5.0 OTHER CEQA DISCUSSIONS

This section covers other topics required to be addressed under the *CEQA Guidelines* that are not covered in other parts of this SEIR, including growth-inducing effects, significant irreversible changes, significant unavoidable impacts, and energy effects as set forth in CEQA Guidelines Appendix F. Effects found not to be significant are addressed in Section 4.15 of this SEIR.

5.1 GROWTH EFFECTS

State CEQA Guidelines Section 15126 of the CEQA Guidelines requires that an EIR address the "growth inducing" effects of the proposed Project. Pursuant to Section 15126.2(d) of the Guidelines, a project would be considered to have a growth-inducing effect if it would:

- Directly or indirectly foster economic or population growth, or the construction of additional housing;
- Remove obstacles to population growth;
- Tax existing community services or facilities, requiring the construction of new facilities that could cause significant environmental effects; or
- Encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.

This section of the SEIR analyzes the potential environmental consequences of the foreseeable growth that could be induced by implementation of the proposed Project. Section 15126.2(d) states that: "It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment." Typically, the growth-inducing potential of the Project would be considered significant if: "[The project] fosters growth or a concentration of population above what is assumed in pertinent master plans, land use plans, or in projections made by regional planning agencies such as the Association of Monterey Bay Area Governments (AMBAG). Significant growth impacts could also occur if a project provides infrastructure or service capacity to accommodate growth beyond the levels currently permitted by local or regional plans and policies." In general, a project may foster growth in a geographic area if it meets any one of the following criteria:

- 1. Removes an impediment to growth (e.g., establish an essential public service or provide new access to an area);
- 2. Foster economic expansion or growth (e.g., change revenue base, expand employment, etc.);
- 3. Fosters population growth (e.g., construct additional housing), either directly or indirectly;
- 4. Establishes a precedent-setting action (e.g., an innovation, a change in zoning, or a general plan amendment approval); or
- 5. Develops or encroaches on an isolated or adjacent area of open space (distinct from an "infill" type of project).

Should the Project meet any one of the above-listed criteria, it may be considered growth inducing. The potential growth-inducing impacts of the proposed Project are evaluated against

these five criteria in this section. Section 15126.2(d) of the CEQA Guidelines requires that an EIR "discuss the ways" a project could be growth inducing and to, "discuss the characteristics of some projects that may encourage...activities that could significantly affect the environment." However, the Guidelines do not require that an EIR predict (or speculate) specifically where such growth would occur, in what form it would occur, or when it would occur. The analysis provided below evaluates whether the proposed project would directly, or indirectly, induce population, housing, or economic growth in the surrounding environment.

It is important to note that direct forms of growth can have secondary effects of expanding the size of local markets and attracting additional economic activity to the area. A project could indirectly induce growth by resulting in:

- Substantial new permanent employment opportunities (e.g., commercial or industrial)
- A construction effort with substantial short-term employment opportunities that indirectly stimulates the need for additional housing and services to support the new temporary employment demand; and/or
- Removal of an obstacle to additional growth and development, such as removing a constraint on a required public utility or service (e.g., construction of a major sewer line with excess capacity through an undeveloped area).

As noted above, typically, the growth-inducing potential of a project would be considered significant if it fosters growth or a concentration of population above what is assumed in local and regional land use plans, or in projections made by regional planning authorities. Significant growth impacts could also occur if the project provides infrastructure or service capacity to accommodate growth levels beyond those permitted by local or regional plans and policies or the project itself.

5.1.1 Economic and Population Growth

As discussed in Section 2.0, *Project Description*, implementation of the proposed Project would involve the development of residential and commercial uses (including neighborhood commercial, office and resort uses). Thus, the economic growth that could be attributed to implementation of the Project would have direct economic benefits with regard to job creation and tax revenue. The proposed Project would generate short-term employment opportunities during construction activities, which would be expected to draw workers primarily from the existing regional work force. Project construction is forecast to support an average of 634 jobs per year during construction (Gruen, Gruen, and Associates, 2013). A "job year" is defined as one job for a period of one year. Assuming five years of active construction, Project construction is forecast to support 3,170 job years within the local economy (Gruen, Gruen, and Associates, 2013).

The Project would also create permanent jobs associated with the proposed commercial uses. An estimated total of 332 ongoing jobs would be generated by the retail operations and hotel space, along with 225 ongoing jobs associated with general household spending of the residents (Gruen, Gruen, and Associates, 2013). Additionally, approximately 80 additional jobs would be supported by the operations of the Project's proposed amenity center and the ongoing operations of the Existing Golf Club (golf course jobs exist currently) (Gruen, Gruen, and

Associates, 2013). Therefore, the Project would create a total of 547 permanent jobs, not including the existing jobs associated with the Existing Golf Club, as well as future jobs connected with the amenity center, and implementing maintenance and other duties pursuant to the active adult community homeowners association (AHOA) and market rate homeowners association (MHOA). Although some jobs generated by implementation of the Project would likely be filled by current residents of San Benito County, some of the new job opportunities would be filled by people commuting or relocating to the area. In this way, the proposed Project may indirectly generate population growth in the area.

Due to the proposed residential development and associated service population, implementation of the Project would also have incremental indirect economic benefits such as increasing demand for retail and commercial services. As such, the proposed Project would increase the amount of economic activity in the County, and therefore induce growth. As described in Section 2.0, *Project Description*, the growth would be consistent with the Project objective to enhance economic development and strengthen the economy of the County by creating employment opportunities. Further, the proposed Project would help to implement current adopted General Plan Land Use Element Goal 5 (to provide a diversified economic base for the county).

Based on the Project's projected population of 1.67 per household for the active adult community (1,017 units) and 3.51 per household for the conventional housing (67 units), the proposed Project would generate 1,933 residents. While some existing County residents may purchase new units, the SEIR takes a conservative approach and assumes that a portion of the purchasers would derive from outside areas. The combination of purchasers would increase the existing population of the County of San Benito from 57,517 to 59,450 (California Department of Finance, 2014). According to the Association of Monterey Bay Area Governments (AMBAG) Monterey Bay Area 2014 Regional Forecast (AMBAG Regional Forecast) and as shown in Table 5-1, San Benito County is forecast to have a population of 75,604 in 2025 (the year the Project is anticipated to be completed) and 81,332 in 2035 (the cumulative scenario). The existing plus Project population (59,450) is well below both the 2025 and 2035 AMBAG projections.

Table 5-1
San Benito County Population Forecasts

	Existing ¹	Project ²	Existing plus Project	AMBAG Forecasts ³		
				2025	2030	2035
Population	57,517	1,933	59,450	75,604	78,418	81,332

Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, May 2014.

The Draft 2035 General Plan Update considers development on the Project Site. The buildout assumption for the Site is "approximately 815 single-family residential units and accompanying commercial uses" (San Benito County, May 2014, p. 3-8). These residential units are assumed to be conventional (not age-restricted) units. The proposed Project includes development of up to 1,084 residential units, including 1,017 active adult units and 67 conventional units. As described above, this mix of units would generate an estimated population of 1,933 residents. In comparison, 815 conventional units would generate an estimated population of approximately

² Based on the Project's projected population of 1.67 per household for the active adult community (1,017 units) and 3.51 per household for the conventional housing (67 units)

³ AMBAG, 2014 Regional Growth Forecast, Table 10. Figures include projected population within the unincorporated County as well as the Cities of Hollister and San Juan Bautista, without the Project incorporated.

2,861 residents (based on an average household size of 3.51 persons per unit). Thus, while the Project proposes a per-unit buildout greater than what is considered in the Draft 2035 General Plan Update, the Project would generate 928 fewer residents than what is considered therein (a 32 percent decrease). The Project's contribution to population growth would be approximately 10.6 percent of the projected growth in the County by 2025 and 8.1 percent of the projected growth by 2035. Because this level of growth is consistent with AMBAG projections, such an increase in population would be consistent with long-term growth projections for the County. Such an increase in population would therefore be less than significant. In addition, the potential direct impacts of this growth are described in the respective sections of this SEIR.

5.1.2 Removal of Obstacles to Growth

A physical obstacle to growth typically involves the lack of public service infrastructure. Similarly, the elimination or change in a regulatory obstacle, including installing infrastructure, can result in new population growth. The referenced Project improvements, taken together, could reduce impediments to growth by eliminating or reducing existing infrastructure constraints. However, as explained more fully below, because these improvements would not serve other development outside the Project Site, they are not considered growth-inducing.

Roadway Extensions/Improvements. The Project Site is accessed by San Juan Oaks Drive, which connects to Union Road and State Route 156 (SR 156). San Juan Oaks Drive is the main road into the Project Site and currently provides access to existing development. As stated in Section 4.13, *Transportation and Circulation*, it is assumed that under buildout of the County's General Plan by the year 2035, approximately five miles of SR 156 will have been widened from two lanes to a four-lane expressway between San Juan Bautista and Hollister. The extension of San Juan Oaks Drive would be treated as a neighborhood street. None of the internal roads would be designed to serve additional development beyond that proposed by the Project. These roadways would not provide new access or substantially enhanced access to currently undeveloped areas located outside the Project Site. Therefore, the proposed Project's roadway network is not considered growth-inducing.

Stormwater Infrastructure. Implementation of the proposed Project would increase the amount of impervious surface area on the Project Site, thereby creating increased stormwater runoff that would require collection and discharge. Proposed land uses that would result in the development of impervious surfaces include residential, retail, and commercial uses. Although the entire surface area of these land uses would not be covered by impervious surfaces, the proposed Project would generate a substantial amount of stormwater runoff in the area. Therefore, the proposed Project would need to manage on-site stormwater. As described in Section 2.0, *Project Description*, the proposed Project includes facilities to manage stormwater. However, the proposed stormwater facilities would not be intended to serve other development outside the Project Site and would be sized accordingly. Therefore, stormwater conveyance infrastructure and facilities to accommodate the Project would not be considered growth-inducing.

<u>Wastewater and Water Infrastructure.</u> The proposed Project includes the addition of wastewater and water supply collection lines to serve the Project Site. On-site water services would be provided by a public utility, regulated by the CPUC, or a mutual water company. Because the surrounding agricultural land in the vicinity the Project Site is not anticipated for urban

development, it is unlikely that expansion of the service area of the utility/mutual water company's service area would occur.

The proposed water and wastewater lines would be sized to meet, but not exceed, the needs of proposed Project. As described in Section 2.0, *Project Description*, the existing wastewater system at the site consists of gravity flow sanitary sewer lines that extend west from the golf course clubhouse to a septic leach field located just west of San Juan Oaks Drive. There is no existing wastewater infrastructure in the majority of the Project Site. Wastewater generated from the Project would be collected and conveyed through proposed new conventional gravity system of pipes and then conveyed to the City of Hollister's existing domestic wastewater treatment plant/water reclamation facility (DWWTP/WRF), located just north of San Juan Road. These approved facilities can accommodate the Project and the Project-specific facilities were not designed to accommodate additional development beyond that envisioned to serve the Project Site. Further, implementation of the proposed Project would not require expansion of the existing DWWTP/WRF or construction of a new wastewater facility that could accommodate additional growth.

In the event that Project wastewater cannot be conveyed to the City of Hollister's DWWTP/WRF for treatment and disposal, the Project applicants propose the construction of an optional on-site wastewater treatment plant (WWTP) within a portion of the neighborhood commercial area. The optional on-site WWTP would be designed to treat up to approximately 0.16 million gallons per day (mgd) of wastewater, which could accommodate the proposed Project and existing on-site development, but not beyond development to occur on-site. In either wastewater treatment scenario, the proposed Project would not result in the development of excess wastewater capacity to serve any other development, and therefore would not be considered growth-inducing.

It is anticipated that groundwater would be the primary source of water to serve the proposed Project. There are currently two active wells (Well 1 and Well 2) within the Project Site that supply groundwater to the Existing Golf Club for both potable and non-potable purposes. Well 1 is the primary groundwater supply source, while Well 2 functions as a backup in case of failure of Well 1. Implementation of the proposed Project would involve construction of a new well near the existing San Juan Oaks Well 1. A second backup well would also be constructed. This groundwater would be treated and pumped to a new water tank on a hillside located south of the proposed amenity center. However, the proposed well and water tank would serve the Project and are not intended to serve other development outside of the Project Site, and would be sized accordingly. Central Valley Project (CVP) water is presently used on the Project Site for the partial irrigation of the Existing Golf Club. CVP water may be used to serve nonpotable uses within the proposed Project, thereby increasing the use of CVP water on the Project Site. However, the SBCWD's CVP supply is limited by contracts with the Bureau of Reclamation and the Project Site lands are limited to a maximum quantity of CVP water according to SBCWD's rules and regulations. Therefore, any increase in CVP water on the Project Site would not be considered growth inducing. In addition, implementation of the proposed Project would not require expansion of the Hollister Conduit or the San Luis Reservoir to deliver CVP water. In addition, if the optional on-site WWTP is constructed, the treated water could be used for irrigation on the Project Site including the golf course, open space areas, and public landscaped medians. The proposed Project would not result in the development of excess water capacity to serve any other development, and therefore would not be considered growth-inducing.

Conversion of Agricultural Land. The proposed Project would result in the development of urban uses in a largely agricultural area. As discussed in Section 4.2, Agricultural Resources, the Project would convert approximately 12 acres of Important Farmland to non-agricultural use. However, the Project would also permanently preserve approximately 153 acres of prime farmland off-site as well as approximately 41 acres on-site for agricultural uses, which would mitigate the loss of Important Farmland on the site. These easement areas would be permanently preserved for agricultural use with an easement, deed restriction or other acceptable mechanism to ensure they are used for agricultural purposes in perpetuity. The Project Site was previously approved for proposed development of the San Juan Oaks Golf Club Project and, therefore, the general area has been previously planned for urban development and is anticipated for future growth. As noted above, the surrounding agricultural land in the vicinity of the Project Site is not anticipated for urban development, and therefore the proposed Project is not likely to trigger other agricultural land conversions in the vicinity. For the above reasons, the conversion of agricultural land is not considered growth-inducing.

Public Services. As described in Section 4.12, *Public Services*, as a Project design feature, the applicants have voluntarily agreed to provide the County with a 15-year option for an approximately two-acre site for a possible police (or fire) station on the Project Site. The availability of public safety stations is generally not considered an obstacle to growth nor does the availability of fire protection by itself normally ensure or encourage growth within a particular area. Other factors such as economic conditions, land availability, population trends, availability of water supply or sewer services and local planning policies have a more direct effect on growth. Furthermore, , as of the writing of this SEIR, the timing of construction of this station as well as the source of funding is unknown and would likely be highly dependent on other nearby future development to occur. In other words, rather than encouraging growth, whether or not this station ultimately is constructed is likely dependent on whether additional growth occurs, which would, in turn, be able to provide the necessary funding and identified need to allow for its construction. For these reasons, the provision of land for a potential future public safety station is not considered growth inducing.

5.2 IRREVERSIBLE ENVIRONMENTAL EFFECTS

Section 15126.2(c) of the State CEQA Guidelines requires a discussion of "significant irreversible environmental changes which would be caused by the proposed project should it be implemented. Uses of nonrenewable resources during the initial and continued phases of a project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (e.g. a highway improvement which 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." The three CEQA-required categories of irreversible changes are discussed below.

1. Changes in Land Use that Commit Future Generations

Full buildout of the Project would result in the conversion of agricultural land currently used for agricultural purposes (including growing crops and grazing) to urbanized uses for

residential and commercial uses (including neighborhood commercial, office, and resort uses). The change is irreversible, particularly as it relates to high-quality farm land take many years to develop. However, as the Project Site has already been planned for future urban growth and is adjacent to already developed areas, implementation of the Project is not expected to result in any land use changes that would commit future generations to uses that are not already prevalent and/or planned for in the Project Site and its immediate vicinity.

2. Irreversible Damage from Environmental Accidents

Potential environmental accidents of concern include those that would have adverse effects on the environment or public health due to the nature or quantity of material released during an accident and the receptors exposed to that release. Construction activities associated with development of the proposed Project would involve some risk for environmental accidents. However, these activities would be monitored by San Benito County, State, and federal agencies, and would follow professional industry standards and rigorous statutory requirements for safety and construction. As described in Section 4.8, Hazards/Hazardous Materials, implementation of the proposed Project would involve limited quantities of miscellaneous hazardous substances, such as gasoline, diesel fuel, and solvents. This includes the use of chemical solutions, including chlorine, as part of the optional on-site WWTP operations. Considering the types and minimal quantities of hazardous materials that would be used for the proposed Project, accidental releases are unlikely. Adherence to applicable federal, State and local requirements would reduce damage to environmental accidents associated with the proposed Project.

As a result, the Project would not pose a substantial risk of environmental accidents.

3. Large Commitment of Nonrenewable Resources

Consumption of nonrenewable resources includes issues related to increased energy consumption, conversion of agricultural lands, and lost access to mining reserves. Construction and operation of the proposed Project would irreversibly commit construction materials and non-renewable energy resources. These energy resource demands would be used for construction, heating and cooling of buildings, transportation of people and goods, as well as lighting and other associated energy needs. Non-renewable and slowly renewable resources used by the Project would include, but are not limited to: lumber and other forest products; sand and gravel; asphalt; petrochemical construction materials; steel; copper; lead and other metals, water; electric and gas service; etc.

Primary impacts related to consumption of non-renewable and slowly renewable resources are considered to be less than significant because Project buildout would not use unusual amounts of energy or construction materials, as development would be primarily comprised of common residential and commercial uses. In addition, due to the escalating costs of raw building materials, it is very likely that the developer would conserve resources for financial reasons.

The commitment of limited, slowly renewable, and nonrenewable resources required for construction and operation of the proposed Project would limit the availability of these resources for future generations or for other uses during the life of the Project. Buildout of the Project would result in the significant irreversible commitment of land to urban uses and the

long-term commitment of other renewable and nonrenewable resources. Implementation of the proposed Project, however, would include several features that would help offset or reduce the need for nonrenewable resources. The Project would be constructed in accordance with the design guidelines contained in the Del Webb at San Juan Oaks Specific Plan, including the following green building practices:

- Concrete roof tile waste, drywall waste, and wood framing waste material diverted and recycled off-site.
- Oriented strand board (OSB) used for framing shear panels and roof sheathing instead of plywood to sustain forests. OSB fiber is grown in sustainable forests and tree farms, reducing the demand for old growth timber. OSB uses nearly 90 percent of the log, with the remaining 10 percent being used to fuel mills.
- Engineered wood products (EWP) used for certain beams/headers for the same reasons listed above with OSB.
- Engineered roof trusses used to reduce wood fiber use and sustain forests.
- Radiant barrier roof sheathing offered as an option to improve energy performance where not offered as a standard.
- Medium density fiberboard (MDF) made from the waste of other wood products and is specified for doors, trim, baseboard and shelving.
- Energy Star bath fans included with each home.
- Gas ranges included with each home along with dryers prepped for gas use.
- Bath exhaust fans include humidistat technology that turns fans on and off based on amount of humidity detected in the room.
- Fluorescent lighting in strategic locations to reduce energy use.
- *Dimmer switches in strategic locations to reduce energy use.*
- High efficiency toilets (HET) with a maximum of 1.28 gallons per flush.
- *Kitchen faucets (1.8 GPM), bath faucets (1.5 GPM), and shower heads (2.0 GPM) that are 20 percent more efficient than typical low-flow plumbing fixtures.*
- Cross-linked polyethylene (PEX) or chlorinated polyvinyl chloride (CPVC) plumbing system conserves water and energy by reducing the amount of time it takes for hot water to arrive at a fixture. PEX and CPVC plumbing have higher R-values which reduce heat lost from water as it travels through the piping.

In addition to the above design standards, the Project would be required to comply with all applicable building and design requirements, including those set forth in Title 24 relating to energy conservation. In compliance with CALGreen, the State's Green Building Standards Code, the Project would be required to reduce water consumption by 20 percent, divert 50 percent of construction waste from landfills, and install low pollutant-emitting materials. The Project would encourage and promote alternative modes of transportation and includes transit-supportive measures and design features including bicycle facilities and pedestrian improvements.

The Project Site contains agricultural land, including Department of Conservation FMMP designated Prime Farmland (approximately 35 acres) and 218 acres designated as prime farmland by the NRCS (assuming irrigation). The proposed future non-agricultural use represents a commitment of non-renewable resources. However, as noted above, as the Project Site has already been planned for future urban growth and is adjacent to developed areas,

implementation of the Project is not expected to result in any land use changes that would commit future generations to uses that are not already prevalent and/or planned for in the Project Site and its immediate vicinity.

The Project Site does not contain a mining reserve.

For the above reasons, the Project would not result in any significant impacts as it relates to irreversible changes.

5.3 SIGNIFICANT, UNAVOIDABLE IMPACTS

Section 15126.2(b), Significant Environmental Effects which Cannot Be Avoided if the Proposed Project is implemented, requires an EIR to describe any significant impacts, including those which can be mitigated but not reduced to a level of insignificance. The evaluation of the environmental issues identified throughout all of the subsections of Sections 4.0, Environmental Impact Analysis, concluded that some of the following significant and unavoidable Project-related and/or cumulative impacts would occur if the 2003 San Juan Oaks Gold Club General Plan/Zone Change/vesting Tentative Subdivision Map EIR (2003 EIR) was implemented as proposed.

The 2003 San Juan Oaks Golf Club General Plan Amendment/Zone Change/Vesting Tentative Subdivision Map EIR (2003 EIR) examined the Project Site and vicinity and the potential significant impacts resulting from development under the San Juan Oaks Golf Club General Plan Amendment/Zone Change/Vesting Tentative Subdivision Map Project. The 2003 EIR concluded that impacts related to the following would be Class I, significant and unavoidable:

- Agricultural Resources: The 2003 Project was found to have an unavoidable impact related
 to the conversion of agricultural land with prime soils that would be considered
 protected farmland;
- Air Quality: The 2003 Project was found to be inconsistent with the 2000 AQMP; and
- Noise: Existing and Project-generated traffic, as well as cumulative and Project-generated traffic, on SR 156 and Union Road were considered to have an unavoidable impact on exterior and interior noise levels at sensitive receptors along those roadways for the 2003 Project.

The development footprint of the 2003 San Juan Oaks Golf Club Project and the current proposed Project are substantially similar, as shown in Figure 1-1 in Section 1.0, *Introduction*. However, substantial changes to the previously approved 2003 San Juan Oaks Golf Club project are proposed as part of Del Webb at San Juan Oaks Specific Plan project. Specifically, the Project proposes to increase the previously approved overall impervious building area from approximately 193 acres to approximately 323 acres, increase the total number of residential dwellings from 186 single-family residential dwellings to 1,084 single-family residential dwellings, increase the neighborhood commercial area from approximately seven acres to approximately 14 acres, increase roadway areas from approximately 44 acres to approximately 88 acres, increase the permanent wildlife habitat/open space from approximately 1,163 acres to approximately 1,243 acres, permanently preserve approximately 153 acres of off-site prime agricultural land, and develop an approximately ten-acre amenity center. These proposed

changes have the potential to substantially affect the severity of the previously identified impacts. Therefore, an impact analysis has been prepared pursuant to Public Resources Code Section 21166 and CEQA Guidelines Section 15162 (a).

This section lists the impacts for the proposed Project that were found to be significant and unavoidable. More information on these impacts is found in Section 4 of this SEIR.

5.3.1 Aesthetics

The Project would result in significant and unavoidable impacts related to aesthetic character. As described in Impact AES-2 in Section 4.1, *Aesthetics*, the proposed Project would change the Project Site's character from rural to a more urbanized developed setting. Implementation of the Specific Plan's development standards, design guidelines and other design-related goals, policies and objectives and compliance with the applicable existing General Plan policies (or Draft 2035 General Plan Update policies, once approved) and County Code provisions designed to protect aesthetic character would partially reduce impacts associated with new development on the Project Site. The distance of the proposed development from the relevant public viewsheds and the anticipated landscaping palette that is intended to help shield the development from view by existing agricultural uses and open space would further limit impacts. Nevertheless, given the conversion of a substantial amount of acreage from rural to urban uses, impacts on the visual character or quality would be significant and unavoidable.

5.3.2 Greenhouse Gas Emissions

Development of the Project would generate an estimated 15,399 MT of CO₂e per year due to construction activity and the Project's long-term operation. As described in Section 4.7, *Greenhouse Gas Emissions*, the most appropriate GHG emissions threshold for the proposed Project is SLOAPCD's adopted efficiency threshold (4.9 MT CO₂e/service population/year). The proposed Project would result in annual emissions that would exceed this threshold; therefore, this impact would be potentially significant. Implementation of the Project's mitigation measure for a GHG reduction plan, as outlined in Section 4.7, *Greenhouse Gas Emissions*, would reduce impacts on climate change to the extent feasible. However, the offset program described in measure GHG-1 has not been vetted or approved by the County Board of Supervisors. In addition, the timing of the projects funded by the carbon offsets – and therefore the timing of the reduction in emissions – cannot be confirmed at the time of publication of this SEIR. Furthermore, the specific mix of GHG reduction measures is not currently known and it cannot be known at this time whether there will be sufficient reduction measures in place for a particular phase. Therefore, this impact would remain Class I, *significant and unavoidable*.

5.3.3 Noise

Construction of the proposed Project has the potential to adversely impact newly developed receptors (the nearest of which could be adjacent to construction activities) within the Project Site. As described in Impact NOI-1 in Section 4.11, *Noise*, Mitigation measures NOI-1(a) through NOI-1(h) would be required. These measures would reduce construction-related noise levels during the day, and would prohibit construction activities during the more noise-sensitive nighttime hours to the extent feasible. However, because of the phasing of the Project and the potential for

construction activities to occur adjacent or in the close vicinity of sensitive receptors, construction-related noise impacts would not be reduced to a less than significant level. Therefore, the Project's construction-related noise impacts as they relate to on-site sensitive receptors would be considered significant and unavoidable.

Construction-related activities associated with the proposed Project would intermittently generate groundborne vibration on and adjacent to the Project Site if construction occurs adjacent to those sites (within approximately 50 feet). As discussed in Impact NOI-2 in Section 4.11, *Noise*, due to the phasing associated with development of the Project, this may affect existing receptors near the Project Site as well as proposed receptors on-site. Mitigation Measure N-2 limits vibration-generating construction equipment. However, if grading were to be required adjacent to an occupied use, this mitigation may not be feasible or may not reduce vibration below the applicable threshold. Impacts would therefore remain significant and unavoidable.

Occupants of off-site residences would be exposed to noise levels that could exceed County standards or that could be substantially louder than existing ambient noise levels as a result of Project-generated traffic on SR 156, Union Road, and San Juan Oaks Drive. Mitigation Measures NOI-3(a) and NOI-3(b) in Section 4.11, *Noise*, would partially reduce impacts. However, mitigation may not be feasible due to physical or other constraints, and would require the cooperation of the existing residents, which cannot be assured. Therefore, impacts related to traffic-generated noise under Existing plus Project conditions would remain significant and unavoidable.

Occupants of off-site residences would be exposed to noise levels that could exceed applicable criteria as a result of Project-generated traffic on SR 156, Union Road, and San Juan Oaks Drive. Mitigation Measure NOI-3 would require the installation of a solid berm between affected residences and the roadway, or via other methods recommended in a noise study to be prepared by an acoustical engineer and approved by the County. The implementation of these structural measures would reduce noise impacts below the applicable standards; however, the measures would require the cooperation of the existing residents and/or private property owners. It should also be noted that the affected residences have driveways on Union Road, and implementing structural measures may limit access. In the event that these entities choose not to grant permission to implement these measures or the possible recommendations of an acoustical engineer, this mitigation would be considered infeasible. Therefore, traffic-generated noise impacts would be significant and unavoidable under both Existing plus Project and Cumulative plus Project conditions.

5.3.4 Transportation and Circulation

The proposed Project would increase traffic levels at study intersections under Existing plus Project conditions and exceed established measures of effectiveness at four of the eleven study area intersections. Mitigation is required for three of the four intersections, and would reduce impacts to two intersections to a less than significant level. However, as described in Impact TRF-1 in Section 4.13, *Transportation and Circulation*, impacts at Union Road-Mitchell Road and SR 156 (Intersection #5) would remain significant and unavoidable in the Existing plus Project condition.

The proposed Project would also increase traffic levels at study intersections under Background plus Project conditions and would exceed established measures of effectiveness at four of the eleven study area intersections. Mitigation is required for three of the four intersections, and would reduce impacts to two intersections to a less than significant level. However, impacts at Union Road-Mitchell Road and SR 156 (Intersection #5) would remain significant and unavoidable in the Background plus Project condition.

Implementation of the Project would increase traffic levels at study intersections under Cumulative plus Project conditions and would exceed established measures of effectiveness at three of the eleven study area intersections. Impacts to one of the intersections would be reduced to a less than significant level with payment of TIMF fees, and impacts at a second would be mitigated to a less than significant level. However, impacts at Bixby Road and SR 156-San Juan Road (Intersection #4) one intersection would remain significant and unavoidable in the Cumulative plus Project condition.

5.4 ENERGY EFFECTS

The CEQA Guidelines Appendix F requires that EIRs include a discussion of the potential energy consumption and/or conservation impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, or unnecessary consumption of energy.

As discussed previously, the proposed Project would involve the use of energy during its construction and operational phases. Energy use during the construction phase would be in the form of fuel consumption (e.g., gasoline and diesel fuel) to operate heavy equipment, light-duty vehicles, machinery, and generators for lighting. In addition, temporary grid power may also be provided to any temporary construction trailers or electric construction equipment.

All equipment used during the construction phase of the Project would be required to comply with the regulations of Title 13, Chapter 9, of the California Code of Regulations pertaining to construction equipment specifications. The regulations of Title 13, Chapter 9, of the California Code of Regulations require that new and old construction equipment be properly tested, maintained, and operated to reduce air pollutant emissions. Compliance with Title 13 would not only reduce exhaust emissions, but would also improve the fuel economy of the equipment fleet. In addition, the Project would be required to comply with Mitigation Measure NOI-1(b) and NOI-1(c) of this SEIR. Mitigation Measure NOI-1(b) requires that all construction equipment used for the Project be properly maintained and equipped with the factory installed original equipment manufacturers (OEM) intake and exhaust mufflers and engine shrouds. Mitigation Measure NOI-1(c) requires that the construction vehicles and equipment used on the Project Site do not be left idling for longer than five minutes when not in use. Compliance with Title 13, as well as Mitigation Measures NOI-1(b) and NOI-1(c) would ensure that all construction equipment and activities associated with the Project would not be inefficient, wasteful, or unnecessary with regard to energy consumption.

Long-term operation of the proposed Project would require permanent grid connections for electricity and natural gas service to power internal and exterior building lighting, heating and cooling systems, water heating, and ventilation systems. The increase in vehicle trips associated with the Project would increase fossil fuel consumption within the County. The required water

supply for the Project would require electrical power as well. Based on CalEEMod default rates for energy use for proposed land uses on the Project Site, the operation of proposed uses would generate demand for an estimated 8.5 million kilowatt hours (kWh) per year of electricity and 36.8 million kiloBritish Thermal Units (kBTU) per year of natural gas. These default values for land uses are based on the California Commercial End Use Survey and Residential Appliance Saturation Survey studies, sponsored by the California Energy Commission, with adjustments to account for current Title 24 building codes (CAPCOA, 2013). CalEEMod considers energy use associated with major building envelope systems such as space heating and cooling, water heating, and ventilation; appliances and electronics; and lighting.

Gas and electric service for the Project Site would be provided by Pacific Gas and Electric Company (PG&E). PG&E's power mix consists of approximately 30% renewable energy sources (approximately 11% large hydroelectric facilities and approximately 19% other renewable resources such as wind, geothermal, biomass, solar, and small hydro) (PG&E website, 2014).

The proposed Project includes policies to reduce overall energy and fuel use. The proposed Specific Plan policies encourage renewable energy use in order to decrease reliance on fossil fuels. Policies also encourage energy conservation by promoting energy-efficient appliances, signage, and lighting. The proposed policies related to energy conservation include:

3.1.1. Overall Building Design

 Building design and siting should take advantage of natural ventilation, heating, and cooling, sun and wind exposure, and solar energy opportunities. Passive solar orientation and design is encouraged to capture natural daylight and to use natural cooling techniques in place of air conditioning. Building siting should consider solar access for adjacent buildings.

3.1.8. Windows and Doors

- Energy efficient windows are strongly encouraged.
- Operable windows are strongly encouraged, especially for residential units, to provide natural ventilation and to enhance the indoor-outdoor relationship

3.1.9. Roofs

- Roof colors and materials that meet or exceed Energy Star requirements shall be used to reduce the heat island effect.
- Rooftop solar panels, solar films, small-scale wind turbines, and other similar features may be used to generate energy.

3.1.10. Equipment Screening and Service Areas

- Energy and water efficient appliances, fixtures, lighting, and windows shall meet or exceed state energy performance standards. Energy Star qualified (or equivalent rating system) models of mechanical equipment are strongly encouraged.
- Equipment should be located to maximize energy efficiency, such as by locating cooling equipment in shaded areas that are protected from the hot sun, thus reducing the energy needed to cool the air.

3.1.12. Exterior Lighting

• Energy efficient, low voltage lighting is strongly encouraged. Decorative lighting shall be low intensity.

3.1.13. Green Building

- Energy Star bath fans included with each home.
- Fluorescent lighting in strategic locations to reduce energy use.
- *Dimmer switches in strategic locations to reduce energy use.*
- Solar panels offered as an option.
- 13 SEER (seasonal energy efficiency ratio) / 11 EER (energy efficiency rating) high efficiency air conditioners standard.
- 80 percent annual fuel utilization efficiency (AFUE) furnaces standard, with option for 90 percent or higher.

3.6.3. Parking Lots

• As a means of providing a source of energy production and to shade parked vehicles, parking lots may include carport-style solar panel covering.

3.6.4. Pedestrian Circulation

• Walkways should be provided along natural paths of travel to connect between buildings, sidewalks, parking areas, and common areas.

3.6.5. Bicycle Circulation

• Bicycle racks are strongly encouraged on all properties within the amenity center, resort hotel, neighborhood commercial, parks, and golf course and clubhouse.

3.6.6. Local Use Vehicle Circulation

- Accommodations for local use vehicle circulation should be made within parking lots for the amenity center, neighborhood commercial, golf course and clubhouse, and resort hotel. Convenient parking spaces should be created within these parking lots to further incentivize use of local use vehicles over automobiles.
- Charging stations for local use vehicles and electric cars are/will be provided within parking lots for the amenity center, neighborhood commercial center, golf course and clubhouse, and resort hotel.

3.7.3. Sign Lighting.

• LED or other low energy use lighting sources shall be used for sign lighting.

Further, the proposed Project would be subject to the most recent energy conservation requirements of the Title 24 of the California Code of Regulations, known as the California Building Standards Code or Title 24, as adopted in 2008, which would reduce operational energy use. Given the current anticipated construction schedule, this would mean that the updated 2015 standards would apply, which will be effective statewide on January 1, 2017. The 2015 Title 24 standards will require greatly increased energy efficiency. The proposed policies related to energy conservation would be consistent with Title 24 standards for energy-efficient windows and exterior doors, including maximum air infiltration rates and relative solar heat gain (Section 116), efficiency standards for heating and cooling systems (Section 112), water heating systems (Section 113), lighting efficiency standards for low-rise residential buildings (Section 150), and power supply efficiency standards for light-emitting diode (LED) signs (Section 148). The proposed use of Energy Star-approved appliances and other policies described above would be additional to Title 24 requirements. The proposed buildings also would be subject to Title 24 requirements for roofing insulation, solar reflectance of roofing materials, and lighting controls. In addition to proposed policies and Title 24 requirements, the proposed buildings would be designed with features to reduce operational emissions, as described in Section 2.0, Project Description. These Project features include the use of recycled

building materials, water-efficient fixtures, low-water use landscape irrigation, and an option for photovoltaic installation on structures.

Furthermore, the Specific Plan is based on a land use pattern that would co-locate residential and commercial uses within the Project Site, resulting in a reduction of vehicle trips, thereby reducing fossil fuel use from transportation. As discussed in Section 4.7, *Greenhouse Gas Emissions*, the vehicle trip data provided in the traffic study prepared by Fehr & Peers (refer to Section 4.13, *Transportation and Circulation* and Appendix I), estimates a 13% mixed-use development (MXD) reduction in vehicle trips.

Adherence to Specific Plan policies and Title 24 energy conservation requirements would ensure that energy is not used in an inefficient, wasteful, or unnecessary manner.

