CHAPTER 7.0 MANDATORY DISCUSSION AREAS

7.1 SIGNIFICANT ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF THE PROJECT IS IMPLEMENTED

Based upon the environmental analyses within this EIR, the City has determined that the Project would result in significant and unavoidable impacts associated with the following issue areas, with these specific significant and unavoidable impacts briefly discussed below.

• Air Quality:

- Violate an Air Quality Standard or Contribute Substantially to an Existing Violation of Air Quality Standard or Substantial Contribution to Existing Air Quality Violation During Construction
- Exceedance 100 Pounds Per Day of Particulate Matter (PM) 10 Dust During Construction and Operation
- Conflict With or Obstruct Implementation of Applicable Air Quality Plan
- Cumulatively Considerable Net Increase in Criteria Pollutants for Which the Project Region is Non-attainment Under Applicable Federal and State Ambient Air Quality Standards During Construction and Operation
- **Biological Resources:** 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
- **Hazardous Materials/Human Health/Public Safety:** The potential risk of upset to the public and the environment as a result of the use of explosive material
- **Historic Resources:** Alteration and/or Destruction of a Prehistoric or Historic Building, Including an Architecturally Significant Building or Site
- **Hydrology and Water Quality:** Floodplain impacts during extremely large and rare storm events
- Land Use: Conflict with Environmental Goals, Objectives, or Recommendations of Applicable Land Use Plans and Programs

- Noise:
 - Significant Temporary Increase in Existing Ambient Noise Levels at Noise Sensitive Receptors During Construction
 - Significant Permanent Increase in Existing Ambient Noise Levels at Noise Sensitive Receptors During Operation
 - Exceedance of City Ordinance Noise Limits During Operation
- Visual Effects and Neighborhood Character: Impacts to Physical Removal of a Community Identification Landmark, Thus, Affecting Aesthetic/Neighborhood Character of the Area

Air Quality and Odor

Violate an Air Quality Standard or Contribute Substantially to an Existing Air Quality Violation

Construction emissions associated with the Project were quantified using the California Emissions Estimator Model (CalEEMod) Version 2013.2.2. Project-related construction emissions were assessed on an hourly, daily, and annual basis and compared to the City of San Diego's significance thresholds. The Project would exceed the hourly significance threshold for NO_X and CO. Hourly significance thresholds would not be exceeded for SO₂. As such, the Project's maximum hourly construction emissions would result in a significant impact to air quality prior to the implementation of mitigation measures. Project's construction emissions would also exceed the daily significance thresholds for NO_X, CO, PM₁₀, and PM_{2.5} and the annual significance thresholds for NO_X and would result in a significant impact to air quality.

Because the Project would exceed the hourly, daily, and annual significance thresholds are anticipated to be exceeded by the emissions generated by the Project, construction emissions would potentially violate the ambient air quality standard or contribute substantially to an existing violation. This impact to air quality would be significant.

Operation

To determine the change in emissions between the existing Qualcomm Stadium and the new stadium, the emissions associated with the existing Qualcomm Stadium were subtracted from the emissions for the new stadium to calculate the net change in emissions associated with implementation of the Project. The net increase in emissions is compared to the applicable threshold of significance.

The maximum hourly and daily emissions evaluation for the existing and new stadium is based on an NFL game. The annual emissions evaluation is based on the anticipated events that would occur throughout the year. The annual emissions evaluation takes into account the increase in frequency of events and new events anticipated to occur. Annual emissions were also evaluated between those that would occur with the existing Qualcomm Stadium and those of the Project. The net change in emissions would result in exceedance of the significance threshold for PM_{10} with all other pollutants being below the significance thresholds.

Additional Stadium Events

The Project would also result in an increase in the number of events as compared to the existing Qualcomm Stadium and those additional events were also included in the air quality analysis. The additional events that generate the most attendance and vehicle trips would be concerts and soccer games. When emissions associated with concert events are evaluated without a comparison to any existing Qualcomm Stadium event, the emissions were found to exceed the hourly significance thresholds for NO_X and CO. Other events that would occur with the new stadium that would not occur with the existing Qualcomm Stadium would likewise result in hourly and daily exceedances of the significance thresholds.

Comparison of Combined Emissions from Construction and Operation of the New Stadium

There would also be a period in 2019 when the new stadium would be built and in operation concurrent with demolition of Qualcomm Stadium. To evaluate this worst-case condition, construction emissions for the year 2019 were added to the emissions from an NFL event to obtain the combined construction and operations phase emissions. The combined emissions from Project-related construction and operations phase activities concluded this worst case scenario would exceed the hourly thresholds for NO_X and CO, and the daily and annual emissions thresholds would be exceeded for all of the analyzed criteria pollutants (ROG, NO_X, CO, PM₁₀, and PM_{2.5}) except for SO₂.

Because the Project would exceed the hourly, daily, and annual significance thresholds for all the evaluated scenarios, the Project would result in significant air quality impacts. Implementation of mitigation measures would reduce these impacts but not to below a level of significance.

Violation of Air Quality Standard or Substantial Contribution to Existing Air Quality Violation

The Project's construction emissions would also exceed the daily significance thresholds for NO_X , CO, PM_{10} , and $PM_{2.5}$ and the annual significance thresholds for NO_X . The Project's operational net change in emissions between the existing Qualcomm Stadium and the Project

would result in exceedance of the significance threshold for PM_{10} with all other pollutants being below the significance thresholds.

The analysis of new events that are planned for the new stadium would likewise result in emissions that exceed the hourly, daily, and annual significance thresholds. The concurrent activities occurring under the construction and operations phases of the Project were also evaluated and found to exceed hourly, daily, and annual significance thresholds. Because the Project would exceed the hourly, daily, and annual significance thresholds for all the evaluated scenarios, the Project would result in significant air quality impacts. Implementation of mitigation measures would reduce these impacts but not to below a level of significance.

Cumulatively Considerable Net Increase in Criteria Pollutants for Which the Project Region is Non-attainment Under Applicable Federal and State Ambient Air Quality Standards

The nonattainment status of regional pollutants is a result of past and present development within the SDAB, and this regional impact is cumulative rather than attributable to any one source. The net increase in emissions over existing conditions would result in the generation of criteria air pollutant emissions that exceed the City's thresholds for construction and operational activities. 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. As such, the Project would result in a significant and unavoidable impact related to air quality that is not mitagable to a less-than-significant level.

Exceed 100 Pounds Per Day of Particulate Matter (PM) 10 Dust

The Project would generate PM_{10} emissions from construction and operational activities, including on-road motor vehicles. The Project would exceed 100 pounds per day of PM dust during construction activities. The operations phase of the Project would likewise result in emissions of PM in excess 100 pounds for those additional events that would occur as a result of the new stadium. As such, the Project would result in a significant and unavoidable construction and operational impact related to air quality that is not mitagable to a less-than-significant level.

Biological Resources

A significant impact would occur if the Project would have a substantial adverse impact on any species identified as a candidate, sensitive, or special-status species in the MSCP or other local or regional plans, policies, or regulations, or by CDFW or USFWS. The final design of the new stadium may include windows and glass doors and may include use of solar photovoltaic (PV) energy. Up to approximately 5 acres of PV panels are anticipated to be located within the limits

of the parking lot in the northwest area of the Project site. The exact location of the panels has not been determined, but the panels would be situated on the portion of the site furthest away from both Murphy Canyon Creek and the San Diego River.

Recent studies have demonstrated that utility-scale solar developments represent a source of fatality for birds (CEC 2013, 2014, Kagan et al. 2014, WEST 2014, Walston et al. 2015). Avian fatalities at PV solar sites may result from direct collision with project structures including PV panels (Walston et al. 2015). Given the urban environment and relatively small acreage proposed (approximately 5 acres), bird collision and mortality associated with Project-related PV panels are anticipated at a relatively low frequency. Impacts to special status birds would be anticipated and would be considered a significant impact. However, PV panels would be situated in the northwest area of the Project site, away from vegetation or habitat familiar and attractive to birds that would result in disorienting reflective images (Cusa et al. 2015, Sheppard 2011).

While the direct Project impacts to avian species from collisions with PV panels may be low in comparison to large scale solar energy facilities, potentially occurring avian species, including special-status species, could collide with PV panels. Not enough data exists, even with data collected using USFWS guidance (2011), to conclude that the impact is not significant. Due to limited data on the causal relationship between avian fatalities and PV solar facilities, no mitigation measures exist to ensure avoidance of this impact. BIO-7 and BIO-8 provide measures that would aim to minimize Project impacts to the extent possible and monitor potential impacts. Without data to support the efficacy of these measures, conclusions made regarding their success would be premature. Thus, impacts to potentially occurring avian species, including special-status species, associated with collisions with PV panels would be considered significant and unmitigated.

Historic Resources

A significant impact would occur if the Project would result in the alteration and/or the destruction of a prehistoric or historic building, including an architecturally significant building or site. The existing Qualcomm Stadium is 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. It is considered eligible for its association with significant recreation/entertainment events and trends, and its design as a distinctive Modern Brutalist building. Demolition of Qualcomm Stadium would result in significant direct impacts to the resource. Implementation of Mitigation Measures HR-1, HR-2, and HR-3 will provide a record of the historically significant building. However, in most cases, the use of drawings, photographs, and/or displays (such as outlined in Mitigation Measures HR-1 through HR-3) does not mitigate the physical impact on the environment caused by demolition or destruction of a historical resource (CEQA Guidelines

Section 15126.4[b]). While recordation would eliminate the adverse impact associated with the loss of historical information, it would not prevent the physical loss of a historically significant resource. Therefore, demolition of the existing Qualcomm Stadium would result in a significant and unavoidable historic resources impact that is not mitagable to a less-than-significant level.

Land Use

The Project would conflict with some Environmental Goals and Policies of the San Diego General Plan (GP) Recreation and Noise Elements and some objectives, guidelines, and proposals of the Mission Valley Community Plan (MVCP) Cultural and Heritage Resources and Urban Design Elements.

The existing Qualcomm Stadium was assessed for eligibility for individual listing in the National Register of Historic Places, California Register of Historical Resources, and the City of San Diego Register of Historic Resources as a Historical Landmark. It was assessed as eligible for all three registers at the local level and would be demolished as part of the Project. Demolition of the existing Qualcomm Stadium would have a significant impact to historic resources. In addition, view corridors of this landmark would not be maintained. As such, the Project would not be consistent with the following:

- MVCP Cultural and Heritage Resources Element:
 - Objective: Identify and preserve any archaeological or historic sites.
 - Proposal: Maintain view corridors to identified community landmarks as a means of establishing the uniqueness and maintaining the visual qualities of the community and as a means of providing orientation within the valley and Review of historic sites, and archeological resources, geological and paleontological resources and geologic hazards should be included as part of project review.
- MVCP Urban Design Element: Design Guidelines (Design Protection Areas -Landmarks): Development surrounding the San Diego stadium should maintain view corridors and landscaped areas to enhance the views into this major civic and architectural landmark.
- GP Recreation Element Preservation Goal: Preserve, protect and enrich natural, cultural, and historic resources that serve as recreation facilities.
- GP Urban Design Element Goals: A built environment that respects San Diego's natural environment and climate; A pattern and scale of development that provides visual diversity, choice of lifestyle, opportunities for social intersection, and that respects

desirable community character and context; a City with distinctive districts, communities, neighborhoods, and village centers where people gather and interact.

The Project does not comply with some of the General Plan noise goals and policies. Temporary noise impacts would be significant during construction. Operational noise levels would be less than significant except during stadium events, which would result in a significant impact to some residential uses to the north. As such, the Project would not be consistent with the following:

- GP Noise Element:
 - Noise and Land Use Compatibility Goal: Consider existing and future noise levels when making land use planning decisions to minimize people's exposure to excessive noise.
 - Motor Vehicle Traffic Noise Goal: Minimal excessive motor vehicle traffic noise on residential and other noise-sensitive land uses.
 - Event Noise Goal: Balance the effects of noise associated with events with the benefits of the events.

The new stadium would be located within the northeastern parking lot and, thus, the large paved surfaces of the parking areas would be located west and south of the stadium structure. In addition, the City has not extended its reclaimed water mains near the Project site and, thus, would not include use of reclaimed water in landscaping and water closets as part of the stadium design. As such, the Project would not be consistent with the following:

- MVCP Urban Design Element:
 - Design Guidelines (Energy and Conservation): To reduce solar reflection on buildings, parking areas with large paved surfaces should be located to the east and north of adjacent buildings.
 - Design Guidelines (Energy and Conservation): Reclaimed water use should be encouraged, particularly for large master planned projects.

Since the aforementioned significant and unavoidable impacts related to inconsistency with policies for historical resources, noise, and public views would not be mitagable to less than significant levels, there would be a significant and unavoidable land use impact related to consistency with applicable land use plans and programs that would not be mitagable to a less than significant level.

Mobility (Circulation)

The study freeway ramp meters identified in Section 4.10 are currently congested. The Project is anticipated to generate additional traffic at congested study freeway segments and ramps during the construction and demolition scenarios. Specifically, the Friars Road on-ramp to I-15 North during construction as well as the Friars Road on-ramp to I-15 North and the Southbound Fairmont Avenue on-ramp to I-E East during demolition are anticipated to experience significant impacts as a result of the Project. There are no feasible mitigation measures available to reduce the degree of this significant impact. As such, construction and demolition traffic would result in a significant and unavoidable construction impact along congested freeway segments and ramps that is not mitagable to a less-than-significant level.

<u>Noise</u>

Significant Temporary Increase in Existing Ambient Noise Levels at Noise Sensitive Receptors during Construction

A significant impact would occur if the Project would result in a significant temporary increase in existing ambient noise levels at noise-sensitive receptors. Project construction noise (specifically during Project reconstruction of the parking lot) levels would potentially result in a significant temporary increase in ambient noise levels (10 dBA Leq or greater) during daytime construction activities Monday through Saturday at the noise-sensitive receptors nearest the Project site boundary (i.e., residential uses to the northwest, the east, and west). While construction noise from some temporary construction activities (pavement breaking of parking lot pavement) near the Project site boundary cannot be avoided, implementation of Mitigation Measures NOI-2, NOI-3, NOI-4 and NOI-5 would reduce the degree of this significant impact. However, temporary construction noise would result in a significant and unavoidable noise impact that is not mitagable to a less-than-significant level.

Significant Permanent Increase in Existing Ambient Noise Levels at Noise Sensitive Receptors during Operation

A significant impact would occur if the Project would result in a significant permanent increase in existing ambient noise levels at noise-sensitive receptors. Project operational (specifically stadium events) noise levels would potentially result in a significant permanent increase in ambient noise levels (3 dBA Leq or greater) at noise-sensitive receptors (residential uses along the Mission Valley northern hillsides) in proximity to the new stadium. While crowd noise from anticipated events at the new stadium cannot reasonably be controlled, implementation of Mitigation Measure NOI-1 would reduce the degree of this significant impact. However, stadium event noise would result in a significant and unavoidable operational noise impact that is not mitagable to a less-than-significant level.

Exceedance of City Ordinance Noise Limits during Operation

A significant impact would occur if the Project would result in exposing people to noise levels that exceed the City's adopted noise ordinance for operation at noise-sensitive receptors. Project operational noise (specifically during stadium events) levels would exceed the operational noise levels of the City's noise ordinance at the property lines for various land uses by time of day for noise generated by on-site sources associated with Project operation. While crowd noise from anticipated events at the new stadium cannot reasonably be controlled to comply with City Ordinance Noise limits, implementation of Mitigation Measure NOI-1 would reduce the degree of this significant impact. However, stadium event noise would result in a significant and unavoidable operational noise impact that is not mitagable to a less-than-significant level.

Visual Effects and Neighborhood Character

Physical Removal of a Community Identification Landmark, Thus, Affecting Aesthetic/ Neighborhood Character of the Area

The Project would not change the development density or type on the Project site. It would involve the construction of a new Stadium. The new stadium would be approximately 140 feet taller than the existing Stadium but on an approximately 2-acre smaller footprint. Since there is no adjacent development and the new stadium would be closer to the tall northern hillsides of Mission Valley than the existing stadium, the Project could not result in stark contrast to adjacent development styles or themes. The new stadium would remain highly visible in a similar manner as the existing stadium. In addition, final design would comply with City design standards (i.e., for use of glass/glare/shading), and final design would require design review with regard to architecture, signage, materials, mass, bulk, and height.

However, the existing stadium is a landmark/sensitive view as indicated in the MVCP and would be demolished. Even with implementation of Mitigation Measures HR-1, HR-2, and HR-3, implementing the Project would result in a significant and unavoidable impact related to a community identification symbol or landmark being physically removed and, thus, affecting the aesthetic/neighborhood character of the area and compatibility with surrounding development.

7.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

CEQA and the CEQA Guidelines require that an EIR address "significant irreversible environmental changes which would be involved in the Project, should it be implemented." [§158126(c)]

If the Project is implemented, redevelopment of the project site would involve the use of nonrenewable resources during the construction phase. Construction would include the use of building materials such as petroleum-based products and metals that cannot reasonably be recreated. Construction also involves significant consumption of energy, usually petroleum-based fuels that deplete supplies of non-renewable resources. Construction of the replacement structure would consume energy and water, however, due to its temporary and one-time nature, construction of the Project would not represent a significant irreversible use of resources.

Once construction is complete, the new stadium would use some nonrenewable fuels to heat and light the buildings and consume water. However, since the Project would be designed to meet LEED Gold certification standards, the Project would consume energy and water at a lower and more renewable rate than the current existing stadium land use. Also to meet LEED Gold certification standards, the Project would utilize building materials that include recycled materials and make information available related to those building materials to developers. The stadium would be built to current codes, which require insulation and design to minimize wasteful energy consumption. The new stadium would be made as energy efficient as possible and is in a location currently served by public transportation. Finally, since the replacement structure would consume less energy for heat and light and water for irrigation and plumbing than the existing stadium, operation of the Project would represent a decreased use in resources and would not represent a significant irreversible use of resources.