CHAPTER 5.0 CUMULATIVE IMPACTS

CEQA requires preparation of a cumulative impact analysis. Cumulative impacts result when the effects of an action are added to or interact with other effects in a particular place and within a particular time. It is the combination of these effects, and any resulting environmental degradation, that should be the focus of cumulative impact analysis.

CEQA Guidelines Section 15355 defines a cumulative impact as one in which two or more individual effects which, when considered together, are considerable or that compound or increase other environmental impacts.

- a. The individual effects may be changes resulting from a single project or a number of separate projects.
- b. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

Methodology

An EIR must discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable. CEQA requires that the discussion of cumulative impacts reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone.

Section 15130(b)(1) of the CEQA Guidelines describes two approaches for analyzing cumulative impacts:

List Method – A list of past, present, and probable future projects producing related or cumulative impacts, including those projects outside the control of the agency; or

Projection Method – A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. A summary of projections may also be contained in an adopted or certified environmental document for such a plan. Such projections may be

supplemented with additional information, such as data provided through regional modeling programs.

The cumulative analysis in this document generally uses the project list approach. Some topic areas, such as traffic or air quality rely on regional modeling or projection forecasts for analysis of future conditions and when cumulative impacts may not be limited to a local area. Those topic areas describe any projections used for the cumulative analysis and why that approach is most appropriate.

Cumulative Project List

The projects listed in Table 5-1 were identified by the City of San Diego as being within appropriate proximity to the Project site and have the potential to contribute to cumulative environmental impacts. Figure 5-1 identifies the locations of these cumulative projects.

Project	Description	Status
Town and Country	Proposal is to amend the Atlas Specific Plan to create 9	Initiation of MV-CP amendment
(MV Atlas)	parcels, demolish some existing commercial structures, reduce existing hotel rooms (from 954 to 700), reduce existing conference area (from approximately 213,000 to 177,000 square feet), construct 840 dwelling units, and create 4.37 acres of park area.	process has begun
Riverwalk	Proposal is to amend the Levi-Cushman Specific Plan, create a new specific plan, and apply for discretionary permits. The development is envisioned as a mixed-used, transit-oriented development, consisting of up to 4,000 new multi-family housing units, 200 acres of commercial office and hotel development, park facilities, and a new trolley stop.	Applicant has not yet submitted a project.
Camino del Rio Mixed Use Project (Bob Baker site)	Proposal is to demolish existing structures and surface parking lots, and construct a mixed-use project of 305 residential units, approximately 5,000 square feet of office space, approximately 4,000 square feet of retail space, and a six-level parking structure with a total building area of approximately 564,000 square feet.	Approved on October 30, 2014 by the Planning Commission . Demolition permits were approved on March 11, 2015. Building, electrical, mechanical, plumbing, and grading permits currently under review.
Civita (formerly known as Quarry Falls)	Proposal is for 4,780 residential units, 603,000 square feet of retail/commercial, and 620,000 square feet of office. Civita is in the Quarry Falls Specific Plan.	Phase I of the project is under construction.
Union-Tribune Mixed Use Project	Proposal is to construct 286,000 square feet total building area including: two 7-story buildings, 200 residential units, 3,000 square feet retail, 60,000 square feet outdoor amenities space; and 212,000 square feet parking structure.	Project approved by Planning Commission, but a City Council appeal hearing is pending.

Table 5-1Cumulative Project List

Project	Description	Status
University of San	Proposal for Conditional Use Permit (CUP), amending	Currently under multi-discipline
Diego Master Plan	CUP #92-0568 and 1996 Master Plan/Design Guidelines,	review.
	would increase student enrollment to a maximum of	
	10,000 full time equivalent students with proposed	
	development over a 20-year period. The 180 +/- acre site	
	is located within the RS-1-7, RM-3-7, OR-1-1 and OP-2-	
	1 zones within the Linda Vista Community Plan area.	
Hazard Center	Proposal to demolish existing commercial to construct	Vesting Tentative Map, Site
Redevelopment	new residential uses and parking on site. Five-story row	Development Permit, Planned
	homes (73 residential units) and 22-story tower (198	Development Permit, and Land
	residential units), with additional commercial along	Use Plan approved by City
	Hazard Center Drive. Also 21-story tower (202	Council on May 18, 2010. No
	residential units) and commercial on northeast corner of P_{max}	applications for building permits
	Friars Rd and Frazee Road. A 0.63-acre public park is proposed in southwest corner of project site.	have been received by the City.
Legacy	Proposal is to construct a mixed-use development with	Design discussion at Mission
International Center	religious, lodging, administrative, recreational, and	Valley Planning Group Design
International Center	commercial uses. The project is located south of I-8 at	Advisory Board in March 2015
	875 Hotel Circle South and consists of two parcels,	Advisory Doard in March 2015
	approximately 18.1 acres. Religious center and	
	associated buildings approximately 400,000 square feet.	
	Total of 878 parking stalls (195 surface and 683	
	subterranean or parking structure).	
Vagabond Inn	Proposal to increase number of hotel rooms on 2.77-acre	Approved by City Hearing
0	site, from 131 rooms to 168 rooms.	Officer February 28, 2015
Discovery Center	Proposal to create a 17-acre nature park, community	Currently under review
	center, and discovery center. Discovery Center River	
	Trail also proposed. 9,450 square feet indoor space, 120-	
	seat outdoor classroom.	
Shawnee LLC/CG	Proposal is for a Master Plan that requires a Community	Approved by City Council in
7600 Master Plan	Plan Amendment to alter the plan's Industrial uses to	October 2012.
	include a total of 1,023 multi-family residential units	
	along with approximately 37,500 square feet of specialty	
	retail which would generate 7,692 ADT. Proposal is at	
	Mission Gorge Road at the intersection of Old Cliffs	
	Road in the Navajo Community.	

5.1 CUMULATIVE EFFECTS FOUND TO BE SIGNIFICANT

Based on the analyses contained in Chapter 4.0 of this EIR and through the analysis presented here, the Project's contribution to cumulative impacts associated with air quality and odor, historical resources, hydrology and water quality, public utilities, and visual effects and neighborhood character would be cumulatively considerable.

Air Quality and Odor

The geographic scope for the analysis of cumulative air quality impacts is considered the San Diego Air Basin. It is appropriate to consider the entire air basin as air emissions can travel substantial distances and are not confined by jurisdictional boundaries; rather they are influenced by large-scale climatic and topographical features. While some air quality emissions can be localized, such as a CO_2 hotspot or odor, the overall consideration of cumulative air quality is typically more regional. By its very nature, air pollution is largely a cumulative impact.

Section 4.1 provides analysis of potential air quality impacts resulting from both construction and operation of the Project. Because the intensity of operational emissions would increase above those accounted for in the RAQS, the Project may conflict with or obstruct implementation of the applicable air quality plan and the impact would be significant. Annual project construction emissions were found to exceed the annual significance thresholds for NO_x and would result in a significant and unavoidable impact as this would potentially violate the ambient air quality standard or contribute substantially to an existing violation even with the implementation of mitigation. Annual construction emissions from the other pollutants were found to be below the annual significance thresholds. The Project would also result in emissions in exceedance of the thresholds for NO_x and CO associated with increased events, such as a concert. Additionally, the Project would generate PM10 fugitive dust emissions that would exceed 100 pounds per day of PM dust during both construction and operation activities and this impact would be significant. Construction of the Project would not expose sensitive receptors to substantial pollutant concentrations that would result in a health risk. Construction or operation would not create objectionable odors.

Other cumulative projects located both in Mission Valley and throughout the air basin would also generate construction and operational air emission that could contribute to air quality impacts. Generally, projects that are consistent with the applicable planning document used to formulate the RAQs and SIP would not produce emissions beyond what is forecast and would not hinder the ability to meet air quality standards. For example, the EIR analyses for the Union Tribune Mixed Use project (City of San Diego 2015), Camino del Rio Mixed Use Project (City of San Diego 2014), and the Civita project (City of San Diego 2008) found that projects were consistent with applicable planning documents and would be consistent with the RAQS and SIP and not affect the ability of the RAQS or other regional plans to meet federal and state clean air standards. In addition, analysis found that implementation of those projects would not generate air pollutants. The Hazard Center Redevelopment Project EIR, however, identified significant unmitigable direct and cumulative air quality impacts related to health risks associated with exposure to diesel emissions (City of San Diego 2010).



Stadium Reconstruction EIR

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The criteria air emissions thresholds as described in Section 4.9 are designed to identify those projects that would result in significant levels of air pollution and to assist the region in attaining the applicable state and federal ambient air quality standards. Projects that would exceed the thresholds of significance may contribute a considerable amount of criteria air pollutant emissions to the region's emissions profile, and may potentially impede attainment and maintenance of ambient air quality standards. Because the Project would exceed project-level air quality significance thresholds, the Project's construction and operational emissions would be cumulatively considerable. Therefore, impacts related to a cumulatively considerable net increase of criteria pollutants would be significant.

Historical Resources

The geographic scope of consideration for the cumulative analysis of historical resources includes the Mission Valley area. The Mission Valley area presents a unique prehistoric and historic context within the region as it was settled in a fairly independent manner from the surrounding area due to the valley's relative abundance of resources available within an arid environment during prehistoric times. During the period of historic development, frequent flooding plagued the area and discouraged development for many years.

As outlined in Section 4.7, the general area of the Project site has a high archaeological sensitivity and while the construction of Qualcomm Stadium likely destroyed most archaeological remains in the Project area, the possibility exists that buried archaeological deposits are present in undisturbed soils and may be significantly impacted by excavation or grading required for the Project. Mitigation is proposed to reduce Project impacts to archaeological resources to less than significant levels. The Project would have no impacts to religious or sacred uses. While there is no evidence indicating the presence of human remains in the Project site, excavation activities have the potential to disturb unknown human remains in undisturbed ground. Implementation of mitigation would reduce Project impacts related to the disturbance of human remains to less than significant levels.

Qualcomm Stadium has been a unique element in the San Diego region since its opening in 1967. The stadium received the distinguished American Institute of Architects Honor award and It was the first major sports facility to receive such an honor. Qualcomm Stadium has been identified as eligible for individual listing in the NRHP, CRHR, and the City of San Diego Register of Historic Resources as a Historical Landmark at the local level due to its association with significant recreation/entertainment events and trends, and its design as a distinctive Modern Brutalist building. Implementation of the Project would require the demolition of Qualcomm Stadium and this is considered a significant direct and unavoidable impact to a

historic resource. Mitigation proposed would provide a record of the structure, but would not mitigate the physical impact to the historic resource to a less than significant level.

Because Mission Valley is known to contain significant prehistoric and historic resources, cumulative projects located throughout the valley would have the potential to impact such resources in a manner similar to the Project. The EIR analyses for the Union Tribune Mixed Use project (City of San Diego 2015), Hazard Center Redevelopment project (City of San Diego 2010), Camino del Rio Mixed Use Project (City of San Diego 2014), and the Civita project (City of San Diego 2008) all identified the potential for impacts to unknown buried cultural resources. Similar to the Project, these cumulative projects propose and are subject to similar mitigation measures and regulatory requirements to reduce potential impacts to archaeological resources to a less than significant level. Generally, mitigation proposed by the projects incorporates monitoring and a data recovery program that allows any discovered cultural resource data to be protected and preserved to ensure that the critical information necessary to the future study of cultural resource sites and artifacts is not lost or destroyed, thus minimizing the impact.

While the majority of the impacts associated with implementation of the Project and other cumulative projects in the Mission Valley area would be reduced to less than significant through the mitigation requirements, the removal of Qualcomm Stadium would be unmitigable. The permanent loss of this significant historic resource is considered a cumulatively considerable contribution related to the loss of historic resources.

Hydrology and Water Quality

The cumulative analysis geographic scope includes the San Diego River hydrologic unit as water bodies within the watershed are part of an interrelated hydrologic system that can span community and jurisdictional boundaries. Modifications to a portion of a watershed or water pollution produced by development in one location may result in hydrology and water quality impacts that affect other water bodies or the entire region.

As detailed in Section 4.8, the Project must adhere to various mitigation measures and permit requirements that would minimize the potential for significant impacts associated with the increase in impervious surfaces, associated increased runoff, and potential flooding on- or offsite. Incorporation of necessary construction, operations, and site design standards and permits would ensure less than significant impacts to groundwater resources as a result of the Project as well as minimize pollutant discharge to receiving waters. Proper adherence to and compliance with regulations and avoidance and minimization measures specified in Section 4.8 would minimize with erosion and sedimentation potential. Similarity, adherence to avoidance and minimization measures would result in less than significant impacts to water quality standards and groundwater quality. However, during the construction phase when both stadium foundations are present, there would be a significant and unavoidable impact to the area's floodplain during extremely large and rare storms (100-year or greater return frequency) during the 3-to-5-year construction period. This temporary impact could not be mitigated, but would cease once construction was finalized.

Mission Valley is known for flooding problems during large rain events. Similar to the Project, regulatory requirements, permit requirements, impact avoidance and minimization measures, and various construction, operation, and site designation standards would also be required of cumulative projects. Such required measures and appropriate site designs would serve to minimize potential for adverse effects to the hydrologic functions or water quality of the area and watershed. For example, the Civita project EIR (City of San Diego 2008), the Union Tribune Mixed Use project EIR (City of San Diego 2015), and Camino Del Rio Mixed Use Project all identified less than significant direct or cumulative impacts related to hydrology and water quality with implementation of various impact avoidance and minimization measures and permit requirements to ensure proper runoff and stormwater design and flooding control.

Thus, the potential for water quality or hydrology affects to combine to create a cumulative impact would be minimized. However, during the construction phase when both stadium footprints are present for a possible 3-5 years, the Project would have the potential to temporarily create additionally flooding conditions during very large rain events. Thus, the Project would make a cumulatively considerable contribution to impacts related to regarding hydrology or water quality during the construction phase.

Public Utilities

The geographic scope for public utilities cumulative analysis is the San Diego region. Public utilities can be specific to jurisdictions; however, some service providers offer service throughout a region and across multiple jurisdictions. Thus, changes in development influence the demand for utilities across the region and can drive the need for new or expanded utility infrastructure.

As detailed in Section 4.14, implementation of the Project would result in relocation of existing on-site public utilities. Sewer, storm drainage, electric, gas, and communications facilities would be of similar size to the existing facilities. It would be necessary to upsize on-site water facilities, but the transmission facilities serving the site would not be modified. Current levels of service would be maintained. The City's existing and planned water supplies are sufficient to accommodate development of the Project and the Project would also include water conservation measures to further reduce water demand. The Point Loma Wastewater Treatment Plant has excess capacity that would be sufficient to handle the wastewater generated by the Project. Existing electric and gas services have adequate capacity to supply to supply the Project. Implementation of the Project would result in a substantial increase in solid waste during construction and demolition while Project operations would result in the generation of similar amounts of waste as the existing Qualcomm Stadium. Implementation of strategies and measures in the WMP, requirements to achieve a LEED Gold certification, and compliance with the San Diego Municipal Code related to waste diversion would ensure a less than significant impact to solid waste facilities.

Utility providers typically have adopted long-term service, supply, and infrastructure plans that forecast the future demand for utility provision and anticipate infrastructure projects necessary to meet projected needs. These plans are typically based on the land use information and adopted planning documents to determine the future service requirements and allow the provider to secure the adequate supplies necessary to avoid future shortages. Examples of these types of planning documents include the San Diego County Water Authority's 2010 UWMP (SDCWA 2011) and 2013 Regional Water Facilities Optimization and Master Plan Update (SDCWA 2014), City of San Diego's 2012 Long Range Water Resources Plan (City of San Diego 2012), and the SDG&E 2012 Long Term Procurement Plan (SDG&E 2012). Thus, cumulative projects that are consistent with land use planning documents and anticipated growth forecasts would be accounted for in the planning of future utilities supplies and infrastructure. Additionally, similar to the Project, cumulative projects would be required to implement water and energy conservation measures as required by the City and applicable regulations as detailed in Section 4.14.

The Civita project EIR identified significant unmitigable cumulative impacts related to solid waste disposal (City of San Diego 2008). The Union Tribune Mixed Use project, Camino Del Rio Mixed Use project, and the Hazard Center Redevelopment project EIR (City of San Diego 2015, 2014, 2010) project EIRs all found the potential for significant solid waste disposal impacts, but relied on mandatory compliance with waste reduction measures to minimize the impact to less than significant (City of San Diego 2015). However, even with implementation of waste disposal reduction measures and diversion requirements for both the Project and cumulative projects, the individual cumulative projects would still create a substantial combined volume of solid waste, particularly during construction and demolition activities that could cause local landfill capacity to be adversely affected. Thus, the Project is considered to result in a cumulatively considerable contribution to cumulative impacts associated with solid waste disposal.

Visual Effects and Neighborhood Character

The geographic scope of consideration for the visual analysis is the Mission Valley area because Qualcomm Stadium is one of the most distinct visual resources in Mission Valley and can be viewed from a wide variety of locations. Throughout Mission Valley, long east-west views are available, while short north-south views are also available.

As described in Section 4.15, the Project would be designed in accordance with the applicable Mission Valley Community Plan Urban Design Guidelines. The new stadium would be built with materials, colors, and massing that would be designed to fit within the existing and planned visual context. While the Project proposes uses very similar to the existing Project site and the overall visual character of the Project site would remain similar, the visual change would be substantial with the removal of Qualcomm Stadium and location of a new stadium in another location within the Project site. In many cases, the visual result would generally be trading one stadium view for another, but from certain viewing locations the new stadium would have a more dominant visual presence and significantly change the public views and visual character. As detailed in Section 4.15, Qualcomm Stadium is designated by the MVCP as a landmark/sensitive view and the removal of this visually prominent feature and community identity symbol/landmark would be a significant visual impact that cannot be mitigated. However, the new stadium is anticipated to have a similar effect on the Mission Valley community and become a new visually recognizable landmark of its own. Additionally, a 20-foot-tall retaining wall along San Diego Mission Road would create a significant negative aesthetic feature on the Project site, but would be mitigated to less than significant. During the construction phase, a short-term dual stadium presence could be visible from multiple existing public view locations, but is temporary and is not considered significant. Cut and fill throughout the Project site would be necessary to create the appropriate grades required; however, no ridgeline, other highly scenic landform, or environmentally sensitive area would be altered and this is considered a less than significant impact regarding landform alteration.

The Project would include lighting consisting of stadium event lighting and exterior stadium lighting (i.e., building perimeter lighting and parking lot lighting), as well as interior emergency lighting. Other reflective materials, such as solar PV panels and light colored materials would be also be used. Similar to existing conditions from Qualcomm Stadium, this would increase the ambient lighting of the nighttime sky during stadium events and increase the glare during sunny days in the Project area. However, with implementation of mitigation measures, nighttime lighting and daytime glare would be minimized to not result in a substantial change in reflection of light or emission of ambient light at night.

The development of cumulative projects within the Mission Valley area continue to slowly and incrementally change and alter the existing visual character of the Mission Valley community. For example, the Civita project EIR identified that implementation of the project would result in significant and unmitigable visual impacts from landform alterations and changes to the visual character of the project site and surrounding area (City of San Diego 2008). Even cumulative projects that do not result in substantial visual changes to scenic resources or viewshed character and are in compliance with all City and community visual resource policies, such as described in the analysis of the Union Tribune Mixed Use project EIR (City of San Diego 2015) result in some alteration of the visual environment.

For these reasons, the removal of the existing prominent visual feature of Qualcomm Stadium, which is designated a landmark/sensitive view and is considered a Mission Valley community identity symbol and landmark would result in a cumulatively considerable contribution to impacts associated with visual resources throughout the Project viewshed.

5.2 CUMULATIVE EFFECTS FOUND NOT TO BE SIGNIFICANT

Based on the analyses contained in Chapter 4.0 of this EIR and through the analysis presented here, the Project's contribution to cumulative impacts associated with biological resources, energy, geology/soils, GHG emissions, hazardous materials/human health/public safety, land use, mobility, noise, paleontological resources, and public services and facilities would not be cumulatively considerable.

Biological Resources

The cumulative analysis geographic scope for biological resources includes the Mission Valley area. Biological resources can have commonalities across a large regional area, while also having very unique and specific characteristics in certain locations. In Mission Valley, the dense urbanized setting creates limited habitat opportunities and biological resources tend to be fairly isolated with areas of connectivity restricted to a few linear features such as Murphy Canyon Creek or the San Diego River.

As described in Section 4.2, the Project would occur entirely within urban/developed habitat. Operation-related impacts from avian collisions with the new stadium or PV facilities that could occur to special-status avian species and avian species protected under the MBTA would be significant and unavoidable even with mitigation. The potential for direct biological impacts would be limited to bat species or avian species protected under the MBTA that may nest in the ornamental trees present within the parking lot and would be mitigated to less than significant. Indirect impacts to sensitive species potentially occurring in the Project area from exotic species

introduction, changes in hydrology, unauthorized access resulting from Project construction or operation would be significant, but reduce to less than significant with mitigation. Project construction may also result in indirect noise and lighting impacts to sensitive avian species, but would be mitigated. Similarly, the Project could result in indirect impacts to riparian vegetation communities that would be significant, but reduced through mitigation. Jurisdictional resources associated with Murphy Canyon Creek and the San Diego River could be indirectly significantly impacted by the introduction of exotic species, changes in hydrology, and unauthorized access, but these indirect impacts would be reduced through mitigation. Indirect impacts to wildlife movement would be significant, but mitigable. The Project would comply with all approved local, regional, state, and federal regulations, policies, ordinances, and finalized HCP/NCCP conservation plans. Indirect impacts associated drainage, toxics, lighting, noise, barriers, and invasives, brush management, and grading/land development have potential to indirectly impact adjacent MHPAs. Potential construction- and operation-related indirect significant with mitigation.

The Mission Valley area is highly urbanized with a wide variety of developed uses. Urban/developed areas have been constructed upon or otherwise physically altered to an extent that native vegetation is no longer supported or occurs in small fragmented locations. Developed land is characterized by permanent or semi-permanent structures, pavement or hardscape, and landscaped areas that often require irrigation and is generally not conducive for the support of native or sensitive species. As described Section 4.2, wildlife use of remaining biological areas, such as the San Diego River and Murphy Canyon Creek are limited given the density of development surrounding the corridor and the corridor's narrow width. Because of the restricted availability of suitable habitat land, many projects or redevelopment located on previously disturbed lands within Mission Valley have minimal biological resources. For example, the EIR for the Camino Del Rio Mixed Use identified no biological resources on the project site and no potential for impacts to sensitive resources to occur (City of San Diego 2014). Often, construction in Mission Valley is redevelopment of an existing disturbed and developed site. An example of this type of cumulative development is the Union Tribune Mixed Use project. The project EIR found that direct impacts to candidate, sensitive, or special status species were not anticipated with project implementation; however, impacts to eucalyptus woodlands have the potential to impact nesting birds protected under the MBTA. Mitigation measures required of the project would reduce potential biological impacts to less than significant (City of San Diego 2015). Similar to the Project, the Hazard Center Redevelopment project EIR identified indirect impacts to bird species due to proximity to the San Diego River and MHPA land which would be reduced through mitigation (City of San Diego 2010). Some areas of Mission Valley still contain sensitive habitats, such as the Civita project site. The Civita project EIR identified direct impacts to a total of 14 acres of sensitive habitat, but could be mitigated to less than significant levels (City of San Diego 2008).

Additionally, water quality and hydrology would be maintained at current conditions per Clean Water Act Section 401, 402, and 404 regulations for the Project as well as cumulative projects. Thus, no further degradation or encroachment on the existing riparian corridor of the San Diego River and its tributaries (and associated riparian habitat for listed and special status species) is anticipated beyond existing conditions.

Due to the limited biological resources throughout the cumulative project area and the ability of projects to reduce or minimize any potential for impacts as shown through the various EIR analyses, the potential for adverse biological affects to combine to create a cumulative impact is minimized. The significant impact associated with bird strikes is fairly unique and specific to the Project and is not of the nature to combine with other similar impacts to form a cumulative scenario as most cumulative project do not include development that results in these types of avian strikes. For these reasons, the Project would not make a cumulatively considerable contribution to impacts related to biological resources.

Energy

The geographic scope for consideration of cumulative energy impacts is the San Diego region as a whole. Development throughout the region influences the demand for energy supply and can drive the location and need for new or additional energy production and transmission infrastructure. Energy service providers and their distribution systems generally cover large areas and are not necessarily associated with or restricted to specific governmental jurisdictions.

The Project would be designed to be a sustainable, green building, and would achieve a LEED rating and meet current Title 24 and CAL-Green requirements incorporating sustainable design features that would reduce the project's overall demand for energy. It would be built to current building code standards which require higher level of energy, HVAC, and lighting efficiencies than Qualcomm Stadium utilizes. Without additional project features to further reduce energy consumption, the Project would consume approximately 10 percent more energy than currently consumed and the per seat usage of electricity would increase by 11.3 percent. This increase is anticipated to be reduced to a below the energy consumption levels with project features such as LED lighting and energy control systems. Also, the Project would result in generation of renewable solar PV energy onsite and would reduce the demand for new energy resources while increasing the reliance on renewable energy. Thus, the Project would not result in significant impacts related to energy resources.

Generally, most typical development or redevelopment projects, such as those included in the cumulative project list, do not independently create substantial impacts on energy production or infrastructure. Rather, the demand for energy is influenced by regionwide development. Thus,

many planning documents that forecast energy demand and determine adequate supply and appropriate infrastructure needs and strategies are also on regional scales. The CEC California Energy Demand 2014 to 2024 Final Forecast report describes 10-year forecasts for electricity and end user natural gas in California and accounts for efficiency and conservation initiatives reasonably expected to occur. This forecast shows the continued increase in demand for energy supplies in the state over the next 10 years (CEC 2014). Specific to the San Diego region, SDG&E is a major provider of energy and their 2012 Long Term Procurement Plan (10 years) addresses both energy demand and energy supply resources (SDG&E 2012). Cumulative projects would be subject to federal, state, and local energy conservation and/or alternative energy policies, such as those within the Conservation Element of the City's General Plan or within the Mission Valley Community Plan. This minimizes the potential for unnecessary or wasteful energy use associated with cumulative development or the demand for energy beyond that accounted for in regional supply forecasts and production. For example the Camino Del Rio Mixed Use project EIR found that with incorporation of LEED standards and sustainable design features, the project would operate more efficiently than existing development and not contribute to a significant cumulative impact on energy demand.

Because the Project would operate more efficiently than the existing Qualcomm Stadium and other cumulative projects throughout the region would also be subject to energy conservation measures to avoid wasteful or unaccounted for energy demand, the Project would not make a cumulatively considerable contribution to a significant impact on energy resources.

Geology/Soils

The geographic scope for cumulative impacts is the Mission Valley area and immediately surrounding lands. Geology and soil features can be very specific to certain locations and sites, but can also have broad reaching elements, such as faults and underlying bedrock formations. However, potential geologic or soil hazards resulting from development is generally localized to the site and immediate surrounding lands rather than a broad reaching area.

As detailed in Section 4.4, the Project site is not underlain by any active or potentially active faults and the seismic design of the Project would be performed in accordance with the requirements in the CBC and the SDMC, thus minimizing the potential for seismic hazards. Due to the presence of loose granular material and a high groundwater level, there is potential for liquefaction and settlement to occur. These types of soils hazards are typically reduced through appropriate site design and construction measures determined through site specific geologic investigations and implementation of Project design in accordance with CBC and SDMC. The potential for tsunami inundation or flooding at the site as a result of a seiche is considered to be very low. Also, given the relatively flat site topography and the underlying alluvial deposits, the

Project has a low potential for geologic instability associated with landslides. Construction of the Project would expose and disturb soils and increase the potential for soil erosion and runoff; however, potential erosion impacts during construction would be avoided with adherence to the City's grading ordinance and implementation of a SWPPP and BMPs.

Throughout the Mission Valley area, cumulative projects would also be susceptible to similar geologic hazards caused by unstable geologic conditions or soils, including seismic activity, liquefaction, settlement and landsliding. The specific geologic conditions of each individual project site, soil type, and project excavation requirements would dictate the severity of the potential geologic risks. Cumulative projects would be subject to the same regulations and engineering requirements as the Project, such as the City's grading ordinance, a SWPPP and associated BMPs, and CBC building codes. Adherence to applicable regulations and design requirements would serve to minimize potential geologic risks associated with development. For instance, the Civita EIR (City of San Diego 2008), Camino Del Rio Mixed Use project EIR (City of San Diego 2014), Union Tribune Mixed Use project EIR (City of San Diego 2015), and Hazard Center Redevelopment project EIR (City of San Diego 2010) all found less than significant geologic impacts with implementation of project compliance with regulatory requirements or mitigation requiring adherence to appropriate design measures.

Thus, the potential for adverse geologic or soil hazards to combine to create a cumulative impact would be minimized through compliance with regulatory requirements. For these reasons, the Project would not result in a cumulatively considerable contribution to impacts related to regarding geology and soils.

Greenhouse Gas Emissions

The geographic scope of consideration for GHG emissions is on a global scale as such emissions contribute, on a cumulative basis, to global climate change. Given the nature of environmental consequences from GHGs and global climate change, CEQA requires that lead agencies evaluate the cumulative impacts of GHGs, even relatively small additions, on a global basis. By nature, greenhouse gas evaluations are a cumulative study. The cumulative analysis considers both global and regional projections of GHG emissions as well as local projects that may contribute to GHG emission impacts.

Construction-related GHG exhaust emissions, primarily in the form of CO_2 would be generated by sources such as heavy-duty off-road equipment, trucks hauling materials to the site, and construction worker commutes. Qualcomm Stadium annual operational GHG emissions were calculated at 19,919 MT CO_{2e} . The analysis presented in Section 4.5 shows that the Project would result in a net increase of 7,349 MT CO_2e from existing conditions. However, the analysis estimates that the Project at full buildout would result in a 29.3% reduction in long-term operational GHG emissions from business as usual conditions and therefore would not impede the implementation of AB 32. Thus, the Project would not generate GHG emissions that may have a significant impact on the environment. Additionally, the Project would not conflict with any applicable plan, policy, or regulation for the purpose of reducing GHG emissions. In the case that the Project was to apply for AB 900 CEQA streamlining, the Project would be required to purchase voluntary carbon credits.

The state of California produced approximately 459 MMT of CO₂e in 2013 (ARB 2015). More locally, the most recent GHG inventory for the City for the year 2010 estimated the total emissions at 12.8 MMT CO₂e per year (City of San Diego 2014). Accounting for future population and economic growth, the City estimates that GHG emissions will increase to approximately 14.0 MMT CO₂e in 2020 and 16.2 MMT CO₂e in 2035. The EIR analyses for the Union Tribune Mixed Use project (City of San Diego 2015), Camino del Rio Mixed Use Project (City of San Diego 2014), and the Civita project (City of San Diego 2008) all identified less than significant impacts to GHG emissions. Generally, the cumulative projects would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of greenhouse gases.

While there is an overall net increase in GHG emission associated with the Project, the would result in a 30.93% reduction in long-term operational GHG emissions from business as usual conditions and would not impede the implementation of AB 32 or conflict with any other GHG reducing plan, policy, or regulation. Because of this long term reduction, the Project would not make a cumulatively considerable contribution related to the emission of GHG.

Hazardous Materials/Human Health/Public Safety

For cumulative analysis, the hazardous materials geographic scope is generally restricted to the area immediately surrounding the Project site as the potential for risk is limited to the area immediately surrounding an affected hazardous material site or risk generator. However, other topics associated with human health and safety such as transportation of hazardous materials, wildfire, or airport safety can expand through the surrounding region.

As described in Section 4.6, there are a wide variety of hazardous material and public health and safety issues that are relevant and applicable to the Project site and Project. Many potential impacts related to hazardous materials and public health and safety risks would be minimized and less than significant due to compliance with federal, state, and local regulatory requirements. These legal requirements and regulations, as detailed in Section 4.6 minimize potential for health and safety risks. Inconsistencies between existing emergency response and evacuation plans and

the new stadium would represent a significant impact. However, as mitigation to reduce this impact, the plans and policies pertaining to emergency response and evacuation procedures would be updated to reflect the location and design of the new stadium. Soil and groundwater on the Project site are known to have been contaminated as a result of prior hazardous material releases and pesticides and because development activities have the potential to uncover contaminated soil and groundwater during site grading and excavation, it is considered a potentially significant impact that can be reduced through adherence to regulatory requirements and mitigation. The potential also remains for the transport, use, or disposal of less typical hazardous materials to create a hazard to the public or environment, which represents a significant impact. A detailed Waste Management Plan would be developed to meet local, state, and federal regulations pertaining to the handling and disposal of hazardous materials and waste, including impacted soil and groundwater. The potential risk of upset to the public and the environment as a result of the use of explosive material as part of stadium demolition represents a significant impact and in addition to compliance with applicable regulations and to further ensure that explosive materials are properly handled mitigation is required. Additionally, a Form 7460-1 (Notice of Proposed Construction or Alteration) has not yet been filed with the FAA and therefore a "Determination of No Hazard" has not yet been received from the FAA, and therefore, for purposes of this EIR, it is considered to have a significant impact regarding airport hazards. The receipt of the determination would eliminate this impact and without it the Project could not proceed. All of these potential Project impacts would be mitigated to less than significant levels.

However, the risk of upset to the public and the environment as a result of the Project's proximity to the KMEP MVT and the potential for an incident to occur at that facility and result in harmful off-site consequences to the Project represents a significant impact, although the likelihood of such an event is relatively low. Compliance with applicable regulations and Project design features would reduce the degree of this impact; however, the event, should it occur, would result in a significant and unavoidable impact.

Cumulative projects would also be subject to federal, state, and local regulations related to hazardous materials and other public health and safety issues. In a manner similar to the Project, adherence to these regulatory requirements would reduce incremental impacts associated with public exposure to health and safety hazards in each of the affected project areas. For example, the Union Tribune Mixed Use project EIR (City of San Diego 2015), Camino Del Rio Mixed Use project EIR (City of San Diego 2014), and Hazard Center Redevelopment project EIR (City of San Diego 2010) all identified no impacts or less than significant impacts to health and safety with the adherence to regulatory requirements. Additionally, most hazardous material and safety-related risks are localized, generally affecting a specific site and immediate surrounding area;

thus, minimizing the potential for an impact to combine with another project to create a cumulative scenario.

Because cumulative projects would be fully regulated, thus reducing potential for public safety risks, cumulative impacts associated with exposure to hazards and hazardous materials would be less than significant. While the Project does identify a significant impact due to the proximity of the Project site to the KMEP MVT, this is a hazard that would only occur if an incident were to occur at that facility and the likelihood of such an event is low. The Project does not increase the probability of such an incident and the risk currently exists. Through mitigation and compliance with regulatory requirements, the construction or operation of the Project itself would not create significant human or environmental health or safety risks that could combine with other project impacts to create a significant and cumulatively considerable impact. For these reasons, the Project would not result in cumulatively considerable contribution to impacts related to regarding hazardous materials/human health/or public safety.

Land Use

The geographic scope for land use cumulative analysis includes the Mission Valley Community Plan area and lands immediately surrounding. Land uses and development patterns are typically established in local land use planning documents specific to jurisdictions, but can have implications on surrounding areas.

Section 4.9 details the applicable land use development regulations of the Land Development Code and with the goals and policies contained in the General Plan, MVCP, MVPDO, City of San Diego MSCP Subarea Plan, Montgomery Field ALUCP, City of San Diego MSCP Subarea Plan, SDRPMP, and other adopted or approved planning regulations as they relate to the Project site. As described, the Project may require a minor deviation for the retaining wall height. The deviation would be from San Diego Municipal Code Section 142.0340 Retaining Wall Regulations in All Zones, which limits a retaining wall along the yard setback to a maximum height of 9 feet and the proposed retaining wall could be up to 20 feet. Mitigation is required for visual impacts of the wall that reduce the impacts to less than significant. The wall height deviation would not result in a significant land use impact that would in turn result in a physical impact on the environment, or physically divide an established community. Any inconsistencies with the Development Intensity Overlay District H would not result in adverse physical effects on the environment and would be less than significant. Tables 4.9-1, 4.9-2, and 4.9-3, provide analysis of Project consistency with applicable policies contained in the General Plan, MVCP, and MSCP Subarea Plan, and show that the Project would be generally compatible and consistent with most applicable planning regulations and land use policies. However, the Project was found to be inconsistent with policies specific to the preservation of historic resources and

landmarks, including Qualcomm Stadium, with noise policies specific to event noise levels from the new stadium, and with policies related to aesthetic views of Qualcomm Stadium that were found to be significant if unmitigated. Noise and historical mitigation measures have been proposed and are included in Sections 4.11.4 and 4.7.4 but impacts would still remain significant and unavoidable. Therefore the Project would have significant impacts in meeting some of the environmental goals, objectives, and/or recommendations of the General Plan and MVCP. Generally, the Project would result in a new stadium and parking areas that would replace a very similar land use (the existing Qualcomm Stadium). While there are some significant and unavoidable policy inconsistencies as identified in Section 4.9, the inconsistencies are very specific to the project site and three specific topic areas (historic resources noise, and urban design). The Project is consistent with the MSCP and General Plan in terms of land use and overall vision of development for the site as discussed in the MVCP. The implementation of the Project with these inconsistencies would not substantially modify the use of the Project site from the current conditions or be different than the overall planned land use of the site. The Project would also not cause a shift in land use development patterns in the surrounding areas inconsistent with the land use planning.

The Project would conform to the Montgomery Field ALUCP and its policies, and not result in land use conflicts or conflicts with the Montgomery Field ALUCP. However, the FAA has not been notified of the project and have not issued approval via a Determination of No Hazard to Air Navigation. This is considered significant and would be mitigated by mitigation measure HAZ-4 requiring FAA notification.

Implementation of the cumulative projects known to the Mission Valley area would continue to modify the existing land uses of the area. However, much of the area is already developed with urban uses and planned for additional new uses, infill, and redevelopment. Similar to the Project, this development is governed by the General Plan and MVCP, MVPDO and other planning documents and policies. For example, the Union Tribune Mixed Use Project EIR found that with minor deviations, the project would be consistent with land use plans and no substantial environmental effects would result (City of San Diego 2015). Other cumulative projects, such as the Shawnee LLC/CG 7600 Master Plan, Town and Country, and Riverwalk projects involve amendments, deviations, or revisions to adopted planning documents such as master plans, specific plans, or the Land Development Code. While these projects would modify or deviate from certain elements of existing land use policies, the City would evaluate each project to determine conformance with pertinent policy documents, goals, policies, and recommendations of applicable ordinances. For these reasons, while cumulative projects may slightly modify or propose project elements that require deviations from adopted land use policies and change or redevelop existing land uses on a particular site, these actions would all require consistency analysis and approval by the City, thus minimizing the potential for land use conflicts and incompatibilities to occur. The Hazard Center Redevelopment project EIR did identify a cumulative land use impact related to secondary noise and air quality impacts at a proposed park (City of San Diego 2010).

The Project's inconsistencies with land use policies are very specific to the Project site and Qualcomm Stadium, and these inconsistencies would not create additional land use incompatibilities or policy conflicts that extend or influence areas beyond the Project site. As demonstrated, the Project, when considered with other planned development in the MVCP area and with the cumulative projects identified above, would not result in a significant cumulative land use impact. For these reasons, the Project would not result in a cumulatively considerable contribution to impacts related to land use.

Mobility (Circulation)

The geographic scope of consideration for the cumulative traffic analysis is considered to be the same as the study area defined for the traffic analysis prepared for the Project. The study area encompasses the roadways, intersections, and freeway segments and ramps that could be affected by Project traffic and could have the potential to combine with other local traffic to create degraded traffic conditions. As described in Section 4.10, the Project study area is defined and is bounded by Friars Road from the north, I-8 to the south and I-15 and Mission Gorge Road to the east and SR-163 to the west.

This cumulative traffic analysis uses regional models and growth factor projection methods as opposed to a cumulative project list approach. As detailed in Section 4.10, future cumulative traffic demand (Project Build Out year 2035) was generated using the SANDAG Series 12: 2050 Regional Growth Forecast, which is based on the population and employment information. The adjusted AM peak hour, PM peak hour, and ADT volumes from the SANDAG model were used to forecast traffic volumes for the future year Baseline scenarios. Rather than use the cumulative project list for cumulative consideration as trip generation numbers were not always available for those projects, a conservative 3% per year cumulative growth factor was applied to all intersections, roadways, freeway segments and ramps when analyzing future year traffic forecasts to account for the cumulative projects' influence to the study area as well as for other unanticipated growth within the study area.

Traffic conditions are identical between the 2035 No Project and Project Build out scenarios on non-game days since the Project is a replacement facility and the trips generated from the site would remain constant on non-game days before and after the project implementation.

The Project would not lower by any increment the LOS of any of the streets, freeways, and roadway facilities within the Project study area from what was anticipated in the community plan in the cumulative 2035 Project Build Out game day scenario. The number of trips generated is reduced in comparison to baseline conditions. The Project would not generate traffic in excess of the Mission Valley Plan ADT allotment. None of the intersections, roadway segments, or freeways segments analyzed are expected to experience significant impacts under Project conditions during the 2035 Project Build Out Conditions on game days or generate additional significant traffic at congested study freeway segments and ramps. The 2035 Project Build Out condition would not generate parking deficiencies. The capacity and operations of the MTS trolley line are assumed to remain the same as existing conditions and would not be significantly impacted by the Project. All circulation movements would largely remain the same as existing conditions and access to parking for public facilities including parks or beaches are not located within the vicinity of the Project site and would not be significantly impacted.

It is shown in Section 4.10 through the projected traffic conditions for the No Project Build Out Year (2035) that cumulative traffic conditions are expected to worsen relative to existing conditions with degraded operations at intersections, roadway segments and freeway segments. The analysis shows that the addition of the Project to the cumulative scenario does not create additional adverse traffic conditions or worsen LOS. Because the Project would result in a replacement stadium with less seating capacity than the existing Qualcomm Stadium, it is reasonable to assume that a lower traffic volume would result during events as fewer people would be in attendance. Therefore, even though there would be significant cumulative traffic conditions at certain locations in the Project study area in 2035, the Project would not make a cumulatively considerable contribution to those mobility impacts.

Noise

The geographic scope for the consideration of cumulative noise impacts is the areas immediately surrounding the Project site and along designated haul routes where heavy truck traffic would travel during construction. Generally, noise impacts are limited to the area directly surrounding the noise generator as noise attenuates with distance and only has the potential to combine with other noise sources in the immediate vicinity.

As detailed in Section 4.11, Project construction noise levels would result in a substantial temporary net increase in ambient noise levels during Project construction activities at noise-sensitive receptors in proximity to construction activities. Even with mitigation, this impact would remain significant and unavoidable. Additionally, Project operational noise levels would potentially result in a significant permanent increase in ambient noise levels (3 dBA L_{eq} or greater) at noise sensitive receptors during concert events. Even with mitigation, this impact

would remain significant and unavoidable. Project construction noise levels would not exceed the operational noise levels of the City's noise ordinance at adjacent property lines. However, Project operational noise levels would exceed the City's noise ordinance and property lines and even with mitigation would remain significant and unavoidable. Also, Project construction traffic or operational traffic would not expose people to current or future transportation noise levels that exceed established standards. Due to distance, groundborne vibration generated by construction of the Project would not be perceptible at nearby receptors or houses and would not result in cosmetic or structural damage to nearby structures.

Many of the cumulative projects located throughout the Mission Valley area would be too distant to create a cumulative noise impact as the noise generated by individual projects would not be of the magnitude to change ambient noise conditions in areas overlapping with other noise from other projects.

While both construction and operation noise associated with the Project would cause significant increases in the ambient noise environment, the noise would not be of the magnitude to combine with other cumulative projects as there are none located in immediate proximity to the Project site where noise could combine together to create an worsened noise environment. For this reason, the Project would not make a cumulatively considerable contribution to a cumulative noise impact.

Paleontological Resources

The general geographic scope for cumulative impacts to paleontological resources includes the overall southern California region as interrelated paleontological resources are known to occur throughout the region in various locations and a variety of rock formations. However, the specific locations known to produce paleontological resources are typically quite limited based upon the sensitivity of the underlying bedrock formations.

As described in Section 4.12, the Project would require ground disturbing construction activities, such as excavation and pile driving that could extend into previously undisturbed geologic formations and underlying bedrock material. Artificial fill underlying portions of the Project site has no paleontological sensitivity; however, the City of San Diego Paleontological Guidelines (City of San Diego 2002) indicate that the Friars Formation has a high paleontological sensitivity rating, and three fossil localities in this unit are directly adjacent to the northeast corner of the Project site. Also, unnamed stream terrace deposits in the Mission Valley community of San Diego should be considered of moderate paleontological sensitivity. It is estimated that at least 2,000 cy of material in the moderate sensitivity unnamed stream terrace deposits would be excavated, meeting the grading threshold for a significant impact and required paleontological

monitoring under City guidelines. Incorporation of mitigation monitoring would reduce the potential for impact to less than significant.

The Mission Valley area is underlain by a variety of geologic formations, some of which have a high paleontological sensitivity and are known for producing fossils, such as the Mission Valley Formation, Friars Formation, and Stadium Conglomerate Formation. Projects throughout the area requiring ground disturbance would have the potential to disturb the paleontological resources potentially found in the geologic formations. For example, the Civita EIR identified potentially significant impacts to paleontological resources due to earthwork in sensitive native bedrock that could be mitigated through measures such as monitoring during construction (City of San Diego 2008). Similarly, the Union Tribune Project EIR found potential to result in significant, but mitigable impacts to paleontological resources (City of San Diego 2015).

Similar to the Project and other projects referenced above, additional cumulative projects throughout the Mission Valley area would be evaluated on a project by project basis and conditioned, as necessary, to mitigate potential impacts to paleontological resources. Typically, mitigation measures include paleontological monitoring during ground disturbing activities that allow for the identification of valuable paleontological fossils, if any; and recovery and reporting of any significant resources; thus preserving the historic and scientific importance of the resource. Therefore, implementation of required mitigation measures would reduce the potential cumulative loss of important paleontological resources to a level less than significant. The Project would not result in cumulatively considerable contribution to cumulative impacts related to paleontological resources.

Public Services and Facilities

The geographic scope for the public services cumulative analysis is the Mission Valley Community within the City of San Diego. The provision of public services is often specific to jurisdictional providers or confined by set service boundaries. Public services and facilities generally serve residents on a community-wide basis. Typically, changes in development influence the demand for public services and related facilities to be provided within a local City, County, or service district.

Existing police facilities would continue to serve the Project site, and would not require the construction of new facilities because the new stadium would be a similar use to the existing Qualcomm Stadium. Similarity, it is not anticipated that the Project would result in an increase in average fire/life protection response time for the area, and would not require the construction of new fire facilities. The Project does not involve the use, manufacture, or storage of toxic, readily combustible, or otherwise hazardous material and the Project site provides for adequate

San Diego Fire Department access. Since the Project would not directly increase populations residing in the area, there would be no increased demand or deterioration of public service facilities including schools, libraries, and parks. The Project is not proposing any new construction or construction staging within the Influence Area of the San Diego River Park Master Plan to allow for future implementation of the San Diego River Park. For these reasons, the Project would not result in significant impacts to public services.

Cumulative projects being developed throughout the Mission Valley area would also create new or altered demand for public services. Cumulative projects would be required to pay Development Impact Fees (DIFs) or ad-hoc fees as conditions of project approval to offset the external costs to public service providers, such as additional staff, equipment, or facilities. These fees allow the City to have a source of funding available to provide new or additional facilities necessary to achieve and maintain adequate public service provision per population-based requirements and development as it occurs within an area. The Union Tribune Mixed Use project EIR (City of San Diego 2015), Hazard Center Redevelopment EIR (City of San Diego 2010), and Camino Del Rio Mixed Use project EIR (City of San Diego 2014) all identified less than significant cumulative impacts related to public services and describe the requirements of the projects to reduce impacts through the payment of fees to offset any potential deterioration of public services.

For the reasons above, the Project would not generate a substantial new demand on public services and the cumulative projects in the Mission Valley area also do not create cumulative public service impacts. Therefore, the Project would not make a cumulatively considerable contribution to a significant cumulative impact on public services.

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