7.1 INTRODUCTION

7.1.1 Purpose and Scope

CEQA requires that an EIR include a discussion of a reasonable range of project alternatives that would "feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any significant effects of the project, and evaluate the comparative merits of the alternatives" (CEQA Guidelines Section 15126.6). This chapter identifies potential alternatives to the Proposed Project and evaluates them, as required by CEQA.

Key provisions of the CEQA Guidelines on alternatives (Section 15126.6[a] through [f]) are summarized below to explain the foundation and legal requirements for the alternatives analysis of an EIR.

- "The discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly" (CEQA Guidelines 15126.6[b]).
- "The specific alternative of 'no project' shall also be evaluated along with its impact" (CEQA Guidelines 15126.6[e][1]).
- "The no project analysis shall discuss the existing conditions at the time the Notice of Preparation (NOP) is published, or if no notice of preparation is published, at the time the environmental analysis is commenced, as well as what would reasonably be 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. If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives" (CEQA Guidelines 15126.6[e][2]).
- "The range of alternatives required in an EIR is governed by a 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project" (CEQA Guidelines 15126.6[f]).
- "Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)" (CEQA Guidelines 15126.6[f][1]).

- For alternative locations, "only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR" (CEQA Guidelines 15126.6[f][2][A]).
- "An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative" (CEQA Guidelines 15126.6[f][3]).

This alternatives analysis differs from a typical alternatives analysis because the 2011 Approved Project is vested and impacts of the Proposed Project are generally similar to the 2011 Approved Project under the vested development plans so that there is no alternative that would reduce an identified significant impact to less than significant.

For each development alternative, this analysis:

- Describes the alternative.
- Analyzes the impact of the alternative as compared to the Proposed Project.
- Identifies the impacts of the Proposed Project that would be avoided or lessened by the alternative.
- Assesses whether the alternative would meet most of the basic project objectives of the Proposed Project.
- Evaluates the comparative merits of the alternative and the Proposed Project.

Per CEQA Guidelines Section 15126.6(d), additional significant effects of the alternatives are discussed in less detail than the significant effects of the Proposed Project.

7.1.2 Project Objectives

As described in Section 3.2, *Statement of Objectives*, of this DSEIR, the following objectives have been established for the Proposed Project and will aid decision makers in their review of the Proposed Project, the project alternatives, and their respective environmental impacts:

- Redevelop and reuse a portion of the former MCAS El Toro Property for a 2,600-student comprehensive high school consistent with the District's adopted Education Specifications.
- To provide high school capacity for current and anticipated educational demands within the District boundaries and provide supportive environment for projected growth in the City.
- Provide for a range of recreational and athletic opportunities for students and community members.
- Implement the provisions of the executed School Mitigation Agreements between IUSD and Heritage Fields El Toro LLC and The Irvine Company.

7.2 ALTERNATIVES CONSIDERED AND REJECTED DURING THE SCOPING/PROJECT PLANNING PROCESS

In accordance with CEQA Guidelines Section 15126.6(c), this section identifies alternatives that were considered by the District during the scoping process but that were rejected as infeasible and briefly explains the reasons underlying the District's determination not to analyze them further in this DSEIR.

7.2.1 No Project/ No Development Alternative

Under this alternative, no high school development would occur and the existing physical conditions would remain. This alternative was rejected because the Project Site is already approved for development under the 2011 Approved Project. The Certified EIR allows mixed use development within the Project Site and it is reasonably foreseeable that the Project Site would be developed in accordance with the vested right under the 2011 Approved Project. For these reasons, the District has determined that the No Project/No Development Alternative is not a legally feasible alternative to the Proposed Project.

7.2.2 Different Site Alternative

The Certified EIR for the 2011 Approved Project did not analyze a different site alternative because development of the 2011 Approved Project at an alternative location would likely result in a similar, and in some cases, greater impacts than those analyzed in the Certified EIR. Similarly, the Proposed Project also does not analyze different site alternative because development of the Proposed Project at an alternative location would likely result in similar impacts as those analyzed in this SEIR. More importantly, "only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR" (CEQA Guidelines 15126.6[f][2][A]) and the only significant and unavoidable impact resulting from the Proposed Project is operations-related emissions of volatile organic compound (VOC). Any alternative site that would achieve the project's objectives would have the same significant operations-related emissions impact. For these reasons, review of an alternative site is unnecessary.

7.3 ALTERNATIVES SELECTED FOR FURTHER ANALYSIS

Based on the criteria set forth in CEQA and the CEQA Guidelines concerning alternatives, the District has determined that the following two alternatives represent a reasonable range of alternatives. These alternatives are analyzed in detail in the following sections.

- No Project/2011 Approved Project Alternative
- Reduced Capacity Alternative

CEQA requires the alternatives analysis to include a No Project Alternative. The purpose of analyzing a No Project Alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project (CEQA Guidelines § 15126.6[e][1]). According to CEQA Guidelines section 15126.6(e)(2), the No Project Alternative "shall discuss the existing conditions at the time the notice of preparation is published... as well as what would reasonably be expected to occur in the foreseeable future if the proposed project were not approved, based on current plans, and consistent with available infrastructure and community services." This chapter analyzes in

detail one No Project alternative. (Section 7.2.1, *No Project/No Development*, discusses why the No Project/No Development scenario is not analyzed in this DSEIR.)

An EIR must identify an "environmentally superior" alternative. Where the No Project Alternative is identified as environmentally superior, the EIR is then required to identify as environmentally superior an alternative from among the others evaluated (CEQA Guidelines § 15126.6(e).). Each alternative's environmental impacts are compared to those of the Proposed Project and determined to be environmentally superior, neutral, or inferior. The assessment of those alternatives chosen for detailed analysis focuses on the significant impacts of the Proposed Project, particularly those determined in this DSEIR to be significant prior to mitigation as analyzed in Chapter 5 of this DSEIR.

Chapter 8 of this DSEIR, *Impacts Found Not to Be Significant*, substantiates the District's determination in the Initial Study (Appendix A to this DSEIR) for the Proposed Project and post Initial Study assessment that a variety of impacts would be less than significant for the Proposed Project, as compared to the 2011 Approved Project. For the same reasons as described in Chapter 8 of this DSEIR, each of the alternatives analyzed in this chapter would have the same less than significant impact or no impact as the Proposed Project, including, but not limited to, certain impacts in the following CEQA environmental factors: agricultural resources, biological resources, cultural resources, geology and soils, hydrology and water quality, mineral resources, population and housing, and recreation. The impact analyses contained in Chapter 8 of this DSEIR are incorporated by reference into the analysis of each of the alternatives below.

Section 7.7 identifies the Environmentally Superior Alternative. Table 7-1 provides a summary of both project alternatives analyzed in this chapter. The environmental impacts of the Proposed Project as compared to the 2011 Approved Project are analyzed in detail in Chapter 5 of this DSEIR.

	Alternative	Description	Basis for Selection and Summary of Analysis
Pro	oposed Project	·	·
Proposed Project		See Section 1.4, <i>Project Summary</i> , and Chapter 3, <i>Project Description</i> .	Not Applicable
Pro	ject Alternatives		
1.	No Project/2011 Approved Project Alternative	The Project Site would be developed with the 2011 Approved Project.	This alternative would not avoid or substantially reduce any of the significant impacts of the Proposed Project. In fact, for the reasons detailed below, this alternative's impacts related to population and housing would be significant and unavoidable, and therefore greater than for the 2012 Modified Project's less than significant impact. All impacts of this alternative, including aesthetics, air quality, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, public services, recreation, transportation and traffic, and utilities and service systems, would be similar to those of the Proposed Project.
2.	Reduced Capacity Alternative	This alternative has been developed to reduce vehicle trips and noise associated with the proposed high school by eliminating the stadium for large crowd gathering events. All other components of the Proposed Project would remain the same under this alternative.	This alternative was studied in an effort to reduce traffic, air, aesthetics, GHG and noise impacts associated with the Proposed Project and specifically the significant and unavoidable operations-related emissions impact (VOCs). Since this alternative does not change the land uses proposed by the 2012 Modified Project, most of the impacts of this alternative analyzed would be the same as for the 2012 Modified Project.

Table 7-1Summary of Alternatives to the Proposed Project

7.4 NO PROJECT/2011 APPROVED PROJECT ALTERNATIVE

This No Project/2011 Approved Project Alternative is the scenario under which the Proposed Project would not proceed on the Project Site, and the development plans permitted under the 2011 Approved Project would be built in its place on the Project Site. Although no vested development plans exist for the Project Site, it is designated as TTOD zone and approved for uses such as residential, commercial, recreational, and education uses that support the multi-use environment of the Orange County Great Park neighborhood.

Aesthetics

Potential impacts associated with scenic vistas and visual character would be similar to that of the Proposed Project. The future mixed use development under this alternative would be required to comply with the design guidelines for the TTOD zoning, and the Proposed Project, although not required, is

consistent with the TTOD zone development standards as discussed in Section 5.1, *Aesthetics*. A high school use is an allowed use under the TTOD zoning, therefore, aesthetic impacts under this alternative would be similar to that of the Proposed Project.

Under this alternative, nighttime lighting proposed for the high school's stadium and aquatic complex would not be necessary, although parking lot lighting and other security and decorative lighting would continue to be sources of light and glare. Effects of stadium and aquatic complex lighting would generally be confined to the area immediately adjacent to those facilities and would not create significant lighting impacts to other areas. Therefore, although more sources of lighting would be created under the Proposed Project compared to the No Project/2011 Approved Project Alternative, the actual light and glare impacts would not be substantially greater for the Proposed Project. No significant and unavoidable impacts have been identified and impacts would similar to the 2011 Approved Project. The overall character and development area at the Project Site under this alternative would be similar to that of the Proposed Project, and the impacts of this alternative, like that of the Proposed Project, would be less than significant. This alternative is environmentally neutral to the Proposed Project.

Agricultural Resources

Until recently the Project Site was being used for agricultural production and the Project Site would be converted to urban uses under this alternative. As discussed in Chapter 8, *Impacts Found Not To Be Significant*, of this DSEIR, impacts to agricultural resources would be less than significant. The Certified EIR, which analyzed the impacts of the 2011 Approved Project, concluded that the 2011 Approved Project would not result in an impact to agricultural resources; consequently this alternative also would not result in an impact to agricultural resources. Neither this alternative nor the Proposed Project would result in a significant impact on agricultural resources.

The Project Site is not zoned for forest land, timberland, or timberland production. Neither this alternative nor the Proposed Project would create any impact on these resources. This alternative is environmentally neutral to the Proposed Project.

Air Quality

The Certified EIR indicated that the 2011 Approved Project would result in significant short-term mass criteria air pollutant construction emissions of VOC, NO_X , PM_{10} , $PM_{2.5}$, and CO. However, with mitigation, the Proposed Project determined that the Proposed Project would result in less than significant short-term mass criteria air pollutant construction emission impacts. Moreover, in addition to the construction emissions from developing the Project Site with mixed uses, additional facility construction would be required at other existing high schools to accommodate students generated from the Great Park Neighborhoods, where these existing schools are surrounded by existing residential uses. Therefore, this alternative would expose greater number of sensitive receptors to construction. Therefore, greater environmental impacts would occur under this alternative compared to the Proposed Project.

As with the Proposed Project, under the 2011 Approved Project, long-term operation-related mass criteria air pollutant emissions would exceed the significance thresholds for VOC, NO_X , CO, and $PM_{2.5}$ and remain significant and unavoidable. Although the site-specific operational emissions would be eliminated, because students from the Great Park Neighborhoods would need to attend other high schools, thus

increasing VMTs, it is anticipated that greater long-term operation-related emissions would result under this alternative compared to the Proposed Project.

Neither this alternative nor the Proposed Project propose to include any land uses that would involve handling large amounts of solid waste, chemicals associated with heavy industry, or other uses that may generate hazardous emissions.

This alternative is environmentally inferior to the Proposed Project.

Biological Resources

The Project Site is currently being used as agricultural land and is approved for urban development under the 2011 Approved Project. As discussed in Chapter 8, *Impacts Found Not To Be Significant*, of this DSEIR, impacts to biological resources would be less than significant with mitigation. Therefore, both this alternative and the Proposed Project would result in the same less than significant impacts related to biological resources.

Cultural Resources

As discussed in Chapter 8, *Impacts Found Not To Be Significant*, of this DSEIR, impacts to cultural resources, including historical, archaeological, paleontological, and human remains, were identified as less than significant in the Certified EIR for the 2011 Approved Project. Since the Proposed Project would not result in any changes to the area of disturbance, this alternative would have the same impacts to cultural resources as the Proposed Project.

Both this alternative and the Proposed Project would result in less than significant impacts to cultural resources with mitigation. This alternative would have neutral environmental impacts relating to cultural resources.

Geology and Soils

Under this alternative, the Project Site would be developed with mixed uses as approved by the 2011 Approved Project. As discussed in Chapter 8, *Impacts Found Not To Be Significant*, of this DSEIR, both this alternative and the Proposed Project would result in less than significant impacts related to geology and soils. The Project Site is not underlain by a known earthquake fault, and other seismic related impacts including ground shaking and unstable soils would be reduced to less than significant after implementation of mitigation measures, including compliance with the latest existing building codes and grading ordinance adopted by the City of Irvine and site-specific geotechnical reports. This alternative would have neutral environmental impacts.

Greenhouse Gas Emissions

As discussed in Section 5.3, *Greenhouse Gas Emissions*, of this DSEIR, the Proposed Project would generate 5,411 metric tons ("MTons") of greenhouse gas ("GHG") emissions (CO_2e) per year. While construction emissions of this alternative would be eliminated at this campus, additional construction would be required at other existing high schools to accommodate the student growth not housed there. As a result, construction-related GHG emissions would be generally the same under this alternative as compared to the Proposed Project. Additionally, the District is required by law to accommodate high

school students within its District and the number of students generated is determined by the City's development decisions. If the proposed high school is not constructed, then those future students would be accommodated by expansion of other existing District campuses. Because these other campuses are located at a greater distance from the Great Park Neighborhoods, travel lengths would increase and greater GHG emissions would be generated. This alternative is inferior to the Proposed Project as it related to GHG emissions.

Hazards and Hazardous Materials

Under this alternative, the Project Site would be remediated to residential standards compared to more stringent school use standards. The Certified EIR determined that the 2011 Approved Project would not result in routine transport, use, or disposal of hazardous materials and would not result in release of hazardous materials into the environment. The 2011 Approved Project allows institutional use within the TTOD zoning, therefore, both this alternative and the Proposed Project would have comparable hazards and hazardous materials impacts. The Certified EIR requires that the developer of the Project Site comply with the applicable plans, programs, and policies as outlined in the MMRP, including, but not limited to PPP 4-1 through 4-8 and Mitigation Measures HH-1 through HH-4. The Project Site would be remediated in accordance with existing regulatory requirements pertaining to the handling, storage, use, transportation and disposal of hazardous materials. Because the cleanup requirements for a school is more restrictive than residential uses, while less than significant impacts are anticipated for both this alternative and the Proposed Project, the Project Site must meet the standard established for the final approved land use, whether school, residential or other. Because the standard will match the land use, this alternative is considered neutral as compared to the Proposed Project.

Hydrology and Water Quality

As discussed in Chapter 8, *Impacts Found Not To Be Significant*, of this DSEIR, the Proposed Project did not warrant further review in this DSEIR because the development of the Project Site (high school) would be essentially the same whether developed as proposed or under this Alternative. Under this alternative, which is the 2011 Approved Project scenario, there would be similar offsite drainage patterns and peak flows as compared to the Proposed Project. Similar to the Proposed Project, development under this alternative would be required to adhere to existing procedures governing water quality, many of which have already been met for the 2011 Approved Project, which would result in less than significant impacts.

The approach in dealing with water quality requirements would be the same under the Proposed Project and this Alternative. In terms of water quality, this alternative would have less than significant impacts on water quality, similar to the Proposed Project.

Overall hydrology and water quality impacts of this alternative would be less than significant, like those of the Proposed Project, making this alternative neutral in comparison.

Land Use and Planning

The Project Site is currently being use as agricultural land and no residential community exists. Therefore, neither this alternative nor the Proposed Project would physically divide an established community. The 2011 Approved Project would allow the Project Site to be developed as residential, commercial, recreational, and education uses that support the multi-use environment of the Orange County Great Park. All development would occur as permitted and no inconsistencies or conflicts with

existing land use plans or policies are anticipated. The Project Site is not part of Natural Community Conservation Plans (NCCPs) or Habitat Conservation Plans (HCPs) as identified by the Certified EIR. Since the Project Site allows a high school use, both this alternative and the Propose Project would have no impact on land use and planning issues. This alternative is environmentally neutral to the Proposed Project.

Mineral Resources

As discussed in Chapter 8, *Impacts Found Not To Be Significant*, of this DSEIR, the Project Site is mapped as Mineral Resource Zone 1 (MRZ-1) (CDGM 1994). The Project Site would be developed as urban uses under both scenarios, therefore, neither this alternative nor the Proposed Project would cause a loss of availability of mineral resources, and no impact would occur. This alternative is environmentally neutral compared to the Proposed Project.

Noise

The 2011 Certified EIR concluded that the 2011 Approved Project would result in less than significant construction noise and vibration impacts on nearby off-site and on-site sensitive receptors provided that the existing PPPs are implemented. As discussed in Section 5.8, *Noise* of this DSEIR, the Proposed Project would also result in less than significant construction noise and vibration impacts. There are no off-site sensitive receptors near the Project Site.

The Certified EIR's noise analysis concluded that the 2011 Approved Project's traffic noise would be less than significant and considered "barely perceptible" in terms of community noise impact assessment. The only significant impact identified in that Noise Impact Analysis was to on-site sensitive receptors, and that impact was reduced to less than significant with the adopted mitigation (including, e.g., sound walls, closed window/mechanical ventilation, dual-glazed windows). Consequently, the Certified EIR concluded that the 2011 Approved Project would not create a substantial permanent increase in traffic-related noise levels. Similarly, as discussed in Section 5.8, *Noise* of this DSEIR, the Proposed Project also would not result in a substantial permanent increase in traffic-related on-site or off-site noise levels. Therefore, this alternative would result in neutral impacts related to long-term operation noise.

The Certified EIR also assessed noise compatibility associated with the development of the 2011 Approved Project, by evaluating its compliance with the City of Irvine's preliminary acoustical analysis criteria for residential development (i.e., 65 dBA CNEL exterior and 45 dBA CNEL interior). Placement of certain of the noise-sensitive land uses proximate to high-volume roadways was identified as a significant impact for the 2011 Approved Project, but this impact was reduced to a less than significant level with the Mitigation Measures N-1 and N-2 that were adopted for the 2011 Approved Project. The 2011 Approved Project is required to comply with the City of Irvine's design standards for noise compatibility (i.e., 65 dBA CNEL) and the State's interior noise criteria (i.e., 45 dBA CNEL) as prescribed in PPP 8-2, and those measures would reduce the impact to a less than significant level.

While normal High School operations were shown not to increase traffic-related noise as compared to the 2011 Approved Project, large evening events at the stadium would generate noise levels above the City's standards at adjacent properties. The No Project/2011 Approved Project Alternative would eliminate this impact. However, the Proposed Project's impact was determined to be less than significant because the surrounding area is currently vacant, and with a zoning designation of TTOD, the uses selected for these

areas can be selected to avoid significant impacts. This alternative is considered environmentally neutral to the Proposed Project related to long-term operational noise.

Population and Housing

The Certified EIR concluded that development of the 2011 Approved Project would create 12,405 residents and 16,510 jobs, resulting in a jobs-housing ratio of 3.37, thus creating jobs-housing imbalance. This alternative would result in population growth in the area, directly and indirectly, whereas the Proposed Project would provide educational support facilities for the City residents. Because the Project Site is vacant, no people would be displaced and no housing units would be demolished, not requiring replacement housing construction elsewhere under both scenarios. The Certified EIR determined that the 2011 Approved Project would result in significant and unavoidable impacts related to jobs-housing ratio. The Proposed Project would have minimal impact on the jobs-housing imbalance because it is needed to serve the new development. The jobs created by the Proposed Project would be minimal within this new development and the students would attend high school at some more distant site if not here. This alternative would have neutral population and housing impacts as compared to the Proposed Project.

Public Services

The Certified EIR determined that impacts to fire, police, school, and library would be less than significant provided that existing PPPs and already adopted mitigation measures are implemented. Development would occur as currently entitled by the 2011 Approved Project and impacts associated with fire protection, law protection, and library services would be generally the same as for the Proposed Project.

The Certified EIR determined that the 2011 Approved Project would result in less than significant impacts concerning school services provided that the required SB50 fees are paid. However, even with the payment of fees, without the Proposed Project, other high schools in the area would experience faster deterioration of school facilities as students generated by the Great Park Neighborhoods would be distributed to existing area schools and create and overcrowding situation. Therefore, although impacts would be less than significant, this alternative would result in greater environmental impacts related to school services compared to the Proposed Project.

Recreation

Under this alternative, residential development would be required to comply with City's park dedication requirements, and therefore, adequate park and recreation facilities would be provided to meet the needs of the anticipated population. Although impacts related to parkland and recreation would be less than significant, without the Proposed Project, the benefit of various recreation and athletic amenities to be provided by the Proposed Project would be lost. Therefore, this impact would be environmentally inferior to the Proposed Project.

Transportation and Traffic

The Certified EIR determined that the 2011 Approved Project would result in significant and unavoidable impacts on affected intersections and roadway segments outside the jurisdiction of the City because implementation of certain mitigation measures for those impacts would be under the control of other cities, Orange County, or Caltrans.

The 2011 Approved Project would provide improvements to area roadways and new roadways designed and built in compliance with local, regional, and state agency requirements. The District would be responsible for onsite circulation system and the offsite circulation system would be provided by the overall Orange County Great Park Neighborhood development. The District would coordinate with the backbone roadway system to provide adequate loading and unloading of students. The District is also required to prepare and implement a safe routes to school program per Caltrans' School Area Pedestrian Safety manual. Therefore, neither this alternative nor the Proposed Project would create any hazards impacts due to roadway design features.

While the traffic analysis for the Proposed Project (high school) found that certain mitigation measures were required, the high school at this location would capture trips that would otherwise travel farther to other high schools. This alternative eliminates the potential to capture these internal trips, and reduce home-to-school trip lengths. As a result, this alternative is considered environmentally inferior.

Utilities and Service Systems

Under this alternative, the utility and service demands, including water, wastewater, stormwater, and solid waste have already been analyzed and approved as part of the 2011 Approved Project. The appropriate infrastructure and facilities for each service under this alternative would be available and/or built and the provider of each service would be able to effectively supply the necessary utilities and service systems. Additionally, the impacts to utilities and services systems under this alternative would be less than significant after implementation of the regulations, PPPs, and already-imposed 2011 Approved Project mitigation measures. The Proposed Project is also required to comply with provisions by the utility providers and laws and regulations governing the respective service systems. Similar impacts to these systems are anticipated and no significant impacts have been identified. This alternative is environmentally neutral to the Proposed Project.

7.4.2 Ability to Reduce Environmental Impacts

This No Project/2011 Approved Project Alternative would not avoid or substantially reduce the significance level of any of the impacts of the Proposed Project discussed above.

7.4.3 Ability to Achieve Project Objectives

The No Project/2011 Approved Project Alternative would not achieve any of objectives for the Proposed Project described in Section 7.1.2.

7.5 REDUCED CAPACITY ALTERNATIVE

A reduction in the size of projects is often viewed as a method to reduce the impacts of a project. This alternative is included in this analysis to determine if a reduction in student capacity would reduce impacts in this circumstance.

Under this alternative, the capacity of the high school would be reduced by about 30 percent to 1,820 students. The onsite building area would also be reduced by 30 percent from 237,511 square feet to approximately 166,257 square feet. Also, the football stadium would be eliminated and replaced with a lighted football field and track with a nominal number of bleacher seats. Junior Varsity and freshman events could occur at the field along with practices, while major spectator events such as Friday night

football games and graduation would be held at other existing District stadiums. The reduced capacity and reduced construction would reduce the amount of activity occurring at this location and hence, reduce certain localized impacts. However, as explored below many impacts are simply shifted to other locations when a population-serving institution is reduced in size. The District established the student capacity of the Proposed Project (2,600) to support the level of development approved by the City of Irvine.

Aesthetics

Under this alternative, the Project Site would still be developed as a high school, but with less building area. The school buildings would continue to comply with the development standards for the TTOD zone as with the Proposed Project. Smaller onsite buildings would not substantially change the visual character of the project site. No changes to the nighttime football field and pool complex lighting would occur under this alternative, therefore, no differences in the nighttime light and glare impacts (which are not significant) are expected.

As with the Proposed Project, this alternative would result in less than significant impacts and this alternative would have neutral environmental impacts related to aesthetics.

Agricultural Resources

As stated in the Section 8.1, Impacts Found Not to be Significant, it was determined that the Proposed Project would not result in significant impacts to the onsite agricultural resources. This alternative would not change the Project Site boundary and as with the Proposed Project, the Project Site would be delivered to the District as a mass-graded site. Therefore, this alternative would not result in any significant impacts to the agricultural resources and this alternative would be environmentally neutral to the Proposed Project.

Air Quality

This alternative would result in approximately the same amount of disturbance area but slight reduction in construction equipment mix and phasing. Therefore, this alternative would result in a slight reduction in construction mass criteria air pollutant emissions of VOC, NO_X , CO, $PM_{2.5}$, and PM_{10} . Short-term construction emissions impacts were determined to be less than significant with mitigation under the Proposed Project and the impacts would be reduced slightly under this alternative. Similar mitigation measures would be required to reduce impacts to a less than significant level. Additionally, while construction-related air quality impacts associated with this alternative would be reduced at this site, this alternative would require construction at other high school campuses to accommodate the student growth not housed at the new campus. This alternative is neutral as it relates to construction-related emissions.

While site-specific operational emissions would be reduced, the cumulative area-wide long-term impacts would worsen because District students would be driving greater distances, resulting in increased vehicle miles traveled (VMT). The removal of the football stadium would eliminate the ability of the school to play "home" games at this campus and all such games would be played "away". This eliminates the potential to capture internal neighborhood trips and forces all attendees to travel to a remote location and VMT increases as a result. Impacts to VOC, NO_X, CO, and PM_{2.5} (the same four criteria air pollutants as to which the 2011 Approved Project would generate significant and unavoidable operational emissions) would remain significant and unavoidable.

This alternative would exacerbate the cumulative long-term operational emissions because of increased VMT. Therefore, this alternative is environmentally inferior to the Proposed Project.

Biological Resources

This alternative would not create any different impacts than the Proposed Project with respect to biological resources. As with the Proposed Project, a mass-graded site would be delivered to the District under this alternative and no changes to the project boundaries would occur. Therefore, the analysis in Chapter 8, *Impacts Found Not To Be Significant*, of this DSEIR would also apply to this alternative. Neither this alternative nor the Proposed Project would result in a significant impact on biological resources and this alternative is environmentally neutral to the Proposed Project.

Cultural Resources

This alternative would not create any different impacts than the Proposed Project with respect to cultural resources. As with the Proposed Project, a mass-graded site would be delivered to the District for development under this alternative and no changes to the project boundaries would occur. Therefore, the analysis in Chapter 8, *Impacts Found Not To Be Significant* would also apply to this alternative. Neither this alternative nor the Proposed Project would result in a significant impact on cultural resources and this alternative is environmentally neutral to the Proposed Project.

Geology and Soils

This alternative would result in similar impacts with respect to geology and soils because the area of disturbance would be the same for this alternative and the Proposed Project. Although the total building area would be approximately 30 percent less under this alternative, structures would be required to comply with the same seismic standards and building codes. Also, this alternative implies expansion at the District's high schools to accommodate the student growth not housed at the new campus. Therefore, the general development envelope across the District would be the same for this alternative and the Proposed Project. Therefore, the analysis in Chapter 8, *Impacts Found Not To Be Significant*, of this DSEIR would also apply to this alternative and impacts would be less than significant. This alternative is environmentally neutral to the Proposed Project.

Greenhouse Gas Emissions

While construction emissions of this alternative would be approximately 30 percent less at this campus, additional construction would be required at other existing high schools to accommodate the student growth not housed there. As a result, construction-related GHG emissions would be the same under this alternative as compared to the Proposed Project.

The District is required by law to accommodate high school students within its District and the number of students generated is determined by the City's development decisions. If capacity of High School 5 is reduced by 867 students (30 percent), then those future students would be accommodated by expansion of existing District campuses. Because these other campuses are located at a greater distance from the Great Park neighborhoods, travel lengths would increase and greater GHG emissions would be generated. This alternative is inferior to the Proposed Project as it related to GHG emissions.

Hazards and Hazardous Materials

Under this alternative, the Project Site would be remediated, if needed, to the same standards as the Proposed Project. Although slightly less construction-related chemicals such as paints and coating would be used under this alternative, the same regulatory requirements pertaining to the handling, storage, use, transportation and disposal of those would apply and the same mitigation measure as the Proposed Project would be incorporated. Similar operational hazardous materials for school maintenance and science classes would be used and the potential release of hazardous materials would be minimal as the Proposed Project. Overall, the hazards and hazardous materials impacts associated with this alternative would be less than significant, same as the Proposed Project. This alternative is environmentally neutral to the Proposed Project.

Hydrology and Water Quality

Drainage patterns and drainage flows in this alternative would generally be similar to those of the Proposed Project as the site layout and configuration would not be substantially different. Although similar, the hydrology and water quality impacts would be slightly less under this alternative, since the building area coverage would be less than the Proposed Project, which would allow for additional permeable surfaces coverage.

As with the Proposed Project, this alternative would not result in significant hydrology impacts and would not exceed the capacity of the storm drain system and the District would be required to adhere to the existing procedures and regulations governing water quality and stormwater runoff. Therefore, hydrology and runoff impacts under this alternative would be the same as for the Proposed Project and impacts would be less than significant. Therefore, the analysis in Chapter 8, Impacts Found Not To Be Significant would also apply to this alternative and this alternative is environmentally neutral to the Proposed Project.

Land Use and Planning

A high school is an allowed use under the TTOD zoning and no changes to the land use would occur under this alternative. The distance to the Musick Facility would be the same and no changes to security program would occur. No significant impacts related to land use and planning have been identified and this alternative is environmentally neutral to the Proposed Project.

Mineral Resources

This alternative would not create any different impacts than the Proposed Project with respect to mineral resources because the development envelope is the same for this alternative and the Proposed Project. Therefore, the analysis in Chapter 8, *Impacts Found Not To Be Significant* would also apply to this alternative and this alternative is environmentally neutral to the Proposed Project.

Noise

The reduction in building area would result in shortened construction period, therefore reduce the noise and vibration levels associated with construction equipment operation and construction-related vehicle trips. However, there are no sensitive receptors in the project vicinity and the construction noise and vibration impacts were determined as less than significant for the Proposed Project. This alternative would slightly reduce the noise and vibration levels in the area. However, as explained above, this alternative would require that expansion take place at existing schools to accommodate students not housed at the new campus. As these existing schools are operating and locating within existing communities, the potential for construction noise to impact sensitive receptors is greater than the Proposed Project.

Operations-related noise from mobile and stationary sources due to reduction in number of students would be reduced under this alternative. The elimination of the football stadium and its major nighttime events would reduce noise impacts at the site. However, these would events would still occur, but would be relocated to existing campuses. With the completion of the University High School Stadium, the District will accommodate University and Woodbridge High Schools at the stadium at University High School and Irvine and Northwood High Schools at the stadium at Irvine High School. Under this alternative, High School 5 events could not be held at the new campus and would occur at one of the other stadiums. Noise from these events would be transferred to another location and this is considered neutral as compared to the Proposed Project.

Population and Housing

As with the Proposed Project, this alternative would serve the existing and future district population, especially the Orange County Great Park Neighborhoods that are already approved for development. This alternative is not a growth-inducing project. This alternative is environmentally neutral to the Proposed Project.

Public Services

The reduction in building area and number of students would result in reduction in demands for sitespecific fire protection demands. However, students that are not accommodated by this alternative would be redistributed to other district schools, increasing fire protection demands at other locations. The Certified EIR determined that OCFA has adequate capacity to serve the development projects provided that developments occurring in the 2011 Approved Project Site comply with the existing plans, programs, and policies required by the OCFA and incorporate applicable mitigation measures including meeting the standards of the Uniform Fire Code and California Fire Code. A high school is an allowed use in the TTOD zone, and appropriate fire protection demands have been projected with the 2011 Approved Project. Provided that this alternative would adhere to the facilities requirements of the OCFA, as with the Proposed Project, the reduction in building area would not substantially affect the OCFA's ability to provide adequate service in the overall 2011 Approved Project Area. This alternative is environmentally neutral as compared to the Proposed Project.

This alternative would result in similar police protection services impacts to the Proposed Project as the number of students across all high school campuses would not change. The campus would engage in the same surveillance programs and the District would continue to work in partnership with Irvine Police Department in assigning school resource officers where necessary. As with the Proposed Project, this alternative would result in a less than significant police protection and services impacts and is environmentally neutral to the Proposed Project.

Recreation

Under this alternative, the football stadium would be eliminated from the campus and large spectator events would occur at other District facilities. The lack of a home field creates scheduling problems, it

increases transportation costs, causes overuse of existing fields, and shifting of impacts. By not having sufficient athletic facilities, high schools must share existing facilities, which requires scheduling of events during school nights, and results in low attendance and participation rates. Because of the overuse of existing fields, this alternative is considered inferior as compared to the Proposed Project.

Transportation and Traffic

Traffic impacts of the Proposed Project were determined to be significant and unavoidable if implementation of certain mitigation measures that are the responsibility of jurisdictions other than the City are not implemented. This alternative would reduce the traffic generated at this campus, but the reduction in capacity is not needed to eliminate this impact; appropriate mitigation measures have been identified.

This alternative would not create any different impacts than the Proposed Project with respect to a roadway design feature because the access points and loading area configuration would not change.

While trip generation would be decreased at this campus, overall trip generation would not be reduced and VMT would increase as students not accommodated at this campus would travel greater distances to remote high schools. For these reasons, this alternative is considered neutral as compare to the Proposed Project.

Utilities and Service Systems

This alternative would result in slightly less demand for water, electricity, and natural gas services, and generation of wastewater and solid waste at the Project Site, as compared to the Proposed Project. However, similar delivery systems are anticipated to be constructed and similar mitigation measures would be necessary. As part of the 2011 Approved Project, appropriate infrastructure and facilities for each service would be constructed for connection and would be available to effectively supply the necessary utilities and service systems. Although onsite generation and/or consumption of each utility service would be less than the Proposed Project, because students otherwise be attending this school would be distributed to other schools in the area, the actual utilities demands would be transferred to other district schools, therefore, the cumulative demands would result in overall reduction. Impacts related to utilities and service systems were determined to be less than significant by the Proposed Project, and remain as less than significant under this alternative. This alternative is environmentally neutral to the Proposed Project.

7.5.2 Ability to Reduce Impacts

This alternative would slightly reduce certain aspects of impacts around the Project Site, such as air quality and noise. However, the alternative would accomplish these local reductions at the cost of increased impacts at existing high schools and at the cost of regional impacts, including increased VMT and air pollution. Many of the other impacts would be similar to the Proposed Project.

7.5.3 Ability to Achieve Project Objectives

Reduced Building Area Alternative would achieve some of the objectives of the Proposed Project as described in Section 7.1.2 but not all. It would not be consistent with the District's adopted education specification to provide a 2,600-student comprehensive high school. Instead, the number of students to be

served would be reduced by 30 percent to approximately 1,820 students. Therefore, it would not be able to provide high school capacity for current and anticipated educational demands within the District boundaries and enrollments at existing high schools would exceed District policies.

7.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires a lead agency to identify the "environmentally superior alternative" when significant environmental impacts result from the Proposed Project, if one exists. In cases where the "No Project" Alternative is environmentally superior to the Proposed Project, an environmentally superior development alternative should be identified as well.

As discussed above, the alternatives analysis in this DSEIR differs from a typical alternatives analysis contemplated in CEQA in that the 2011 Approved Project is the baseline conditions to assess project impacts. The CEQA Guidelines (Section 15126[a]) state that an EIR must address "a range of reasonable alternatives to the project, or to the location of the project, which could feasibly attain the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives. As noted the only significant and unavoidable impact of the Proposed Project is Air Quality, which primarily results from operations-related traffic. What this analysis has shown is the District is legally obligated to house all students of high school age and the District does not have control over the development decisions that generate population growth.

If the District chooses not to build the high school at the Project Site (i.e., No Project/2011 Approved Project Alternative) or reduce the size of the high school (i.e., Reduced Capacity Alternative), it must find other ways to accommodate these students. While it would require a change in District policy to allow its existing high schools to increase in size, this is what is most likely to occur under either of these two alternatives. Housing the students residing in this developing area at existing high schools would have the opposite effect intended in seeking alternatives that would reduce significant impacts. In this instance, both the No Project/2011 Approved Project Alternative and the Reduced Capacity Alternative would increase home to school trip lengths and result in greater air pollution. These two alternatives are inferior to the Proposed Project.

An impact comparison is provided on Table 7-2 and a summary of the ability of each alternative to meet the project objectives is provided on Table 7-3.

Table 7-2 Impact Comparison (Proposed Project vs. Project Alternatives)						
Environmental Impact	Proposed Project (without/ with mitigation)	No Project/2011 Approved Project	Reduced Capacity			
Aesthetics	LS/LS	=	=			
Agricultural Resources	LS/LS	=	=			
Air Quality Short-Term Long-Term	S/LS S/S	> >	= >			
Biological Resources	LS/LS	=	=			
Cultural Resources	LS/LS	=	=			
Geology and Soils	LS/LS	=	=			
Greenhouse Gas Emissions	LS/LS	>	>			
Hazards and Hazardous Materials	LS/LS	=	=			
Hydrology and Water Quality	LS/LS	=	=			
Land Use and Planning	LS/LS	=	=			
Minerals	LS/LS	=	=			
Noise Short-Term	LS/LS	>	>			
Long-Term	LS/LS	=	>			
Population and Housing	S/LS	=	=			
Public Services	LS/LS	>	=			
Recreation	LS/LS	>	>			
Transportation/Traffic Local	S/LS	<	<			
Regional Utilities and Service Systems	S/LS LS/LS	>	>			
LS = Less than significant: S = Significant		=	=			

LS = Less than significant; S = Significant "<" = Reduces impacts compared to the Proposed Project; ">" = Increases impacts compared to the Proposed Project; = Impacts would be similar.

Table 7-3							
Ability of Each Alternative to Meet the Project Objectives							
	Proposed	No Project/2011	Redu				

Proposed Project Objectives	Proposed Project	No Project/2011 Approved Project	Reduced Capacity
Redevelop and reuse a portion of the former MCAS El Toro Property for a 2,600-student comprehensive high school consistent with the District's adopted Education Specifications.	Yes	No	Less than the Proposed Project
To provide high school capacity for current and anticipated educational demands within the District boundaries and provide supportive environment for projected growth in the City.	Yes	No	Less than the Proposed Project
Provide for a range of recreational and athletic opportunities for students and community members.	Yes	No	Less than the Proposed Project
Implement the provisions of the executed School Mitigation Agreements between IUSD and Heritage Fields El Toro LLC and The Irvine Company.	Yes	No	Less than the Proposed Project