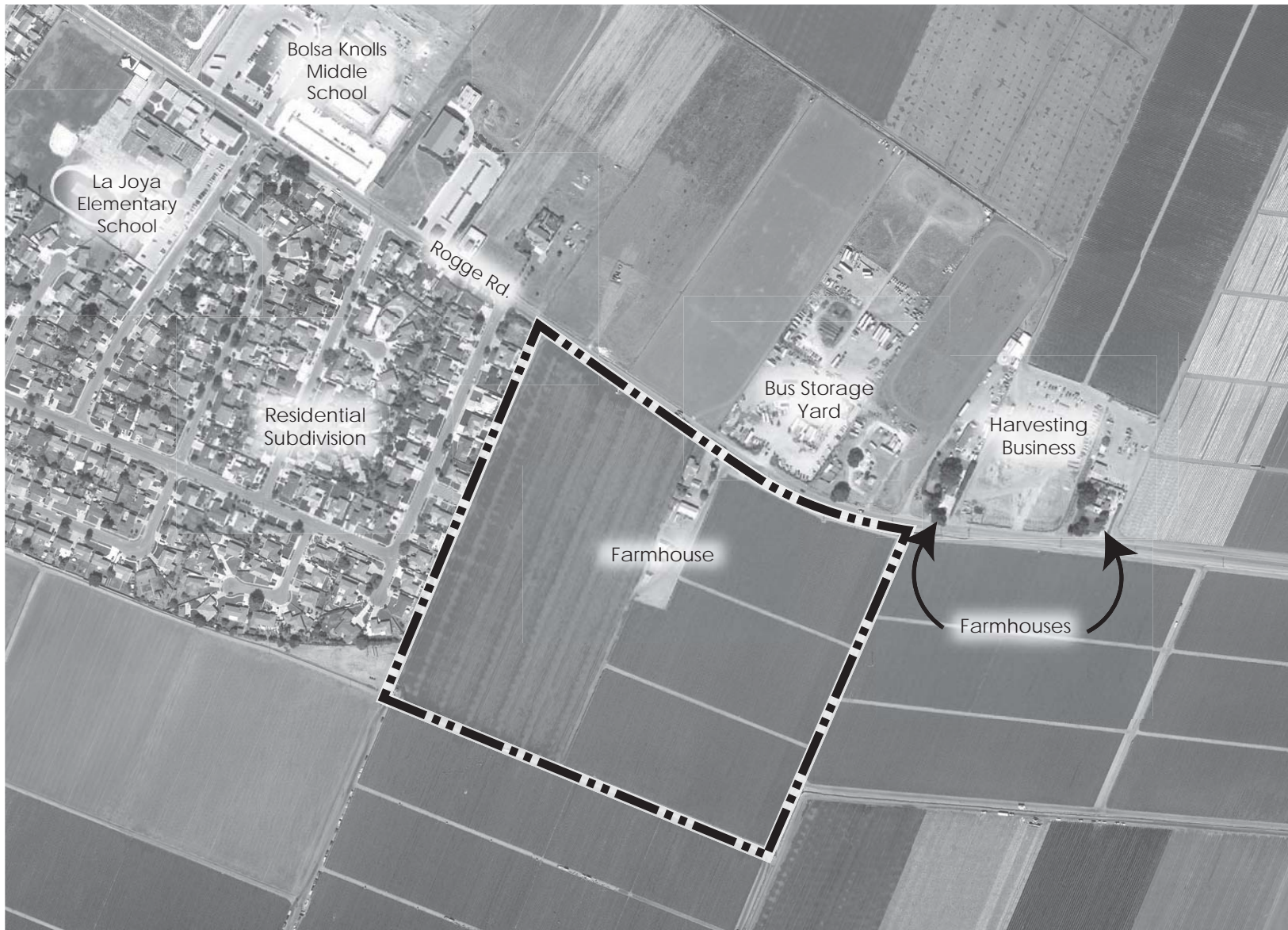


Figure 2  
Project Vicinity

SUHSD New High School #5 Construction SEIR

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0 500 feet



Approximate project site boundaries

Source: Google Earth 2009



Figure 3  
Aerial Photograph

SUHSD New High School #5 Construction SEIR

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① View from Rogge Road looking southeast across project site



② View looking southeast along Rogge Road of northern site boundary



③ View looking south of the existing on-site residence and associated structures



■ ■ ■ Approximate project boundaries



④ View looking southwest from Rogge Road across the project site



⑤ View looking west from Rogge Road across the project site



⑥ View looking east across the project site at the end of Topaz Way

Source: Google Earth 2009, EMC Planning Group 2011

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Figure 4

## Site Photographs

SUHSD New High School #5 Construction SEIR

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The project site has a public/semi-public land use designation (SHS-senior high school). Adjacent land use designations are agricultural across Rogge Road to the north (unincorporated county), residential low density to the south, and mixed-use to east.

## ***Project Background***

In 2006, the Salinas Union High School District Board of Trustees (hereinafter “School District”) prepared and certified the Rogge Road High School Site Acquisition EIR (hereinafter “Acquisition EIR”). The 2006 EIR allowed the School District to acquire the property for future construction of a high school. That EIR analyzed, to the extent possible, the environmental impacts associated with acquisition and future development of a high school. However, because development of a site plan and construction of the school was not anticipated for several years, the EIR could not fully evaluate impacts associated with aesthetics and lighting, greenhouse gas emissions, air quality, land use and planning, noise, hydrology, and traffic and circulation resulting from construction on the site. Therefore, this EIR will be subsequent to the Acquisition EIR, addressing the issues that could not be addressed at the time the Acquisition EIR was prepared. A copy of the acquisition draft and final EIR can be found on the School District’s website at <http://www.salinas.k12.ca.us/sites/DO-B/Index.htm>. The mitigation measures included in the Acquisition EIR can be found in [Appendix A, Site Acquisition Mitigation Monitoring Program](#), which was adopted by the School District Board of Trustees, is included on the CD located on the back inside cover of this EIR.

The Acquisition EIR (page 1-4) stated that the proposed high school would,

likely serve existing students, as well as the local neighborhoods, and would be accessed from the future Russell Road extension. The school district anticipates acquisition of the project site as early as the summer of 2006. A construction bond may be brought before the voters in the fall of 2006. The school would be designed to accommodate approximately 2,000 students. Construction of the high school is expected to occur as the surrounding area is developed.

Several things have changed since the Acquisition EIR was prepared and certified by the School District Board of Trustees. They are discussed below:

1. Development in the Future Growth Area has not occurred as was anticipated in 2005-06 when the Acquisition EIR was prepared and certified. The School District has consulted with the City of Salinas regarding the anticipated schedule for development in the Future Growth Area. There is no schedule for when development in the Future Growth Area will occur.

The City of Salinas requires private development within the Future Growth Area to prepare and submit proposed specific plans that must be adopted by the City prior to development proceeding within the Future Growth Area. The School District understands that currently, no proposed specific plan addressing future development in the immediate vicinity of the project site has been submitted to the City for processing. Proposed access to the high school is from Rogge Road, adjacent to existing residential neighborhoods.

2. Enrollment at the School District's other high schools warrants development of the new high school whether or not development occurs within the Future Growth Area. The proposed high school will accommodate 900 "existing" students - approximately 675 students who would be enrolled at Everett Alvarez High School at 1900 Independence Boulevard, and approximately 225 students who would be enrolled at North Salinas High School located at 55 Kip Drive at its intersection with E. Alvin Drive. This will allow the School District to remove portables at both of these existing high schools that were put on the campuses to address overcrowding (over enrollment) at the schools, if desired.
3. The California Department of Education has determined that the proposed site size is appropriate for a maximum of 1,500 students. Therefore, in addition to accommodating 900 existing students at two overcrowded high schools, the proposed high school could accommodate 600 more students. These students could be from the Future Growth Area, but may also come from other future development in the vicinity, should it occur prior to development in the Future Growth Area. The additional students could also be added through attendance boundary modifications or through the District's school of choice program.

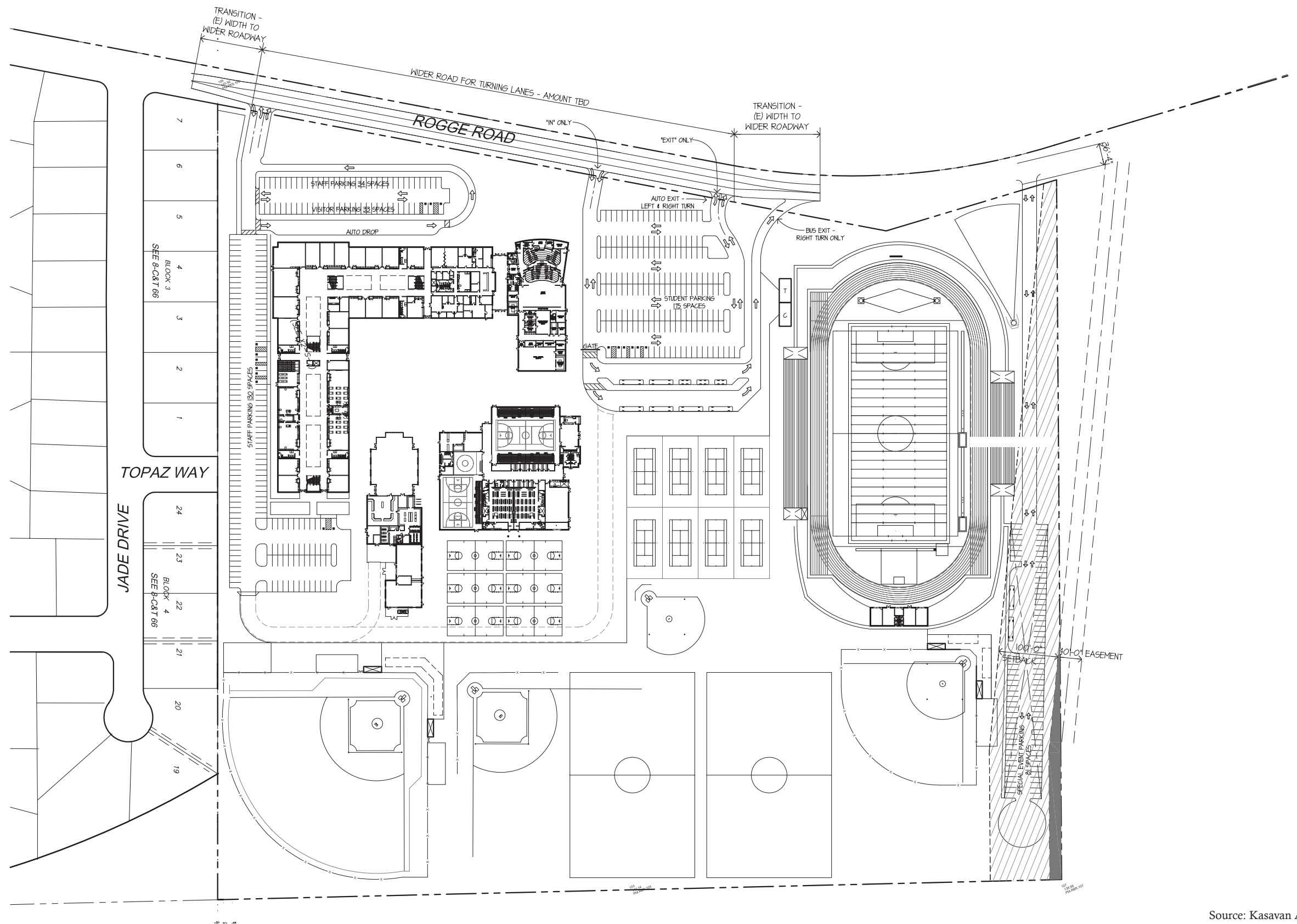
### ***Project Overview***

The School District is now proposing to construct the new high school #5 (hereinafter "proposed project") located on the project site. The project site has been approved by the California Department of Education for 1,500 students. The proposed site layout is presented in [Figure 6, Site Plan](#).

### **Attendance Boundaries**

The proposed preliminary attendance boundaries are generally consistent with the Santa Rita Union School District boundary, which is presented in [Figure 7, Attendance Boundary](#). This boundary may be expanded as realignment of all high schools attendance boundaries may be required.



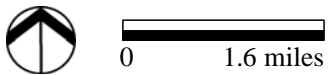
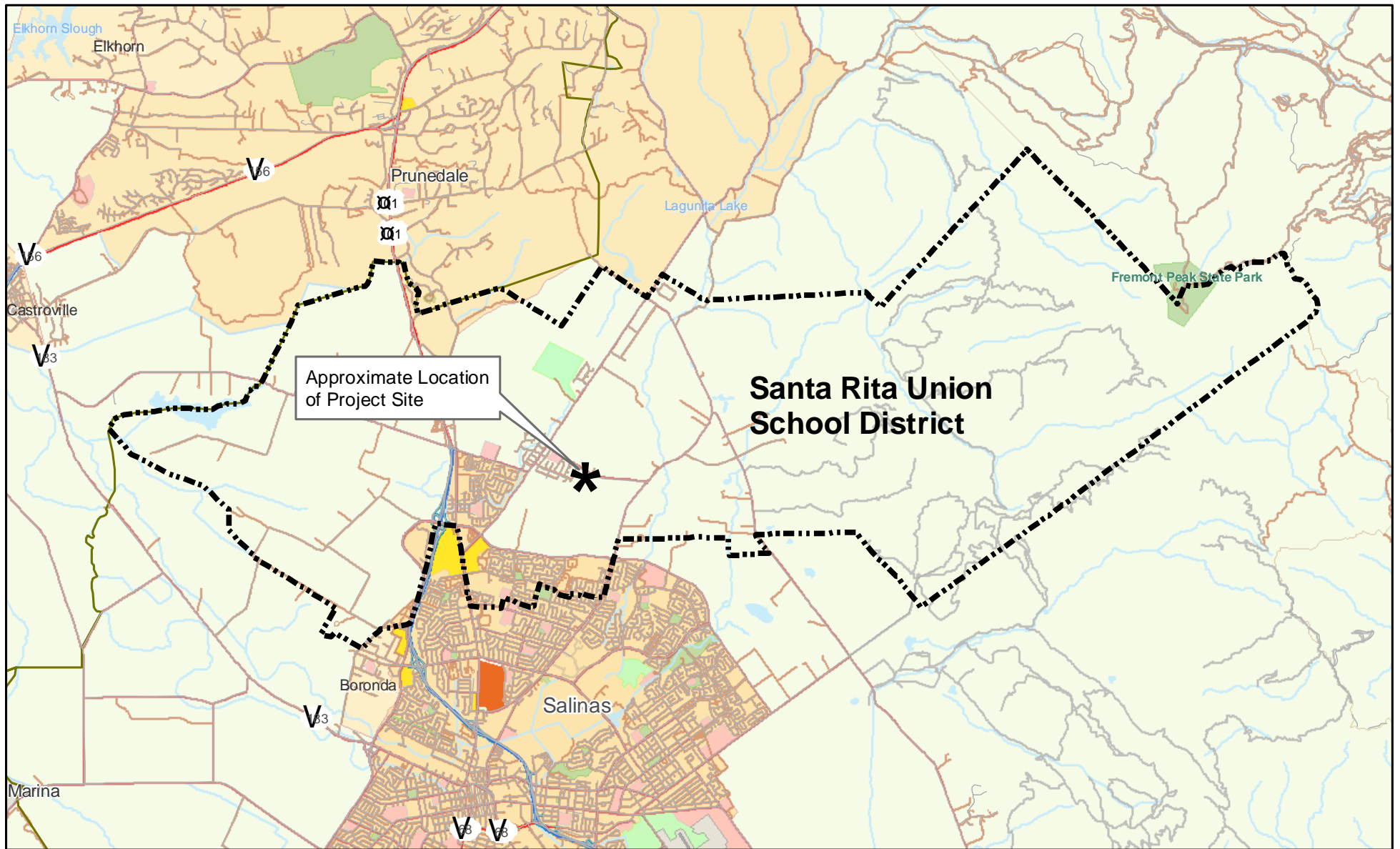


Source: Kasavan Architects 2011

Figure 6  
Site Plan

SUHSD New High School #5 Construction SEIR

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Source: ESRI 2010



Figure 7  
**Attendance Boundary**  
 SUHSD New High School #5 Construction SEIR

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## **Phasing**

The high school would open with the freshman and sophomore classes. Approximately 900 of the 1,500 students would come from existing neighborhoods within the Santa Rita Union School District. Currently, 75 percent of the 900 existing students attend Everett Alvarez High School, located at 1900 Independence Boulevard, and 25 percent attend North Salinas High School, located at 55 Kip Drive. Both campus' have portable classrooms to house the over capacity students. Portables could be removed from the existing schools depending on how the high school boundaries are redrawn as each school will be adjusted. Refer to Figure 2, Project Vicinity, for the location of each of these high schools in relation to the proposed project site.

The balance of students (600) would come from existing neighborhoods, or from the future neighborhoods within the Future Growth Area. Currently, there are no applications for residential development within this area of the City of Salinas. The additional 600 students could also be added through attendance boundary modifications or through the District's school of choice program.

## **Access**

The proposed high school is oriented towards Rogge Road making the main entrance accessible to students in the existing residential development to the west. At this time, there is no proposed access from the east and south facing the existing agricultural fields. If appropriate in the future, the nature of the high school project allows for consideration of additional pedestrian and bicycle access to the site for students coming from future residential development to the south and east. At this time, it is not yet known exactly what the development and supporting infrastructure will consist of, or how it will be oriented, making it premature to address such access at this time.

## **Structures and Recreational Amenities**

The proposed high school would include a two-story, L-shaped classroom building located in the northwestern corner of the project site. The classroom building would consist of 54 classrooms, including eight science labs, three computer labs, a book and media center, a text book storage room, and administrative offices. A 400-seat performing arts auditorium would be located directly to the east of the classroom buildings and would include two music rooms, a green room/drama classroom, dressing rooms, and a TV studio, along with an outdoor stage located in the campus' inner quad. A gymnasium building would be located to the south of the performing arts building and would include a main gym, a small gym, a wrestling gym, a weight room, attached boys and girl's locker rooms, and an athletic training room. A food service building would be located south of the classroom building and west of the gymnasium. The food service building would include a 300-seat food court, an attached kitchen, and two trade-related classrooms.

Outdoor athletic facilities will include a large lighted stadium used for football, soccer, and track and field competition, eight tennis courts, six outdoor basketball courts, one baseball field, three softball fields, and two soccer fields. Proposed associated athletic structures include a concession/ticket booth, stadium restrooms, a field house, and baseball and softball dugouts.

The stadium field lighting will be very similar to the lighting installed in 2009 at Everett Alvarez High School in Salinas. The best available cut-off glare shields available will be used. A preliminary lighting plan, which is included in Appendix C, includes the following:

1. Football and soccer require adequate lighting from ground level to approximately 50 feet above ground to accommodate the combination of aerial and ground play.
2. There will be four light poles with lights approximately 85 feet in height above the final playing field level.
3. Stadium lights will be 1,500 watt metal halide with glare shields.
4. Football and soccer fields will have an average of 50 footcandles at playing field level.
5. Track will average 20 footcandles on the track.
6. Footcandle levels created by stadium field lighting will average about 0.1 to 0.2 foot candles horizontal and 0.5 to 0.6 average vertical footcandles measured at 40 feet out from the edge of the track.

### **Parking**

Parking for approximately 453 vehicles would be provided in several lots throughout the project site. A 130-space staff parking lot would be located along the western edge of the project site, and a parking lot with 34 spaces for staff and 33 spaces for visitor parking, would be located in the northern corner of the project site. A 175-space student parking lot would be located along the northeastern edge of the project site, between the stadium and the L-shaped classroom building. An 81-space special events (aka “stadium-capacity events”) parking lot would be located along the southeastern boundary of the project site, within the 100-foot setback from the electrical transmission lines. This type of parking lot is allowed by the State Department of Education to be within the 100-foot setback, while student and staff parking lots are not.

### **Road Improvements**

The proposed project would include improvements to Rogge Road to allow improve access to the project site. A preliminary design (February 8, 2011), is presented in [Figure 8, Rogge Road Preliminary Design](#).



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## Site Preparation

The project includes the demolition of the existing house and associated structures, as well as the demolition of the on-site septic system. The demolition of the existing house and associated structures would require a demolition permit from the Bay Area Air Quality Management District. The demolition of the septic system would require a septic tank demolition permit from the Monterey County Environmental Health Division. Wells that are necessary for irrigating adjacent agricultural fields will be maintained for irrigation purposes, and may also be utilized for irrigating the high school athletic fields.

## Off-site improvements

To service the proposed project, sewer lines would be extended along Rogge Road to the west to connect with the City of Salinas sewer system at the southwestern corner of Rogge Road and Bollenbacher Drive. The project requires a lift station, which will be located on site.

Water mains would be extended along Rogge Road to the west to connect with the City's water system at the southeastern corner of Rogge Road and Jade Drive. The proposed project would connect to an existing gas main located directly across Rogge Road from the main entrance. Off-site improvements are delineated on [Figure 9, Utility Plan](#).

The proposed project includes a number of off-site improvements necessary to provide adequate bike and pedestrian access to the project site. A Class I bike/pedestrian trail would be constructed along the southern leg of Rogge Road from the edge of the project site west to Jade Drive. This trail would connect to the on-site proposed Class 1 bike/pedestrian trail along the project site frontage. The existing crosswalks at the intersections of Rogge Road and Jade Drive, Jasper Way, and Bollenbacher Drive would be upgraded with ADA compliant ramps and markings. Class III bike lanes are proposed from Jade Drive to the existing Class II bikes lanes west of Bollenbacher Drive. Construction of the project frontage improvements will require minor road widening to the north along a portion of Rogge Road, within the existing right-of-way. [Figure 10, Off-Site Bike and Pedestrian Improvements](#), shows the proposed off-site improvements necessary to provide adequate bike and pedestrian access to the project site.

## Low Impact Development

The proposed project includes several Low Impact Development elements to reduce the impact of potential increases in runoff and to comply with the criteria of the City's Storm Water Development Standards and the requirements of the Regional Water Quality Control Board, which require the proposed development to match pre-development flow conditions. These elements include the use of pervious pavement, bioretention, an infiltration underdrain system

under the football field, vegetated swales, and a shallow detention basin. The project also includes a channel along the eastern edge of the project site to convey offsite runoff to replace an existing ditch.

### **Hardscape/Landscape**

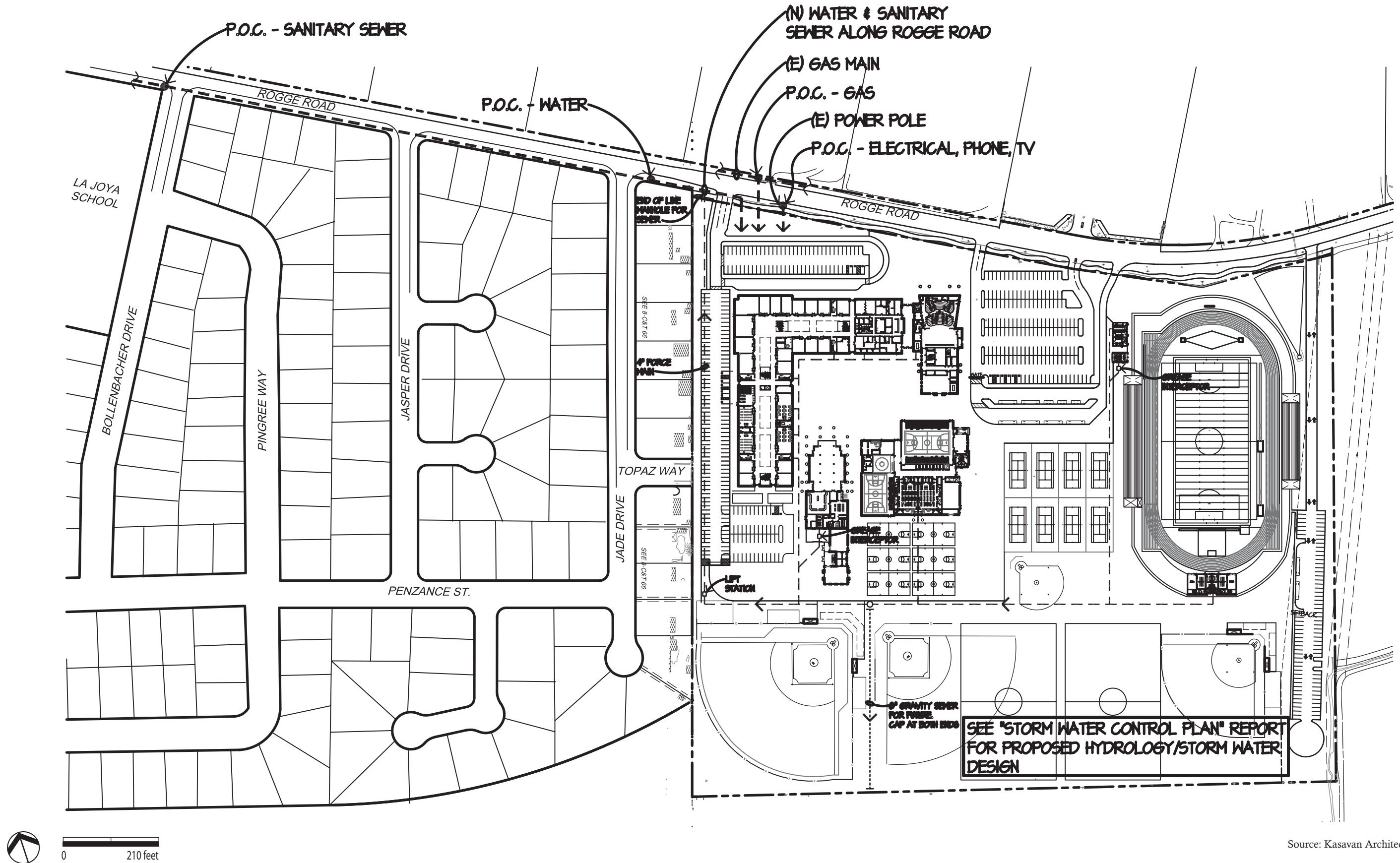
Figure 11, *Preliminary Landscape Site Plan*, indicates that approximately 50 percent of the project site would be hardscape and 50 percent would be landscaped, including athletic fields.

### ***Proposed Approvals***

The School District is the lead agency as well as the project proponent. The approvals necessary for this project include the School District Board of Trustees approving the project plans, as well as approvals by other local, regional, and state agencies listed below.

### ***Project Objectives***

The objectives of the proposed project are to construct a new high school to provide both a safe and a supportive environment for the instructional program and the learning process. The 1,500 student high school is planned to accommodate 900 existing students within the attendance boundaries of the Santa Rita Union School District, as well as an additional 600 that may be added through attendance boundary modifications, through the District's school of choice program, or from future development in the vicinity.



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0 600 feet



Project Boundary



Curb and Crosswalk Improvements



Road Segment to be Widened

Source: Google Earth 2009, RBF Consulting 2011

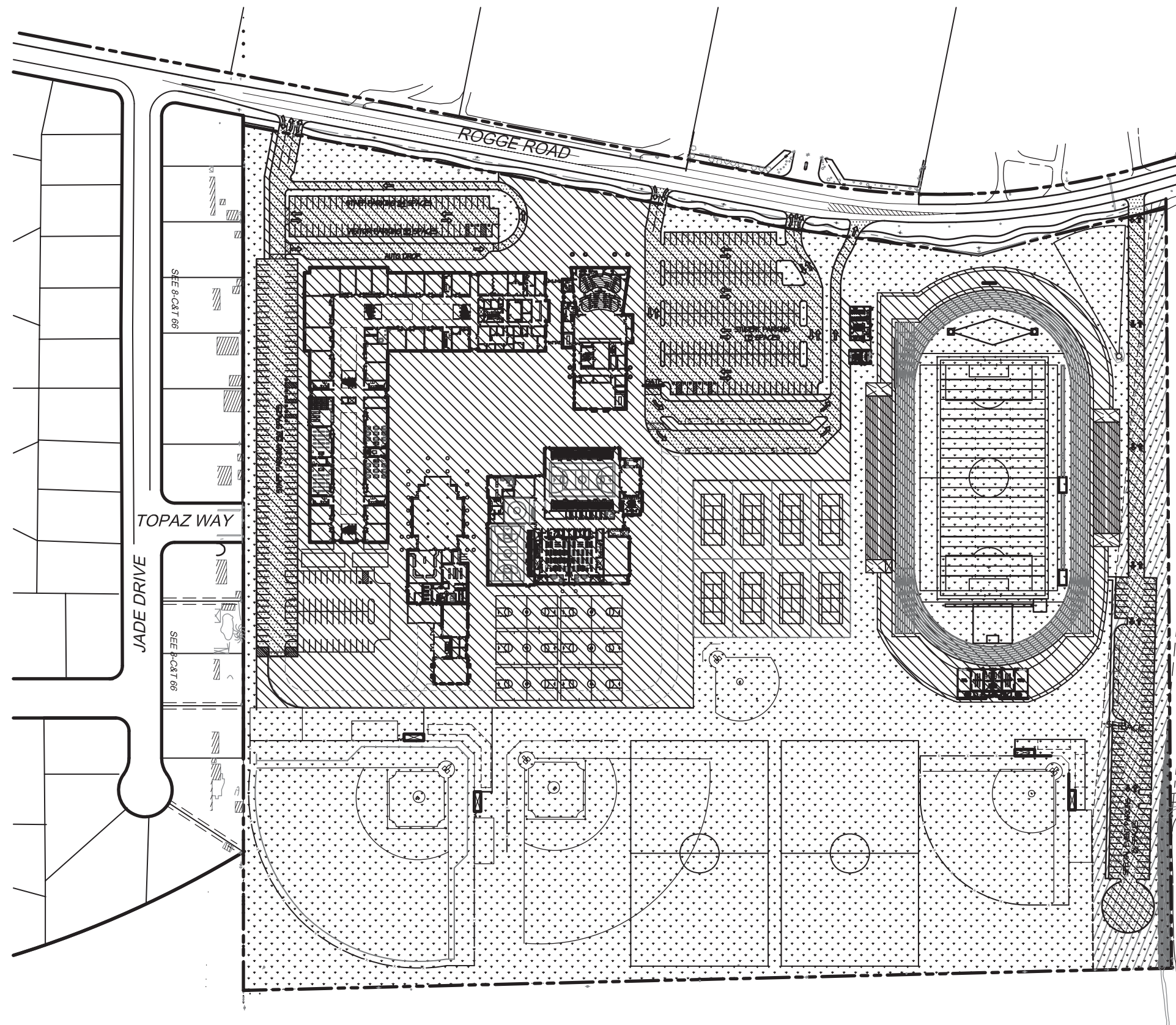


## Figure 10 Off-Site Bike and Pedestrian Improvements

SUHSD New High School #5 Construction SEIR

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#### PARKING COUNT

TOTAL PARKING SPACES 453

#### LEGEND

EMERGENCY VEHICLE ACCESS

POWER LINE SETBACK

HARDSCAPE - 828,862 S.F. = 44.2%

LANDSCAPE - 839,124 S.F. = 44.8%

TOTAL AREA - 1,668,586 S.F. = 100%  
(38.6 AC)



Source: Kasavan Architects 2011

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## 1.2 REPORT AUTHORIZATION AND PURPOSE

### ***Determination to Prepare a Subsequent Environmental Impact Report***

The School District, acting as the lead agency, has determined that construction of the proposed project may result in significant adverse environmental effects, as defined by the California Environmental Quality Act (CEQA) Guidelines section 15064, which were not, and could not have been addressed in the Acquisition EIR. Therefore, the School District has had this subsequent environmental impact report (SEIR) prepared to evaluate the potentially significant adverse environmental impacts of the proposed project that were not addressed in the Acquisition EIR.

CEQA Guidelines section 15162 discusses when a subsequent EIR is required.

When an EIR has been certified...no subsequent EIR shall be prepare for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

- (1) Substantial changes are proposed in the project which will require major revisions of the environmental effects or a substantial increase in the severity of previously identified significant effects;
- (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR...due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete...shows any of the following:
  - (A) The project will have one or more significant effects not discussed in the previous EIR...;
  - (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measures or alternatives.

Based upon the decision to prepare a SEIR, the School District prepared and distributed a notice of preparation (NOP) for a 30-day review period from March 4, 2011 to April 4, 2011 in accordance with CEQA Guidelines section 15082. CEQA Guidelines section 15375 defines an NOP as:

...a brief notice sent by the lead agency to notify the responsible agencies, trustee agencies, and involved federal agencies that the lead agency plans to prepare an EIR for the project. The purpose of the notice is to solicit guidance from those agencies as to the scope and content of the environmental information to be included in the EIR.

Written responses to the NOP were received from the following agencies:

- Native American Heritage Commission (March 10, 2011)
- Brian Finegan, Attorney at Law, on behalf of land owners and developers in the Future Growth Area (April 1, 2011)
- Monterey County Resource Management Agency, Department of Public Works (April 1, 2011)
- Monterey County Resource Management Agency, Planning Department (April 4, 2011)
- Monterey Bay Unified Air Pollution Control District (April 4, 2011)
- City of Salinas Community Development Department (April 31, 2011)

The NOP and responses to the NOP are contained in [Appendix B](#), which is included on the CD located on the back inside cover of this EIR.

## ***Preparation Standards and Methods***

This SEIR has been prepared by EMC Planning Group Inc. (hereinafter "consultant") under contract to the School District in accordance with CEQA and its implementing guidelines. This SEIR has been prepared using available information from private and public sources noted herein, as well as information generated by the consultant through field investigation. This SEIR will be used to inform public decision-makers and their constituents of the environmental impacts of the proposed project.

This SEIR addresses only those issues that were not, and could not have been, addressed in the Acquisition EIR, or that need further discussion based upon the details of the project description, or the changes in the regulatory setting. For example, there was no proposed site plan in the Acquisition EIR and therefore, the specific traffic, access, and circulation impacts could not be fully addressed at that time. Also, climate change and greenhouse gas emissions were not addressed in the CEQA process when the Acquisition EIR was prepared. Since that time, the CEQA Statutes and Guidelines have been revised to include the analysis of greenhouse gas emissions in the CEQA process.

This SEIR describes and evaluates the existing environmental setting of the project site and surrounding areas, discusses the characteristics of the proposed project, identifies environmental impacts associated with the proposed project, and provides feasible mitigation measures that can be implemented to reduce or avoid identified adverse environmental impacts.

If the SEIR identifies a significant adverse impact, the School District Board of Trustees may approve the project only if it finds that mitigation measures have been required to reduce the impact's significance, or that such mitigation is infeasible for specified social, economic, and/or other reasons (Public Resources Code section 21081). The School District may not omit from the project conditions a mitigation measure associated with a project impact identified in the EIR as significant, unless it makes specific findings regarding the omission.

This SEIR is an objective public disclosure document that takes no position on the merits of the proposed project. Thus, the findings of this SEIR do not advocate a position "for" or "against" the proposed project. Instead, this SEIR provides information on which decisions about the proposed project can be based. The SEIR has been prepared according to the professional standards and practices of the consulting team's individual disciplines and in conformance with the legal requirements and informational expectations of CEQA and its implementing guidelines.

## 1.3 SEIR USES AND APPROVALS

As mandated by CEQA Guidelines section 15124(d), this section contains a list of agencies that are expected to use the SEIR in their decision-making, and a list of the approvals for which the SEIR will be used. These lists include information that is known to the lead agency.

### ***Local Agencies***

- Salinas Union High School District (Lead Agency)
  - Approval - site plan
  - Site development
- City of Salinas
  - Approval - connection to the City's sewer and water systems
- County of Monterey
  - Approval - Encroachment permit on Rogge Road (Public Works)
  - Approval – Septic tank demolition permit (Environmental Health)
  - Approval – Well abandonment permit, if and when abandonment is necessary

### ***Regional Agencies***

- Monterey Bay Unified Air Pollution Control District
  - Approval - Demolition permit (existing farmhouse)

### ***State Agencies***

- Division of the State Architect
  - Approval – Project plans approval
- Office of Public School Construction
  - Approval – Funding Application
- California Department of Toxic Substances Control (DTSC)

- Approval – Final site approval
- Central Coast Regional Water Quality Control Board
  - Approval – National Pollutant Discharge Elimination System Permit for Construction

## 1.4 TERMINOLOGY USED IN THE SEIR

### ***Characterization of Impacts***

This SEIR uses the following terminology to denote the significance of environmental impacts:

- “No impact” means that no change from existing conditions is expected to occur;
- A “less than significant impact” would cause no substantial adverse change in the physical environment, and no mitigation is recommended;
- A “significant impact” or “potentially significant impact” would, or would potentially, cause a substantial adverse change in the physical environment, and mitigation is required; and
- A “significant and unavoidable impact” would cause a substantial change in the physical environment and cannot be avoided if the project is implemented; mitigation may be required, but will not reduce the impact to less than significant levels.

### ***Abbreviations and Acronyms***

ARB	Air Resources Board
AQMP	Air Quality Management Plan
BAAQMD	Bay Area Air Quality Management District
CAAA	California Clean Air Act
CAA	Clean Air Act
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CEQA	California Environmental Quality Act

## 1.0 INTRODUCTION

CFC	Cholorofluorocarbons
CH <sub>4</sub>	Methane
CNEL	Community Noise Equivalent Level
CO	Carbon Monoxide
CO <sub>2</sub>	Carbon Dioxide
CO <sub>2</sub> e	Carbon Dioxide Equivalent
dB	Decibel
dBA	Decibel A-weighted
DTSC	California Department of Toxic Substances Control
EPA	Environmental Protection Agency
FRM	Federal Reference Method
IR	Environmental Impact Report
GHG	Greenhouse Gas
GP	General Plan
HFC	Hydrofluorocarbons
kWh	Kilowatt Hour
LEED	Leadership in Energy and Environmental Design
LCFS	Low Carbon Fuel Standards
LGOP	Local Government Operations Protocol
MBUAPCD	Monterey Bay Unified Air Pollution Control District
MWh	Megawatt Hour
N <sub>2</sub> O	Nitrous Oxide
NPDES	National Pollutant Discharge Elimination System
NOP	Notice of Preparation
O <sub>3</sub>	Oxygen

PEA	Preliminary Environmental Assessment
PM <sub>2.5</sub>	Particulate Matter 2.5 microns of less
PM <sub>10</sub>	Particulate Matter 10 microns of less
PV	Photovoltaic (solar)
RWQCB	Regional Water Quality Control Board
SEIR	Subsequent Environmental Impact Report
SO <sub>2</sub>	Sulfur Dioxide
SUHSD	Salinas Union High School District
SWPPP	Storm Water Pollution Prevention Plan
Tg	Teragrams
TIA	Traffic Impact Analysis
VOC	Volatile Organic Compounds



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# SETTING, ANALYSIS, AND MITIGATION

## 2.1 AESTHETICS

This section of the EIR addresses the project's effect on visual resources, the change in the visual character of the project site and its surroundings, and new sources of light. The discussion in this section is based upon information from the Acquisition EIR (2006), a landscape site plan prepared for the proposed project by Kasavan Architects (2011), and a lighting plan prepared for the proposed project by Aurum Consulting Engineers Monterey Bay, Inc. (2010). A copy of the lighting plan can be found in [Appendix C](#), which is included on the CD located on the back inside cover of this EIR.

The City of Salinas Community Development Department submitted a response letter to the NOP. The letter expresses concern that the current design and siting of the high school campus does not reflect the New Urbanism design principals encouraged in the Salinas General Plan. The City requested that the potential impacts related to visual character should be addressed. This SEIR addresses those concerns to the extent they are related to CEQA.

### ***Standards of Significance***

CEQA Guidelines appendix G indicates that a project may have a significant effect on the environment if it would:

- have a substantial adverse effect on a scenic vista;
- substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- substantially degrade the existing visual character or quality of the site and its surroundings; and/or
- create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area.

## ***Background Information***

The Acquisition EIR analyzed the aesthetic impacts associated with the acquisition and development of a high school at the project site, although the analysis was limited as no site plan or construction plans were available at the time. According to the California Scenic Highway Mapping System, the project site is not located on or within the vicinity of an officially designated or eligible State Scenic Highway ([http://www.dot.ca.gov/hq/LandArch/scenic\\_highways/index.htm](http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm)). The acquisition of the project site and the subsequent development of the proposed project would not result in damage to any scenic resources within a state scenic highway. Neither the City of Salinas nor the County of Monterey identifies the project area as a scenic area in their general plans (Acquisition EIR, page 2-1). The acquisition and subsequent development of the project site would not have a substantial adverse effect on a designated scenic vista. These environmental issues were adequately addressed in the Acquisition EIR and therefore, are not addressed in this SEIR.

At the time of the Acquisition EIR, the School District did not have a site plan or a time for construction to occur. Therefore, the Acquisition EIR concluded that additional environmental review would need to occur for certain potential aesthetic impacts in the future if and when the School District proposed a specific project on the site. The Acquisition EIR stated that landscaping amenities with the intent to reduce visual impacts and otherwise beautify the school site would need to be evaluated in supplemental environmental review (original EIR, page 2-2). The Acquisition EIR also concluded that potential impacts due to light pollution from the school facilities would need to be evaluated in supplemental environmental review, and Mitigation Measure AE-1 in the Acquisition EIR requires the District to prepare a lighting plan evaluating the future proposed school facilities. For this subsequent EIR, a lighting plan and a landscape plan have been prepared and are used in the analysis below.

## ***Environmental Setting***

### **Regional Setting**

The City of Salinas is an urban community situated in the northern region of the Salinas Valley. The region is rich with fertile soils and agricultural crops including strawberries and lettuce. Two mountain ranges are visible from Salinas as well as the project site specifically: the Gabilan mountain range to the northeast and the Sierra de Salinas mountain range to the southwest. The Gabilan range is visible from the project site and surrounding area, consequently affording views of past and present mining activities.

## Local Environmental Setting

The project site is flat, and ranges in elevation from about 140 to about 150 feet above mean sea level. The project site is currently used for agricultural row crops and is located on the urban edge of the City of Salinas. The project site is not currently in a natural state, although farmland does provide open space and aesthetic benefits. Little to no light is emitted currently from the project site. Improvements on site include one single family residence with associated ornamental plants, as well as several accessory farm-related structures. The accessory structures include a two-car garage, farm machinery shed, and granary. The residence was constructed in 1940 to 1941. Several irrigation system structures are located on site. There is an electrical box located north of water tanks, which is used to power the irrigation pump located about 30 feet east. Refer to [Figure 4, Site Photographs](#), in Section 1 to see the existing conditions on the project site.

Aboveground electrical lines, power poles, and pole-mounted transformers are located along the north, west, and southern perimeters of the site. There are no creeks or other water features located on site.

Existing adjacent land uses include a residential subdivision to the west and row crops to the north, east, and south. Rogge Road runs along the northern perimeter. Beyond Rogge Road is agricultural land, a harvesting business with an equipment storage yard, a bus storage yard, and two single family dwellings. The adjacent subdivision includes single family tract homes, and the La Joya Elementary School. Strawberries are the primary agricultural crop in the vicinity. Refer to [Figure 3, Aerial Photograph](#), in Section 1 to see the existing site and surrounding area.

## Project Analysis

### Visual Impact on the Site and Surrounding Areas

[Figure 10, Landscape Site Plan](#), presented in Section 1.0, shows the area of the project site that will be landscaped. According to the landscape site plan, approximately 50 percent of the project site would be hardscape and 50 percent would be landscaped, including athletic fields.

The new high school would be immediately visible from Rogge Road. The homes immediately adjacent in the residential neighborhood to the west back up to the school. Therefore, the school would only be visible over the back fences of these homes and at the terminus of Topaz Way. One home fronting at the intersection of Jade Drive and Topaz Way would have direct visual access to the school. Agricultural fields are adjacent to the school to the east and to the south.

The development of a new high school facility would permanently alter the existing character and landscape of the project site. Although the agricultural character of the site would change,

due to the fact that the site is currently used for irrigated agriculture and is developed with several structures, the change in character would not be as significant as if the site were currently in a natural state. By annexing the Future Growth Area, the City of Salinas acknowledged that the area, including the project site, would be altered from its current agricultural use to urban uses. The proposed project is consistent with the City of Salinas general plan land use designation for the project site, and is adjacent to an existing residential neighborhood. However, development of the high school on farmland, and adjacent to farmland and/or farmland-related uses on three sides, would substantially degrade the existing visual character or quality of the site and its surroundings.

### Light and Glare

The proposed project includes a lighted stadium that would be used for football, soccer, and track and field competitions. The stadium would be located in the northeastern corner of the project site. Outdoor lighting would be required for nighttime athletic events at the stadium, which would create a new source of light that may adversely affect nighttime views in the area. Adversely affecting nighttime views could be considered a significant impact. A lighting plan, which includes design standards, was prepared for the proposed project. The stadium field lighting will be very similar to the lighting installed in 2009 at Everett Alverez High School in Salinas. The best available cut-off glare shields available will be used. A preliminary lighting plan, which is included in [Appendix C](#), includes the following:

1. Football and soccer require adequate lighting from ground level to approximately 50 feet above ground to accommodate the combination of aerial and ground play.
2. There will be four light poles with lights approximately 85 feet in height above the final playing field level.
3. Stadium lights will be 1,500 watt metal halide with glare shields. These lights will light the play area, but minimize light overflow.
4. Football and soccer fields will have an average of 50 footcandles at playing field level.
5. Track will average 20 footcandles on the track.
6. Footcandle levels created by stadium field lighting will average about 0.1 to 0.2 foot candles horizontal and 0.5 to 0.6 average vertical footcandles measured at 40 feet out from the edge of the track.

The plan also summarizes the state, city, and industry standards and requirements for campus exterior and stadium lighting. The report also lists the design measures that the proposed project would implement to reduce the impact of light emitted from the proposed project on the surrounding area.

The project site is located within the Future Growth Area of the City of Salinas. The area east of the project site has a Salinas General Plan land use designation of “Mixed Use” and the area south of the project site has a land use designation of “Residential Low Density” beyond the future extension of Russell Road along the southern border of the school site. Refer to [Figure 5, Land Use and Circulation Policy Map](#), in Section 1 of this SEIR.

The School District has consulted with the City of Salinas, and no development plans have been submitted for the properties east and south of the school site. Therefore, it is unknown what specific kinds of projects and project designs could eventually be constructed adjacent to the school. Should future development consist of land uses that could be sensitive to the views of the high school athletic fields, the School District is open to discussing a landscape treatment, as feasible, along the perimeter of the eastern and/or southern boundaries of the school with the City of Salinas and adjacent developers. The lighting plan specifications were developed to ensure that the athletic field lighting would not have a significant light effect on adjacent land uses.

## ***Impacts and Mitigation Measures***

**Significant and Unavoidable Impact – Substantially Degrade the Existing Visual Character or Quality of the Site.** Although located on the urban edge of the City of Salinas and adjacent to an existing residential neighborhood, a high school developed on this farmland would permanently alter the existing rural visual character of the site and substantially degrade the existing visual character or quality of the site. This impact is considered significant and unavoidable. The School District Board of Trustees will be required to adopt a statement of overriding considerations, finding that the economic and social benefits of constructing a school at this location outweigh this significant and unavoidable visual impact.

**Less than Significant Impact– Stadium Lighting.** The proposed project includes detailed specifications to ensure that stadium lighting will not result in substantial light or glare that would adversely affect day or nighttime views in the area.

## **2.2 AIR QUALITY**

Information in this section is drawn primarily from the Monterey Bay Unified Air Pollution Control District’s (MBUAPCD) and *CEQA Air Quality Guidelines* (2008) and conversations with MBUAPCD staff. No NOP response letters were received regarding air quality impacts.

## ***Standards of Significance***

CEQA Guidelines appendix G indicates that a project may have a significant effect on the environment if it would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Cause a violation of any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations; or
- Create objectionable odors affecting a substantial number of people.

## ***Background Information***

The Acquisition EIR analyzed the air quality impacts associated with the acquisition and development of the project site by the School District. The Acquisition EIR included a Consistency Determination from the MBUAPCD stating that the acquisition and subsequent development of the site would be consistent with the Air Quality Management Plan (Acquisition EIR, page 2-17). The Acquisition EIR concluded that the acquisition of the project site and subsequent development of the proposed project may result in significant short term construction emissions and included mitigation measures AQ-1 and AQ-2, which would reduce these potential impacts to a less than significant level (Acquisition EIR, page 2-20). The Acquisition EIR also concluded that the demolition of the existing on-site structures may result in the release of asbestos, which would be a potentially significant impact. DTSC requires the School District to prepare a Preliminary Environmental Assessment (PEA) of potential hazards at the project site (Acquisition EIR, page 2-21). A PEA was prepared for the project site by Kleinfelder, Inc in September 2006. The PEA concluded that the existing onsite structure could contain asbestos and/or lead based paint, resulting in adverse health effect if exposed to humans (Acquisition EIR, page 2-44). The Acquisition EIR included mitigation measure HZ-1, which would reduce the impact to a less than significant level. Although the air quality in the North Central Coast Air Basin is generally good, the basin is considered as a non-attainment area due to its exceedances of ozone and particulate matter 10 microns or less (PM<sub>10</sub>). The Acquisition EIR discussed the potential for development of the project site to expose sensitive receptors to areas of high concentrations of carbon monoxide (CO), or “hot spots”. These areas are associated with



signalized intersections operating at unacceptable levels of service. Based on the traffic report that was prepared for the Acquisition EIR, it was concluded that although the development of the project site is not anticipated to result in significant concentrations of CO, this issue would need to be analyzed again when more specific site plans were prepared (Acquisition EIR, page 2-18). According to the *SUHSD #5 High School, Salinas, California Traffic Impact Analysis* included as Appendix G in a CD in the back of this EIR, with mitigation measures, the proposed project would not result in any intersections operating at unacceptable levels of service. Refer to Section 2.8, Transportation and Traffic, of this EIR. Therefore, the proposed project would not result in any CO “hot spots” and no further analysis is required in this document. The Acquisition EIR also concluded that the development of the school would be a contributor to the cumulative effects of air emissions from general plan build out and would therefore result in an unavoidable, significant cumulative impact. Even with the implementation of mitigation measure CUM-AQ-1, the impact would still be significant and unavoidable (Acquisition EIR, page 3-3). These issues were analyzed in the Acquisition EIR and the School District Board of Trustees adopted a statement of overriding considerations. Therefore, this impact will not be analyzed again in this document.

The final Acquisition EIR includes a comment letter submitted by the MBUAPCD stated that the draft Acquisition EIR did not address direct emissions and that they should be analyzed and included in the environmental document when construction of the high school is proposed (final Acquisition EIR, page 2-15). Therefore, direct emissions are being addressed in environmental review process for construction of the high school.

## ***Policies and Regulations***

### **Federal**

The federal Clean Air Act (CAA), adopted in 1970 and amended in 1990, provides the basis for federal air quality standards. The CAA is implemented by the U.S. Environmental Protection Agency. The CAA established two types of national air standards: primary and secondary. Primary standards set limits to protect public health, including the health of sensitive persons such as asthmatics, children, and the elderly. Secondary standards set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings.

### **State**

The Lewis-Presley Air Quality Management Act, adopted in 1976 and amended in 1987, and the California Clean Air Act (CCAA), adopted in 1988 and amended in 1992, provide the basis

for air quality regulation in the state, particularly maintaining ambient air quality standards for ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, and particulate matter, collectively referred to as “criteria pollutants.” The California Environmental Protection Agency Air Resources Board (ARB) is responsible for coordinating air quality attainment efforts, setting standards, conducting research and creating solutions to air pollution.

### **Standards for Criteria Air Pollutants**

In general, criteria pollutants are pervasive constituents, such as those emitted in vast quantities by the combustion of fossil fuels. Both the State of California and the federal government have developed ambient air quality standards for the identified criteria pollutants, which include ozone, carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), and suspended particulate matter 10 microns or less (PM<sub>10</sub>), and 2.5 microns or less (PM<sub>2.5</sub>). [Table 1, Federal and State Ambient Air Quality Standards](#), lists state and federal ambient air quality standards for criteria air pollutants. The State standards generally have lower thresholds than the federal standards, yet both are applicable to the proposed project. When thresholds are exceeded at regional monitoring stations, an “attainment plan” must be prepared that outlines how an air quality district will achieve compliance. Generally, these plans must provide for district-wide emission reductions of five percent per year averaged over consecutive three-year periods.

### **Monterey Bay Unified Air Pollution Control District**

The MBUAPCD exercises its jurisdiction within the North Central Coast Air Basin (hereinafter referred to as “air basin”), which includes Monterey, Santa Cruz, and San Benito counties. The MBUAPCD is charged with regulatory authority over stationary sources of air emissions, monitoring air quality within the air basin, providing guidelines for analysis of air quality impacts pursuant to CEQA, and preparing an air quality management plan or Clean Air Plan. ARB also grants air districts explicit statutory authority to adopt indirect source regulations and transportation control measures, including measures to encourage the use of ridesharing, flexible work hours, or other measures that reduce the number or length of vehicle trips.

**Air Quality Management Plan.** The MBUAPCD is delegated with local responsibility to implement both federal and state mandates for improving air quality in the air basin through implementation of an air quality plan. The MBUAPCD adopted the Monterey Bay Unified Air Pollution Control District Air Quality Management Plan (AQMP) in 1991 and several updates in subsequent years. The AQMP presents measures to control emissions of volatile organic compounds (VOC) from stationary and mobile sources in order to meet the ozone standard mandated by the CCAA. In 2006 the ARB made the AAQS more stringent by adding an 8-hour ozone average to the standard.

**Table 1 Federal and State Ambient Air Quality Standards**

Pollutant	Averaging Time	California Standards <sup>1</sup>		Federal Standards <sup>2</sup>			
		Concentration <sup>3</sup>		Primary <sup>3,4</sup>		Secondary <sup>3,5</sup>	
		ppm	µg/m <sup>3</sup>	ppm	µg/ m <sup>3</sup>	ppm	µg/ m <sup>3</sup>
Ozone	1 Hour	0.09	180	-		-	
	8 Hour	0.07	137	0.075	147	0.075	147
PM <sup>10</sup>	24 Hour		50		150		150
	Annual		20		-		-
PM <sup>2.5</sup>	24 Hour	No Separate State Standard			35		35
	Annual		12		15		15
Carbon Monoxide (CO)	8 Hour	9	10,000	9	10,000	-	-
	1 Hour	20	23,000	35	40,000	-	-
Nitrogen Dioxide (NO <sub>2</sub> )	Annual	0.030	57	53 ppb	100	53 ppb	100
	1 Hour	0.18	339	100 ppb	188	-	-
Sulfur Dioxide (SO <sub>2</sub> )	24 Hour	0.04	105	-	-	-	-
	3 Hour	-	-	-	-	0.5	1,300
	1 Hour	0.25	655	75 ppb	196		-
Lead <sup>6</sup>	30 Day Average		1.5		-		-
	Calendar Quarter		-		1.5		1.5
	Rolling 3-month		-		0.15		0.15
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per km. - visibility of 10 miles or more due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape.		No Federal Standards			
Sulfates	24 Hour		25				

## 2.0 SETTING, ANALYSIS, AND MITIGATION

Hydrogen Sulfide	1 Hour	0.03	42	
Vinyl Chloride <sup>6</sup>	24 Hour	0.01	26	

**Source:** California Air Resources Board, September 8, 2010

### Notes:

1. California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter—PM<sub>10</sub>, PM<sub>2.5</sub>, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM<sub>10</sub>, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m<sup>3</sup> is equal to or less than one. For PM<sub>2.5</sub>, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current federal policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent procedure which can be shown to the satisfaction of the ARB to give equivalent results to protect the public health.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the EPA.
8. To attain this standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 0.100 ppm (effective January 22, 2010). Note that the EPA standards are in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national standards to the California standards the units can be converted from ppb to ppm. In this case, the national standards of 53 ppb and 100 ppb are identical to 0.053 ppm and 0.100 ppm, respectively.
9. On June 2, 2010, the U.S. EPA established a new 1-hour SO<sub>2</sub> standard, effective August 23, 2010, which is based on the 3-year average of the annual 99th percentile of 1-hour daily maximum concentrations. EPA also proposed a new automated Federal Reference Method (FRM) using ultraviolet technology, but will retain the older pararosaniline methods until the new FRM have adequately permeated State monitoring networks. The EPA also revoked both the existing 24-hour SO<sub>2</sub> standard of 0.14 ppm and the annual primary SO<sub>2</sub> standard of 0.030 ppm, effective August 23, 2010. The secondary SO<sub>2</sub> standard was not revised at that time; however, the secondary standard is undergoing a separate review by EPA. Note that the new standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the new primary national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
10. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants
11. National lead standard, rolling 3-month average: final rule signed October 15, 2008.

**MBUAPCD CEQA Air Quality Guidelines (2008).** The Monterey Bay Unified Air Pollution Control District (MBUAPCD), and other regional-wide air district authorities, are charged with regulatory authority over stationary sources of air emissions, monitoring air quality within an air basin, providing guidelines for analysis of air quality impacts pursuant to CEQA, and preparing air quality management plan, or Clean Air Plans, intended to maintain or improve air quality in the region. Attainment plans must be prepared by the air district when a criteria pollutant is in excess of standards on consecutive accounts. The California Air Resources Board also grants air districts explicit statutory authority to adopt indirect source regulations and transportation control measures, including measures to encourage the use of ridesharing, flexible work hours, or other measures that reduce the number or length of vehicle trips.

The MBUAPCD is delegated with the responsibility at the local level to implement both federal and state mandates for improving air quality in the air basin through an air quality plan. The MBUAPCD has adopted several plans in an attempt to achieve state and federal air quality standards. As required by the California Clean Air Act, MBUAPCD adopted the Monterey Bay Unified Air Pollution Control District Air Quality Management Plan (AQMP) in 1991, which contains the steps that will be taken to come into attainment with the state and federal standards. The AQMP addressed planning requirements to meet the ozone standard mandated by the California Clean Air Act and included measures to control emissions of VOC's from stationary and mobile sources. The AQMP has undergone subsequent "updates" -the most recent in August 2008. The 2008 AQMP is a transitional plan shifting the focus of the MBUAPCD efforts from achieving the 1-hour component of the State Ambient Air Quality Standards to achieving the new 8-hour requirement. The plan includes an updated air quality trends analysis, which now reflects both the 1 and 8-hour standards, as well as an updated emission inventory, which includes the latest information on stationary, area and mobile emission sources.

## ***Environmental Setting***

### **Regional Climate, Topography, and Existing Conditions**

The air basin lies along the central coast of California covering an area of approximately 5,159 square miles. The air basin is comprised of several interconnected valleys: a portion of the Santa Clara Valley; San Benito Valley; Salinas Valley, and Carmel Valley. The semi-permanent high-pressure cell in the eastern Pacific Ocean is the basic controlling factor in the climate of the air basin. In the summer, the high pressure cell is dominant and causes persistent west and northwest winds over the entire California coast. Air descends in the Pacific high-pressure cell forming a stable temperature inversion of hot air over a cool coastal layer of air. The onshore air currents pass over cool ocean waters to bring fog and relatively cool air into the coastal valleys and the warmer air aloft acts as a lid to inhibit vertical air movement.

The generally northwest-southeast orientation of mountain ridges restricts and channels the summer on-shore air currents. Surface heating in the interior portion of the Salinas and San Benito valleys creates a weak low pressure, which intensifies the on-shore airflow during the afternoon and evening.

In the fall, the surface winds become weak, and the marine layer grows shallow, dissipating altogether on some days. The airflow is occasionally reversed in a weak offshore movement, and the relatively stationary air mass is held in place by the Pacific high-pressure cell, which allows pollutants to build up over a period of a few days. It is most often during this season that the north or east winds develop to transport pollutants from either the San Francisco Bay Area or the Central Valley into the air basin.

During the winter, the Pacific high-pressure cell migrates southward and has less influence on the air basin. Air frequently flows in a southeasterly direction out of the Salinas and San Benito valleys, especially during night and morning hours. Northwest winds are nevertheless still dominant in winter, but easterly flow is more frequent. The general absence of deep, persistent inversions and the occasional storm systems usually result in good air quality for the basin as a whole in winter and early spring.

The project site is currently underdeveloped and used for agricultural production. There is one on-site single family home with associated structures.

### ***Project Analysis***

#### **Direct Stationary Source Emissions**

The proposed project would result in the construction of a high school on the project site and would result in some direct emissions. Direct stationary source emissions are typically associated with some commercial, industrial, or institutional uses. Consistency of direct emissions subject to MBUAPCD permit authority is determined by assessing whether the emission source complies with all applicable MBUAPCD rules and regulations, and/or whether or not project emissions are accommodated in the AQMP. According to Jean Getchell, Supervising Air Quality Planner at the MBUAPCD, typical equipment associated with the operation of schools is accounted for in the AQMP. Unusual uses, such as swimming pools or indoor ice skating rinks, may include equipment not accounted for in the AQMP (Jean Getchell, telephone conversation, April 11, 2011). The proposed project does not include any such uses and would not result in any significant direct emissions.

## ***Impacts and Mitigation Measures***

**Less than Significant – Direct Emissions.** The proposed project does not include any unusual uses that would utilize equipment that would result in direct emissions not already accounted for in the MBUAPCD AQMP. The proposed project would not result in any significant levels of direct air quality emissions.

## **2.3 CLIMATE CHANGE**

Although not required when the 2006 EIR was prepared and certified by the School District, the CEQA Guidelines now require lead agencies to analyze greenhouse gas (GHG) emissions effects of projects. This section presents an overview of existing climate change guidelines and legislation, identifies and quantifies sources of GHG emissions for the proposed project, identifies GHG reduction measures planned for incorporation into the proposed project, and identifies the significance of GHG emissions that would be generated by the proposed project. Information in this section is derived primarily from state regulations and laws, various state and regional agency resources, as well as the 2007 *Final Supplement for the City of Salinas General Plan Final Program EIR* (GP SEIR).

The Monterey Bay Peninsula Air Pollution Control District (MBUAPCD) and the City of Salinas submitted response letters to the NOP. The City's comments state that GHG emissions should be evaluated within the context of the GP SEIR and should address how the City's approach to analyzing GHG emissions has evolved since that time. The MBUAPCD letter describes the recently adopted CEQA Guideline amendments that address greenhouse gases.

## ***Policy and Regulatory Issues***

### **California Climate Change Legislation/Regulation**

The following is a summary of important state legislation that is directly and indirectly related to climate change.

**Title 24 Standards/Energy Conservation.** California's Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) were first established in 1978 to reduce California's energy consumption. The standards were most recently updated in January 2010. Energy efficient buildings require less electricity, natural gas, and other fuels, use of which creates GHG emissions.



**California Assembly Bill No. 1493 (Pavley).** AB 1493, enacted on July 22, 2002, required the California Air Resources Board (CARB) to develop and adopt regulations that reduce GHG emitted by new light-duty passenger vehicles. The regulations require auto manufacturers to reduce vehicle emissions of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and hydrofluorocarbons (HFCs) from light duty passenger vehicles, including passenger cars, light-duty trucks, and medium-duty trucks/vehicles.

The Pavley bill regulations were designed to begin with the 2009 model year and end in 2016. The period from 2009 to 2016 is known as “Pavley 1”; the period from 2017 to 2020 is “Pavley 2” and would require greater GHG reduction by 2020. Pavley 2 is a commitment made by the CARB to extend progress from Pavley 1 and to increase the greenhouse gas reduction requirements.

The regulations had been threatened by automaker lawsuits and were stalled by the U.S. Environmental Protection Agency’s delay in reviewing and then initially denying California’s request for a waiver from federal standards that would have potentially prevented California’s ability to implement the regulations. The parties involved entered a May 19, 2009 agreement to resolve these issues. With the granting of the waiver on June 30, 2009, it is expected that the Pavley regulations will reduce GHG emissions from California passenger vehicles by about 22 percent in 2012 and about 30 percent in 2016 (<http://www.arb.ca.gov/cc/ccms/ccms.htm>).

**Renewable Energy Legislation/Orders.** The Renewable Portfolio Standard was established in 2002 under Senate Bill 1078 and accelerated in 2006 under Senate Bill 107. These bills obligated investor-owned utilities, energy service providers and community choice aggregators to procure 20 percent of their electricity production from renewable energy sources no later than 2010. Executive Order S-14-08, signed in 2008, requires California utilities to obtain 33 percent of their electricity production from renewable sources by 2020.

**Executive Order S-3-05.** Governor Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05, GHG emission reduction targets as follows: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; by 2050, reduce GHG emissions to 80 percent below 1990 levels. Some literature equates these reductions to 11 percent by 2010 and 25 percent by 2020.

**California Assembly Bill 32.** The California Global Warming Solutions Act of 2006 requires CARB to adopt rules and regulations that would achieve GHG emissions equivalent to statewide levels in 1990 by 2020. Among its key components are:

- Identify a list of discrete early action GHG emission reduction measures that can be implemented prior to the adoption of the statewide GHG limit and the measures required to achieve compliance with the statewide limit;

- Adopt a statewide GHG emissions limit that is equivalent to the 1990 level (an approximate 30 percent reduction in existing statewide GHG emissions);
- Adopt regulations to implement the early action GHG emission reduction measures;
- Adopt quantifiable, verifiable and enforceable emission reduction measures by regulation that will achieve the statewide GHG emissions limit by 2020, to become operative on January 1, 2012 at the latest; and
- Monitor compliance with and enforce adopted emission reduction measures.

CARB's *AB 32 Scoping Plan*, which was adopted by CARB in December 2008, contains the main strategies California will pursue to reduce greenhouse gas emissions. These include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms (i.e. cap-and-trade), and an administration fee to fund the program. Several of the Scoping Plan regulations are relevant to the proposed project due to their potential to reduce GHG emissions from activities related to the project. Examples include regulations to reduce emissions from vehicles and regulations to require improved energy efficiency in buildings.

AB 32 does not mandate action at the local level. However, the Scoping Plan identifies that local agencies should strive to reduce GHG emissions within their boundaries by 15 percent from 2008 levels by 2020 to help achieve emissions reductions needed to meet AB 32 goals.

**Executive Order S-01-07 (Low Carbon Fuel Standard).** Issued on January 18, 2007, this order mandates that a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020 and that a Low Carbon Fuel Standard (LCFS) for transportation fuels be established. The LCFS addresses the type of fuel used in vehicles and is intended to reduce the carbon content of the fuel, therefore reducing GHG emissions even if total fuel consumption is not reduced.

On April 23, 2009, CARB approved the LCFS regulation. Therefore, it is assumed that the effects of the LCFS would be a 10% reduction in GHG emissions from fuel use by 2020 for the vehicle types addressed by the regulation.

**California Senate Bill 97.** SB 97 was signed in August 2007. SB 97 directed the Office of Planning and Research to prepare, develop, and transmit to the California Natural Resources Agency guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions by July 1, 2009. The Natural Resources Agency was required to certify or adopt those guidelines by January 1, 2010. SB 97 describes the CEQA process as an appropriate tool for addressing and mitigating global warming impacts from new development projects that are subject to CEQA.

In July 2009, the California Natural Resources Agency published proposed amendment of regulations based on the Office of Planning and Research's proposed revisions to CEQA to address GHG emissions. Numerous comments were submitted and in December 2010, the Natural Resources Agency adopted the proposed amendments, which went into effect in 2010. Among the highlights of the changes are: local agencies are encouraged to adopt their own thresholds of significance, climate action plans can be used as a basis to determine whether the climate change impacts of individual projects are significant, and modifications to Appendix G of the CEQA Guidelines as a basis to ensure integration of climate change considerations into the CEQA analysis process.

**California Senate Bill 375.** This 2008 bill sets forth a mechanism for coordinating land use and transportation on a regional level for the purpose of reducing GHG. The focus is to reduce miles traveled by passenger vehicles and light trucks. CARB is required to set GHG reduction targets for each metropolitan region for the years 2020 and 2035. Regional organizations for each metropolitan area are responsible for working with CARB to set the reduction targets and to implement programs. SB 375 aligns: 1) regional transportation plans and policies; 2) housing policies and housing allocations; and 3) GHG emissions reductions for the transportation sector (passenger vehicles and light trucks).

**Executive Order S-13-08.** This Executive Order enhances the state's management of climate impacts from sea level rise, increased temperatures, shifting precipitation and extreme weather events. In December 2009, the California Natural Resources Agency released the *2009 California Climate Adaptation Strategy Discussion Draft*. The document provides interim guidance to state and local agencies on planning for the impacts and risks of climate change.

**California Green Building Standards Code.** The Green Building Standards Code (hereinafter "Green Building Code"), requiring all new buildings in the state to be more energy efficient and environmentally responsible, took effect on January 1, 2011. These comprehensive regulations will achieve major reductions in greenhouse gas emissions, energy consumption and water use to create a greener California. Requirements of the Code for new schools in California include, but may not be limited to:

- Preparing a Storm Water Pollution Prevention Plan (SWPPP) that has been designed, specific to its site, conforming to the State Storm water NPDES Construction Permit or local ordinance, whichever is stricter, as is required for projects one acre or more (Section 5.106.1);
- Providing bicycle parking and changing rooms (Section 5106.4);
- Providing designated parking for low-emitting, fuel-efficient and carpool/van pool vehicles (Section 5.106.5.2);

- Complying with lighting power requirements in the California Energy Code, CCR, Part 6, and design interior and exterior lighting such that zero direct-beam illumination leaves the building site. Meet or exceed exterior light levels and uniformity ratios for lighting zones 1–4 as defined in Chapter 10 of the California Administrative Code, CCR, Part 1 (Section 5.106.7);
- Grading and paving the site shall to keep surface water from entering buildings. Construction plans shall indicate how site grading or a drainage system will manage all surface water flows (Section 5.106.10).
- Reducing water consumption by 20 percent (Section 5303.2);
- Reducing wastewater generation by 20 percent (Section 5.303.4);
- Reducing outdoor potable water use. For new water service for landscaped areas between 1,000 square feet and 5,000 square feet (the level at which Water Code §535 applies), separate meters or submeters shall be installed for indoor and outdoor potable water use (Section 5.304.2);

Installing irrigation controllers and sensors (Section 5.304.3);

- Providing weather-resistant exterior walls and foundation envelope as required by California Building Code Section 1403.2 (Weather Protection) and California Energy Code Section 150, (Mandatory Features and Devices), manufacturer’s installation instructions or local ordinance, whichever is more stringent (Section 5.407.1);
- Employing moisture control measures (Section 5.407.2);
- Establishing a construction waste management plan for the diverted materials, or meet local construction and demolition waste management ordinance, whichever is more stringent, with a minimum of 50 percent diversion (Section 5.408.1);
- Reusing or recycling 100 percent of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reused or recycled (Section 5.408.4);

Providing readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics and metals (Section 5.410.1);

- Requires mandatory inspections of energy systems (e.g., heat furnace, air conditioner and mechanical equipment) for nonresidential buildings over 10,000 square feet (sf) to ensure that all are working at their maximum capacity and according to their design efficiencies (Section 5.410.4.2);

- Covering of duct openings and protection of mechanical equipment during construction (Section 5.504.3);
- Using special finish materials to control pollutant (Section 5.504.4);
- Installing carpet meeting the testing and product requirements (Section 5.504.4.4);
- Installing composite wood products used on the interior or exterior of the building that meet the requirements for formaldehyde as specified in ARB's Air Toxics Control Measure for Composite Wood (Section 5.504.4.5);
- Installing resilient flooring systems. For 50 percent of floor area receiving resilient flooring, install resilient flooring complying with the VOC-emission limits defined in the 2009 Collaborative for High Performance Schools (CHPS) criteria and listed on its Low-emitting Materials List (or Product Registry) or certified under the Resilient Floor Covering Institute (RFCI) FloorScore program (Section 5.504.4.6).;
- In mechanically ventilated buildings, providing regularly occupied areas of the building with air filtration media for outside and return air prior to occupancy that provides at least a Minimum Efficiency Reporting Value (MERV) of 8 (Section 5.504.5.3); and
- Providing indoor moisture control. Buildings shall meet or exceed the provisions of California Building Code, CCR, Title 24, Part 2, Sections 1203 (Ventilation) and Chapter 14 (Exterior Walls) (Section 5.505.1).

A complete list of mandatory and voluntary measures for schools can be review at [http://www.documents.dgs.ca.gov/dsa/pubs/GL-4\\_CalGreen.pdf](http://www.documents.dgs.ca.gov/dsa/pubs/GL-4_CalGreen.pdf).

### **State Guidance on Greenhouse Gas Emissions Analysis**

State guidance on evaluating climate change impacts of new development has been and continues to develop in response to AB 32. One such response, Senate Bill 97 (SB 97) was signed in August 2007. SB 97 directed the Office of Planning and Research to prepare, develop, and transmit to the Natural Resources Agency guidelines for the feasible mitigation of GHG emissions. The law identifies the CEQA process as an appropriate tool for addressing and mitigating global warming impacts from new development projects and prompted amendments to the CEQA Guidelines to guide impact analysis and mitigation approaches.

The California Attorney General has issued a range of opinions that have reinforced CEQA as the appropriate tool for assessing climate change impacts of new development and supporting implementation of AB 32. The California Attorney General's *Addressing Climate Change at the*

*Project Level*, released in 2008 and updated in 2010, lists a range of GHG reduction measures to be considered for inclusion in development projects to reduce their GHG emissions.

Additional guidance on potential GHG reduction measures has been provided from a variety of other sources. Two comprehensive and useful sources are the California Air Pollution Control Officers Association's (CAPCOA) *CEQA and Climate Change – Evaluating and Addressing Greenhouse Gas Emissions from Project Subject to the Environmental Quality Act*, published in 2008 and the Bay Area Air Quality Management District's (BAAQMD) *California Environmental Quality Act Air Quality Guidelines*, which were adopted in June 2010. Appendix B of the CAPCOA document contains a compendium of GHG reduction measures, along with data about reduction potential, cost, ease of implementation, etc. The BAAQMD document includes a methodology for quantifying GHG emissions from projects as well as a list of reduction measures and their respective emissions reduction potential. A number of additional air quality management agencies have recently developed or in the process of developing similar guidance and analysis tools.

Emission reduction measure guidance was developed by the three sources noted above in the context of AB 32 and the important role that local land use development projects and local lead agencies have in implementing AB 32. The “menu” of GHG reduction options developed by each source can be used by project developers in the design of proposed projects. The information is also useful to lead agencies to identify GHG reduction measures that apply to a given project type and to determine the extent to which a project proponent has incorporated applicable GHG reduction measures into a proposed project.

## **Existing Greenhouse Gas Emissions Threshold Guidance**

Identifying the significance of a project's contribution to global climate change impacts remains challenging for many local agencies since no State guidance on appropriate thresholds of significance exists. In the absence of State guidance, regional agencies such as air quality management districts and local agencies are working to develop their own thresholds. The proposed project is the first for which the School District has been required to consider climate change impacts of a project it is proposing. Like many local agencies and special districts, the School District has not yet adopted its own thresholds of significance for climate change. While the School District is the lead agency for the proposed project and is responsible for making findings regarding the proposed project's impact on climate change, the project's location within the City of Salinas suggests that the City's approach to addressing climate change on a City-wide basis can inform the School District's approach to this issue.

The framework for the City's current climate change planning is embedded in the *Final Supplement for the City of Salinas General Plan Final Program EIR* (GP SEIR), which the City

certified in 2007. The GP SEIR focused primarily on analysis of potential environmental impacts of the City's proposal to annex a large area of land to the north and east of the City known as the Future Growth Area. The *Salinas General Plan FEIR* (GP FEIR), certified in 2002, addresses impacts of the annexation at a programmatic level. However, between time the GP FEIR was certified in 2002 and the time the City formally began consideration of the Future Growth Area sphere of influence amendment and annexation, the environmental setting utilized in the General Plan FEIR had changed. The GP SEIR was prepared to address certain potential impacts of the Future Growth Area annexation under more current environmental setting conditions.

Climate change impacts of general plan build out, including build out of the Future Growth Area, were not evaluated in the GP FEIR. With the passage of AB 32 in 2006 and the rising tide of international, state, and local concern about climate change, the City incorporated analysis of potential climate change impacts of build out under the general plan into the SEIR to address this change in environmental setting that had occurred after 2002.

The GP SEIR included a basic GHG inventory and projection of GHG emissions under general plan build out. A quantified emissions reduction target for 2020 was not included in the analysis. General plan build out GHG emissions were projected to be 46 percent higher than under baseline conditions in 2000. Nevertheless, the analysis in the GP SEIR was used to conclude (page 5.5-15) that the incremental GHG emissions associated with development under the general plan would:

...cause a cumulatively considerable incremental contribution to the significant cumulative (worldwide) impacts when viewed in connection with worldwide GHG emissions. By generating increased emissions that contribute to global climate change, development that occurs in accordance with the general plan throughout the City of Salinas and within the SOI Amendment and Annexation areas would incrementally contribute to the adverse economic, public health, natural resources, and other environmental impacts mentioned earlier in this section that are projected to occur in California and throughout the world as a result of global climate change.

The GP SEIR includes nine global climate change mitigation measures (GCC measures) designed to reduce significant unavoidable climate change impacts of residential, commercial and/or industrial projects. As stated on page 5.5-15 of the GP SEIR, "the mitigation measures shall be applied to development projects throughout the City of Salinas where feasible to reduce the cumulatively significant incremental contribution to global climate change." Eight of the nine GCC measures are either actions that are the responsibility of the City (GCC measures 1 and 6) or explicitly apply to residential, commercial, and/or industrial projects. Only GCC

measure 5 appears to be relevant to a special agency public project such as a school. It requires that new development or redevelopment projects in excess of 10 acres in size meet the certification requirements of the LEED for Neighborhood Development. However, no formal certification is required.

### **Determining Significance of a Project Specific Climate Change Impacts**

The GP SEIR included the following qualitative threshold of significance, found on page 5.5-11:

The project's incremental contribution to global climate change would be considered cumulatively significant if, due to the size or nature of the project, it would generate a substantial increase in GHG emissions relative to existing conditions.

The threshold considered that under year 2020 general plan build out conditions, GHGs from development within the City and the Future Growth Area could impede attainment of the state's goal to reduce statewide GHG emissions by 30 percent to 1990 levels by the year 2020 and 80 percent below 1990 levels by 2050 as mandated in AB 32. In response to changing circumstances since the GP SEIR was adopted in 2007, the City has determined that this original qualitative threshold of significance may not provide sufficient guidance. Rather, the City has taken the position that GHG analysis guidance provided in the CEQA Guidelines should be used in assessment of GHG impacts of new land use development projects.

Amendments to the CEQA Guidelines were adopted by the state in 2010, in significant part to incorporate consideration of climate change impacts from new development. CEQA Guidelines Appendix G – Environmental Checklist Form now includes two questions pertaining to GHG emissions which are being used by many lead agencies as guidance for determining climate change impact significance:

Would the project:

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

To date, there are no initiatives in progress to develop a regional or local plan for reducing GHG emissions reduction that would apply to activities within the City of Salinas or the School District.



In absence of local GHG reduction plan, consistency of new land use development projects with AB 32 is considered an appropriate metric for assessing significance given that in light of the CEQA Guidelines, AB 32 is the only greenhouse gas reduction plan that is applicable to the proposed project. Therefore, if project-based GHG emissions cannot be reduced by 30 percent to be consistent with AB 32, the proposed project would conflict with the applicable greenhouse gas reduction plan and project impacts would be significant.

### ***Environmental Setting***

#### **Recognition and Response**

The international scientific community has concluded with a high degree of confidence that human activities are causing an accelerated warming of the atmosphere. The resulting change in climate has serious global implications and consequently, human activities that contribute to climate change may have a potentially significant effect on the environment. In the past several years, concern about climate change and its potential impacts have risen dramatically. That concern has translated into a range of international treaties aimed at diminishing the rate at which global warming is occurring. The federal government has begun to tackle concerns about climate change through a range of initiatives and regulatory actions. Many states and local agencies, private sector interests, and other public and private interests have also taken the initiative to combat climate change. At the state level, California has taken a leadership role in tackling climate change, as evidenced by the programs outlined in the Regulatory Setting section below.

#### **Causes and Effects of Climate Change**

Temperatures at the Earth's surface have increased by an estimated 1.4°F (0.8°C) between 1900 and 2005. The past decade was the warmest of the past 150 years and perhaps the past millennium. The warmest 22 years on record have occurred since 1980, and 2005 was the warmest on record. Scientific consensus is that this warming is largely the result of emissions of carbon dioxide and other greenhouse gases from human activities including industrial processes, fossil fuel combustion, and changes in land use, such as deforestation.

Unaddressed, climate change will have significant impacts across the United States and around the world. The generalized potential effects of climate change in California have been summarized in the *Climate Action Team Report to Governor Schwarzenegger and the Legislature* (California EPA 2006). Among the key effects are: substantially reduced availability of water supply; economic impacts resulting from reduced winter recreation; temperature increases projected at 8.0 to 10.4 degrees Fahrenheit under more severe emissions scenarios; exacerbation and acceleration of coastal erosion; impacts on surface water quality from seawater intrusion

into the Sacramento Delta; general decline in agricultural production resulting from increased scarcity of water supply; increased vulnerability of natural areas and agricultural production from rising temperatures and increases in potential pest infestation; increased growth rates and expanded ranges of weeds, insect pests, and pathogens with elevated temperatures; and increased energy demand especially during hot summer months. Two more recent studies provide further related information: *Climate Action Team Draft Biennial Report* (California EPA 2009) and *The Future is Now: An Update on Climate Change Science Impacts and Response Options for California* (California Climate Change Center 2009).

## Greenhouse Gases

Gases that trap heat in the atmosphere are called greenhouse gases. GHG are emitted by natural processes and human activities. The human-produced GHG most responsible for global warming and their relative contribution are CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, near surface ozone (O<sub>3</sub>), and chlorofluorocarbons (CFCs). The relative contribution of these types of GHG to global warming is summarized in [Table 2, GHG Types and Their Contribution to Global Warming](#).

**Table 2 GHG Types and Their Contribution to Global Warming**

Carbon dioxide (CO <sub>2</sub> )	53 percent
Methane (CH <sub>4</sub> )	17 percent
Near Surface Ozone (O <sub>3</sub> )	13 percent
Nitrous Oxide (N <sub>2</sub> O)	12 percent
Chlorofluorocarbons (CFCs)	5 percent

*Source:* California EPA, March 2006

California ranks as the 12th to 16th largest emitter of CO<sub>2</sub> in the world and is responsible for approximately two percent of the world's CO<sub>2</sub> emissions. Within California, 82 percent of the GHG emissions, generated in the form of CO<sub>2</sub>, are from combustion of fossil fuel, primarily in the transportation and electricity generation sectors. About 41.2 percent of all GHG emitted come from the transportation sector. Industry emissions and electricity generation are the second and third largest categories. Emissions by sector in California are presented in [Table 3, Sector Shares of Greenhouse Gas Emissions](#) (CEC June 2005 and EPA 2006).

## Greenhouse Gas Global Warming Potentials

Each type of GHG has a different capacity to trap heat in the atmosphere and each type remains in the atmosphere for a particular length of time. The ability of a GHG to trap heat is measured by an index called the global warming potential. Carbon dioxide is considered the baseline GHG

**Table 3     Sector Shares of Greenhouse Gas Emissions**

Transportation	41.2 percent
Industry	22.8 percent
Electric Power	19.6 percent
Agriculture and Forestry	8.0 percent
Other Sources	8.4 percent

*Source:*     CEC 2005, California EPA, March 2006

in this index and has a global warming potential of one. Methane has a global warming potential of 21 times that of CO<sub>2</sub> and N<sub>2</sub>O has a global warming potential of 310 times that of CO<sub>2</sub>. The families of chlorofluorocarbons, hydrofluorocarbons and perfluorocarbons have a substantially greater global warming potential than other GHG, generally ranging from approximately 1,300 to over 10,000 times that of CO<sub>2</sub>. While CO<sub>2</sub> represents the vast majority of the total volume of GHG released into the atmosphere, the release of even small quantities of other types of GHG can be significant for their contribution to climate change.

CO<sub>2</sub> is the least potent of the primary greenhouse gases. However, because CO<sub>2</sub> is produced in such huge quantities, its effect dwarfs all the other greenhouse gasses combined. To standardize how GHG emissions volumes are reported in light of the variable global warming potentials of different greenhouse gases, GHG emissions volumes are reported as though they were equivalent to a given volume of CO<sub>2</sub>. The converted metric is annotated as “CO<sub>2</sub>e”.

## **Inventories of Greenhouse Gases**

**World/U.S. Estimates of GHG Emissions.** In 2004, total worldwide GHG emissions were estimated to be 20,135 teragrams (Tg) CO<sub>2</sub> equivalent, excluding emissions/removals caused by removal of vegetation and forestry. A teragram equals one million metric tons. In 2004, GHG emissions in the U.S. were 7,074.4 Tg CO<sub>2</sub> equivalent. In 2005, total U.S. GHG emissions were 7,260.4 Tg CO<sub>2</sub>e, a 16.3 percent increase from 1990 emissions, while U.S. gross domestic product has increased by 55 percent over the same period (United States EPA 2007).

**California GHG Emissions Inventory.** California is a substantial contributor of global GHG as it is the second largest contributor in the United States and between the 12th to 16th largest in the world. Based upon the *Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004, June 2005 and December 2006* (California Energy Commission 2006, 2007), California produced 492 million metric tons (542,336,520 tons) of CO<sub>2</sub> equivalent in 2004, the latest year that emissions data is available.

## ***Project Analysis***

### **Analysis Methodology**

Per guidance provided by the California Office of Planning and Research, among others, the current basic approach for assessing the impacts of climate change is to: 1) identify sources of GHG emissions for the proposed project; 2) quantify the GHG emissions from the proposed project; 3) determine the significance of the proposed project's impact on climate change; and 4) apply feasible mitigation measures to avoid or lessen the impact. Emissions generated during both the operational phase of a project and during its construction phase are to be identified.

Greenhouse gas emissions from land-use development projects are most typically associated with transportation (direct mobile sources), burning of energy in the form of natural gas on-site for water heating and space heating (area-source emissions), and emissions created in the off-site generation of electricity demanded by a project (indirect emissions), both during project operations and project construction. A project proponent, such as the School District, typically has control over activities within the project boundary that can directly or indirectly result in GHG emissions, i.e. use of energy efficiency measures that reduce GHG emissions resulting from off-site electricity generation. On the other hand, the project proponent does not typically have control of GHG emissions generated by mobile sources such as cars or trucks that travel to the project site. However, the School District may be able to incorporate measures into a project that reduce the number of vehicle trips to a site, thereby reducing associated GHG emissions.

### **Discussion of “New” Project Emissions**

The proposed project includes the construction of a new 1,500 student high school to accommodate approximately 900 students that now attend other high schools within the School District and 600 new students, potentially from future anticipated development within the City's Future Growth Area. Currently, 75 percent of the 900 existing students attend Everett Alvarez High School, located at 1900 Independence Boulevard, and 25 percent attend North Salinas High School, located at 55 Kip Drive. Both campuses use portable classrooms to accommodate student numbers that are in excess of each school's designed enrollment capacity. Refer to Figure 2, Project Vicinity, for the location of each of these high schools in relation to the project site. The School District boundary is considered to be the boundary of mobile source GHG emissions that are generated in the process of transporting students to and from high school facilities, area source emissions from school facility heating, and indirect source emissions from generation of electricity used in the schools. The new high school may be a considerably shorter distance for many students than the existing high school they would attend if the new school were not developed. However, without a significant amount of research and analysis, the change in distances per student cannot be quantified. Therefore, the conservative approach is to assume

that the emissions associated with the 900 existing high school students would simply switch to a new high school within the School District boundary and are not considered to be “new” emissions. Consequently, the GHG emissions inventory presented below addresses only the new emissions that would be generated by introducing 600 new students into the School District at the new high school.

Area source and indirect GHG emissions as discussed below are generated by existing School District operations at Everett Alvarez and North Salinas high schools needed to accommodate the 900 students that would shift to the new high school. Analogous to mobile source GHG emissions, area source and indirect source component of the GHG inventory discussed addresses only the new area source and indirect emissions that would be generated by the 600 new students.

### Greenhouse Gas Emissions Inventory

The approach recommended by CAPCOA for quantifying GHG emissions from land use projects is utilized in this inventory. It consists of two components. The URBEMIS2007 model is used to estimate GHG emissions from mobile sources (transportation) and from area sources (most typically the on-site combustion of natural gas). CARB’s Local Government Operations Protocol (LGOP) Version 1.0, prepared in September 2008 is used as a basis to quantify GHG emissions resulting from off-site electricity generation needed to meet project demand. Similar to the *California Climate Action Registry General Reporting Protocol*, the LGOP contains emissions factors for use in quantifying indirect CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O emissions resulting from electricity generation. These factors are supplemented with information obtained from the electricity provider, Pacific Gas and Electric.

**Mobile Source and Area Source GHG Emissions.** Mobile sources (transportation) are typically the dominant source of GHG emissions for a typical development project. The URBEMIS2007 model was run to estimate mobile source emissions using trip generate rates contained in the traffic impact report prepared for the proposed project by Hatch Mott MacDonald in June 2011. According to Exhibit 6B the traffic impact report, the proposed project would generate approximately 1.85 trips to the project site per student per day. Using the URBEMIS2007 model, mobile source emissions in the form of CO<sub>2</sub> from the proposed project are estimated to be 2,496.54, or approximately 2,265 metric tons using a conversion factor of 0.907 metric tons per short ton. The results of the URBEMIS runs are shown in [Appendix D, URBEMIS Results](#), which is included on the CD located on the back inside cover of this EIR. However, this number was based on the 1,500 student capacity of the proposed high school. Since 900 of the students already attend high schools within the School District, the mobile source emissions associated with these students already exist. The only new mobile source emissions would be from the 600 new students. Therefore, only 40 percent of the mobile emissions (600 students/1,500 students), or 906 metric tons, would be new emissions.

Area source CO<sub>2</sub> emissions are also estimated using the URBEMIS2007 software. This emissions source is associated with the burning of energy in the form of natural gas on-site for water heating and space heating. Area source emissions were calculated based on the new school's 1,500 student capacity at approximately 292.40 tons per year or approximately 265 metric tons per year. Similar to mobile source emissions, only 40 percent of these emissions, or 106 metric tons, are considered to be new emissions.

**Indirect GHG Emissions from Electricity Generation.** The primary source of indirect GHG emissions generation is from the combustion of fossil fuels to produce electricity needed to meet project demand. That demand is in the form of electricity consumption on-site and from energy consumed in supplying domestic water (pumping) and treating sanitary wastewater from the project. These emissions are calculated using typical energy intensities as contained in Appendix G of the CARB's LGOP, data from the joint United State Department of Energy and United State Environmental Protection Agency (US EPA) Energy Star program, and data from Pacific Gas & Electric.

According to the US EPA Energy Star program, the average electrical demand factor for a high school is 20 kilowatt hours (kWh) per square-foot of building area ([http://www.energystar.gov/index.cfm?c=business.EPA\\_BUM\\_CH10\\_Schools](http://www.energystar.gov/index.cfm?c=business.EPA_BUM_CH10_Schools)). For each kilowatt hour of energy produced to meet future development needs, CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O (nitrous oxide) emissions are produced. At a total of approximately 415,141 square feet (sf) of new construction, the proposed project would require approximately 8,302,820 kWh of energy per year or 8,303 megawatt hours (MWh) per year. A megawatt hour is equivalent to 1,000 kilowatt hours.

Energy generated for use in water pumping and wastewater treatment is a notable source of indirect GHG emissions. The LGOP energy use factor for off-site water pumping is 1,450 kWh per 1,000,000 gallons of water consumed. The project site is located within the jurisdiction of the California Water Services Company (Cal Water). Cal Water does not have demand factors, so the Monterey Peninsula Water Management District water demand factor of 0.00007 acre-feet per square-foot per year for school uses was used to determine the approximate water demand from the proposed project. This use would create demand for about 29 acre-feet per year (afy) of water per year (415,141 sf x 0.00007 ayf/sf), or approximately 9,449,679 gallons of water per year (29 afy x 325,851 gallons/acre-foot). Using the LGOP energy use factor of 1,450 kWh per 1,000,000 gallons of water consumed, approximately 13,702 kWh of electricity or 14 MWh would be required per year for water pumping.

It can be conservatively assumed that the amount of wastewater generated by the proposed project would be similar to its total water demand since a majority of the water consumed would be disposed of as wastewater. Therefore, it is assumed that approximately 9,449,679 gallons per year of wastewater would be generated by the proposed project. The LGOP energy demand

factor for wastewater treatment is about 2,500 kWh per 1,000,000 gallons of wastewater treated. Electricity demand from wastewater treatment would be approximately 23,624 kWh or 24 MWh per year.

The sum of electricity demand for the proposed project is approximately 8,341 MWh per year. [Table 4, Estimated Annual Electricity Demand](#), summarizes the annual average electricity demand of the proposed project. The demand shown does not reflect any energy conservation or other measures that might be employed as part of the project to reduce electricity demand.

**Table 4 Estimated Annual Electricity Demand**

Sources of Demand	Demand (MWh)/Year
On-Site Electricity	8,303
Water Supply Pumping	14
Wastewater Treatment	24
<b>Total</b>	<b>8,341</b>

*Source:* EMC Planning Group 2011

Pacific Gas and Electric estimates that 559 pounds of CO<sub>2</sub> are produced for each MWh of electricity produced, the LGOP Appendix G factors for additional GHGs are 0.029 pounds of CH<sub>4</sub> and 0.011 pounds of N<sub>2</sub>O for each MWh of electricity produced. Utilizing these emissions factors, along with factoring in the global warming potential of each pollutant, the proposed project would result in approximately 2,130 metric tons of CO<sub>2</sub>e per year for electricity generation.

As noted previously for mobile source and area source emissions, GHG emissions from indirect sources associated with 900 of the 1,500 student capacity at the new high school are already being generated at two other existing high schools. Only the indirect emissions generated by the equivalent of 600 students (or 40 percent of the total student capacity) at the new high school would be “new” emissions. Therefore, the proposed project would result in 40 percent of the total 2,130 metric tons, or approximately 852 metric tons of CO<sub>2</sub>e per year for electricity generation.

[Table 5, GHG Emissions from Electricity Generation](#), summarizes CO<sub>2</sub>e emissions resulting from the generation of electricity needed to meet project demand for the new school assuming all students and associated emissions are new and also shows the 60 percent reduction in emissions given existing baseline conditions.

**Table 5 GHG Emissions from Electricity Generation**

Projected Electricity Demand from Future Development (MWh)	GHG Type	GHG Emissions Factor (lbs/MWh) <sup>1</sup>	Global Warming Potential	CO <sub>2</sub> Equivalent (metric tons CO <sub>2</sub> e/yr) <sup>2</sup>
8,341	CO <sub>2</sub>	559.0	1	2,115
8,341	CH <sub>4</sub>	0.029	21	2
8,341	N <sub>2</sub> O	0.011	310	13
<b>Subtotal for 1,500 New Students</b>				2,130
<b>Net New Indirect Emission (Subtotal x .4)</b>				852

*Source:* EMC Planning Group 2011

*Notes:* 1. CO<sub>2</sub> factor from PG&E 2011; CH<sub>4</sub> and N<sub>2</sub>O factors from Table G.6, Local Government Operations Protocol, 2010.  
 2. CO<sub>2</sub> Equivalent is calculated as (electricity use) x (emissions factor) x (warming potential) / (2,204.62 lb/metric ton).  
 Figures shown are rounded to the nearest metric ton.

With approximately 906 metric tons of mobile source CO<sub>2</sub> emissions, 106 metric tons of area-source emissions, and 852 metric tons of indirect source emissions, total operational GHG emissions are estimated at 1,864 metric tons per year. Mobile sources represent 48 percent of the total emissions, indirect sources represent 46 percent, and area source emissions represent six percent of the total emissions.

Table 6, [Total Operational GHG Emissions](#), shows the sum of direct and indirect emissions.

**Table 6 Total Operational GHG Emissions (metric tons CO<sub>2</sub>e/year)**

GHG Emissions Source	GHG Emissions Volume
Mobile source	906
Area Source	106
On-/Off-Site Electricity Demand (indirect sources)	852
<b>Total</b>	1,864

*Source:* EMC Planning Group 2011

**Construction Phase GHG Emissions.** GHG emissions would be generated during construction of the project site. Typical sources of emissions include construction equipment and vehicle trips to transport workers and goods to and from the project site. The URBEMIS2007 program was used to calculate CO<sub>2</sub> emission generated by proposed project. Total GHG emissions for these



activities are estimated at 278.18 tons or 252 metric tons. The URBMIS2007 results are shown in [Appendix D](#), which is included on the CD located on the back inside cover of this EIR.

### **Proposed Greenhouse Gas Emission Reduction Measures**

The School District is proposing to include several measures in the design of the school that are primarily LEED related. The measures are as follows:

1. Energy efficient lighting and mechanical equipment;
2. Optimization of building envelope;
3. Conformance with the California Green Building Code.
4. Daylighting and natural ventilation strategies;
5. Measures to reduce the heat island effects, such as high solar reflective materials on the structures in the parking lot(s), and the use of paving, trees and shading, and vegetation in open spaces
6. High recycled content and regional materials;
7. Construction waste management; and
8. Support of alternative transportation, including bike racks and showers, bus stops, fuel efficient vehicle parking, electric vehicles, and carpool programs.

Measures 1 through 5 would result in incremental reductions in indirect source GHG emissions because they are targeted to improve energy efficiency or energy demand. As noted previously, indirect emissions represent approximately 46 percent of the total project emissions. Based on the CAPCOA and BAAQMD documents described previously, each of these measures would, at most, result in about a one-half percent reduction in GHG emissions from indirect sources, or approximately 21 metric tons per year. Measure 8 would provide about a one-half percent reduction in mobile source emissions, which represent approximately 48 percent of total project emissions. The incremental reduction would be about approximately 5 metric tons per year. In total, these measures are not likely to result in more than a 26 metric ton or about one percent reduction in overall GHG emissions.

The School District has identified additional measures that could be incorporated into the proposed project contingent on the availability of funding. These measures include the following:

- Solar photovoltaic (PV) power generation;

- Solar hot tub assist (wet system);
- Wind turbine power generation; and
- Purchasing power from renewable sources through utility company.

These measures would also result in an incremental reduction in GHG emissions, primarily from indirect sources as noted above. However, because implementation of the measures is uncertain, related potential GHG reductions may not be realized and are not included in the emissions inventory analysis.

**Reductions from Pavley, LCFS and Other State Regulatory Actions.** The School District largely has control over GHG emission reduction actions and measures which can be implemented as part of the project design, such as the measures noted above. Mobile source transportation is typically the largest source of GHG emissions related to land development projects. For the proposed project, mobile sources represent approximately 48 percent of the total project emissions. However, the School District does not have control over these emissions sources, as they are regulated by state and federal agencies. Two state regulations designed to help achieve AB 32 GHG reduction targets will have a significant effect on reducing mobile source GHG emissions. These are the Pavley standards and LCFS regulations, both of which were summarized in the prior California Climate Change Related Legislation/Regulation section.

Pavley regulations are designed to reduce GHG emissions from new passenger vehicles and will result in a 30 percent reduction of GHG emissions from cars, light duty truck and medium-duty vehicles by the year 2016 as stated by CARB. As shown in the URBEMIS2007 modeling results in [Appendix D](#), Pavley regulations apply to approximately 89.9 percent of the proposed project fleet mix (vehicles under 8,500 pounds). If it is assumed that these vehicles would generate approximately 90 percent of the 906 tons of mobile source emissions for the proposed project, reductions from Pavley regulations would be applied to approximately 815 metric tons CO<sub>2</sub> of mobile source emissions. Reductions would equal approximately 245 metric tons in the year 2016 (.3 x 815 metric tons CO<sub>2</sub>). Total mobile source emissions after Pavley reductions are applied would equal approximately 661 metric tons CO<sub>2</sub>. Emissions may be slightly higher in the interim years to 2016 as older vehicles to which the standards do not apply are gradually taken out of service. However, GHG emission reductions would result prior to 2016 as the standards are phased in starting with the 2011 model year.

The LCFS would result in a 10 percent reduction in all mobile source GHG emissions generated by the proposed project in the year 2020 and all subsequent years of operation. CARB's *Pavley I + Low Carbon Fuel Standard Postprocessor User's Guide* notes that reductions resulting from the LCFS are applied once reductions resulting from Pavley regulations have already been

calculated for the vehicle classes to which Pavley standards apply. With this assumption, the LCFS would result in an additional reduction of 66 metric tons CO<sub>2</sub> (.1 x 661 metric tons CO). A 10 percent reduction in GHG emissions from the balance of the mobile source volume generated by the project (emissions from vehicles not covered by Pavley) would also be realized. This equates to nine metric tons CO<sub>2</sub> per year (.1 x .1 x 906 metric tons CO<sub>2</sub>) for a total of approximately 75 metric tons of reductions from the LCFS. With LCFS applied, mobile source emissions reductions would total approximately 320 metric tons, with total mobile source emissions declining to 586 metric tons CO<sub>2</sub>.

As with Pavley, emissions reductions resulting from the LCFS in the years from project completion to 2020 would be slightly greater. The LCFS reductions will be phased in on a yearly percentage increase basis beginning in 2011 (.25 percent) until they reach 10 percent in 2020 and beyond. The LCFS regulation reduction for model year 2016 is approximately 3.5 percent (.035 x 906) or approximately 32 metric tons CO<sub>2</sub>.

Other state regulations would also result in GHG emissions reductions from operations of the proposed project. These include use of lower carbon intensive electricity generated by renewable sources required through the Renewable Portfolio Standards and more energy efficient buildings as required through CALGREEN.

### **Project Impact**

The proposed project would result in increased GHG emissions relative to existing conditions. Total project emissions are estimated at approximately 1,864 metric tons CO<sub>2</sub>e per year. The School District is proposing to include several measures in the design of the school that would result in some emissions reductions. These reduction measures proposed by the School District would reduce the indirect emissions by approximately 26 metric tons per year, or approximately one percent. The Pavley standards and LCFS would result in a reduction of an additional 320 metric tons per year, or 17 percent of total project emissions. The sum of all reductions would equate to approximately 345 metric tons CO<sub>2</sub>e per year or 18 percent of total emissions.

Despite the measures that would be implemented by the School District and GHG reductions that would occur due to two key regulatory actions taken by the State of California, the proposed project would still not reduce its emissions by 30 percent, the target reduction identified in the applicable GHG reduction plan – AB 32. Consequently, the project would conflict with the applicable plan. This is a significant and unavoidable impact.

## ***Impacts and Mitigation Measures***

**Significant Unavoidable Impact - Inconsistency with Applicable GHG Reduction Plan.** The applicable GHG reduction plan for the proposed project is AB 32. The School District would consider the proposed project to be consistent with AB 32 if its unmitigated GHG emissions volume of 1,864 metric tons per year can be reduced by 30 percent below “business as usual” to a total of 1,305 metric tons per year or less. As described above, total GHG emissions reductions for the proposed project are estimated at 345 metric tons per year, approximately 18 percent of the total emissions. To achieve the 30 percent reduction, the proposed project would need to reduce its GHG emissions by 559 metric tons per year. The proposed project will therefore, not be consistent with the applicable greenhouse gas reduction plan. The School District cannot assure that additional GHG reduction measures which might further reduce GHG emissions volumes are feasible. Consequently, this impact is considered to be significant and unavoidable.

The School District would be required to adopt a statement of overriding consideration finding that the benefits of the project outweigh the significant environmental impact associated GHG emissions.

## **2.4 HAZARDS AND HAZARDOUS MATERIALS**

The information contained within this section is based on data from the City of Salinas Municipal Code, the County of Monterey Municipal Code, the *Environmental Site Assessment Proposed New School Site Mortensen Property 1100 Rogge Road Salinas, California* (Kleinfelder 2005) the *Preliminary Environmental Assessment Workplan Proposed New High School Site Mortensen Property, 1100 Rogge Road, Salinas, California* (Kleinfelder September 2006) and the *Preliminary Environmental Assessment Proposed New School Site Mortensen Property, 1100 Rogge Road Salinas, California* (Kleinfelder December 2006) that were prepared for site acquisition.

### ***Standards of Significance***

CEQA Guidelines appendix G indicates that a project may have a significant effect on the environment if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- 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;

- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- 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 a public-use airport, result in a safety hazard for people residing or working in the project area;
- 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, create a significant hazard to the public or the environment; or
- Expose people or structures to significant risk of loss, injury, or death involving wildland fires, including wildlands area adjacent to urbanized areas or where residences are intermixed with wildlands.

## ***Background***

The Acquisition EIR analyzed the potential impacts related to hazards and hazardous materials associated with the acquisition and development of a high school at the project site. After the draft Acquisition EIR was circulated for public review from May 8, 2006 to June 23, 2006, the School District became aware of a natural gas pipeline in Rogge Road immediately adjacent to the project site. The School District determined that this new information required revisions to, and recirculation of, the hazards section of the draft EIR. Therefore, the revised hazards section of the draft Acquisition EIR (“Revised DEIR”) was recirculated for public review from August 14, 2006 to September 27, 2006. As required by the State Department of Education, a Phase 1 Environmental Site Assessment (ESA) was prepared by Kleinfelder, Inc for the project site on September 15, 2005. The ESA concluded that further investigation was required, and a Preliminary Environmental Assessment (PEA) was prepared by Kleinfelder, Inc on September 8, 2006. After the preparation of the original PEA, the California Department of Toxic Substance Control (DTSC) requested that additional research be conducted to address other potential contamination at the site. Therefore, a subsequent PEA was prepared by Kleinfelder, Inc on December 8, 2006.

According to the Acquisition EIR, the Revised DEIR, and the updated PEA, there are no known facilities, businesses, or properties within one-quarter of a mile of the project site that handle hazardous materials or waste, or are known locations of a release of hazardous substances (Acquisition EIR, page 2-42). No naturally occurring asbestos, mercury, or radon are anticipated to be present on site or in close proximity (Acquisition EIR, page 2-42). The project site is not within the range of probable hazards from heavily traveled highways or streets, railroads, or airports. The site contains no obvious onsite hazardous substance storage, treatment, or disposal activities except for an existing 55-gallon oil drum containing motor oil

located next to one of the storage buildings (Acquisition EIR, page 2-43). Mitigation measure HZ-2 requires the proper removal of the 55-gallon drum prior to acquisition of the site.

The existing on-site structures may potentially contain asbestos and/or lead based paints, which may result in the release of hazardous materials into the air during demolition. The updated PEA concluded that asbestos, pesticides, metals, termiticides and other hazardous materials may be present on the site due to existing structures and past activities. Mitigation measure HZ-1 requires that a Preliminary Environmental Assessment (PEA) analyze the existing structure to determine the presence of asbestos containing materials, lead based paints, and soils conditions near the 55-gallon tank and if hazardous materials are found, the structures School District shall ensure that the structures are demolished and disposed according to the most recent legal requirements, and provide evidence to the DTSC as the oversight agency (Acquisition EIR, page 2-44).

The updated PEA was prepared after the preparation of the Acquisition FEIR. As part of the updated PEA, soil samples were collected and tested for concentrations of metals and organochlorine pesticides (Kleinfelder, page 2). The updated PEA recommended excavation and offsite disposal of the soil near the 55-gallon drum and the demolished structure, which would remove the hazardous materials on the project site. Confirmatory soil samples are recommended following the removal of contaminated soils (Kleinfelder, 58).

There are electrical power distribution and transmission lines located adjacent to the project site, along the south and north project boundaries. The Acquisition EIR included mitigation measure HZ-3, requiring that the future design of the school include an appropriate setback from these lines (Acquisition EIR, page 2-45). Pacific Gas & Electric operates a 4.0-inch steel natural gas transmission pipeline that follows Rogge Road and runs adjacent to the northern boundary of the project site. Other than this natural gas pipeline, there are no known pipelines within 1,500 feet of the project site which carry hazardous substances. The Revised DEIR concluded that the likelihood of a pipeline incident is low to medium, and included mitigation measure HZ-4, which requires the School District to prepare a natural gas pipeline emergency plan. Therefore, these environmental issues were adequately addressed in the Acquisition EIR and therefore, are not addressed in this SEIR.

At the time of the Acquisition EIR, it was assumed that the high school would be constructed after build out of some of the surrounding land and that the school would be a compatible use with the surrounding development (Acquisition EIR, page 2-9). However, at this time, none of the adjacent parcels within the Future Growth Area have been developed, no development plans are currently being processed by the City of Salinas, and the land remains in agricultural production. It is possible that the school could be developed and operational for several years before the adjacent development occurs, which may result in students being exposed to pesticides from the adjacent farming practices.

## ***Regulatory Setting***

A Environmental Site Assessment (Phase 1 ESA) was prepared for the Acquisition EIR by Kleinfelder, Inc in 2005. Subsequently, the California Department of Toxic Substance Control (DTSC) made a determination that a Preliminary Environmental Assessment (PEA) would be required for the project site. The DTSC requires that the PEA address the issues of possible naturally occurring asbestos, potential PCB contamination at the transformer sites, potential lead-in-soil contamination around site structures, potential polycyclic aromatic hydrocarbons, metals, and petroleum contamination in the vicinity of the demolished structure. The PEA will also contain a health risk assessment of the organochloride and metals data from the soils investigation included in the Phase I ESA. A PEA was prepared by Kleinfelder, Inc on September 8, 2006. After the preparation of the original PEA, the California Department of Toxic Substance Control (DTSC) requested that additional research be conducted to address other potential contamination at the site and a subsequent PEA was prepared by Kleinfelder, Inc on December 8, 2006.

### **California Department of Education**

According to George Shaw, the Monterey County Field Representative for the California Department of Education, the department does not currently have any regulations regarding schools being sited next to agricultural land (George Shaw, telephone conversation, June 28, 2011). Mr. Shaw recommended that the School District attempt to reach an agreement with the adjacent farmers to ensure pesticide application does not occur during school hours.

### **City of Salinas**

The relevant provisions of the Salinas Municipal Code are presented here to demonstrate how the City is addressing urban uses adjacent to active farmland.

Section 37-50.220 of the Salinas Municipal Code is a right-to-farm ordinance, which requires a deed restriction on developed properties allowing adjacent farmers to continue agricultural operations. Section 37-50.180 of the Salinas Municipal Code requires a tree buffer between residential uses and active farmland in an effort to control dust.

### **County of Monterey**

The relevant provisions of the Monterey County Municipal Code are presented here to demonstrate how the County is addressing urban uses adjacent to active farmland.

Section 21.66.030 of the Monterey County Municipal Code states that new development adjacent to agricultural areas shall be required to establish a well-defined buffer zone within the area to be developed. The area utilized as a buffer shall be placed in an easement, required as a condition of project approval. The easement width shall be sufficient to protect agriculture from impacts of new residential or other incompatible development and to mitigate against the effects of agricultural operations on the proposed uses. The code requires that for development adjacent to "F", "PG" or "RG" Zoning Districts, the easement shall be a width of two hundred (200) feet, or wider where necessary to mitigate adverse impacts between agricultural and adjacent land uses. In all other zoning districts, the easement may be reduced to a width of not less than fifty (50) feet. Land within the easement may not be used for recreational areas as part of housing projects or public facilities.

### **Monterey County Agricultural Commissioners Office**

The Monterey County Agricultural Commissioners Office has pesticide application requirements for farmers with fields adjacent to schools. According to Nathan Desjarlais, an agricultural inspector/biologist with the commissioner's office, the requirements differ with each pesticide (telephone conversation, June 30, 2011). The application of methyl bromide, which is the primary pesticide used in strawberry production, is prohibited during schools hours and may not be applied within 36 hours of students being present. Therefore, farmers adjacent to schools are restricted to the application of methyl bromide during the summer months or on weekends. Other pesticides may not be applied within 500 feet of the campus during school hours.

### ***Environmental Setting***

The project site is currently used for agricultural row crops. Adjacent land uses include a residential neighborhood to the west, row crops to the east and south, and fallow farmland and a packing and shipping company to the north across Rogge Road. Strawberries are the primary crop on site and in the vicinity; however the crops are generally in rotation between strawberries, lettuce, and broccoli. According to the County of Monterey Planning Department, a soccer park is currently being contemplated on the fallow farmland to the north. Refer to Figure 3, Aerial Photograph, to see the existing project site and surrounding area.

According to the Agricultural Commissioner's Office, the main pesticide utilized for strawberry production is methyl bromide. Methyl bromide is used as a fungicide and is injected on top of tarp-covered soil once a season, usually between August and mid-October. The pesticides utilized for lettuce and broccoli are typically sprayed onto the crops in regular intervals during the growing season (Nathan Desjarlais, telephone conversation, June 30, 2011).



The annual prevailing winds in the City of Salinas are generally from the west. Monthly prevailing winds are presented in [Table 7, Prevailing Winds](#).

**Table 7 Prevailing Winds**

Month	Wind Direction
July – October	West Northwest
November – February	Southeast
March – June	West

*Source:* Western Regional Climate Center

## ***Project Analysis***

The proposed project would result in the development of a high school on the project site. The proposed location of the L-shaped two-story classroom building is in the northwestern corner of the project site, approximately 400 feet to 600 feet from the farming activities to the south and approximately 560 to 675 feet from the farming activities to the east. The football/soccer stadium and outdoor athletic fields are located along southern and eastern boundaries of the project site, immediately adjacent to existing agricultural fields. Although the adjacent agricultural land to the south and east are within the Future Growth Area and are designated for development under the City of Salinas general plan, the current economic conditions make it uncertain when development would occur. Therefore, the high school campus would be immediately adjacent to active agricultural land until such time urban development occurs. The prevailing winds would blow from the agricultural fields across the project site for four months out of the school year (November through February). The classroom facilities, where the most concentrated number of students occurs, are located on the opposite side of the campus from the active agricultural fields. Students on the outdoor playing fields would be located closer to the fields and the applied pesticides.

## ***Impacts and Mitigation Measures***

**Potentially Significant Impact –Pesticide Exposure.** The proposed high school would be located immediately adjacent to active agricultural fields, which could expose students and staff to pesticides. Exposing students and staff to pesticides would be considered a significant environmental impact. The implementation of the following mitigation measures would reduce the impact to a less than significant level.

## Mitigation Measure

- HZ-1. Prior to construction of the high school, the School District will notify the Monterey County Agricultural Commissioner and adjacent property owners to ensure that farmers to the east and south will only apply pesticides according to the Agricultural Commissioner's regulations. This will include not applying methyl bromide during school hours and not within 36 hours of students being present on the site, and will not apply other pesticides within 500 feet of the school property during school hours.
- HZ-2. The school district will incorporate fencing and landscaping along the eastern and southern boundaries of the site to ensure students do not have direct access to the adjacent agricultural fields. Fencing and landscaping may be modified upon urban development of the adjacent agricultural fields.

## 2.5 HYDROLOGY AND WATER QUALITY

This section summarizes information on hydrology, including flooding, and water quality, within the study area. Information in this section is taken primarily from the 2007 *Final Supplement for the City of Salinas General Plan Final Program EIR* (GP SEIR) and the *Stormwater Control Plan for Salinas High School District High School #5, Salinas, CA* prepared for the proposed project by RBF Consulting in March 2011. A copy of the report can be found in [Appendix E](#) in the CD on the back cover of this EIR.

Response letters to the NOP were submitted by the City of Salinas and Brian Finegan. Both letters state that this EIR must thoroughly analyze drainage and storm water management issues in light of the issuance of the City's National Pollutant Discharge Elimination System (NPDES) permit and the Storm Water Development Standards and Storm Water Ordinance to implement the NPDES permit. The requested analysis is included in this section.

### ***Standards of Significance***

CEQA Guidelines appendix G indicates that a project may have a significant effect on the environment if it would:

- Violate any water quality standards or waste discharge requirements;
- 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., would the production rate of preexisting nearby wells drop to a level which would not support existing land uses or planned uses for which permits have been granted;

- 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;
- 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 run-off in a manner which would result in flooding on- or off-site;
- Create or contribute run-off water, which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted run-off;
- Otherwise substantially degrade water quality;
- Place housing within a 100-year flood hazard area as mapped on Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows;
- Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam; or
- Cause inundation by seiche, tsunami, or mudflow.

### ***Background Information***

The Acquisition EIR analyzed the potential hydrological impacts associated with the acquisition and development of the project site by the School District and concluded that the future development of the project site would not result in substantial depletion of groundwater supplies or interfere substantially with groundwater recharge (Acquisition EIR, page 2-52). The project site is not located within the 100-year flood zone (Acquisition EIR, page 2-50). The Monterey Regional Water Pollution Control Agency would provide sewer service and the California Water Service Company would provide water service to the proposed project. The wastewater treatment plant has the physical capacity to serve the proposed project (Acquisition EIR, page 2-63). The proposed project would not exceed wastewater treatment requirements of the Regional Water Quality Control Board and would not violate any water quality standards or waste discharge requirements (Acquisition EIR, page 2-45). Therefore, these impacts are not analyzed in this SEIR.

The Acquisition EIR concluded that the future development of the site would result in an increased amount of impervious surfaces and consequently an increase in the amount of storm water collected on site and pollutants conveyed off site. This could result in a significant impact

regarding flood control, lack of infiltration, and water quality concerns. The Acquisition EIR stated that compliance with the requirements of the NPDES General Construction Permit would reduce water quality concerns during construction activities to a less than significant level. However, storm water runoff retention concerns and operational storm water quality concerns were still identified as potentially significant impacts (Acquisition EIR, page 2-53). These impacts are discussed below. Mitigation measure HY-1 required that a hydrological analysis be prepared to determine the adequate storm water conveyance and detention infrastructure for the proposed project and a report titled *Stormwater Control Plan for Salinas High School District High School #5, Salinas, CA* (hereinafter “storm water plan”) was prepared for the proposed project.

## ***Policy and Regulatory Issues***

### **Federal Clean Water Act and State Porter-Cologne Water Quality Control Act**

Water quality objectives for all waters in the State of California are established under applicable provisions of Section 303 of the Federal Clean Water Act and the state Porter-Cologne Water Quality Control Act. These laws seek to control the addition of source and non-source pollutants to surface waters and to protect the integrity of wetlands. Section 303 of the Clean Water Act requires states to adopt water quality standards for all surface waters. Section 304(a) requires the U.S. Environmental Protection Agency to publish water quality criteria that accurately reflect the latest scientific knowledge on the kind and extent of all effects on health and welfare that may be expected from the presence of pollutants in the water.

The Porter-Cologne Water Quality Control Act of 1969 established the State Water Resources Control Board, which is the state agency with primary responsibility for protecting water quality, and the nine Regional Water Quality Control Boards. The State Water Resources Control Board and the nine Regional Water Quality Control Boards are responsible for assuring implementation and compliance with the provisions of the Clean Water Act and the Porter-Cologne Water Quality Control Act. The City of Salinas falls within the Central Coast Regional Water Quality Control Board, which sets water quality standards, issues waste discharge requirements, determines compliance with those requirements, and takes enforcement action. The Central Coast Regional Water Quality Control Board developed a water quality control plan for the central coast basin that protects water quality through the designation of beneficial uses, establishment of water quality objectives, and administration of the NPDES permit program for storm water and construction site runoff.

## **National Pollutant Discharge Elimination System**

The U.S. EPA has published regulations establishing storm water permit application requirements under the Clean Water Act. The NPDES program controls and reduces pollutants to water bodies from point and non-point discharges. Projects that disturb more than one acre of land during construction are required to file a notice of intent to be covered under the State NPDES General Construction Permit for discharges of storm water associated with construction activities. The NPDES construction permit requires implementing both construction and post construction phase storm water pollution best management practices. The State NPDES General Construction Permit requires development and implementation of a Storm Water Pollution Prevention Plan that uses storm water “Best Management Practices” to control runoff, erosion, and sedimentation from the site both during and after construction. The Storm Water Pollution Prevention Plan has two major objectives: (1) to help identify the sources of sediments and other pollutants that affect the quality of storm water discharges; and (2) to describe and ensure the implementation of practices to reduce sediment and other pollutants in storm water discharges.

## **City of Salinas Drainage Criteria**

The City of Salinas adopted new Storm Water Development Standards in April 2010, which impact all new development in the City which create or disturb impervious surface areas greater than 5,000 square feet. The purpose of the Storm Water Development Standards document is to assist project applicants with new storm water management requirements set forth by the Central Coast Water Quality Control Board and the associated City storm drainage and flood control requirements. The Central Coast Regional Water Quality Control Board now requires that Low Impact Development be applied to certain new and redevelopment projects to the maximum extent practicable as a way to minimize the impacts of urban runoff on receiving waters and to promote healthy watersheds. This can be achieved by the use of Best Management Practices, which are any procedure, activity, facility or device that helps to achieve storm water management objectives at a designated site. Also utilized are Integrated Management Practices, which are small on-site treatment control Best Management Practices that are integrated into the site layout, landscaping, and drainage design of the development.

## ***Environmental Setting***

### **Drainage Patterns**

The project site is located in the Salinas watershed, which experiences a moderate Mediterranean climate, receiving 87 percent of its 14 inches of annual precipitation from November through April. The Salinas River is the primary drainage within the Salinas

watershed, and releases into the Pacific Ocean north of the City of Marina on the Monterey Bay (Acquisition EIR, page 2-47). Although the project site is relatively flat, it is situated on a hydrologic ridge. The project site is on the drainage divide between Santa Rita Creek and Markley Swamp (RBF Consulting, page 4). The entire project site is within the Reclamation Ditch watershed. Both Markley Swamp and Santa Rita Creek connect to the Reclamation Ditch drainage system downstream from Carr Lake (RBF Consulting, page 3). Drainage from the eastern portion of the project site drains to the southeastern corner of the site into a ditch that conveys runoff south to a storm water drain structure at East Boronda Road and McKinnon Street, which connects to a system that ultimately discharges into Markley Swamp (RBF Consulting, page 6). Drainage from the western portion of the project site drains to the southwestern corner of the site into a ditch that leads to a culvert under San Juan Grade Road, which discharges into Santa Rita Creek (RBF Consulting, page 7).

### **Off-Site Conveyance**

Currently, runoff coming from northeast of the project site is conveyed to the southeastern corner of the site through an existing ditch along the eastern edge. The existing channel is an earthen ditch that experiences significant bank erosion and does not have adequate capacity to meet the City's design criteria for a manmade open channel. Runoff from the parcel to the east of the project site combines with flows to the southeastern corner of the project site and combines with the runoff from the northeast. The combined flows travel generally southward through a series of drainage ditches to a storm drain structure at East Boronda Road and McKinnon Street, which eventually drains into Markley Swamp (RBF Consulting, page 5).

Runoff from directly to the north of the site is conveyed westward in a roadside ditch along the north side of Rogge Road. The runoff then drains into an inlet associated with the adjacent development and ultimately discharges into Santa Rita Creek. No runoff from the area directly to the north flows across the project site (RBF Consulting, page 6).

## ***Project Analysis***

### **Storm Water Runoff**

The proposed project would result in an increase of impervious area of the project site by approximately 17.4 acres. This could result in increased storm water collected on site and pollutants conveyed off site, which could result in impacts related to flood control, lack of infiltration, and water quality concerns. This is a potentially significant impact. Development of the project site is subject to the City of Salinas Storm Water Development Standards (RBF Consulting, page 9). The storm water plan prepared for the proposed project identifies the Storm

Water Development Standards that are applicable to the proposed project, as well as the Low Impact Development elements that can be incorporated into the proposed site plan to meet these applicable standards. Examples of applicable Storm Water Development Standards include the requirement that that 100 percent of runoff from new impervious surfaces be directed into approved Best Management Practices to control runoff, erosion, and sedimentation from the site, the division of the project site into discrete drainage areas with storm water control plans submitted for each area, and the demonstration that post-project runoff does not exceed pre-development runoff (RBF Consulting, page 2).

To comply with these applicable standards, the storm water plan divides the project site into seven Drainage Management Areas. The Bay Area Hydrology Model was then used to estimate pre- and post-project flows, and Best Management Practices and Integrated Management Practices were sized to ensure that post-project conditions did not exceed pre-development levels. Examples of Best Management Practices and Integrated Management Practices include the use of pervious pavement for sidewalks and student parking areas, depressed landscaping with underdrains near parking lots, self-retaining areas, underground infiltration chambers, and the use of vegetated swales and surface infiltration/detention basins (RBF Consulting, page 9). A complete list and description of these Low Impact Development features recommended for each Drainage Management Area can be found in the storm water plan in [Appendix E](#), which is included on the CD located on the back inside cover of this EIR. The storm water plan concludes that runoff flow rates of the proposed project with the recommended Low Impact Development features would be adequate to meet the requirements of the Storm Water Development Standards. However, the specific management practices recommended in the storm water plan were developed for planning purposes and not design. Therefore, infiltration rate testing and a detailed site grading plan will need to occur to provide a design basis for infiltration at the football field area, the student parking area, and the staff parking area.

### **Off-Site Conveyance**

The proposed project would result in the development the project site, which could substantially alter the existing drainage pattern of runoff across the site from the surrounding area. Runoff from the northeast is currently conveyed in a drainage ditch along the eastern edge of the site. Runoff from the east of the project site combines with the northeastern runoff at the southeastern corner of the site. The drainage ditch currently does not meet the City's design criteria for a manmade ditch and frequently experiences erosion and does not have adequate capacity. This may result in substantial off-site erosion or flooding, which would be a potentially significant impact. The storm water plan provides a basis for improvements to be made to the channel to accommodate flows from off site and to minimize off-site erosion and flooding. Examples of proposed improvements include increasing the width and depth of the channel and managing in-channel vegetation to reduce flow velocities and erosion, while still maintaining sediment

deposits. The storm water plan provides a basis of design for the channel; however final design of the channel would require a detailed survey along the project edge to refine the grading to match edge conditions.

## ***Impacts and Mitigation Measures***

**Less than Significant Impact – Construction Related Runoff.** The proposed project may result in runoff during the construction phase that could result in water quality impacts. The School District will comply with the requirements of the NPDES General Construction Permit, which would reduce water quality concerns during construction activities to a less than significant level. No further mitigation is required.

**Potentially Significant Impact – Operational Related Runoff and Off-site Drainage Improvements.** The proposed project would result in an increase of impervious area of the project site by approximately 17.4 acres. This could result in increased storm water collected on site and pollutants conveyed off site, which could result in impacts related to flood control, lack of infiltration, and water quality concerns. This is a significant adverse environmental impact. The implementation of the following mitigation measures would reduce the impact to a less than significant level.

### **Mitigation Measure**

- HY-1. Prior to final site design, the School District will integrate into the project design all applicable Low Impact Development features discussed in the storm water plan so that the proposed project meets design standards to match pre-construction flow conditions.
- HY-2. Prior to final site design, the School District will conduct infiltration rate testing and a prepare a detailed site grading plan to provide a design basis for infiltration at the football field area, the student parking area, and the staff parking area. The final design of the proposed project will integrate the Integrated Management Practices features with internal site drainage details.

**Potentially Significant Impact – On-site Flooding.** Development of the project site would substantially alter the existing drainage pattern of runoff across the site from the northeast. Runoff from the northeast is currently conveyed in a drainage ditch along the eastern edge of the site; however, the existing drainage ditch is inadequate to handle estimated flows and may result in flooding portion of the high school. This is a potentially significant impact. The implementation of the following mitigation measure would reduce the impact to a less than significant level.



### **Mitigation Measure**

HY-3. Prior to school construction, the School District will construct a new drainage channel along the eastern edge of the project site to accommodate flows from off site and ensure they do not cause flooding on site. Final design of the channel will require detailed survey along the project edge to refine the grading to match edge conditions.

## **2.6 LAND USE**

This section of the EIR addresses the consistency of the proposed project with the City of Salinas land use plans, policies or regulations adopted for the purpose of avoiding or mitigating an environmental impact. The information contained within this section is based on data from the *City of Salinas General Plan (2002)*, the *Final Supplement for the City of Salinas General Plan Final Program EIR (2007)*, and the City of Salinas Municipal Code.

Response letters to the NOP were received from the City of Salinas Community Development Department and from Brian Finegan. The letters imply that the current project design is not consistent with policies from the City's general plan. Both letters express concerns that the proposed project does not promote the New Urbanism design principles required under the general plan for development within the Future Grown Area. In particular, the letters state that the siting of the school building generally does not lend itself to being accessible to future residents in the Future Growth Area, which is inconsistent with the general plan policies promoting a school within walking distance of residences. The City requested that the SEIR address these potential impacts, as well as any inconsistencies between the proposed project and the City of Salinas general plan policies and zoning code.

### ***Standards of Significance***

CEQA Guidelines appendix G indicates that a project may have a significant effect on the environment if it would:

- physically divide an established community;
- 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; or
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

## **Background**

The Acquisition EIR concluded that development of a high school at this site is consistent with the City of Salinas general plan land use designation of the project site. The only urban development within the vicinity of the project site is the existing residential neighborhood to the west. Undeveloped farmland land lies to the south and east, and packing and shipping agricultural operations north of the project site. Therefore, the proposed project would not physically divide an established community. There are no habitat conservation plans or natural community conservation plans applicable to the project site.

At the time of the Acquisition EIR, the School District did not have a site plan proposed. The following consistency analysis is provided at the request of the City of Salinas Community Development Department.

## **Regulatory Setting**

The City of Salinas General Plan Land Use and Circulation Policy Map (2006) identifies the land use designation for the project site as Public/Semipublic and is labeled SHS for “Senior High School”. Property to the east has a land use designation of Mixed Use, with the future extension of El Dorado Drive bisecting that property identified as Mixed Use. The future extension of Russell Road is planned along the southern boundary of the project site. South of this planned road extension, land is designated for Residential Low Density.

Figure 5, [Land Use and Circulation Policy Map](#) in Section 1, presents the project site land use designation in context with the City of Salinas and the Future Growth Area. The Future Growth Area, including the proposed project site, was annexed into the City on September 8, 2008. The 2007 *Final Supplement for the City of Salinas General Plan Final Program EIR (GP SEIR)* was certified in conjunction with the annexation to the City. The project site is located within the New Urbanism (NU) Interim zoning district with a Specific Plan Overlay.

## **City of Salinas General Plan Policies**

**Policy LU-1.4:** Create and preserve distinct, identifiable neighborhoods that have traditional neighborhood development (TND) characteristics. Specifically, development should:

Connect in as many locations as possible to adjacent development, arterial streets, and thoroughfares;

Provide a balanced mix of housing, workplaces, shopping, recreational opportunities, and institutional uses, including mixed-

use structures (combined residential and non-residential uses) that help to reduce vehicular trips;

Provide natural amenities that are fronted by thoroughfares or public spaces, and not privatized behind backyards;

Commercial buildings should directly front on the sidewalk, with ample landscaping as a buffer between the building and sidewalk, and parking lots are to be located behind the buildings;

Allow flexible parking requirements and arrangements within neighborhood activity centers to minimize the impact of the automobile and foster a pedestrian oriented streetscape;

Provide second stories on commercial buildings to provide for other uses and encourage residential use;

Allow small ancillary dwelling units in the rear yard for residential areas;

Decrease the front yard setbacks moving from the neighborhood edge to neighborhood center.

**Community Design Element Goal 3:** Create a community that promotes a pedestrian-friendly, livable environment.

**Policy CD-3.1:** Create and preserve distinct, identifiable neighborhoods that have traditional neighborhoods development (TND) characteristics. Specifically, each neighborhood should have the following characteristics:

An approximately 5-minute walk from perimeter to center;

Housing densities should increase from perimeter to center (i.e. neighborhoods should be more densely populated at the center);

The neighborhood center should be at the location of retail space, office space, and upper story residential above commercial and office space;

A civic or public space such as a plaza or park should be at the neighborhood center;

Small parks should be distributed throughout the neighborhood;

Schools should lie within the neighborhood and be easily accessible and within walking distance;

When not adjacent to agricultural operations, which may require a variety of buffering techniques, the neighborhood edge should be bordered by either a natural corridor or the edge of an adjacent neighborhood across pedestrian-friendly boulevard; and

Front yard setbacks should decrease from neighborhoods edge to neighborhood center.

### **City of Salinas Zoning Code**

The project site is within the New Urbanism (NU) and New Urbanism Interim (NI) zoning district. According to the City of Salinas Zoning Code (2010), the purpose of the NI district is to provide a transitional zone for the future growth areas of the city located north of East Boronda Road that are annexed to the city and are subject to the preparation of specific plans and subsequent subdivision maps. According to Section 37-30.410 of the City of Salinas municipal code, the purposes of the New Urbanism districts regulations are the following:

Promote the principles of new urbanism through the creation of distinct identifiable neighborhoods that have traditional neighborhood development (TND) characteristics as expressed in the Salinas general plan;

Ensure the development of a pedestrian-sensitive, yet auto-accommodating community containing a range of residential housing types, mixed use buildings and developments, neighborhood commercial, and employment opportunities which may be developed in one or more phases;

Provide for a number of design, development, and infrastructure features indicative of a self-reliant neighborhood; including, but not limited to, multipurpose streets linking residential areas with neighborhood activity and commercial centers and multimodal transportation alternatives; quality and craftsmanship in the built environment; a lively mix of neighborhood shopping and community services; an advantageous and sensitive use of natural resource features and open space; and innovative and imaginative site planning in order to develop a sense of place where the amenities, facilities, and features all exhibit an overall high level of urban design and architectural integration;

Ensure the creation of walkable neighborhoods with mixed use village centers overlaid on a network of schools, civic amenities, parks, and open space;

Provide a circulation system that avoids significant pedestrian barriers and replaces the standard collector street (too often lined by back yard fences) with more frequent and less congested "connector" streets to establish a traditional grid circulation system offering a variety of circulation options and allow connections from neighborhood to neighborhood. The combination of such a circulation system with design standards that ensure pedestrian-friendly neighborhoods with defined village centers should result in a pattern of development, which enhances the city and its future inhabitants; and

Promote vital and safe residential and mixed use areas through the incorporation of crime prevention through environmental design (CPTED) features in development.

Section 37-10.440 of the municipal code defines Traditional Neighborhood Design as “developments based on human-scale design principles that promote walkability, compact neighborhoods, and a reduction of automobile usage. Such developments typically exhibit several of the following characteristics: buildings oriented to the street, front porches on houses, emphasis on pedestrian orientation, village squares and greens, alleys, streets laid out in a grid system, and compatible mixed land uses, etc.”

## ***Policy Consistency***

The City of Salinas General Plan Policy LU-1.4 aims to create and preserve distinct, identifiable neighborhoods that have traditional neighborhood development (TND) characteristics (general plan, page LU-10). The policy states that neighborhoods with TND characteristics would provide a “balanced mix of housing, workplaces, shopping, recreational opportunities, and institutional uses”. The proposed project accomplishes this goal by providing a high school campus within an area accessible to existing residential neighborhoods on Rogge Road and future residential uses to the south and east. The City of Salinas General Plan Policy Goal 3 aims to create a community that promotes a pedestrian-friendly, livable environment. Policy CD-3.1 also aims to create distinct, identifiable neighborhoods that have traditional neighborhood development (TND) characteristics (general plan, page CD-8) by siting schools within neighborhoods so that they are easily accessible and within walking distance.

The proposed high school campus is located in an area that is easily accessible and walkable to the existing residents to the west, and to potential future residents to the east and south. The

proposed design has the campus fronting Rogge Road, which would make the school easily accessible to existing students in the adjacent neighborhoods to the west.

Although pedestrian access from the south and the east are not necessary at this time because that property is in active farming operations, in the future when the surrounding residential uses are developed, access could be provided. If appropriate in the future, the nature of the high school project allows for consideration of additional pedestrian and bicycle access to the site for students coming from future residential development to the south and east. At this time, it is not yet known exactly what the development and supporting infrastructure will consist of, or how it will be oriented, making it premature to address such access at this time.

To the extent that the applicable plans and policies address schools, the proposed project is consistent with them. The proposed project would be consistent with the design principals of both traditional neighborhood development and New Urbanism and would comply with the City of Salinas general plan policies and zoning code.

## ***Impacts and Mitigation Measures***

**Less than Significant – Consistency with General Plan Policies and Zoning Code.** The City of Salinas general plan and zoning code includes policies and measures aimed at creating walkable development that support the principals of New Urbanism and have traditional neighborhood development (TND) characteristics. The proposed high school campus is located in an area that is easily accessible and walkable to the existing residents to the west, and to potential future residents to the east and south. The proposed design has the campus fronting Rogge Road, which would make the school easily accessible to existing students in the adjacent neighborhoods to the west. If appropriate in the future, the nature of the high school project allows for consideration of additional pedestrian and bicycle access to the site for students coming from future residential development to the south and east. The proposed project would be consistent with the design principals of both traditional neighborhood development and New Urbanism and would comply with the City of Salinas general plan policies and zoning code.

## **2.7 NOISE**

The information contained within this section is based on data from the *Noise Assessment Study for High School #5 Environmental Impact Report, Rogge Road, Salinas* (noise assessment) prepared Edward L. Pack Associates (2011). A copy of the noise assessment can be found in [Appendix F](#), which is included on the CD located on the back inside cover of this EIR.

No NOP response letters were received regarding noise impacts.

## ***Standards of Significance***

CEQA Guidelines appendix G indicates that a project may have a significant effect on the environment if it would:

- result in 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;
- result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels;
- result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project; or
- expose people to excessive noise near a public-use airport or private airstrip.

## ***Background Information***

The Acquisition EIR analyzed the potential noise impacts associated with the acquisition and development of the project site by the School District. The Acquisition EIR concluded that the proposed project may result in short-term noise impacts associated with construction activities and included mitigation measure N-2, which would reduce these potential impacts to a less than significant level (Acquisition EIR, page 2-56). The project site is not located within an airport land use plan, within two miles of a public airport, or within the vicinity of a private airstrip, therefore the proposed project would not expose people to excessive noise near a public-use airport or private airstrip. These issues were analyzed in the Acquisition EIR and will not be analyzed in this document.

The Acquisition EIR concluded that the proposed project would introduce new sources of noise in the vicinity due to increased vehicle trips and sporting or stadium-capacity events, and that noise projections for the project may change due to increased development or changing development patterns. A significant increase in the noise environment could have an adverse impact on students and faculty of the future school, and noise from the proposed project could potentially impact surrounding uses (Acquisition EIR, page 2-55). Mitigation measure N-1 requires the preparation of an acoustical analysis when layout of the future school is determined, as part of the subsequent environmental review process. A noise assessment, titled the *Noise Assessment Study for High School #5 Environmental Impact Report, Rogge Road, Salinas*, was prepared by Edward L. Pack Associates for the proposed project.

## ***Environmental Setting***

### **Measurements of Noise**

Noise is defined as unwanted sound. Airborne sound is a rapid fluctuation of air pressure above and below atmospheric pressure. Sound levels are usually measured and expressed in decibels (dB) with 0 dB corresponding roughly to the threshold of hearing. There are several methods of characterizing sound. The most common in California is the A-weighted sound level or dBA. This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events. This energy-equivalent sound/noise descriptor is called  $L_{eq}$ . The most common averaging period is hourly, but  $L_{eq}$  can describe any series of noise events of arbitrary duration.

The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within about plus or minus one dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The accuracy of the predicted models depends upon the distance the receptor is from the noise source. Close to the noise source, the models are accurate to within about plus or minus one to two dBA.

Although the A-weighted noise level may adequately indicate the level of noise at any instant in time, community noise levels vary continuously. Most environmental noise includes a mixture of noise from distant sources that create a relatively steady background noise from which no particular source is identifiable. To describe the time-varying character of environmental noise, the statistical noise descriptors,  $L_1$ ,  $L_{10}$ ,  $L_{50}$  and  $L_{90}$  are commonly used. They are the A-weighted noise levels exceeded for 1%, 10%, 50% and 90% of a stated time period. The continuous equivalent-energy level ( $L_{eq}$ ) is that level of a steady state noise which has the same sound energy as a time-varying noise. It is often considered the average noise level and is used to calculate the Day-Night Levels (DNL) and the Community Noise Equivalent Level (CNEL) described below.

In determining the daily level of environmental noise, it is important to account for the difference in response of people to daytime and nighttime noises. During the nighttime, exterior background noises are generally lower than the daytime levels. However, most household noise also decreases at night and exterior noise becomes very noticeable. Further, most people sleep at night and are very sensitive to noise intrusion. To account for human sensitivity to nighttime noise levels, the Day-Night Level (DNL) noise descriptor was developed. The DNL is also called the  $L_{dn}$ . Either is acceptable, however, DNL is more popular worldwide. The DNL



divides the 24-hour day into the daytime period of 7:00 a.m. to 10:00 p.m. and the nighttime period of 10:00 p.m. to 7:00 a.m. The nighttime noise levels are penalized by 10 dB to account for the greater sensitivity to noise at night. The Community Noise Equivalent Level (CNEL) is another 24-hour average which includes a 5 dB evening (7:00 p.m. - 10:00 p.m.) penalty and a 10 dB nighttime penalty. Both the DNL and the CNEL average the daytime, evening and nighttime noise levels over a 24-hour period to attain a single digit noise exposure.

### Noise Standards

Like many special districts, the School District does not have adopted standards for exterior and interior noise levels. The City of Salinas General Plan Noise Element provides an exterior noise limit for single-family residences and schools a Normally Acceptable standard of 60 dBA and a Conditionally Acceptable standard of 70 dBA. The Noise Element specifies a Normally Acceptable limit of 70 dB DNL for agricultural harvesting and packing uses (use across Rogge Road) and agricultural uses (uses adjacent to the south and east of the site).

The Monterey County Safety Element also has a standard of 60 dBA for low-density residential uses. The project-generated noise exposures at the residential area to the west of the site were evaluated against the standards of the Monterey County Safety Element, since these residences are in the unincorporated Monterey County (Edward L. Pack Associates, page 7).

The State of California Code of Regulations specifies a limit for public school classrooms of 45 dBA. In addition to limiting sound transmission from exterior sources to classroom interiors, the code also requires minimum Sound Transmission Class (STC) ratings for exterior walls and windows, given certain proximities to major noise sources and exterior noise exposures (Edward L. Pack Associates, page 7).

The American National Standards Institute provides a standard for core classroom interiors, limiting the hourly average noise levels from exterior sources during school hours to 35 dBA.

According to the CEQA guidelines, a project would result in a significant impact if project-generated noise causes a substantial increase in the ambient noise level. The quantification of the threshold of significance is left up to the local jurisdiction. The noise assessment utilizes the following thresholds of significance, which are commonly used by many other local jurisdictions:

- causing the DNL in existing residential areas to increase by 5 dB or more and remain below 60 dB DNL;
- causing the DNL in existing residential areas to increase by 3 dB or more and, thereby, exceed 60 dB DNL; or
- causing the DNL in existing residential areas to increase by 1 dB or more if the current noise exposure exceeds 60 dB DNL.

These thresholds of significance were only applied to the existing residential area to the west of the project site, and not to the agricultural operations to the north, south, and east (Edward L. Pack Associates, page 8).

## Existing Conditions

The project site is currently undeveloped and used for agricultural production. An existing residential development is located directly to the west and a harvesting and packing business is located to the north across Rogge Road. Undeveloped agricultural land is located to the north, east, and south. Adjacent land use designations are low-density residential to the west and agricultural across Rogge Road to the north (unincorporated county), and residential low-density to the south and mixed-use to east (City of Salinas). Refer to Figure 5, Land Use and Circulation Policy Map.

To determine the existing noise environment at the site, continuous recordings of the sound levels were made at two locations. Location 1 was to the east of the existing on-site farmhouse, 45 feet from the existing centerline of Rogge Road. Location 2 was at the western property line at the terminus of Topaz Way, approximately 670 feet from the centerline of Rogge Road. The measurements were made for a continuous 24-hour period on March 28 and 29, 2011. The existing  $L_{eq}$ 's at Location 1 ranged from 55.9 to 66.4 dBA during the daytime and from 47.6 to 66.8 dBA at night. The  $L_{eq}$ 's at Location 2 ranged from 40.8 to 54.9 dBA during the daytime and from 37.2 to 50.7 dBA at night. During school hours of 8:00 a.m. to 3:00 p.m., the highest hourly  $L_{eq}$  at Location 1 was 66.4 dBA.

The DNL's for the survey locations were calculated by decibel averaging of the  $L_{eq}$ 's as they apply to the various time periods of the DNL index. A ten decibel nighttime weighting factor was applied and the DNL's were calculated and adjustments were made to the measured noise levels to account for the increased setback of the school buildings. Traffic noise diminishes at the rate of three to six decibels for every doubling of the distance from the source to the receiver. Therefore, other locations on the site at greater distances from Rogge Road would have lower noise levels (Edward L. Pack Associates, page 15).

Future traffic volumes for Rogge Road, under the worst-case general plan build out condition, are expected to increase the existing average daily traffic, which would result in a three decibel increase in the traffic noise levels (Edward L. Pack Associates, page 15). [Table 8, Existing and Future Noise Conditions](#), shows the existing and future noise contours on the project site without factoring in the proposed project.

**Table 8 Existing and Future Noise Contours**

<b>Existing and Future Noise Contours, dBA DNL</b>				
	Main Area of Site		Jade Street/Topaz Way Residences	
Distance to Rogge Road	Existing	Future	Existing	Future
45	67	70	65	68
71	64	67	62	65
97	62	65	60	63
154	59	62	57	60
209	57	60	55	58
331	54	57	52	55
450	53	55	50	53
713	49	52	47	50
969	47	50	45	48

*Source:* Edward L. Pack Associates (2011)

## ***Project Analysis***

### **Impacts to the Proposed Project**

**Exterior Noise Exposures.** The City of Salinas general plan identifies an exterior noise standard of 60 dB DNL for school land uses. This criterion is only applied to areas on the project site that would be developed with buildings, and not for the active acres of the project, such as the soccer fields, baseball diamonds, or tennis courts. [Table 9, Estimated Exterior Noise Levels](#), shows the exterior noise levels at the most impacted setbacks of the classrooms and the auditorium under existing and future traffic noise contours.

The noise assessment concluded that the outdoor noise exposures at the site from traffic on Rogge Road would be within the Normally Acceptable limit of the City of Salinas noise element. Noise from the harvesting and packing business to the north across Rogge Road is intermittent and would not result in unacceptable levels of noise at the school (Edward L. Pack Associates, page 19). The only outdoor noise sensitive area in the proposed project would be the quad/outdoor stage area. However, this area would be surrounded by buildings, which would adequately shield it from traffic noise (Edward L. Pack Associates, page 17).

**Table 9 Estimated Exterior Hourly Noise Levels**

Noise Exposures, Db DNL					
Classrooms			Auditorium		
Distance to Rogge Road Centerline	Existing	Future	Distance to Rogge Road Centerline	Existing	Future
194 ft.	56	59	160 ft.	58	61

*Source:* Edward L. Pack Associates (2011)

**Interior Noise Levels.** For classroom interiors, the State of California Code of Regulations specifies a short-term noise limit of 45 dBA  $L_{eq}$  and the American National Standards Institute specifies a limit of 35 dBA  $L_{eq}$ .

To determine the interior noise levels inside the classroom buildings, a 25 dBA reduction factor was applied to the exterior noise levels to account for the attenuation provided by the classroom building shell under a closed window condition. The closed window condition assumes that the classroom windows would be maintained closed during school hours, mechanical ventilation would be provided and that the windows will be fitted with standard dual-pane thermal insulating glass. [Table 10, Estimated Interior Noise Levels](#), shows the estimated interior noise levels for the classrooms and auditorium.

**Table 10 Estimated Interior Noise Levels**

Hourly Noise Levels, dBA $L_{eq}$			
Classrooms		Auditorium	
Existing	Future	Existing	Future
31	34	33	36

*Source:* Edward L. Pack Associates (2011)

The expected classroom interior noise levels from traffic on Rogge Road would be within the 45 dBA  $L_{eq}$  standard of the State of California Code of Regulations and within the 35 dBA  $L_{eq}$  standard of the American National Standards Institute. There are no interior noise standards for auditoriums.

## Project-Generated Noise Impacts

Noise impacts from the project to the area surrounding the proposed project would include project-generated traffic and school activities, such as football/soccer games, marching bands, outdoor basketball games, baseball games, tennis court activities, and outdoor stage performances.

**Project-Generated Traffic Noise.** The noise assessment analyzed the noise impact of traffic on local surface streets, as well as noise impacts from project traffic using the school parking lot. The contribution of school related traffic to the existing and future traffic volumes in the vicinity of the school would be negligible and would not result in a significant increase in ambient noise levels (Edward L. Pack Associates, page 21). The staff parking lot, located along the western property line, would be adjacent to the existing residential development. The noise from the parking lot traffic would be in compliance with the City of Salinas Noise Element and the Monterey County Safety Element standards and would not add to the background noise environment at the respective receptor locations (Edward L. Pack Associates, page 21-23).

**Football Game Noise.** The football stadium would be located in the northeastern corner of the project site. The noise generated by a high school football game includes PA system announcements, play-by-play calls, a half-time show with both school marching bands, cheering from the crowd, and bands playing during the game. All of these activities are typical of a high school football game. Games are typically three hours in length, with noise before and after the game being inconsequential in relation to game noise. Hourly noise measurements were taken at comparable facilities and analysis concluded that noise levels at the adjacent residences to the west would be within the 60 dB DNL limits of the City of Salinas Noise Element and County of Monterey Safety Element. The noise levels at the eastern and southern property lines, and the property lines of the harvesting and packing business would be within the 70 dB DNL limit of the City of Salinas Noise Element for industrial uses (Edward L. Pack Associates, pages 24 and 25).

**Soccer Game Noise.** The soccer fields would be located along the southern property line of the site. Soccer game noise is created primarily by the shouts of spectators and referee whistles. Noise data of high school soccer games are unavailable at this time; however data gathered from youth soccer games and community college women's soccer games indicates that at 210 feet from the center of the field, with varying numbers of spectators, games generate average sound levels of 49-52 dBA  $L_{eq}$ . The soccer fields would be located along the southern property line of the project site and would not result in significant levels of noise at the residential area to the west (Edward L. Pack Associates, pages 26 and 27).

**Marching Band Noise.** Noise from a marching band would vary greatly, depending upon the size of the band, the instrumentation, the locations of rehearsals and performances, the styles of

the music played, and the intensity with which the band plays any particular piece of music. It is assumed that marching band practice would take place on the football field, as would band performances, such as half-time shows during games. Noise from marching band practices and performances on the football field or during football games would be within the 60 dB DNL limits of the City of Salinas Noise Element and Monterey County Safety Element at the residential uses to the west. The noise would also be within the 70 dB DNL limit of the City of Salinas Noise Element standard for the agricultural uses to the east and south and the industrial use to the north (Edward L. Pack Associates, pages 28 and 29).

**Basketball Court Noise.** The basketball courts would be located in the center of the campus, north of the baseball fields. Typical noises include ball dribbling, shots against the backboard, and shouts from the players. A typical recreational game of high school-aged boys would generate an average sound level of 64 dBA at 40 feet from the center of the court. The proposed project groups the six courts together, creating an equivalent to 72 dBA at 40 feet from the center of the court group. This noise will dissipate as it reaches adjacent land uses. Noise from the basketball courts would be within acceptable noise limits at the adjacent residences to the west (42 dB DNL), within the acceptable noise limits at the agricultural to the east (39 dB DNL) and south (43 dB DNL), and the agricultural-industrial uses to the north (40 dB, DNL) (Edward L. Pack Associates, page 30).

**Tennis Court Noise.** The tennis courts would be located in the center of the campus, directly west of the football stadium. The noise associated with tennis playing is primarily from balls being hit, shoes squeaking on the court, and vocal sound from the players. The tennis courts would have no stands or bleachers, thus, spectator noise should not be an issue. A tournament level match of high school aged boys would generate an average sound level of 56 dBA at 80 ft. from the center of the court. Tennis activity would be in compliance with the standards of the City of Salinas Noise Element and Monterey County Safety Element at the residential uses to the west of the site. Tennis activity would also be in compliance with the City of Salinas Noise Element standards at the agricultural uses to the east and south, and to the industrial use across Rogge Road to the north (Edward L. Pack Associates, page 31).

**Baseball/Softball Game Noise.** The baseball fields would be located in both the southwestern and southeastern corners of the project site. The average sound level at the backstop behind home plate (25 feet) of a championship baseball game of 18 year old boys, with approximately 100 people in the stands is 84 dBA. Although noise data of Jr. Varsity baseball game are unavailable, noise levels during a Jr. Varsity game or Major Little League could be approximately 78 dBA at 25 feet from home plate based on approximately two spectators per player and no PA system. Similarly, girls' softball games typically do not generate the same sound levels as baseball games. Based on two spectators per player, softball games could generate sound levels of up to 75 dBA at 25 feet from home plate. High school baseball and

softball field usage is typically restricted to extracurricular afternoon games and physical education classes. Therefore, the amount of usage of fields would be limited to approximately eight hours per day, with no crowd noise during physical education classes. The worst-case conditions would likely be created by weekend high school games scheduled in conjunction with Little League games when the maximum number of spectators would be present. This analysis assumes a worst-case scenario of all fields being used with a high capacity of spectators and continuous play for nine hours during the day. Noise levels from baseball and softball games dissipates to acceptable levels at the four property lines and would be within the standards of the City of Salinas Noise Element and the Monterey County Safety Element (Edward L. Pack Associates, pages 32 and 33).

**Outdoor Stage.** The outdoor stage is located in the center of the campus, attached to the auditorium. Outdoor concerts of a large concert band or an amplified “rock” band would typically generate sound levels of approximately 94 dBA at 20 feet from the front of the stage (main speakers). Over the course of one hour, the hourly average sound level would be 93 dBA  $L_{eq}$ , which includes a 15 minute break. This sound level also includes the sound reflections or “buildup” from the buildings surrounding the state area. The nearest noise sensitive receptors would be the adjacent residences to the west. These residences are located approximately 520 feet from the stage and are shielded from the stage by the classroom building. Assuming a four hour music event before 10:00 pm, the noise exposure would be 40 dB DNL. The existing and future noise exposures at this residence are 50 and 53 dB DNL, respectively. Therefore, the addition of 40 dB DNL to the background noise exposure results in no increase. The noise from the outdoor stage would be compliance with the City of Salinas Noise Element standards and with the County of Monterey Safety Element standards (Edward L. Pack Associates, page 36).

## ***Impacts and Mitigation Measures***

**Less than Significant Impact– Exterior Traffic Noise Impacts to the Project.** Traffic on Rogge Road would be within the Normally Acceptable limit of the City of Salinas and County of Monterey noise elements. Noise from the harvesting and packing business to the north across Rogge Road is intermittent and would not result in unacceptable levels of noise at the school (Edward L. Pack Associates, page 19). The only outdoor noise sensitive area in the proposed project would be the quad/outdoor stage area. However, this area would be surrounded by buildings, which would adequately shield it from traffic noise. The proposed project would not result in any exceedences of exterior noise standards for school uses. The impact would be less than significant.

**Less than Significant Impact– Interior Traffic Noise Impacts to the Project.** The expected classroom interior noise levels from traffic on Rogge Road would be within the 45 dBA  $L_{eq}$

standard of the State of California Code of Regulations and within the 35 dBA  $L_{eq}$  standard of the American National Standards Institute.

**Less than Significant Impact – Project-Generated Traffic and Parking Lot Noise Impacts.**

The contribution of school related traffic to the existing and future traffic volumes in the vicinity of the school would be negligible. The staff parking lot, located along the western property line, would be adjacent to the existing residential development. The noise from the parking lot traffic would be in compliance with the City of Salinas Noise Element and the Monterey County Safety Element standards and would not add to the background noise environment at the respective receptor locations. The proposed project would not result in any significant traffic or parking lot related noise impacts.

**Less than Significant – Project-Related Outdoor Activity Noise.** The proposed project would result in several outdoor activities that would generate noise, such as athletic events and practice, marching band activities, and an outdoor stage where concerts may occur. All of these activities would result in noise levels that would be in compliance with the City of Salinas Noise Element and the Monterey County Safety Element standards and no significant impact would occur.

## 2.8 TRAFFIC AND TRANSPORTATION

The information in this section is based upon a traffic impact analysis conducted for the proposed project by Hatch Mott MacDonald and presented in the report: SUHSD #5 High School, Salinas, California (2010). The report is included in [Appendix G](#), which is on a CD attached to the back inside cover of the EIR.

Responses to the NOP addressing traffic and transportation issues were received from the Monterey County Resource Management Agency Department of Public Works, Monterey County Resource Management Agency Planning Department, the City of Salinas Community Development Department, and Brian Finegan.

The County Department of Public Works' letter offers information and recommendations about the scope of work for the traffic study. The County Planning Department's letter raised questions about student drop off. The City Community Development Department letter requested that the EIR address issues associated with Rogge Road, and the future extensions of Russell Road and El Dorado Drive. Mr. Finegan requested that this EIR address issues associated with access from Rogge Road and the relationship of the Russell Road and El Dorado Drive extensions to the proposed project.



## ***Standards of Significance***

CEQA Guidelines appendix G indicates that a project may have a significant effect on the environment if it would:

- conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit (see specific thresholds of significance below);
- conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;
- substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- 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;
- result in inadequate emergency access; or
- conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Note: Level of service (LOS) is a concept used by traffic engineers to describe the peak hour traffic conditions at a given intersection. There are six levels of service, Level A through Level F, with A being the least congested and F being the most congested. The full description of “level of service” is provided in Appendix A-1 of the traffic impact analysis, which is included as [Appendix G](#) of the draft SEIR.

## ***Policy Issues and Thresholds of Significance***

The study area covers the jurisdiction of two public agencies, the City of Salinas and the County of Monterey. The City of Salinas and the County of Monterey have established LOS D as the general threshold for acceptable overall traffic operations for signalized, all-way stop controlled, and one- and two-way stop controlled intersections. LOS F operations on the side street approach are the thresholds that warrant improvements at one- and two-way stop controlled intersections.

The significance criteria utilized in the study is consistent with the adopted policies, regulations, goals and guidelines for the City of Salinas and County of Monterey as applicable to the facilities under their jurisdiction. The impact criteria are presented below.

### **Signalized Intersections**

Significant impacts at signalized intersections are defined to occur when:

- The addition of project traffic causes intersection operations to degrade from an acceptable level (LOS D or better) to an unacceptable level (LOS E or worse), or
- Project traffic is added to an intersection operating at an unacceptable level (LOS E or worse).

### **Unsignalized Intersections**

Significant impacts at unsignalized intersections are defined to occur when:

- The addition of project traffic to any unsignalized intersection operating at LOS F under existing conditions; or
- Any traffic signal warrant is met.

### **Pedestrian and Bicycle Facilities**

Significant impacts to pedestrian and bicycle facilities are defined to occur when:

- The project conflicts with existing or planned pedestrian or bicycle facilities, or
- The project creates pedestrian and bicycle demand without providing adequate facilities.

### **Transit Facilities**

Significant impacts to transit facilities are defined to occur when:

- The project conflicts with existing or planned transit facilities, or
- The project generates potential transit trips without providing adequate facilities for pedestrians and bicycles to access transit routes and stops.

## ***Scope of Traffic Impact Analysis***

This traffic study includes a traffic impact analysis of operations at 10 existing intersections during typical weekday AM and PM peak hours, as well as mid-afternoon analysis representing operations when the high school classes end for the day. The following existing intersections were analyzed:

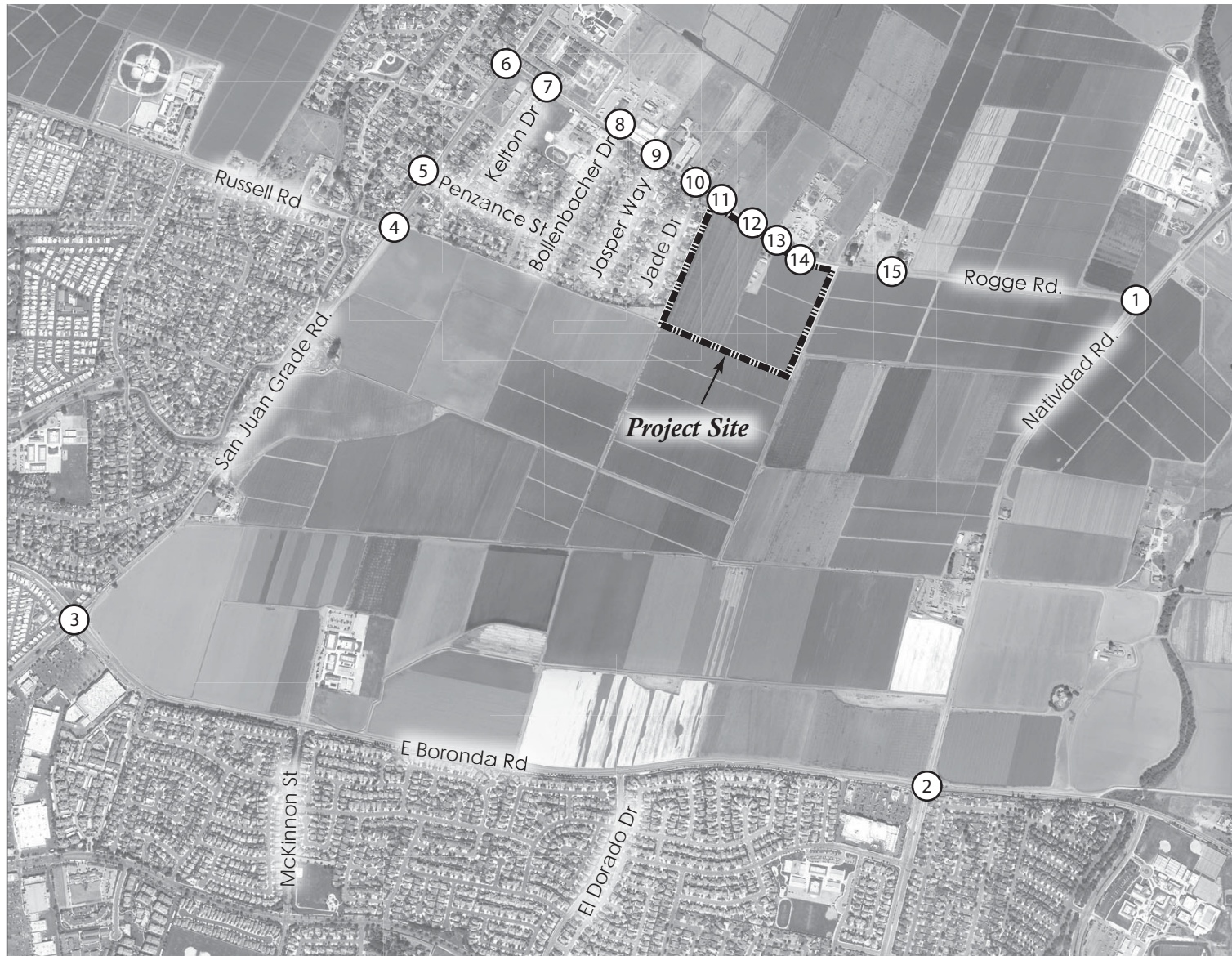
1. Natividad Road/Rogge Road
2. Natividad Road/Boronda Road
3. San Juan Grade Road/Boronda Road
4. San Juan Grade Road/Russell Road
5. San Juan Grade Road/Penzance Road
6. San Juan Grade Road/Rogge Road
7. Kelton Drive/Rogge Road
8. Bollenbacher Drive/Rogge Road
9. Jasper Way/Rogge Road
10. Jade Drive/Rogge Road

In addition, traffic operations at four of the five high school driveway intersections were analyzed. Operations at the driveway serving the stadium-capacity events parking lot are not analyzed because access to this lot will be prohibited during the AM, midday and PM peak hours. The future intersection of Rogge Road and El Dorado Drive was also analyzed.

Studied intersections are identified in [Figure 12, Study Intersections](#).

This traffic study analyzed the traffic impacts of buildout of the proposed project, along with the additional effects of traffic from the long-range cumulative projects in the area. The traffic scenarios evaluated as part of this traffic study are:

- Existing Traffic Conditions;
- Existing Plus Project; and
- Cumulative Plus Project Buildout Traffic Conditions.



0 1,500 feet

Project Site

Source: Hatch Mott MacDonald 2011  
Google Earth 2009



## Figure 12 Study Intersections

SUHSD New High School #5 Construction SEIR

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Traffic conditions during the AM, mid-afternoon, and PM peak hours were analyzed. Existing traffic conditions were determined based on new AM, Mid-afternoon and PM peak period traffic counts collected at the study intersections.

The trips generated by the new high school were determined on the basis of a trip generation study of five high schools in the region. The project generated trips were assigned to the local road network using a trip distribution pattern derived using the expected attendance boundary for the high school. The process provides an intersection level analysis.

## ***Existing Setting***

### **Vicinity Roadway Network**

The existing road network in the vicinity of the project site is described below.

*Rogge Road* is a two lane collector street that connects San Juan Grade Road and Natividad Road. West of the project site, the posted speed limit is 35 miles per hour and east of the project site, the speed limit is not posted. Bolsa Knolls Middle School is located on the north side of Rogge Road, east of Bollenbacher Drive. La Joya Elementary School is located on the south side of Rogge Road, west of Bollenbacher Drive. Rogge Road is currently under County jurisdiction.

*Boronda Road* is a primary access route to the study area and provides access between Highway 101 on the west and Williams Road on the east. It is a six lane east-west arterial between Highway 101 and just east of Main Street. It narrows to a two lane arterial east of San Juan Grade Road. It is planned to be a six lane divided arterial in the Salinas General Plan.

*El Dorado Drive* is a two lane collector that extends in a north-south orientation between Alvin Drive on the south and Boronda Road on the north. The City plans for it to be extended as a two lane collector street to Rogge Road with development of the future growth area.

*McKinnon Street* is a two lane collector that extends in a north-south orientation between Alvin Drive on the south and Boronda Road on the north. The City plans for it to be extended as a two lane collector street to Russell Road near the southwest corner of the high school site with development of the future growth area.

*Natividad Road* is a six lane divided arterial between Laurel Drive and Boronda Road. It narrows to a two lane rural highway between Boronda Road and Old Stage Road. The City's plans for it to be widened to a four lane divided arterial between Boronda Road and Rogge Road with development of the future growth area.



*Russell Road* is currently a two lane arterial between Highway 101 and San Juan Grade Road. Major portions of the Russell Road are wide enough to be a four lane arterial, although the road is currently striped as a two lane arterial due to certain sections that have not been widened to its ultimate width. The City plans for it to be extended east of San Juan Grade Road across Natividad Road, along the southern boundary of the project site, to Old Stage Road with development of the future growth area. It will be a four lane arterial from Highway 101 to Old Stage Road.

*San Juan Grade Road* is a four lane arterial between Main Street and Boronda Road. North of Russell Road, San Juan Grade is two-lanes wide. It extends north of Russell Road to Crazy Horse Canyon Road and continues north to Highway 156 near San Juan Bautista as a two-lane road. The City plans for it to be a four lane divided arterial from Rogge Road to Main Street.

San Juan Grade Road north of Russell Road, and Rogge Road including the Rogge Road/Natividad Road intersection and the streets within the Bolsa Knolls community, are under the jurisdiction of the County of Monterey. San Juan Grade Road south of Russell Road including the San Juan Grade Road/Russell Road intersection, Natividad Road south of the Natividad Road/Rogge Road intersection and Boronda Road are under the jurisdiction of the City of Salinas.

### Existing Transit Systems

The largest single public transit provider in Monterey County is the Monterey-Salinas Transit (MST). The Monterey-Salinas Transit operates from five key transit centers, the Monterey Transit Plaza, Salinas Transit Center, Watsonville Transit Center, Edgewater Transit Exchange in Seaside/Sand City, and Marina Transit Exchange. Each of these centers operates on a time-transfer "pulse" schedule providing easy connections and quick transfers to multiple routings.

The project site is not currently served by MST. The closest service to the site is Route 45 that serves Russell Road, Van Buren Avenue, San Juan Grade Road south of Van Buren Avenue and Boronda Road.

### Existing Bikeway and Pedestrian Facilities

**Bikeways.** There are three basic types of bicycle facilities. Each type is described below:

- Bike path (Class I) - A completely separate right of way designed for the exclusive use of cyclists and pedestrians, with minimal crossings for motorists. These paths should have a minimum width of 8 feet when two-way travel is required and 5 feet in width to accommodate one-way movement.

- Bike lane (Class II) - A lane on a regular roadway, separated from the motorized vehicle right-of way by paint striping, designated for the exclusive or semi exclusive use of bicycles. Bike lanes allow one way bike travel. A minimum width of 5 feet should be provided and adjacent curbside parking avoided where feasible; where curbside parking is allowed adjoining a bike lane, the combined width of the parking and adjacent bike lane should be not less than 13 feet.
- Bike route (Class III) - Provides shared use of the roadway, designated by signs or permanent markings and shared with motorists.

Except for a short section of Rogge Road between San Juan Grade Road and La Joya Elementary School, bike lanes are not currently provided on Rogge Road between San Juan Grade Road and Natividad Road. San Juan Grade Road and Natividad Road in the vicinity of the project also do not have bike lanes. The Monterey County Bikeways Plan includes plans for Class II bike lanes for San Juan Grade Road (between Van Buren Avenue and Crazy Horse Canyon Road, Rogge Road (between Natividad Road and San Juan Grade Road) and Natividad Road (between Boronda Road and Old Stage Road.

**Pedestrian facilities.** A sidewalk is currently provided on the south side of Rogge Road between San Juan Grade Road and the westerly property line. A sidewalk is also provided on the north side of Rogge Road between San Juan Grade Road and the high school site, except along two parcels located between Jasper Way and Jade Drive. Along the project frontage as well as east of the project to Natividad Road, sidewalks are not provided as this portion of Rogge Road fronts agricultural land. The residential streets located within the Bolsa Knolls community are improved with curb, gutter and sidewalks.

## ***Existing Traffic Conditions***

Existing conditions AM, midday, and PM intersection levels of service are summarized in [Figure 13, Intersection Levels of Service](#). Three of the existing study intersections are currently signalized, one is all-way stop controlled and six are one-way or two-way stop-controlled, one is effectively an “L” intersection (with no conflicting movements).

All of the ten study intersections analyzed under existing conditions operate at or better than the LOS D standard. No improvements are required at any of these study intersections under existing conditions. However, there is an existing safety issue at the Natividad Road/Rogge Road intersection.

There are currently approximately 235 vehicles turning left at this location in the AM peak Hour (Hatch Mott MacDonald, Exhibit 4A). The left turn lane on northbound Natividad Road at Rogge Road is designed with a storage bay of about 100 feet and a bay taper of 120 feet. The



design of the left turn lane is not adequate based on design guidelines published by Caltrans. Left turn lanes provide storage for vehicles turning left and also vehicle deceleration for vehicles entering the left turn lane. It is desirable that deceleration takes place entirely off the through lanes. Caltrans allows 10 to 20 miles per hour of deceleration to occur in the left turn lane under certain conditions. Based on a 60 mph design speed, but allowing for 20 mph of deceleration to occur in the left turn lane, the left turn lane would need to be 315 feet in length just for vehicle deceleration. Based on Caltrans standards, 325 feet of additional space should be provided for vehicle storage. This will serve the existing peak demand during the morning peak hour. The under-design of the left turn lane is a safety issue as inadequate storage and deceleration lengths are currently provided. Vehicles slowing in the northbound Natividad Road through lane before entering the left turn lane present a hazard to through traffic on Natividad Road. Vehicle spillback from the left turn lane into the northbound through lane also is a safety hazard for motorists in the left turn lane and motorists travelling on northbound Natividad Road.

The left turn lane on northbound Natividad Road at Rogge Road should be lengthened to provide for vehicle deceleration and vehicle storage. This is the responsibility of the agency with jurisdiction over this intersection, which is located on the boundary of the City of Salinas and unincorporated Monterey County. This improvement is not the responsibility of the School District.

### ***Project Analysis***

The proposed project is analyzed in two separate phases. Phase 1 would develop a high school with an enrollment of 900 students. The campus would be built-out to include classrooms, support facilities and athletic fields. The school is being built to support 900 students in existing neighborhoods located within the Santa Rita Union School District boundaries. The School District expects to be able to accommodate 600 students from the Future Growth Area. Because it is not known if and when development within the Future Growth Area will proceed, the traffic impacts of full enrollment were analyzed in the Cumulative (General Plan Buildout) scenario. Please see Section 3.4, Proposed Project's Contribution to Cumulative Impacts, for a discussion of the impact of full buildout of the school under cumulative project conditions.

The project will be accessed from Rogge Road via five driveways. For reference, the driveways are 1 through 5 from west to east as shown in [Figure 6, Site Plan, in Section 1](#). From west to east, the driveways serve the following purposes:

- Driveway 1 provides access to staff and visitor parking as well as the auto drop-off/pick-up area.
- Driveway 2 is an inbound only driveway that provides access to student parking and the bus drop-off/pick-up area.

N-S Street	E-W Street	Existing Lane Configuration	Existing Intersection Control	LOS Standard	Existing Conditions						Existing + Project Conditions						General Plan Conditions					
					AM Peak Hr		MD Pk Hr		PM Pk Hr		AM Peak Hr		MD Pk Hr		Sat Mid Pk Hr		AM Peak Hr		MD Pk Hr		Sat Mid Pk Hr	
					Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
1	Natividad Road	Rogge Road	NB 1-L, 1-T SB 1-L/R EB 1-L, 1-R  Two-Way Stop (Worst Approach)  W/Improvement	D (E)	7.5 15.0	A B	5.8 14.8	A B	4.3 11.7	A B	10.1 20.8	B C	6.7 16.5	A C	4.7 12.3	A B	25.7 75.8	D F	21.8 81.6	C F	7.9 33.8	A D
2	Natividad Road	Boronda Road	NB 1-L, 1-T, 1-R SB 1-L, 1-T/R EB 1-L, 1-T, 1-R WB 1-L, 1-T/R  Signal  W/Improvement	D	34.0	C	40.4	D	40.1	D	37.5	D	43.2	D	40.9	D	407.6	F	544.9	F	527.8	F
3	San Juan Grade Road	Boronda Road	NB 2-L, 2-T, 1-R SB 2-L, 2-T, 1-R EB 2-L, 1-T, 1-T/R WB 2-L, 3-T, 1-R  Signal  W/Improvement 1 W/Improvement 1 & 2	D	27.8	C	28.1	C	26.9	C	28.5	C	28.5	C	27.3	C	54.9 38.6 36.8	D D D	132.2 59.4 49.1	F E D	176.2 45.5 32.2	F D C
4	San Juan Grade Road	Russell Road	NB 1-L, 1-T SB 1-L, 1-T, 1-R EB 1-L, 1-R  Signal	D	28.4	C	23.7	C	25.1	C	41.6	D	24.6	C	25.0	C	48.5	D	47.4	D	31.1	C
5	San Juan Grade Road	Penzance Street	NB 1-L/T/R SB 1-L, 1-T/R EB 1-L/T/R WB 1-L/T/R  Two-Way Stop (Worst Approach)  W/Improvement	D (E)	5.6 36.8	A E	2.2 19.3	A C	1.6 16.8	A C	31.6 255.7 25.1	D F C	3.0 30.4 23.3	A D C	1.8 21.1 23.0	A C C	5.7 48.2	A E	2.4 28.2	A D	1.4 21.4	A C
6	San Juan Grade Road	Rogge Road	NB 1-L/T, 1-R SB 1-L/T, 1-T/R EB 1-L/T/R WB 1-L, 1-T/R  All-Way Stop  W/Improvement	D	18.3	C	12.0	B	10.7	B	133.6 23.5	F C	23.0 21.2	C C	13.2 22.0	B C	21.9	C	17.2	C	16.6	C
7	Kelton Drive	Rogge Road	NB 1-L/R EB 1-T/R WB 1-L/R  Two-Way Stop (Worst Approach)	D (E)	0.5 12.9	A B	0.7 12.1	A B	0.5 9.7	A A	0.6 22.4	A C	0.6 15.6	A C	0.5 10.7	A B	0.4 12.3	A B	0.5 11.5	A B	0.4 10.2	A B

Source: Hatch Mott MacDonald 2011

Figure 13a  
Intersections Levels of Service  
SUHSD New High School #5 Construction SEIR

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N-S Street	E-W Street	Existing Lane Configuration	Existing Intersection Control	LOS Standard	Existing Conditions						Existing + Project Conditions						General Plan Conditions						
					AM Peak Hr		MD Pk Hr		PM Pk Hr		AM Peak Hr		MD Pk Hr		Sat Mid Pk Hr		AM Peak Hr		MD Pk Hr		Sat Mid Pk Hr		
					Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	
8	Bollenbacher Drive	Rogge Road	NB 1-L/R EB 1-T/R WB 1-L/R	Two-Way Stop (Worst Approach)	D (E)	1.7 11.8	A B	1.0 11.7	A B	0.7 9.3	A A	1.8 19.6	A C	0.9 13.8	A B	0.6 10.0	A A	1.3 11.4	A B	0.7 10.9	A B	0.5 9.6	A A
9	Jasper Way	Rogge Road	NB 1-L/R EB 1-T/R WB 1-L/R	Two-Way Stop (Worst Approach)	D (E)	0.5 14.3	A B	0.7 13.3	A B	0.4 9.8	A A	0.9 35.4	A E	0.7 19.3	A C	0.4 11.2	A B	0.4 13.9	A B	0.5 13.3	A B	0.3 10.8	A B
10	Jade Drive	Rogge Road	NB 1-L/R EB 1-T/R WB 1-L/R	Two-Way Stop (Worst Approach)	D (E)	0.8 11.8	A B	0.5 9.5	A A	0.8 9.8	A A	2.1 26.9	A D	0.9 13.8	A B	1.0 11.1	A B	1.2 12.1	A B	0.8 11.0	A B	0.7 10.5	A B
11	High School Driveway 1	Rogge Road	EB 1-T WB 1-T	Two-Way Stop (Worst Approach)	D (E)	- -	- -	- -	- -	- -	12.9 68.9	B F	3.2 18.9	A C	1.5 12.1	A B	7.0 22.0	A C	4.1 14.3	A B	1.9 10.9	A B	
12	High School Driveway 2	Rogge Road	EB 1-T WB 1-T	Two-Way Stop (Worst Approach)	D (E)	- -	- -	- -	- -	- -	0.3 9.0	A A	0.1 8.3	A A	0.1 7.8	A A	0.8 9.5	A A	0.1 8.5	A A	0.5 8.0	A A	
13	High School Driveway 3	Rogge Road	EB 1-T WB 1-T	Two-Way Stop (Worst Approach)	D (E)	- -	- -	- -	- -	- -	0.0 0.0	A A	1.4 17.0	A C	0.9 11.5	A B	0.0 0.0	A A	1.1 13.6	A B	0.8 11.2	A B	
14	High School Driveway 4	Rogge Road	EB 1-T WB 1-T	Two-Way Stop (Worst Approach)	D (E)	- -	- -	- -	- -	- -	0.2 11.6	A B	0.2 11.1	A B	0.0 0.0	A A	0.1 12.6	A B	0.1 12.1	A B	0.0 0.0	A A	

NOTES:

1. L, T, R = Left, Through, Right.
2. NB, SB, EB, WB = Northbound, Southbound, Eastbound, Westbound.
3. Analysis performed using 2000 Highway Capacity Manual methodologies.
4. Worst approach level of service standard is generally LOS E. Level of service "F" is the level of service at which improvements would be required.
5. Levels of service cited under *Mitigations* use recommended improvements shown on *Exhibit 5B*.
6. \* = Delay is over 300 seconds (5 minutes)
7. Operations in **bold** represent significant impacts.

Source: Hatch Mott MacDonald 2011

Figure 13b  
Intersections Levels of Service  
SUHSD New High School #5 Construction SEIR



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- Driveway 3 is an outbound only driveway that provides egress from the student parking lot.
- Driveway 4 is an outbound only driveway that provides egress from the bus drop-off/pick-up area. The driveway approach to Rogge Road will be designed and signed to only allow right turns from the driveway to Rogge Road.
- Driveway 5 provides access to the stadium-capacity events parking lot that is located on the east side of the campus. This lot will only be used for special school events.

Phase 1 is analyzed in conjunction with existing traffic volumes and the existing street network, while Buildout is analyzed with the trips from both cumulative long-range development projects in the greater Salinas area that includes development of the Future Growth Area land uses and proposed street network changes.

**Phase 1**

Phase 1 of the project would generate 1,661 daily trips, with 495 trips during the AM peak hour, 306 trips during the midday peak hour, and 162 trips during the PM street peak hour. Trip generation is presented in [Table 11, Project Trip Generation](#).

**Project Trip Distribution and Assignment.** Trip distribution defines the origins and destinations of all trips to and from a project site. Sixty percent of the enrollment for the new high school will be located within current residential neighborhoods within the Santa Rita Union School District boundaries (Phase 1) and 40 percent will be located within the Future Growth Area (Buildout), also within the Santa Rita Union School District boundaries. Trip distribution patterns were developed separately for each of the areas to account for the different spatial orientation of each with respect to the new high school.

Exhibit 7 in the traffic impact analysis (Appendix G) shows the spatial distribution pattern for students located within the Santa Rita Union School District. The trip distribution pattern was developed using the enrollment figures at the elementary schools located within the school district as a surrogate for the spatial distribution pattern of population within the district. The following enrollment figures were used in the analysis for each school:

La Joya Elementary School	459 students
McKinnon Elementary School	540 students
New Republic Elementary School	410 students
Santa Rita Elementary School	515 students

**Table 11 Project Trip Generation**

	Project Size	Weekday Daily Trips	AM Peak Hour			PM School Peak Hour			PM Street Peak Hour		
			Total Peak Hour	% of ADT	In / Out	Total Peak Hour	% of ADT	In / Out	Total Peak Hour	% of ADT	In / Out
<b>Trip Generation Rates<sup>1</sup></b>											
High School (per student)	1,500 students	1.85	0.55	30%	60% / 40%	0.34	18%	40% / 60%	0.18	10%	44% / 56%
<b>High School #5</b>											
High School	1,500 students	2,768	825	30%	495 / 330	510	18%	204 / 306	270	10%	119 / 151
<b>Trip Generation by Area</b>											
Santa Rita District (Current Students)	900 students	1,661	495	30%	297 / 198	306	18%	122 / 184	162	10%	71 / 91
Future Growth Area	600 students	1,107	330	30%	198 / 132	204	18%	82 / 122	108	10%	48 / 60
<b>Total</b>	<b>1,500 students</b>	<b>2,768</b>	<b>825</b>	<b>30%</b>	<b>495 / 330</b>	<b>510</b>	<b>18%</b>	<b>204 / 306</b>	<b>270</b>	<b>10%</b>	<b>119 / 151</b>

**Source:** Hatch Mott MacDonald

**Note:** 1. Trip generation rates for High School derived from traffic counts performed at five area high schools. See Exhibit 16A in the traffic impact report for more information.  
2. Buildout of the school (1,500 students) is evaluated in the Cumulative Impacts Discussion in Section 3 of this EIR.

The trip distribution was further refined to determine the percentage arriving and departing to/from the west versus the percentage arriving and departing to/from the east on Rogge Road. The results are as follows:

	To/From the West	To/From the East
Santa Rita Union District Students	80 percent	20 percent

No credit was given for the trips generated by existing high school students that would be transferred to the new school. All of the project-generated traffic was assumed to be new traffic on the local road network. As a result, the analysis of traffic impacts is conservative.

Consistent with the starting and ending times of other high schools in the Salinas Union High School District, the new high school was planned to begin the school day at or near the 8:00 AM hour and end the school day at or near the 3:00 PM hour. La Joya Elementary School begins the day at 8:00 AM and ends at 2:40 PM and the Bolsa Knolls Middle school begins school at 8:15 AM and ends at 3:10 PM.

**Project Level Transit Systems.** The Monterey-Salinas Transit (MST) does not provide service to Rogge Road. However, the school district operates a school busing program. Students living outside of 2½ miles of the high school would be offered bus transportation to the school. The exact number of students that would be bused to and from the school is uncertain. For purposes of this analysis, it was assumed the school would be served by six buses during the morning arrival period and afternoon departure period. The proposed project would not create significant impacts to transit facilities.

**Project Level Bikeway and Pedestrian Facilities.** The project would generate pedestrian and bicycle trips. Approximately 135 students during Phase 1 and 225 students at buildout would bike or walk to school. This is a rough approximation of walking and bicycling demand generated by the school based on national statistics. Actual usage would depend on housing density located with reasonable walking and biking distances, the provision of pedestrian and bicycling facilities and other factors.

The predominant pedestrian and bicycle demand initially generated from west of the site. Future pedestrian and bicycle demand from east and south of the site would be generated when the Future Growth Area is developed.

Pedestrians and bicyclists would travel primarily from the Bolsa Knolls neighborhood using Penzance Street, Bollenbacher Drive, Jasper Way and Jade Street to access Rogge Road. Additional walking and bicycle trips to and from the site would be generated by residential housing located on the north side of Rogge Road at San Juan Grade Road and on the west side of San Juan Grade Road at Rogge Road.



The continuous sidewalk located on the south side of Rogge Road between San Juan Grade Road and the project site would serve pedestrians generated originating from residential development located south of Rogge Road and west of the project site. A continuous sidewalk is not provided on the north of Rogge Road west of the project site to serve pedestrians originating from residential development on the north side of Rogge Road. However, crosswalks are provided allowing students to safely cross from the north side of Rogge Road to the south side of Rogge Road.

A Class II bike lane currently exists on Rogge Road between San Juan Grade Road and La Joya Elementary School, but not along the remaining sections on Rogge Road west of the project site. This analysis assumes that some of the high school students would bike to school along Rogge Road. Without bike lanes along the entire portion of Rogge Road west of the project site, bicycling along Rogge Road could be dangerous and result in injury to students who would bike to school. This would be a significant safety impact. Providing bike lanes along both sides Rogge Road would mitigate this impact. Providing the bike lanes are included as mitigation measures in “Impacts and Mitigation Measures” presented later in this section.

The project plans include a 10-foot wide meandering shared bike/pedestrian trail on the south side of Rogge Road along the project frontage. The shared facility would be constructed in lieu of bike lanes on Rogge Road. The shared trail would continue to the west of Driveway #1 and would terminate at the sidewalk on the south side of Rogge Road that terminates at the westerly property boundary. The existing Rogge Road sidewalk at this location is only four feet in width, which is not wide enough to serve as a shared facility. The planned facilities for pedestrians and bicyclists between the project’s western boundary and Jade Drive will not be adequate for the pedestrian and bicycle demand anticipated for this section of roadway. This could result in collisions between pedestrians and bicyclists potentially resulting in injury. This is considered a significant safety impact. To mitigate this impact, the School District will widen the existing sidewalk located on the south side of Rogge Road between Jade Drive and the school property boundary to 10 feet. In addition, as identified above, a crosswalk will also be provided across Rogge Road at the Jade Drive and Jasper Way intersections, allowing bicyclists to safely cross the road. These improvements are included as mitigation measures in “Impacts and Mitigation Measures” presented later in this section.

A sidewalk will be constructed on the west side of Driveway #1 that will connect to the sidewalk on Rogge Road that terminates at the westerly property boundary. This sidewalk will provide a connection between the school and the Rogge Road sidewalk that will allow pedestrians to avoid conflicting with drop-off/pick-up traffic. Bicycle parking area will be provided at the high school.

**Existing Plus Project Phase 1 Traffic Conditions - Intersection Operations.** The traffic that would be generated by Phase 1 of the study project was combined with the existing traffic to

achieve Existing Plus Project Phase 1 condition traffic volumes. The following three intersections would not operate at acceptable operations under the Existing Plus Project Phase 1 Condition:

- Intersection #5 – San Juan Grade Road/Penzance Street (unsignalized)
- Intersection #6 – San Juan Grade Road/Rogge Road (unsignalized)
- Intersection #11 – Rogge Road/High School Driveway #1 (unsignalized)

In addition, unless the existing safety deficiencies of the left turn storage lane on northbound Natividad Road at Rogge Road (Intersection #1) are not fixed as discuss earlier in this section, this safety issue would continue at the intersection. Traffic operations at each of these four intersections under existing plus Phase 1 conditions are described below.

*Intersection #1 – Natividad Road/Rogge Road:* Although this intersection would operate at satisfactory levels of service under Project Phase 1 conditions, the proposed project will add trips to the northbound Natividad Road left turn lane. As described in the Existing Traffic Conditions section, this left turn lane is not adequately designed for current conditions. The addition of project trips to the intersection represents a significant impact. To mitigate the impact, the left turn lane on northbound Natividad Road at Rogge Road should be lengthened to provide for 400 feet for vehicle storage plus additional length for vehicle deceleration. This improvement is included as a mitigation measure in “Impacts and Mitigation Measures” presented later in this section.

*Intersection #5 – San Juan Grade Road/Penzance Street:* This intersection is currently a two-way stop controlled intersection on both legs of Penzance Street. This intersection would operate at an overall LOS D, but the westbound Penzance Street approach would operate at LOS F during the AM peak hour. Note that a small amount of project trips were assigned to this intersection on the Penzance Street approaches to account for the possibility that some high school traffic would use Penzance Street to circulate between Rogge Road and San Juan Grade Road. Even if zero project trips were added to the Penzance Street approaches, the Penzance Street approaches to San Juan Grade Road would operate at LOS F during the AM peak hour due to the amount of project traffic added to San Juan Grade Road.

The San Juan Grade Road/Penzance Street intersection operates at an overall LOS A and the westbound Penzance Street approach operates at LOS E during the AM peak hour. By degrading the westbound intersection approach from LOS E, which is an acceptable operation, to LOS F, which is not acceptable, the project impact to this intersection is considered significant.

The Caltrans Peak Hour Signal Warrant is met at the San Juan Grade Road/Penzance Street intersection for the Existing Plus Project Phase 1 Condition. With signalization and the addition

of a left turn on the northbound San Juan Grade approach to Penzance Street, the San Juan Grade Road/Penzance Street would operate at LOS C during each of the three study peak hours (AM, Midday and PM).

*Intersection #6 – San Juan Grade Road/Rogge Road:* This intersection is currently an all-way stop controlled intersection and it would operate at LOS F during the AM peak hour with the project developed. The intersection currently operates at LOS C during the AM peak hour. The project impact, with an a.m. start time of 8:00 to this intersection would be significant. Changing the bell schedule so that classes start before 7:45 a.m. or after 8:30 a.m. would eliminate the significant impact at this intersection. This change is included as a mitigation measure in “Impacts and Mitigation Measures” presented later in this section.

*Intersection #11 – Rogge Road/High School Driveway #1:* This intersection would operate at an overall LOS B, but the northbound driveway would operate at LOS F during the AM peak hour. This is an unacceptable operating condition. Because this driveway serves the drop-off/pick-up area, significant vehicle queuing through the drop-off/pick-up area would occur in this situation. Potentially, the queue could extend from the northbound approach (exit) to Rogge Road, through the drop-off/pick-up area and to the inbound lane (entrance) of the driveway at Rogge Road. This situation could cause gridlock that would extend onto Rogge Road. Under these conditions, motorists dropping students off in the morning would avoid entering the drop-off area in the morning and would drop their student(s) at other locations near the school, including on Rogge Road and on Jade Drive.

Signalization of the Rogge Road/Project Driveway #1 intersection is not recommended for Existing Plus Project Phase 1 conditions with the project site plan depicted in [Figure 6, Site Plan](#). The peak hour signalization warrant would not be met, except for the brief 20 minute period prior to the start of school under Existing Plus Project Phase 1 conditions. In addition, signalization is not necessarily the best alternative considering the high inbound and outbound vehicle demand that would occur during the morning drop-off period and the relatively short distance between Rogge Road and the parent drop-off area for both the inbound and outbound directions. Signalization of the Rogge Road intersection with the driveway serving the drop-off/pick-up area could create gridlock in the drop-off/pick-up area during periods when the signal indication for the driveway exit approach was red.

The traffic impact analysis recommended that the school access plan be modified to achieve acceptable traffic operations at the Rogge Road intersections with the project driveways. This could necessitate separating inbound movements to the parent loading area and outbound movements from the parent loading area to two separate driveways. Changing the access plan is included as a mitigation measure in “Impacts and Mitigation Measures” presented later in this section.

**Neighborhood Impacts.** The high school site is located immediately east of the Bolsa Knolls residential community and the Bolsa Knolls street network provides an alternative route to Rogge Road and San Juan Grade Road for circulation between the high school and the San Juan Grade Road at Russell Road. Some high school traffic could use Penzance Street and Jade Drive for access to avoid San Juan Grade Road north of Penzance Street and Rogge Road between San Juan Grade Road and Jade Drive. Currently, Penzance Street between San Juan Grade Road and Bollenbacher Drive and Bollenbacher Drive between Penzance Street and Rogge Road is used by parents as an access route to La Joya Elementary School.

Whether Penzance Street is used to bypass San Juan Grade Road and Rogge Road would depend on travel time differential between the two alternative routes. The Penzance Street-Jade Drive route is subject to 25 mile per hour travel speeds on these residential streets and additional delay at two all-way stop controlled intersections on Penzance Street, at Dexter Drive and Pingree Way. Additional delay is incurred turning onto and off of Rogge Road and San Juan Grade Road. The San Juan Grade Road-Rogge Road route is subject to 35 mile per hour speed limits and additional delay at the all-way stop controlled San Juan Grade/Rogge Road intersection.

It is important that the capacity of the San Juan Grade Road – Rogge Road route and the San Juan Grade Road/Rogge Road intersection in particular, be improved to serve the projected demand. If the capacity of the route is not improved to meet the demand, traffic would seek alternatives, which in this case, is Penzance Street and Jade Drive.

Travel times between the San Juan Grade Road/Penzance Street intersection and the Rogge Road/Jade Street intersection using the two alternative routes are compared [Table 12, Travel Time Comparison Between San Juan Grade Road/Penzance Street and Rogge Road/Jade Drive Intersections, Existing Plus Phase 1 Project Conditions – AM Peak Hour](#).

Under Existing Plus Project Phase 1 conditions and with no change in the bell schedule, the Penzance Street – Jade Drive route would provide faster travel time from San Juan Grade Road compared to the San Juan Grade Road – Rogge Road route in the inbound direction during the AM peak hour. With a change in the bell schedule, the San Juan Grade Road-Rogge Road route would become the faster route to school in the morning. In the outbound direction during the AM peak hour, the San Juan Grade Road – Penzance Street route is faster than the Penzance Street – Jade Drive route with or without the recommended change in the bell schedule. The comparison of travel times indicates the importance of changing the bell schedule so that the start time of the high school is not at the same time as the elementary and middle schools located to the west on Rogge Road. Without the recommended change in the bell schedule, it is very likely that high school traffic would utilize the Penzance Street – Jade Street route to access the high school to avoid congestion at the San Juan Grade Road/Rogge Road intersection.

**Table 12 Travel Time Comparison Between San Juan Grade Road/Penzance Street and Rogge Road/Jade Drive Intersections, Existing Plus Phase 1 Project Conditions – AM Peak Hour**

	Inbound			Outbound		
	SJG Rd Rogge Rd (seconds)	Penzance Jade Dr (seconds)	Time Differential (seconds)	SJG Rd Rogge Rd (seconds)	Penzance Jade Dr (seconds)	Time Differential (seconds)
No Mitigation	286	<b>135</b>	151	<b>263</b>	374	-111
With Mitigation	<b>101</b>	157	-56	<b>114</b>	178	-64

**Source:** Hatch Mott MacDonald

- Note:**
1. Shortest route in each condition (no mitigation/with mitigation) is in bold
  2. Segment travel time based on speed limit and travel distance. Intersection delay based on Existing Plus Project Phase 1 intersection delay calculations using the Traffix software.
  3. Travel times for the no mitigation condition based on existing intersection geometrics and traffic control.
  4. Travel times for the with mitigation condition based on proposed intersection geometrics and traffic control recommended on Exhibit 5B of the traffic impact analysis report in Appendix G.

**Project Access and Internal Circulation.** The project access and internal circulation proposed in Figure 6, Site Plan, would not work adequately as previously discussed.

In addition, the stadium-capacity parking lot would have a single access to Rogge Road and would not connect to other parking lots on site. This parking lot would only be used during stadium-capacity events. Eighty-one parking spaces will be provided in this parking lot. Police traffic control at the driveway intersection with Rogge Road is recommended when the parking lot is used for stadium-capacity events because left turn channelization is not provided on Rogge Road at this driveway.

## ***Impacts and Mitigation Measures***

Note: This section of the EIR generally addresses only the project's first phase of 900 students, although some improvements to Rogge Road that are required prior to implementation of Phase II are address in this section. Impacts associated with the high school's capacity of 1,500 students is further address in Section 3, Cumulative Impacts, of this EIR.

**Less than Significant Impact with Implementation of Mitigation-Unacceptable Traffic Operations at the San Juan Grade Road/Rogge Road Intersection.** Addition of the Project Phase 1 traffic at the San Juan Grade Road/Rogge Road intersection would result in an increase in delay from 18.3 seconds (LOS C) to 133.6 seconds (LOS F) in the AM peak hour.

Implementation of the following mitigation measure would reduce this impact to a less than significant level.

## Mitigation Measures

T-1. The School District will adjust the planned high school bell schedule to avoid the starting and ending times of the elementary and middle schools located to the west on Rogge Road. Based on the current schedules for the elementary and middle schools, the high school should begin prior to 7:45 AM or after 8:30 AM.

The School District has decided to begin classes at 7:45 AM.

**Less than Significant Impact with Implementation of Mitigation-Unacceptable Traffic Operations at High School Driveway 1 and Rogge Road.** Vehicles exiting the parent drop off parking lot in the AM peak hour would wait approximately 69.9 seconds (LOS F). Significant vehicle queuing through the drop-off/pick-up area would occur in this situation. Potentially, the queue could extend from the northbound approach (exit) to Rogge Road, through the drop-off/pick-up area and to the inbound lane (entrance) of the driveway at Rogge Road. This situation could cause gridlock that would extend onto Rogge Road. Implementation of the following mitigation measure would reduce this impact to a less than significant level.

## Mitigation Measure

T-2. The School District will revise the site and access plans to achieve acceptable traffic operations at the Rogge Road intersections with the project driveways. Changes include the following:

- a. Acceptable intersection operations (i.e., intersection levels of service) at all Rogge Road intersections with project driveways;
- b. Separation of the physical routes for the various transportation modes (buses, cars, pedestrians/bicycles and service vehicles) as much as possible from each other; and
- c. Adequate loading/unloading space with an adequate driveway length for queuing vehicles on site.

Mitigated site and access plans were subsequently prepared that address this impact. They are presented as [Figure 14, Mitigated Site Plan](#) and [Figure 15, Mitigated Access Plan](#).

An analysis confirming that this new design mitigates the identified impacts was conducted by RBF Consulting (2011) and a summary of that evaluation is presented below. The analysis is included as [Appendix H, SUHSD High School #5 Mitigated Access Plan Analysis](#), of this EIR.

## Mitigated Site and Access Plans

Mitigated site and access plans were prepared to address the access and circulation impacts discussed above. The mitigated site and access plan provides access to the project site via four new driveways, as seen in [Figure 14](#) and [Figure 15](#), and described below.

- Driveway 1 (Intersection #11) – Provides full access to staff and visitor parking, and ingress only for school buses;
- Driveway 2 (Intersection #12) – Provides right-out egress only for school buses;
- Driveway 3 (Intersection #13) – Provides ingress only for student parking and drop-off/pick-up area; and
- Driveway 4 (Intersection #14) – Provides full access to student and drop-off/pick-up area.

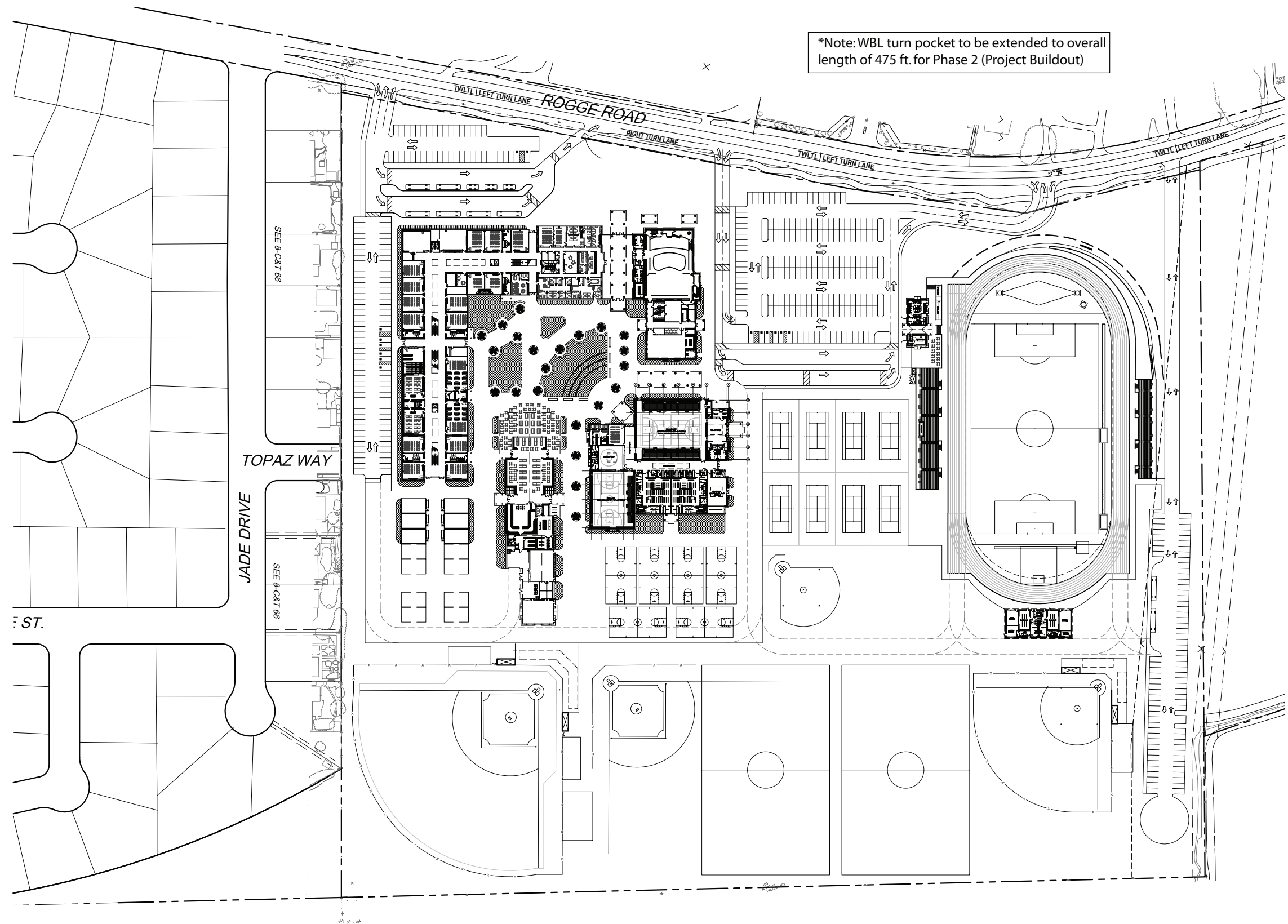
The mitigated plans include the installation of a two-way left turn lane at Driveway 1 and a traffic signal at Driveway 4. These improvements will improve traffic operations at Driveway 1 and Driveway 4 from LOS F to LOS C or better during the AM peak hour during both Phase I and Phase II, and would alleviate significant delays during the AM peak hour both intersections.

The increased traffic along Rogge Road during Phase I and Phase II at the proposed ingress driveways would meet warrants for requiring a separate left turn lane for Driveway 3 and Driveway 4 under the mitigated plans and the mitigated plans include the installation of a separate left turn lane for Driveway 3 and Driveway 4. During Phase II, after development within the Future Growth Area, the storage for the westbound left turn along Rogge Road into Driveway 3 will be 450 feet, and storage for the westbound left turn along Rogge Road into Driveway 4 will be 475 feet. During Phase I, a right turn lane will be warranted along Rogge Road at Driveway 3; however it will not be warranted under Phase II. The storage for the eastbound right turn along Rogge Road into Driveway 3 will be 175 feet in both Phase I and Phase II.

**Less than Significant Impact with Implementation of Mitigation– Off-site Safety Issues Associated with Bicycle and Pedestrian Facilities.** The proposed project will generate pedestrian and bicycle trips. Approximately 135 students during Phase 1 and 225 students at buildout are anticipated to bike or walk to school. The following safety impacts have been identified:

- The existing Rogge Road sidewalk between the westerly property boundary and Jade Drive is only four feet in width, which is not wide enough to serve as a shared (bicycle and pedestrian) path facility. This could result in collisions between pedestrians and bicyclists potentially resulting in injury.





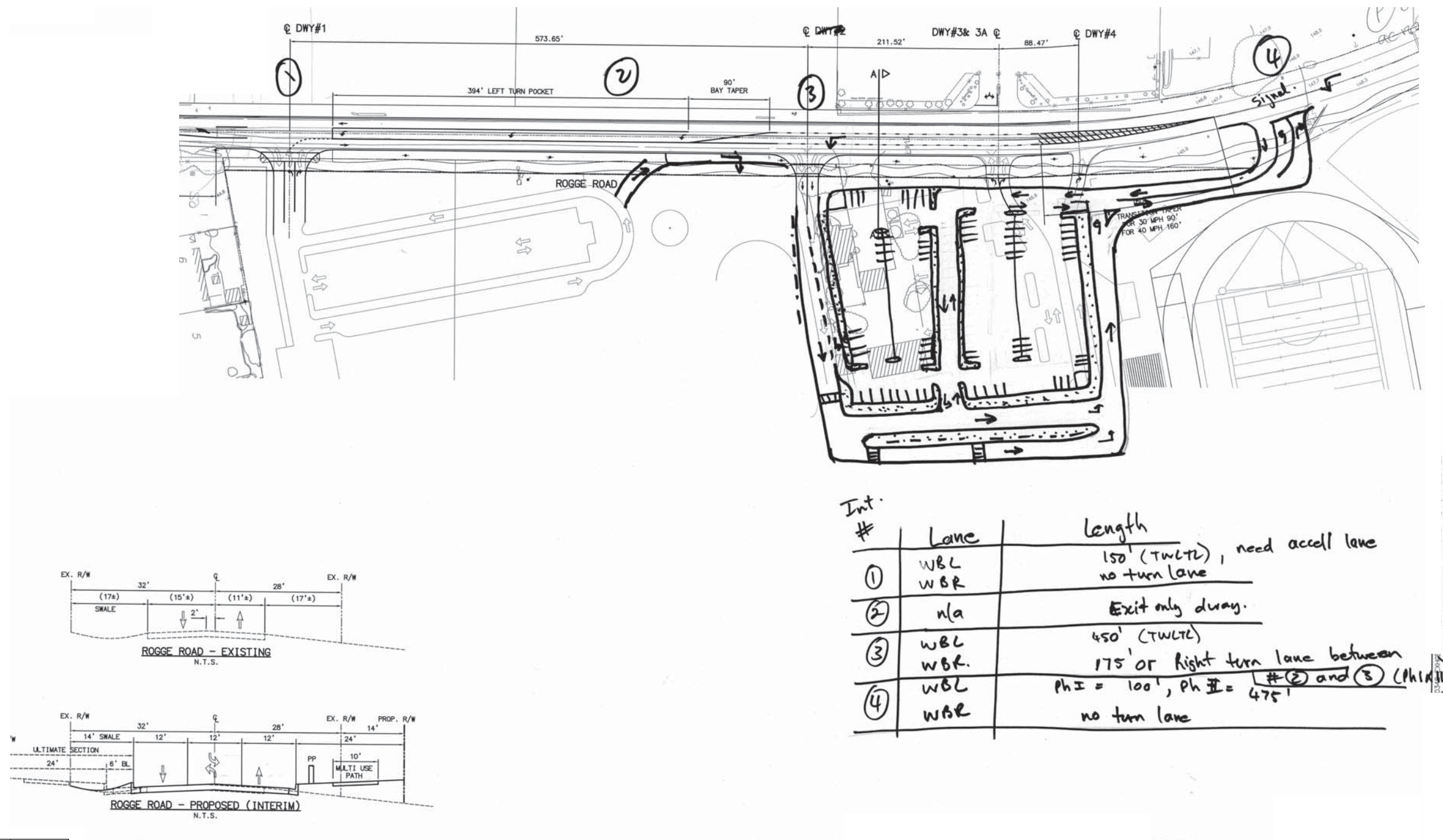
Source: Kasavan Architects 2011

Figure 14  
Mitigated Site Plan

SUHSD New High School #5 Construction SEIR



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Source: RBF Consulting 2011

Figure 15  
Mitigated Access Plan

SUHS New High School #5 Construction SEIR



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- The bike lanes on both the north and south sides of Rogge Road from San Juan Grade Road to the project site are not contiguous. Lack of adequate bicycle facilities along Rogge Road west of the project site is a safety issue.
- The sidewalk is not contiguous on north side of Rogge Road from San Juan Grade Road to the project site.

Implementation of the following mitigation measures would reduce these potential impacts to a less than significant level.

### **Mitigation Measure**

T-3. The School District will provide the following pedestrian and bicycle facilities improvements:

- a. Extend the Class I bike/pedestrian trail along the school street frontage west to Jade Drive.
- b. Provide a Class III bike route on both the north and south sides of Rogge Road from Jade Drive west to the existing Class II bike lane west of Bollenbacher Drive.
- c. Widen (to 10 feet) the existing sidewalk located on the south side of Rogge Road between Jade Drive and the school property boundary.
- d. Provide ADA ramps and a crosswalk across Rogge Road at the Bollenbacher intersection.
- e. Provide ADA ramps and crosswalks across Jade Drive and Jasper Way.
- f. Provide a bicycle parking area on the high school.

All improvements will be implemented prior to opening day. All improvements within the public right-of-way will be subject to review and approval by the Monterey County Department of Public Works.

The impacts associated with these improvements are analyzed in Section 2.9 Off-Site Improvements.

**Less than Significant Impact with Implementation of Mitigation–Inadequate Left-turn Storage on Northbound Natividad Road at Rogge Road.** As discussed in the Existing Traffic Conditions presented earlier in this section of the EIR, this intersection currently has inadequate left-turn storage on northbound Natividad Road at Rogge Road during the AM peak hour for the approximate 235 vehicles turning left during this time period. Therefore, improvements to the left-turn storage are warranted under existing conditions.

Phase 1 of the proposed project would add approximately 54 vehicles turning left from northbound Natividad Road onto westbound Rogge Road in the AM peak hour. This represents about 18.7 percent of the total traffic under existing plus Phase 1 project conditions (235 existing plus 54 project Phase 1). Adding vehicles to this currently deficient left-turn movement would be considered a potentially significant safety impact. Implementation of the following mitigation measure will reduce this impact to a less than significant level.

### **Mitigation Measure**

T-4. The School District will pay their fair share of improving the left-turn storage on northbound Natividad Road at Rogge Road to the responsible agency (City of Salinas or County of Monterey), if the responsible agency agrees to make the improvement prior to opening day for the high school. If the responsible agency does not agree to make the necessary improvement, the School District will implement the improvement to the degree it mitigates the School District's fair share of the cumulative impact.

**Less than Significant Impact Left Turn Channelization at the Stadium-Capacity Events Parking Lot.** The stadium-capacity events parking lot would have a single access to Rogge Road and will not connect to other parking lots on site. This parking lot will only be used during stadium-capacity events. Eighty-one parking spaces will be provided in this parking lot. Safety could be an issue at this intersection without appropriate left-turn channelization. The signal at Driveway 4 will generate gaps for vehicles to exit the site. In addition, the westbound left turn pocket at Driveway 4 will extend past the stadium driveway and provide left turn storage. No mitigation measures are necessary (RBF Consulting 2011, page 6).

### **Traffic Impact Fees**

The discussion of cumulative impacts and traffic impact fees is included in Section 3.0, Cumulative Impacts, of this EIR.

## **2.9 OFF-SITE IMPROVEMENTS**

The proposed project and identified mitigation measures include a number of off-site improvements necessary to provide adequate infrastructure, and bicycle and pedestrian access to the project site. To service the proposed project, sewer lines would be extended along Rogge Road to the west to connect with the City of Salinas sewer system at the southwestern corner of Rogge Road and Bollenbacher Drive. Water mains would be extended along Rogge Road to the west to connect with the City's water system at the southeastern corner of Rogge Road and Jade Drive. The proposed project would connect to an existing gas main located directly across Rogge

Road. A Class I bike/pedestrian trail would be constructed along the south side of Rogge Road from the edge of the project site west to Jade Drive. This trail would connect to the Class 1 bike/pedestrian trail that would run along the street frontage of the project site. The existing crosswalks at the intersections of Rogge Road and Jade Drive, Jasper Way, and Bollenbacher Drive would be upgraded with ADA compliant ramps and markings. Class III bike lanes are proposed on both the north and south side of Rogge Road from Jade Drive to the existing Class II bikes lanes west of Bollenbacher Drive. The following section analyzes the environmental effects of the proposed off-site improvements.

## ***Aesthetics***

The proposed off-site improvements would result in sewer, water, and gas infrastructure extension, and bike and pedestrian related improvements in the existing right-of-way and would not have any effect on any scenic vistas and would not result in any degradation of the visual character or quality of the site and its surroundings. The off-site improvements would not occur along a state scenic highway and would not result in any increase in light or glare. The proposed off-site improvements would not result in any aesthetic-related impacts.

## ***Agriculture***

The off-site improvements would occur completely in the existing right-of-way and would not result in any adverse impacts to agricultural or forest land resources.

## ***Air Quality***

The proposed off-site improvements would not result in any emissions during the operational phase, but may result in some emissions during the construction phase. The Acquisition EIR includes mitigation measures AQ-1 and AQ-2, which when implemented would reduce impacts of the short-term construction emissions to a less than significant level. The off-site improvements would be subject to the same mitigation measures and would result in a less than significant impact on air quality.

## ***Biological Resources***

The off-site improvements would occur completely in the existing right-of-way and would not result in any adverse effects on any species identified as candidate, sensitive, or special-status. The off-site improvements would not interfere with the movement of any species. There is an existing drainage ditch that runs along the northern side of Rogge Road, which could be affected by construction activities during the widening of the road. On October 27, 2010, EMC Planning

Group senior biologist Bill Goggins walked the approximately 800-foot length of the drainage ditch site and visually examined the ditch for signs of wetland vegetation and/or hydrological development that would suggest that the ditch might be hydrologically connected to a potentially jurisdictional feature and/or would support wetland vegetation, hydrology and hydric soils that would support jurisdictional wetlands and/or waters. Based on this reconnaissance-level evaluation, it was concluded that the drainage ditch would not likely be considered as a jurisdictional feature by the United States Army Corps of Engineers due to the lack of wetland vegetation and the fact that it does not appear to be hydrologically-connected to a navigatable waterbody. Therefore, the proposed off-site improvements would not have any effects on federally protected wetlands, riparian habitat, or other sensitive communities. The proposed project would not result in any impacts to sensitive biological resources.

### ***Cultural Resources***

The off-site improvements would result in some grading activities. The Acquisition EIR includes mitigation measures CR-1, which requires that construction work be halted and an evaluation be conducted by a qualified archaeologist in the event that archaeological resources or human remains are accidentally discovered during construction. The off-site improvements would be subject to the same mitigation measure and would result in a less than significant impact on cultural resources.

### ***Geology***

The off-site improvements would occur completely in the existing right-of-way and would not result in the construction of any structures. The proposed off-site improvements would not result in expose of people or structures to any geologic or soil related hazard.

### ***Greenhouse Gas Emissions***

The proposed off-site improvements would not result in any greenhouse gas emissions during the operational phase, but may result in some emissions during the construction phase. Although the duration and scale of the off-site improvements would result in minimal greenhouse gas emissions, these emissions would be a cumulative part of overall construction-related impacts. The greenhouse gas emissions section of this EIR concluded that the project's cumulative contribution to greenhouse gas emissions would be significant and unavoidable. It was determined that a Statement of Overriding Consideration would be required.

## ***Hazards and Hazardous Materials***

The proposed off-site improvements would not result in the transport, use, disposal, or accidental release of any hazardous materials. The off-site improvements would not occur on a site included on a list of hazardous materials sites compiled pursuant to Government Code 65962.5. The off-site improvements would not occur within the vicinity of a private airstrip or public airport, and would not impair implementation or physically interfere with an adopted emergency response or evacuation plan. The off-site improvements would not result in the construction of any structures and would not expose people or structures to any risk involving wildland fires.

## ***Hydrology and Flooding***

The off-site improvements would result in some grading activities and would comply with the requirements of the NPDES General Construction Permit, which would reduce water quality concerns during construction activities to a less than significant level. The off-site improvements would result in a minimal increase in impervious surfaces related to the widening of Rogge Road, however these improvements would not substantially alter the existing drainage patterns of the site or area in a way that would result in substantial erosion, siltation, or flooding on- or off-site. The off-site improvements would not result in the construction of any structures and would not place any housing or structures in the 100-year flood hazard area and would not expose people or structures to risk associated with the failure of a levee, dam, or inundation by seiche, tsunami, or mudflow.

## ***Land Use***

The proposed off-site improvements would not physically divide an established community or conflict with any applicable land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. There are no habitat conservation plans or natural community plans applicable to the project site.

## ***Noise***

The proposed off-site improvements would not result in any noise during the operational phase, but may result in some noise during the construction phase. Noise from construction activities may impact the surrounding land uses, including the residential homes located along Rogge Road. The Acquisition EIR includes mitigation measure N-2, which requires all construction activities and use of heavy equipment to be limited to the hours of 7:00 a.m. and 7:00 p.m. on all workdays. The off-site improvements would be subject to the same mitigation measure and would result in a less than significant noise impact.



## ***Traffic and Transportation***

The proposed off-site improvements would result in sewer, water, and gas infrastructure extensions, and bike and pedestrian related improvements in the existing right-of-way and would not conflict with any applicable plans, ordinances, or policies established to measure the effectiveness of the circulation system, or any congestion management programs. The off-site improvements would not result in any hazards due to design features, changes in air traffic patterns, or result in inadequate emergency access. The off-site improvements would actually improve the bike and pedestrian facilities along Rogge Road.

## **3.0**

# **CUMULATIVE IMPACTS**

### **3.1 INTRODUCTION**

CEQA Guidelines section 15130 requires an EIR to discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable. Cumulative considerable means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probably future projects.

Cumulative impacts consist of an impact that is created as a result of the combination of the proposed project together with other projects causing related impacts. An EIR may determine that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant. A project's contribution is less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact.

### **3.2 BACKGROUND INFORMATION**

The Acquisition EIR addressed the proposed project's contribution to cumulative impacts to the level possible without having a proposed site plan to evaluate and without knowing when the high school and properties to the south and east (within the City's Future Grown Area) would be developed. However, the cumulative impact analysis did assume that the proposed high school would be developed generally within the same timeframe as the adjacent properties within the Future Growth Area. Because the existing conditions and assumptions have changed, the analysis and some of the mitigation measures are no longer applicable, or may require modification to reflect existing conditions. These changes are discussed herein.

### 3.3 CUMULATIVE PROJECTS SCENARIO

The discussion of cumulative impacts reflects the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by standards of practicality and reasonableness.

The cumulative projects scenario should consist of either a list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or a summary of projections contained in an adopted plan that describes or evaluates conditions contributing to the cumulative effect, such as a general plan.

The new cumulative projects scenario for this subsequent EIR is somewhat of a combination of the two options. This scenario mainly consists of buildout of the Salinas General Plan, for which an EIR, as well as a supplemental EIR, were certified. In addition, a soccer field, snack bar, restroom, and associated parking is currently being contemplated immediately north of the project site across Rogge Road in unincorporated Monterey County. As of October 11, 2011, the County had received an application for the soccer field project, but the application was deemed incomplete and has not yet been resubmitted (Craig Spencer, Monterey County Planning Department, telephone conversation with consultant). There is currently no information about the proposed operating hours of this soccer park. According to the County Planning Department, there are no other proposed or contemplated projects in the vicinity.

### 3.4 PROPOSED PROJECT'S CONTRIBUTION TO CUMULATIVE IMPACTS

#### ***Aesthetics***

The project site is currently used for agricultural production. Development of the proposed project would permanently alter the existing visual character of the project site and would result in additional urban development at the City's existing urban/agricultural edge. The project-level impact was determined to be significant and unavoidable. See Section 2.1, Aesthetics, for a detailed discussion.

The project site is located within the Future Growth Area. The City of Salinas general plan FEIR concludes that build out of the general plan, including the Future Growth Area, would result in a range of potentially significant aesthetic impacts, including expansion of urban uses into agricultural lands, but that these impacts would be mitigated through implementation of

general plan policies. Policies applicable to the proposed project include General Plan Implementation Program CD-3 and CD-5. Implementation Program CD-3 requires all future outdoor lights include cut-off lenses to minimize light dispersion above the fixture head, a lighting study to be performed when appropriate to ensure adequate light levels while not exceeding industry standards, and that sky glow is reduced. The proposed project implements all of these requirements to ensure that lighting impacts are minimized. See Section 2.1, Aesthetics, of this EIR. Implementation Program CD-5 requires projects to be consistent with the City's design guidelines and incorporation of Traditional Neighborhood Development characteristics. The proposed project is consistent with these guidelines and characteristics. See Section 2.5, Land Use, of this EIR.

Since the certification of the General Plan EIR there have been no changes in the General Plan, the circumstances of its implementation, or new information that would affect the conclusion that the aesthetics impacts of this cumulative development would be less than significant. Additionally, with the exception of the possible soccer park that may be proposed across Rogge Road, there are no currently foreseeable projects that were not considered in the analysis of the 2002 General Plan EIR that would affect this conclusion. The visual impacts of construction of a soccer park across Rogge Road would not add measurably to the visual impacts of buildout of the Salinas General Plan, include the Future Growth Area.

Although the proposed project would have a significant visual impact on existing conditions, the visual impacts of developing the high school would not be cumulatively considerable when viewed in connection with buildout of the General Plan, including development of the Future Growth Area. In addition, the following mitigation measures were included in the Acquisition EIR and mitigation monitoring program adopted by the School District Board of Trustees. Therefore, the proposed project's contribution to the cumulative aesthetic impact is not cumulatively considerable.

CUM-AE-1. The SUHSD shall prepare and implement a landscape plan that promotes greater visual and functional compatibility with the planned adjacent residential developments and pedestrian and bicycle use to the extent financially feasible and in alignment with educational programs and facilities.

CUM-AE-2. To the extent financially feasible and in alignment with educational programs and facilities, the SUHSD shall design the high school with "Traditional Neighborhood Development" characteristics. The SUHSD should consult with the City of Salinas regarding the city's design standards.

## ***Air Quality***

The proposed project is consistent with the City of Salinas general plan and is consistent with the Monterey Bay Unified Air Pollution Control District Air Quality Management Plan. See Section 2.2, Air Quality, in this EIR. The Salinas General Plan EIR concluded that buildout of the general plan would result in significant and unavoidable short-term and long-term air quality impacts, despite the implementation of mitigation measures.

Since the certification of the General Plan EIR there have been no changes in the General Plan, the circumstances of its implementation, or new information that would affect the conclusion that the air quality impacts of this cumulative development would be significant and unavoidable. Additionally, with the exception of the possible soccer park that may be proposed across Rogge Road, there are no currently foreseeable projects that were not considered in the analysis of the 2002 General Plan EIR that would affect this conclusion. The traffic and related air quality impact associated with development of such a soccer park would incrementally add to the air quality impacts addressed in the General Plan EIR; however, the addition of these impacts would not change the conclusion.

The proposed project is consistent with the General Plan, and the regional and area-wide cumulative air quality impacts of the project have been adequately addressed in the General Plan EIR. The proposed project would be a contributor to the cumulative effects of air emissions from general plan buildout, and would therefore result in an unavoidable, significant cumulative air quality impact. Implementation of the following mitigation measure, which was included in the Acquisition EIR and mitigation monitoring program adopted by the School District Board of Trustees, would reduce the impact, but not to a less than significant level. The cumulative impact would still be significant and unavoidable. A statement of overriding considerations was adopted associated with site acquisition and the 2006 Site Acquisition EIR.

CUM-AQ-1. The SUHSD Board of Trustees shall require to the extent financially feasible and in alignment with educational programs and facilities the following measures, as identified by the Monterey Bay Unified Air Pollution Control District, in final improvement plans prior to approval of the campus design plans.

- a. Access points shall include street lighting to provide pedestrian safety;
- b. Sidewalks shall be designed for connectivity and access, providing continuous, safe pedestrian circulation;
- c. Street trees shall be planted along roadways to provide a cooler, comfortable and attractive pedestrian route, and to uptake CO for natural filtration;

- d. Buildings shall be situated in a north-south orientation as much as feasible to reduce heating and cooling needs, energy demand, and district costs;
- e. Parking areas shall include landscaping with trees that provide at least 30 percent shade (canopy) cover at maturity, or maximum potential shade cover considering the design and utility of the parking areas. The vegetation and shade provide a temperature buffer and natural coolant, as well as natural air filtration;
- f. Parking areas should provide preferential carpool/vanpool spaces; and
- g. The school should provide secure bicycle parking and storage conveniently accessible and in a safe, visible area of campus.

## ***Climate Change***

The analysis of climate change impacts in Section 2.3, Climate Change, is essentially a discussion of cumulative impacts. The proposed project would result in approximately 278 metric tons of CO<sub>2</sub> from construction activities and approximately 1,864 metric tons per year of CO<sub>2</sub> from operational sources. Although the State and project-related measures would reduce the project's GHG emissions, the proposed project would not reduce its emissions by 30 percent, the target reduction identified in the applicable GHG reduction plan – AB 32. Therefore, project-related emissions would add to the cumulative increase in local, state, regional and global GHG emissions. The project is not consistent with AB 32 and would not achieve emissions reductions that help ensure its GHG emissions are not cumulatively considerable in the state context. The proposed project would contribute to the expected significant and cumulative impacts related to greenhouse gas emissions.

The effects on global climate change from the proposed project would be considered cumulatively significant and unavoidable. A statement of overriding considerations will be required.

## ***Hazards and Hazardous Materials***

The proposed project would result in the construction of a high school adjacent to active agricultural lands to the south and the east. This could result in the exposure of students to pesticides until the adjacent land is developed. The implementation of mitigation measure HZ-1 would reduce this impact until such time property to the south and east are developed. The adjacent land to the south and the east are located within the Future Growth Area and it is anticipated that these areas would be developed with urban uses in the future. Therefore, the proposed project would not result in a cumulatively considerable hazards and hazardous materials impact.

## ***Hydrology and Water Quality***

The project site is located within the City of Salinas Future Growth Area and would connect to the City's storm water drainage system. Potential cumulative impacts resulting from general plan build out are described on pages 5.4-1 to 5.4-8 of the 2007 *Final Supplement for the City of Salinas General Plan Final Program EIR* (GP SEIR).

The GP SEIR states that build out of the general plan, including the proposed project, would result in additional impervious surfaces and would increase the quantity of local storm water runoff. The GP SEIR identifies certain drainage and water quality effects that could result in potentially significant impacts without appropriate storm water management improvements (GP SEIR, page 5.4-4). The GP SEIR includes several mitigation measures, the implementation of which would reduce these impacts to a less than significant level (GP SEIR, page 5.4-7).

The proposed project includes a detailed approach for managing storm water runoff that is consistent with the City's detailed storm water development standards and would comply with the GP SEIR mitigation measures. Analysis has also shown that the proposed project with mitigation measures would have a less than significant impact on construction and operational-related runoff, and off-site drainage, erosion and flooding. Therefore, the proposed project would not result in any cumulatively considerable impacts related to hydrology.

## ***Land Use and Planning***

The proposed project is consistent with the policies and measures of the City of Salinas general plan and zoning code. The proposed project is an allowable use within the existing land use designation and zone district, and the proposed project and design do not conflict with any City goals or policies.

The proposed project would not contribute to a cumulatively considerable environmental impact associated with land use and planning.

## ***Noise***

The Salinas General Plan EIR concluded that buildout of the general plan would result in significant and unavoidable vehicular traffic noise impacts at certain locations within the City, despite the implementation of mitigation measures. Future noise levels within 50 feet of the roadway centerlines of major streets in the City's planning area are projected to range from approximately 59.0 dB on Central Avenue to 76.5 dB on Blanco Road (page 5.3-11). Buildout of the general plan would result in approximately 18,726 new residential units (Table 5.1-3 of the GP EIR). Using standard ITE trip generation rates, this would result in approximately 167,033 new trips per day on the Salinas roadway system.

Proposed project traffic noise would affect only the portion of the roadways within the Santa Rita Union School District boundaries, which are the proposed boundaries for the proposed high school. These boundaries are presented in Figure 7, Attendance Boundaries, and included only the northernmost section of the City of Salinas. Trip distribution for Phase 1 of the project (900 students) is presented in Exhibit 7, Project Trip Distribution, of the traffic impact analysis, and project' second phase (600 students) trip distribution is presented in Exhibit 11, Project Trip Distribution (Future Growth Area). At buildout, the proposed project would result in approximately 2,768 trips per day, spread throughout the attendance boundary only, which is about 1.7 percent of the anticipated daily trips at general plan buildout ( $2,768 \div 167,033 = 1.7$  percent). Therefore, the proposed project's contribution to cumulative noise impacts is minimal and would not be considerable.

## ***Traffic & Transportation***

This section describes the analysis results of the study intersection and roadway segment operations under Cumulative with Project Buildout (total of 1,500 students) traffic conditions. The cumulative condition traffic forecasts are primarily based on 2030 travel forecasts prepared for the supplemental transportation analysis for the proposed Sphere of Influence (SOI) Amendment and Annexation development north of East Boronda Road in the City of Salinas. The development area is commonly referred to as the Future Growth Area and consists of three distinct plan areas (West, Central and East). Specific plans for these areas have not yet been submitted to the City of Salinas for processing and adoption. The traffic analysis for the SOI Amendment and Annexation is documented in a 2007 study entitled Salinas Sphere of Influence Amendment and Annexation Supplemental TIA that was prepared in 2007. The traffic forecasts documented in that study used a horizon year of 2030 and include the full buildout of the Salinas Future Growth Area.

### **Cumulative Traffic Conditions – Road Network**

Figure 5 in Section 1.1 of this EIR presents the City of Salinas Land Use and Circulation Policy Map. The map shows the configuration of the planned long-range road network for the City of Salinas. In the vicinity of the project site, the extension of Russell Road, McKinnon Street and El Dorado Drive are key new road links that will affect traffic access opportunities for the project.

As previously stated, the traffic projections for the cumulative scenario are primarily based on 2030 travel forecasts prepared for the supplemental transportation analysis that was prepared for the Future Growth Area. The traffic forecasting for that study included several road improvements that are anticipated to be built by 2030. The traffic forecasts for the cumulative 2030 scenario assume implementation of the following road improvements:



### 3.0 CUMULATIVE IMPACTS

1. Blanco Road widening to 4-lanes between Alisal Street and Davis Road.
2. Laurel Drive widening to 6-lanes between Natividad Road and Constitution Boulevard with left turn channelization east of Constitution Boulevard.
3. Davis Road widening to 4-lanes between Market Street and Reservation Road.
4. Reservation Road widening to 4-lanes between Blanco Road and Davis Road.
5. San Juan Road widening to 4-lanes between Boronda Road and Rogge Road.
6. New interchange at US 101 and Crazy Horse Canyon Road.
7. New US 101/Harrison Road diamond interchange with local roadway improvements.
8. Eastside Road between Intergarrison Road and Giggling Road.
9. Intergarrison Road widening to 4-lanes between Reservation Road and Eastside Road.
10. Sanborn Road widening to 6-lanes between John Street and Abbott Street.
11. General Jim Moore Boulevard widening to 4-lanes between McClure Road and South Boundary Road. This improvement has been completed.
12. Alisal Street widening to 4-lanes between Williams Road and Alisal Road.
13. Extension of Russell Road as a 4-lane arterial between San Juan Grade Road and Old Stage Road.
14. Extension of McKinnon Street as a 2-lane collector between Boronda Road and Russell Road.
15. Extension of El Dorado Drive as a 2-lane collector between Boronda Road and Russell Road.
16. Extension of Independence Boulevard as a 2-lane arterial between Boronda Road and Old Stage Road.
17. Extension of Constitution Boulevard as a 2-lane arterial between Boronda Road and Old Stage Road.
18. Extension of Sanborn Road as a 2-lane arterial between Boronda Road and Old Stage Road.
19. Boronda Road widening to 6-lane arterial between San Juan Grade Road and Williams Road.

20. Natividad Road widening to a 4-lane arterial between Boronda Road and Rogge Road.
21. Addition of two east-west 2-lane collectors between San Juan Grade Road and Williams Road.

Road network improvements that are included in the Salinas Traffic Improvement Program that were not included in traffic forecast modeling for the Future Growth Area traffic study and are not considered to be included in the cumulative condition forecasts for this study are as follows:

1. Prunedale Bypass
2. Western Bypass
3. Eastern Bypass
4. US 101 widening through Salinas
5. Alisal Road extension
6. Moffett Street extension
7. Main Street widening to 6-lanes between Bernal Street and Market Street
8. Roadway extensions of Bernal Street and Constitution Boulevard into Carr Lake
9. Alvin Drive extension as a 4-lane arterial to include Westridge Parkway extension
10. US 101/Laurel interchange widening to 6-lanes between Davis Road and Adams street
11. Williams Road widening to 4-lanes between Freedom Parkway and Boronda Road
12. Espinosa Road widening to 4-lanes between US 101 and SR 183
13. Blanco Road extension as a 4-lane arterial between Reservation Road and Imjin Road

### **Cumulative Traffic Volumes**

The 2030 cumulative condition volumes are primarily based upon the 2030 travel forecasts estimated using the association of Monterey Bay Area Governments (AMBAG) Regional Travel Forecasting Model that are documented in the SOI Supplemental TIA. The forecasts in the SOI Supplemental TIA were supplemented with travel forecasts developed for the City of Salinas General Plan Circulation Study, the Rogge Road High School Traffic Analysis Report prepared in 2006 and the Creekbridge II Transportation Planning Report prepared in 2008. Traffic volumes consistent with the average daily traffic volumes (ADT's) developed from the SOI Supplemental TIA and other referenced reports were used to estimate intersection turning volumes at the study intersections.

## **Project Description – Buildout**

At buildout, the capacity of the school would be 1,500 students. Access to the school as described for Phase 1 would be maintained with access provided via five driveways to Rogge Road. The easterly-most driveway would continue to be utilized only during stadium capacity events.

## **Project Buildout Trip Generation**

Table 11, Project Trip Generation, in Section 2.8, Traffic and Circulation of this EIR, contains the trip generation estimate for buildout of the proposed project. This trip generation estimate is a combination of the previous trip generation under Phase 1, plus the additional trips that would be generated by the additional students originating in the Future Growth Area.

The high school at full buildout would generate 2,768 trips per day, with 825 trips (495 in, 330 out) during the AM peak hour, 510 trips (204 in, 306 out) during the midday peak hour and 270 trips (119 in, 151 out) during the PM street peak hour.

## **Project Trip Distribution and Assignment**

A project trip assignment for the buildout of the school was developed that included Phase 1 trips and the trips that will be generated by the enrollment that could be generated within the Future Growth Area. The Phase 1 project trip distribution origins remain unchanged from the Existing Plus Project Phase 1 analysis previously described. However, the assignment of Phase 1 trips was revised to account for the new roadways that would be constructed in conjunction with the development of the Future Growth Area. Exhibit 11 in the traffic impact analysis in [Appendix G](#) shows the trip distribution pattern for the high school trips that could be generated within the Future Growth Area.

The assignment of AM, Midday and PM peak hour high school trips to the study intersections for the buildout condition is shown on Exhibits 12A, 12B and 12C, respectively of the traffic impact analysis in [Appendix G](#).

The construction of the Future Growth Area road network that includes the extensions of Russell Road, McKinnon Street and El Dorado Drive would alter travel patterns for motorists traveling to and from the school. For the buildout condition, the arrival/distribution pattern for the school shifts from a predominately westerly orientation under Phase 1 to a predominantly easterly orientation with buildout. Under the Phase 1 scenario, 80 percent of the high school trips were estimated to arrive and depart to and from the west. With buildout, 78 percent of the high school trips were estimated to arrive and depart to and from the east.

## Cumulative With Project Buildout Traffic Conditions - Intersection Operations

Cumulative conditions were evaluated based on existing intersection geometrics and traffic control. The exception was the San Juan Grade Road/Russell Road extension. Because Russell Road will be extended to the east, which will add a fourth leg to the intersection, the initial intersection level of service calculation was based on the intersection lane configuration documented in the City of Salinas Transportation Improvement Program, 2010 Update.

Subsequent to the initial intersection calculation, intersection geometrics documented in the City of Salinas Transportation Improvement Program, 2010 Update were analyzed.

Based on existing intersection geometrics, the following five intersections would not operate at acceptable levels of service under Cumulative with Project Buildout Conditions:

1. Natividad Road/Rogge Road
2. Natividad Road/Boronda Road
3. San Juan Grade Road/Boronda Road
4. San Juan Grade Road/Penzance Street
5. San Juan Grade Road/Rogge Road

In addition, the San Juan Grade Road/Russell Road intersection will not operate at a satisfactory level of service with the intersection improvements described in the Salinas TIP. The intersection of Rogge Road and project driveway #1 (Figure 6, Site Plan) will also not operate at a satisfactory level of service during the AM peak hour under cumulative conditions.

The Rogge Road/El Dorado Drive intersection would operate at LOS D during the AM peak hour and LOS C during the midday and PM peak hours with signal traffic control and the following lane configuration:

- Westbound – one left turn lane and one through lane;
- Eastbound – one through lane and one right turn lane; and
- Northbound – one left turn lane and one right turn lane.

A discussion of the traffic operations for each intersection with operational deficiencies under Cumulative with Project Buildout Conditions is provided below.

*Intersection #1 – Natividad Road/Rogge Road.* This intersection is currently stop controlled on the eastbound Rogge Road approach to Natividad Road. The eastbound approach is projected to operate at LOS F during the AM and Midday peak hours. At buildout, the proposed project would contribute about 3.0 percent of the cumulative traffic to this intersection in the AM peak hour.

Signalization of the intersection is warranted under Cumulative with Project Buildout conditions. In addition, widening of Natividad Road between Boronda Road and Rogge Road to a four-lane road is planned in conjunction with the development of the Future Growth Area. It is recommended that the eastbound right turn lane be designed as a free right turn movement that becomes the second southbound right turn lane on Natividad Road south of Rogge Road. With these improvements the intersection would operate at LOS C during the AM peak hour and LOS B during the Midday and PM peak hours. The proposed project would pay its fair share of the required improvements.

*Intersection #2 – Natividad Road/Boronda Road.* The Natividad Road/Boronda Road intersection would operate at LOS F during the AM, Midday and PM peak hours under Cumulative with Project Buildout conditions with existing geometrics. At buildout, the proposed project would contribute about 0.6 percent of the cumulative traffic to this intersection in the AM peak hour.

Boronda Road and Natividad Road are planned for widening in conjunction with the development of the Future Growth Area. The Salinas TIP indicates that the Natividad Road/Boronda Road intersection approaches will be widened to provide the following intersection design:

- Northbound: Two left turn lanes, two through lanes and one right turn lane;
- Southbound: Two left turn lanes, two through lanes and one right turn lane;
- Eastbound: Two left turn lanes, three through lanes and one right turn lane; and
- Westbound: Two left turn lanes, three through lanes and one right turn lane.

With the intersection improved as described above, the intersection would operate at LOS E during the Midday peak hours. To achieve acceptable operations, a fourth westbound through lane would be required. Alternatively, the traffic forecasts do not reflect the addition of the Alvin Drive extension over Highway 101. This improvement would divert traffic from Boronda Road and improve operations at the Natividad Road/Boronda Road intersection. The proposed project would pay its fair share of the required improvements.

*Intersection #3 – San Juan Grade Road/Boronda Road.* The San Juan Grade Road/Boronda Road intersection would operate at LOS F during the Midday and PM peak hours under Cumulative with Project Buildout conditions with existing geometrics. At buildout, the proposed project would contribute about 0.6 percent of the cumulative traffic to this intersection in the AM peak hour.

Boronda Road and San Juan Grade Road are planned for widening in conjunction with the development of the Future Growth Area. The north, south and east legs of the intersection have been widened to their ultimate widths as described in the Salinas TIP. The Salinas TIP indicates

that the west leg will be widened to provide two left turn lanes, three through lanes and one right turn lane. With the intersection improved as planned in the Salinas TIP, the intersection would operate at LOS D during the AM and PM peak hours, but at an unacceptable LOS E during the Midday peak hour. To achieve an acceptable level of service, the northbound San Juan Grade right turn lane would need to be continued onto eastbound Boronda Road as a free right turn and the southbound right turn operated with an overlap phase. Provision of the third eastbound through lane as well as the northbound to eastbound free right turn is problematic given that the existing development located in the southwest and southeast quadrant of the intersection.

The analysis road network that was modeled for the Cumulative with Project Buildout Condition does not include the Alvin Street extension. The extension of Alvin Street over U.S. 101 to N. Davis Street will reduce traffic on Boronda Road. This improvement would improve traffic operations on Boronda Road and at the San Juan Grade Road/Boronda Road intersection. The proposed project would pay its fair share of the required improvements.

*Intersection #4 – San Juan Grade Road/Russell Road.* This intersection would operate at LOS E during the AM and mid-day peak hours under cumulative conditions. At buildout, the proposed project would contribute about 3.0 percent of the cumulative traffic to this intersection in the AM peak hour.

The improvements described in the Salinas TIP for the San Juan Grade Road/Russell Road intersection provide the following lane configuration on the intersection approaches:

- Northbound: Two left turn lanes, one through lane and one shared/right turn lane;
- Southbound: Two left turn lanes, two through lanes and one right turn lane;
- Eastbound: Two left turn lanes, two through lanes and one right turn lane; and
- Westbound: Two left turn lanes, two through lanes and one right turn lane.

Providing a right turn lane operated with an overlap phase on the northbound San Juan Grade approach would achieve LOS D operations during the AM peak hour and LOS C during the mid-day peak hours. The northbound approach would be configured to provide two left turn lanes, two through lanes and one right turn lane. The proposed project would pay its fair share of the required improvements.

*Intersection #5 – San Juan Grade Road/Penzance Street.* The westbound Penzance Street approach to San Juan Grade Road would operate at LOS F during the AM peak hour. At buildout, the proposed project would contribute about 4.0 percent of the cumulative traffic to this intersection in the AM peak hour.

With signalization and the addition of a northbound left turn lane, the intersection would operate at LOS B during the AM peak hour under cumulative conditions. Intersection levels of service with the recommended improvements are summarized on Exhibit 5A of the traffic impact analysis in [Appendix G](#). The proposed project would pay its fair share of the required improvements.

*Intersection #6 – San Juan Grade Road/Rogge Road.* As an all-way stop controlled intersection, the San Juan Grade Road/Rogge Road intersection would operate at LOS E during the AM peak hour under cumulative conditions. At buildout, the proposed project would contribute about 6.0 percent of the cumulative traffic to this intersection in the AM peak hour.

The peak hour signal warrant is met for the AM peak hour condition. Signalization of the intersection and modification of the intersection as described under Existing Plus Project Phase 1 conditions would improve intersection operations to LOS C during the AM peak hour. The following improvements would improve the operation of the intersection to acceptable levels:

1. Add a traffic signal.
2. Modify the northbound San Juan Grade approach to provide one left turn lane, one northbound through lane and one right turn lane.
3. Modify the southbound approach to provide one left turn lane and one shared through/right turn lane.
4. Modify the westbound approach to provide one exclusive left turn lane and one shared left/through/right lane.
5. Operate the eastbound and westbound approaches with “split “signal phasing.

*Intersection #11 – Rogge Road/High School Driveway #1:* This intersection would operate at an overall LOS F and the northbound driveway would operate at LOS F during the AM peak hour. This is an unacceptable operating condition. As with Existing Plus Project Phase 1 Conditions, signalization of the Rogge Road/Project Driveway #1 intersection is not recommended for Buildout Conditions. To improve driveway operations, the access plan for the school be modified as described for the Existing Plus Project Condition. The proposed project would pay its fair share of the required improvements.

### **Traffic Impact Fees**

The City of Salinas administers a traffic impact fee to fund planned improvements to the City’s road network. The improvements funded by the traffic impact fee include the following improvements in the immediate vicinity of the project:

TIP 8 – Russell Road Extension east of San Juan Grade Road

TIP 9 – Natividad Road widening between Boronda Road and Rogge Road

TIP 10 – El Dorado Drive Extension between Boronda Road and Rogge Road

TIP 11 – McKinnon Street Extension between Boronda Road and Russell Road

TIP 12- Russell Road widening between Main Street and San Juan Grade Road

TIP 13- San Juan Grade widening between Boronda Road and Rogge Road

TIP 49 – San Juan Grade/Russell Road intersection improvements

TIP 50 – San Juan Grade/Boronda Road intersection improvements

TIP 51 – Boronda Road/Natividad Road intersection improvement

TIP 58 – Natividad Road / Russell Road intersection improvements

Signalization of the Natividad Road/Rogge Road intersection is not included in the traffic impact fee program and the project should provide a pro-rata contribution based on the percentage of trips at the intersection that are generated by the new high school. The right turn lane recommended for the northbound San Juan Grade approach to Russell Road for the Buildout Condition should be added to the Salinas Traffic Improvement Program. The results of the analysis also indicate that the Alvin Street extension is required for the long-term buildout development condition. The Alvin Street extension will divert traffic from Boronda Road resulting in better operations than forecast in this study.

The improvements listed above will mitigate cumulative project impacts. With the specific exception of improvements recommended for the Natividad Road/Rogge Road, San Juan Grade Road/Penzance Street and San Juan Grade Road/Rogge Road intersections, the City of Salinas is collecting fees for the construction of the improvements described above via the Traffic Impact Fee program. New development, including new development in the Future Growth Area, will pay traffic impact fees to the City of Salinas.

### **Mitigation Measure**

CUM-T-1. The School District will be responsible for paying their appropriate fair share of the transportation improvements to the appropriate agencies (Monterey County and City of Salinas) identified herein.



### **Mitigated Site and Access Plan**

RBF Consulting prepared a mitigated access plan to address the access and circulation impacts. As discussed in Section 2.8, Traffic and Transportation, the mitigated plan includes measures that address access and circulation impacts in both Phase I and Phase II. The following summarizes the measures applicable to Phase II that are described in Section 2.8.

The mitigated plan includes the installation of a two-way left turn lane at Driveway 1 and a traffic signal at Driveway 4 to mitigated unacceptable traffic operations at both driveways during the AM peak hour in both Phase I and Phase II.

The increased traffic along Rogge Road during Phase I and Phase II at the proposed ingress driveways would meet warrants for requiring a separate left turn lane for Driveway 3 and Driveway 4 under the mitigated plan. During Phase II, after development within the Future Growth Area, the storage for the westbound left turn along Rogge Road into Driveway 3 will be 450 feet.

Although a right turn lane will be warranted along Rogge Road at Driveway 3 during Phase I, it will not be warranted during Phase II. The storage for the eastbound right turn along Rogge Road into Driveway 3 will be 175 feet in both Phase I and Phase II.

## 4.0 ALTERNATIVES

### 4.1 CEQA REQUIREMENTS

CEQA Guidelines section 15126.6(a) requires a description of reasonable alternatives to the proposed project, or to the location of the project, which could feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project. It also requires an evaluation of the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project, but must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. CEQA Guidelines section 15126.6(b) further requires that the discussion of alternatives focus on those alternatives capable of eliminating any significant adverse environmental impacts or reducing them to a level of insignificance, even if these alternatives would impede to some degree the attainment of the project objectives or would be more costly.

CEQA Guidelines section 15126.6 (e) stipulates that a “No Project” alternative be evaluated along with its impacts. If the project is a development project on identifiable property, the no project alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in its existing state against environmental effects that would occur if the project is approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this no project consequence should be discussed. In certain instances, the no project alternative means “no build” wherein the existing environmental setting is maintained. However, where failure to proceed with the project will not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project’s non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment. The “No Project” alternative analysis must discuss the existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.

CEQA Guidelines section 15126.6(d) requires the EIR to present enough information about each alternative to allow meaningful evaluation, analysis and comparison with the proposed project. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed. CEQA Guidelines section 15126.6(e) requires the identification of an environmentally superior alternative. If the "No Project" alternative is the environmentally superior alternative, then the environmentally superior alternative amongst the remaining alternatives must be identified.

## 4.2 PROJECT OBJECTIVES

The objectives of the proposed project are to construct a new high school to provide both a safe and a supportive environment for the instructional program and the learning process. The 1,500 student high school is planned to accommodate 900 existing students within the attendance boundaries of the Santa Rita Union School District, as well as an additional 600 that may be added through attendance boundary modifications, through the District's school of choice program, or from future development in the vicinity.

## 4.3 BACKGROUND

The Acquisition EIR evaluated two alternative sites, as well as the "No Project-Residential" alternative. Alternative location A was property located at 901 Old Stage Road and alternative location B was property located on the northeastern side of Old Stage Road, across from alternative location A. The "No Project" option was analyzed as the project site being developed with low-density and medium-density residential use. The Acquisition EIR concluded that alternative location A was the environmentally superior alternative, the proposed site as the second environmentally superior alternative. The alternative location A and the proposed project site are similar in their relative environmental impacts. The "No Project" alternative was ranked as the third environmentally superior alternative and Alternative location B was considered to be the least environmentally superior alternative. The School District subsequently made the required findings and acquired the project site.

## 4.4 ALTERNATIVES CONSIDERED

The following alternatives to the proposed project are considered in this subsequent EIR.

- Alternative 1: No project–No Development. This alternative assumes that the project site would remain in its existing condition as farmland.
- Alternative 2: No project-Residential Development. This alternative assumes that, as instructed in CEQA Guidelines section 15126.6 (e) discussed above, that a residential neighborhood could be developed here if the School District chose not to build a school here.
- Alternative 3: Site Redesign A. This alternative design was prepared in response to the City’s request to consider fronting the school where the Salinas General Plan identifies the future Russell Road extension. Refer to Figure 5, City of Salinas General Plan Land Use and Circulation Map, for the planned location of the Russell Road extension.
- Alternative 4: Site Redesign B. This alternative design was also prepared in response to the City’s request to consider fronting the school where the Salinas General Plan identifies the future Russell Road extension. Refer to Figure 5, City of Salinas General Plan Land Use and Circulation Map, for the planned location of the Russell Road extension.

Each of these alternatives is described and discussed below.

## ***Alternative 1: No Project–No Development***

### **Alternative Description**

The “No Project-No Development” alternative consists of the project site remaining in its existing condition, as farmland.

### **Environmental Analysis**

Potential environmental impacts from the “No Project-No Development” alternative are analyzed below and compared to those of the proposed project.

**Aesthetics.** No physical changes would occur with the “No Project-No Development” alternative. Therefore, the “No Project-No Development” alternative would result in no visual impacts. The proposed project would result in significant and unavoidable visual impacts.

**Agricultural Resources.** The Acquisition EIR included analysis of the site development on agricultural resources and concluded that any development on the site would result in a significant and unavoidable impact due to the conversion of Prime Farmland and Farmland of Statewide Significance. The “No Project-No Development” alternative would not result in the conversion of farmland, and therefore, no impacts to agricultural resources.

**Air Quality.** The Acquisition EIR included an analysis of construction-related and operational air quality impacts. It concluded that the construction-related air quality impacts would be less than significant with mitigation measures. The “No Project-No Development” alternative would result in no construction-related air quality impacts.

Under this alternative, farming operations would continue. Operational air quality impacts associated with farming operations are generally confined to PM<sub>10</sub> associated with tilling the land, and are generally minimal compared to land development projects. This alternative would result in no increase in air pollution.

**Biological Resources.** The Acquisition EIR included an analysis of the impact of development of the site on biological resources and concluded that development of the site would have no impact on sensitive biological resources. The “No Project-No Development” alternative would not result in impacts to sensitive biological resources. Therefore, this alternative is similar to the proposed project in terms of sensitive biological resources.

**Cultural Resources.** The Acquisition EIR included an analysis of site development on cultural resources and concluded that development of the site would potentially have an impact, but it would be less than significant with mitigation measures. The “No Project-No Development” alternative would have no potential impact on cultural resources.

**Geology and Soils.** The Acquisition EIR included an analysis of site development related to geology and soils and concluded that the impact would be less than significant with mitigation measures. The “No Project-No Development” alternative would have no impacts related to geology and soils.

**Greenhouse Gas Emissions.** The Acquisition EIR did not include an analysis of greenhouse gas emissions. As evaluated and presented in this SEIR, the proposed project would have a significant and unavoidable cumulative impact on greenhouse gas emissions. Under the “No Project-No Development” alternative, farming operations would continue. Existing farming operation do result in some greenhouse gas emissions associated with the operation of farming equipment and are minimal compared to land development projects. This alternative would result in no increase in greenhouse gas emissions.

**Hazards and Hazardous Materials.** The Acquisition EIR included an impact analysis related to hazards and hazardous materials and concluded that the impact would be less than significant with mitigation measures. The project design includes a 100-foot setback of the school buildings from the transmission lines, as required by the State Department of Education. Additional evaluation in this SEIR regarding the potential hazards of constructing a high school adjacent to existing agricultural fields concluded that, with the implementation of mitigation measures, the potential impacts associated with hazardous materials would be less than significant.

Under the “No Project-No Development” alternative, farming operations would continue. Typically farming operations, including those on the project site, include the use of pesticides and other hazardous materials. The use of pesticide and hazardous materials associated with routine farming activities are typically not considered significant. This alternative would result in no increase in the use of hazards and hazardous materials on site.

**Hydrology and Flooding.** The proposed project would have less than significant impacts associated with hydrology and flooding with the implementation of mitigation measures. The “No Project-No Development” alternative would result in no impacts associated with hydrology and flooding.

**Land Use and Planning.** The proposed project is consistent with the general plan; and therefore, would have no impacts in the area of land use and planning. Land use and planning issues are not relevant under the existing condition-“No Project-No Development”.

**Noise.** As discussed in this SEIR, the proposed project would result in less than significant operational impacts and less than significant construction-related noise impacts with implementation of mitigation measures. The “No Project-No Development” alternative would result in no new noise impacts at the project site, as the property would continue to be farmed.

**Transportation and Circulation.** The proposed project would result in less than significant transportation and circulation-related impact with implementation of mitigation. The “No Project-No Development” alternative would result in no new vehicle, pedestrian, or bicycle trips and therefore, would have no impact associated with transportation and circulation issues.

## **Conclusion**

The “No Project-No Development” alternative would result in no impacts, or no increase in existing impacts and therefore, would be environmentally superior to the proposed project. However, this alternative does not meet the basic objectives of the proposed project. If the proposed project is not constructed at this location, it would need to be constructed at another location. The Acquisition EIR evaluated alternative locations.

## ***Alternative 2: No Project-Residential Development***

### **Alternative Description**

The “No Project-Residential Development” alternative would result in the SUHSD not constructing the proposed high school on the site. The general plan identifies the project site for a senior high school, so if it is not developed with a high school, any other project may require a

general plan amendment. According to the Acquisition EIR, sites planned for schools that are not developed as schools usually get developed as low-density residential, and in the case of the proposed project site, primarily low-density residential with some medium-density (Acquisition EIR, page 3-8). Realistically, the site could accommodate approximately 220 low-density units and 35 medium-density residential units. Any private residential development project would be subject to the City of Salinas policies, preparation of a specific plan, and consistency with the specific plan (Acquisition EIR, page 3-9).

## Environmental Analysis

Potential environmental impacts from the “No Project-Residential Development” alternative are analyzed below and compared to those of the proposed project.

**Aesthetics.** The “No Project-Residential Development” alternative would likely result in the construction of low- and medium-density housing at the project site. Therefore, the existing aesthetic qualities and character of the site would be converted to an urbanized condition regardless. Development under this alternative would most likely be consistent with City of Salinas general plan design measures and policies related to New Urbanism and traditional neighborhood development (TND) standards. Under the “No Project” alternative, the proposed athletic stadium would not be constructed on the project site, which may result in lower impact related to lighting, but would also result in less open space. The aesthetic impacts of urban development projects are very subjective and without having a residential neighborhood design for this alternative, it would not be possible to determine whether the proposed school, or a residential neighborhood would have a greater visual impact. Therefore, the “No Project-Residential Development” alternative would result in similar aesthetic impacts.

**Agricultural Resources.** The Acquisition EIR included an analysis of site development on agricultural resources and concluded that any development on the site would result in a significant and unavoidable impact due to the conversion of Prime Farmland and Farmland of Statewide Significance. The “No Project-Residential Development” alternative would result in the same impacts on agricultural resources as those of the proposed project.

**Air Quality.** The Acquisition EIR included an analysis of construction-related and operational air quality impacts. It concluded that the construction-related air quality impacts would be less than significant with mitigation measures. The “No Project-Residential Development” alternative would have similar construction-related air quality impacts.

The construction of housing at the project site instead of a school would likely result in fewer operational air quality impacts due to a decrease in traffic levels. According to Exhibit 6B of the SEIR traffic impact report, the proposed project would create approximately 2,768 vehicle trips per day. The “No Project-Residential Development” alternative, assuming approximately 220

low-density units and 35 medium-density units, would generate about 2,400 vehicle trips per day (Acquisition EIR, page 3-11). Although air quality impacts from both the proposed project and this alternative would result in less than significant impacts, the impacts associated with the housing alternative would be slightly less.

The Acquisition EIR included an analysis of the cumulative operational impacts of the development of the site and concluded that the development of the site would contribute to ozone and PM<sub>10</sub>, pollutants for which the North Central Coast Air Basin is currently in non-attainment. The City of Salinas EIR concluded that build out of the general plan is not consistent with the air quality management plan and therefore, would result in a significant and unavoidable impact. The “No Project-Residential Development” alternative would result in development of the site and would result in a similar significant and unavoidable cumulative impact.

**Biological Resources.** The Acquisition EIR included an analysis of the impact of development of the site on biological resources and concluded that development of the site would have no impact on sensitive biological resources. The “No Project-Residential Development” alternative would not result in impacts to sensitive biological resources. Therefore, this alternative is similar to the proposed project in terms of sensitive biological resources.

**Cultural Resources.** The Acquisition EIR included a cultural resources impact analysis and concluded that development of the site would have a less than significant impact with mitigation measures. The “No Project-Residential Development” alternative would result in the same impacts on cultural resources.

**Geology and Soils.** The Acquisition EIR included an analysis of geological and soils hazards and concluded that the impact would be less than significant with mitigation measures. The “No Project-Residential Development” alternative would result in similar impacts related to geological and soil hazards.

**Greenhouse Gas Emissions.** The “No Project-Residential Development” alternative could result in the development of approximately 220 low-density units and 35 medium-density residential units on the project site. Greenhouse gas emissions from land-use development projects are most typically associated with transportation (direct mobile sources), burning of energy in the form of natural gas on-site for water heating and space heating (area-source emissions), and emissions created in the off-site generation of electricity demanded by a project (indirect emissions), both during project operations and project construction.

The URBEMIS2007 model was run to estimate mobile source emissions of a residential project of this type. Using the URBEMIS2007 model, mobile source emissions in the form of CO<sub>2</sub> from the proposed project are estimated to be 3,772.10, or approximately 2,972 metric tons using a conversion factor of 0.907 metric tons per short ton.



Area source CO<sub>2</sub> emissions are also estimated using the URBEMIS2007 software. This emissions source is associated with the burning of energy in the form of natural gas on-site for water heating and space heating. Area source emissions were calculated based on a residential project of this type at approximately 913.10 tons per year or approximately 828 metric tons per year. The results of the URBEMIS run can be found in [Appendix D, URBEMIS Results](#).

The primary source of indirect GHG emissions generation is from the combustion of fossil fuels to produce electricity needed to meet project demand. That demand is in the form of electricity consumption on-site and from energy consumed in supplying domestic water (pumping) and treating sanitary wastewater from the project. According to the EPA, on average, each single-family (low-density) unit consumed approximately 8.24 metric tons of CO<sub>2</sub> per home per year and a medium-density unit would consume approximately 4.23 metric tons of CO<sub>2</sub> per unit per year (<http://www.epa.gov/cleanenergy/energy-resources/refs.html>). Using these estimates, the “No Project-Residential Development” alternative would result in 1,812.8 metric tons of CO<sub>2</sub> from the 220 low-density units, and 148.05 metric tons of CO<sub>2</sub> from the 35 medium-density units, for a total of approximately 1,961 metric tons of CO<sub>2</sub> per year.

Energy generated for use in water pumping and wastewater treatment is a notable source of indirect GHG emissions. The LGOP energy use factor for off-site water pumping is 1,450 kWh per 1,000,000 gallons of water consumed. The project site is located within the jurisdiction of the California Water Services Company (Cal Water). Cal Water does not have demand factors, so the estimated water demand factors in the City of Salinas GP SEIR were used to approximate the water demand from the proposed project. According to the GP SEIR, low-density uses and medium-density uses utilize approximately 550 gallons per day (gpd) (GP SEIR, page 5.3-24). Therefore, the 220 low-density units and 35 medium-density units would utilize approximately 140,250 gpd, or 51,191,250 gallons of water per year. Using the LGOP energy use factor of 1,450 kWh per 1,000,000 gallons of water consumed, approximately 74,227 kWh of electricity or 74 MWh would be required per year for water pumping.

It can be conservatively assumed that the amount of wastewater generated by the proposed project would be similar to its total water demand since a majority of the water consumed would be disposed of as wastewater. Therefore, it is assumed that approximately 51,191,250 gallons per year of wastewater would be generated by the proposed project. The LGOP energy demand factor for wastewater treatment is about 2,500 kWh per 1,000,000 gallons of wastewater treated. Electricity demand from wastewater treatment would be approximately 127,978 kWh or 128 MWh per year. Therefore, the “No Project-Residential Development” alternative would require approximately 202 MWh (74 + 128) of energy for water pumping and wastewater treatment.

Pacific Gas and Electric estimates that 559 pounds of CO<sub>2</sub> are produced for each MWh of electricity produced, the LGOP Appendix G factors for additional GHGs are 0.029 pounds of CH<sub>4</sub> and 0.011 pounds of N<sub>2</sub>O for each MWh of electricity produced. Utilizing these emissions

factors, along with factoring in the global warming potential of each pollutant, the proposed project would result in approximately 2,130 metric tons of CO<sub>2</sub>e per year for electricity generation.

**Table 13 No Project–Residential Development Alternative GHG Emissions from Electricity Generation**

<b>Projected Electricity Demand from Future Development (MWh)</b>	<b>GHG Type</b>	<b>GHG Emissions Factor (lbs/MWh)<sup>1</sup></b>	<b>Global Warming Potential</b>	<b>CO<sub>2</sub> Equivalent (metric tons CO<sub>2</sub>e/yr)<sup>2</sup></b>
202	CO <sub>2</sub>	559.0	1	51
202	CH <sub>4</sub>	0.029	21	1
202	N <sub>2</sub> O	0.011	310	1
<b>Total CO<sub>2</sub> Equivalent (metric tons per year)</b>				<b>53</b>

*Source:* EMC Planning Group 2011

*Note:*

1. CO<sub>2</sub> factor from PG&E 2011; CH<sub>4</sub> and N<sub>2</sub>O factors from Table G.6, Local Government Operations Protocol, 2010.
2. CO<sub>2</sub> Equivalent is calculated as (electricity use) x (emissions factor) x (warming potential) / (2,204.62 lb/metric ton). Figures shown are rounded to the nearest metric ton.

Approximately 1,961 metric tons of CO<sub>2</sub> would be generated from on-site electricity use, and approximately 53 metric tons of CO<sub>2</sub> would be generated for water pumping and wastewater treatment, for a total of 2,014 metric tons of CO<sub>2</sub> being emitted by indirect sources.

With approximately 2,972 metric tons of mobile source CO<sub>2</sub> emissions, 828 metric tons of area-source emissions, and 2,014 metric tons of indirect source emissions, total operational GHG emissions are estimated at 5,814 metric tons per year.

At this time, it is unknown if any emission reductions measures would be incorporated into the “No Project-Residential Development” alternative. Even if it is assumed that the “No Project-Residential Development” alternative would incorporate adequate measures to reduce project emissions by 30 percent (1,744 metric tons of CO<sub>2</sub> per year) and thereby complying with AB 32, the “No Project-Residential Development” alternative would still result in approximately 4,070 metric tons of CO<sub>2</sub> per year. This is approximately 2,206 metric tons higher than the proposed project. Therefore, the “No Project-Residential Development” alternative would result in a greater impact with regard to climate change.

**Hazards and Hazardous Materials.** The Acquisition EIR included an analysis of the impact of a high school on site related to hazards and hazardous materials and concluded that the impact would be less than significant with mitigation measures. The project design includes a 100-foot setback of the school buildings from the transmission lines, as required by the State Department of Education. There is nothing in the Salinas general plan, general plan EIR, or zoning code that prohibits residential uses in the vicinity of transmission lines.

Since it is unknown at this time if and when the areas to the south and east of the project site would be development, the “No Project-Residential Development” alternative may place new residential uses adjacent to active agricultural land. This may result in residents being exposed to pesticides from the adjacent farmland. There is nothing in the Salinas general plan requiring a buffer zone between residential and agricultural uses, although the Section 37-50.220 of the Salinas Municipal Code requires a deed restriction on developed properties allowing adjacent farmers to continue agricultural operations (right to farm ordinance). In addition, Section 37-50.180 of the Salinas Municipal Code requires a tree buffer between residential uses and active farmland in an effort to control dust. Therefore, the proposed project and the no project alternative would have similar, less than significant, adverse impacts. Therefore, the “No Project-Residential Development” alternative would result in similar impacts related to hazards and hazardous materials.

**Hydrology and Flooding.** Development resulting under the “No Project-Residential Development” alternative would be required to implement appropriate Low Impact Development drainage features in compliance with the City of Salinas Storm Water Development Standards. However, the “No Project-Residential Development” alternative would result in greater impervious surfaces on the site due to the development of residential uses instead of a high school campus. Therefore, the “No Project-Residential Development” alternative would result in somewhat greater storm water runoff and greater impacts to on- and off-site flooding.

**Land Use and Planning.** The project site is designated as a high school campus in the general plan; therefore the development of the site with residential uses may require a general plan amendment. This alternative would also require the School District to sell the property to a developer and identifying another location for the high school. Alternative locations were evaluated in the Acquisition EIR.

The “No Project-Residential Development” alternative would result in similar impacts associated with land use and planning.

**Noise.** The “No Project-Residential Development” alternative would expose residential uses, i.e., sensitive receptors, to similar noise levels as the proposed project. However, the “No Project-Residential Development” alternative would not expose adjacent land uses to temporary

elevated noise associated with special events, such as football games at the proposed school. The “No Project-Residential Development” alternative would also result in a reduction of trips to the project site. Therefore, the “No Project-Residential Development” alternative would result in less periodic increases in noise levels.

**Transportation and Circulation.** The “No Project-Residential Development” alternative is anticipated to result in less daily traffic than the proposed project, including less trips during the AM and PM peak hour trips. The proposed project would create approximately 2,768 vehicle trips per day; whereas the “No Project” alternative would generate about 2,400 vehicle trips per day. The proposed project’s and the residential project’s AM and PM peak hour trips are presented in [Table 14, AM and PM Peak Hour Trips, Comparison between Proposed Project and No Project \(Residential\) Alternative](#).

**Table 14 AM and PM Peak Hour Trips, Comparison Between Proposed Project and No Project-Residential Alternative.**

	<b>Average Daily Trips</b>	<b>AM Peak Hour Trips</b>	<b>PM Peak Hour Trips</b>
Proposed Project (High School)	2,768	825	270
No Project Alternative (Residential)	2,400	180	240

**Source:** Institute of Transportation Engineering Trip Generation Manual, 8<sup>th</sup> Edition

**Note:** Numbers are approximate. AM peak hour trips approximately 7.5 percent of average daily traffic. PM peak hour trips approximately 10 percent of average daily traffic.

Therefore, the “No Project-Residential Development” alternative would result in less traffic impacts. However, the proposed high school would need to be constructed at another location, which is not factored into this evaluation of traffic impacts.

## Conclusion

The “No Project-Residential Development” alternative would result in a greater impact than the proposed project with regard to greenhouse gas emissions and hydrology and flooding, and fewer impacts with regard to operation air quality impacts and noise. All other impacts would be similar. However, this alternative does not meet the basic objectives of the proposed project. If the proposed project is not constructed at this location, it would need to be constructed at another location. The Acquisition EIR evaluated alternative locations.

## **Alternative 3 Site Redesign A**

### **Alternative Description**

Figure 16, *Site Redesign A*, presents the layout for this alternative. The “Site Redesign A” alternative would result in a redesign of the high school campus. This alternative would place most of the outdoor athletic facilities along the western boundary of the site, adjacent to the existing residential neighborhood. Two baseball fields, four softball fields, and one soccer field would be situated along the western portion of the site, with the football/ soccer stadium would be placed along the northern boundary of the site, adjacent to Rogge Road. Six basketball courts would be located to the west of the softball fields and eight tennis courts would be located between the football/soccer stadium and the student parking lot. The two-story classroom building would front on existing agricultural fields. The food court, trade classrooms, main gym, small gym, and the locker rooms, weight room, food court, and kitchen would be located to the north of the classroom building, in the center of the campus.

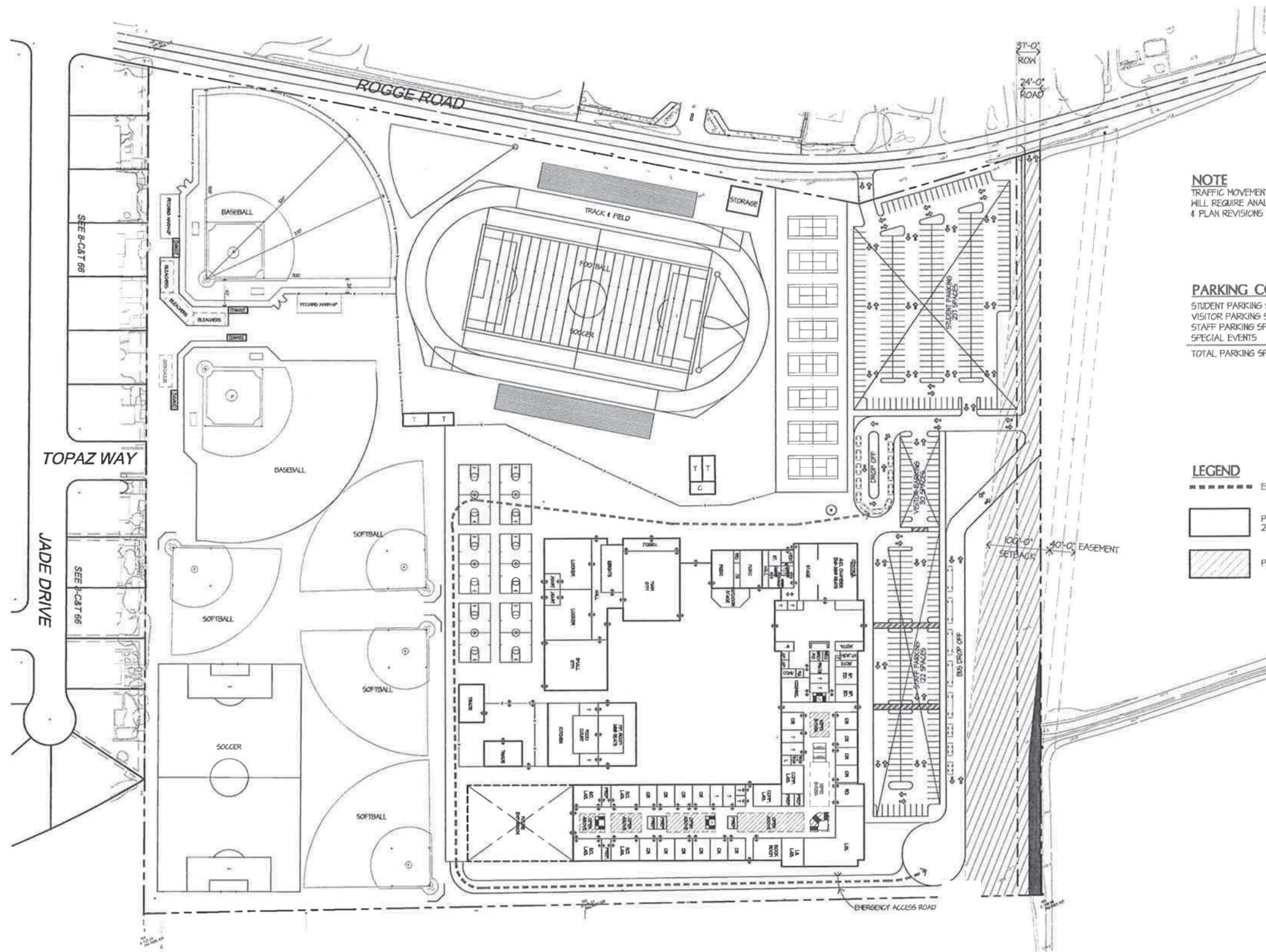
All campus parking would be located along the eastern edge of the site. Access to the campus would occur in two places. The main access point would be located to the eastern boundary of the site, off of a new roadway. This point would fork, allowing access to either a 30 space visitor parking lot, 122 space parking lot and a student drop off area, or to the bus drop off zone. The second point would be located on Rogge Road along the northeastern boundary of the site, which would access a 251 space student parking lot. The School District would be responsible for constructing the new road from Rogge Road as far as the campus entry point.

### **Environmental Analysis**

Potential environmental impacts from the “Site Redesign A” alternative are analyzed below and compared to those of the proposed project.

**Aesthetics.** The “Site Redesign A” alternative would reorient the high school to front on agricultural fields to the south and east and would require an access road to the parking lot. This orientation places the main campus buildings on the planned future Russell Road extension. The “Site Redesign A” alternative would orient the campus closer to the future neighborhoods and increase the walkability of the campus for the future residents within the Future Growth Area, however it would orient the campus away from the existing residential neighborhood to the west and make the campus less walkable for existing residents. The proposed high school is intended to serve both existing students with the school district (900 students) and future students (600 students) that could reside within the Future Growth Area. The “Site Redesign A” alternative would result in a similar aesthetic impact associated with the visual impact on the project site and surrounding area.





**NOTE**  
TRAFFIC MOVEMENTS ARE CONCEPTUAL ONLY,  
WILL REQUIRE ANALYSIS BY A TRAFFIC ENGINEER  
& PLAN REVISIONS TO MINIMIZE CONFLICTS.

**PARKING COUNT**

STUDENT PARKING SPACES	251
VISITOR PARKING SPACES	30
STAFF PARKING SPACES	122
SPECIAL EVENTS	0
<b>TOTAL PARKING SPACES</b>	<b>404</b>

**LEGEND**

	EMERGENCY VEHICLE ACCESS
	PARKING & VEHICLE CIRCULATION 20,410 S.F.
	POWER LINE SETBACK



Source: Kasavan Architects 2011

Figure 16  
Site Redesign A

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The “Site Redesign A” alternative would potentially expose the existing residential neighborhood to the west to increased lighting impacts from the athletic fields. Development under the “Site Redesign A” alternative would be required to implement the same lighting mitigation measures and therefore, the impacts would be similar to the lighting impacts of the proposed project.

**Agricultural Resources.** The Acquisition EIR included an analysis of the impact of development of the site on agricultural resources and concluded that any development on the site would result in a significant and unavoidable impact due to the conversion of Prime Farmland and Farmland of Statewide Significance. The “Site Redesign A” alternative would result in the same impacts on agricultural resources as those of the proposed project.

**Air Quality.** The “Site Redesign A” alternative would still develop the site with a high school campus and would not result in any development of a greater intensity. There would be no increase in construction or operational air quality impacts. The “Site Redesign A” alternative would result in the similar air quality impacts as the proposed project.

**Biological Resources.** The “Site Redesign A” alternative would result in similar impacts on biological resources as the proposed project.

**Cultural Resources.** The “Site Redesign A” alternative would result in similar impacts on cultural resources as the proposed project.

**Geology and Soils.** The “Site Redesign A” alternative would result in similar geology and soils related impacts as the proposed project.

**Greenhouse Gases.** The “Site Redesign A” alternative would result in the same intensity of development on the project site and would result in similar greenhouse gas emissions than the proposed project.

**Hazards and Hazardous Materials.** The Acquisition EIR included an analysis of the impact of the development of a high school on the site and concluded that all impacts were less than significant with mitigation measures. The “Site Redesign A” alternative does result in less useable real estate for the campus due to the 100-foot power transmission line setback located in the southeastern corner of the site. The proposed project utilizes the setback area as a parking lot whereas the “Site Redesign A” alternative does not have any development located within that area.

Since it is unknown at this time if and when the areas to the south and east of the project site would be development, the “Site Redesign A” alternative places the main school buildings, even if just temporarily, adjacent to active agricultural land. This may result in the exposure of students to hazardous materials in the form of pesticides, which is a potentially significant



impact. In the “Site Redesign A” alternative, all of the classroom facilities are located in the southeastern corner of the site. Therefore, students are more likely to be exposed to higher pesticide levels than under the proposed project design. This design alternative also places the main school buildings closer to the electrical transmission lines, although outside of the required 100-foot setback. The “Site Redesign A” alternative would result in a somewhat greater impact regarding hazardous materials.

**Hydrology and Flooding.** The “Site Redesign A” alternative would redesign the campus, but would result in approximately the same amount of impervious surfaces as the proposed project. Development under the “Site Redesign A” alternative would be required to implement appropriate Low Impact Development drainage features in compliance with the City of Salinas Storm Water Development Standards and would result in a similar impact related to hydrology and flooding. Therefore, the “Site Redesign A” alternative would result in similar impact related to hydrology and flooding.

**Land Use and Planning.** The “Site Redesign A” alternative would reorient the high school to front on existing farmland. The project site is located within the “New Urbanism” District. Development within the NU District is intended to be high quality, pedestrian-oriented, safe and reflect the traditional neighborhood design principles. The “Site Redesign A” alternative would orient the campus buildings closer to the General Plan future neighborhoods and increase the walkability of the campus for the future residents within the Future Growth Area. If appropriate in the future, the nature of the high school project allows for consideration of additional pedestrian and bicycle access to the site for students coming from future residential development to the south and east. At this time, it is not yet known exactly what the development and supporting infrastructure will consist of, or how it will be oriented, making it premature to address such access at this time. The “Site Redesign A” alternative would be consistent with the design principals of both traditional neighborhood development and New Urbanism and would comply with the City of Salinas general plan policies and zoning code. Therefore, the “Site Redesign A” alternative would result in similar impacts related to land use and planning.

**Noise.** A noise report title *Noise Assessment Study for High School #5 Environmental Impact Report, Rogge Road, Salinas* (noise assessment) was prepared for the proposed project by Edward L. Pack & Associates in June 2011. The noise assessment analyzed the potential noise impacts that could occur to and would be generated by the “Site Redesign A” alternative.

The “Site Redesign A” alternative would not expose any sensitive outdoor on-site uses to unacceptable levels of noise (Pack, page 17). The expected interior noise levels from traffic on Rogge Road would be within the noise standards set by the California Code of Regulations and the American National Standards Institute (Pack, page 20).

Noise impacts from the project to the area surrounding the proposed high school would include project-generated traffic and school activities, such as football/soccer games, marching bands, basketball games, baseball games, tennis court activity and outdoor stage performance activity. The noise report analyzed the noise impact of traffic on local surface streets, as well as noise from project traffic using the school parking lot. The contribution of the school-related traffic would be negligible and would not result in significant traffic-related noise impacts (Pack, page 21). Under the “Site Redesign A” alternative, the parking lots are located along the easterly border of the site. These parking lots are far removed from the existing residential development to the west and would not result in any noise-related impacts on the existing residences (Pack, page 22). Noise generated as a result of football games, marching band practices, use of the outdoor stage, and outdoor basketball and tennis activities would not result in significant levels of noise (Pack, pages 23-36). Under the “Site Redesign A” alternative, the soccer field would be located in the southwestern corner of the project site. Noise generated by soccer practice and games would result in an 8 dB increase to the existing noise environment near the southwest corner, which would result in a potentially significant noise impact (Pack, page 25). The noise report includes a mitigation measure that would require the construction of a six-foot high acoustically-effective barrier along the western property line of the site, contiguous with the residences along Jade Drive. The implementation of this mitigation measure would reduce the impact to a less than significant level (Pack, page 39). Under the “Site Redesign A” alternative, the baseball and softball fields would be primarily located along the western side of the project site, with both baseball fields and one softball field being located directly adjacent to the western boundary and in the northwest corner of the project site. If these fields are used for extended periods of time, such as during a weekend little league or community softball event, the noise generated by these three fields would result in noise in excess of the standards, which is a potentially significant impact (Pack, page 35). The noise report includes a mitigation measure that would require the construction of an acoustically-effective barrier along the western property line of the site, contiguous with the residences along Jade Drive. The barrier north of Topaz Way would need to achieve a height no less than three feet above the top seat of the would need to be a minimum of six feet high. The barrier height is in reference to the nearest residential building pad or baseball diamond elevation, whichever is higher. The implementation of this mitigation measure would reduce the impact to a less than significant level (Pack, page 39). Therefore, the “Site Redesign A” alternative would result in potentially significant levels of noise adjacent to sensitive noise, although mitigation measures could be implemented to reduce the impacts to a less than significant level. This alternative would still result in a greater operational-noise related impact.

The “Site Redesign A” alternative would still develop the site would result in the similar construction-related noise as the proposed project.

**Transportation and Circulation.** Site Redesign 1 maintains access to the project from Rogge Road, but relocates the driveways to the easterly portion of the project site. Peak hour traffic volume projections for the Project Phase 1 and Buildout Conditions are shown on Exhibits 15A in [Appendix G](#) and level of service calculations for the Rogge Road intersections with the project driveways are shown on Exhibit 16 in [Appendix G](#).

This alternative site plan locates an access driveway adjacent to the easterly property boundary. In the event that Site Redesign A is adopted and a collector street is ultimately constructed directly adjacent to the school's eastern property boundary, access to the easterly high school driveway should be relocated from Rogge Road to new north-south collector street. This would leave one access driveway connection to Rogge Road and one access driveway to a north-south collector. Overall, this configuration, if achievable, would reduce high school related traffic on Rogge Road as it is expected that when the Future Growth Area develops high school traffic will access the site from the south and east to a greater degree than during Phase 1 of the project. Alternatively, access could also be provided via a connection to the Russell Road extension.

By locating the driveways to the easterly portion of the site, vehicular access is separated from the primary pedestrian and bicycle activity, which will be primarily to and from the west, at least for Phase 1. The site plan for this alternative does not show a shared path along the project frontage on Rogge Road. Approval of any alternative site plan would require including a bike lane or share pedestrian/bike path. In addition, left turn channelization on Rogge Road at the project driveways is not shown on the alternative plan. Left turn channelization would be required on Rogge Road at the project driveways for the project alternatives.

The access plan is very similar to the access plan for the preferred project except the number of driveways to Rogge Road have been consolidated from five to two and an internal connection is provided between the student parking lot and the visitor parking lot. Both of these changes are positive improvements to the access plan. However, with Site Redesign A access, student parking lot access would be primarily limited to the westerly driveway (Driveway #1) and visitor/staff/drop-off/pick-off access would be primarily concentrated at the easterly driveway (Driveway #2). Because of this, intersection operations at the Rogge Road/Driveway #2 intersection are unacceptable during the AM peak hour for both the Phase 1 and Buildout Conditions. Given the long driveways provided on-site between Rogge Road and the drop-off/pick-up area, signalization of the Rogge Road/Driveway #2 intersection would be required for the Project Phase 1 and Buildout Conditions. In addition, a free right turn movement from northbound Driveway 2 to eastbound Rogge Road would be required for the buildout condition, assuming access is not reconfigured to a new north-south collector street built adjacent to the school's eastern property line. Both driveway approaches to Rogge Road should be designed to provide separate left and right turn lanes. These improvements would improve traffic operations to acceptable levels.

Under Buildout Conditions, signalization of the easterly most driveway would be required and a free right turn should be provided from the northbound driveway approach to eastbound Rogge Road at the same driveway. This assumes access is not relocated to a new north-south collector street built on the school's eastern property boundary.

This alternative locates the parent loading area to the interior of the site, which will provide on-site queuing area on the approach to the drop-off/pick-up area and on the exiting approach to Rogge Road that is not provided with the project plan.

## ***Alternative 4 Site Redesign B***

### **Alternative Description**

Figure 17, *Site Redesign B*, presents the layout for this alternative. The “Site Redesign B” alternative would result in a redesign of the high school campus. This alternative would place most of the outdoor athletic facilities along the western boundary of the site, adjacent to the existing residential neighborhood. Two baseball fields, four softball fields, and one soccer field would be situated along the western portion of the site, with the football/ soccer stadium would be placed along the northern boundary of the site, adjacent to Rogge Road. Six basketball courts and eight tennis courts would be located to the west of the softball fields. The two-story classroom building would be fronting on existing farmland and the future Russell Road extension, as shown on the City of Salinas General Plan. The food court, trade classrooms, main gym, small gym, and the locker rooms, weight room, food court, and kitchen would be located to the north of the classroom building, in the center of the campus.

All campus parking would be located in the eastern portion of the site. Access to the campus would occur in two places. One access point would be located to the eastern boundary of the site, off of the future El Dorado Road extension. This point would allow access to a 74 space visitor parking lot and a 120 space staff parking lot. The second point would be located on Rogge Road along the northeastern boundary of the site, which would access a 291 space student parking lot and the student and bus drop off area.

### **Environmental Analysis**

Potential environmental impacts from the “Site Redesign B” alternative are analyzed below and compared to those of the proposed project.

**Aesthetics.** The “Site Redesign B” alternative would reorient the high school to front on agricultural fields to the south and east and would require an access road to the parking lot. This orientation places the main campus buildings on existing farmland. The “Site Redesign B”

alternative would orient the campus closer to the General Plan future neighborhoods and increase the walkability of the campus for the future residents within the Future Growth Area, however it would orient the campus away from the existing residential neighborhood to the west and make the campus less walkable for existing residents. The proposed high school is intended to serve both existing students with the school district (900 students) and future students (600 students) that could reside within the Future Growth Area. The “Site Redesign B” alternative would result in a similar aesthetic impact associated with the visual impact on the project site and surrounding area.

The “Site Redesign B” alternative would potentially expose the existing residential neighborhood to the west to increased lighting impacts from the athletic fields. Development under the “Site Redesign B” alternative would be required to implement the same lighting mitigation measures and the impacts would be similar to the lighting impacts of the proposed project.

**Agricultural Resources.** The Acquisition EIR included an analysis of the impact of development of the site on agricultural resources and concluded that any development on the site would result in a significant and unavoidable impact due to the conversion of Prime Farmland and Farmland of Statewide Significance. The “Site Redesign B” alternative would result in the same impacts on agricultural resources as those of the proposed project.

**Air Quality.** The “Site Redesign B” alternative would still develop the site with a high school campus and would not result in any development of a greater intensity. There would be no increase in construction or operational air quality impacts. The “Site Redesign B” alternative would result in the similar air quality impacts as the proposed project.

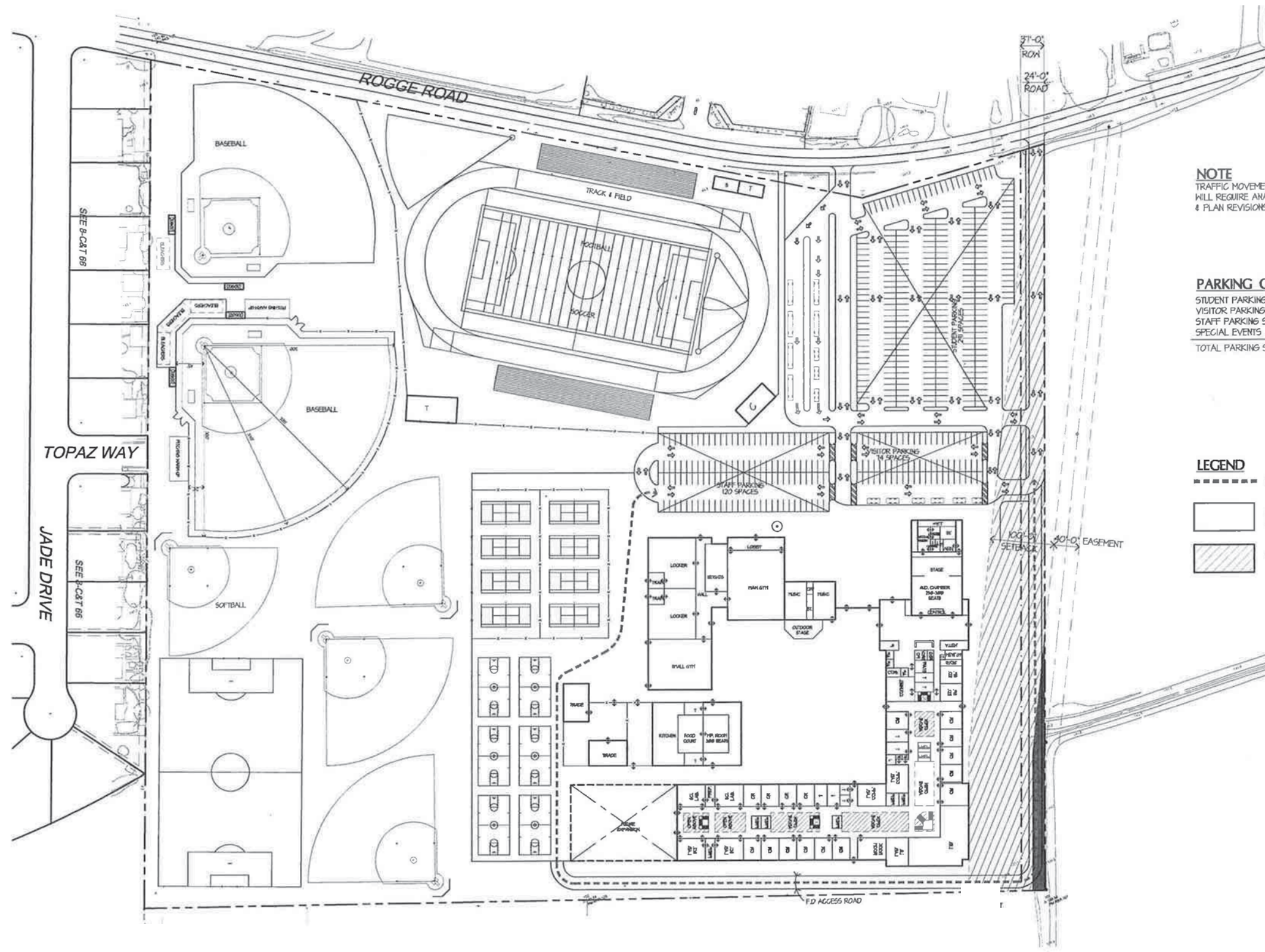
**Biological Resources.** The “Site Redesign B” alternative would result in similar impacts on biological resources as the proposed project.

**Cultural Resources.** The “Site Redesign B” alternative would result in similar impacts on cultural resources as the proposed project.

**Geology and Soils.** The “Site Redesign B” alternative would result in similar geology and soils related impacts as the proposed project.

**Greenhouse Gases.** The “Site Redesign B” alternative would result in the same intensity of development on the project site and would result in similar greenhouse gas emissions than the proposed project.





**NOTE**  
TRAFFIC MOVEMENTS ARE CONCEPTUAL ONLY,  
WILL REQUIRE ANALYSIS BY A TRAFFIC ENGINEER  
& PLAN REVISIONS TO MINIMIZE CONFLICTS.

**PARKING COUNT**

STUDENT PARKING SPACES	291
VISITOR PARKING SPACES	74
STAFF PARKING SPACES	120
SPECIAL EVENTS	0
<b>TOTAL PARKING SPACES</b>	<b>485</b>

**LEGEND**

- EMERGENCY VEHICLE ACCESS
- PARKING & VEHICLE CIRCULATION  
226,300 S.F.
- POWER LINE SETBACK



Source: Kasavan Architects 2011

Figure 17  
Site Redesign B

SUHSD New High School #5 Construction SEIR

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**Hazards and Hazardous Materials.** The Acquisition EIR included an analysis of the impact of the development of a high school on the site and concluded that all impacts were less than significant with mitigation measures. The “Site Redesign B” alternative does result in less useable real estate for the campus due to the 100-foot power transmission line setback located in the southeastern corner of the site. The proposed project utilizes the setback area as a parking lot whereas the “Site Redesign B” alternative does not have any development located within that area. Although the “Site Redesign B” alternative would result in less usable real estate, it would result in similar impacts.

Since it is unknown at this time if and when the areas to the south and east of the project site would be development, the “Site Redesign B” alternative places the main school buildings, even if just temporarily, adjacent to active agricultural land. This may result in the exposure of students to hazardous materials in the form of pesticides, which is a potentially significant impact. In the “Site Redesign B” alternative, all of the classroom facilities are located in the southeastern corner of the site. Therefore, students are more likely to be exposed to higher pesticide levels than under the proposed project design. This design alternative also places the main school buildings closer to the electrical transmission lines, although outside of the required 100-foot setback. The “Site Redesign A” alternative would result in a somewhat greater impact regarding hazardous materials.

**Hydrology and Flooding.** The “Site Redesign B” alternative would redesign the campus, but would result in approximately the same amount of impervious surfaces as the proposed project. Development under the “Site Redesign B” alternative would be required to implement appropriate Low Impact Development drainage features in compliance with the City of Salinas Storm Water Development Standards and would result in a similar impact related to hydrology and flooding. Therefore, the “Site Redesign B” alternative would result in similar impact related to hydrology and flooding.

**Land Use and Planning.** The “Site Redesign B” alternative would reorient the high school to front on the future Russell Road extension and would face the campus towards existing farmland. The project site is located within the “New Urbanism” District. Development within the NU District is intended to be high quality, pedestrian-oriented, safe and reflect the traditional neighborhood design principles. The “Site Redesign B” alternative would orient the campus closer to the future neighborhoods and increase the walkability of the campus for the future residents within the Future Growth Area. If appropriate in the future, the nature of the high school project allows for consideration of additional pedestrian and bicycle access to the site for students coming from future residential development to the south and east. At this time, it is not yet known exactly what the development and supporting infrastructure will consist of, or how it will be oriented, making it premature to address such access at this time. The “Site Redesign B”



alternative would be consistent with the design principals of both traditional neighborhood development and New Urbanism and would comply with the City of Salinas general plan policies and zoning code.

Therefore, the “Site Redesign B” alternative would result in similar impacts related to land use and planning.

**Noise.** A noise report title *Noise Assessment Study for High School #5 Environmental Impact Report, Rogge Road, Salinas* (noise assessment) was prepared for the proposed project by Edward L. Pack & Associates in June 2011. The noise assessment analyzed the potential noise impacts that could occur to and would be generated by the “Site Redesign B” alternative.

The “Site Redesign B” alternative would not expose any sensitive outdoor on-site uses to unacceptable levels of noise (Pack, page 17). The expected interior noise levels from traffic on Rogge Road would be within the noise standards set by the California Code of Regulations and the American National Standards Institute (Pack, page 20).

Noise impacts from the project to the area surrounding the proposed high school would include project-generated traffic and school activities, such as football/soccer games, marching bands, basketball games, baseball games, tennis court activity and outdoor stage performance activity. The noise report analyzed the noise impact of traffic on local surface streets, as well as noise from project traffic using the school parking lot. The contribution of the school-related traffic would be negligible and would not result in significant traffic-related noise impacts (Pack, page 21). Under the “Site Redesign B” alternative, the parking lots are located along the easterly border of the site. These parking lots are far removed from the existing residential development to the west and would not result in any noise-related impacts on the existing residences (Pack, page 22).

Noise generated as a result of football games, marching band practices, and outdoor basketball and tennis activities would not result in significant levels of noise (Pack, pages 23-31). Under the “Site Redesign B” alternative, the soccer field would be located in the southwestern corner of the project site. Noise generated by soccer practice and games would result in an 8 dB increase to the existing noise environment near the southwest corner, which would result in a potentially significant noise impact (Pack, page 25). The noise report includes a mitigation measure that would require the construction of a six-foot high acoustically-effective barrier along the western property line of the site, contiguous with the residences along Jade Drive. The implementation of this mitigation measure would reduce the impact to a less than significant level (Pack, page 39).

Under the “Site Redesign B” alternative, the baseball and softball fields would be primarily located along the western side of the project site, with both baseball fields and one softball field being located directly adjacent to the western boundary and in the northwest corner of the project site. If these fields are used for extended periods of time, such as during a weekend little

league or community softball event, the noise generated by these three fields would result in noise in excess of the standards, which is a potentially significant impact (Pack, page 35). The noise report includes a mitigation measure that would require the construction of an acoustically-effective barrier along the western property line of the site, contiguous with the residences along Jade Drive. The barrier north of Topaz Way would need to achieve a height no less than three feet above the top seat of the bleachers of the baseball diamonds closest to the property line. The barrier south of Topaz Way would need to be a minimum of six feet high. The barrier height is in reference to the nearest residential building pad or baseball diamond elevation, whichever is higher. The implementation of this mitigation measure would reduce the impact to a less than significant level (Pack, page 39). Therefore, the “Site Redesign B” alternative would result in potentially significant levels of noise adjacent to sensitive noise, although mitigation measures could be implemented to reduce the impacts to a less than significant level. This alternative would still result in a greater operational-noise related impact.

The “Site Redesign B” alternative would result in the similar construction-related noise as the proposed project.

**Transportation and Circulation.** “Site Redesign B” maintains access to the project from Rogge Road, but relocates the driveways to the easterly portion of the project site. Peak hour traffic volume projections for the Project Phase 1 and Buildout Conditions are shown on Exhibits 15B in [Appendix G](#) and level of service calculations for the Rogge Road intersections with the project driveways are shown on Exhibit 16 in [Appendix G](#).

This alternative site plan locates an access driveway adjacent to the easterly property boundary. In the event that “Site Redesign B” is adopted and a collector street is ultimately constructed directly adjacent to the school’s eastern property boundary, access to the easterly high school driveway should be relocated from Rogge Road to new north-south collector street. This would leave one access driveway connection to Rogge Road and one access driveway to a north-south collector. Overall, this configuration, if achievable, would reduce high school related traffic on Rogge Road as it is expected that when the Future Growth Area develops high school traffic will access the site from the south and east to a greater degree than during Phase 1 of the project. Alternatively, access could also be provided via a connection to the Russell Road extension.

By locating the driveways to the easterly portion of the site, vehicular access is separated from the primary pedestrian and bicycle activity, which will be primarily to and from the west, at least for Phase 1. This alternative plan does not show a shared path along the project frontage on Rogge Road. Approval of any alternative site plan would require including a bike lane or share pedestrian/bike path. In addition, left turn channelization on Rogge Road at the project driveways is not shown on the alternative plan. Left turn channelization would be required on Rogge Road at the project driveways for the project alternatives.

The access plan for “Site Redesign B” provides two driveways to Rogge Road and an internal circulation plan that would balance turning volumes at the two driveways. For this reason, acceptable driveway operations are projected for the Phase 1 access plan for “Site Redesign B”. Left turn channelization would be required on Rogge Road at both intersection driveways and both driveways should be designed to provide separate left and right turn lanes on the approach to Rogge Road.

Under Buildout Conditions, signalization of the easterly most driveway would be required and a free right turn should be provided from the northbound driveway approach to eastbound Rogge Road at the same driveway. This assumes access is not relocated to a new north-south collector street built on the school’s eastern property boundary.

## 4.5 COMPARISON OF ALTERNATIVES

CEQA Guidelines section 15126.6(e) require the selection of an environmentally superior alternative. If the “No Project” alternative is the environmentally superior alternative, then the environmentally superior alternative among the remaining alternatives must be identified. The proposed project and the alternatives were ranked for the environmental superiority.

The alternatives’ impacts are summarized and compared in a matrix format in [Table 15, Project Alternatives Summary](#). The “No Project-No Development” alternative would result in no impacts, or no increase in impacts over existing conditions. Therefore, this alternative is the environmentally-superior alternative. However, this alternative does not meet the basic objectives of the proposed project. If the proposed project is not constructed at this location, it would need to be constructed at another location. The Acquisition EIR evaluated alternative locations.

The “No Project-Residential Development” alternative impacts would be somewhat less than the proposed project’s impacts in the areas of operational air quality, noise, and traffic volumes, and somewhat greater in the areas of greenhouse gas emissions and hydrology. The relative impacts for all other areas would be similar to the proposed project. Therefore, the “No Project-Residential Development” alternative would be the environmentally superior alternative after the “No Project-No Development” alternatives. However, this alternative would not achieve the project objectives either.

The “Site Redesign A” alternative and “Site Redesign B” alternative impacts would be less than the proposed project’s impacts in the areas of access, but greater in the areas of hazards and noise. Both alternative designs provide access from two roadways (Rogge Road and a new partial street intersecting Rogge Road), which provides for better access and internal circulation.

In terms of access from Rogge Road, “Site Redesign B” provides a better access plan than Site Redesign A because the internal connections between parking areas on-site will allow for the

distribution of inbound and outbound traffic between the two driveways. In terms of access from Rogge Road, “Site Redesign B” is at least equal if not better than the proposed project.

Both alternative site redesign plans locate the parent loading area to the interior of the site, which will provide on-site queuing area on the approach to the drop-off/pick-up area and on the exiting approach to Rogge Road that is not provided with the project plan. With regards to on-site vehicle queuing for parent loading, Site Redesign A and Site Redesign B are preferred over the proposed project. However, the area provided for drop-offs is not adequate for both alternative site designs.

Both alternative designs place the school buildings closer to both the transmission lines and the existing vegetables fields, which are treated with pesticides. These designs place the buildings, which is where students and staff are the majority of the school day, closer the potential hazards than does the proposed site design. The alternative site designs also result in greater noise impacts on the existing residential neighborhood immediately adjacent to the school site.

Therefore, the proposed projects and alternatives are ranked for their environmental superiority as follows: No Project-No Development, No Project-Residential Development, Proposed Project, and Site Redesign A and Site Redesign B.

**Table 15 Project Alternatives Summary**

<b>Environmental Issue</b>	<b>Impacts Relative to the Proposed Project's Impacts</b>				
	<b>Proposed Project</b>	<b>No Project-No Development</b>	<b>No Project-Residential</b>	<b>Site Redesign #A</b>	<b>Site Redesign #B</b>
Aesthetics	Significant and Unavoidable	No Impact Less than	Similar	Similar	Similar
Agriculture	Significant and Unavoidable	No Impact Less than	Similar	Similar	Similar
Air Quality Construction	Less than Significant	No Impact Less than	Similar	Similar	Similar
Air Quality Operational	Less than Significant	No Increase in Existing Impacts Less than	Less Than	Similar	Similar
Air Quality Cumulative	Significant and Unavoidable	No Increase in Existing Impacts Less than	Similar	Similar	Similar
Biology	No Impact	No Impact Similar	Similar	Similar	Similar

Environmental Issue	Impacts Relative to the Proposed Project's Impacts				
	Proposed Project	No Project-No Development	No Project-Residential	Site Redesign #A	Site Redesign #B
Cultural	Less than Significant	No Impact Less than	Similar	Similar	Similar
Geology and Soils	Less than Significant	No Impact Less than	Similar	Similar	Similar
Greenhouse Gas	Significant and Unavoidable	No Increase in Existing Impacts Less than	Greater than	Similar	Similar
Hazards	Less than Significant	No Impact Less than	Similar	Greater than	Greater than
Hydrology	Less than Significant	No Impact Less than	Greater than	Similar	Similar
Land Use & Planning	Less than Significant	No Impact Similar	Similar	Similar	Similar
Noise (Construction)	Less than Significant	No Impact Less than	Similar	Similar	Similar
Noise (Operational)	Less than Significant	No Increase in Existing Impacts Less than	Less than	Greater than	Greater than
Traffic Volumes	Less than Significant	No Increase in Existing Impacts Less than	Less than	Similar	Similar
Access	Less than Significant	N/A	N/A	Less than	Less than
<b>Ranking</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>4</b>

*Source:* EMC Planning Group 2011

## 5.0

# GROWTH INDUCEMENT AND UNAVOIDABLE IMPACTS

### 5.1 GROWTH INDUCEMENT

#### ***CEQA Requirements***

CEQA Guidelines section 15126.2 (d) requires a discussion of the growth-inducing impacts of a proposed project. Growth inducement refers to the likelihood that a proposed project will foster growth in the surrounding area, either directly or indirectly. The most common factor in fostering growth is the removal of obstacles to population or economic growth. Potential growth-inducing impacts must be discussed in relation to both the potential impacts on existing community service facilities and the way a project may encourage and facilitate other activities that could significantly affect the environment. It must not be assumed that growth in any area is necessarily beneficial, detrimental or of little significance to the environment.

#### ***Growth-inducing Impact Analysis***

The proposed project is located adjacent to residential development, and within an area of the City of Salinas that is planned for growth. The proposed project provides a public service based on existing need. Therefore, the proposed project would be growth accommodating and not growth-inducing.

## 5.2 SIGNIFICANT UNAVOIDABLE IMPACTS

### ***CEQA Requirements***

A significant adverse unavoidable environmental impact is a significant adverse impact that cannot be reduced to a less than significant level through the implementation of mitigation measures. CEQA Guidelines section 15093 requires that a lead agency make findings of overriding considerations for unavoidable significant adverse environmental impacts before approving a project.

CEQA Guidelines section 15093(a) requires the decision-making agency (Salinas Union High School District) to balance, as applicable, the economic, legal, social, technological, or other benefits of a project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits of a project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered “acceptable.” CEQA Guidelines section 15093(b) states that when the lead agency approves a project which will result in the occurrence of significant effects which are identified in the final EIR but are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its action based on the final EIR and/or other information in the record. The statement of overriding considerations shall be supported by substantial evidence in the record.

### ***Proposed Project’s Significant and Unavoidable Effects***

The proposed project would result in significant and unavoidable impacts in the areas of aesthetics and climate change. The School District Board of Trustees will be required to adopt a statement of overriding considerations, finding that the economic and social benefits of constructing a school at this location outweigh this significant and unavoidable visual and climate change impacts.

#### **Aesthetics (Visual) Impact – Project Level**

**Significant Unavoidable Impact – Substantially Degrade the Existing Visual Character or Quality of the Site.** Although located on the urban edge of the City of Salinas and adjacent to an existing residential neighborhood, a high school developed on this farmland would permanently alter the existing rural visual character of the site and substantially degrade the existing visual character or quality of the site. This impact is considered significant and unavoidable.

## **Air Quality-Cumulative**

**Significant Unavoidable Impact – Cumulative Contribution to Regional Air Emissions.** The proposed project's contribution to regional air pollution is considered significant and unavoidable, even with the implementation of mitigation measures.

## **Climate Change-Cumulative**

**Significant Unavoidable Impact – Cumulative Climate Change Impact.** The proposed project would result in increased GHG emissions relative to existing conditions. Total project emissions are estimated at approximately 4,660 metric tons CO<sub>2</sub>e per year. State regulations, especially the Pavley standards and LCFS would result in some GHG emissions reductions from mobile (transportation) sources. In total, reductions of approximately 691 metric tons per year, or 15 percent of total project emissions could be realized from State measures. The proposed project includes improvements and measures which would reduce some GHG emissions. These reduction measures proposed by the School District would reduce the indirect emissions by approximately 64 metric tons per year, or approximately another one percent. This is a total reduction of 755 metric tons per year or a total GHG reduction of approximately 16 percent.

Despite the measures that would be implemented by the School District and GHG reductions that would occur due to regulatory actions taken by the State, the proposed project would still not reduce its emissions by the necessary 30 percent specified in AB 32. By not reducing its emissions by 30 percent, the project would conflict with the implementation of AB 32, which is the applicable plan. The School District cannot assure that additional GHG reduction measures which might further reduce GHG emissions volumes are feasible.

The GP SEIR did conclude that cumulative impacts associated with GHG emissions generated under general plan build out would have a significant unavoidable impact on climate change (GP SEIR, page 5-5.18). Therefore, the proposed project would contribute to the expected significant and cumulative impacts related to greenhouse gas emissions and the effects of the proposed project are also considered cumulatively significant and unavoidable.



## **5.3 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES**

### ***CEQA Requirements***

CEQA Guidelines section 15126.2(c) requires a discussion of significant and irreversible changes that would be caused by a project if implemented. The use of non-renewable resources during the initial and continued phases of a project may be irreversible, since a large commitment of such resources makes removal or nonuse in the future unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement that provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with a project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

### ***Significant Irreversible Environmental Effects***

The Acquisition EIR concluded that the acquisition and development of the project site, even with the implementation of mitigation measures, would result in significant and irreversible impacts related to agricultural resources, and cumulative significant unavoidable impacts related to agricultural resources, air quality, and hydrology/water quality. The proposed project would not result in any additional significant irreversible environmental effects beyond what was indicated in the Acquisition EIR.

## 6.0 DOCUMENTATION

### 6.1 PERSONS CONTACTED

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