7. Summary of Cumulative Impacts

CEQA requires the consideration of cumulative impacts. Defined, these impacts are "two or more individual effects, which when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines §15355).

The Proposed Project is located in an unincorporated area of Orange County adjacent to existing residential neighborhoods within the City of Yorba Linda, with little opportunity for additional development in the immediately adjacent areas. To the north and east is Chino Hills State Park, to the south is dedicated open space (City of Yorba Linda), and to the west/southwest is undeveloped property that is proposed for the 112-residential-unit Cielo Vista project. Further to the south, southeast, and west are existing single-family homes in the City of Yorba Linda (City). Where the project will create an impact to the existing residential developments, such impacts are noted in Chapter 5 of the DEIR. In addition to an assessment of impacts on the environment, including the existing built environment, this section analyzes whether the project will result in incremental effects that, when combined with other past, present, and probable future projects, are cumulatively considerable.

The Proposed Project has the greatest chance of creating a cumulative impact when combined with the proposed Cielo Vista project, which is immediately adjacent to the Project Site, because of the proximity of the project sites. In addition, the Bridal Hills project is a reasonably foreseeable development and has been considered herein for analysis in Air Quality, Transportation/Traffic, and Population/Housing. Nevertheless, all past, present, and probable future projects have been identified in order to accurately assess the potential cumulative impacts associated with the Proposed Project. Great care has been taken throughout this DEIR to accurately describe the impacts directly attributable to the Proposed Project without suggesting impacts from the Cielo Vista project, with the exception of potential cumulative impacts identified herein.

The City of Yorba Linda General Plan (Yorba Linda GP) was also examined to assess cumulative impacts. However, the City is currently in the process of conducting a comprehensive update to the General Plan and, therefore, a list of related projects, consistent with CEQA Guidelines §15130(b)(1)(A) was developed.

In addition to the existing built environment within the City and the surrounding area, a number of anticipated development and redevelopment projects are located within a two-mile radius of the Proposed Project as researched at the cities of Yorba Linda, Anaheim, Brea, Placentia, and Orange, and unincorporated County of Orange. Of the 18 potential related projects, 17 are expected to be built and occupied by Year 2020. For near -term (Year 2020), 16 related projects are located in the City, and one is located in the City of Brea. Table 7-1-1 below provides a brief description of the 18 related projects and identifies the occupancy percentage for each. Exhibit 7-1 graphically illustrates the location of the 18 projects.

				Occupancy Percentage	
No.	Related Project	Land Use	Year 2020	Year 203	
1	North Yorba Linda Estates	364 single-family residential dwelling units	100%	100%	
		110 condo/townhomes	100%	100%	
2	Cielo Vista	112 single-family residential dwelling units	100%	100%	
3	Hover/Bastanchury Holding Co.	48 single-family residential dwelling units	100%	100%	
4	Yorba Linda Town Center	32 single-family residential dwelling units	100%	100%	
		119 condo/townhomes	100%	100%	
		1,200-seat performing arts center	100%	100%	
		24,000-square-foot library	100%	100%	
		5,200 square feet of general office uses	100%	100%	
		61,600 square feet of commercial retail uses	100%	100%	
E	Oakcrest Terrace	16,400 square feet of restaurant uses	100% 100%	100% 100%	
5 6		69 apartments	100%	100%	
	Canal Annex – Savi Ranch	84 apartments	100%	100%	
7 8	Nixon Archive Site	59 single-family residential dwelling units	100%	100%	
0	SWC Bastanchury/Lakeview	180 apartment units	100%	100%	
9	Friends Christian High School	109 single-family residential dwelling units 1,200 students	100%	100%	
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10	Prospect (Greenhouse)	55 single-family residential dwelling units	100%	100%	
11	Wabash & Rose	17 single-family residential dwelling units	100%	100%	
12	Yorba Linda/Prospect	122 apartment units	100%	100%	
13	Postal Annex SE Lemon & Eureka	5 single-family residential dwelling units	100%	100%	
14	4622 Plumosa	10 apartment units	100%	100%	
15	Lakeview & Mariposa	149 apartment units	100%	100%	
16	Palisades at Vista del Verde	143 condo/townhomes	100%	100%	
City o	f Anaheim				
17	Mountain Park	1,675 single-family residential dwelling units	0%	100%	
		825 condos/townhomes	0%	100%	
		3,000-square-foot convenience market	0%	100%	
		800-student elementary school	0%	100%	
		15 acres of park	0%	100%	
City o	f Brea				
18	La Floresta Development	398 medium-density residential dwelling units	100%	100%	
		787 high-density residential dwelling units	100%	100%	
		150 mixed-use residential dwelling units	100%	100%	
		156,800 square feet of mixed-use commercial	100%	100%	
		18-hole golf course	100%	100%	
		20,000-square-foot community center	100%	100%	
		5.30-acre public facility (active adult)	100%	100%	
		75.60 acres of natural open space	100%	100%	

Table 7-1-1 Description of Related Projects

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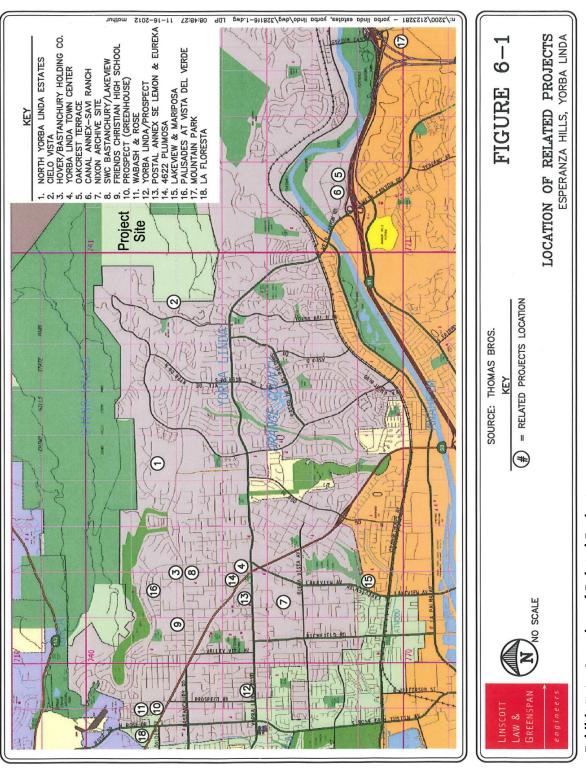


Exhibit 7-1 – Location of Related Projects

The existing residential and commercial developments, and related projects listed above, including potential impacts attributable to the proposed Cielo Vista project, were taken into consideration to assess impacts as discussed in each topical section below. Chapter 5 of this DEIR contains additional analysis of cumulative impacts for each topical environmental section. Specifically, the existing built environment was used to accurately describe the existing setting without the Proposed Project and was contemplated to determine whether the Proposed Project, when combined with other past, present, and reasonably foreseeable future projects, would result in cumulatively considerable impacts. Cumulative impact conclusions are based on two key criteria:

- 1. Level of project-specific impact. When an analysis concludes a project's impacts are individually minor but "cumulatively considerable," the project may have a significant impact on the environment.
- 2. Consideration of non-existing conditions and other cumulative projects. If there is a serious existing problem such that any additional amount of impact, when compared to the pre-existing conditions, would be significant, any additional amount of project impact would contribute to a cumulative impact.

The table below identifies each environmental topic and discusses cumulative impacts related to each.

Table 7-1-2 Cumulative impacts summary			
Environmental Issue/Topic	Project Specific Impact	Conclusion Regarding Cumulative Impacts	
Aesthetics	Construction of residences in an otherwise undeveloped area will create visual impacts due to landform alteration and placement of homes. Sources of light and glare will be introduced to the site. Mitigation measures and project design features have been incorporated into the project to reduce aesthetics impacts to less than significant.	The Proposed Project, combined with the proposed Cielo Vista project, will introduce residential development to open space. However, the project site is adjacent to existing residential development within the City of Yorba Linda and will provide a similar development (i.e., single-family homes on large lots) The proposed project, when combined with the proposed Cielo Vista project and all other past, present, and probable future projects, will not create any new or more severe impacts to aesthetics. Cumulative impacts to aesthetics are therefore less than significant.	
Air Quality	Implementation of mitigation measures would result in additional reductions in project emissions in short-term and long-term conditions.	The Proposed Project, in conjunction with growth and development with the South Coast Air Basin (SCAB), would hinder conformance with the regional AQMP. Because the SCAB has been classified as a non-attainment air basin, the Proposed Project will have a cumulatively considerable incremental increase in air emissions. In addition, the Proposed Project will contribute greenhouse gas emissions to the environment in excess of SCAQMD's advisory level. Therefore, the Proposed Project will result in cumulatively considerable and significant impacts to air quality.	

 Table 7-1-2
 Cumulative Impacts Summary

Environmental	Droinet Creatific Impact	Conclusion Depending Computation Imports
Issue/Topic Biological Resources	Project Specific Impact The proposed project has the potential to impact	Conclusion Regarding Cumulative Impacts The adjacent proposed Cielo Vista project will
	the least Bell's vireo and nesting birds under the Migratory Bird Treaty Act. Additional impacts to least Bell's vireo are:	impact the same habitat areas for least Bell's vireo as the Proposed Project in the areas of off- site grading. The impacts of the Proposed
	 Option 105 acre of mulefat scrub Option 205 acre of mulefat scrub, .19 acre of black willow 	Project will be fully mitigated with implementation of a re-vegetation plan resulting in a net increase in riparian habitat suitable for least Bell's vireo.
	Option 2A05 acre of mulefat scrub, .09 acre of black willow, .36 acre of southern willow scrub	Impacts to ACOE and CDFW jurisdiction will be mitigated through implementation of a restoration plan and a habitat mitigation and monitoring program.
	Fill of drainages due to grading and hillside stabilization could potentially impact ACOE and CDFW jurisdictional waters.	There will be no cumulative considerable or significant impacts to biological resources. The
	However, mitigation measures and project design features have been included that will reduce the impacts to less than significant. There are no unavoidable significant impacts associated with biological resources.	Proposed Project analyzed off-site impacts, which are consistent with Cielo Vista impacts. Cumulative impacts to biological resources, when combined with the proposed adjacent Cielo Vista project, are not considerable with implementation of proposed mitigation measures
Cultural Resources	No cultural resources are known to exist within the project site. However, mitigation has been included to address unanticipated discovery of cultural resources during project grading. No unavoidable significant impacts are associated with cultural resources.	Project development in combination with other cumulative projects would not significantly alter any regional or cumulative cultural, scientific, or historic resource.
Geology and Soils	The geotechnical investigation and fault hazard report contain recommendations pertaining to slope stability, ground rupture, liquefaction, landslide potential, groundwater levels, settlement of fill, and compressible and expansive soils. With incorpora- tion of mitigation measures, impacts will be reduced to less than significant.	Significant cumulative impacts due to potential erosion from grading and wind-related soil disturbance could occur if the proposed project grading occurs concurrently with adjacent development of the proposed Cielo Vista project. No other significant cumulative impacts will occur in the area of geology and soils.
Greenhouse Gas Emissions	GHG emissions will remain above the SCAQMD advisory level for construction, operation, and cumulative conditions and are therefore considered significant and unavoidable.	The project will contribute greenhouse gas emissions to the environment. Therefore, the project will result in cumulative impacts to greenhouse gas emissions and global climate change.
Hazards and Hazardous Materials	On-site oil well operations have the potential for accidental release of gas/methane. Mitigation measures have been incorporated to reduce such impact to less than significant. The project is located in a Very High Fire Hazard Severity Zone (VHFHSZ). A Fire Protection and Emergency Evacuation Plan has been prepared and includes recommendations for fuel modification zones, fire breaks, emergency vehicle staging areas, and the provision of adequate water and water pressure. Implementation of the mitigation measures	There are 13 active wells and 12 abandoned oil and gas wells within the project area, including on the adjacent Cielo Vista site and within the surrounding community. On the project site there are 3 active wells and 4 abandoned wells. Mitigation has been included to require a Combustible Gas/Methane assessment and a Methane Control Plan if necessary to reduce impacts to less than significant. Implementation of the proposed project will result in lower fire hazard risk than currently
	provided will result in less than significant impacts. There are no unavoidable significant impacts with	exists on the site, because project design features and mitigation measures will provide

Environmental		
Issue/Topic	Project Specific Impact	Conclusion Regarding Cumulative Impacts
	project implementation.	benefits to the surrounding areas through redundant layers of fire protection systems. Two gravity-fed water reservoirs on-site will provide water and adequate water pressure for firefighting purposes. Fuel modification zones are required, significantly reducing the site's fuel sources for a wildfire. A large area of highly flammable vegetation will be converted to lower flammability landscapes. Fuel breaks will be provided on the south and southwestern portions of the site within Blue Mud Canyon, which serve as an extension of the formal fuel modification zones. Project design includes fire-hardened structures that are ember-resistant. A community evacuation plan will be in place, including implementation of the OCFA Ready, Set, Go Program to educate residents about evacuation procedures. Emergency vehicle staging areas will be provided in three locations. With implementation of mitigation measures and project design features, cumulative impacts are
Hydrology and Water Quality	The Proposed Project has the potential to degrade water quality during grading and construction operations. However, the project has been designed to comply with all water quality standards and SWPPP and NPDES requirements. Project Design Features include dry detention basins, rip- rap pads, flow restrictors, and best management practices to reduce erosion and siltation from storm water runoff post-construction. These features have been incorporated to ensure that impacts to hydrology and water quality will be less than significant. There are no unavoidable significant impacts associated with the project.	less than significant. The increase in impervious surfaces resulting from the Proposed Project and the surrounding proposed development could increase the potential for flooding. Cumulative development will increase impervious surfaces and could potentially increase the potential for flooding in the area as well as result in the alteration of drainage patterns. However, the County requires all new development to design and implement low impact development that mimics the pre- development existing flows, volumes and water quality prior to discharge from the site. In addition, the Proposed Project will result in a reduction of runoff with implementation of a Water Quality Management Plan and a drainage system. Therefore, no cumulative impacts will occur to the proposed project or adjacent development.
Land Use and Planning	The Proposed Project is consistent with County of Orange General Plan Land Use Element policies and complies with zoning regulations. The project is also consistent with City of Yorba Linda General Plan policies, including density assumptions for the site. However, it is inconsistent with provisions of the City's Hillside Development/Grading/Fire Protection ordinance with respect to the height of retaining walls and grading on ridgelines. Prominent ridgelines on the site, including the northern and eastern ridgelines separating the site	The Proposed Project, combined with other development and future development in the surrounding area, will increase the intensity of the land use regionally. The Proposed Project and the proposed adjacent Cielo Vista project are consistent with the City's General Plan designation for single-family residential use, which identifies a density of 1.0 dwelling unit per acre. The Proposed Project has a density of 0.73 units per acre, while the proposed Cielo Vista project has a density of 1.33 units per acre.

Environmental		
Issue/Topic	Project Specific Impact from Chino Hills State Park, would not be impacted by the project. The inconsistency with the City's Hillside ordinance is not considered a significant impact, because the ordinance does not apply to County projects. No mitigation measures are	Conclusion Regarding Cumulative Impacts Cumulatively, both projects are consistent with the Murdock Area development envisioned in the Yorba Linda GP. Although Estate Lot 1 is viewed at a distance from San Juan Hill Lookout in Chino Hills State Park, the Proposed Project is
	required. There are no unavoidable significant impacts associated with the Proposed Project.	consistent with the Yorba Linda Hillside Development/Grading/Fire Protection Ordinance because the Proposed Project has incorporated design features to reduce this visual impact. There will be no cumulative impacts related to land use. The Proposed Project is substantially consistent with the goals and policies of the Yorba Linda GP and the Chino Hills State Park General Plan. With the approval of the proposed General Plan Amendment, the Proposed Project will be consistent with the County General Plan. Therefore, cumulative impacts are less than significant.
Noise	Short-term construction and long-term operational impacts have been reduced through the provision of mitigation measures. However, because the project vicinity has low baseline levels for ambient noise, small increases in noise due to construction will be perceptible to adjacent existing development. These are short-term impacts and will cease upon construction completion. Long-term impacts include the increase in noise due to additional traffic. Impacts are considered significant if they increase noise levels by 3 dB CNEL. Therefore, traffic noise is considered significant. However, noise levels are anticipated to remain under the 65 dB CNEL County threshold.	A substantial noise increase of +3 dB CNEL from project-related traffic will occur in both the existing and future time period under both Option 1 and Option 2. A significant cumulative traffic noise increase above the +3 dB CNEL threshold will occur under Option 2 along Aspen Way, under Option 2 access conditions, and along San Antonio Road north of Yorba Linda Boulevard. Therefore, it is anticipated that the Proposed Project will result in cumulative noise impacts in that a permanent increase in ambient noise levels will occur, notwithstanding that County noise level standards of 65 dB CNEL will not be exceeded. The Proposed Project, when combined with the proposed Cielo Vista project, will create additional noise from traffic that will exceed the 3 dB perceptible noise threshold and will be cumulatively considerable and significant.
Population and Housing	Development of the project site was anticipated in the County and Yorba Linda General Plans. The Proposed Project will provide additional housing to meet housing needs and will provide employment during project construction. While an additional 1,787 dwelling units are anticipated in the area in the next 6 to 7 years, the RHNA projections for 2008-2014 and 2014-2012 accommodate the residences, as well as the 340 dwelling units form the Proposed Project. The Proposed Project will not result in significant impacts, and no mitigation measures are required. There are no anticipated unavoidable significant impacts related to population and housing.	The proposed Cielo Vista project, which is adjacent to the project site, will result in an additional 112 single-family residential units. This will have a positive benefit in meeting housing needs. The RHNA projections through 2012 accommodate the cumulative and Project proposed developments. No significant cumulative impacts will result related to the additional population and housing.

Environmental		
Issue/Topic	Project Specific Impact	Conclusion Regarding Cumulative Impacts
Public Services	The Proposed Project will not result in significant impacts. Mitigation measures are included that provide for payment of fair share fees for capital and infrastructure needs, and payment of SB 50 school impact fees will reduce impacts to less than significant.	The Proposed Project, in addition to past, present, and planned probable projects in the vicinity, will result in an increased need for fire, police, school, parks, and library services. Impacts will be mitigated on a project-by-project basis with the payment of required fees to reduce such impacts. Both the Proposed Project and the proposed Cielo Vista project will be serviced by the same providers and will not create significant cumulative impacts.
Recreation	The Proposed Project exceeds the minimum requirements for provision of parks. In addition, the project will provide trails and trail connections that will be a positive benefit to surrounding residents. No mitigation measures are required related to recreation.	Surrounding developments will have access to the proposed public trails and trail linkages to existing equestrian, hiking, and biking trails. This is a positive benefit and will not create a cumulative impact. Because the Proposed Project will include nine community parks and several trails and trail connections, cumulative impacts will be less than significant.
Transportation and Traffic	Option 1 Access - Impacts under existing and Year 2020 conditions will be less than significant with mitigation as proposed. Year 2035 is forecast to operate at an unacceptable level of service at Yorba Linda Boulevard at Savi Ranch Parkway and Weir Canyon Road at SR-91 EB Ramps. Option 2 Access - Impacts under existing and Year 2020 conditions will be less than significant with mitigation as proposed. Year 2035 conditions will impact the same two intersections as Option 1. Mitigation Measures included herein, including increasing the queue length at Yorba Linda Boulevard and Via del Agua and the payment of fair share fees are expected to reduce impacts to less than significant.	The Proposed Project is expected to contribute to roadway operation deficiencies at the intersection of Yorba Linda Boulevard at Via del Agua and Yorba Linda Boulevard at Savi Ranch Parkway. However, mitigation proposed for both intersections will offset the cumulative impacts. The proposed Cielo Vista project will add 112 residential units to the surrounding area. These residences were included in the Traffic Analysis prepared for the proposed project. A three-phase signal at Yorba Linda Boulevard and Via del Agua is considered a planned improvement with the proposed Cielo Vista development. Installation of the signal will reduce impacts for both projects to a less than significant level at this intersection.
		The Traffic Impact Analysis determined that the Proposed Project, combined with the proposed Cielo Vista project, will not result in significant cumulative impacts with implementation of mitigation and payment of fair-share fees. Fees will be collected by the City to provide new and upgraded transportation improvements when necessary to mitigate impacts. No cumulative impacts are anticipated with project develop- ment.
Utilities and Service Systems	The Proposed Project will provide adequate water and sewer infrastructure as approved by the YLWD, two underground water reservoirs, and on- site improvements to accommodate gas, electric, telephone and cable service. Mitigation measures are included to ensure coordination with service	Cumulative impacts will result in an increase in the demand for utility and service systems for new development in the area. The adjacent proposed Cielo Vista and anticipated Friend developments will result in a total of 494 new residences.

Environmental		
Issue/Topic	Project Specific Impact	Conclusion Regarding Cumulative Impacts
	providers to reduce potential impacts to less than significant. There are no unavoidable significant adverse impacts associated with utilities and service systems.	The YLWD 2005 Water Master Plan and the 2013 NEAPS have determined that adequate water supply exists, and no cumulative impacts are anticipated.
		The Sewer Report prepared for the Proposed Project concludes that there will be adequate sewer capacity for the Proposed Project, the proposed adjacent Cielo Vista project, and all other past, present, and probable future projects to connect to existing systems. The Proposed Project will not share any drainage improve- ments with the proposed adjacent Cielo Vista project or any other projects. The Fountain Valley and Huntington Beach wastewater treatment facilities have adequate capacity for their service areas and no cumulative impacts will result.
		Gas and electric service has been confirmed and adequate capacity exists for provision of these services. Future developments will be required to secure service on a project-by-project basis for gas, electric, telephone, and cable.
		Mitigation measures have been included for the Proposed Project to require that adequate coordination occurs with all utilities and service providers to ensure no cumulative impacts will result.