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### 5.0 ENVIRONMENTAL ANALYSIS

The following sections analyze the potential environmental impacts that may occur as a result of project implementation. Issue areas subject to detailed analysis include those that were identified by the City of San Diego as potentially causing significant environmental impacts through the initial study and scoping process and issues which were identified in response to the NOP and the public scoping meeting as having potentially significant impacts. The NOP and letters submitted in response to the NOP, as well as the public scoping meeting comments and transcript, are included in Appendix A and Appendix B, respectively, of this EIR. The following environmental issues are addressed in this Section:

- *Land Use*
- *Transportation/Traffic Circulation/  
Parking*
- *Visual Effects and Neighborhood  
Character*
- *Air Quality*
- *Global Climate Change*
- *Energy*
- *Noise*
- *Biological Resources*
- *Historical Resources (Archaeological  
Resources)*
- *Geologic Conditions*
- *Paleontological Resources*
- *Hydrology/Water Quality*
- *Health and Safety*
- *Public Services and Facilities*
- *Public Utilities*



## 5.1 LAND USE

As stated in Section 2.0, *Environmental Setting*, development on the project site is governed by the City's General Plan, the Miramar Ranch North Community Plan, and the City's Land Development Code. Additionally, the project site is influenced by the MCAS Miramar ACLUP and is within the City's Multiple Species Conservation Program area.

This section addresses the consistency of the proposed project with the development regulations of the Land Development Code and with the goals and policies contained in the City of San Diego General Plan, Miramar Ranch North Community Plan, City of San Diego MSCP Sub-Area Plan, and the MCAS Miramar ACLUP. Additionally, this section addresses conversion of Prime Industrial Lands based on the *Prime Industrial Lands Criteria Analysis* (prepared by KLR Planning, June 28, 2011; Appendix O of this EIR) and the *Collocation/Conversion Suitability Factors* (prepared by KLR Planning, June 28, 2011; Appendix P of this EIR). The determination of significance regarding any inconsistency with development regulations or plan policies is evaluated in terms of the potential for the inconsistency to result in the creation of secondary environmental impacts considered significant under CEQA. (The compatibility of the proposed project with surrounding land uses and community character is addressed in Section 5.3, *Visual Effects/Neighborhood Character*.)

### 5.1.1 Existing Conditions

#### Relevant Plans and Policies

The planning context of the *Environmental Setting*, Section 2.0 of this EIR, describes the land use plans and development regulations that apply to the development of the proposed project. The following provides a brief recount or expansion of the planning context's discussion of selected plans and development regulations, including the City of San Diego General Plan, Miramar Ranch North Community Plan, MSCP Subarea Plan, the MCAS Miramar ALUCP, and pertinent Land Development Code regulations. A discussion of the project's compatibility with these plans is provided in Section 5.1.2, *Impact Analysis*.

#### City of San Diego General Plan

The City of San Diego's General Plan sets forth a long-term plan for development within the City of San Diego. As such, the plan and development guidelines it identifies pertain to the project site. The current General Plan was adopted in March 2008 and represents a comprehensive update and replacement of the City's 1979 *Progress Guide and General Plan*. The City's General Plan includes incorporation of a Strategic Framework Element and replaces the previous chapter entitled "Guidelines for Future Development."

The General Plan guides development and addresses State requirements through the following eleven elements: Land Use and Community Planning; Mobility; Economic Prosperity; Public Facilities, Services, and Safety; Urban Design; Recreation; Historic Preservation; Conservation; Noise; and Housing. (The Housing Element was adopted December 2006 and is printed under separate cover from the General Plan.) As presented in Section 2.0, *Environmental Setting*, and depicted in Figure 2-5, *City of San Diego General Plan Land Use Map*, the project site is identified as Industrial Employment in the General Plan. The relevancy of the General Plan's elements specific to the Watermark project is discussed below in greater detail.

The *Land Use and Community Planning Element (Land Use Element)* guides future growth and development into a sustainable citywide development pattern while maintaining or enhancing the quality of life. This element provides policies to implement the City of Villages strategy and establishes a framework to guide and govern the preparation of community plans tailored to each community. The relevant goals and policies of the Land Use Element for the Watermark project are as follows:

#### City of Villages Strategy

The City of Villages strategy is to focus growth into mixed-use activity centers that are pedestrian-friendly, centers of community, and linked to the regional transit system. The strategy draws upon the strengths of San Diego's natural environment, neighborhoods, commercial centers, institutions, and employment centers and focuses on the long-term economic, environmental, and social health of the City and its many communities. The City of Villages strategy recognizes the value of San Diego's distinctive neighborhoods and open spaces that together form the City as a whole. Implementation of the City of Villages strategy is an important component of the City's commitment to reduce local contributions to greenhouse gas emissions, because the strategy makes it possible for larger numbers of people to make fewer and shorter auto trips.

#### Relevant Policies

- *LU-A.2.* Identify sites suitable for mixed-use village development that will complement the existing community fabric or help achieve desired community character, with input from recognized community planning groups and the general public.
- *LU-A.7.* Determine the appropriate mix and densities/intensities of village land uses at the community plan level, or at the project level when adequate direction is not provided in the community plan.
- *LU-A.7.b.* Achieve transit-supportive density and design, where such density can be adequately served by public facilities and services.
- *LU-A.9.* Integrate public gathering spaces and civic uses into village design.

The City of San Diego has determined the “village propensity” for all areas within City jurisdiction. Village propensity is determined by analyzing an array of factors. The factors considered when locating village sites include community plan-identified capacity for growth, existing or an identified funding source for public facilities, existing or an identified funding source for transit service, community character, and environmental constraints. These factors are mapped and overlaid upon each other to illustrate areas that already exhibit village characteristics and areas that may have a propensity to develop as village areas. According to the *City of San Diego General Plan Village Propensity Map* (Figure 5.1-1), the project site has a low village propensity. However, the project site is located adjacent to the freeway commercial area that has a moderate village propensity.



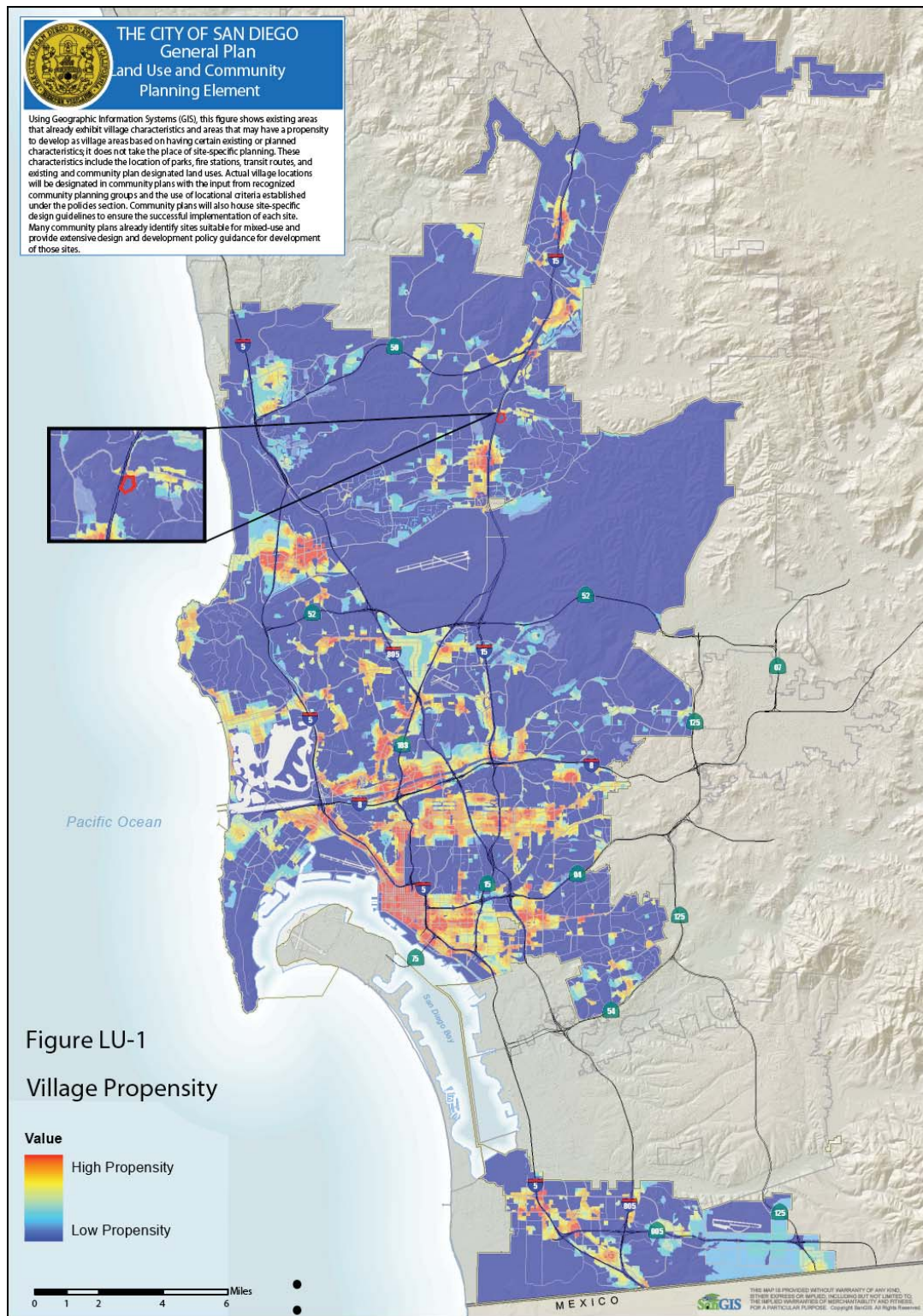


Figure 5.1-1. City of San Diego General Plan Village Propensity Map

The *Mobility Element* provides the framework to improve mobility through development of a balanced, multi-modal transportation network that is efficient and minimizes environmental and neighborhood impacts. It is closely linked to the Land Use and Community Planning Element and the City of Villages growth strategy. Project-relevant policies contained within the Mobility Element address the need to improve walkability and the bicycle network, increase transit use, improve performance and efficiency of the street and freeway system, and provide sufficient parking facilities. Specifically, the following goals and policies apply to the Watermark project:

#### Walkable Communities

- A safe and comfortable pedestrian environment.
- A complete, functional, and interconnected pedestrian network, that is accessible to pedestrians of all abilities.
- Greater walkability achieved through pedestrian-friendly street, site and building design.
- *ME-A.4* Make sidewalks and street crossings accessible to pedestrians of all abilities.
- *ME-A.6.* Work toward achieving a complete, functional and interconnected pedestrian network.

#### Transit First

- An attractive and convenient transit system that is the first choice of travel for many of the trips made in the City.
- *ME-B.9.b.* Plan for transit-supportive villages, transit corridors, and other higher-intensity uses in areas that are served by existing or planned higher-quality transit services.

#### Street and Freeway System

- Safe and efficient street design that minimizes environmental and neighborhood impacts.
- *ME-C.5.* Install traffic calming measures as appropriate in accordance with site-specific recommendations to increase the safety and enhance livability in communities.
- *ME-C.6.i.* Employ landscaping to enhance or screen views as appropriate.
- *ME-C.6.j.* Select landscape designs and materials on the basis of their aesthetic qualities, compatibility with the surrounding area, and low water demand and maintenance requirements.

#### Transportation Demand Management

- Expanded travel options and improved personal mobility.

#### Bicycling

- A safe and comprehensive local and regional bikeway network.

#### Parking Management

- Parking that is reasonably available when and where it is needed through management of the supply.
- New development with adequate parking through the application of innovative citywide parking regulations.
- Increased land use efficiencies in the provision of parking.

- *ME-G.1.* Provide and manage parking so that it is reasonably available when and where it is needed.
- *ME-G.2.* Implement innovative and up-to-date parking regulations that address the vehicular and bicycle parking needs generated by development.

The *Urban Design Element* addresses the integration of new development into the natural landscape and/or existing community. The element discusses an *Urban Design Strategy*, or framework, for development as envisioned in the City of Villages strategy based upon the following principles: 1) Contribute to the qualities that distinguish San Diego as a unique living environment; 2) Build upon our existing communities; 3) Direct growth into commercial areas where a high level of activity already exist; and 4) Preserve stable residential neighborhoods. These principles are composed of a balance of several components including natural and created features. The Urban Design Element also helps implement the “core values” related to urban form that were adopted as a part of the Strategic Framework Element (see below). Relevant goals and policies are as follows:

#### General Urban Design

- An improved quality of life through safe and secure neighborhoods and public places.
- A pattern and scale of development that provides visual diversity, choice of lifestyle, and opportunities for social interaction.
- A City with distinctive districts, communities, neighborhoods, and village centers where people gather and interact.
- Utilization of landscape as an important aesthetic and unifying element throughout the City.
- *UD-A.3.* Design development adjacent to natural features in a sensitive manner to highlight and complement the natural environment in areas designated for development.
- *UD-A.5.* Design buildings that contribute to a positive neighborhood character and relate to neighborhood and community context.
- *UD-A.8.* Landscape materials and design should enhance structures, create and define public and private spaces, and provide shade, aesthetic appeal, and environmental benefits.
- *UD-A.11.* Encourage the use of underground or above-ground parking structures, rather than surface parking lots, to reduce land area devoted to parking.
- *UD-A.12.* Reduce the amount and visual impact of surface parking lots.
- *UD-A.13.* Provide lighting from a variety of sources at appropriate intensities and qualities for safety.

#### Mixed-Use Villages and Commercial Areas

- Mixed-use villages that achieve an integration of uses and serve as focal points for public gathering as a result of their outstanding public spaces.
- Vibrant, mixed-use main streets that serve as neighborhood destinations, community resources, and conduits to the regional transit system.
- Neighborhood commercial shopping areas that serve as walkable centers of activity.
- *UD-C.3* Develop and apply building design guidelines and regulations that create diversity rather than homogeneity, and improve the quality of infill development.
- *UD-C.7.* Enhance the public streetscape for greater walkability and neighborhood aesthetics.

Office and Business Park Development

- Promote the enhanced visually quality of office and industrial development.
- Provide increased pedestrian and transit orientation within office and industrial developments.
- *UD-D.1.* Provide expanded opportunities for local access and address the circulation needs of pedestrians within and among office and business park developments.
- *UD-D.2.* Assure high quality design of buildings and structures. The design and orientation of buildings within projects affect the pedestrian- and transit-orientation.

Public Spaces and Civic Architecture

- Significant public gathering spaces in every community.
- *UD-E.1.* Include public plazas, squares or other gathering spaces in each neighborhood and village center.

The *Economic Prosperity Element* links economic prosperity goals with land use distribution and employment land use policies. Its purpose is “*to increase wealth and the standard of living of all San Diegans with policies that support a diverse, innovative, competitive, entrepreneurial, and sustainable local economy.*” Relevant goals and policies for the Watermark include:

Industrial Land Use

- A diversified economy with a focus on providing quality employment opportunities for all San Diegans.
- *EP-A.10.* Locate compatible employment uses on infill industrial sites and establish incentives to support job growth in existing urban areas.

The project site is identified as an area where Prime Industrial Land policies apply. Prime Industrial Lands are areas that support export-oriented base sector activities such as warehouse distribution, heavy or light manufacturing, and research and development uses. These areas are part of even larger areas that provide a significant benefit to the regional economy and meet General Plan goals and objectives to encourage a strong economic base.

Commercial Land Use

- Economically healthy neighborhood and community commercial areas that are easily accessible to residents.
- New commercial development that contributes positively to the economic vitality of the community and provides opportunities for new business development.
- *EP-B.2.* Encourage development of unique shopping districts that help strengthen community identity and contribute to overall neighborhood revitalization.
- *EP-B.6.* Promote economically vital neighborhood commercial districts that foster small business enterprises and entrepreneurship.
- *EP-B.7.* Promote and facilitate shared parking facilities including parking structures as part of commercial revitalization activities.

Employment Development

- A city with an increase in the number of quality jobs for local residents, including middle-income employment opportunities and jobs with career ladders.



- *EP-E.1.c.* Encourage the development of measures that facilitate expansion of high technology business facilities that have the potential to create middle-income jobs likely to be filled by local residents.

#### Community and Infrastructure Investment

- Public and private infrastructure that supports economic prosperity.

The *Public Facilities, Services, and Safety Element* addresses the provision, prioritization, and financing strategies of fire-rescue, police, wastewater, storm water infrastructure, water infrastructure, waste management libraries, schools, information infrastructure, public utilities, regional facilities, disaster preparedness, and seismic safety. Relevant goals and policies of the Public Facilities, Services and Safety Element to the proposed project include the following:

#### Evaluation of Growth, Facilities, and Services

- Adequate public facilities available at the time of need.
- Public facilities exactions that mitigate the facilities impacts that are attributable to new development.
- Improvement of quality of life in communities through the evaluation of private development and the determination of appropriate exactions.
- *PF-C.1.* Require development proposals to fully address impacts to public facilities and services.

#### Fire-Rescue

- Protection of life, property, and environment by delivering the highest level of emergency and fire-rescue services, hazard prevention, and safety education.

#### Police

- Safe, peaceful, and orderly communities.

#### Wastewater

- Environmentally sound collection, treatment, re-use, disposal, and monitoring of wastewater.
- Increased use of reclaimed water to supplement the region's limited water supply.

#### Storm Water Infrastructure

- A storm water conveyance system that effectively reduces pollutants in urban runoff and storm water to the maximum extent practicable.

#### Waste Management

- Maximum diversion of materials from disposal through the reduction, reuse, and recycling of wastes to the highest and best use.
- *PF-I.2.* Maximize water reduction and diversion.

Public Utilities

- Public utilities that sufficiently meet existing and future demand with facilities and maintenance practices that are sensible, efficient and well-integrated into the natural and urban landscape.

Seismic Safety

- Development that avoids inappropriate land uses in identified seismic risk areas.

The *Conservation Element* contains policies to guide the conservation of resources that are fundamental components of San Diego's environment, that help define the City's identity, and that are relied upon for continued economic prosperity. Sustainable development and climate change issues are also addressed through the policies of the Conservation Element. Conservation Element goals and policies relevant to the proposed project call for the following:

Climate Change & Sustainable Development

- To reduce the City's overall carbon dioxide footprint by improving energy efficiency, increasing use of alternative modes of transportation, employing sustainable planning and design techniques, and providing environmentally sound waste management.
- *CE-A.5.* Employ sustainable or "green" building techniques for the construction and operation of buildings.
- *CE-A.9.* Reuse building materials, use materials that have recycled content, or use materials that are derived from sustainable or rapidly renewable sources to the extent possible.
- *CE-A.10.* Include features in building to facilitate recycling of waste generated by building occupants and associated refuse storage areas.
- *CE-A.11.* Implement sustainable landscape design and maintenance.

Open Space and Landform Preservation

- Preservation and long-term management of the natural landforms and open spaces that help make San Diego unique.
- *CE-B.4.* Limit and control runoff, sedimentation, and erosion both during and after construction activity.
- *CE-B.6.* Provide an appropriate defensible space between open space and urban areas through the management of brush, the use of transitional landscaping, and the design of structures.

Urban Runoff Management

- Protection and restoration of water bodies, including reservoirs, coastal waters, creeks, bays, and wetlands.
- *CE-E.2.* Apply water quality protection measures to land development projects early in the process – during project design, permitting, construction, and operations – in order to minimize the quantity of runoff generated on-site, the disruption of natural water flows and the contamination of storm water runoff.
- *CE-E.3.* Require contractors to comply with accepted storm water pollution prevention planning practices for all projects.

Air Quality

- Regional air quality which meet state and federal standards.
- Reduction in greenhouse gas emissions effecting climate change.

Sustainable Energy

- An increase in local energy independence through conservation, efficient community design, reduced consumption, and efficient production and development of energy supplies that are diverse, efficient, environmentally-sound, sustainable, and reliable.

The *Noise Element* is intended to protect people living and working in the City of San Diego from excessive noise. The most prevalent noise source in the City is motor vehicle traffic. Goals and policies provided in the Noise Element guide compatible land uses and the incorporation of noise attenuation measures for new uses to protect people from an excessive noise environmental. The Noise Element promotes the following goals and policies pertaining to noise relevant to the Watermark:

Noise and Land Use Compatibility

- Consider existing and future noise levels when making land use planning decisions to minimize people's exposure to excessive noise.
- *NE-A.2.* Assure the appropriateness of proposed development relative to existing and future noise levels by consulting the guidelines for noise-compatible land use to minimize the effects on noise-sensitive land uses.
- *NE-A.4.* Require an acoustical study consistent with Acoustical Study Guidelines for proposed developments in areas where the existing or future noise level exceeds or would exceed the "compatible" noise level thresholds as indicated on the Land Use – Noise Compatibility Guidelines (Table NE-3 of the General Plan), so that noise mitigation measures can be included in the project design to meet the noise guidelines.

Motor Vehicle Noise

- Minimal excessive motor vehicle traffic noise on residential and other noise-sensitive land uses.
- *NE-B.1.* Encourage noise-compatible land uses and site planning adjoining existing and future highways and freeways.
- *NE-B.2.* Consider traffic calming design, traffic control measures, and low-noise pavement surface that minimize motor vehicle traffic noise.
- *NE.B.4.* Require new development to provide facilities which support the use of alternative transportation modes such as walking, bicycling, carpooling and, where applicable, transit to reduce peak-hour traffic.
- *NE.B.7.* Promote the use of berms, landscaping, setbacks, and architectural design where appropriate and effective, rather than conventional wall barriers to enhance aesthetics.

Commercial and Mixed-Use Activity Noise

- Minimal exposure of residential and other noise-sensitive land uses to excessive commercial and mixed-use related noise.

- *NE-E.1.* Encourage the design and construction of commercial and mixed-use structures with noise attenuation methods to minimize excessive noise to residential and other noise-sensitive land use.

#### Industrial Activity Noise

- Minimal exposure of residential and other noise-sensitive land uses to excessive industrial-related noise.
- *NE-F.2.* Encourage the design and construction of industrial development to minimize excessive off-site noise impacts to residential and other noise-sensitive uses.

#### Construction, Refuse Vehicles, Parking Lot Sweepers, and Public Activity Noise

- Minimal exposure of residential and other noise-sensitive land uses to excessive construction refuse vehicles, parking lot sweeper-related noise and public noise.
- *NE-G.1.* Implement limits on the hours of operation for non-emergency construction and refuse vehicle and parking lot sweeper activity in residential area and areas abutting residential areas.

#### Strategic Framework Element

As discussed above, the City of San Diego completed a comprehensive update of its General Plan in March 2008. The City initiated the update with adoption of the Strategic Framework Element in 2002. The Strategic Framework Element provides the overall structure to guide the General Plan update, including future Community Plan updates and amendments and implementation of an action plan. The Strategic Framework Element represents the City's new approach for shaping how the City will grow while attempting to preserve the character of its communities and its natural resources and amenities. As discussed within the Strategic Framework Element, the City of Villages strategy is a growth strategy that has been designed to create mixed-use areas within communities throughout San Diego. The strategy draws upon strengths and characteristics of existing neighborhoods to determine where and how new growth should occur. Policies guiding the City of Villages strategy have been developed in the following eight areas: urban form, neighborhood quality, public facilities and services, conservation and the environment, mobility, housing affordability, economic prosperity and regionalism, and equitable development.

#### Prime Industrial Lands

Prime Industrial Land identifies areas that support export-oriented base sector activities such as warehouse distribution, heavy or light manufacturing, research and development uses. These areas are part of even larger areas that provide a significant benefit to the regional economy and meet General Plan goals and objectives to encourage a strong economic base.

It is anticipated that the Industrial and Prime Industrial Lands Map will be revised over time, particularly as appropriate land uses evaluated during comprehensive community plan updates. Land identified as Prime Industrial will undergo additional scrutiny if land use amendments are proposed that could diminish their potential role for base sector and related employment uses either before or after comprehensive Community Plan updates. The identification of Prime Industrial Lands is intended to protect valuable employment land for base sector industries. The identification of land as Prime Industrial does not change the land use designation or zoning of a property, nor influence the processing of ministerial permits. Approximately half of the industrially designated land in the



City of San Diego qualifies as Prime Industrial Lands. The Watermark project site is identified as Prime Industrial Lands, as shown in Figure 5.1-2, *Prime Industrial Lands Map*.

#### **Miramar Ranch North Community Plan**

The project site is governed by the Miramar Ranch North Community Plan, which was adopted by the San Diego City Council on March 4, 1980, and was subsequently amended in 1987, 1991, 1995, and 1998. The Community Plan is intended to serve as a comprehensive guide for residential, industrial, and commercial developments, open space preservation, and development of a transportation network within the plan area. As presented in Section 2.0, *Environmental Setting*, and depicted in Figure 2-6, *Miramar Ranch North Community Plan Land Use Map*, the project site is identified as the Mercy Site and is designated for Industrial Development in the Miramar Ranch North Community Plan. Additionally, the project is identified as the Mercy Interchange Gateway. The project requires an amendment to the Community Plan to change the site's land use designation from Industrial/Business Park to Regional Commercial, as shown in Figure 3-1, *Miramar Ranch North Community Plan – Proposed Land Use Designations*.

The Miramar Ranch North Community Plan is comprised of eleven elements including Transportation, Residential, Industrial, Commercial, Park and Recreation, Public Services, School, Community Social, Design, Sensitive Lands/Open Space, and Implementation. Goals, policies and proposals of each element of the Miramar Ranch North Community Plan which are relevant to the proposed project are presented below.

Roadways, transit, and bicycle and pedestrian facilities are addressed in the *Transportation Element*. Roadway capacity has been identified as a primary transportation concern since the adoption of the Community Plan. Other interest areas include community roadways, street and parking development, and alternate transportation modes. A goal and objectives have been developed to increase the efficiency of the transportation system, maximize transit use, and encourage bicycle and pedestrian activity. The following goal and objectives are relevant to the Watermark:

- **Goal.** Construct and maintain an adequate system for vehicular, future transit, bicycle, and pedestrian circulation within the community, while providing adequate access to the larger San Diego region.
- **Objective (Subregional Traffic).** Ensure sufficient capacity on the I-15 interchanges and onsite roadways to handle traffic generated by the community.
- **Objective (Traffic Generation and Community Roadway Design).** Require streets serving the community possess sufficient capacity and meet City engineering standards to safely handle traffic generated as the community develops.
- **Objective (Street and Parking Development Guidelines).** Encourage the sensitive design and construction of streets and parking facilities.

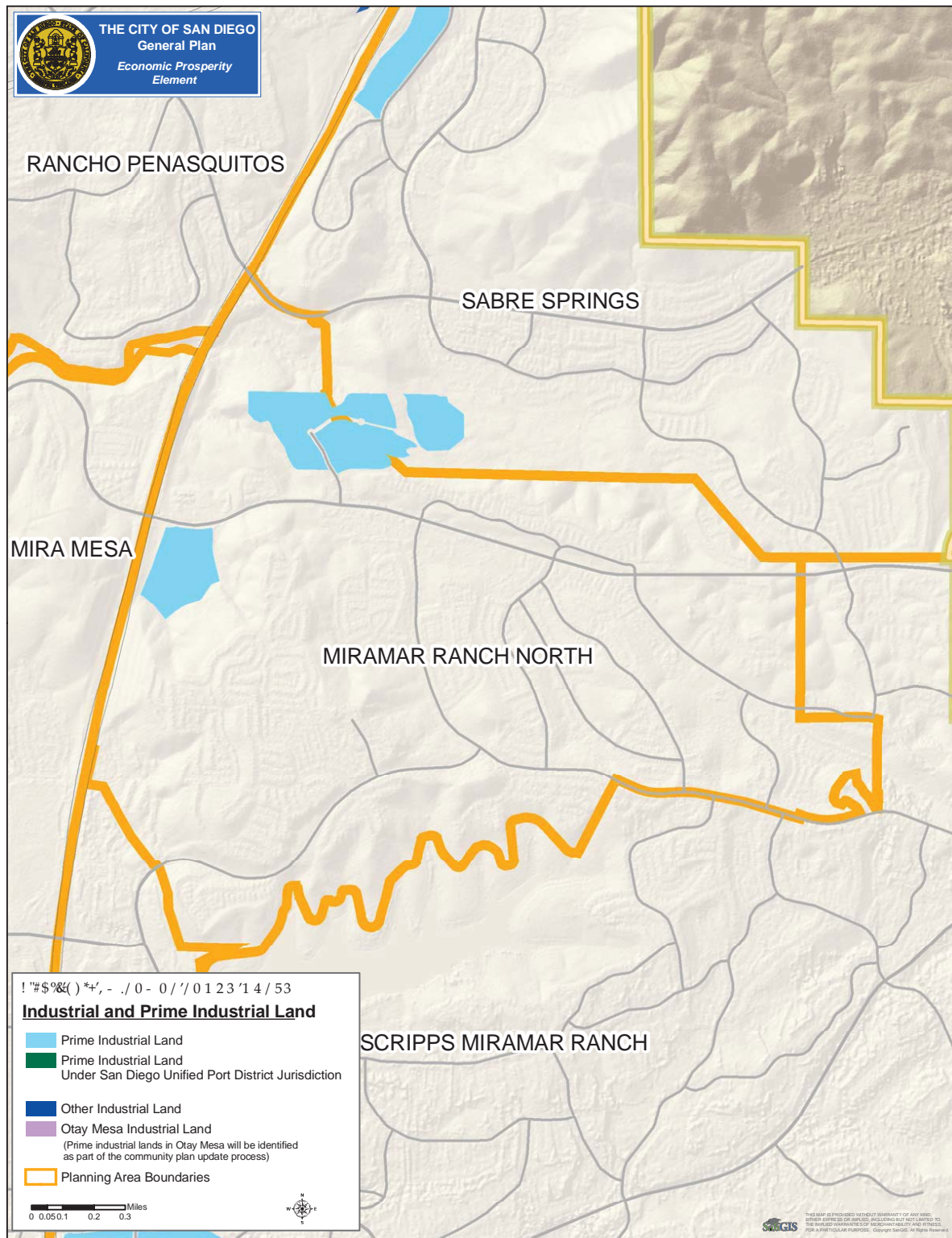


Figure 5.1-2. Prime Industrial Lands Map

Industrial development is addressed in the *Industrial Element* of the Community Plan. Two areas are identified in this element: the North Ridge Site and the Mercy Site. The project site is located on the Mercy Site. The following goal and objectives are relevant to the proposed project:

- **Goal.** Promote industrial and business park development which provides employment opportunities while enhancing the physical environment of the community.
- **Objective (Location of Industrial Development).** Locate industrial/business park land uses in areas appropriate to environmental conditions, the circulation system, and the overall land use pattern of the community.
- **Objective (Industrial Development Guidelines).** Require high standards of design, materials, and workmanship in business park development.

The *Commercial Element* addresses commercial development within Miramar Ranch North. The project site is not a designated commercial area; however, it proposes commercial development. The following goal and objectives are applicable to the Watermark:

- **Goal.** Encourage attractive, accessible commercial development meeting the community shopping and services requirements of the ranch.
- **Objective (Community Commercial Needs).** Provide sufficient commercial area for retail, professional, and recreational uses and social and other services to meet the basic requirements of residents and workers in the community.
- **Objective (Location of Commercial Development).** Locate commercial land uses to best serve consumer needs, especially in relation to the circulation system and the overall land use pattern of the community.
- **Objective (Commercial Development Guidelines).** Encourage high standards in the design, construction, and maintenance of commercial development in the community.

The *Parks and Recreation Element* addresses the provision of parks and open space within the Miramar Ranch North community. These recreational spaces include a system of public parks, private recreational facilities, and a network of open spaces. While the goal and objectives of this element do not pertain to the proposed project, as development potential does not include park space, this element does specifically call out recommendations for the project site as follows:

*Commercial recreation facilities should be considered for the freeway commercial site at Mercy interchange. Possible facilities include sports clubs, a hotel/motel, restaurants, a bowling alley, and a family movie theatre. Facilities addressed to families and to teenagers and young adults are particularly encouraged.*

Public services include fire protection service, police service, libraries, public utilities, and communications. The *Public Services Element* contains goals and objectives for the Miramar Ranch North community for public facilities, utilities, communications, and a future institutional site. Relevant goal and objectives for the proposed project include the following:

- **Goal.** Guarantee a range of public facilities tailored to local requirements and accessible to the community, and as needed, Scripps Ranch.
- **Objective (Public Facilities).** Ensure public services facilities appropriate in quantity, accessibility, timing, and quality to local community requirements.

- **Objective (Utilities).** Provide adequate utility services for development in the community.
- **Objective (Communications).** Provide adequate communications services to the community.

Community social activities and facilities are addressed in the *Community Social Element*. This element assumes that activities and facilities for Miramar Ranch North are in large part tied to Scripps Miramar Ranch, with a number of public facilities proposed for development on a shared basis. The relevant goal and objective for the proposed project are the following:

- **Goal.** Support development of social services, programs, and facilities responsive to the changing physical and socioeconomic needs of community inhabitants.
- **Objective (Development of Community Facilities).** Provide sufficient area for the development of facilities to house community social activities.

Community aesthetics are addressed in the *Design Element*. This element contains land use-specific development guidelines with a design checklist to ensure quality of individual developments. Additionally, this element address areas of Miramar Ranch North that require special design attention due to their highly visible location and/or environmentally sensitive nature. The project site is located in one of these special design areas. The goal and objectives that have been identified in this element and which are relevant to the Watermark are as follows:

- **Goal:** Promote high quality design throughout the community, with special emphasis on projects and roadways in highly visible areas.
- **Objective (Community-Wide Design Integration).** Promote the utilization of harmonious design features and techniques throughout the community in order to create an overall community atmosphere.
- **Objective (Special Design Areas).** Designate special development areas and anchor projects for special attention in design, construction, and maintenance.
- **Objective (Mercy Interchange Gateway).** Promote the sensitive development of the Mercy interchange area as an attractive gateway into the community.

The *Sensitive Lands/Open Space Element* contains goals and objectives relative to the preservation of sensitive lands and open space. Conservation policies and specific objectives for development, such as grading and drainage, are included in this element. The relevant goal and objectives of this element are the following:

- **Goal 1.** Encourage the careful management of community environmental resources through preservation of a passive open space network and support of environmentally sensitive development.
- **Objective (Landscaping Program).** Provide for the planting and maintenance of landscaped areas appropriate to creating the overall community character and to local environmental conditions, with emphasis on eucalyptus forestation.
- **Objective (Drainage).** Provide an adequate drainage system for the collection and control of surface water.



**Zoning**

Zoning for the property located in the City of San Diego is governed by the City's LDC. As presented in Section 2.0, *Environmental Setting*, and shown on Figure 2-7, *Existing Zoning*, the Watermark project site is zoned IP-2-1. The purpose of the IP-2-1 zone is to “provide for high quality science and business park development. The property development standards of this zone are intended to create a campus-like environment characterized by comprehensive site design and substantial landscaping. Restrictions on permitted uses and signs are provided to minimize commercial influence.” The IP-2-1 zone allows for a mix of office and light industrial uses. The project proposes to change the zoning on a portion of the project site from IP-2-1 to CR-2-1, as discussed under Section 5.1.2, *Impact Analysis*, below.

**City of San Diego Multiple Species Conservation Program Subarea Plan**

The MSCP is a comprehensive plan that will preserve a network of habitat and open space in the region. The MSCP identifies a Multi-Habitat Planning Area (MHPA) in which the permanent MSCP preserve will be assembled and managed for its biological resources. In accordance with the MSCP, the City has developed a Subarea Plan to implement the MSCP and habitat preserve within the City of San Diego. The Watermark project site is within the City's MSCP Subarea, but is not located within or adjacent to the MHPA (Figure 5.1-3, *Multi-Habitat Planning Area*).

Within the MSCP, the project site is located within an urban habitat area. The City's MSCP Subarea Plan identifies specific management policies and directives for urban habitat lands. Major issues identified for these lands include the following:

- Intense land uses and activities adjacent to and in covered species habitat
- Dumping, litter, and vandalism
- Itinerant living quarters
- Utility, facility, and road repair, construction, and maintenance activities
- Exotic (non-native) and invasive plants and animals
- Urban runoff and water quality

The City's MSCP Subarea Plan also addresses mitigation for impacts to wildlife and habitat. For those impacts occurring outside the MHPA, such as the project site, mitigation is based on the habitat type and location of the mitigation site.

**Marine Corps Air Station Miramar Airport Land Use Compatibility Plan**

The basic function of ALUCPs (or compatibility plans) is to promote compatibility between airports and the land uses that surround them to the extent that these areas are not already devoted to incompatible uses. With limited exception, California law requires preparation of a compatibility plan for each public-use and military airport in the state. Most counties have established an airport land use commission (ALUC), as provided for by law, to prepare compatibility plans for the airports in that county and to review land use plans and development proposals, as well as certain airport development plans, for consistency with the compatibility plans. In San Diego County, the ALUC function rests with the San Diego County Regional Airport Authority (SDCRAA), as provided in section 21670.3 of the California Public Utilities Code.



Figure 5.1-3. Multi-Habitat Planning Area

The MCAS Miramar Airport Land Use Compatibility Plan is the fundamental tool used by the SDCRAA, acting in its capacity as the San Diego County ALUC, in fulfilling its purpose of promoting airport land use compatibility. Specifically, this Compatibility Plan: 1) provides for the orderly growth of the airport and the area surrounding the airport; and 2) safeguards the general welfare of the inhabitants within the vicinity of the airport and the public in general. Essentially then, this compatibility plan serves as a tool for use by the ALUC in fulfilling its duty to review land use development proposals within the AIA at MCAS Miramar. In addition, the compatibility plan provides compatibility policies and criteria applicable to local agencies in their preparation or amendment of land use plans and ordinances and to landowners in their design of new development.

As shown in Figure 2-8, *MCAS Miramar – Airport Influence Area*, the Watermark project site is located within Review Area 2 of the AIA for MCAS Miramar. As a result, compatibility with regards to such areas as noise and safety zones needs to be adhered to.

### 5.1.2 Impact Analysis

#### *Thresholds of Significance*

The following thresholds, relevant to the proposed project, have been identified in the City of San Diego's *Significance Determination Guidelines under the California Environmental Quality Act* for evaluating potential impacts to land use:

- Inconsistency/conflict with the environmental goals, objectives, or guidelines of the Miramar Ranch North Community Plan or City of San Diego General Plan.
- Inconsistency/conflict with an adopted land use designation or intensity and indirect or secondary environmental impacts occur.
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project.
- Inconsistency/conflict with the City's Multiple Species Conservation Program (MSCP) Subarea Plan and any applicable MHPA Adjacency Guidelines.

#### Issue 1

*Would the proposed project be inconsistent/conflict with environmental goals, objectives, or guidelines of the Miramar Ranch North Community Plan or the City of San Diego General Plan?*

#### *Impact Analysis*

The Watermark project proposes the development of a mix of retail commercial, office buildings, hotel, movie theatre, and parking (surface and structured). The project provides for a development intensity range, with target development intensity being 502,112 square feet of commercial office space (including MedImpact); 316,000 square feet of commercial retail space; 43,917 square feet of movie theatre; and a 130-room hotel. Project proposals also include the development of plaza space for community gatherings, events, and leisure.



**Miramar Ranch North Community Plan**

The project site is situated in an industrially-designated area of the Miramar Ranch North Community Plan known as the Mercy Site. Additionally, the project site is identified as the Mercy Interchange Gateway. The Community Plan recommends this site develop with light industrial uses such as manufacturing, wholesale distribution, and warehousing. Additionally, the Community Plan specifically recommends that recreation vehicle storage area screened by mini-warehousing facilities should be considered for the project site. While the existing development (Corporate Office) on a portion of the project site (Area B) implements the recommendations of the Community Plan, the proposed project requires a Community Plan Amendment to change the land use designation from Industrial to Regional Commercial on Area A. If the Community Plan Amendment is approved by City Council, then the project will be consistent with the amended Community Plan.

The Miramar Ranch North Community Plan addresses the development of community commercial uses to meet community needs. The proposed project would create additional community-serving commercial options. Additionally, the project adheres to the objectives throughout the Community Plan encouraging high standards of design for commercial and industrial projects. The project proposes specific Design Guidelines that would ensure development of the proposed project in a manner that complies with the Community Plan's recommendations.

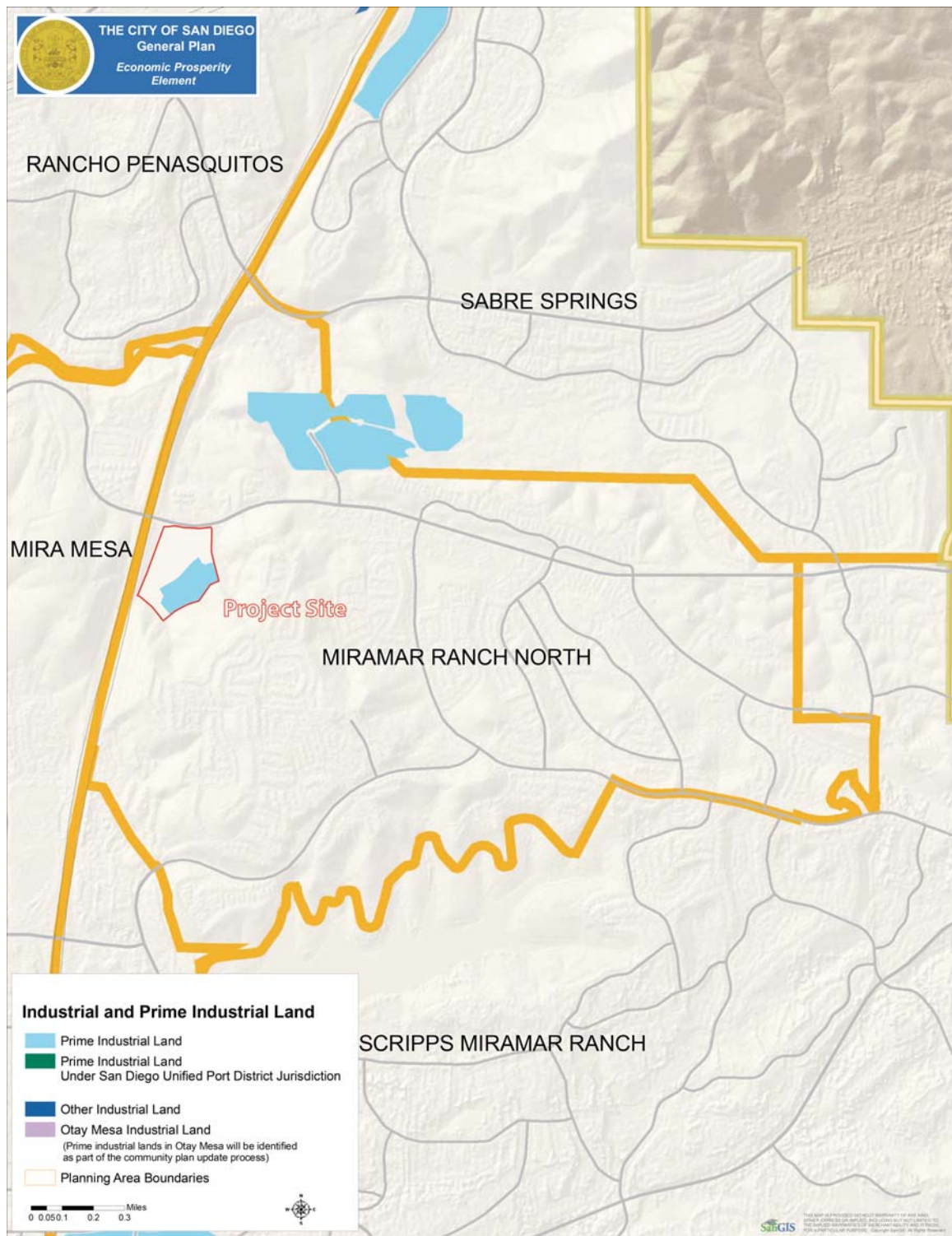
While the project does not propose any parks or open spaces, the Watermark project is consistent with the goals and objectives for parks and recreation, community social, and open spaces as identified in the Miramar Ranch North Community Plan. Under the existing approvals, a 3.42-acre special perimeter landscaping area (previously approved Lot A), provides buffer to the existing open space uses abutting the project site to the south and east. The project proposes a movie theatre, keeping with the Community Plan's recommendations for a family movie theatre at the Mercy interchange. Additionally, the project would provide space for community social activities.

Development of commercial uses on the Mercy Site would be inconsistent with the Miramar Ranch North Community Plan, requiring the proposed Community Plan Amendment. However, the proposed project would not result in significant environmental impacts associated with land use recommendations of the Miramar Ranch North Community Plan or the proposed Community Plan Amendment.

**City of San Diego General Plan**

The City of San Diego General Plan identifies the project site as Prime Industrial Lands. Justification for the proposed land use change for Area A of the project site (see Figure 5.1-4, *Proposed Prime Industrial Lands Map*) (from Industrial/Business Park to Regional Commercial) must be supported by an evaluation of the Prime Industrial Lands criteria contained in Appendix C, EP-1 of the General Plan; the Collocation/Conversion Suitability Factors in Appendix C, EP-2 of the General Plan; and the potential contribution of the area to the local and regional economy. A *Prime Industrial Lands Criteria Analysis* and *Collocation/Conversion Suitability Factors Analysis* have been completed for the Watermark project and are included as Appendix O and Appendix P, respectively, of this EIR.



Figure 5.1-4. *Proposed Prime Industrial Lands Map*

The *Prime Industrial Lands Criteria Analysis* evaluates the project site's value as identified industrial land. The analysis yields that, while the project site would develop as a mix of uses, the residential restriction would protect the industrial nature of the project. The nearest science and engineering workers are located at the North Ridge Site, a pocket of Prime Industrial Lands located less than a mile from the project site. Substantially larger congregations of high-technology businesses exist west of the project site in the communities of Mira Mesa, Sorrento Mesa, and University. Unlike Sorrento Mesa, Mira Mesa, and the North Torrey Pines area of the University community, the North Ridge Site and the project site are both isolated sites; lack connectivity with one another; and are separated by distance, landform and roadways. As such, the project site is not considered to be in proximity to resources of extraordinary value for high-technology businesses but rather provides a limited pocket of industrial land. [The *Prime Industrial Land Criteria Analysis* considers "resources of extraordinary value" to be "certain human resources and infrastructure investments to which access is fundamental to the type of use it would support." In San Diego, resources of extraordinary value for existing and probable future industrial companies fall into two basic groups: high-technology businesses (bio-technology, business equipment and defense manufacturing) where site selection is driven by the need to have access to universities and science and engineering workers; and international trade, logistics, and ship building businesses where site selection is driven by access to physical resources such as harbor facilities and other ports-of-entry, such as the border truck crossing and U.S. Customs facilities in Otay Mesa.] Additionally, there is a vacancy of at least 335,000 square feet of industrial space available for use on the site designated as the North Ridge Site. The project site has been previously graded and is not physically prohibitive of industrial development. While no residential units immediately surround the project site and the project does not propose any residential uses, over 50 percent of the surrounding uses are non-industrial.

Based on the *Prime Industrial Lands Criteria Analysis*, the project site is not a high value Prime Industrial Lands. The project site is surrounded by non-industrial uses, which diminishes its ability to be developed in the synergy of a campus of industrial uses. The North Ridge Site, located less than one mile northeast of the project site, has developed with light industrial uses and currently has vacancies, illustrating a supply of industrial space currently outstripping demand in this area. While the project has industrial value, which is recognize by existing and proposed development, it lacks value as Prime Industrial Lands.

The *Collocation/Conversion Suitability Factors Analysis* examines the impact of the proposed conversion of Prime Industrial Lands to commercial retail and office uses. This analysis draws on a similar framework as the Prime Industrial Lands Criteria Analysis to discuss how Prime Industrial Lands are impacted if a property is converted. The analysis concludes that the project site is not located within an area with transit availability. A portion of the project site (Area B, where the MedImpact facilities are located) would remain zoned IP-2-1, which allows light industrial uses; would remain designated Industrial in both the Community Plan and General Plan; and would maintain the Prime Industrial Lands identification. Area A of the project would develop as a mixed-use project, with corporate office uses, multi-tenant office space, commercial retail space, restaurants, a hotel, and movie theatre. These uses offer dining, lodging, entertainment, and shopping opportunities which can serve employees of the light industrial office development. The project does not propose any residential uses or residential support uses, and there are no hazardous sources located within one-quarter mile of the project site.

The results of the *Collocation/Conversion Suitability Factors Analysis* conclude that the project's conversion of Area A to a mixed-use project with light industrial components is suitable. The project does not impact residents or expose sensitive receptors to hazardous materials.

The project's proposal to remove the Prime Industrial Lands identification and the Industrial land use designation from Area A of the project site would not result in significant environmental impacts associated with Land Use.

The City of San Diego General Plan Mobility Element addresses the City-wide transit network through the Transit First policies. These policies pertain to the creation and maintenance of an attractive and convenient transit system that supports villages, transit corridors, and other higher-intensity uses with existing or planned higher-quality transit services. While there is currently no existing or planned transit within the project area, the Watermark Site Plan identifies a potential location for a future transit stop on the northeast corner of Scripps Poway Parkway and Scripps Highlands Drive, should a transit route along Scripps Poway Parkway exist in the future. For a discussion of the project's relation to public transit, please see Section 5.2, *Transportation/Traffic Circulation/Parking*.

### ***Significance of Impacts***

While the existing development (Corporate Office) on a portion of the project site (Area B) implements the recommendations of the Community Plan, the proposed project requires a change in the land use designation from Industrial to Regional Commercial for Area A. The proposed project is also inconsistent with the General Plan, in that the project proposes to remove the Prime Industrial Lands identification from Area A of the project site to allow development of a mixed-use commercial retail and office project. The project's proposal to remove the Prime Industrial Lands identification and the Industrial land use designation from Area A of the project site would not result in significant environmental impacts associated with Land Use, because the actual change to the General/Community Plan does not create a physical change to the environment; and nNo significant direct environmental impacts would result from the General/Community Plan Amendment. However, secondary impacts would be associated with the change in land use as discussed under Issue 2, below.

The Watermark project proposes to develop a mix of uses including light industrial office, community-serving commercial, a movie theatre, and social gathering space. Although the project does not realize the Community Plan's recommendation for the Mercy Site developing with uses such as manufacturing, wholesale and distribution, and warehousing, no environmental impacts would result from not providing such uses on the project site.

### ***Mitigation Measures***

The project would not result significant impacts associated with Land Use. No mitigation is required.

***Issue 2***

*Would the project result in a conflict with the environmental goals, objectives, and recommendations of the Community Plan in which it is located?*

***Impact Analysis***

The Miramar Ranch North Community Plan designates the project site for Industrial/Business Park use. A portion of the project site – Area B – is developing under the existing approvals as the corporate office campus for MedImpact. That development is in accordance with the existing IP-2-1 zone. Additionally, the project proposes a mix of commercial office development with commercial retail uses, a hotel, and a movie theatre, and proposes rezoning a portion of the project site – Area A – to CR-2-1 to allow the development of commercial retail uses. In order to develop the site as a mixed-use office/commercial retail project, an amendment to the Miramar Ranch North Community Plan would be required. Therefore, the project proposes a change in the Community Plan land use designation of Area A of the project site from Industrial/Business Park to Commercial Retail.

As discussed under *Land Use Issue 1*, above, the Community Plan recommends this site develop with light industrial uses such as manufacturing, wholesale distribution, and warehousing. The proposed project is consistent with the Miramar Ranch North Community Plan in that development would include a light industrial (office) component. The project would not develop with manufacturing, wholesale distribution, and/or warehousing uses; however, not developing the project site with those uses does not result in significant environmental impacts. No indirect or secondary land use impacts would occur.

The project conflicts with the Community Plan by proposing commercial development on a site identified for industrial uses. A Community Plan Amendment is required. ~~The proposed commercial land use and Community Plan Amendment would not result in indirect or secondary land use impacts.~~ Additionally,

~~The proposed project does not implement the General Plan policies regarding Prime Industrial lands and conflicts with the General Plan identification of the project site as Prime Industrial Land. The project proposes an amendment to the General Plan to remove the Prime Industrial Land identification and change the land use designation from Industrial to Regional Commercial on Area A of the project site. The proposed project would not result in significant environmental impacts associated with removing Area A of the project site from Prime Industrial Lands. No indirect or secondary land use impacts would occur.~~ The project's proposal to change the land use designation and remove the Prime Industrial Lands identification would result in secondary environmental effects. Secondary effects associated with the project's proposal to remove the Prime Industrial Lands identification and develop Area A as a mix of commercial uses would result in increased traffic and associated increase air quality emissions, greenhouse gas emissions, and noise levels. Impacts associated with these environmental effects are addressed in Sections 5.2, 5.4, 5.5, and 5.7, respectively.

Additionally, the proposed project requests several deviations from the City of San Diego Land Development Code, as described in Section 3.3.4, *Planned Development Permit*. The project requires height deviations for development within the CR-2-1 zone. The purpose of these deviations is to



allow for Class A office space approved under the existing Planned Industrial Permit, to allow for design and architectural elements, and to accommodate the parking garage.

~~A deviation request from the 60-foot maximum structure height of the CR-2-1 would allow the Watermark project to proceed with development of additional Class A office space as envisioned in the existing planned industrial development permit (CUP/PID No. 1027). This deviation is necessary to maintain the existing vested development rights under that approval. Should the feasibility of developing commercial retail uses be unachievable under future market conditions, the Watermark project would be completed as a corporate office park as envisioned under the existing entitlement. The structure height deviation for office buildings would apply to proposed Lots 3, 4 and 5.~~

A deviation for structure height on the plaza (proposed Lot 9) enables the development of a landmark architectural feature, such as a clock tower, bell tower, or other architectural features to designate the gateway to the community. This would assist in achieving an objective of the Community Plan to develop the Mercy Interchange area as an attractive gateway to the community. Such a feature will provide a visible landmark to I-15 travelers, as well as persons entering Miramar Ranch North. The height of the parking structure requires a height deviation

A deviation for height would also allow for the construction of a parking garage to accommodate parking needs for the project. This would reduce land required for surface parking, providing for more public amenity open space. Height deviations are summarized in Table 3-2, *Watermark – Maximum Structure Height*.

### ***Significance of Impacts***

The proposed project is consistent with goals and objectives of the Miramar Ranch North Community Plan that call for development of the project area with a range of commercial uses. The project would also retain a corporate office campus on a portion of the site and would, therefore, be consistent with the Community Plan's recommendation for light industrial uses. The project would not construct other light industrial uses, such as warehousing, distribution, or research and development uses. While the existing development (Corporate Office) on a portion of the project site (Area B) implements the recommendations of the Community Plan, the proposed project requires a Community Plan Amendment to change the land use designation from Industrial to Regional Commercial on Area A. If the City Council approves the Community Plan Amendment, then the project will be consistent with the Community Plan. ~~No indirect or secondary environmental impacts associated with the Miramar Ranch North Community Plan would result from implementation of the proposed project.~~

The project does not implement the General Plan policies regarding Prime Industrial Lands and is not consistent with the Prime Industrial Lands identification in the City of San Diego General Plan; the proposed project is otherwise consistent with the General Plan. ~~No indirect or secondary environmental impacts would be associated with this project's inconsistency with the General Plan's identification of the project site as Prime Industrial Lands.~~

The project's proposal to change the land use designation and remove the Prime Industrial Lands identification would result in secondary environmental effects. Secondary effects associated with the

project's proposal to remove the Prime Industrial Lands identification and develop Area A as a mix of commercial uses would result in increased traffic and associated increase air quality emissions, greenhouse gas emissions, and noise levels. Impacts associated with these environmental effects are addressed in Sections 5.2, 5.4, 5.5, and 5.7, respectively.

The project is not consistent with the City's Land Development Code, requiring deviations for proposed project maximum building heights. Height deviations would be implemented for the primary purpose of added architectural detail, wayfinding, and the creation of a community gateway through landmarks. The slight height deviation for the parking garage and the height deviations for project buildings would not represent a significant environmental impact, as these deviations are relatively minor and would not be out of character with adjacent and nearby developments.

### ***Mitigation Measures***

The project would not result in significant indirect or secondary environmental impacts relevant to land use. No mitigation measures have been identified.

### ***Issue 3***

*Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project?*

### ***Impact Analysis***

For a discussion of the applicable land use plans and policies, see *Issue 1* and *Issue 2*, above.

The project site is located within MCAS Miramar's AIA. The AIA is "*the area in which current or future airport-related noise, overflight, safety, or airspace protection factors may significantly affect land uses or necessitate restrictions on those uses.*" To facilitate implementation and reduce unnecessary referrals of projects to the ALUC, the AIA is divided into Review Area 1 and Review Area 2. The project site is located within Review Area 2. The composition of each area is determined as follows:

- Review Area 1 consists of locations where noise and/or safety concerns may necessitate limitations on the types of land uses. Specifically, Review Area 1 encompasses locations exposed to noise levels of community noise level equivalent (CNEL) 60 decibels (dB) or greater together with all of the safety zones depicted on the associated maps in this chapter. Within Review Area 1, all types of land use actions are to be submitted to the ALUC for review to the extent review is required by law.
- Review Area 2 consists of locations beyond Review Area 1 but within the airspace protection and/or overflight areas depicted on the associated maps in the MCAS Miramar ALUCP. Limits on the heights of structures, particularly in areas of high terrain, are the only restrictions on land uses within Review Area 2. The additional function of this area is to define where various mechanisms to alert prospective property owners about the nearby airport are appropriate. Within Review Area 2, only land use actions for which the height of objects is an issue are subject to ALUC review.

The ALUCP contains four principle compatibility concerns: noise (exposure to aircraft noise), safety (land use factors that affect safety both for people on the ground and occupants of aircraft, airspace

protection (protection of airport airspace), and overflight (annoyance or other general concerns related to aircraft overflights). As shown in Figures 5.1-5 (*MCAS Miramar Compatibility Policy Map: Noise*), 5.1-6 (*MCAS Miramar Compatibility Policy Map: Safety*), and 5.1-7 (*MCAS Miramar Compatibility Policy Map: Airspace Protection*), the proposed project is located outside the boundaries for noise compatibility, safety compatibility, and airspace protection compatibility. No land use impacts would result.

The Watermark project was reviewed for consistency with the MCAS Airport Land Use Compatibility Plan (ALUCP) by the San Diego County Regional Airport Authority Land Use Commission (ALUC). The project site is located within Review Area 2 of the Airport Influence Area (AIA) for the MCAS Miramar ALUCP. Based on its letter dated August 9, 2010, the ALUC staff determined that a determination of consistency with the ALUC is not required pursuant to Policies 2.6.1(a)(2) and 2.6.1(b)(2) of the MCAS Miramar ALUCP. A subsequent e-mail correspondence from MCAS Miramar to City staff dated May 3, 2013, further documents that no review is needed, as MCAS Miramar found no issues with noise, accident potential, or height guidelines in the ALUCP.

Overflight compatibility concerns apply to the proposed project. The project site is located within the Overflight-Related Real Estate Disclosure Area, as shown in Figure 5.1-8, *MCAS Miramar Compatibility Policy Map: Overflight*. This disclosure area relates to residential real estate transactions. Because the proposed project does not contain residential development, this compatibility concern is not applicable to the Watermark, and no impacts would result.

### ***Significance of Impacts***

Although the project site is within the MCAS Miramar AIA, the proposed project would not result in impacts associated with the four compatibility concern areas. As a result, there are no impacts to any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project.

### ***Mitigation Measures***

The proposed project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project. Therefore, no impacts would result, and no mitigation is required.

### ***Issue 4***

*Would the project be inconsistent/conflict with the City's Multiple Species Conservation Program (MSCP) Subarea Plan and any applicable MHPA Adjacency Guidelines?*

### ***Impact Analysis***

As shown in Figure 5.1-2, *Multi-Habitat Planning Area*, the Watermark project site is located within the City's MSCP and outside of the MHPA boundary. As discussed in Section 5.8, *Biological Resources*, the existing entitlements cover all direct biological impacts. The project site is currently fully graded and no additional impacts to sensitive habitat are anticipated. Drainage for the proposed project drains away from the MHPA and open space areas due to site topography (see Section 5.12, *Hydrology/Water Quality*). Additionally, all stormwater would be treated by filtrate and dispatch devices before leaving the site. Therefore, no impacts to the MHPA due to drainage and stormwater runoff would occur. The project would not conflict with the MSCP. The project could

result in indirect impacts to adjacent open space areas, and mitigation measures would be required to reduce indirect biology impacts to below a level of significance. (See Section 5.8, *Biological Resources*, for a discussion of impacts and mitigation associated with biological resources.)

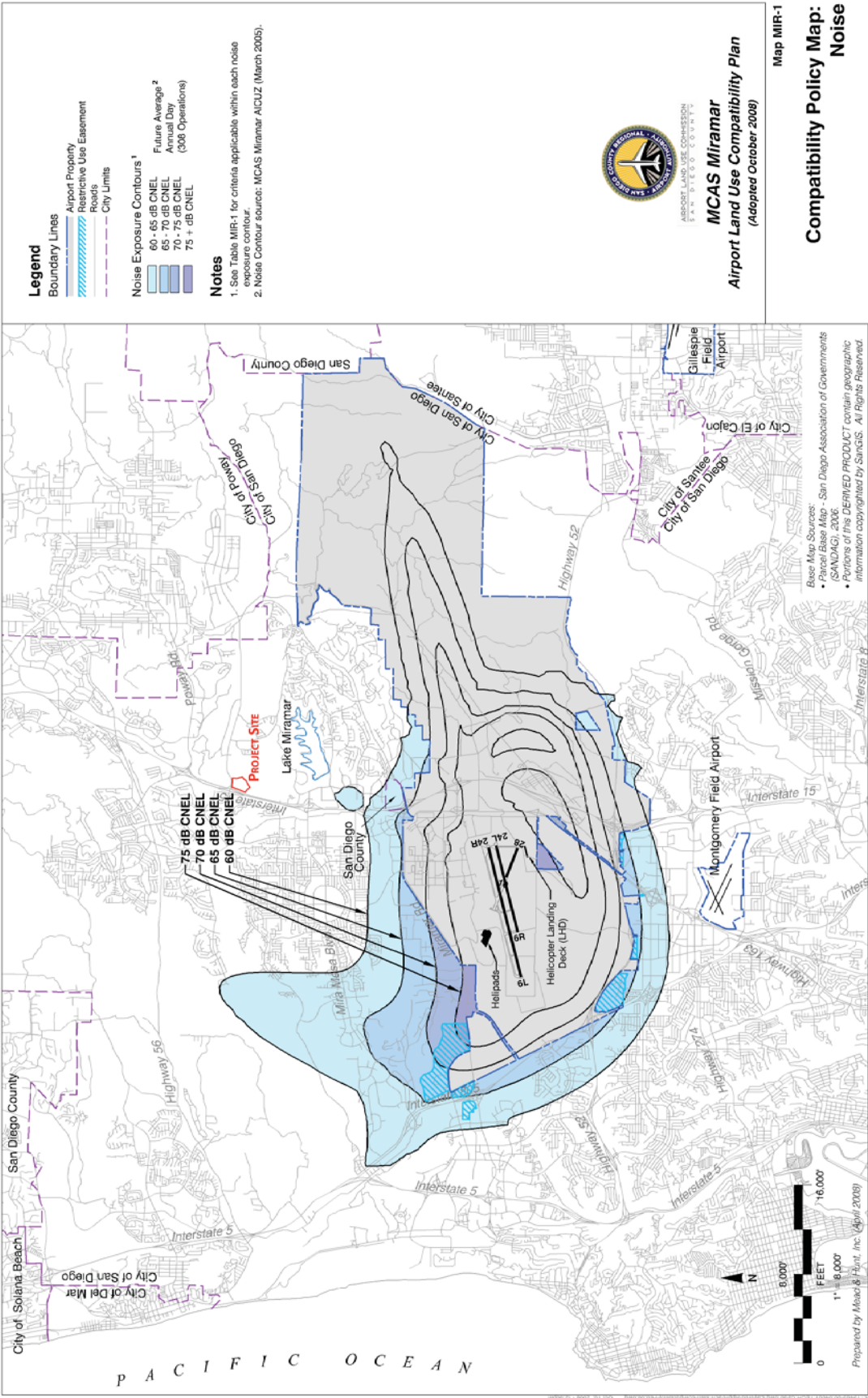
### ***Significance of Impacts***

In accordance with the City's MSCP, the project would include measures to avoid impacts to adjacent open space areas. No impacts to the MHPA would occur, as the project site is not located within or adjacent to an MHPA area.

### ***Mitigation Measures***

No impacts to the MHPA would occur, as the project site is not located within or adjacent to an MHPA area. No mitigation measures relative to the MHPA are required.





Figures 5.1-5. MCAS Miramar Compatibility Policy Map: Noise

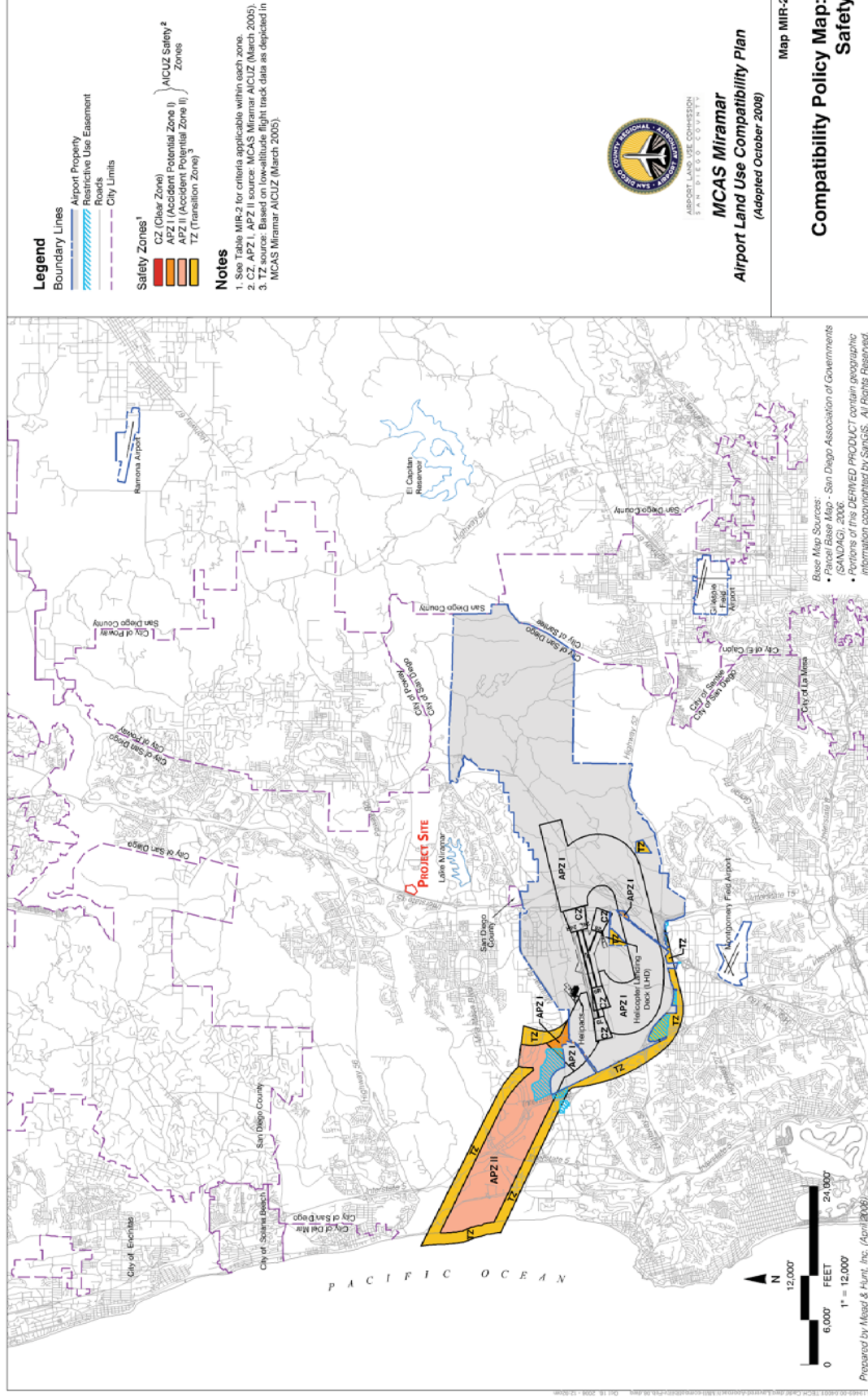


Figure 5.1-6. MCAS Miramar Compatibility Policy Map: Safety



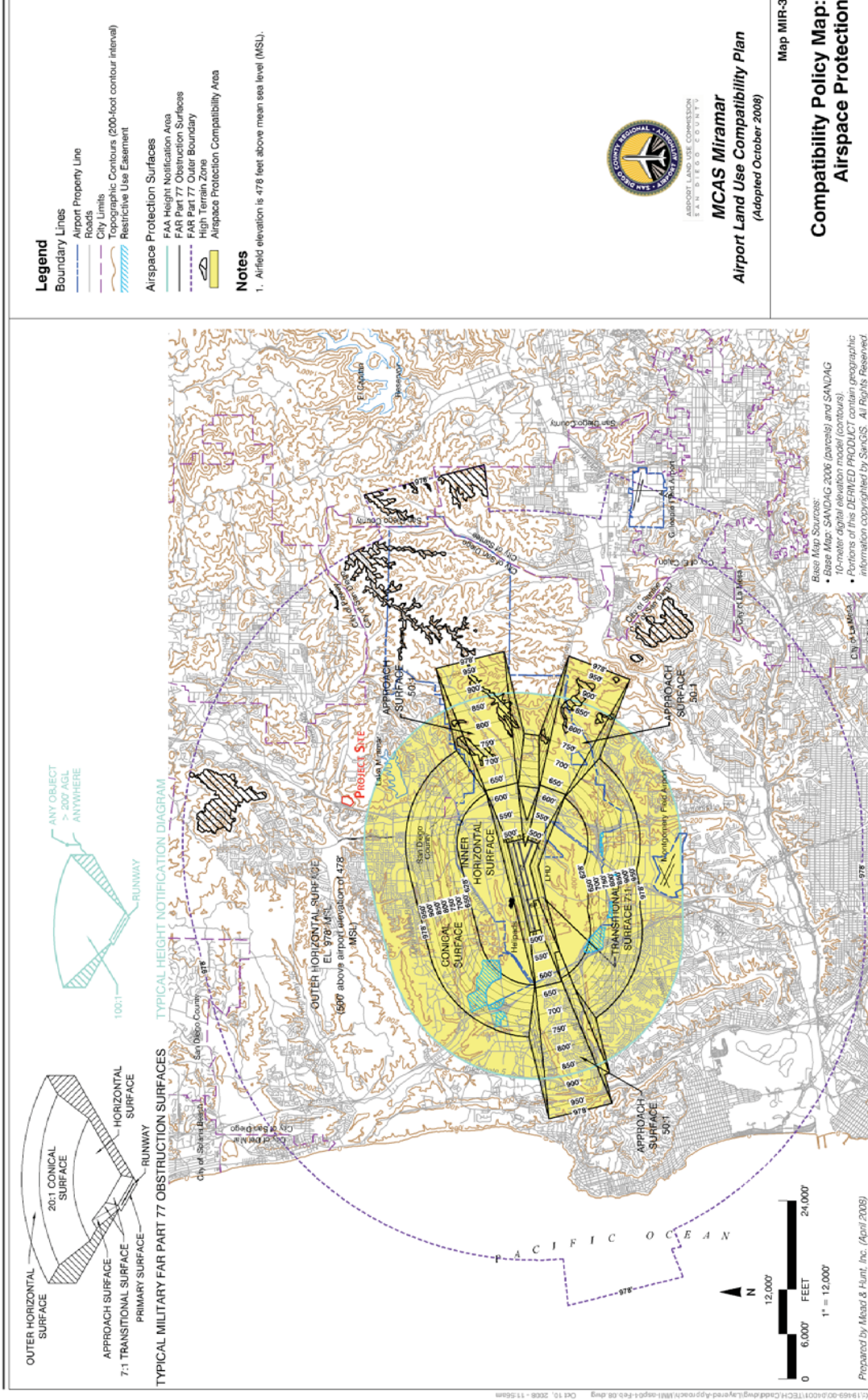


Figure 5.1-7. MCAS Miramar Compatibility Policy Map: Airspace Protection



## 5.2 TRANSPORTATION / TRAFFIC CIRCULATION / PARKING

This section of the EIR is based on the *Traffic Impact Analysis* prepared for the proposed project by Urban Systems Associates, Inc. (USAI), dated November 12, 2012. A copy of the *Traffic Impact Analysis* is included as Appendix D to this EIR.

The *Traffic Impact Analysis* examines the effects of the proposed Watermark project on the existing and planned circulation system based on development of the project and build-out of the community. In order to determine the trip distribution and study area for the project, USAI used a SANDAG Series 11 select zone model run. For study area purposes, City Guidelines were used, which are based on 50 trips in one direction during a peak hour, as a threshold for study. Also, based on the City Guidelines, USAI used 50 peak hour directional trips as the basis for studying freeway segments and 20 peak hour trips for studying metered freeway onramps. Using the 50-trip threshold for study, the study area ~~would encompass~~ anywhere that the project distribution shows 5.6 percent of project traffic or more. Utilizing the 20-trip rule for ramps, the project (i.e. Area A) would have to have 2.3 percent of project trips or more in order to trigger the threshold for study. (Note: Traffic from Area B is associated with the existing MedImpact development on Lot 1 and approved but not yet built MedImpact that can occur on Lot 2, which is accounted for as an “other project”, as described in 5.2.1, below.) The study area was agreed upon based on a consultation with City Transportation staff. Figures 5.2-1a and 5.2-1b, *Study Area Boundary and Intersection Key*, show the study area boundary and the intersections selected for the study. USAI then gathered information or oversaw the machine and manual traffic counts of the existing ADT and peak hour traffic flow data at the time the EIR began preparation for the study intersections and street segments. The study area for the proposed project includes existing intersections and their corresponding roadway segments. Roadway segments and intersections are summarized in Table 5.2-1, *Study Area Street Segments and Intersections*.

The Traffic Impact Analysis evaluates existing conditions (based on current street improvements and operations), Existing with Project, Near Term without Project, Near Term with Project, Year 2030 without Project, and Year 2030 with Project. See Section 5.2.1, below, for a description of “existing” conditions. The term “near term” is meant to discuss a condition occurring within the next several years to reflect the proposed project’s opening day. This reflects the best information available for determining what traffic would be in the next several years, derived from information obtained in the existing counts, SANDAG, the City, and other applicants that have projects approved by not yet built. The analysis used for transportation modeling purposes is the Year 2030.

Ramp meters at freeway entrances in the study area exist at:

- I-15 Northbound at Scripps Poway Parkway (PM peak hour)
- I-15 Southbound at Mercy Road (AM and PM peak hour)

The Traffic Impact Analysis also includes an analysis of transit, parking, and access. A discussion of internal project access and parking can be found in Section 3.3.4, *Planned Development Permit*, of this EIR.



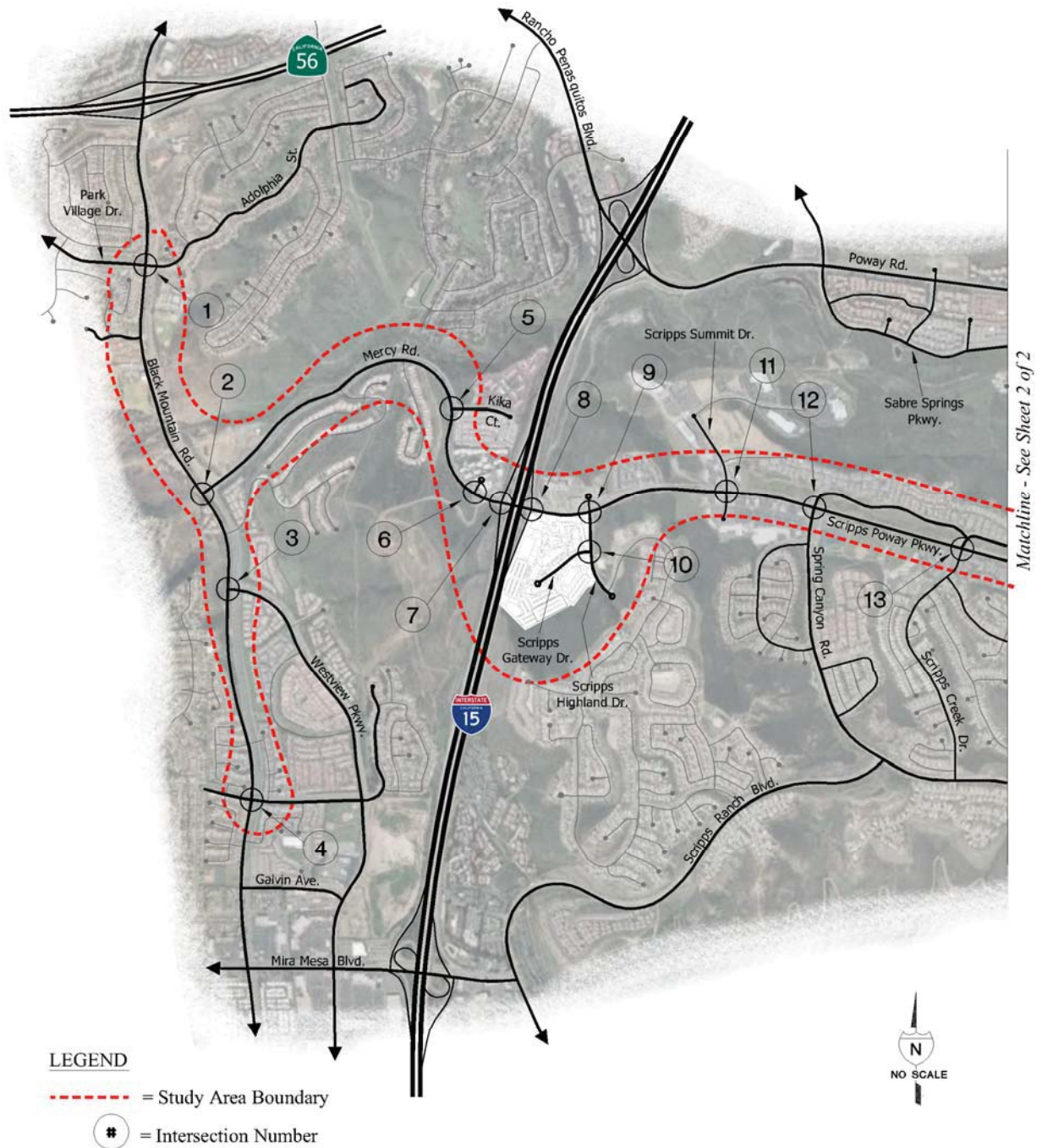


Figure 5.2-1a. Study Area Boundary and Intersection Key

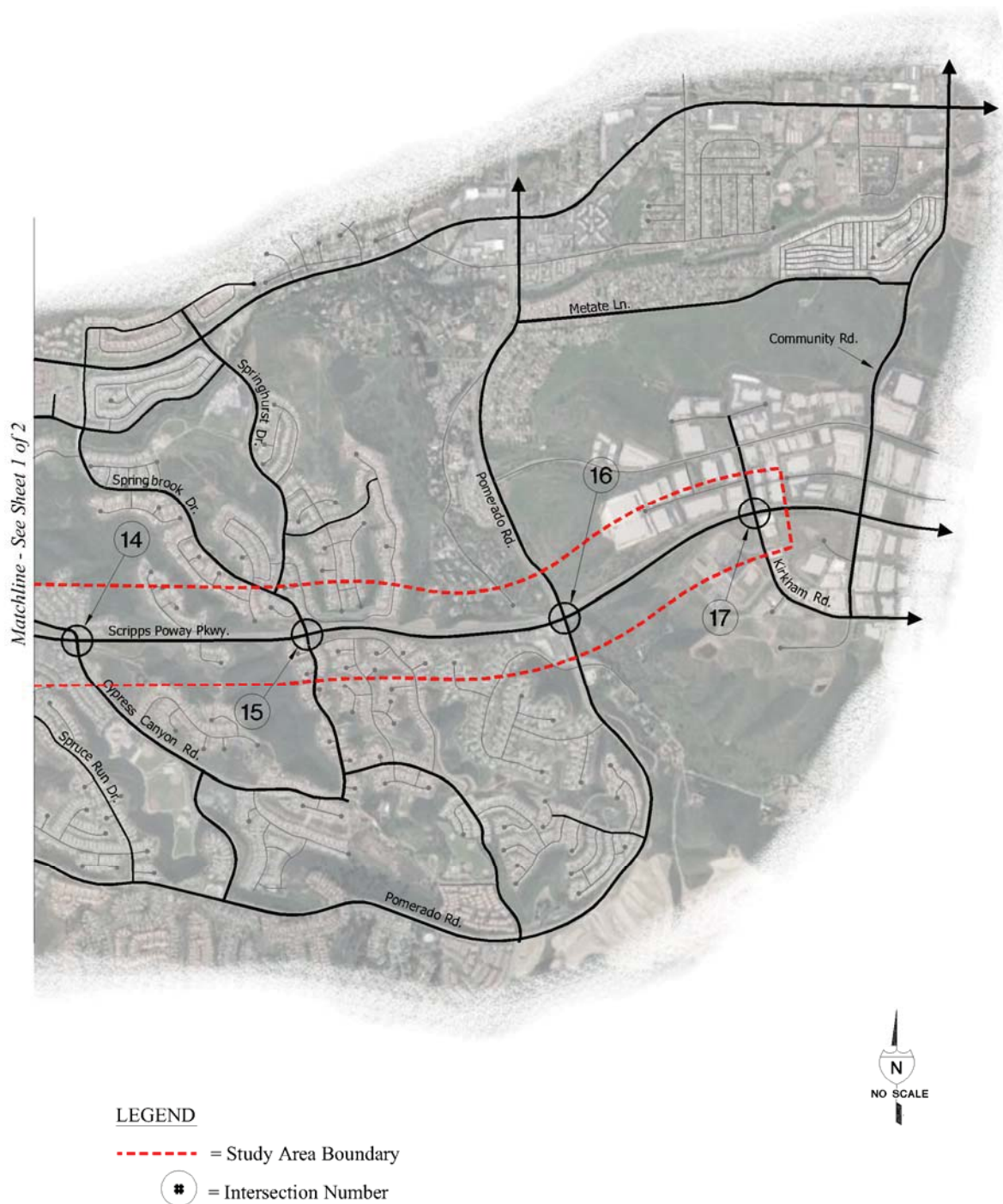


Figure 5.2-1b. Study Area Boundary and Intersection Key

**Table 5.2-1. Study Area Street Segments and Intersections**

Street Segments	
<i>Road</i>	<i>Segment</i>
Black Mountain Road	Mercy Road/Park Village Drive
	Westview Parkway/Mercy Road
	Capricorn Way/Westview Parkway
Mercy Road	Black Mountain Road/Kika Court
	Kika Court/Alemania Road
	Alemania Road/I-15 Southbound Ramps
Scripps Poway Parkway	I-15 Northbound Ramps/Scripps Highlands Drive
	Scripps Highlands Drive/Scripps Summit Drive
	Scripps Summit Drive/Springs Canyon Road
	Spring Canyon Road/Scripps Creek Drive
	Scripps Creek Drive/Cypress Canyon Road
	Cypress Canyon Road/Vail Court
	Angelique Street/Pomerado Road
	Pomerado Road/Kirkham Road
Intersections	
<i>Number</i>	<i>Intersection</i>
1	Park Village Road/Black Mountain Road
2	Mercy Road/Black Mountain Road
3	Westview Parkway/Black Mountain Road
4	Capricorn Way/Black Mountain Road
5	Kika Court/Mercy Road
6	Mercy Road/Alemania Road
7	Mercy Road/I-15 Southbound Ramps
8	Scripps Poway Parkway/I-15 Northbound Ramps
9	Scripps Poway Parkway/Scripps Highlands Drive
10	Scripps Highlands Drive/Scripps Gateway Court
11	Scripps Poway Parkway/Scripps Summit Drive
12	Scripps Poway Parkway/Spring Canyon Drive
13	Scripps Poway Parkway/Scripps Creek Drive
14	Scripps Poway Parkway/Cypress Canyon Drive
15	Scripps Poway Parkway/Springbrook Drive
16	Scripps Poway Parkway/Pomerado Road
17	Scripps Poway Parkway/Kirkham Road

### 5.2.1 Existing Conditions

The proposed project is located on the southeast corner of the Scripps Poway Parkway/I-15 interchange. The development is proposed to be accessed via a channelized right in/out driveway on Scripps Poway Parkway just east of the I-15 northbound ramps, as well as a signalized entry on Scripps Highland Drive at the existing intersection of Scripps Highland Drive/Scripps Gateway Court. The project site is adjacent to and shares access with the existing MedImpact single-tenant Class A office building. The existing MedImpact development on Lot 1 (Area B) and the approved but not yet built MedImpact facilities for Lot 2 are part of the Watermark project site and utilize the same access as proposed development of the Watermark project. Although the MedImpact buildings either exist or are permitted under separate approved entitlements, traffic from the development on Lot 1 and 2 was fully considered in the Traffic Impact Analysis and this EIR. has been considered an “other project” for off-site analysis and has been considered part of the “whole site” for access analysis purposes.



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***Existing Roadway Facilities***

**Scripps Poway Parkway** – Scripps Poway Parkway connects I-15 in the west and State Route 67 (SR-67) in the east. The road is classified as a six-lane Prime Arterial and a four-lane Major Road west and east of Spring Canyon Road, respectively. The road currently exists in its ultimate Community Plan Classification within the City of San Diego. The speed limit along Scripps Poway Parkway is 50 miles per hour (mph). There is a raised median and no parking along the entire road within the study area. Scripps Poway Parkway also contains bike lanes. The road is a major east-west route through Miramar Ranch North and provides access to I-15 for much of the community. Scripps Poway Parkway is identified as a Regionally Significant Arterial in the Congestion Management Program and is subject to enhanced evaluation procedures.

**Mercy Road** – Mercy Road connects Black Mountain Road in the west to I-15 in the east. The road is classified as a four-lane Major Road and serves as a continuation of Scripps Poway Parkway. The road has a speed limit of 45 mph within the study area. The road has no parking, a raised median, and bike lanes. Mercy Road exists in its ultimate classification for the Mira Mesa Community Plan. The road connects Miramar Ranch North to Mira Mesa and Rancho Peñasquitos via Black Mountain Road.

**Black Mountain Road** – Black Mountain Road is a major north-south roadway connecting Mira Mesa in the south to Rancho Peñasquitos in the north. The road is classified as a six-lane Prime Arterial south of Mercy Road and a four-lane Major Road north of Mercy Road. The speed limit for Black Mountain Road is 45 mph within the study area. The road has no parking, a raised median, and bike lanes within the study area. North of Mercy Road, the Rancho Peñasquitos Community Plan calls for the road to be widened to a six-lane Prime Arterial. A limited portion of this widening is planned to be completed by the Casa Mira View project, a recently approved project under construction in the Mira Mesa community. However, because this improvement was not completed at the time the Traffic Impact Analysis was prepared, it has not been assumed as completed in the traffic study.

***Existing Traffic Volumes and Levels of Service***

Figures 5.2-2a and 5.2-2b, *Existing Average Daily Traffic Volumes*, show the existing average weekday 24-hour traffic volumes for street segments in the project study area. Existing street segment functional classifications were used for purposes of this analysis. Traffic counts summarized on this figure were completed in October and November 2008.

Roadway segment and intersection operating conditions are typically described in terms of “Level of Service” (LOS). LOS is a qualitative measure of a roadway’s or an intersection’s operating performance and the motorists’ perception of roadway performance. LOS is expressed as a letter designation from A to F, with A representing the best operating conditions and F the worst. LOS A represents free flowing traffic conditions with no restrictions on maneuvering or operating speeds, low traffic volumes and high speeds; LOS B represents stable flow, more restrictions, and operating speeds beginning to be affected by traffic volume; LOS C represents stable flow, more restrictions, and the point at which maneuverability and speed, motorist comfort, and convenience begin to decline noticeably; LOS D represents conditions approaching unstable flow with traffic volumes

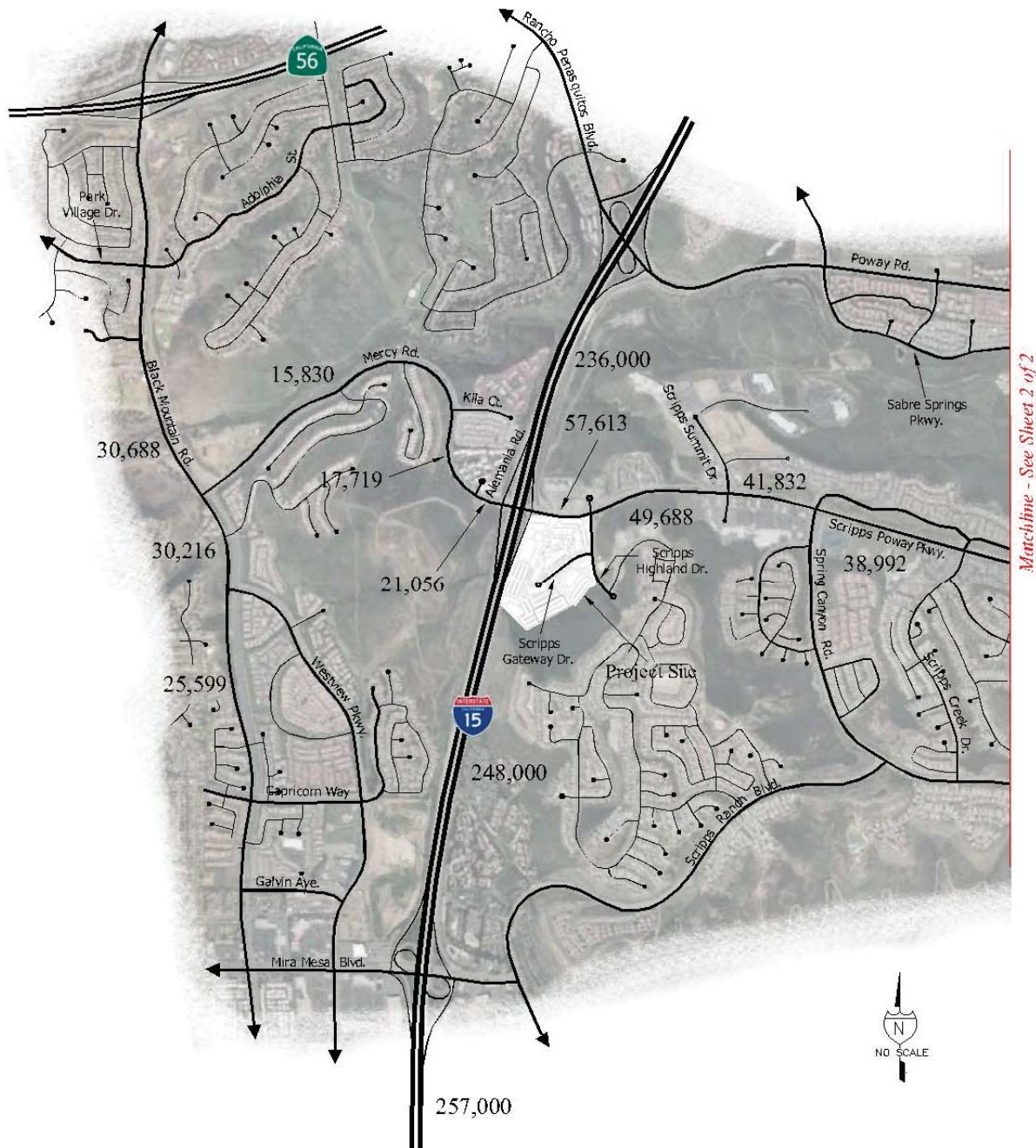


Figure 5.2-2a. Existing Average Daily Traffic Volumes



Figure 5.2-2b. Existing Average Daily Traffic Volumes



that profoundly affect arterials; LOS E represents unstable flow and some stoppages; LOS F represents forced flow, many stoppages, and low operating speeds.

While roadway LOS based on daily traffic volumes is useful in describing traffic operating conditions, roadway performance is most often controlled by the performance of intersections and, more specifically, intersection performance during peak traffic periods. Intersection performance is important because traffic control at intersections interrupts traffic flow, which would otherwise be relatively unimpeded (except for the influences of on-street parking, access to adjacent uses or other factors, which result in interaction among vehicles between controlled intersections).

The acceptable LOS for roadways and intersections in San Diego is LOS D. As shown in Table 5.2-2, *Existing Street Segment Levels of Service*, all study area street segments currently operate at acceptable levels of service (LOS) with the exception of the three segments of Scripps Poway Parkway: I-15 Northbound Ramps to Scripps Highland Drive; Spring Canyon Road to Scripps Creek Drive; and Scripps Creek Drive to Cypress Canyon Road. These segments currently operate at LOS E. (Note: For purposes of the Traffic Impact Analysis and this EIR, “current” conditions assume traffic from MedImpact Lot 1, since development on that lot has been completed. Approved but not yet built MedImpact facilities that can occur on Lot 2 is included in the near-term conditions, as that development had not yet occurred at the time the Traffic Impact Analysis and EIR were prepared.)

Existing morning (AM) and afternoon (PM) peak hour traffic data was collected at the intersections. As required by the City of San Diego, the analysis of peak hour intersection performance was based on the 2000 Highway Capacity Manual (HCM) using operational analysis procedures. A computer program (Synchro), which is based on these procedures, was used to complete the analysis. As shown on Table 5.2-3, *Existing Intersection Levels of Service*, all intersections currently operate at a level of service “D” or better during the AM and PM peak hour periods.

Ramp meters have been evaluated at Scripps Poway Parkway on the I-15 ramps. The meter rate is based on the existing meter rates provided by Caltrans. Table 5.2-4, *Existing Ramp Meter Analysis*, shows the existing state of this ramp meter at the most restrictive meter rate. At the I-15 Southbound Ramp on Mercy Road, the observed delay was approximately three minutes, with a queue of at least 750 feet or greater. This queue exceeded the ramp storage and overflowed into the interchange several times. At the I-15 Northbound Ramp, the observed delay was approximately 1.5 minutes, with a queue of approximately 400 feet.

Table 5.2-2. Existing Street Segment Levels of Service

Road	Segment	Jurisd.	# Lanes	Class.	Cap.	Volume	V/C	LOS
Black Mountain Rd.	Mercy Rd./Park Village Dr.	SD	4	4-M	40,000	30,688	0.77	D
	Westview Pkwy./ Mercy Rd.	SD	6	PA	60,000	30,216	0.50	B
	Capricorn Way/ Westview Pkwy.	SD	6	PA	60,000	25,599	0.43	B
Mercy Road	Black Mountain Rd./ Kika Ct.	SD	4	4-M	40,000	15,830	0.40	B
	Kika Ct./ Alemania Rd.	SD	4	4-M	40,000	17,719	0.44	B
	Alemania Rd./ I-15 SB Ramps	SD	4	4-M	40,000	21,056	0.53	C
Scripps Poway Parkway	I-15 NB Ramps/ Scripps Highland Dr.	SD	6	PA	60,000	57,613	0.96	E
	Scripps Highland Dr./ Scripps Summit Dr.	SD	6	PA	60,000	49,688	0.83	C
	Scripps Summit Dr./ Spring Canyon Rd.	SD	6	PA	60,000	41,832	0.70	C
	Spring Canyon Rd./ Scripps Creek Dr.	SD	4	4-M	40,000	38,992	0.97	E
	Scripps Creek Dr./ Cypress Canyon Rd.	SD	4	4-M	40,000	35,805	0.90	E
	Cypress Canyon Rd./ Angelique St.	SD	4	4-M	40,000	34,720	0.87	D
	Angelique St./ Pomerado Rd.	Poway	6	PA	60,000	36,008	0.60	C
	Pomerado Rd./ Kirkham Rd.	Poway	6	PA	60,000	41,405	0.69	C

**Legend:**

Class. = Functional Class SD= San Diego

Cap. = Capacity @ LOS "E"

LOS = Level of Service

PA = 6 lane Prime Arterial

4-M = 4 Lane Major Arterial

**Existing Arterial Analysis**

Road	Segment	Jurisd.	Class.	Cap.	Volume	Direction	Speed (mph)		LOS	
							AM	PM	AM	PM
Scripps Poway Parkway	I-15 NB Ramps/ Scripps Highland Dr.	SD	PA	60,000	57,613	Eastbound	15.8	17.3	E	D
						Westbound	22.8	22.2	C	C
	Scripps Highland Dr./ Scripps Summit Dr.	SD	PA	60,000	49,688	Eastbound	30.4	21.4	B	D
						Westbound	31.6	27.2	B	C
	Scripps Summit Dr./ Spring Canyon Rd.	SD	PA	60,000	41,832	Eastbound	18.9	17.0	D	D
						Westbound	15.2	17.4	E	D
	Spring Canyon Rd./ Scripps Creek Dr.	SD	4-M	40,000	38,992	Eastbound	20.1	21.6	D	D
						Westbound	25.3	28.0	C	B
	Scripps Creek Dr./ Cypress Canyon Rd.	SD	4-M	40,000	35,805	Eastbound	24.3	24.0	C	C
						Westbound	23.7	24.8	C	C
	Cypress Canyon Rd./ Vail Ct.	SD	4-M	40,000	34,720	Eastbound	28.6	27.4	B	C
						Westbound	31.8	31.3	B	B
	Angelique St./ Pomerado Rd.	Poway	PA	60,000	36,008	Eastbound	28.4	26.4	B	C
						Westbound	26.2	22.5	C	C
	Pomerado Rd./ Kirkham Rd.	Poway	PA	60,000	41,405	Eastbound	43.6	37.7	A	A
						Westbound	36.9	34.7	A	B

**Legend:**

Class. = Functional Class SD= San Diego

Cap. = Capacity @ LOS "E"

LOS = Level of Service

PA = 6 lane Prime Arterial

4-M = 4 Lane Major Arterial



Table 5.2-3. Existing Intersection Levels of Service

Number	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Park Village Road/Black Mountain Road	Signalized	39.0	D	42.9	D
2	Mercy Road/Black Mountain Road	Signalized	31.6	C	32.5	C
3	Westview Parkway/Black Mountain Road	Signalized	16.7	B	17.5	B
4	Capricorn Way/Black Mountain Road	Signalized	41.0	D	39.5	D
5	Kika Court/Mercy Road	Signalized	6.0	A	6.2	A
6	Mercy Road/Alemania Road	Signalized	15.6	B	10.7	B
7	Mercy Road/I-15 Southbound Ramps	Signalized	34.2	C	32.6	C
8	Scripps Poway Parkway/I-15 Northbound Ramps	Signalized	10.1	B	22.7	C
9	Scripps Poway Parkway/Scripps Highlands Drive	Signalized	19.8	B	21.0	C
10	Scripps Highlands Drive/Scripps Gateway Court	Signalized	14.3	B	7.2	A
11	Scripps Poway Parkway/Scripps Summit Drive	Signalized	27.4	C	32.1	C
12	Scripps Poway Parkway/Spring Canyon Drive	Signalized	26.5	C	29.9	C
13	Scripps Poway Parkway/Scripps Creek Drive	Signalized	26.8	C	23.1	C
14	Scripps Poway Parkway/Cypress Canyon Road	Signalized	11.8	B	12.6	B
15	Scripps Poway Parkway/Springbrook Drive	Signalized	22.0	C	32.2	C
16	Scripps Poway Parkway/Pomerado Road	Signalized	29.4	C	35.7	D
17	Scripps Poway Parkway/ Kirkham Road	Signalized	12.4	B	24.5	C

Table 5.2-4. Existing Ramp Meter Analysis

(most restrictive meter rate)

Location		Demand (Veh/Hr)	Demand per lane <sup>1</sup> (Veh/Hr/Ln)	Meter Rate (Veh/Hr/Ln)	Excess Demand (Veh/Hr/Ln)	Delay (Min)	Queue (Feet)
Mercy Road/ I-15 SB On Ramp- 2-SOV	AM	1200	489	420	69	9.86	2,001
	PM	1340	590	406	184	27.19	5,336
Mercy Road / I-15 SB On Ramp- 1-HOV	AM	1200	237	420	0	0.00	0
	PM	1340	219	406	0	0.00	0
Scripps Poway Pkwy. / I-15 NB On Ramp- 2-SOV	AM	Ramp Meter is not turned on in this Peak					
	PM	994	420	270	150	33.33	4,350
Scripps Poway Pkwy. / I-15 NB On Ramp- 1-HOV	AM	Ramp Meter is not turned on in this Peak					
	PM	994	167	270	0	0.00	0

**NOTE:**

Meter rate is based on the most restrictive meter rate provided by Caltrans

Delay = (Demand - Meter Rate) / Meter Rate \* 60 minutes/hour

Queue = Excess Demand \* 29 feet/vehicle

SOV= Single Occupancy Vehicles

HOV= High Occupancy Vehicles

<sup>1</sup> = the critical lane is used for ramps with multiple lanes

Veh/Hr= Vehicles per hour

Veh/Hr/Ln= Vehicles per hour per lane

Freeway segments have been evaluated utilizing Caltrans District 11 procedures accepted by the City of San Diego. Table 5.2-5, *Existing Freeway Segment LOS Summary*, illustrates current freeway conditions. As shown in Table 5.2-5, all freeway segments are expected to operate at an acceptable level of service in the existing conditions.

**Table 5.2-5. Existing Freeway Segment LOS Summary**

Segment	Lanes	Dir.	Cap.	ADT*	Peak Hour %	Dir. Split	PHV	V/C	LOS
<b>I-15</b>									
SR-163/SR-52	5-GP	NB	11,750	176,000	0.075	0.55	7,314	0.622	C
SR-163/SR-52	5-GP	SB	11,750	176,000	0.081	0.53	7,534	0.641	C
Miramar Road/ SR-163	7-GP+2-M	NB	19,810	296,000	0.075	0.55	12,301	0.621	C
Miramar Road/ SR-163	7-GP+2-M	SB	19,810	296,000	0.081	0.53	12,670	0.640	C
Carroll Canyon Road/Miramar Road	5-GP+2-M	NB	15,110	275,000	0.075	0.55	11,428	0.756	C
Carroll Canyon Road/Miramar Road	5-GP+2-M	SB	15,110	275,000	0.081	0.53	11,771	0.779	C
Carroll Canyon Road/ Mira Mesa Blvd.	5-GP+2-M	NB	15,110	257,000	0.075	0.55	10,680	0.707	C
Carroll Canyon Road/ Mira Mesa Blvd.	5-GP+2-M	SB	15,110	257,000	0.083	0.57	12,178	0.806	D
Mira Mesa Blvd./ Scripps Poway Pkwy.	5-GP+2-M	NB	15,110	248,000	0.081	0.53	10,534	0.697	C
Mira Mesa Blvd./ Scripps Poway Pkwy.	5-GP+2-M	SB	15,110	248,000	0.082	0.58	11,760	0.778	C
Scripps Poway Pkwy./Poway Road	5-GP+2-M	NB	15,110	236,000	0.081	0.53	10,024	0.663	C
Scripps Poway Pkwy./Poway Road	5-GP+2-M	SB	15,110	236,000	0.082	0.58	11,191	0.741	C
Poway Road/ SR-56	5-GP+2-M	NB	15,110	208,000	0.077	0.52	8,393	0.555	B
Poway Road/ SR-56	5-GP+2-M	SB	15,110	208,000	0.078	0.57	9,311	0.616	B
SR-56/ Carmel Mountain Road	5-GP+4-M	NB	18,470	225,000	0.077	0.52	9,079	0.492	B
SR-56/ Carmel Mountain Road	5-GP+4-M	SB	18,470	225,000	0.078	0.57	10,072	0.545	B
Carmel Mountain Road/ Camino Del Norte	5-GP+4-M	NB	18,470	213,000	0.077	0.52	8,595	0.465	B
Carmel Mountain Road/ Camino Del Norte	5-GP+4-M	SB	18,470	213,000	0.078	0.57	9,535	0.516	B
Camino Del Norte/ Rancho Bernardo Road	5-GP+4-M	NB	18,470	209,000	0.077	0.52	8,433	0.457	B
Camino Del Norte/ Rancho Bernardo Road	5-GP+4-M	SB	18,470	209,000	0.078	0.57	9,356	0.507	B

**Legend:**

Dir.= Direction

Cap. = Capacity

ADT= Average Daily Traffic

V/C= Volume to Capacity Ratio

LOS= Level of Service

PHV= Peak Hour Volume

#-GP= # of General Purpose Lanes

#-M=# of Managed Lanes (Capacity for LOS "C" assumed at 1680 veh/hr/ln taken from Caltrans Guide, December 2002)

**Note:**

Capacity for LOS "E" roadway is 2,350 veh/hr/ln.

Taken from Transition between LOS "C" and LOS "D" criteria for Basic Freeway Segments @ 65 mi/hr in "Caltrans Guide for the Preparation of Traffic Impact Studies", December 2002

Peak Hour % and Dir. Split taken from Caltrans internet posted Traffic Volumes

\*Caltrans 2010 Count Data

As stated previously, the Traffic Impact Analysis considers the proposed Watermark development in Area A plus full development of the MedImpact facilities on Lots 1 and 2 (Area B) as allowed under existing approvals. For purposes of the Traffic Impact Analysis and this EIR, traffic from MedImpact Lot 1 is assumed as part of the existing baseline, since development on that lot has been completed and traffic from the MedImpact office buildings is part of existing traffic volumes. Approved but not yet built MedImpact facilities that can occur on Lot 2 is included in the near-term

conditions, as that development had not yet occurred at the time the Traffic Impact Analysis and EIR were prepared. Therefore, for purposes of the Traffic Impact Analysis, the MedImpact facilities in Area B are considered among the “other projects” included in the evaluation of traffic impacts.

To find the Near Term (Existing plus Other Projects) traffic volumes, USAI contacted City staff to determine other proposed or approved projects that have impacts within the project study area. From that contact, three other projects were found to have impacts within the project study area. Each of these other projects has been approved by the City of San Diego. Project-only volumes from the three cumulative projects were extracted from other traffic studies and added to existing traffic volumes to get Near Term “other project” volumes. The three other projects used in this analysis are listed below. (See Figure 6-1, *General Location of Cumulative Projects*, for the location of these three projects.)

**MedImpact** – The MedImpact facilities (Area B) are composed of two large corporate headquarters (single-tenant) office buildings located adjacent to the project site and sharing access through Scripps Gateway Court and other project roadways. It is expected that MedImpact will be a large user of the hotel planned for the Watermark project. Further, due to the adjacent location and the planned connections with the Watermark project, it is expected that the MedImpact facilities will serve to increase the mixed-use nature of the project and contribute to the further internalization of project traffic. The MedImpact facilities are anticipated to generate 3,243 ADT when fully occupied. A portion of the traffic generated by the MedImpact facilities is included in the baseline conditions, as development on Lot 1 has been completed and traffic from that development is part of existing traffic volumes. Development of Lot 2 has not yet occurred and is, therefore, part of the near-term conditions.

**Sharp Health** – The Sharp Health project is composed of medical office uses located north of Scripps Poway Parkway at Scripps Summit Drive. The Sharp Health project 45,000 square feet is anticipated to generate 900 ADT when fully occupied.

**Casa Mira View** – Casa Mira View is a large multi-family residential project located on Westview Parkway north of Mira Mesa Boulevard and adjacent to I-15. The project consists of 1,848 residential dwelling units expected to generate 11,088 ADT. As a relatively distant project, it is anticipated that the Casa Mira View project will have limited impacts on study area intersections and segments focused on Black Mountain Road and Mercy Road. This project is anticipated to construct 200 dwelling units per year over the next several years.

### 5.2.2 Impact Analysis

#### Thresholds of Significance

Relative to Transportation/Traffic Circulation, the following thresholds have been established to determine significant traffic impacts:

1. If any intersection, roadway segment, or freeway segment affected by a project would operate at LOS E or F under either direct or cumulative conditions, the impact would

- be significant if the project exceeds the thresholds shown in the table below.
- At any ramp meter location with delays above 15 minutes, the impact would be significant if the project exceeds the thresholds shown in the table below.
  - If a project would add a substantial amount of traffic to a congested freeway segment, interchange, or ramp, the impact may be significant.
  - If a project would increase traffic hazards to motor vehicles, bicyclists or pedestrians due to proposed non-standard design features (e.g., poor sight distance, proposed driveway onto an access-restricted roadway), the impact would be significant.
  - If a project would result in the construction of a roadway which is inconsistent with the General Plan and/or a community plan, the impact would be significant if the proposed roadway would not properly align with other existing or planned roadways.
  - If a project would result in a substantial restriction in access to publicly or privately owned land, the impact would be significant.

Level of Service with Project *	Allowable Change Due To Project Impact **					
	Freeways		Roadway Segments		Intersections	Ramp Metering
	V/C	Speed (mph)	V/C	Speed (mph)	Delay (sec.)	Delay (min.)
E (or ramp meter delays above 15 min.)	0.010	1.0	0.02	1.0	2.0	2.0
F (or ramp meter delays above 15 min.)	0.005	0.5	0.01	0.5	1.0	1.0

Note 1: The allowable increase in delay at a ramp meter with more than 15 minutes delay and freeway LOS E is 2 minutes.

Note 2: The allowable increase in delay at a ramp meter with more than 15 minutes delay and freeway LOS F is 1 minute.

\* All LOS measurements are based upon Highway Capacity Manual procedures for peak-hour conditions. However, V/C ratios for roadway segments are estimated on an ADT/24-hour traffic volume basis (using Table 2 of the City's Traffic Impact Study Manual. The acceptable LOS for freeways, roadways, and intersections is generally —DI (—CI for undeveloped locations). For metered freeway ramps, LOS does not apply. However, ramp meter delays above 15 minutes are considered excessive.

\*\* If a proposed project's traffic causes the values shown in the table to be exceeded, the impacts are determined to be significant. The project applicant shall then identify feasible improvements (within the Traffic Impact Study) that will restore/and maintain the traffic facility at an acceptable LOS. If the LOS with the proposed project becomes unacceptable (see above \* note), or if the project adds a significant amount of peak-hour trips to cause any traffic queues to exceed on- or off-ramp storage capacities, the project applicant shall be responsible for mitigating the project's direct significant and/or cumulatively considerable traffic impacts.

KEY:

Delay = Average control delay per vehicle measured in seconds for intersections, or minutes for ramp meters

LOS = Level of Service

Speed = measured in miles per hour

V/C = Volume to Capacity ratio

Relative to Parking, parking requirements vary by land use and location and are dictated by the City of San Diego Municipal Code. Non-compliance with the City's parking ordinance does not necessarily constitute a significant environmental impact. However, it can lead to a decrease in the availability of existing public parking in the vicinity of the project. Generally, if a project is deficient by more than ten percent of the required amount of parking and at least one the following criteria applies, then a significant impact may result:

- The project's parking shortfall or displacement of existing parking would substantially affect the availability of parking in an adjacent residential area, including the availability of public parking.

2. The parking deficiency would severely impede the accessibility of a public facility, such as a park or beach.

### **Issue 1**

*Would the project result in:*

- *Traffic generation in excess of specific community plan allocation?*
- *An increase in projected traffic which is substantial in relation to the existing traffic load and capacity of the street system based on the table presented under Thresholds of Significance above?*
- *Addition of substantial amount of traffic to a congested freeway segment, interchange, or ramp as shown in the table under Significance of Thresholds above?*
- *Substantial impact upon existing or planned transportation systems?*
- *Substantial alterations to present circulation improvements including effects on existing public access to beaches, parks, or other open space areas?*

### **Impacts**

Please see *Issue 6*, below, for a discussion of non-motorized travel, including pedestrian and bicycle mobility.

There is no transit service in the vicinity. Project design incorporates space for a future bus stop along Scripps Poway Parkway, in the event a bus transit route is aligned with Scripps Poway Parkway. Transit routes and locations would be determined by MTS. Because there is no transit service in the project vicinity currently, employees and visitors of the project would not be able to utilize transit to access the project site. Therefore, the project is not anticipated to have any effects on transit service.

As shown in Table 5.2-6, *Watermark Project Traffic Generation*, based on the target development intensity, the proposed development of 151,369 square feet of office use, 316,000 square feet of retail uses, a 130-room hotel, and a 43,917 square foot movie theater would be expected to generate a maximum 18,551 cumulative ADT with 583 trips in the AM peak hour and 1,726 trips in the PM peak hour. The proposed development would be expected to generate a maximum 21,509 ADT at driveways with 648 trips in the AM peak hour and 2,003 trips in the PM peak hour. Figures 5.2-3a and 5.2-3b, *Project Trip Distribution*, show the project's expected trip distribution. Figures 5.2-4a and 5.2-4b, *Project Only (ADT) Traffic Assignment*, show the project average daily traffic volumes based on the daily trip generation shown in Table 5.2-6.



Table 5.2-6. Watermark Project Traffic Generation

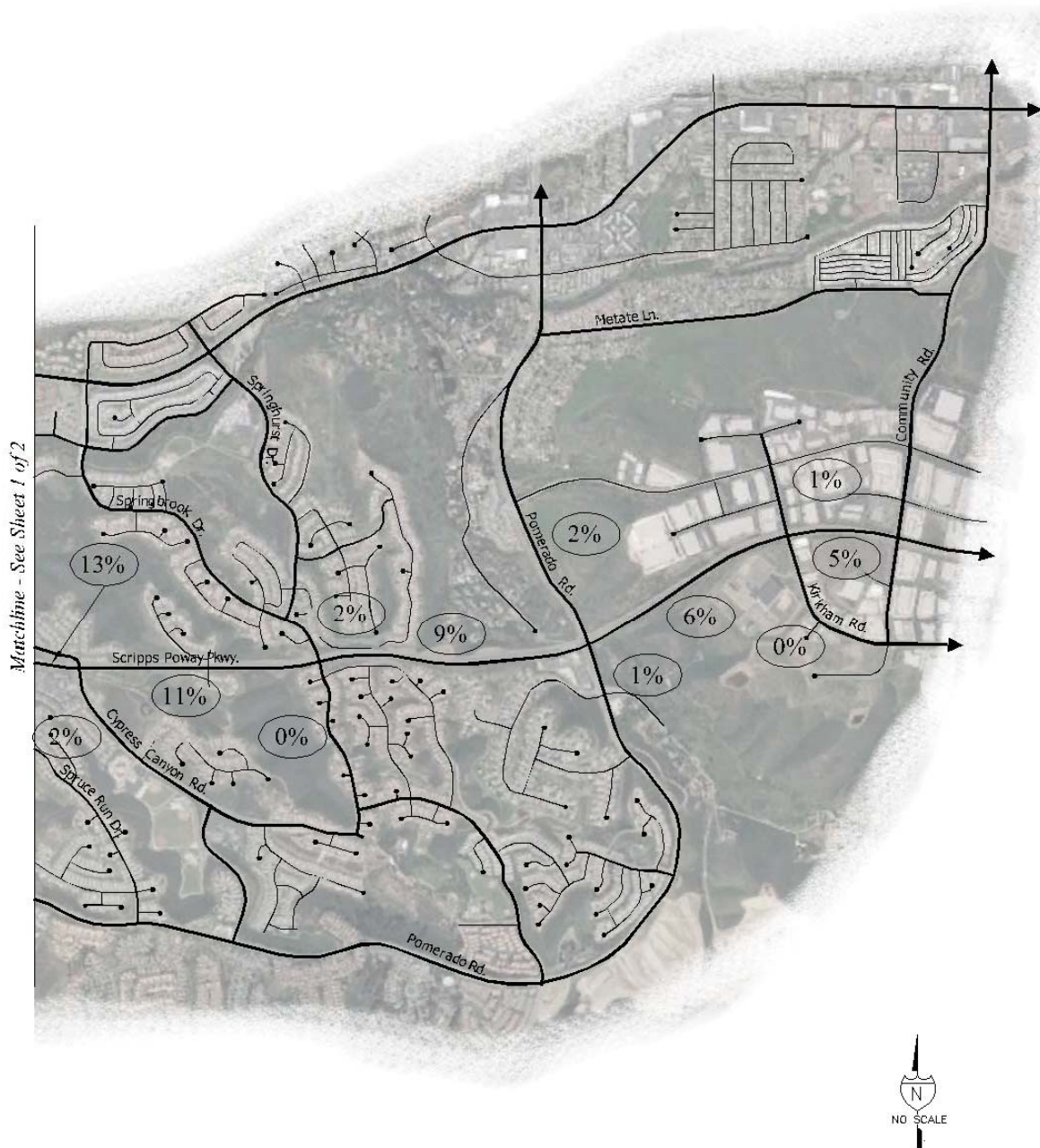
CUMULATIVE TRIP GENERATION													
Use	Amount	Trip Rate	ADT	AM Peak Hour					PM Peak Hour				
				%	#	In:Out	In	Out	%	#	In:Out	In	Out
Multi Tenant Office	151,369 sq. ft.	$\text{Ln}(T)=0.756$ $\text{Ln}(x) + 3.95$	2,310	13%	300	9:1	270	30	14%	323	2:8	65	259
Mixed Use Reduction %			3%		5%		5%	5%		4%		4%	4%
Office Mixed Use Reduction			-69		-15		-14	-2		-13		-3	-10
Office Subtotal			2,240		285		257	29		310		62	248
Hotel	130 rooms	10/room	1,300	6%	78	6:4	47	31	8%	104	6:4	62	42
Mixed Use Reduction %			10%		8%		8%	8%		10%		10%	10%
Hotel Mixed Use Reduction			-130		-6		-4	-2		-10		-6	-4
Hotel Subtotal			1,170		72		43	29		94		56	37
Retail	316,000 sq. ft.	$\text{Ln}(T)=0.756^*$ $\text{Ln}(x) + 5.25 \cdot 0.8$	11,828	2%	237	7:3	166	71	9%	1,064	5:5	532	532
Movie	43,917 sq. ft.	80/1,000 sq.ft.	3,513	0%	11	7:3	7	3	8%	281	7:3	197	84
Reduction in Retail Trips			-199		-21		-17	-4		-23		-9	-14
Retail Subtotal			15,142		226		156	70		1,322		720	602
TOTAL			18,552		583		455	127		1,726		838	888

DRIVEWAY TRIP GENERATION													
Use	Amount	Trip Rate	ADT	AM Peak Hour					PM Peak Hour				
				%	#	In:Out	In	Out	%	#	In:Out	In	Out
Multi Tenant Office	151,369 sq. ft.	$\text{Ln}(T)=0.756$ $\text{Ln}(x) + 3.95$	2,310	13%	300	9:1	270	30	14%	323	2:8	65	259
Mixed Use Reduction %			3%		5%		5%	5%		4%		4%	4%
Office Mixed Use Reduction			-69		-15		-13	-2		-13		-3	-10
Office Subtotal			2,240		285		257	29		310		62	248
Hotel	130 rooms	10/room	1,300	6%	78	6:4	47	31	8%	104	6:4	62	42
Mixed Use Reduction %			10%		8%		8%	8%		10%		10%	10%
Hotel Mixed Use Reduction			130		-6		-4	-2		-10		-6	-4
Hotel Subtotal			1,170		72		43	29		94		56	37
Retail	316,000 sq. ft.	$\text{Ln}(T)=0.756^*$ $\text{Ln}(x) + 5.25$	14,785	2%	296	7:3	207	89	9%	1,331	5:5	665	665
Movie	43,917 sq. ft.	80/1,000 sq. ft.	3,513	0%	11	7:3	7	3	8%	281	7:3	197	84
Reduction in Retail Trips			-199		-21		-17	-4		-23		-9	-15
Retail Subtotal			18,099		285		197	88		1,588		853	735
TOTAL			21,509		648		501	148		2,003		978	1,025



## The Watermark

*Final Environmental Impact Report*

Figure 5.2-3b. *Project Trip Distribution*



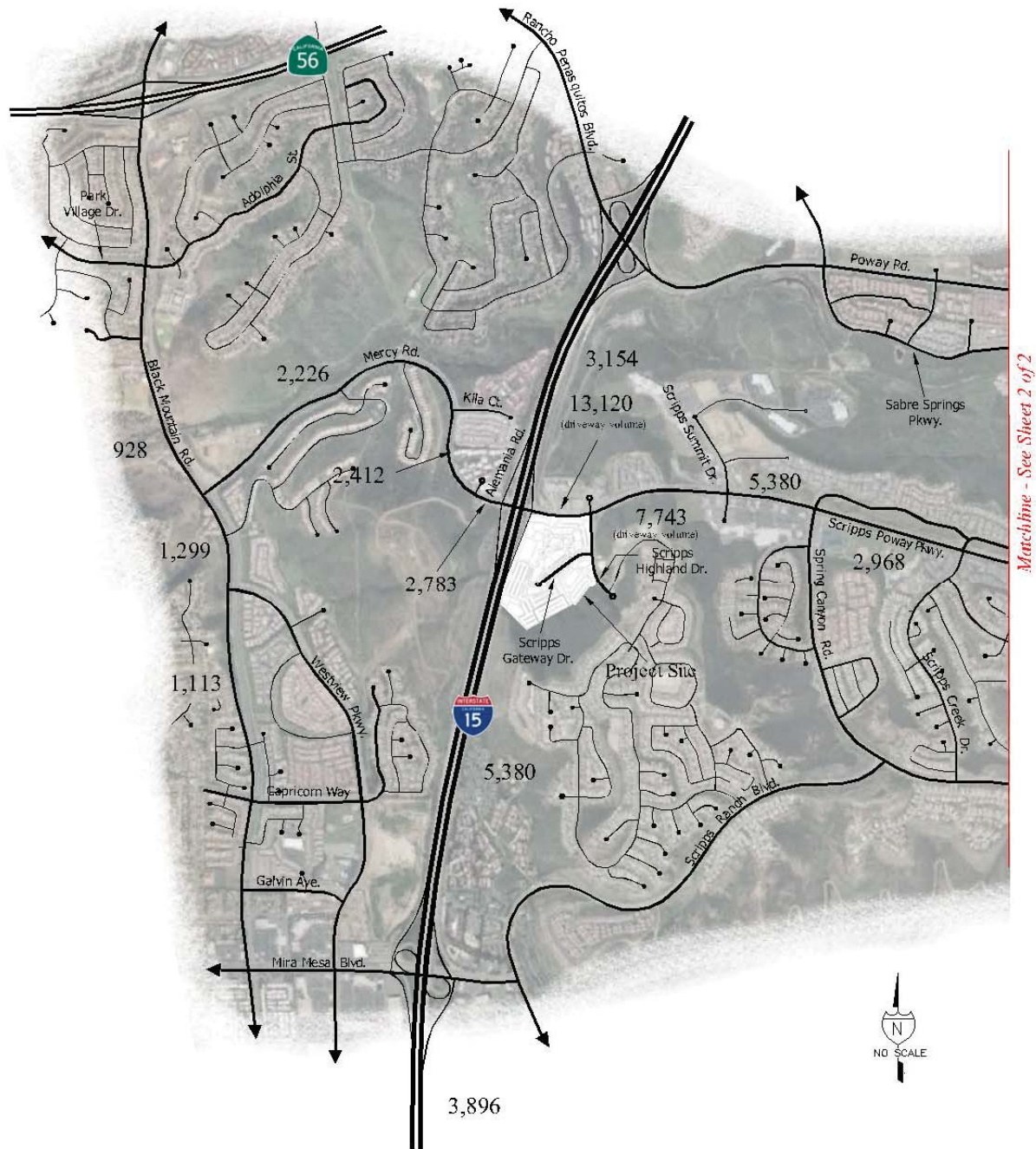
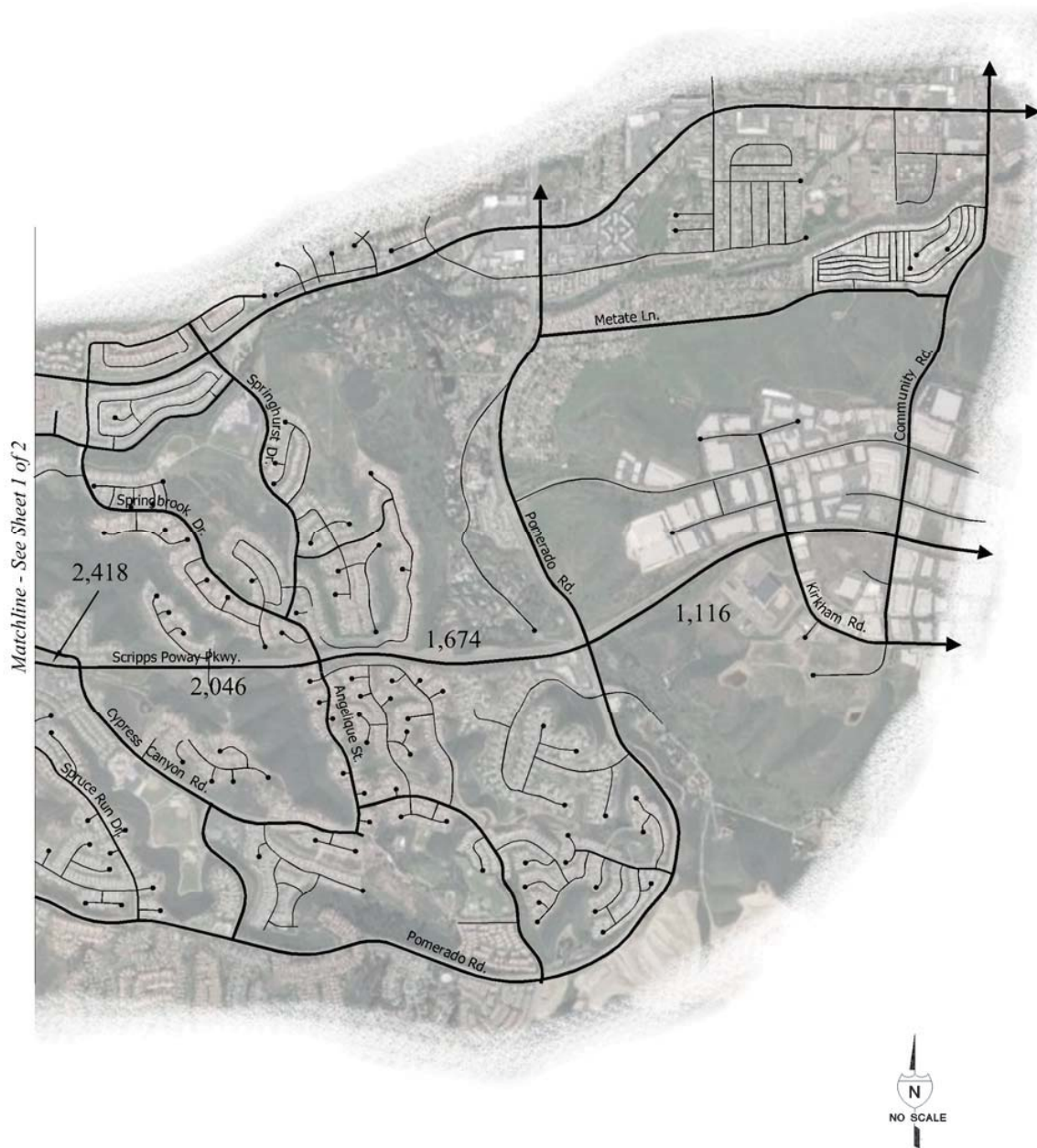


Figure 5.2-4a. Project Only (ADT) Traffic Assignment



Figure 5.2-4b. *Project Only (ADT) Traffic Assignment*

**Existing with Project**

In order to determine Existing with Project traffic, Watermark project traffic (Area A only) was added to the existing traffic presented in Section 5.2.1, above. Figures 5.2-5a and 5.2-5b show the *Existing with Project Average Daily Traffic*. (Note: As described in Section 5.2.1, *Existing Conditions*, the MedImpact facilities on Lot 1 in Area B are considered part of the existing traffic. Approved by not yet built MedImpact development that can occur on Lot 2 is assumed as an “other project:” and is considered as part of the near-term analysis. ~~Therefore, traffic from MedImpact facilities is already assumed in the analysis.~~) No road or freeway improvements are assumed in the Existing scenarios.

Table 5.2-7, *Existing with Project Street Segment Levels of Service*, shows street segment levels of service and significant impacts measured without project traffic. The following street segments are projected to operate at an unacceptable arterial level of service in the Existing with Project condition and without mitigation representing a significant project impact.

<b><u>Road</u></b>	<b><u>Segment</u></b>	<b><u>LOS</u></b>
Scripps Poway Parkway	I-15 Northbound Ramps / Scripps Highlands Drive	F
Scripps Poway Parkway	Scripps Highland Drive/ Scripps Summit Drive	E
Scripps Poway Parkway	Spring Canyon Road / Scripps Creek Drive	F
Scripps Poway Parkway	Scripps Creek Drive / Cypress Canyon Road	E
Scripps Poway Parkway	Cypress Canyon Road / Angelique Street	E

Table 5.2-8, *Existing with Project Intersection Levels of Service*, shows the resulting AM and PM peak hour levels of service for peak hour traffic volumes from the project traffic when added to existing peak hour volumes at the study area intersections. As shown in Table 5.2-8, no intersections are projected to operate at an unacceptable level of service.

Ramp meters have been evaluated for the I-15 freeway ramps at Scripps Poway Parkway on the Interstate 15 ramps. The meter rate is based on the existing meter rates provided by Caltrans. Table 5.2-9, *Existing with Project Ramp Meter Analysis*, shows the existing impacts to ramp meters using the most restrictive meter rate. A significant impact occurs at the ramp if the change in delay is greater than one or two minutes and the ramp experiences a delay greater than 15 minutes with the freeway operating at LOS E or F. Table 5.2-9, *Existing With and Without Project Ramp Meter Analysis*, shows a change in delay greater than two minutes; however, the freeway operates at an acceptable LOS. Therefore, no impacts would occur.

Freeway main lane segments have been evaluated utilizing Caltrans procedures. In future conditions, the ongoing I-15 managed lanes project is assumed to be completed. This project is fully funded and under construction. ~~This~~ The I-15 managed lanes project is expected to significantly improve freeway operation. Table 5.2-10, *Existing With and Without Project Freeway Segment LOS Summary*, illustrates near-term impacts to I-15 with and without the proposed project. No significant impacts to freeway main line segments would occur.

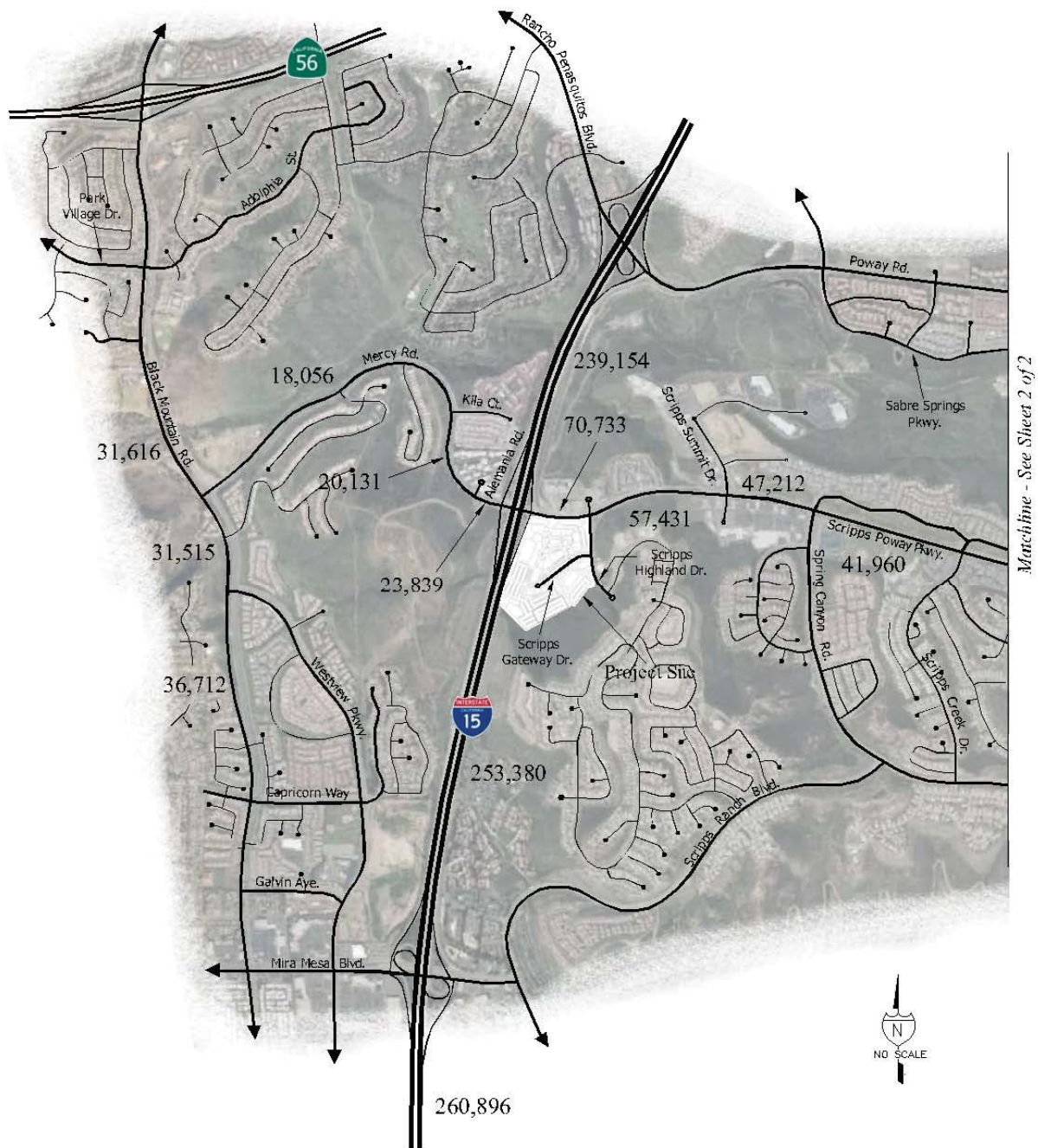


Figure 5.2-5a. Existing with Project Average Daily Traffic Volumes



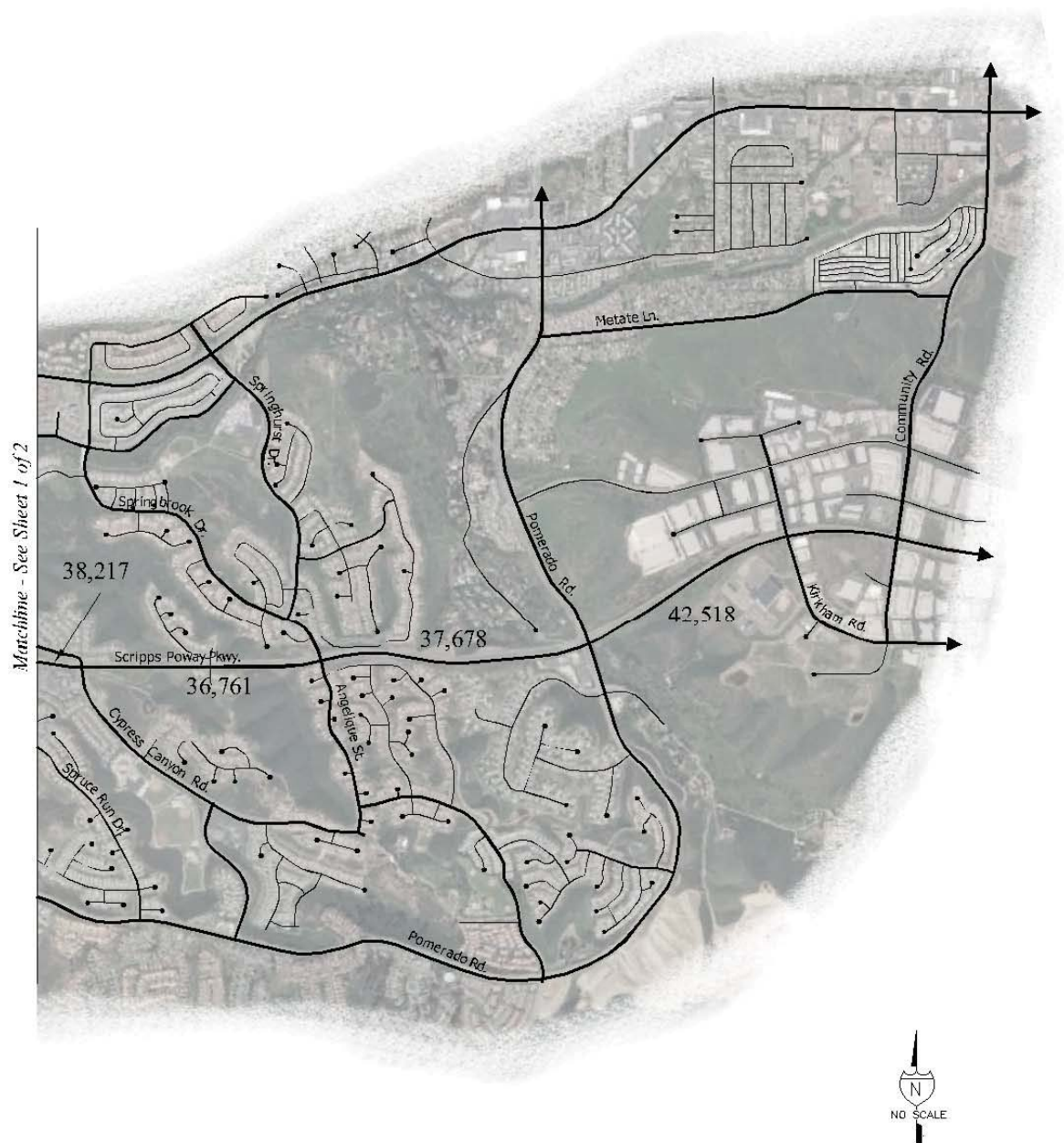


Figure 5.2-5b. Existing with Project Average Daily Traffic Volumes



Table 5.2-7. Existing with Project Street Segment Levels of Service

Road	Segment	Jurisd.	# Lanes	Class.	Cap.	Volume	V/C	LOS
Black Mountain Rd.	Mercy Rd./Park Village Dr.	SD	4	4-M	40,000	31,616	0.79	D
	Westview Pkwy./ Mercy Rd.	SD	6	PA	60,000	31,515	0.53	B
	Capricorn Way/ Westview Pkwy.	SD	6	PA	60,000	26,712	0.45	B
Mercy Road	Black Mountain Rd./ Kika Ct.	SD	4	4-M	40,000	18,056	0.45	B
	Kika Ct./ Alemania Rd.	SD	4	4-M	40,000	20,131	0.50	B
	Alemania Rd./ I-15 SB Ramps	SD	4	4-M	40,000	23,839	0.60	C
Scripps Poway Parkway	I-15 NB Ramps/ Scripps Highland Dr.	SD	6	PA	60,000	70,733	1.18	F
	Scripps Highland Dr./ Scripps Summit Dr.	SD	6	PA	60,000	57,431	0.96	E
	Scripps Summit Dr./ Spring Canyon Rd.	SD	6	PA	60,000	47,212	0.79	C
	Spring Canyon Rd./ Scripps Creek Dr.	SD	4	4-M	40,000	41,960	1.05	F
	Scripps Creek Dr./ Cypress Canyon Rd.	SD	4	4-M	40,000	38,217	0.96	E
	Cypress Canyon Rd./ Angelique St.	SD	4	4-M	40,000	36,761	0.92	E
	Angelique St./ Pomerado Rd.	Poway	6	PA	60,000	37,678	0.63	C
	Pomerado Rd./ Kirkham Rd.	Poway	6	PA	60,000	42,518	0.71	C

**Legend:**

Class. = Functional Class SD= San Diego

Cap. = Capacity @ LOS "E"

LOS = Level of Service

PA = 6 lane Prime Arterial

4-M = 4 Lane Major Arterial

## Existing With Project Arterial Analysis

Road	Segment	Jurisd.	Class.	Cap.	Volume	Direction	Speed (mph)		LOS	
							AM	PM	AM	PM
Scripps Poway Parkway	I-15 NB Ramps/ Scripps Highland Dr.	SD	PA	60,000	70,733	Eastbound	14.5	9.2	E	F
						Westbound	22.7	10.6	C	F
	Scripps Highland Dr./ Scripps Summit Dr.	SD	PA	60,000	57,431	Eastbound	30.0	13.7	B	E
						Westbound	30.6	25.0	B	C
	Scripps Summit Dr./ Spring Canyon Rd.	SD	PA	60,000	47,212	Eastbound	13.7	12.7	E	F
						Westbound	12.8	15.0	F	E
	Spring Canyon Rd./ Scripps Creek Dr.	SD	4-M	40,000	41,960	Eastbound	20.0	19.8	D	D
						Westbound	23.8	24.6	C	C
	Scripps Creek Dr./ Cypress Canyon Rd.	SD	4-M	40,000	38,217	Eastbound	24.2	23.1	C	C
						Westbound	23.3	23.7	C	C
	Cypress Canyon Rd./ Vail Ct.	SD	4-M	40,000	36,761	Eastbound	28.6	27.2	B	C
						Westbound	31.7	30.8	B	B
	Angelique St./ Pomerado Rd.	Poway	PA	60,000	37,678	Eastbound	28.4	26.2	B	C
						Westbound	26.0	20.1	C	D
	Pomerado Rd./ Kirkham Rd.	Poway	PA	60,000	42,518	Eastbound	43.0	37.3	A	A
						Westbound	36.6	34.4	A	B

**Legend:**

Class. = Functional Class SD= San Diego

Cap. = Capacity @ LOS "E"

LOS = Level of Service

PA = 6 lane Prime Arterial

4-M = 4 Lane Major Arterial

Table 5.2-8. *Existing With Project Intersection Levels of Service*

Number	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Park Village Rd. / Black Mountain Rd.	Signalized	51.4	D	44	D
2	Mercy Rd. / Black Mountain Rd.	Signalized	33.6	C	34.6	C
3	Westview Pkwy / Black Mountain Rd.	Signalized	16.8	B	17.8	B
4	Capricorn Way / Black Mountain Rd.	Signalized	42.2	D	39.5	D
5	Kika Ct. / Mercy Rd.	Signalized	6	A	6.4	A
6	Mercy Rd. / Alemania Rd.	Signalized	15.6	B	12.9	B
7	Mercy Rd. / I-15 SB ramps	Signalized	34.4	C	53.1	D
8	Scripps Poway Pkwy / I-15 NB ramps	Signalized	10.2	B	27.2	C
9	Scripps Poway Pkwy / Scripps Highlands Dr.	Signalized	24.1	C	54.8	D
10	Scripps Highlands Dr. / Scripps Gateway Ct.	Signalized	6.9	A	17	B
11	Scripps Poway Pkwy / Scripps Summit Dr.	Signalized	32.3	C	48.2	D
12	Scripps Poway Pkwy / Spring Canyon Rd.	Signalized	35	C	47.9	D
13	Scripps Poway Pkwy / Scripps Creek Dr.	Signalized	27.2	C	28.3	C
14	Scripps Poway Pkwy / Cypress Canyon Rd.	Signalized	12.1	B	14	B
15	Scripps Poway Pkwy / Springbrook Dr.	Signalized	22.3	C	40.7	D
16	Scripps Poway Pkwy / Pomerado Rd.	Signalized	29.4	C	37.1	D
17	Scripps Poway Pkwy / Kirkham Rd.	Signalized	13.8	B	25.3	C

Notes:

LOS = Level of Service

**Table 5.2-9. Existing With and Without Project Ramp Meter Analysis**  
**Most Restrictive Meter Rate**

Location		Existing Without Project		Existing With Project		Freeway LOS*	V	S
		Delay (Min)	Queue (Ft)	Delay (Min)	Queue (Ft)			
Mercy Road / I-15 SB On Ramp (2-SOV)	AM	9.86	2,001	12.01	2,438	D	2.15	NO
	PM	27.19	5,336	43.98	8,630	D	16.79	NO
Mercy Road / I-15 SB On Ramp (1-HOV)	AM	0.00	0	0.00	0	D	0.00	NO
	PM	0.00	0	0.00	0	D	0.00	NO
Scripps Poway Pkwy. / I-15 NB On Ramp (2-SOV)	AM	Ramp Meter is not turned on in this Peak						
	PM	33.33	4,350	47.51	6,200	C	14.18	NO
Scripps Poway Pkwy. / I-15 NB On Ramp (1-HOV)	AM	Ramp Meter is not turned on in this Peak						
	PM	0.00	0	0.00	0	C	0.00	NO

**Notes:**

Δ = Change in Delay (minutes)

S = Significant, if change in delay is greater than 2 minutes and freeway LOS E and ramp delay is 15 minutes or more

S = Significant, if change in delay is greater than 1 minutes and freeway LOS F and ramp delay is 15 minutes or more

SOV = Single Occupancy Vehicles

HOV = High Occupancy Vehicles

\*=taken from Table 1-10

The highest per lane demand is used in delay and queue calculations

**Table 5.2-10. Existing With and Without Project Freeway Segment LOS Summary**

Segment	Dir.	Capacity	# of Lanes	Peak Hour %	Dir. Split	Existing				Existing with Project				Δ	Sig.?
						Vol.	PHV	V/C	LOS	Vol.	PHV	V/C	LOS		
I-15															
SR-163/SR-52	NB	11,750	5-GP	0.075	0.55	176,000	7,314	0.622	C	177,484	7,376	0.628	C	0.006	NO
SR-163/SR-52	SB	11,750	5-GP	0.081	0.53	176,000	7,534	0.641	C	177,484	7,597	0.647	C	0.006	NO
Miramar Road/ SR-163	NB	19,810	7-GP+2-M	0.075	0.55	296,000	12,301	0.621	C	298,597	12,409	0.626	C	0.005	NO
Miramar Road/ SR-163	SB	19,810	7-GP+2-M	0.081	0.53	296,000	12,670	0.640	C	298,597	12,781	0.645	C	0.006	NO
Caroll Canyon Road/Miramar Road	NB	15,110	5-GP+2-M	0.075	0.55	275,000	11,428	0.756	C	278,339	11,567	0.764	C	0.007	NO
Caroll Canyon Road/Miramar Road	SB	15,110	5-GP+2-M	0.081	0.53	275,000	11,771	0.779	C	278,339	11,914	0.787	C	0.007	NO
Carroll Canyon Road/ Mira Mesa Blvd.	NB	15,110	5-GP+2-M	0.075	0.55	257,000	10,680	0.707	C	260,896	10,842	0.714	C	0.008	NO
Carroll Canyon Road/ Mira Mesa Blvd.	SB	15,110	5-GP+2-M	0.083	0.57	257,000	12,178	0.806	D	260,896	12,363	0.815	D	0.009	NO
Mira Mesa Blvd./ Scripps Poway Pkwy.	NB	15,110	5-GP+2-M	0.081	0.53	248,000	10,534	0.697	C	253,380	10,763	0.706	C	0.008	NO
Mira Mesa Blvd./ Scripps Poway Pkwy.	SB	15,110	5-GP+2-M	0.082	0.58	248,000	11,760	0.778	C	253,380	12,015	0.788	D	0.009	NO
Scripps Poway Pkwy./Poway Road	NB	15,110	5-GP+2-M	0.081	0.53	236,000	10,024	0.663	C	239,154	10,158	0.667	C	0.004	NO
Scripps Poway Pkwy./Poway Road	SB	15,110	5-GP+2-M	0.082	0.58	236,000	11,191	0.741	C	239,154	11,340	0.745	C	0.004	NO
Poway Road/ SR-56	NB	15,110	5-GP+2-M	0.077	0.52	208,000	8,393	0.555	B	211,339	8,528	0.559	B	0.004	NO
Poway Road/ SR-56	SB	15,110	5-GP+2-M	0.078	0.57	208,000	9,311	0.616	B	211,339	9,461	0.620	C	0.004	NO
SR-56/ Carmel Mountain Road	NB	18,470	5-GP+4-M	0.077	0.52	225,000	9,079	0.492	B	227,041	9,161	0.494	B	0.002	NO
SR-56/ Carmel Mountain Road	SB	18,470	5-GP+4-M	0.078	0.57	225,000	10,072	0.545	B	227,041	10,164	0.548	B	0.002	NO
Carmel Mountain Road/ Camino Del Norte	NB	18,470	5-GP+4-M	0.077	0.52	213,000	8,595	0.465	B	214,670	8,662	0.467	B	0.002	NO
Carmel Mountain Road/ Camino Del Norte	SB	18,470	5-GP+4-M	0.078	0.57	213,000	9,535	0.516	B	214,670	9,610	0.518	B	0.002	NO
Camino Del Norte/ Rancho Bernardo Road	NB	18,470	5-GP+4-M	0.077	0.52	209,000	8,433	0.457	B	210,299	8,486	0.458	B	0.001	NO
Camino Del Norte/ Rancho Bernardo Road	SB	18,470	5-GP+4-M	0.078	0.57	209,000	9,356	0.507	B	210,299	9,414	0.508	B	0.002	NO

**Legend:**

Vol.= Volume

Dir.= Direction

V/C= Volume to Capacity Ratio

LOS= Level of Service

Sig.? = Is this significant?

GP= General Purpose Lanes, Capacity= 2,350 vphpl

M= Managed Lanes, Capacity= 1,680 vphpl

PHV= Peak Hour Volume

***Near Term without Project***

In order to determine Near Term traffic, the methodology outlined in the City of San Diego Traffic Impact Study Manual was followed. An examination of the immediate area surrounding the Watermark project, including projects that were approved, pending approval, or planned in the area, including “other” project traffic identified in Section 5.2.1, *Existing Conditions*, were evaluated. (Note: As described in Section 5.2.1, *Existing Conditions*, the traffic from the MedImpact facilities on Lot 1 of in Area B are considered part as an “other project.” is assumed as part of the existing baseline, since development on that lot has been completed and traffic from the MedImpact office buildings is part of existing traffic volumes. Approved but not yet built MedImpact facilities that can occur on Lot 2 is included in the near-term conditions, as that development had not yet occurred at the time the Traffic Impact Analysis and EIR were prepared. Therefore, traffic from MedImpact facilities is already assumed in the analysis.) The project-only traffic for these projects was added to the existing traffic to reflect an “existing plus other project” or Near Term scenario. Figures 5.2-6a and 5.2-6b show the *Near Term without Project Average Daily Traffic Volumes*. No road or freeway improvements are assumed in the Near Term scenarios.

Table 5.2-11, *Near Term without Project Street Segment Levels of Service*, shows street segment levels of service and significant impact measure without project traffic. The following street segments are projected to operate at an unacceptable arterial level of service in the Near Term condition without the project.

<b><u>Road</u></b>	<b><u>Segment</u></b>	<b><u>LOS</u></b>
Scripps Poway Parkway	I-15 / Scripps Highlands Drive	E
Scripps Poway Parkway	Scripps Canyon Road / Scripps Creek Drive	E
Scripps Poway Parkway	Scripps Creek Drive / Cypress Canyon Road	E
Scripps Poway Parkway	Cypress Canyon Road / Angelique Street	E

Table 5.2-12, *Near Term without Project Intersection Levels of Service*, shows the resulting AM and PM peak hour levels of service for peak hour traffic volumes from the “other projects” when added to existing peak hour volumes at the study area intersections. As shown in Table 5.2-12, no intersections are expected to operate at an unacceptable level of service.

Ramp meters have been evaluated at Scripps Poway Parkway on the Interstate 15 ramps. The meter rate is based on the existing meter rates provided by Caltrans. Table 5.2-13, *Near Term without Project Ramp Meter Analysis*, shows the near-term impacts to ramp meters using the most restrictive meter rate. A significant impact occurs at the ramp if the change in delay is greater than one or two minutes and the ramps experiences a delay greater than 15 minutes with the freeway operating at LOS E or F. As shown in Table 5.2-13, a change in delay greater than two minutes would occur; however, the freeway operates at an acceptable LOS.

Freeway main lane segments have been evaluated utilizing Caltrans procedures. In future conditions, the ongoing I-15 managed lanes project is assumed to be completed. This project is fully funded and under construction. ~~This~~ The I-15 managed lanes project is expected to significantly improve freeway operation.



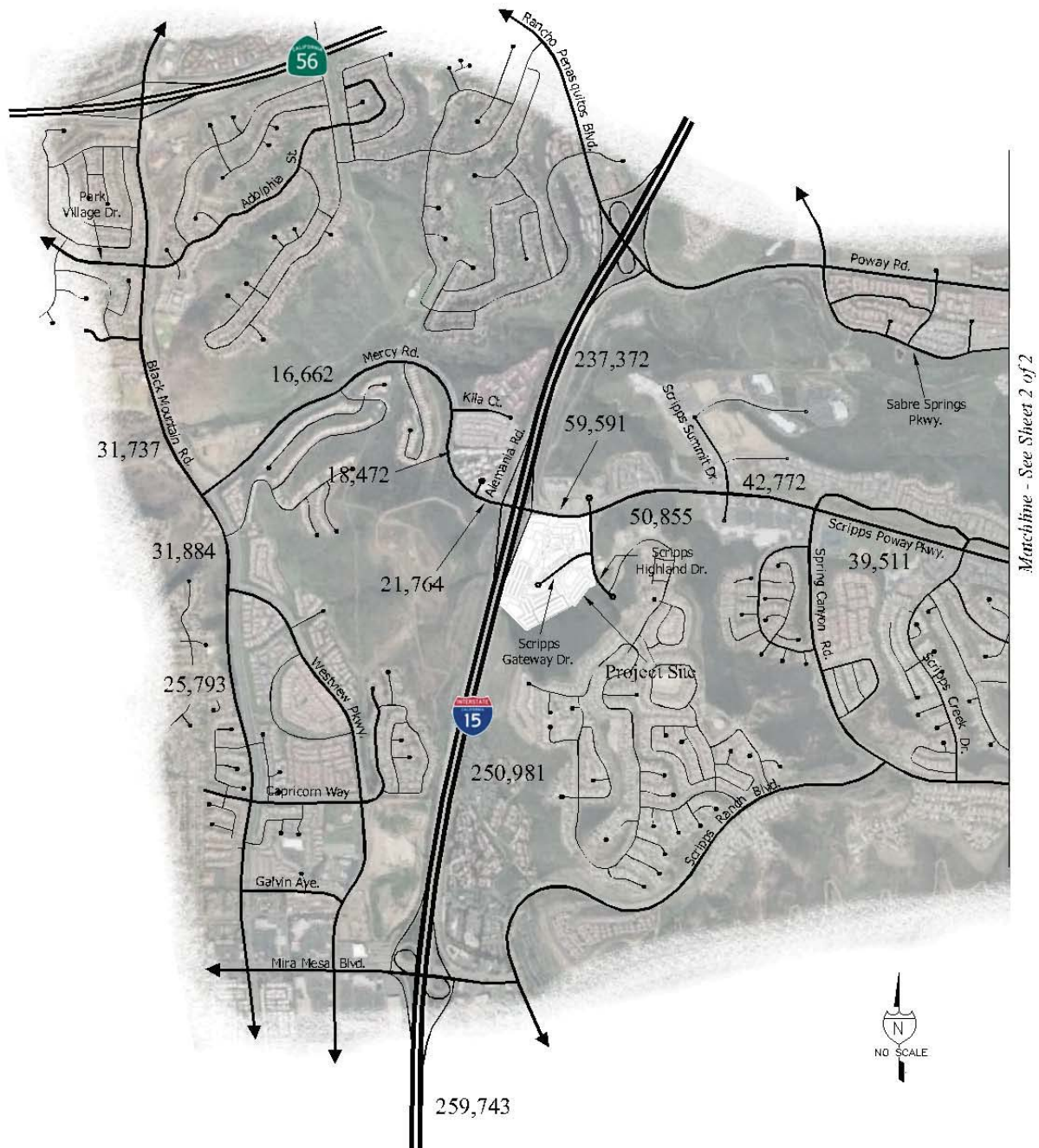


Figure 5.2-6a. Near Term without Project Average Daily Traffic Volumes



Figure 5.2-6b. *Near Term without Project Average Daily Traffic Volumes*

Table 5.2-11. *Near Term without Project Street Segment Levels of Service*

Road	Segment	Jurisd.	# Lanes	Class.	Cap.	Volume	V/C	LOS
Black Mountain Rd.	Mercy Rd./Park Village Dr.	SD	4	4-M	40,000	31,737	0.79	D
	Westview Pkwy./ Mercy Rd.	SD	6	PA	60,000	31,884	0.53	B
	Capricorn Way/ Westview Pkwy.	SD	6	PA	60,000	25,793	0.43	B
Mercy Road	Black Mountain Rd./ Kika Ct.	SD	4	4-M	40,000	16,662	0.42	B
	Kika Ct./ Alemania Rd.	SD	4	4-M	40,000	18,472	0.46	B
	Alemania Rd./ I-15 SB Ramps	SD	4	4-M	40,000	21,764	0.54	C
Scripps Poway Parkway	I-15 NB Ramps/ Scripps Highland Dr.	SD	6	PA	60,000	59,591	0.99	E
	Scripps Highland Dr./ Scripps Summit Dr.	SD	6	PA	60,000	50,855	0.85	D
	Scripps Summit Dr./ Spring Canyon Rd.	SD	6	PA	60,000	42,772	0.71	C
	Spring Canyon Rd./ Scripps Creek Dr.	SD	4	4-M	40,000	39,511	0.99	E
	Scripps Creek Dr./ Cypress Canyon Rd.	SD	4	4-M	40,000	36,226	0.91	E
	Cypress Canyon Rd./ Angelique St.	SD	4	4-M	40,000	35,077	0.88	E
	Angelique St./ Pomerado Rd.	Poway	6	PA	60,000	36,300	0.61	C
	Pomerado Rd./ Kirkham Rd.	Poway	6	PA	60,000	41,599	0.69	C

**Legend:**

Class. = Functional Class      SD= San Diego

Cap. = Capacity @ LOS "E"

LOS = Level of Service

PA = 6 lane Prime Arterial

4-M = 4 Lane Major Arterial

**Near Term Without Project Arterial Analysis**

Road	Segment	Jurisd.	Class.	Cap.	Volume	Direction	Speed (mph)		LOS	
							AM	PM	AM	PM
Scripps Poway Parkway	I-15 NB Ramps/ Scripps Highland Dr.	SD	PA	60,000	59,591	Eastbound	15.8	15.6	E	E
						Westbound	22.8	16.8	C	E
	Scripps Highland Dr./ Scripps Summit Dr.	SD	PA	60,000	50,855	Eastbound	30.2	20.3	B	D
						Westbound	31.6	27.4	B	C
	Scripps Summit Dr./ Spring Canyon Rd.	SD	PA	60,000	42,772	Eastbound	18.8	14.5	D	E
						Westbound	13.6	18.0	E	D
	Spring Canyon Rd./ Scripps Creek Dr.	SD	4-M	40,000	39,511	Eastbound	20.1	21.0	D	D
						Westbound	24.4	26.6	C	C
	Scripps Creek Dr./ Cypress Canyon Rd.	SD	4-M	40,000	36,226	Eastbound	24.3	23.7	C	C
						Westbound	23.3	24.8	C	C
	Cypress Canyon Rd./ Vail Ct.	SD	4-M	40,000	35,077	Eastbound	28.4	27.3	B	C
						Westbound	31.7	31.3	B	B
	Angelique St./ Pomerado Rd.	Poway	PA	60,000	36,300	Eastbound	28.4	25.1	B	C
						Westbound	25.8	22.2	C	C
	Pomerado Rd./ Kirkham Rd.	Poway	PA	60,000	41,599	Eastbound	43.2	37.7	A	A
						Westbound	36.4	33.3	A	B

**Legend:**

Class. = Functional Class      SD= San Diego

Cap. = Capacity @ LOS "E"

LOS = Level of Service

PA = 6 lane Prime Arterial

4-M = 4 Lane Major Arterial

**Table 5.2-12. Near Term without Project Intersection Levels of Service**

Number	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Park Village Rd. / Black Mountain Rd.	Signalized	50.7	D	44.5	D
2	Mercy Rd. / Black Mountain Rd.	Signalized	33.4	C	33.5	C
3	Westview Pkwy / Black Mountain Rd.	Signalized	16.7	B	20.7	C
4	Capricorn Way / Black Mountain Rd.	Signalized	41.0	D	40.0	D
5	Kika Ct. / Mercy Rd.	Signalized	6.0	A	6.3	A
6	Mercy Rd. / Alemania Rd.	Signalized	15.6	B	11.2	B
7	Mercy Rd. / I-15 SB ramps	Signalized	34.2	C	37.6	D
8	Scripps Poway Pkwy / I-15 NB ramps	Signalized	10.1	B	15.4	B
9	Scripps Poway Pkwy / Scripps Highlands Dr.	Signalized	19.8	B	25.1	C
10	Scripps Highlands Dr. / Scripps Gateway Ct.	Signalized	18.3	B	12.1	B
11	Scripps Poway Pkwy / Scripps Summit Dr.	Signalized	29.9	C	33.3	C
12	Scripps Poway Pkwy / Spring Canyon Rd.	Signalized	27.1	C	39.9	D
13	Scripps Poway Pkwy / Scripps Creek Dr.	Signalized	27.0	C	24.5	C
14	Scripps Poway Pkwy / Cypress Canyon Rd.	Signalized	12.1	B	12.8	B
15	Scripps Poway Pkwy / Springbrook Dr.	Signalized	23.0	C	33.2	C
16	Scripps Poway Pkwy / Pomerado Rd.	Signalized	29.5	C	35.8	D
17	Scripps Poway Pkwy / Kirkham Rd.	Signalized	13.8	B	24.6	C

**Notes:**

LOS = Level of Service



**Table 5.2-13. Near Term With and Without Project Ramp Meter Analysis**  
**Most Restrictive Meter Rate**

Location		Near Term Without Project		Near Term With Project		Freeway LOS*	V	S
		Delay (Min)	Queue (Ft)	Delay (Min)	Queue (Ft)			
Mercy Road / I-15 SB On Ramp (2-SOV)	AM	10.67	2,166	12.83	2,604	D	2.15	NO
	PM	28.23	5,540	45.02	8,835	D	16.79	NO
Mercy Road / I-15 SB On Ramp (1-HOV)	AM	0.00	0	0.00	0	D	0.00	NO
	PM	0.00	0	0.00	0	D	0.00	NO
Scripps Poway Pkwy. / I-15 NB On Ramp (2-SOV)	AM	Ramp Meter is not turned on in this Peak						
	PM	33.90	4,424	48.08	6,274	C	14.18	NO
Scripps Poway Pkwy. / I-15 NB On Ramp (1-HOV)	AM	Ramp Meter is not turned on in this Peak						
	PM	0.00	0	0.00	0	C	0.00	NO

**Notes:**

Δ = Change in Delay (minutes)

S = Significant, if change in delay is greater than 2 minutes and freeway LOS E and ramp delay is 15 minutes or more

S = Significant, if change in delay is greater than 1 minutes and freeway LOS F and ramp delay is 15 minutes or more

SOV = Single Occupancy Vehicles

HOV = High Occupancy Vehicles

\*=taken from Table 1-11

The highest per lane demand is used in delay and queue calculations

Table 5.2-14, *Near Term With and Without Project Freeway Segment LOS Summary*, illustrates near-term impacts to I-15 with and without the proposed project. As shown in Table 5.2-14, all freeway segments are expected to operate at an acceptable level of service.

**Table 5.2-14. Near Term With and Without Project Freeway Segment LOS Summary**

Segment	Dir.	Capacity	# of Lanes	Peak Hour %	Dir. Split	Near Term				Near Term with Project				Δ	Sig.
						Vol.	PHV	V/C	LOS	Vol.	PHV	V/C	LOS		
I-15															
SR-163/SR-52	NB	11,750	5-GP	0.075	0.554	177,557	7,379	0.628	C	179,041	7,440	0.633	C	0.005	NO
SR-163/SR-52	SB	11,750	5-GP	0.081	0.527	177,557	7,600	0.647	C	179,041	7,664	0.652	C	0.005	NO
Miramar Road/ SR-163	NB	19,810	7-GP+2-M	0.075	0.554	298,550	12,407	0.626	C	301,147	12,515	0.632	C	0.005	NO
Miramar Road/ SR-163	SB	19,810	7-GP+2-M	0.081	0.527	298,550	12,779	0.645	C	301,147	12,890	0.651	C	0.006	NO
Carroll Canyon Road/Miramar Road	NB	15,110	5-GP+2-M	0.075	0.554	277,646	11,538	0.764	C	280,985	11,677	0.773	C	0.009	NO
Carroll Canyon Road/Miramar Road	SB	15,110	5-GP+2-M	0.081	0.527	277,646	11,884	0.787	C	280,985	12,027	0.796	D	0.009	NO
Carroll Canyon Road/ Mira Mesa Blvd.	NB	15,110	5-GP+2-M	0.075	0.554	259,743	10,794	0.714	C	263,639	10,956	0.725	C	0.011	NO
Carroll Canyon Road/ Mira Mesa Blvd.	SB	15,110	5-GP+2-M	0.083	0.572	259,743	12,308	0.815	D	263,639	12,493	0.827	D	0.012	NO
Mira Mesa Blvd./ Scripps Poway Pkwy.	NB	15,110	5-GP+2-M	0.081	0.526	250,981	10,661	0.706	C	256,361	10,889	0.721	C	0.015	NO
Mira Mesa Blvd./ Scripps Poway Pkwy.	SB	15,110	5-GP+2-M	0.082	0.581	250,981	11,901	0.788	C	256,361	12,156	0.805	D	0.017	NO
Scripps Poway Pkwy./Poway Road	NB	15,110	5-GP+2-M	0.081	0.526	237,372	10,083	0.667	C	240,526	10,217	0.676	C	0.009	NO
Scripps Poway Pkwy./Poway Road	SB	15,110	5-GP+2-M	0.082	0.581	237,372	11,256	0.745	C	240,526	11,405	0.755	C	0.010	NO
Poway Road/ SR-56	NB	15,110	5-GP+2-M	0.077	0.522	209,327	8,446	0.559	B	212,666	8,581	0.568	B	0.009	NO
Poway Road/ SR-56	SB	15,110	5-GP+2-M	0.078	0.571	209,327	9,371	0.620	C	212,666	9,520	0.630	C	0.010	NO
SR-56/ Carmel Mountain Road	NB	18,470	5-GP+4-M	0.077	0.522	225,944	9,117	0.494	B	227,985	9,199	0.498	B	0.004	NO
SR-56/ Carmel Mountain Road	SB	18,470	5-GP+4-M	0.078	0.571	225,944	10,115	0.548	B	227,985	10,206	0.553	B	0.005	NO
Carmel Mountain Road/ Camino Del Norte	NB	18,470	5-GP+4-M	0.077	0.522	213,835	8,628	0.467	B	215,505	8,696	0.471	B	0.004	NO
Carmel Mountain Road/ Camino Del Norte	SB	18,470	5-GP+4-M	0.078	0.571	213,835	9,573	0.518	B	215,505	9,647	0.522	B	0.004	NO
Camino Del Norte/ Rancho Bernardo Road	NB	18,470	5-GP+4-M	0.077	0.522	209,648	8,459	0.458	B	210,947	8,512	0.461	B	0.003	NO
Camino Del Norte/ Rancho Bernardo Road	SB	18,470	5-GP+4-M	0.078	0.571	209,648	9,385	0.508	B	210,947	9,443	0.511	B	0.003	NO

**Legend:**

Vol.= Volume  
Dir.= Direction  
V/C= Volume to Capacity Ratio  
LOS= Level of Service  
Sig.= Is this significant?

GP= General Purpose Lanes, Capacity= 2,350 vphpl  
M= Managed Lanes, Capacity= 1,680 vphpl  
PHV= Peak Hour Volume

**Near Term with Project**

This section evaluates the Near Term with Project traffic conditions by adding the “other projects” plus the Watermark project traffic to existing volumes and evaluating project traffic impacts, resulting in the evaluation of the near term with project conditions compared to the near term without project conditions. Figures 5.2-7a and 5.2-7b show the *Near Term with Project Average Daily Traffic Volumes*.

Table 5.2-15, *Near Term with Project Street Segment Levels of Service*, shows street segment levels of service with Watermark project traffic. The following street segments of Scripps Poway Parkway are projected to operate at an unacceptable level of service representing a significant project impact.

<b><u>Road</u></b>	<b><u>Segment</u></b>	<b><u>LOS</u></b>
Scripps Poway Parkway	I-15 / Scripps Highlands Drive	F
Scripps Poway Parkway	Scripps Highland Drive/ Scripps Summit Drive	E
Scripps Poway Parkway	Spring Canyon Road / Scripps Creek Drive	F
Scripps Poway Parkway	Scripps Creek Drive / Cypress Canyon Road	E
Scripps Poway Parkway	Cypress Canyon Road / Angelique Street	E

The Near Term with Project intersection analysis takes into account existing traffic plus “other projects” plus the Watermark project combined traffic volumes during AM/PM peak hours at study area intersections. Table 5.2-16, *Near Term with Project Intersection Levels of Service*, includes study area intersection levels of service with the Watermark project traffic added. The following two intersections are projected to operate at an unacceptable levels of service in the Near Term with Project:

<b><u>Intersection</u></b>	<b><u>AM PEAK HOUR</u></b>	<b><u>PM PEAK HOUR</u></b>
Mercy Road / I-15 Southbound Ramps	LOS D	LOS E
Scripps Poway Parkway / Scripps Highlands Drive	LOS C	LOS F

Table 5.2-13, *Near Term With and Without Project Ramp Meter Analysis*, shows the near-term impacts on ramp meters including proposed project traffic. A significant impact occurs at the ramp if the change in delay between the two conditions is greater than one or two minutes and the ramp experiences a delay that is greater than 15 minutes with the freeway operating at LOS E or F. As shown in Table 5.2-13, a change in delay of greater than two minutes would occur; however, the freeway operates at an acceptable LOS. Therefore, no impacts would occur.

Freeway main lane segments have been evaluated utilizing Caltrans procedures. In future conditions, the ongoing I-15 managed lanes project is assumed to be completed. This project is fully funded and under construction. The I-15 managed lane project is expected to significantly improve freeway operation. Table 5.2-14, *Near Term With and Without Project Freeway Segment LOS Summary*, illustrates near-term impacts to I-15 with proposed project development. As shown in Table 5.2-14, all freeway segments are expected to operate at an acceptable level of service.

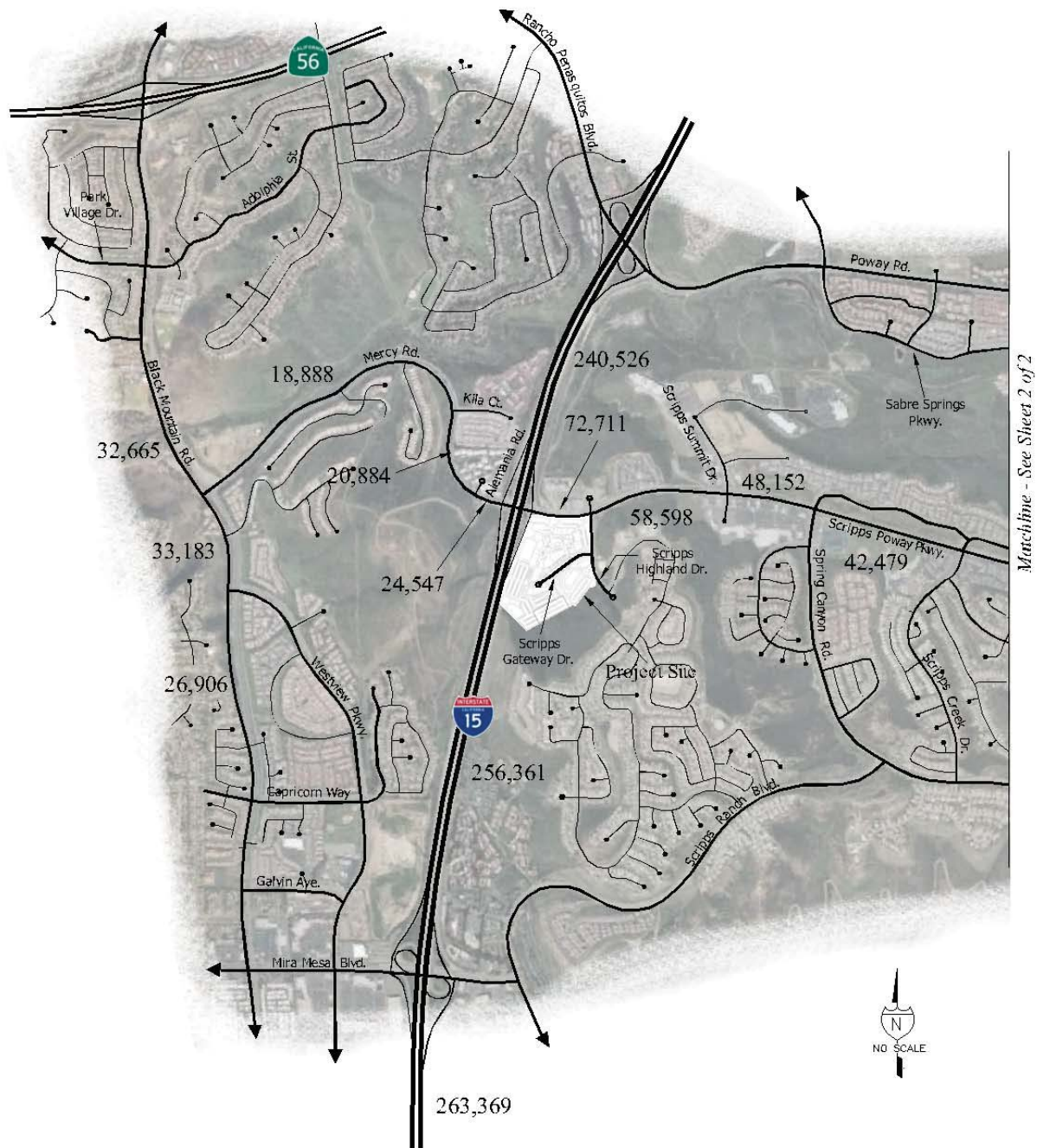


Figure 5.2-7a. Near Term with Project Average Daily Traffic Volumes



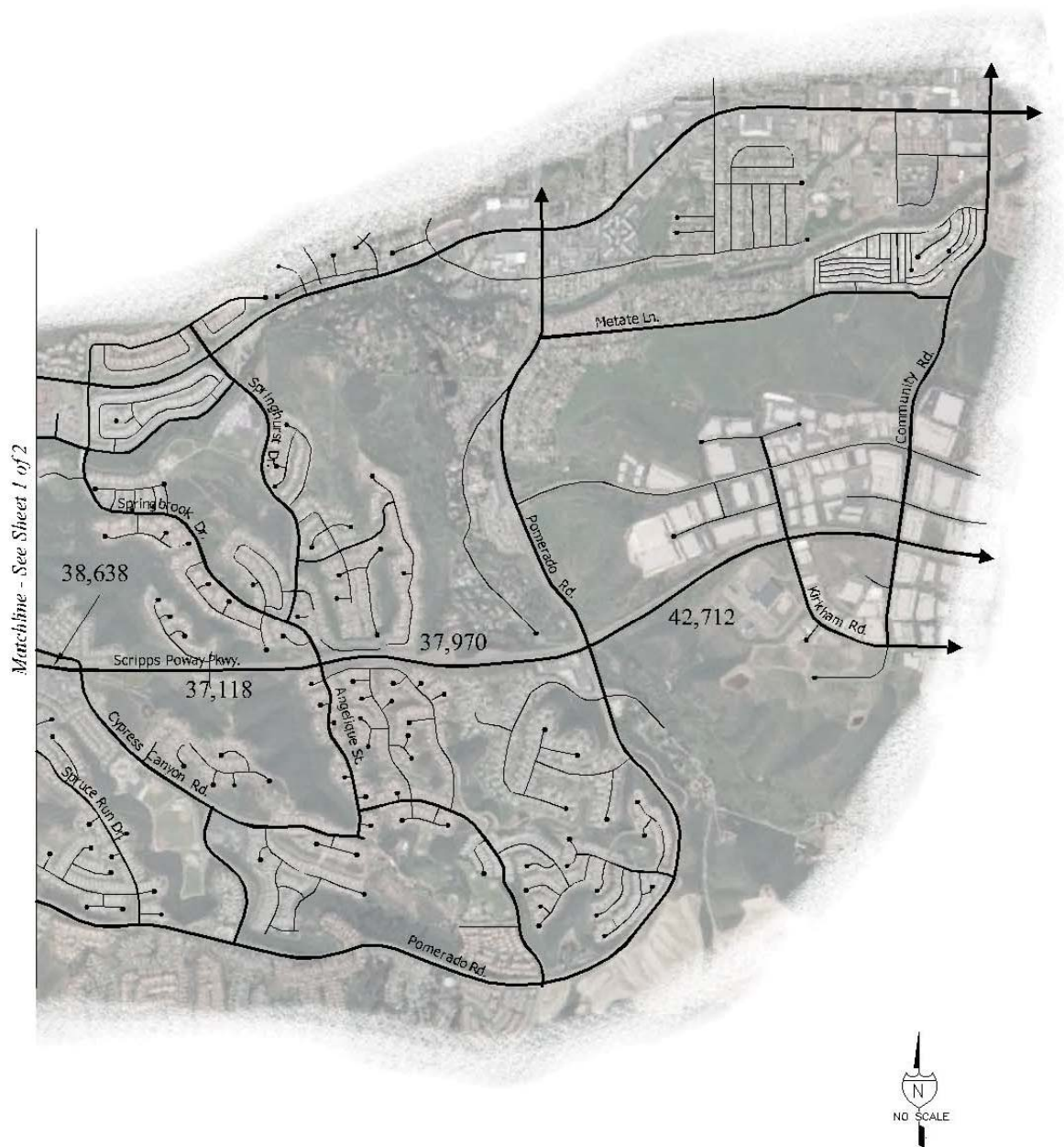


Figure 5.2-7b. Near Term with Project Average Daily Traffic Volumes



**Table 5.2-15. Near Term with Project Street Segment Levels of Service**

Road	Segment	Jurisd.	# Lanes	Class.	Cap.	Volume	V/C	LOS
Black Mountain Rd.	Mercy Rd./Park Village Dr.	SD	4	4-M	40,000	32,665	0.82	D
	Westview Pkwy./ Mercy Rd.	SD	6	PA	60,000	33,183	0.55	B
	Capricorn Way/ Westview Pkwy.	SD	6	PA	60,000	26,906	0.45	B
Mercy Road	Black Mountain Rd./ Kika Ct.	SD	4	4-M	40,000	18,888	0.47	B
	Kika Ct./ Alemania Rd.	SD	4	4-M	40,000	20,884	0.52	B
	Alemania Rd./ I-15 SB Ramps	SD	4	4-M	40,000	24,547	0.61	C
Scripps Poway Parkway	I-15 NB Ramps/ Scripps Highland Dr.	SD	6	PA	60,000	72,711	1.21	F
	Scripps Highland Dr./ Scripps Summit Dr.	SD	6	PA	60,000	58,598	0.98	E
	Scripps Summit Dr./ Spring Canyon Rd.	SD	6	PA	60,000	48,152	0.80	C
	Spring Canyon Rd./ Scripps Creek Dr.	SD	4	4-M	40,000	42,479	1.06	F
	Scripps Creek Dr./ Cypress Canyon Rd.	SD	4	4-M	40,000	38,638	0.97	E
	Cypress Canyon Rd./ Angelique St.	SD	4	4-M	40,000	37,118	0.93	E
	Angelique St./ Pomerado Rd.	Poway	6	PA	60,000	37,970	0.63	C
	Pomerado Rd./ Kirkham Rd.	Poway	6	PA	60,000	42,712	0.71	C

**Legend:**

Class. = Functional Class SD= San Diego

Cap. = Capacity @ LOS "E"

LOS = Level of Service

PA = 6 lane Prime Arterial

4-M = 4 Lane Major Arterial

**Near Term With Project Arterial Analysis**

Road	Segment	Jurisd.	Class.	Cap.	Volume	Direction	Speed (mph)		LOS	
							AM	PM	AM	PM
Scripps Poway Parkway	I-15 NB Ramps/ Scripps Highland Dr.	SD	PA	60,000	72,711	Eastbound	16.3	5.1	E	F
						Westbound	22.4	13.4	C	E
	Scripps Highland Dr./ Scripps Summit Dr.	SD	PA	60,000	58,598	Eastbound	29.7	9.3	B	F
						Westbound	32.9	22.7	B	C
	Scripps Summit Dr./ Spring Canyon Rd.	SD	PA	60,000	48,152	Eastbound	18.0	16.2	D	E
						Westbound	10.0	11.1	F	F
	Spring Canyon Rd./ Scripps Creek Dr.	SD	4-M	40,000	42,479	Eastbound	19.9	26.0	D	C
						Westbound	23.1	26.7	C	C
	Scripps Creek Dr./ Cypress Canyon Rd.	SD	4-M	40,000	38,638	Eastbound	24.2	21.7	C	D
						Westbound	22.9	23.3	C	C
	Cypress Canyon Rd./ Vail Ct.	SD	4-M	40,000	37,118	Eastbound	28.6	27.0	B	C
						Westbound	31.5	30.3	B	B
	Angelique St./ Pomerado Rd.	Poway	PA	60,000	37,970	Eastbound	28.4	24.7	B	C
						Westbound	25.6	19.4	C	D
	Pomerado Rd./ Kirkham Rd.	Poway	PA	60,000	42,712	Eastbound	42.4	37.1	A	A
						Westbound	36.3	33.1	A	B

**Legend:**

Class. = Functional Class SD= San Diego

Cap. = Capacity @ LOS "E"

LOS = Level of Service

PA = 6 lane Prime Arterial

4-M = 4 Lane Major Arterial

Table 5.2-16. *Near Term with Project Intersection Levels of Service*

Number	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Park Village Rd. / Black Mountain Rd.	Signalized	51.6	D	46	D
2	Mercy Rd. / Black Mountain Rd.	Signalized	34	C	35.6	D
3	Westview Pkwy / Black Mountain Rd.	Signalized	16.7	B	21.3	C
4	Capricorn Way / Black Mountain Rd.	Signalized	42.1	D	41	D
5	Kika Ct. / Mercy Rd.	Signalized	6.1	A	6.5	A
6	Mercy Rd. / Alemania Rd.	Signalized	15.7	B	11.9	B
7	Mercy Rd. / I-15 SB ramps	Signalized	37	D	66.7	E
8	Scripps Poway Pkwy / I-15 NB ramps	Signalized	10.2	B	19	B
9	Scripps Poway Pkwy / Scripps Highlands Dr.	Signalized	23.4	C	135.5	F
10	Scripps Highlands Dr. / Scripps Gateway Ct.	Signalized	7.1	A	20.7	C
11	Scripps Poway Pkwy / Scripps Summit Dr.	Signalized	39.1	D	45.2	D
12	Scripps Poway Pkwy / Spring Canyon Rd.	Signalized	29.1	C	49.4	D
13	Scripps Poway Pkwy / Scripps Creek Dr.	Signalized	27.6	C	29.4	C
14	Scripps Poway Pkwy / Cypress Canyon Rd.	Signalized	12.4	B	16.3	B
15	Scripps Poway Pkwy / Springbrook Dr.	Signalized	23.1	C	43.1	D
16	Scripps Poway Pkwy / Pomerado Rd.	Signalized	29.5	C	36.7	D
17	Scripps Poway Pkwy / Kirkham Rd.	Signalized	14.3	B	25.8	C

Notes:

LOS = Level of Service

**Horizon Year 2030 without Project**

This section evaluates the Year 2030 without project condition. The SANDAG Series 11 regional traffic forecast model is based on planning efforts involving all jurisdictions within the County of San Diego. SANDAG, as the regional planning agency, collects data from these plans and collates this data within a traffic model. SANDAG also prepared the Regional Transportation Plan (RTP) utilized by the traffic model as a basis for estimating future traffic. Forecasted growth in traffic volumes from the traffic model was utilized to evaluate Year 2030 conditions with and without the project. To calculate Year 2030 conditions, the Watermark project was added to the SANDAG Series 11 Year 2030 regional travel forecast. Average Daily Traffic was taken from the SANDAG model and peak hour volumes were calculated by factoring Near Term peak hour volumes. Since the Watermark project was added to the Series 11 traffic model, Watermark project volumes had to be subtracted to calculate "Year 2030 without Project" conditions. To calculate Year 2030 conditions without the project, the Watermark project was subtracted from Year 2030 conditions with the project, which were based on forecasted volumes. The ongoing I-15 freeway improvements were assumed complete prior to the Horizon Year 2030 consistent with ongoing work and plans by Caltrans. Figures 5.2-8a and 5.2-8b show the *Horizon Year 2030 without Project Average Daily Traffic Volumes*.

The street segment levels of service for Year 2030 conditions without the project are shown in Table 5.2-17, *Horizon Year 2030 without Project Street Segment Levels of Service*. The following street segments are projected to operate at an unacceptable level of service representing a significant project impact.

<b><u>Road</u></b>	<b><u>Segment</u></b>	<b><u>LOS</u></b>
Scripps Poway Parkway	I-15 / Scripps Highlands Drive	E
Scripps Poway Parkway	Spring Canyon Road / Scripps Creek Drive	F
Scripps Poway Parkway	Scripps Creek Drive / Cypress Canyon Road	E
Scripps Poway Parkway	Angelique Street / Pomerado Road	E
Scripps Poway Parkway	Cypress Canyon Road / Angelique Street	E

AM/PM peak hour turn volumes were established by using a factoring method based on Near Term with Project volumes and Year 2030 with Project volumes. An evaluation of all study intersections AM/PM peak hour turn volumes used based the factoring method was conducted to develop Year 2030 with project volumes. Project-only peak hour volumes were subtracted from Year 2030 with Project volumes to reflect Year 2030 without Project peak hour volumes. Table 5.2-18, *Horizon Year 2030 without Project Intersection Levels of Service*, shows the peak hour intersection levels of service. Park Village Road at Black Mountain Road is anticipated to operate at an unacceptable LOS E in the AM peak hour.

Ramp meters have been evaluated at Scripps Poway Parkway on the Interstate 15 ramps. The meter rate is based on the existing meter rates provided by Caltrans. Table 5.2-19, *Horizon Year 2030 With and Without Project Ramp Meter Analysis*, shows the horizon year impacts on ramp meters with and without the including proposed project traffic. A significant impact occurs at the ramp if the change in delay between the two conditions is greater than one or two minutes and the ramp experiences a delay greater than 15 minutes with the freeway operating at LOS E or F. As shown in Table 5.2-19, a change in delay greater than two minutes would occur; however, the freeway operates at an acceptable LOS. Therefore, no impacts would occur.

Freeway main lane segments have been evaluated utilizing Caltrans procedures, as described in Appendix C. In future conditions, the ongoing I-15 managed lanes project is assumed to be completed. This project is fully funded and under construction. This I-15 managed lane project is expected to significantly improve freeway operation. Table 5.2-19, *Horizon Year 2030 With and Without Project Freeway Segment LOS Summary*, illustrates horizon year impacts to I-15.



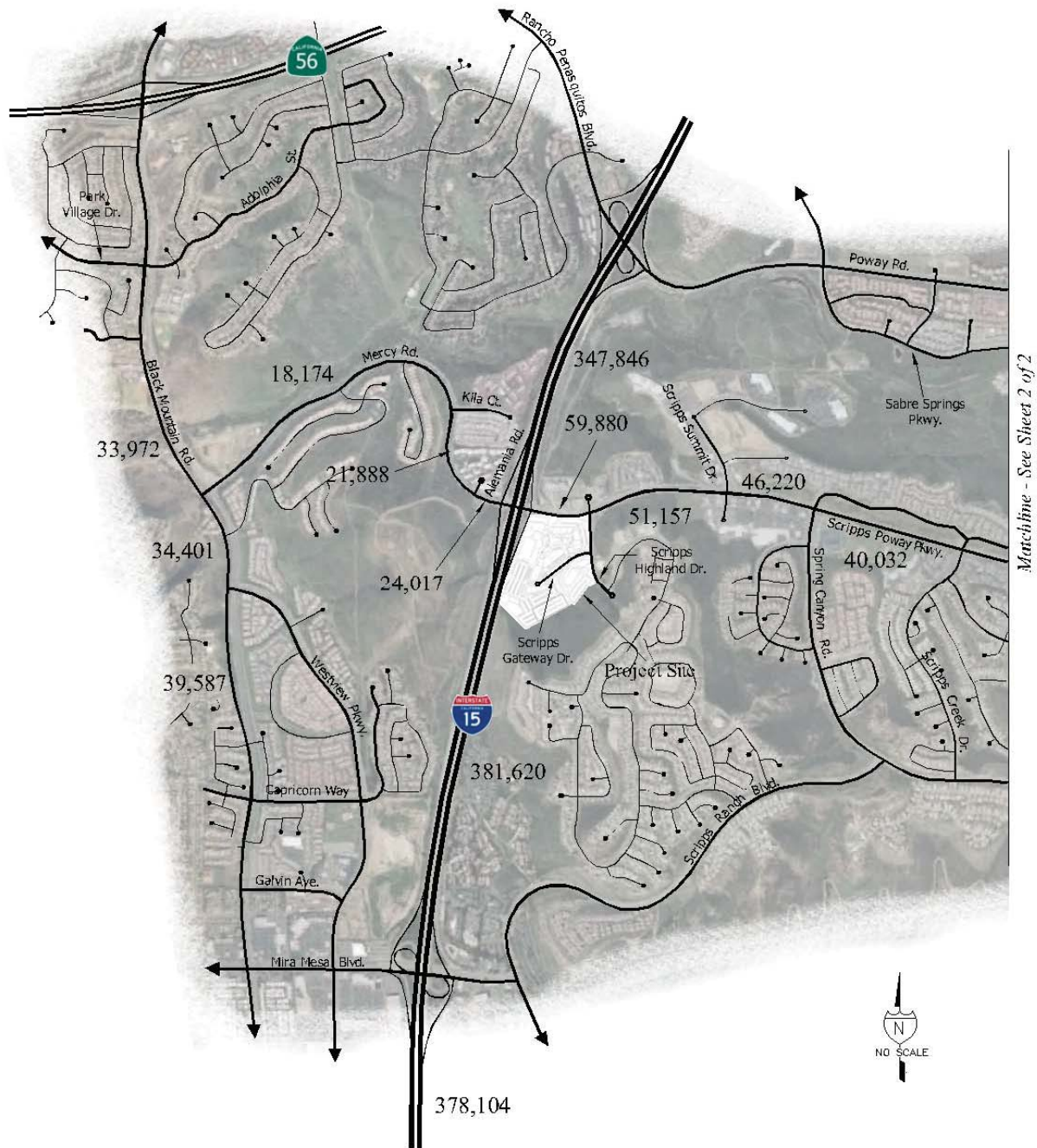


Figure 5.2-8a. Horizon Year 2030 without Project Average Daily Traffic Volumes

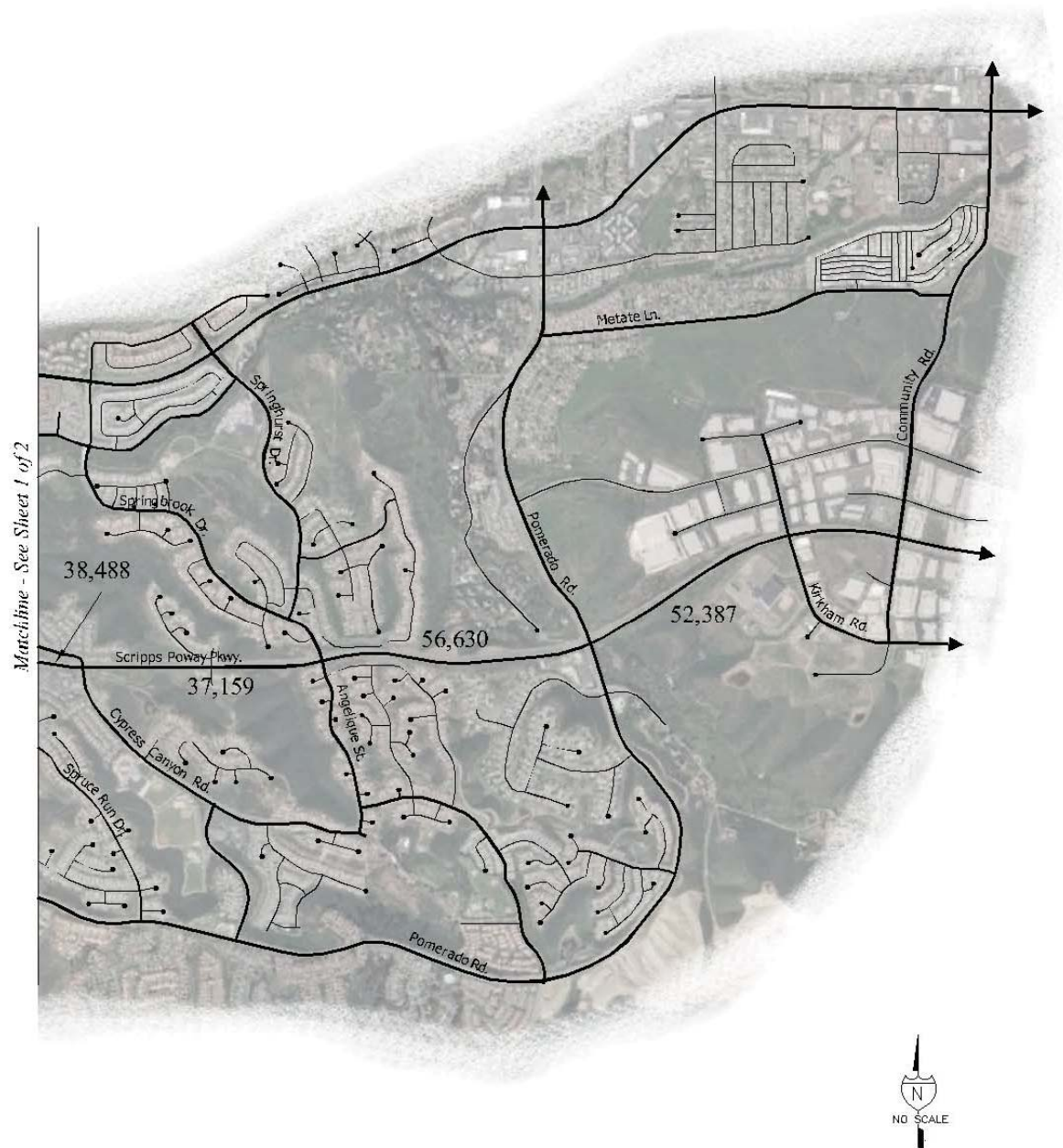


Figure 5.2-8b. Horizon Year 2030 without Project Average Daily Traffic Volumes

Table 5.2-17. *Horizon Year 2030 without Project Street Segment Levels of Service*

Road	Segment	Jurisd.	# Lanes	Class.	Cap.	Volume	V/C	LOS
Black Mountain Rd.	Mercy Rd./Park Village Dr.	SD	4	4-M	40,000	33,972	0.85	D
	Westview Pkwy./ Mercy Rd.	SD	6	PA	60,000	34,401	0.57	B
	Capricorn Way/ Westview Pkwy.	SD	6	PA	60,000	39,587	0.66	C
Mercy Road	Black Mountain Rd./ Kika Ct.	SD	4	4-M	40,000	18,174	0.45	B
	Kika Ct./ Alemania Rd.	SD	4	4-M	40,000	21,888	0.55	C
	Alemania Rd./ I-15 SB Ramps	SD	4	4-M	40,000	24,017	0.60	C
Scripps Poway Parkway	I-15 NB Ramps/ Scripps Highland Dr.	SD	6	PA	60,000	59,880	1.00	E
	Scripps Highland Dr./ Scripps Summit Dr.	SD	6	PA	60,000	52,157	0.87	D
	Scripps Summit Dr./ Spring Canyon Rd.	SD	6	PA	60,000	46,220	0.77	C
	Spring Canyon Rd./ Scripps Creek Dr.	SD	4	4-M	40,000	40,032	1.00	F
	Scripps Creek Dr./ Cypress Canyon Rd.	SD	4	4-M	40,000	38,488	0.96	E
	Cypress Canyon Rd./ Angelique St.	SD	4	4-M	40,000	37,159	0.93	E
	Angelique St./ Pomerado Rd.	Poway	6	PA	60,000	56,630	0.94	E
	Pomerado Rd./ Kirkham Rd.	Poway	6	PA	60,000	52,387	0.87	D

**Legend:**

Class. = Functional Class SD= San Diego

Cap. = Capacity @ LOS "E"

LOS = Level of Service

PA = 6 lane Prime Arterial

4-M = 4 Lane Major Arterial

**Horizon Year 2030 Without Project Arterial Analysis**

Road	Segment	Jurisd.	Class.	Cap.	Volume	Direction	Speed (mph)		LOS	
							AM	PM	AM	PM
Scripps Poway Parkway	I-15 NB Ramps/ Scripps Highland Dr.	SD	PA	60,000	59,880	Eastbound	14.9	13.8	E	E
						Westbound	22.2	20.2	C	D
	Scripps Highland Dr./ Scripps Summit Dr.	SD	PA	60,000	52,157	Eastbound	29.7	13.4	B	E
						Westbound	31.1	24.7	B	C
	Scripps Summit Dr./ Spring Canyon Rd.	SD	PA	60,000	46,220	Eastbound	14.4	15.6	E	E
						Westbound	12.0	16.7	F	E
	Spring Canyon Rd./ Scripps Creek Dr.	SD	4-M	40,000	40,032	Eastbound	20.1	21.1	D	D
						Westbound	23.6	26.8	C	C
	Scripps Creek Dr./ Cypress Canyon Rd.	SD	4-M	40,000	38,488	Eastbound	23.8	23.0	C	C
						Westbound	23.2	24.7	C	C
	Cypress Canyon Rd./ Vail Ct.	SD	4-M	40,000	37,159	Eastbound	24.4	22.2	C	C
						Westbound	31.4	30.9	B	B
	Angelique St./ Pomerado Rd.	Poway	PA	60,000	56,630	Eastbound	24.5	24.1	C	C
						Westbound	25.0	20.4	C	D
	Pomerado Rd./ Kirkham Rd.	Poway	PA	60,000	52,387	Eastbound	39.5	32.5	A	B
						Westbound	35.2	31.8	A	B

**Legend:**

Class. = Functional Class SD= San Diego

Cap. = Capacity @ LOS "E"

LOS = Level of Service

PA = 6 lane Prime Arterial

4-M = 4 Lane Major Arterial

Table 5.2-18. *Horizon Year 2030 without Project Intersection Levels of Service*

Number	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Park Village Rd. / Black Mountain Rd.	Signalized	56.0	E	45.0	D
2	Mercy Rd. / Black Mountain Rd.	Signalized	34.0	C	35.2	D
3	Westview Pkwy / Black Mountain Rd.	Signalized	16.8	B	20.8	C
4	Capricorn Way / Black Mountain Rd.	Signalized	45.1	D	40.7	D
5	Kika Ct. / Mercy Rd.	Signalized	6.4	A	6.5	A
6	Mercy Rd. / Alemania Rd.	Signalized	15.4	B	12.3	B
7	Mercy Rd. / I-15 SB ramps	Signalized	35.0	C	39.2	D
8	Scripps Poway Pkwy / I-15 NB ramps	Signalized	10.5	B	27.6	C
9	Scripps Poway Pkwy / Scripps Highlands Dr.	Signalized	22.0	C	30.3	C
10	Scripps Highlands Dr. / Scripps Gateway Ct.	Signalized	18.3	B	12.2	B
11	Scripps Poway Pkwy / Scripps Summit Dr.	Signalized	32.4	C	48.8	D
12	Scripps Poway Pkwy / Spring Canyon Rd.	Signalized	33.1	C	34.6	C
13	Scripps Poway Pkwy / Scripps Creek Dr.	Signalized	27.2	C	25.2	C
14	Scripps Poway Pkwy / Cypress Canyon Rd.	Signalized	12.5	B	13.9	B
15	Scripps Poway Pkwy / Springbrook Dr.	Signalized	32.4	C	48.2	D
16	Scripps Poway Pkwy / Pomerado Rd.	Signalized	37.9	D	44.7	D
17	Scripps Poway Pkwy / Kirkham Rd.	Signalized	17.2	B	35.8	D

Notes:

LOS = Level of Service



Table 5.2-19. *Horizon Year 2030 With and Without Project Ramp Meter Analysis***Most Restrictive Meter Rate**

Location		Year 2030 Without Project		Year 2030 With Project		Freeway LOS*	V	S
		Delay (Min)	Queue (Ft)	Delay (Min)	Queue (Ft)			
Mercy Road / I-15 SB On Ramp (2-SOV)	AM	47.46	9,635	49.62	10,072	D	2.15	NO
	PM	74.17	14,555	90.96	17,849	D	16.79	NO
Mercy Road / I-15 SB On Ramp (1-HOV)	AM	0.00	0	0.00	0	D	0.00	NO
	PM	0.00	0	0.00	0	D	0.00	NO
Scripps Poway Pkwy. / I-15 NB On Ramp (2-SOV)	AM	Ramp Meter is not turned on in this Peak						
	PM	77.56	10,121	91.74	11,972	D	14.18	NO
Scripps Poway Pkwy. / I-15 NB On Ramp (1-HOV)	AM	Ramp Meter is not turned on in this Peak						
	PM	0.00	0	0.33	43	D	0.33	NO

Notes:

Δ = Change in Delay (minutes)

S = Significant, if change in delay is greater than 2 minutes and freeway LOS E and ramp delay is 15 minutes or more

S = Significant, if change in delay is greater than 1 minutes and freeway LOS F and ramp delay is 15 minutes or more

SOV = Single Occupancy Vehicles

HOV = High Occupancy Vehicles

\*=taken from Table 1-12

The highest per lane demand is used in delay and queue calculations

Table 5.2-20. *Horizon Year 2030 With and Without Freeway Segment LOS Summary*

Segment	Dir.	Capacity	# of Lanes	Peak Hour %	Dir. Split	Year 2030				Year 2030 with Project				Δ	Sig.?
						Vol.	PHV	V/C	LOS	Vol.	PHV	V/C	LOS		
I-15															
SR-163/SR-52	NB	14,100	6-GP	0.075	0.554	261,516	10,868	0.771	C	263,000	10,930	0.775	C	0.004	NO
SR-163/SR-52	SB	11,750	5-GP	0.081	0.527	261,516	11,194	0.953	E	263,000	11,258	0.958	E	0.005	NO
Miramar Road/ SR-163	NB	23,170	7-GP+4-M	0.075	0.554	409,403	17,014	0.734	C	412,000	17,122	0.739	C	0.005	NO
Miramar Road/ SR-163	SB	23,170	7-GP+4-M	0.081	0.527	409,403	17,524	0.756	C	412,000	17,635	0.761	C	0.005	NO
Caroll Canyon Road/Miramar Road	NB	23,170	7-GP+4-M	0.075	0.554	385,661	16,027	0.692	C	389,000	16,166	0.698	C	0.006	NO
Caroll Canyon Road/Miramar Road	SB	23,170	7-GP+4-M	0.081	0.527	385,661	16,508	0.712	C	389,000	16,651	0.719	C	0.006	NO
Carroll Canyon Road/ Mira Mesa Blvd.	NB	20,820	6-GP+4-M	0.075	0.554	378,104	15,713	0.755	C	382,000	15,875	0.762	C	0.008	NO
Carroll Canyon Road/ Mira Mesa Blvd.	SB	20,820	6-GP+4-M	0.083	0.572	378,104	17,917	0.861	D	382,000	18,102	0.869	D	0.009	NO
Mira Mesa Blvd./ Scripps Poway Pkwy.	NB	20,820	6-GP+4-M	0.081	0.526	381,620	16,210	0.779	C	387,000	16,438	0.790	C	0.011	NO
Mira Mesa Blvd./ Scripps Poway Pkwy.	SB	20,820	6-GP+4-M	0.082	0.581	381,620	18,096	0.869	D	387,000	18,351	0.881	D	0.012	NO
Scripps Poway Pkwy./Poway Road	NB	18,470	5-GP+4-M	0.081	0.526	347,846	14,775	0.800	D	351,000	14,909	0.807	D	0.007	NO
Scripps Poway Pkwy./Poway Road	SB	18,470	5-GP+4-M	0.082	0.581	347,846	16,494	0.893	D	351,000	16,644	0.901	D	0.008	NO
Poway Road/ SR-56	NB	18,470	5-GP+4-M	0.077	0.522	319,661	12,898	0.698	C	323,000	13,033	0.706	C	0.007	NO
Poway Road/ SR-56	SB	18,470	5-GP+4-M	0.078	0.571	319,661	14,310	0.775	C	323,000	14,460	0.783	C	0.008	NO
SR-56/ Carmel Mountain Road	NB	18,470	5-GP+4-M	0.077	0.522	334,959	13,516	0.732	C	337,000	13,598	0.736	C	0.004	NO
SR-56/ Carmel Mountain Road	SB	18,470	5-GP+4-M	0.078	0.571	334,959	14,995	0.812	D	337,000	15,086	0.817	D	0.005	NO
Carmel Mountain Road/ Camino Del Norte	NB	18,470	5-GP+4-M	0.077	0.522	323,330	13,047	0.706	C	325,000	13,114	0.710	C	0.004	NO
Carmel Mountain Road/ Camino Del Norte	SB	18,470	5-GP+4-M	0.078	0.571	323,330	14,474	0.784	C	325,000	14,549	0.788	C	0.004	NO
Camino Del Norte/ Rancho Bernardo Road	NB	18,470	5-GP+4-M	0.077	0.522	324,701	13,102	0.709	C	326,000	13,154	0.712	C	0.003	NO
Camino Del Norte/ Rancho Bernardo Road	SB	18,470	5-GP+4-M	0.078	0.571	324,701	14,536	0.787	C	326,000	14,594	0.790	D	0.003	NO

**Legend:**

Vol.= Volume

Dir.= Direction

V/C= Volume to Capacity Ratio

LOS= Level of Service

Sig.?= Is this significant?

GP= General Purpose Lanes, Capacity= 2,350 vphpl

M= Managed Lanes, Capacity= 1,680 vphpl

PHV= Peak Hour Volume

***Horizon Year 2030 with Project***

This section evaluates the Year 2030 with project condition. The SANDAG Series 11 regional traffic forecast model is based on planning efforts involving all jurisdictions within the County of San Diego. SANDAG, as the regional planning agency, collects data from these plans and collates this data within a traffic model. SANDAG also prepared the RTP utilized by the traffic model as a basis for estimating future traffic. The Watermark project was added to this traffic model to estimate Year 2030 conditions with the project. (The existing and approved but not yet MedImpact facilities are already included in the model.) Forecasted growth in traffic volumes from the traffic model was utilized to evaluate Year 2030 conditions with the project. The ongoing I-15 freeway improvements were assumed complete prior to the Horizon Year 2030 consistent with ongoing work and plans by Caltrans. Figures 5.2-9a and 5.2-9b show the *Horizon Year 2030 without Project Average Daily Traffic Volumes*.

An analysis was completed for street segments in the Year 2030 with Project condition. The street segment levels of service for Year 2030 conditions with the project are shown in Table 5.2-21, *Horizon Year 2030 with Project Street Segment Levels of Service*. The following street segments are projected to operate at an unacceptable arterial level of service representing a significant project impact.

<b>Road</b>	<b>Segment</b>	<b>LOS</b>
Scripps Poway Parkway	I-15 / Scripps Highlands Drive	F
Scripps Poway Parkway	Scripps Highlands Drive / Scripps Summit Drive	E
Scripps Poway Parkway	Spring Canyon Road / Scripps Creek Drive	E
Scripps Poway Parkway	Scripps Creek Drive / Cypress Canyon Road	F
Scripps Poway Parkway	Cypress Canyon Road / Angelique Street	E
Scripps Poway Parkway	Angelique Street / Pomerado Road	E

Table 5.2-22, *Horizon Year 2030 with Project Intersection Levels of Service*, shows the AM and PM peak hour levels of service for the Year 2030 with Project condition. As shown, the following three intersections are projected to operate at unacceptable levels of service:

	<b>AM Peak Hour</b>	<b>PM Peak Hour</b>
Park Village Road / Black Mountain Road	LOS E	LOS D
Mercy Road / I-15 SB Ramps	LOS D	LOS E
Scripps Poway Parkway / Scripps Highlands Drive	LOS C	LOS F

The project would result in significant impacts at the Mercy Road/I-15 Southbound Ramps and the Scripps Poway Parkway/Scripps Highlands Drive intersections.

Table 5.2-19, *Horizon Year 2030 With and Without Project Ramp Meter Analysis*, shows impacts to study area ramp meters with the project. Table 5.2-27, *Horizon Year 2030 with and without Project Ramp Meter Analysis*, offers a comparison of impacts. As shown in this comparison, both ramps have a change in delay greater than 2 minutes; however, the freeway operates at an acceptable LOS. Therefore, no impacts would occur.

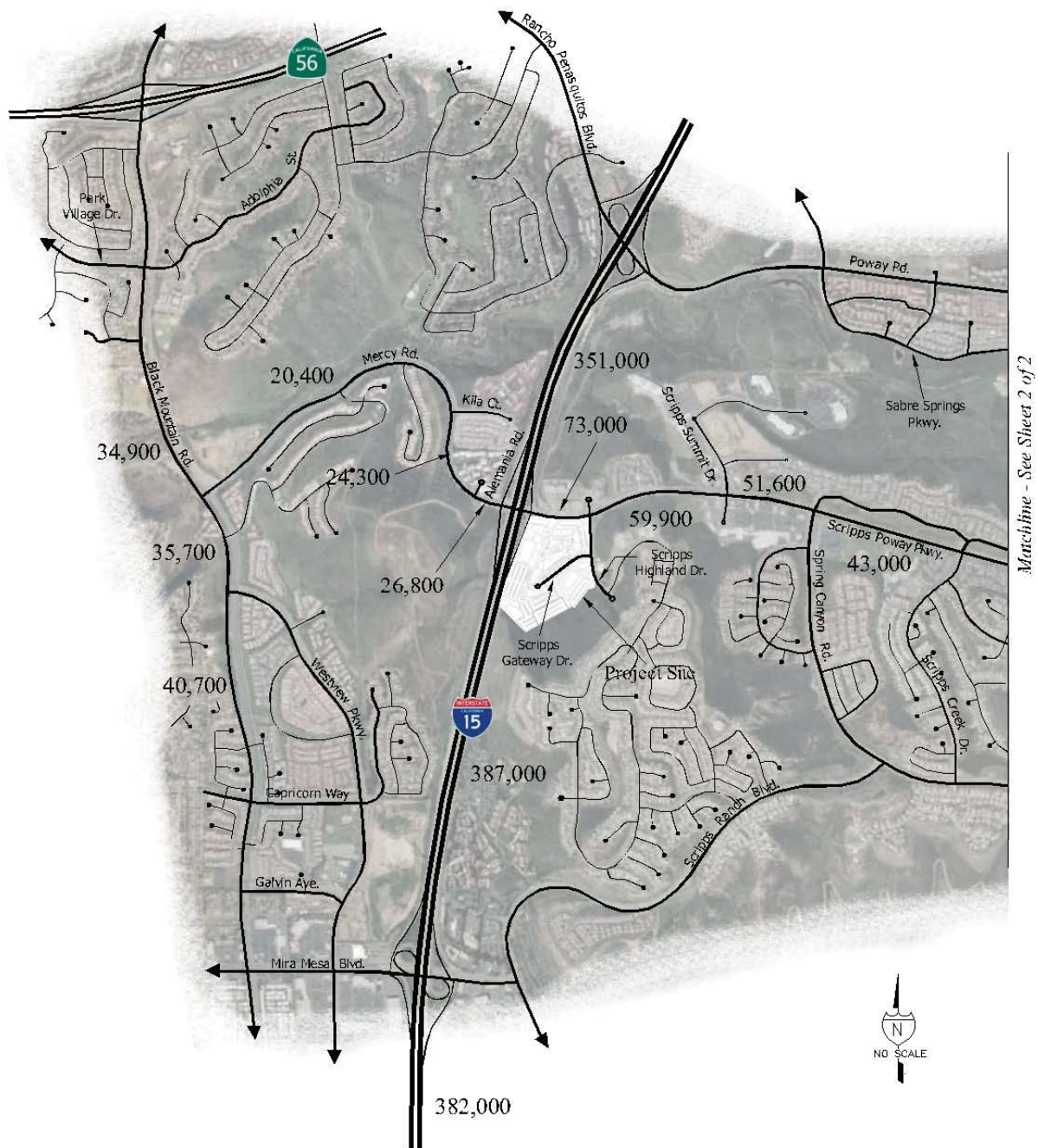


Figure 5.2-9a. Horizon Year 2030 with Project Average Daily Traffic Volumes



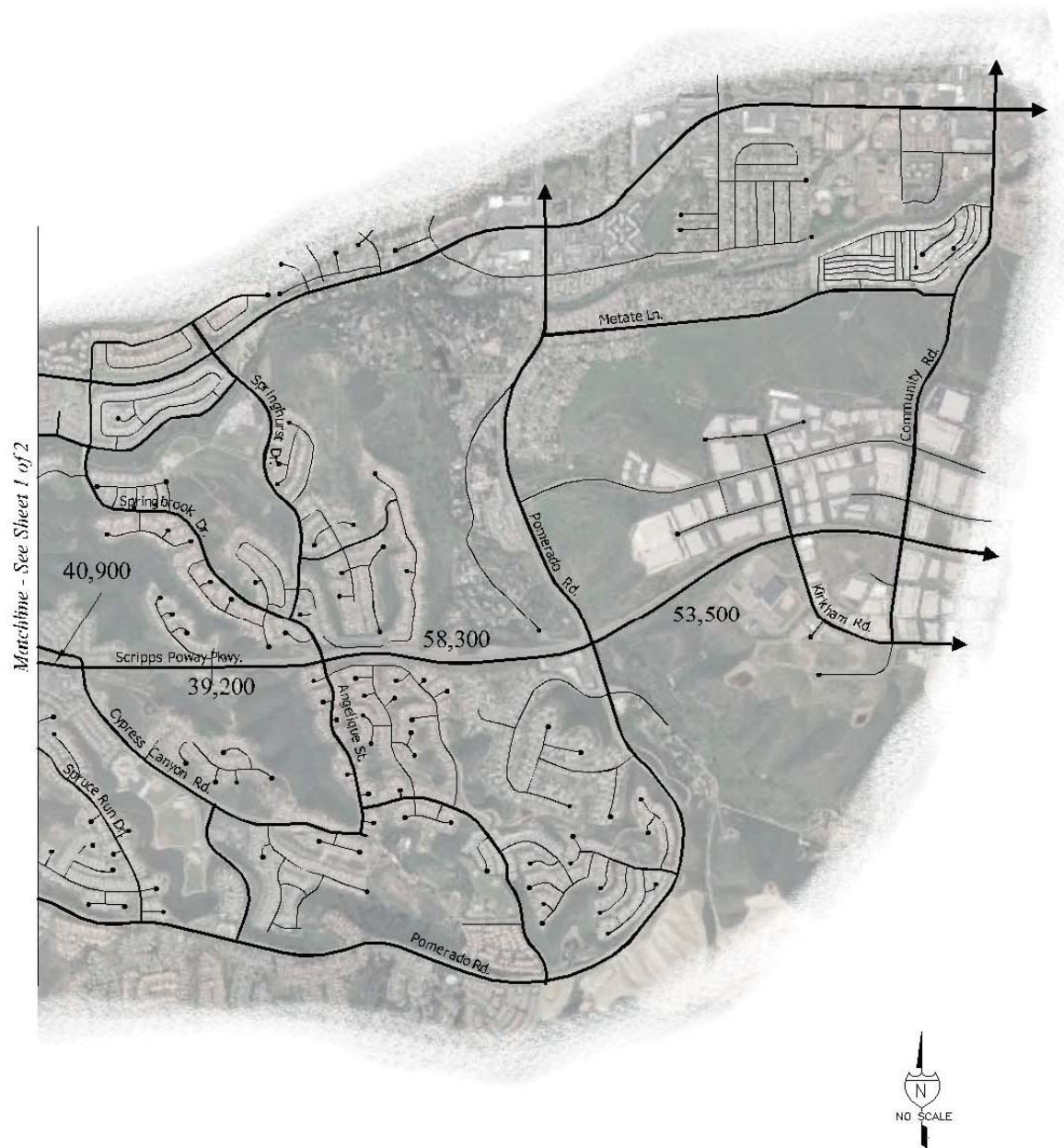


Figure 5.2-9b. Horizon Year 2030 with Project Average Daily Traffic Volumes



Table 5.2-21. *Horizon Year 2030 with Project Street Segment Levels of Service*

Road	Segment	Jurisd.	# Lanes	Class.	Cap.	Volume	V/C	LOS
Black Mountain Rd.	Mercy Rd./Park Village Dr.	SD	4	4-M	40,000	34,900	0.87	D
	Westview Pkwy./ Mercy Rd.	SD	6	PA	60,000	35,700	0.60	C
	Capricorn Way/ Westview Pkwy.	SD	6	PA	60,000	40,700	0.68	C
Mercy Road	Black Mountain Rd./ Kika Ct.	SD	4	4-M	40,000	20,400	0.51	B
	Kika Ct./ Alemania Rd.	SD	4	4-M	40,000	24,300	0.61	C
	Alemania Rd./ I-15 SB Ramps	SD	4	4-M	40,000	26,800	0.67	C
Scripps Poway Parkway	I-15 NB Ramps/ Scripps Highland Dr.	SD	6	PA	60,000	73,000	1.22	F
	Scripps Highland Dr./ Scripps Summit Dr.	SD	6	PA	60,000	59,900	1.00	E
	Scripps Summit Dr./ Spring Canyon Rd.	SD	6	PA	60,000	51,600	0.86	D
	Spring Canyon Rd./ Scripps Creek Dr.	SD	4	4-M	40,000	43,000	1.08	F
	Scripps Creek Dr./ Cypress Canyon Rd.	SD	4	4-M	40,000	40,900	1.02	F
	Cypress Canyon Rd./ Angelique St.	SD	4	4-M	40,000	39,200	0.98	E
	Angelique St./ Pomerado Rd.	Poway	6	PA	60,000	58,300	0.97	E
	Pomerado Rd./ Kirkham Rd.	Poway	6	PA	60,000	53,500	0.89	D

**Legend:**

Class. = Functional Class SD= San Diego

Cap. = Capacity @ LOS "E"

LOS = Level of Service

PA = 6 lane Prime Arterial

4-M = 4 Lane Major Arterial

Horizon Year 2030 With Project Arterial Analysis

Road	Segment	Jurisd.	Class.	Cap.	Volume	Direction	Speed (mph)		LOS	
							AM	PM	AM	PM
Scripps Poway Parkway	I-15 NB Ramps/ Scripps Highland Dr.	SD	PA	60,000	73,000	Eastbound Westbound	10.4 17.7	10.4 17.7	F D	F D
	Scripps Highland Dr./ Scripps Summit Dr.	SD	PA	60,000	59,900	Eastbound Westbound	9.0 21.4	10.1 21.4	F D	F D
	Scripps Summit Dr./ Spring Canyon Rd.	SD	PA	60,000	51,600	Eastbound Westbound	15.9 12.5	8.7 13.6	E F	F E
	Spring Canyon Rd./ Scripps Creek Dr.	SD	4-M	40,000	43,000	Eastbound Westbound	22.5 26.3	22.5 25.5	C C	C C
	Scripps Creek Dr./ Cypress Canyon Rd.	SD	4-M	40,000	40,900	Eastbound Westbound	21.0 22.5	21.0 22.5	D C	D C
	Cypress Canyon Rd./ Vail Ct.	SD	4-M	40,000	39,200	Eastbound Westbound	22.9 29.9	22.9 29.9	C B	C B
	Angelique St./ Pomerado Rd.	Poway	PA	60,000	58,300	Eastbound Westbound	23.2 18.6	23.2 18.6	C D	C D
	Pomerado Rd./ Kirkham Rd.	Poway	PA	60,000	53,500	Eastbound Westbound	31.2 31.5	31.2 31.5	B B	B B

**Legend:**

Class. = Functional Class SD= San Diego

Cap. = Capacity @ LOS "E"

LOS = Level of Service

PA = 6 lane Prime Arterial

4-M = 4 Lane Major Arterial

**Notes:**

Taken from Sandag Series 11 traffic model.

Table 5.2-22. *Horizon with Project Intersection Levels of Service*

Number	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Park Village Rd. / Black Mountain Rd.	Signalized	56.5	E	46.8	D
2	Mercy Rd. / Black Mountain Rd.	Signalized	34.5	C	37.5	D
3	Westview Pkwy / Black Mountain Rd.	Signalized	16.9	B	22.3	C
4	Capricorn Way / Black Mountain Rd.	Signalized	46.2	D	42.6	D
5	Kika Ct. / Mercy Rd.	Signalized	6.5	A	7.1	A
6	Mercy Rd. / Alemania Rd.	Signalized	15.6	B	12.7	B
7	Mercy Rd. / I-15 SB ramps	Signalized	38.6	D	68.3	E
8	Scripps Poway Pkwy / I-15 NB ramps	Signalized	11.6	B	30.5	C
9	Scripps Poway Pkwy / Scripps Highlands Dr.	Signalized	24.7	C	178.6	F
10	Scripps Highlands Dr. / Scripps Gateway Ct.	Signalized	7.1	A	21.3	C
11	Scripps Poway Pkwy / Scripps Summit Dr.	Signalized	41.8	D	52.7	D
12	Scripps Poway Pkwy / Spring Canyon Rd.	Signalized	34.7	C	51.8	D
13	Scripps Poway Pkwy / Scripps Creek Dr.	Signalized	27.6	C	28.5	C
14	Scripps Poway Pkwy / Cypress Canyon Rd.	Signalized	14	B	19	B
15	Scripps Poway Pkwy / Springbrook Dr.	Signalized	33.3	C	51.9	D
16	Scripps Poway Pkwy / Pomerado Rd.	Signalized	38.2	D	47.1	D
17	Scripps Poway Pkwy / Kirkham Rd.	Signalized	17.5	B	39.8	D

Notes:

LOS = Level of Service

Freeway main lane segments have been evaluated utilizing Caltrans procedures. In future conditions, the ongoing I-15 managed lanes project is assumed to be completed. This project is fully funded and under construction. This project is expected to significantly improve freeway operation. Table 5.2-20, *Horizon Year 2030 With and Without Project Freeway Segment LOS Summary*, illustrates near-term impacts to I-15 with the proposed project. As shown on Table 5.2-20, no freeway impacts are anticipated.

***Significance of Impacts***

The project would result in significant direct impacts at five roadway segments and one arterial segment location. Segments with significant impacts are:

- Scripps Poway Parkway - I-15 Northbound Ramps / Scripps Highlands Drive
- Scripps Poway Parkway - Scripps Highlands Drive / Scripps Summit Drive
- Scripps Poway Parkway – Scripps Summit Drive / Spring Canyon Road
- Scripps Poway Parkway – Spring Canyon Road / Scripps Creek Drive
- Scripps Poway Parkway – Scripps Creek Drive / Cypress Canyon Road
- Scripps Poway Parkway – Cypress Canyon Road / Angelique Street

Cumulatively significant impacts would also occur at six roadway segments and one arterial segment as shown below:

- Scripps Poway Parkway - I-15 Northbound Ramps / Scripps Highlands Drive
- Scripps Poway Parkway - Scripps Highlands Drive / Scripps Summit Drive
- Scripps Poway Parkway – Scripps Summit Drive / Spring Canyon Road
- Scripps Poway Parkway – Spring Canyon Road / Scripps Creek Drive
- Scripps Poway Parkway – Scripps Creek Drive / Cypress Canyon Road
- Scripps Poway Parkway – Cypress Canyon Road / Angelique Street
- Scripps Poway Parkway – Angelique Street / Pomerado Road

The project would result in significant direct and cumulative impacts at the following two intersections:

- Scripps Poway Parkway / Scripps Highlands Drive
- Mercy Road / I-15 Southbound Ramps

***Mitigation Measures***

The project proposes mitigation for impacts to the I-15 Southbound Ramp at Scripps Poway Parkway, as presented under **MM 5.2-1**, below. A reconfiguration of the Scripps Poway Parkway/I-15 Interchange is proposed to mitigate the project's significant direct traffic impacts.

**MM 5.2-1** Prior to issuance of the first construction permit, owner/permittee shall assure by permit and bond the reconfiguration to shift the westbound through lanes on Scripps Poway Parkway to the north and provide additional queuing length for westbound traffic on Scripps Poway Parkway to the interchange. The “back-to-back” left turn lanes will be eliminated and additional queuing for traffic turning left from Scripps Poway Parkway to southbound I-15 will be provided. Reduction in the width of raised median on Scripps Poway Parkway east of the interchange will be required. All work to be done to the satisfaction of the City Engineer.

In order to mitigate significant direct and cumulative impacts to the intersections of Scripps Poway Parkway/Scripps Highlands Drive and Mercy Road/I-15 Southbound Ramps, the following measure would be implemented:

**MM 5.2-2** Prior to issuance of the first construction permit, owner/permittee shall assure by permit and bond the provision of a triple left-turn at Scripps Poway Parkway and Scripps Highlands Drive intersection by re-striping the northbound leg to take a thru-lane and make it a shared left-thru lane. The pedestrian crossing on the west leg of the intersection ~~will~~ shall be removed. Additionally, a northbound right-turn overlap ~~will~~ shall be provided. All work to be done to the satisfaction of the City Engineer.

Table 5.2-23, *Near Term and Horizon Year 2030 Intersection Mitigation LOS Comparison*, shows the anticipated LOS at the impacted intersections before and after mitigation.

**Table 5.2-23. Near Term and Horizon Year 2030 Intersection Mitigation LOS Comparison**

Near Term

#	Intersection	Near Term				Near Term with Project (unmitigated)				Near Term With Project (mitigated)							
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		Δ	S ?	PM Peak Hour		Δ	S ?
		D	LOS	D	LOS	D	LOS	D	LOS	D	LOS			D	LOS		
7	Mercy Rd. / I-15 SB ramps	34.2	C	37.6	D	37.0	D	66.7	E	37.5	D	0.5	No	51.9	D	-14.8	No
9	Scripps Poway Pkwy / Scripps Highlands Dr.	19.8	B	25.1	C	23.4	C	135.5	F	35.5	D	12.1	No	52.4	D	-83.1	No

Notes:

LOS = Level of Service

Δ = Change

S = Significant

D = Delay

Horizon Year

#	Intersection	Year 2030				Year 2030 with Project (unmitigated)				Year 2030 + Project (mitigated)							
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		Δ	S ?	PM Peak Hour		Δ	S ?
		D	LOS	D	LOS	D	LOS	D	LOS	D	LOS			D	LOS		
7	Mercy Rd. / I-15 SB ramps	35.0	C	39.2	D	38.6	D	68.3	E	37.5	D	-1.1	No	54.8	D	-13.5	No
9	Scripps Poway Pkwy / Scripps Highlands Dr.	22.0	C	30.3	C	24.7	C	178.6	F	45.2	D	20.5	No	54.0	D	-124.6	No

Notes:

LOS = Level of Service

Δ = Change

S = Significant

D = Delay



Additional improvements are also discussed under *Issue 6*, below. A bicycle path and wide sidewalk intended to provide safer bicycle operations along Scripps Poway Parkway near the project frontage are ~~required~~ proposed as part of the project. This improvement is ~~required~~ proposed as part of the project due to the addition of a right in/out access for the project on Scripps Poway Parkway which necessitated the removal of bicyclists from the traffic stream on eastbound Scripps Poway Parkway due to vehicular turning movements.

### ***Significance of Impacts after Mitigation***

All intersection impacts would be mitigated to an acceptable LOS, as discussed above. However, significant and unmitigated Impacts would result on several street segments at the following locations:

<u>Road</u>	<u>Segment</u>
Scripps Poway Parkway	I-15 Northbound / Scripps Highland Drive
Scripps Poway Parkway	Scripps Highland Drive / Scripps Summit Drive
Scripps Poway Parkway	Scripps Summit Drive / Spring Canyon Road
Scripps Poway Parkway	Spring Canyon Road / Scripps Creek Drive
Scripps Poway Parkway	Scripps Creek Drive / Cypress Canyon Road
Scripps Poway Parkway	Cypress Canyon Road/ Angelique Street

Currently, the segments of Scripps Poway Parkway west of Spring Canyon Road are constructed to their ultimate Community Plan classification. Additional widening beyond the current 6-lane prime arterial classification is impractical since no right-of-way is available and existing buildings would be affected.

The street segment analysis indicates the potential for impacts on Scripps Poway Parkway between Spring Canyon Road and Angelique Street. However, the more detailed arterial analysis indicates that these road segments would experience an unacceptable LOS with the project in all conditions. Therefore, although disclosed as an impact, it is anticipated that an acceptable LOS will be maintained in the future and no widening would be necessary.

### ***Issue 2***

*Would the project conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the County congestion management agency for designated road or highways?*

### ***Impacts***

The City of San Diego has developed a Traffic Impact Study Manual (July 1998). The stated purpose of the Traffic Impact Study Manual is “...to ensure consistency with all applicable City and State regulations.” The Traffic Impact Study Manual provides guidance regarding preparation of traffic impact reports in the City of San Diego. Since the proposed project is located in City of San Diego, the traffic impact report for the Watermark follows the procedures outlined in the City’s traffic manual. The manual includes guidelines for forecasting, trip generation and assignment, and analysis procedures.

The City's Traffic Impact Study Manual also establishes criteria and methods for analyzing study area street segments. Specifically, Congestion Management Program (CMP) arterial roadways must be analyzed utilizing the peak hour method found in Chapter 11 of the current Highway Capacity Manual (HCM). As a CMP arterial roadway, Scripps Poway Parkway was analyzed utilizing this method. Non-CMP arterials are to be analyzed utilizing a standard v/c (volume to capacity ratio) method established by the City of San Diego.

When analyzing street segments, the level of service (LOS) must be determined. Table 5.2-24, *Roadway Classifications and Levels of Service*, shows the City of San Diego roadway classifications and corresponding levels of service applicable to the proposed project.

**Table 5.2-24. Roadway Classifications and Levels of Service**

Street Classification	Lanes	Level of Service				
		A	B	C	D	E
Prime Arterial	6 lanes	25,000 <sup>1</sup>	35,000 <sup>1</sup>	50,000 <sup>1</sup>	55,000 <sup>1</sup>	60,000 <sup>1</sup>
Major Arterial	4 lanes	15,000 <sup>1</sup>	21,000 <sup>1</sup>	30,000 <sup>1</sup>	35,000 <sup>1</sup>	40,000 <sup>1</sup>

Legend:

XXX/XXX – Curb to curb width (feet)/right of way (feet); based on the City of San Diego Street Design Manual.

##/###,### – Approximate recommended ADT based on the City of San Diego Street Design Manual.

Note:

The volumes and the average daily level of service listed above are only intended as a general planning guideline.

The City and Regional Congestion Management Program (CMP) guidelines, as adopted by SANDAG, determine the procedures to be used for intersection peak hour analysis. To determine an intersection peak hour LOS, the CMP guidelines require use of the most recent procedure from Chapter 16 of the Highway Capacity Manual (Transportation Research Board, 2000). The procedure in Chapter 16 which is used to analyze signalized intersection is the “operational method.” This method determines LOS based on average control delay expressed in seconds. Table 5.2-25, *Level of Service Criteria*, shows the LOS based upon the delay. A computer program is used to complete the analysis. As discussed above, the City and CMP guidelines have established LOS “D” or better as the objective for intersections and street segments.

**Table 5.2-25. Level of Service Criteria**  
**Level of Service Criteria For Signalized Intersections**

Level of Service	Control Delay Per Vehicle (sec)
A	>10
B	>10 and <20
C	>20 and <35
D	>35 and <55
E	>55 and <80
F	>80

Source: Table 9-1, Highway Capacity Manual, 2000

**Level of Service Criteria For Unsignalized Intersections**

Level of Service	Control Delay Per Vehicle (sec)
A	>10
B	>10 and <15
C	>15 and <25
D	>25 and <35
E	>35 and <50
F	>50

Source: Table 10-7, Highway Capacity Manual, 2000

The CMP regional guidelines prepared by the SANDAG, stipulate that any development project generating 2,400 or more average daily trips, or 200 or more peak hour trips, must be evaluated in accordance with the requirements of the Regional CMP. The CMP analysis must include the traffic level of service (LOS) impacts on affected freeways and Regionally Significant Arterial (RSA) systems, which includes all designated CMP roadways. In order to conform to the region's CMP, local jurisdictions must adopt and implement a land use analysis program to assess impacts of land use decisions on the regional transportation system.

A review of the trip generation from the proposed project compared to the CMP requirements is summarized below in Table 5.2-26, *Congestion Management Program Requirements*:

**Table 5.2-26. Congestion Management Program Requirements**

	Watermark	CMP Requirements
ADT	18,873	> 2,400
Peak Hour	1,752 (PM)	> 200

As shown, the proposed project is above the threshold for ADTs, and it is also above the threshold for peak hour trips, therefore, a CMP level of analysis is required.

City of San Diego Guidelines are consistent with the methodologies contained in the Congestion Management Program. Further, City of San Diego Significance Determination Guidelines are more restrictive than those contained in the Congestion Management Program. Therefore, CMP requirements are met.

As noted in *Transportation/Traffic Circulation/Parking Issue 1*, above, impacts occur to area street segments and intersections. Mitigation measures MM 5.2-1 and MM 5.2-2 ~~is able to~~would partially mitigate these impacts. However, impacts remain significant after mitigation.

### ***Significance of Impacts***

The proposed project is consistent with the Congestion Management Program. Impacts are less than significant.

As noted above, impacts to project area street segments, intersections, and freeway ramp meters are significant.

### ***Mitigation Measures***

Impacts relative to CMP are less than significant. No mitigation is required. Impacts associated with street segment, intersection, and freeway ramp meters are address in MM 5.2-1 and MM 5.2-2, above.

### ***Significance of Impacts Following Implementation of Mitigation Measures***

The proposed project would not result in significant impacts relative to the Congestion Management program. No mitigation measures are required. As discussed above, impacts to street segments, intersections, and ramp meters remain significant after implementation of MM 5.2-1 and MM 5.2-2.

### ***Issue 3***

*Would the project result in a change in traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?*

### ***Impacts***

The project does not result in a physical change in traffic patterns. Located in a developed community, the proposed project draws from existing circulation element roadways, including Scripps Poway Parkway and Scripps Highlands Drive. The proposed project does include a street vacation for Scripps Gateway Court. However, this does not result in an alteration to the traffic pattern, as access into the project site would remain.

Traffic levels would increase over time with the proposed project and without the proposed project. Impacts of the project have been mitigated to the extent possible (see *Issue 1*, above). However, it is not possible to mitigate these impacts to below a level of significance.

### ***Significance of Impacts***

Impacts related to traffic volumes result in a significant impacts to street segments, intersections and freeway ramps.

### ***Mitigation Measures***

Mitigation measure 5.2-1 (MM 5.2-1) is proposed to lessen traffic volume impacts, as presented under *Issue 1*, above. As stated above, MM 5.2-1 would not able to fully mitigate impacts, and impacts would remain significant and unmitigated, requiring that the decision-maker adopt either a



project alternative or a Statement Overriding Considerations which finds the impact to be acceptable. (See Section 10.0, *Alternatives*, for a discussion of project alternatives.)

### ***Significance of Impacts after Mitigation***

Impacts related to traffic volumes remain significant and unmitigated.

#### ***Issue 4***

*Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses?*

#### ***Impacts***

The project does not propose major changes to existing circulation. The project proposes no hazardous design features, such as sharp curves or dangerous intersections. The project features a bicycle lane in the form of a multi-use path, as discussed in *Issue 6*, below. This path has been designed to avoid potential conflicts with automobiles entering and exiting the project site at Scripps Poway Parkway.

Uses within the proposed project and adjacent community are compatible. The project site is shared with the MedImpact corporate headquarters, which continue construction on the eastern portion of the site. This office campus is anticipated to provide many users for the Watermark project. Pedestrian circulation (see *Issue 6*, below) has been designed so as to minimize potential conflicts. Additionally, the project site is located adjacent to existing commercial development to the north. The uses proposed within the Watermark are compatible with adjacent development.

### ***Significance of Impacts***

The project does not substantially increase hazards due to design features or incompatible uses. No impacts result.

### ***Mitigation Measures***

The proposed project does not increase hazards. No mitigation is required.

#### ***Issue 5***

*Would the project result in inadequate emergency access?*

#### ***Impacts***

The Watermark project would take access via Scripps Poway Parkway at a channelized right in/out driveway and at an existing signalized intersection at Scripps Gateway Court and Scripps Highlands Drive. (See Figure 3-7. *Entry from Scripps Highlands Road Landscape Design*). Due to the access configuration for the Watermark project, all project traffic would travel through the intersection of Scripps Poway Parkway at Scripps Highland Drive. Therefore, two signalized intersections and one driveway would accommodate all of the project traffic. The two signalized intersections were analyzed using driveway trip generation rates. Additionally, due to the presence of the MedImpact office buildings (which were not constructed at the time of the existing counts but which were instead added as an “other project”) expected trip generation from the MedImpact project was

added to the Watermark project traffic because the same access would be utilized and would function as a cohesive site for access purposes. To provide a conservative evaluation, the intersections of Scripps Highlands Drive at Scripps Poway Parkway and Scripps Highlands Drive at Scripps Gateway Court were analyzed at ultimate project and community buildout.

The project proposes a slight reconfiguration of the intersections including a triple left turn lane (sharing the through lane) and switch to split phasing for the northbound leg of Scripps Poway Parkway at Scripps Highland Drive. Acceptable levels of service “D” or better would be achieved in all peak hours. Emergency access would not be impeded by project development.

### ***Significance of Impacts***

Project impacts on emergency access are less than significant.

### ***Mitigation Measures***

No impacts to emergency access are anticipated. Therefore, no mitigation measures are required.

### ***Issue 6***

*Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?*

### ***Impacts***

The project site is not currently serviced by public transit, nor is the project area anticipated to be serviced by transit in the future. Project design incorporates space for a future bus stop along Scripps Poway Parkway, in the event a bus transit route is ever aligned with Scripps Poway Parkway. Transit routes and locations would be determined by MTS. Because there is no transit service in the project vicinity currently, employees and visitors of the project would not be able to utilize transit to access the project site.

~~The project proposes the construction of a~~ The right in/out driveway proposed on Scripps Poway Parkway would be providing a new access between the I-15 ramps and Scripps Highlands Drive. When this access is constructed as part of the project, the existing bike lane on the south side of Scripps Poway Parkway would need to be relocated and constructed as a multi-use path adjacent to the project site. This would require a limited dedication from the Watermark project site in order to be achieved.

Pedestrian circulation throughout the project site is facilitated by dedicated pedestrian paths and sidewalks. Enhanced paving demarcates pedestrian access in areas where vehicles and pedestrians share the right of way.

### ***Significance of Impacts***

The proposed project would not conflict with public transit, bicycle, or pedestrian circulation. Impacts would be less than significant.

### ***Mitigation Measures***

Because the proposed project would not result in substantial impacts to transit, bicycle, or pedestrian circulation, no mitigation would be required.

### ***Issue 7***

*Would the project result in:*

- *An increased demand for off-site parking?*
- *Effects on existing parking?*

### ***Impacts***

Parking for the Watermark project would be accommodated wholly onsite. Through a combination of parking structures and surface parking, a total of 2,191 spaces are proposed. Utilizing City of San Diego standard parking ratios consistent with the Municipal Code, a minimum of 1,982 parking spaces are required (without applying shared parking). Therefore, the project exceeds the required amount of parking.

As a large, multi-use project, the Watermark project would be eligible to take advantage of shared parking per the municipal code. If shared parking were proposed, a shared parking calculations consistent with the City of San Diego Municipal Code would need to be completed. The total parking provided for the site would need to exceed the minimum requirements of the City's Municipal Code.

### ***Significance of Impacts***

The project would not result in significant impacts associated with parking.

### ***Mitigation Measures***

No impacts associated with parking are anticipated. Therefore, no mitigation measures are required.





### 5.3 VISUAL EFFECTS AND NEIGHBORHOOD CHARACTER

#### 5.3.1 Existing Conditions

The Watermark project site is situated in the northwestern portion of the Miramar Ranch North community (see Figure 2-3, *Project Location Map*). The project site is the location of approved entitlements for the development of a corporate office campus to serve as headquarters for MedImpact. Two corporate office buildings and a support building will be constructed under this entitlement. One building and a parking garage have already been constructed. In total, the MedImpact office complex comprises 11.97 acres of the project site (Area B). The rest of the project site (22.42 acres) is graded as flat pads for development under the approved entitlements.

As shown in Figure 2-3, *Project Location Map*, the Watermark project site is located in the southeast quadrant of I-15 and Scripps Poway Parkway. Situated south of Scripps Poway Parkway, east of I-15, a distance north of Mira Mesa Boulevard, and west of Scripps Highlands Drive, the Watermark project site encompasses approximately 34.39 acres. Single-family residential development within the Scripps Highlands neighborhood occurs east and south of the project site at elevations above the project site. Steep slopes vegetated in native habitat and preserved through an open space easement separate the Watermark site from the Scripps Highlands residential neighborhood. North of the project is a small neighborhood commercial center (with hotels and restaurants) and office buildings.

#### Views of the Project Site

Views of the project site are characterized by flat graded pads. Development of the existing entitlements have begun on the eastern parcels. An office building and parking structure have been constructed and are occupied (see Figure 5.3-1, *Current Conditions Aerial*).

Views from the south of the project site are largely blocked by naturally occurring topography and vegetation. Views from the southwest and west are available to motorists traveling on I-15 less than one-half mile south of the site, as well as bicyclists and pedestrians utilizing the multi-use trail that runs alongside the freeway. These views are primarily of bare flat pads that have been graded as per the existing entitlements, as well as the newly constructed MedImpact office building and parking structure to the east.

Immediate views from the north of the project site are blocked nearly entirely. The topography of the project is higher than Scripps Poway Parkway and the existing pedestrian and vehicular circulation elements. Landscaping along the northern slopes preclude any views into the project site. These landscapes slopes block views of the existing development on the site, as well. Southbound traffic on I-15 may view the MedImpact building from a distance of approximately 1.5 miles to the north of the site.



Figure 5.3-1. *Current Conditions Aerial (2011)*

Views from the east of the project site along Scripps Highlands Drive are mostly screened from view due to topography and landscaping. At the intersection of Scripps Highlands Drive and Scripps Gateway Court, the existing development is visible; graded pads remain screened from view of the street by landscaping and topography. Views from the east along Trail Crest Drive allow for full viewing of the entire project site. This viewshed is currently dominated by the existing construction in the foreground, with graded pads in the background.

#### *Views from the Project Site*

Due to the elevated nature of the project site, views from the project site to the north are of the northwestern region of the Miramar Ranch North community and the Sabre Springs community beyond to the north.



View looking northwest from the project site





*View looking north from the project site*

Views from the project site to the west are of I-15 and natural slopes, while views to the south and east are of naturally occurring vegetated slopes.





View looking west from the project site



*View looking south from the project site*



*View looking east from the project site*



*View looking east from the project site*

### **Neighborhood Character**

The project site is located within the suburbanized community of Miramar Ranch North. The character of the Miramar Ranch North community surrounding the project site is a mix of retail, commercial office, light industrial/business parks, and residential. West of the project is I-15. Beyond I-15 is open space area. To the northwest, at the Mercy interchange, is a mix of commercial, multi-family residential, and public utility uses. To the north of the project site is a commercial center with hotels, restaurants, and commercial uses. To the east, separated by a substantial elevation and open space belt, is a single-family home development. To the northeast, about a mile from the project site, is another cluster of commercial retail establishments proximate to light industrial park uses and multi-family and single-family residential developments. Immediately south of the project site is open space, with single-family residential occurring further south, separated by a substantial increase in elevation. (See Figure 2-4, *Surrounding Land Uses*.)

The Miramar Ranch North Community Plan calls for the promotion of sensitive development of the Mercy interchange area as an attractive community gateway. The Mercy interchange area is important as the major entrance into the community, both visually to I-15 travelers, and physically and visually to persons entering the ranch. Developments in this area should reflect the atmosphere of the rest of Miramar Ranch North. According to the Community Plan, the key to developing the gateway in a harmonious fashion is the careful design of the individual projects in relation to Scripps North Parkway. A similar relationship between the project and the road should be established for all projects. For example, buildings could be placed near the roadway, offset by a wide landscaped strip, with parking largely tucked behind and out of sight. Additional measures to achieve a harmonious appearance could include a consistent landscaping motif or selected tree, standard signing, street furniture and street lighting, harmonious building and paving materials, a selected architectural style and a similar building height or massing of different heights. Roofscares on all projects should be as



clean as possible, since they are visible from other developments above.

### 5.3.2 Impact Analysis

#### *Thresholds of Significance*

##### **1. Views**

Projects that would block public views from designated open space areas, roads, or parks or to significant visual landmarks or scenic vistas (Pacific Ocean, downtown skyline, mountains, canyons, waterways) may result in a significant impact. To meet this significance threshold, one or more of the following conditions must apply:

- a. The project would substantially block a view through a designated public view corridor as shown in an adopted community plan, the General Plan, or the Local Coastal Program. Minor view blockages would not be considered to meet this condition. In order to determine whether this condition has been met, consider the level of effort required by the viewer to retain the view;
- b. The project would cause substantial view blockage from a public viewing area of a public resource (such as the ocean) that is considered significant by the applicable community plan. Unless the project is moderate to large in scale, condition “c” would typically have to be met for view blockage to be considered substantial;
- c. The project exceeds the allowed height or bulk regulations, and this excess results in a substantial view blockage from a public viewing area;
- d. The project would have a cumulative effect by opening up a new area for development, which will ultimately cause “extensive” view blockage. (Cumulative effects are usually considered significant for a community plan analysis, but not necessarily for individual projects. Project level mitigation should be identified at the community plan level). View blockage would be considered “extensive” when the overall scenic quality of a visual resource is changed; for example, from an essentially natural view to a largely manufactured appearance.

Note: Views from private property are not protected by CEQA or the City of San Diego.

##### **2. Neighborhood Character/Architecture**

Projects that severely contrast with the surrounding neighborhood character. To meet this significance threshold, one or more of the following conditions must apply:

- a. The project exceeds the allowable height or bulk regulations and the height and bulk of the existing patterns of development in the vicinity of the project by a substantial margin.
- b. The project would have an architectural style or use building materials in stark contrast to adjacent development where the adjacent development follows a single or common architectural theme (e.g., Gaslamp Quarter, Old Town).
- c. The project would result in the physical loss, isolation or degradation of a community



identification symbol or landmark (e.g., a stand of trees, coastal bluff, historic landmark) which is identified in the General Plan, applicable community plan or local coastal program.

- d. The project is located in a highly visible area (e.g., on a canyon edge, hilltop or adjacent to an interstate highway) and would strongly contrast with the surrounding development or natural topography through excessive height, bulk, signage, or architectural projections.
- e. The project would have a cumulative effect by opening up a new area for development or changing the overall character of the area (e.g., rural to urban, single-family to multi-family). As with views, cumulative neighborhood character effects are usually considered significant for a community plan analysis, but not necessarily for individual projects. Project level mitigation should be identified at the community plan level. Analysts should also evaluate the potential for a project to initiate a cumulative effect by building structures that substantially differ from the character of the vicinity through height, bulk, scale, type of use, etc., when it is reasonably foreseeable that other such changes in neighborhood character will follow.

### **3. Land Form Alteration Grading**

Projects that significantly alter the natural landform. To meet this significance threshold, typically the following conditions must apply:

- a. The project would alter more than 2,000 cubic yards of earth per graded acre by either excavation or fill. Grading of a smaller amount may still be considered significant in highly scenic or environmentally sensitive areas. Excavation for garages and basements are typically not held to this threshold. In addition, one or more of the following conditions (1-3) must apply to meet this significance threshold.
  - 1) The project would disturb steep hillsides in excess of the encroachment allowances of the Environmentally Sensitive Lands regulations (LDC Chapter 14, Article 3, Division 1). In evaluating this issue, environmental staff should consult with permit staff.
  - 2) The project would create manufactured slopes higher than ten feet or Steeper than 2:1 (50 percent).
  - 3) The project would result in a change in elevation of steep hillsides as defined by the SDMC Section 113.0103 from existing grade to proposed grade of more than five feet by either excavation or fill, unless the area over which excavation or fill would exceed five feet is only at isolated points on the site. (A continuous elevation change of five feet may be noticeable in relation to surrounding areas. In addition, such a change may require retaining walls and other features to stabilize slopes, potentially resulting in a manufactured appearance.)
  - 4) The project design includes mass terracing of natural slopes with cut or fill slopes in order to construct flat-pad structures. (This item moved from “Development Features” section below.)

b. However, the above conditions may not be considered significant if one or more of the following apply:

- 1) The grading plans clearly demonstrate, with both spot elevations and contours, that the proposed landforms will very closely imitate the existing on-site landform and/or the undisturbed, pre-existing surrounding neighborhood landforms. This may be achieved through —naturalized variable slopes.
- 2) The grading plans clearly demonstrate, with both spot elevations and contours, that the proposed slopes follow the natural existing landform and at no point vary substantially from the natural landform elevations.
- 3) The proposed excavation or fill is necessary to permit installation of alternative design features such as step-down or detached buildings, non-typical roadway or parking lot designs, and alternative retaining wall designs which reduce the project's overall grading requirements.

#### **4. Development Features**

Projects that have a negative visual appearance. To meet this significance threshold, one or more of the following conditions must apply:

- a. The project would create a disorganized appearance and would substantially conflict with City codes (e.g., a sign plan which proposes extensive signage beyond the City's sign ordinance allowance).
- b. The project significantly conflicts with the height, bulk, or coverage regulations of the zone and does not provide architectural interest (e.g., a tilt-up concrete building with no offsets or varying window treatment).
- c. The project includes crib, retaining or noise walls greater than six feet in height and 50 feet in length with minimal landscape screening or berming where the walls would be visible to the public.
- d. The project is large and would result in an exceeding monotonous visual environment (e.g., a large subdivision in which all the units are virtually identical).
- e. The project includes a shoreline protection device in a scenic, high public use area, unless the adjacent bluff areas are similarly protected.

These conditions may become more significant for projects which are highly visible from designated open spaces, roads, parks, or significant visual landmarks. The significance threshold may be lower for such projects. Refer to the project's applicable community plan and the Urban Design Element of the City's Progress Guide and General Plan for more information on visual quality.

### **Light/Glare**

Projects that would emit or reflect a significant amount of light and glare. To meet this significance threshold, one or more of the following must apply:

- f. The project would be moderate to large in scale, more than 50 percent of any single elevation of a building's exterior is built with a material with a light reflectivity greater than 30 percent (see LDC Section 142.07330(a)), and the project is adjacent to a major public roadway or public area.
- g. The project would shed substantial light onto adjacent, light-sensitive property or land use, or would emit a substantial amount of ambient light into the nighttime sky. Uses considered sensitive to nighttime light include, but are not limited to, residential, some commercial and industrial uses, and natural areas.

### ***Issue 1***

*Would the project result in a substantial obstruction of any vista or scenic view from a public viewing area as identified in the Community Plan?*

### ***Impact Analysis***

The Watermark project site is not located in an area designated as a scenic vista or viewshed by either the City of San Diego General Plan or the Miramar Ranch North Community Plan. The closest designated viewshed is the Miramar Lake Viewshed, as identified in the Miramar Ranch North Community Plan. This viewshed is located approximately two miles south of the project site. Due to topography, Miramar Lake is not visible from the project site, and the proposed project would not be visible from Miramar Lake. No significant impacts to a scenic vista would occur.

The project site is located between two hills, and is visible from I-15 north and south. Housing in the Scripps Highland development, located atop the hill to the east, would overlook the proposed project. However, proposed heights within the project would not be such as to obstruct existing views from these single-family residences. Building heights would reach a maximum of 103 feet and would be generally consistent with what has been constructed with the existing MedImpact buildings, and with the nearby commercial and office sites located within the Community Plan Area, just north of the project site. The proposed project buildings would be lower than the existing MedImpact building, which is 112 feet in height. The proposed project would not obstruct existing views from surrounding development.

### ***Significance of Impacts***

The proposed project does not compromise any designated scenic views or viewshed areas and would not obstruct views from surrounding areas. Therefore, the project results in no impacts to scenic views.

### ***Mitigation Measures***

The project would not result in significant impacts associated with vistas and viewshed. No mitigation is required.

**Issue 2**

*Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?*

***Impact Analysis***

The California Department of Transportation is responsible for denoting Officially Designated State Scenic Highways and Historic Parkways. I-15, which runs parallel to the proposed project's western boundary is not an officially designated state scenic highway, nor is this section of freeway an eligible State scenic highway. The closest officially designated scenic highways are SR-125 (located approximately 13 miles to the southeast between I-8 and SR-94), and SR-163 (located approximately 14 miles to the southwest approaching downtown San Diego). The closest eligible State scenic highways are SR-52 (located approximately six miles to the south) and SR-76 (located approximately 28 miles to the north).

The project site is a fully disturbed, completely graded, and partially built site. There are no scenic trees or rock outcroppings present on-site that would be damaged. Likewise, no historic buildings or structures are located on the project site.

The project would not result in damage of scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, and would not result in visual impacts associated with a State scenic highway. No significant impacts would occur.

***Significance of Impacts***

The proposed project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a scenic highway. The project is not located proximate to a scenic highway. No significant stands of trees, rock outcroppings, or historic buildings are located on-site. No impacts would result from the proposed project.

***Mitigation Measures***

The project would not result in impacts to scenic resources. No mitigation measures are required.

**Issue 3**

*Would the project result in:*

- *Substantial change in the existing landform?*
- *The creation of a negative aesthetic site or project?*
- *Project bulk, scale, materials, or style which would be incompatible with surrounding development?*
- *Substantial alteration to the existing or planned character of the area, such as could occur with the construction of a subdivision in a previously undeveloped area? Note: For substantial alteration to occur, new development would have to be of a size, scale, or design that would markedly contrast with the character of the surrounding area.*



**Impact Analysis**

As stated above, the project site is a series of completely graded pads in the developed, suburbanized community of Miramar Ranch North. The project is situated adjacent to existing commercial development to the north, residential development to the east, open space to the south, and I-15 to the west. The existing visual character of the site is that of a partially built development, as the site was fully graded under previously approved entitlements; but the previously approved project has only been partially constructed.

The Miramar Ranch North Community Plan Design Element provides specific recommendations for the development of property within the Mercy Interchange Gateway, which encompasses the project site. This section of the Community Plan calls for *“the sensitive development of the Mercy interchange area as an attractive gateway into the community.”* Sensitive development refers to attention given to continuity within projects in this gateway region, including the Watermark site, the adjacent commercial development, and multi-family developments located to the northwest of the interchange area.

Additionally, the Industrial Element of the Community Plan addresses industrial development and contains guidelines for *“high standards of design, materials, and workmanship in business park development.”* Similarly, the Commercial Element calls for *“high standards in the design, construction, and maintenance of commercial development in the community.”* Both of these elements address the sensitive siting of projects to respect the pedestrian realm and existing community character. Additionally, these elements stress the importance of high quality design and construction of projects, as well as continued maintenance.

The Watermark project proposes a mixed-use development with commercial retail uses, restaurants, a movie theater, hotel, office buildings, parking structures, surface parking, and hardscape and landscape areas (Area A). The proposed project includes existing phased development of the MedImpact corporate headquarters (Area B). One office building and supporting parking structure have been constructed on previously approved Lot 1; an additional office building, parking structure, and ancillary structure (which would serve as an employee cafeteria and fitness center) would be constructed on previously approved Lot 2. The office buildings (Class A) range in height from five to six stories, and the parking structure is four levels.

The proposed project requests height deviations from the City of San Diego Land Development Code, as described in Section 3.3.4, *Planned Development Permit*. The project requires height deviations for development within the CR-2-1 zone. The purpose of these deviations is to allow for Class A office space approved under the existing Planned Industrial Permit, to allow for design and architectural elements, and to accommodate the parking garage.

~~A deviation request from the 60-foot maximum structure height of the CR-2-1 would allow the Watermark to proceed with development of additional Class A office space as envisioned in the existing planned industrial development permit (CUP/PID No. 1027). This deviation is necessary to maintain the existing vested development rights under that approval. Should the feasibility of developing commercial retail uses be unachievable under future market conditions, the Watermark would be completed as a corporate office park as envisioned under the existing entitlement. The~~

structure height deviation for office buildings would apply to proposed Lots 3, 4 and 5. Additionally, structure height deviations are requested to allow for development of the parking garage with shade/canopy structures on the top floor and an architectural feature. The structure height is not to exceed ~~74~~100 feet in height with the shade/canopy structures and architectural feature.

A deviation for structure height on the plaza (proposed Lot 9) would enable the development of a landmark architectural feature, such as a clock tower, bell tower, or other architectural features to designate the gateway to the community. This would assist in achieving an objective of the Community Plan to develop the Mercy Interchange area as an attractive gateway to the community. Such a feature will provide a visible landmark to I-15 travelers, as well as persons entering Miramar Ranch North. The project proposes a deviation in height for landmark architectural features from 60 feet allowed in the CR-2-1 zone to 103 feet.

A deviation for height would also allow for the construction of a parking garage to accommodate parking needs for the project. This would reduce land required for surface parking, providing for more public amenity open space. The project proposes a deviation for the parking structure from 60 feet to a maximum of 103 feet. Height deviations are summarized in Table 3-2, *Watermark – Maximum Structure Height*.

To implement the goal of creating a coherent and signature design statement at this gateway to the Miramar Ranch North community, the office buildings draw from the same palette of colors and materials, including the use of natural stone, to achieve compatibility in the implementation of the office campus. The modern design is achieved through an extensive use of glass with metal and accents. Building articulation employs the subtle use of offsets and curves to provide relief from standard rectangular building design. The buildings are oriented to provide an offset view from the freeway and the primary drive, as well as shield the view of the parking structures that serve each building. (For purposes of showing the entire gateway on both sides of the road, existing development at these two intersections is shown in Figure 5.3-2a and 5.3-3a, respectively. See Figures 5.3-2b, *Photo Simulation – Scripps Poway Parkway and I-15*, and 5.3-3b, *Photo Simulation – Scripps Poway Parkway and Scripps Highlands Drive* for photos simulations of how the project would look at these two intersections.)



Figure 5.3-2a. *Existing Development –  
Scripps Poway Parkway and I-15*



Figure 5.3-2b. *Photo Simulation –  
Scripps Poway Parkway and I-15*



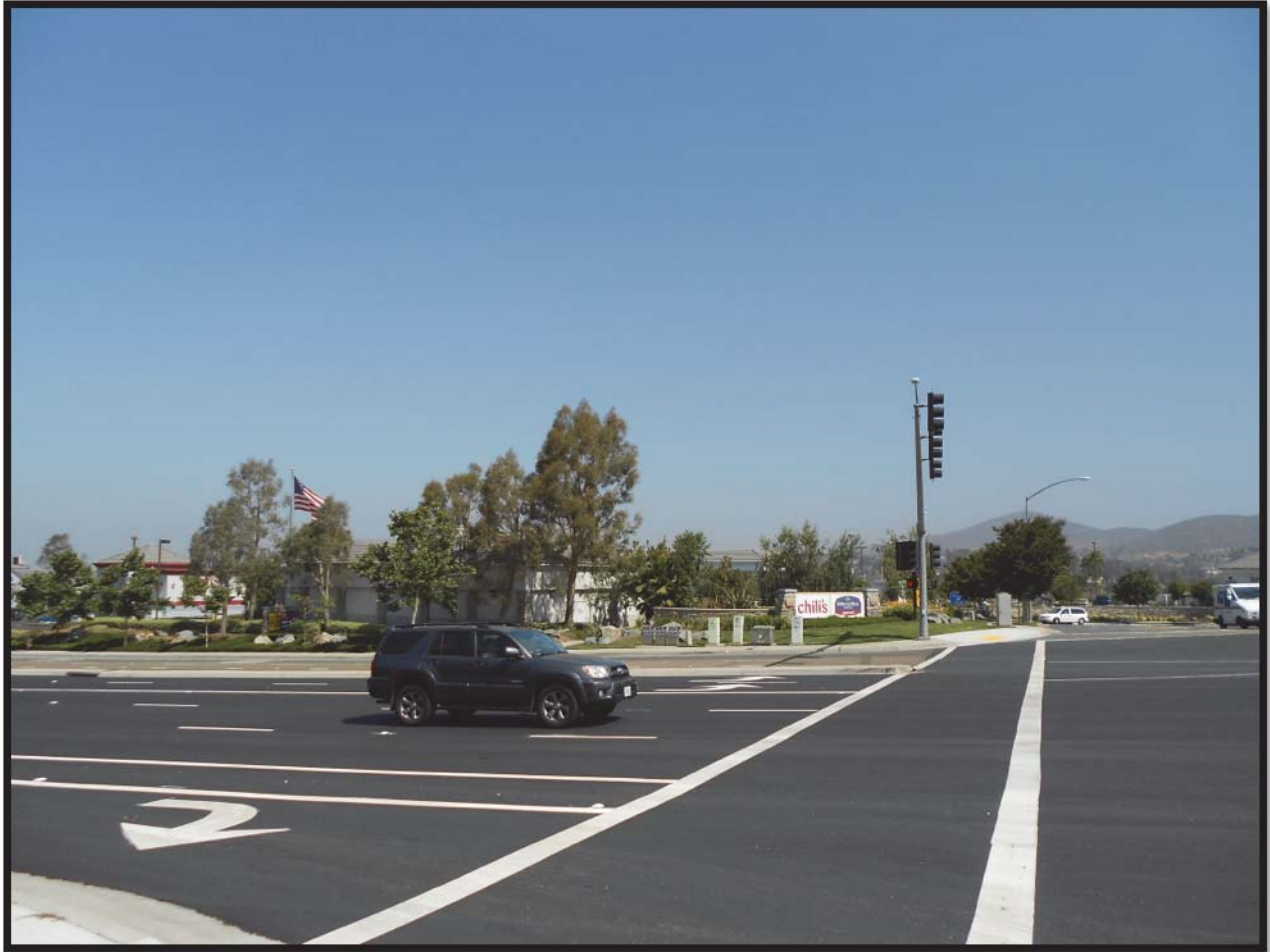


Figure 5.3-3a. *Existing Development –  
Scripps Poway Parkway and Scripps Highlands Drive*



Figure 5.3-3b. *Photo Simulation –  
Scripps Poway Parkway and Scripps Highlands Drive*

The Watermark project entitlements include the adoption of a PDP. Within the PDP are Architectural Design Guidelines, which seek to maintain architectural consistency established with the existing MedImpact campus by maintaining complementary architectural vocabulary for the mixed-use project. The intent of these guidelines is to unify the multiple buildings on the site, maintain the level of design quality of the project to maximize aesthetic qualities, and enhance the area in which the project is located.

According to the proposed Design Guidelines prepared for the project, a *Kit of Parts* has been developed to be used in whole or in combination to achieve the intended ambiance and character of the project. In any multiple building project, there are elements that are common among the buildings that create a unified architectural character within the project. Included in these elements are various types of building massing and articulation, forms and materials of entries, windows, awnings, and other architectural treatments. The Design Guidelines require the use of similar, but not identical, elements on multiple buildings to create a unified character within the project, while avoiding monotony. Each new building should incorporate a sufficient number of architectural elements so as to reflect the Watermark design character. Buildings should employ staggered setbacks, varied building heights, widths, shapes, orientations, colors, and materials.

Horizontal roof lines should be further detailed with cornices and molding that embellishes the top of the building. All roof mounted equipment, apparatus, and vents shall be architecturally screened from view and painted for compatibility with the roof color. Metal and fabric canopies and wood trellises provide additional building articulation as well as shade and opportunities for enhanced landscaping. Stucco siding shall be enhanced by the use of a variety of accent materials, including metal, wood, brick, and stone veneer. Precast concrete elements for base and vertical building elements represent durable and long-lasting construction materials while providing relief from the building wall.

Existing commercial development is located to the north of the project site (see Figure 2-4, *Surrounding Land Uses*). This development is separated from the proposed project by Scripps Poway Parkway, a roughly 100-foot distance from property line to property line. The commercial center to the north of the project includes two four-story hotels and restaurant uses mixed with other miscellaneous single-story commercial retailers. Surface parking is located mostly internal to the commercial site and is sparsely landscaped. The color palette is mostly light natural tones and white paint and stucco with rock accents. Thus, due to the urbanized and developed nature of the project surroundings, the project site is not considered to be a sensitive or scenic aesthetic resource.

Finish grading would be required for the proposed project. The grading would occur within areas of the site that have already been graded under existing approvals. Open space slopes that rim the perimeter of the site would not be altered. These natural areas would continue to form a backdrop for the project such that the project would appear to sit among the natural landscape.

The proposed project offers greater architectural detail and color palette than what exists in the commercial development. Common design elements include the use of stone and articulated rooflines. While the proposed project differs to some extent from the character of the existing development, this difference in design elements does not result in a significant incompatibility. The

project would not degrade the visual character of the project site or its surrounding.

### ***Significance of Impacts***

The project's impacts on the visual character and quality of the surrounding environment is less than significant, and the proposed project would not result in a substantial degradation the existing visual character or quality of the site or its surroundings. Project deviations to maximum structure height are not great enough to cause a significant environmental impact and, relative to community aesthetic, these deviations would provide a greater level of architectural detail to create the community gateway recommended in the community plan.

### ***Mitigation Measures***

The project does not result in significant impacts. No mitigation is required.

### ***Issue 4***

*Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?*

### ***Impact Analysis***

The project site is partially developed. Current development includes a Class A office building and parking structure in the eastern portion of the site. Otherwise, the remainder of the project site is undeveloped as graded pads. Current sources of light on-site include the office building, parking structure, and street lighting.

Lighting within the project provides a unifying theme to the entire project site. Light fixtures for major tenants, shops, and individual buildings shall be of matching and/or complementary design. Landscaping and architectural features shall be illuminated and accented with lighting. Parking structure and lot lighting shall match the site lighting theme. Additional lighting would be provided in pedestrian and parking areas to provide necessary security. Building-mounted flood lighting shall not be used to illuminate parking areas.

Project lighting has the potential to affect nighttime views, while construction may result in glare. Lighting impacts will be regulated by compliance with Section 142.0740 of the City of San Diego Land Development Code.

The project does not propose high-rise buildings which could have the potential to create reflection and glare for drivers on I-15. Additionally, the project would be set back a distance with I-15. Structures closest to the freeway would include the proposed parking structure and the theater; neither structure would include large areas of reflective glass. A hotel is proposed for the southwest portion of the project site. However, that structure would be placed as an angle to the freeway such that the shortest side would face to the west. Landscaping proposed as part of the project would further reduce and screen large expansive areas of glass, reducing the effects of reflecting sunlight onto the I-15 freeway. Glare impacts will be regulated by compliance with Section 142.0730 of the City of San Diego Land Development Code.



As part of addressing light and glare impacts from a proposed project, the City of San Diego requires the evaluation of a project's potential to result in significant numbers of bird collisions based on the project's size and height of structure. The documentation regarding bird collisions with human-made structures dates back at least a century. Bird strikes occur when bird species physically collide with a structure (tower, wind turbine, etc.) or windows. Bird strikes result when birds cannot determine that the images observed in glass surfaces are a reflection. The window reflection is misinterpreted as the sky or surrounding landscape. Birds do not recognize glass as a reflective barrier.

The best predictor of bird strike rate is density of birds in the vicinity of glass surfaces, vegetation, water and bird feeders. There is a direct relationship between density of birds in an area, bird strikes and bird fatalities. Bird strikes at buildings are more common during the day and at the ground and lower levels of buildings where glass surfaces reflect outside vegetation. Bird collisions may also occur at buildings where windows expose indoor vegetation (i.e., atriums). Bird collisions decrease with glass surfaces located above vegetation or remote from vegetation.

A correlation results between the distance between a bird attractant (vegetation, water, feeder, etc.) and a glass surface. Studies have indicated that a distance of 30 feet or more allows a bird to reach a flight speed wherein a collision is more likely fatal. Strike frequency and fatalities at windows increased as the distance between bird feeders and the glass surface increased.

One of the more oft-cited studies of urban bird strike rates was conducted in the city of Manhattan. The study found that the majority of collisions occur during the daytime and with long-distance migrant bird species. There is a higher rate of collision with facades that support abundant exterior vegetation opposite expanses of reflective or transparent glass windows. As documented by much of the research, tall structures are more susceptible to bird strikes, but bird strikes are known to occur at both tall and short buildings.

Higher bird strike mortality rates may result during the spring and fall; however this may be more due to human attention during these seasons. Winter bird strikes are also frequent and are most likely tied to limited available food sources during this season. Results of studies may vary if they are conducted along well-defined avian migration routes or if the study areas are surrounded by dense vegetation (such as forests) or permanent water sources (i.e., lakes, creeks, oceans). Higher bird strike mortality may result on routes that are more heavily used by migrants, however both migrant and local avian species are often affected.

Many bird strike studies have concluded that bird mortality due to strikes is far higher than what was previously estimated. Hager et al., 2008, concluded that annual bird mortality at commercial buildings may be about five times higher than previous estimates.

It is important to note that no recognized academic studies have been conducted in southern California and that the majority of research is conducted east of the Rocky Mountains, in known avian flyways, and in major urban centers.

Studies on bird strikes have determined that there are effective preventative measures that can decrease this phenomenon. Decreasing the reflectiveness of window materials, reducing the proportion of glass to other building materials and changing the angle of reflection have been shown to reduce bird strikes. Reducing ground cover, providing changes in the height of vegetation and limiting shrubs and trees in front of buildings may reduce collisions. More recently, the use of UV reflecting and UV absorbing window coverings, one-way window film, ceramic frit glass with dots or other patterns or decals approximately 5-10 cm apart have been shown to reduce bird strikes.

The bird strike/collision risk posed by the Watermark project is anticipated to be low due to the following factors:

- The project proposes the use of non-mirrored glass and building heights less than 80 feet;
- Architectural design elements include framed windows, trellising, louvered and fabric canopies on windows, stacked stone, brick veneer and painted / patterned plaster, thereby resulting in the use of solid materials intermixed with windows so that there are no large, uninterrupted glass surfaces;
- The proposed project consists of multiple buildings, staggered building offsets and heights, grade differentiations, and varied roof and façade elements, thereby breaking up the mass of the project and reducing surface area for bird strikes;
- Proposed project landscaping consists of scattered trees and vertical vegetation (such as cypress) which does not provide extensive refuge or an attractant to birds; and
- The proposed project is in close proximity to other commercial and residential development and Highway I-15.
- Architectural features, such as clock towers, could reach 103 feet. However, such architectural features would be limited and would be scattered throughout the approximately 35-acre project site, and would not significantly interfere with bird flight.

Based on the above factors, impacts to birds as a result of bird strikes at the proposed project site would be less than significant. No mitigation measures are required.

### ***Significance of Impacts***

The proposed project would not result in significant lighting and glare impacts.

### ***Mitigation Measures***

The project would not result in significant impacts related to lighting and glare. No mitigation measures are recommended.

## 5.4 AIR QUALITY

This section of the EIR is based on the *Air Quality Technical Report* prepared for the proposed project by Scientific Resources Associated, dated December 30, 2011. A copy of the *Air Quality Technical Report* is included as Appendix D to this EIR. The Air Quality Technical Report analyzes the construction impacts of Area A and the operational impacts of Area A and Area B (with Area B being analyzed as an existing condition). As a result, this report evaluates the entire project site, *Areas A and B*.

### 5.4.1 Existing Conditions

The Watermark project site is characterized by mostly undeveloped, graded pads. Under existing entitlements, development has begun in Area B for the MedImpact corporate headquarters; one Class A office building and supporting parking structure have been constructed on previously approved Lot 1, and previously approved Lot 2 is planned for development with an additional office building and accessory facilities. The primary source of air quality degradation on-site comes from vehicle trips to the MedImpact building, as well as occasional heavy trucks for deliveries.

#### Climate and Meteorology

The project site is located in the San Diego Air Basin (SDAB). The climate of the SDAB is dominated by a semi-permanent high-pressure cell located over the Pacific Ocean. This cell influences the direction of prevailing winds (westerly to northwesterly) and maintains clear skies for much of the year. Figure 5.4-1, *Wind Rose – MCAS Miramar*, provides a graphic representation of the prevailing winds in the project vicinity, as measured at MCAS Miramar, which is the closest meteorological monitoring station to the site, and provides general wind trends in San Diego County.

The high-pressure cell creates two types of temperature inversions that may act to degrade local air quality. Subsidence inversions occur during the warmer months as descending air associated with the Pacific high pressure cell comes into contact with cool marine air. The boundary between the two layers of air creates a temperature inversion that traps pollutants. The other type of inversion, a radiation inversion, develops on winter nights when air near the ground cools by heat radiation and air aloft remains warm. The shallow inversion layer formed between these two air masses also can trap pollutants. As the pollutants become more concentrated in the atmosphere, photochemical reactions occur that produce ozone, commonly known as smog.

#### Background Air Quality

The Air Pollution Control District (APCD) operates a network of ambient air monitoring stations throughout San Diego County. The purpose of the monitoring stations is to measure ambient concentrations of the pollutants and determine whether the ambient air quality meets the California Ambient Air Quality Standards (CAAQS) and the National Ambient Air Quality Standards (NAAQS). The nearest ambient monitoring station to the project site is the Kearny Mesa monitoring station, which measures ozone, nitrogen dioxide, respirable particulate matter (less than or equal to ten microns in diameter), and fine particulate matter (less than or equal to 2.5 microns in diameter). The nearest monitoring station that measures carbon monoxide and sulfur dioxide in San Diego County is located in downtown San Diego. Ambient concentrations of pollutants over the last five years are presented in Table 5.4-1, *Ambient Background Concentrations*.

The Kearny Mesa monitoring station measure exceedances of the State 1-hour ozone standard and the State and Federal 8-hour ozone standards in the period from 2006 through 2010. An exceedance of the California 24-hour PM<sub>10</sub> standard was measured in 2007 during the southern California fire event. The data from the monitoring station indicates that air quality is in attainment of all other air quality standards.

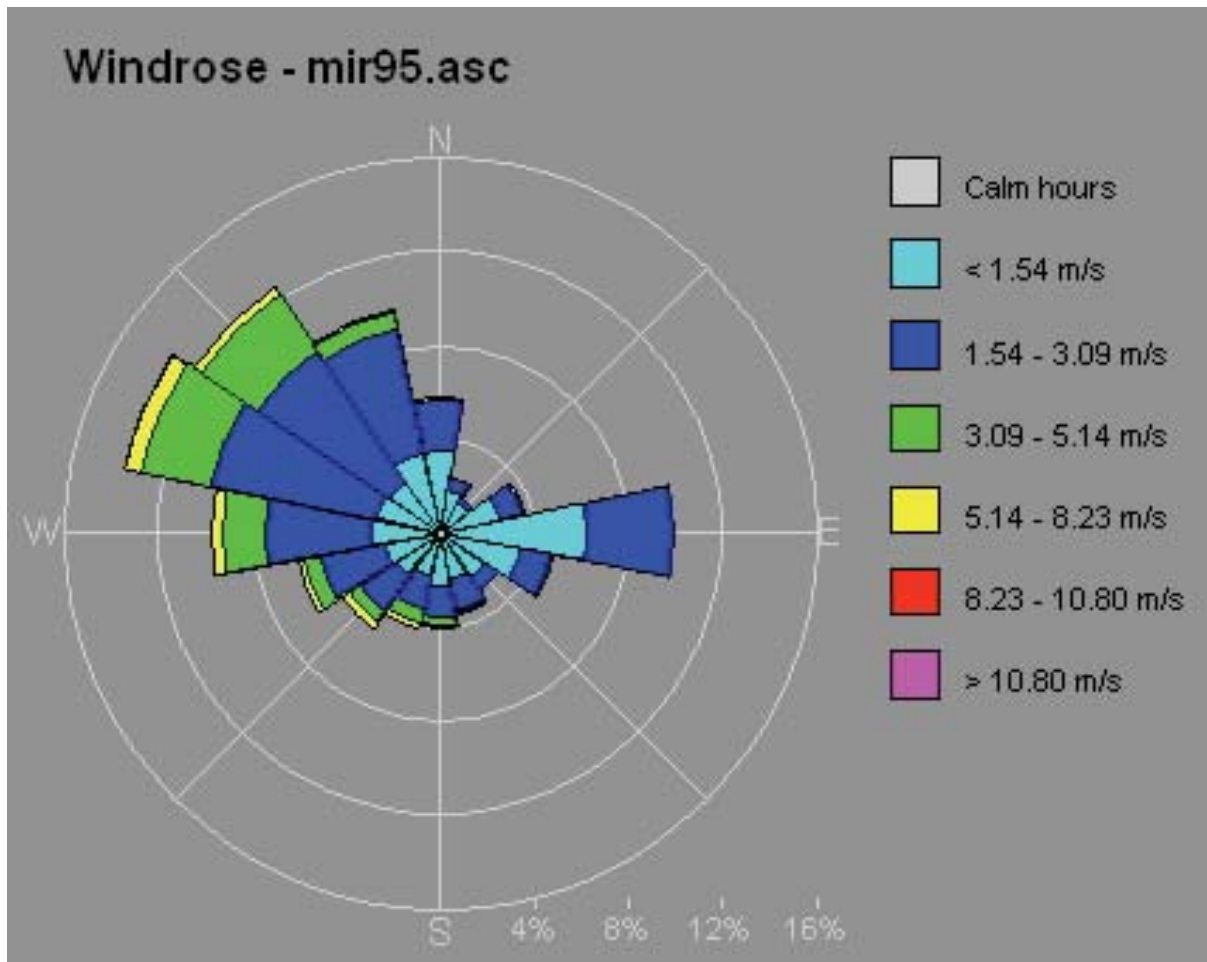


Figure 5.4-1. *Wind Rose – MCAS Miramar*



Table 5.4-1. Ambient Background Concentrations

Air Quality Indicator	2006	2007	2008	2009	2010
<b>Ozone (O<sub>3</sub>)</b>					
Peak 1-hour value (ppm)	0.108	0.088	0.100	0.105	0.100
Days above state standard (0.09 ppm)	1	0	4	2	2
Peak 8-hour value (ppm)	0.091	0.076	0.093	0.082	0.073
Fourth high 8-hour value (ppm)	0.070	0.073	0.082	0.070	0.070
Days above federal standard (0.075 ppm) <sup>(1,2)</sup>	1	2	5	1	0
Days above state standard (0.070 ppm)	2	5	12	3	3
<b>Particulate matter less than or equal to 2.5 microns in diameter (PM<sub>2.5</sub>)</b>					
Peak 24-hour value (µg/m <sup>3</sup> )	26.3	30.6	27.2	25.1	18.7
Days above federal standard (35 µg/m <sup>3</sup> ) <sup>(3)</sup>	0	0	0	0	0
Annual Average value (µg/m <sup>3</sup> )	11.0	NA	NA	10.5	8.7
<b>Particulate matter less than or equal to 10 microns in diameter (PM<sub>10</sub>)</b>					
Peak 24-hour value (federal) (µg/m <sup>3</sup> ) <sup>(4)</sup>	42	65	41	50	33
Peak 24-hour value (state) (µg/m <sup>3</sup> ) <sup>(4)</sup>	42	65	41	50	32
Days above federal standard (150 µg/m <sup>3</sup> )	0	0	0	0	0
Days above state standard (50 µg/m <sup>3</sup> )	0	1	0	0	0
Annual Average value (federal) (µg/m <sup>3</sup> ) <sup>(4)</sup>	22.5	23.2	23.5	24.7	18.6
Annual Average value (state) (µg/m <sup>3</sup> ) <sup>(4)</sup>	22.6	23.6	23.8	24.9	18.7
<b>Carbon Monoxide (CO)</b>					
Peak 1-hour value (ppm)	5.3	4.4	3.1	NA	NA
Days above federal and state standard (9 ppm)	0	0	0	NA	NA
Peak 8-hour value (ppm)	3.27	3.01	2.60	2.77	2.17
Days above federal standard (35 ppm)	0	0	0	0	0
Days above state standard (20 ppm)	0	0	0	0	0
<b>Nitrogen Dioxide (NO<sub>2</sub>)</b>					
Peak 1-hour value (ppm)	0.091	0.087	0.077	0.060	0.073
Days above federal standard (0.100 ppm)	0	0	0	0	0
Days above state standard (0.18 ppm)	0	0	0	0	0
Annual Average value (ppm)	0.017	0.015	0.014	0.014	0.013
<b>Sulfur Dioxide (SO<sub>2</sub>)</b>					
Peak 1-hour value (ppm)	0.034	0.018	0.019	NA	NA
Days above federal standard (0.075 ppm) <sup>(5)</sup>	NA	NA	NA	NA	NA
Peak 24-hour value (ppm)	0.009	0.006	0.007	0.006	0.002
Days above state standard (0.04 ppm)	NA	0	0	0	0
Annual Average value (ppm)	0.004	0.002	0.003	0.001	0.000

**Notes:**

<sup>(1)</sup> The Federal 8-hour O<sub>3</sub> standard was revised downward in 2008 to 0.075 ppm.

<sup>(2)</sup> The Federal 8-hour O<sub>3</sub> standard was previously defined as 0.08 ppm (1 significant digit). Measurements were rounded up or down to determine compliance with the standard; therefore a measurement of 0.084 ppm is rounded to 0.08 ppm. The 8-hour O<sub>3</sub> ambient air quality standards are met at an ambient air quality monitoring site when the average of the annual fourth-highest daily maximum 8-hour average O<sub>3</sub> concentration is less than or equal to the standard.

<sup>(3)</sup> The Federal PM<sub>2.5</sub> standard was revised downward in 2007 to 35 µg/m<sup>3</sup>. For PM<sub>2.5</sub>, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.

<sup>(4)</sup> State and Federal statistics may differ for the following reasons: (1) State statistics are based on California approved samplers, whereas national statistics are based on samplers using Federal reference or equivalent methods. State and Federal statistics may therefore be based on different samplers. (2) State criteria for ensuring that data are sufficiently complete for calculating valid annual averages are more stringent than the national criteria.

<sup>(5)</sup> The Federal 1-hour SO<sub>2</sub> standard was adopted in 2010.

ppm = parts per million; µg/m<sup>3</sup> = micrograms per cubic meter; NA = data not available

Source: ARB 2011, <http://www.arb.ca.gov/adam/topfour/topfourdisplay.php>; USEPA 2011,

<http://iaspub.epa.gov/airsdata/adaqs.monvals?geotype=co&geocode=06073&geoinfo=co%7E06073%7ESan+Diego+Co%2C+Califor&pol=CO+SO2&year=2008+2007+2006&fld=monid&fld=siteid&fld=address&fld=city&fld=county&fld=stabbr&fld=regnrpp=25>

### *Regulatory Setting*

#### *Federal*

Air quality is defined by ambient air concentrations of specific pollutants identified by the United States Environmental Protection Agency (EPA) to be of concern with respect to health and welfare of the general public. The EPA is responsible for enforcing the Federal Clean Air Act (CAA) of 1970 and its 1977 and 1990 Amendments. The CAA required the EPA to establish NAAQS, which identify concentrations of pollutants in the ambient air below which no adverse effects on the public health and welfare are anticipated. In response, the EPA established both primary and secondary standards for seven pollutants (called “criteria” pollutants). The seven pollutants regulated under the NAAQS are as follows: ozone (O<sub>3</sub>), carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), respirable particulate matter (or particulate matter with an aerodynamic diameter of 10 microns or less, PM<sub>10</sub>), fine particulate matter (or particulate matter with an aerodynamic diameter of 2.5 microns or less, PM<sub>2.5</sub>), sulfur dioxide (SO<sub>2</sub>), and lead (Pb). Primary standards are designed to protect human health with an adequate margin of safety. Secondary standards are designed to protect property and the public welfare from air pollutants in the atmosphere. Areas that do not meet the NAAQS for a particular pollutant are considered to be “nonattainment areas” for that pollutant.

In September 1997, the EPA promulgated 8-hour O<sub>3</sub> and 24-hour and annual PM<sub>2.5</sub> national standards. As a result, this action has initiated a new planning process to monitor and evaluate emission control measures for these pollutants. On April 15, 2004, the SDAB was designated a basic nonattainment area for the 8-hour NAAQS for O<sub>3</sub>. In 2009, the EPA was challenged on its justification for “basic” designations. The EPA subsequently released proposed redesignation classifications for all areas that were classified as “basic” nonattainment. The SDAB would be redesignated as a moderate O<sub>3</sub> nonattainment area under the revised classifications. The SDAB is in attainment for the NAAQS for all other criteria pollutants.

The following specific descriptions of health effects for each of the criteria air pollutants associated with project construction and operations are based on EPA and the California Air Resources Board (ARB).

**Ozone.** O<sub>3</sub> is considered a photochemical oxidant, which is a chemical that is formed when reactive organic gases (ROG) and oxides of nitrogen (NO<sub>x</sub>), both by-products of combustion, react in the presence of ultraviolet light. O<sub>3</sub> is considered a respiratory irritant and prolonged exposure can reduce lung function, aggravate asthma, and increase susceptibility to respiratory infections. Children and those with existing respiratory diseases are at greatest risk from exposure to O<sub>3</sub>.

**Carbon Monoxide.** CO is a product of combustion, and the main source of CO in the SDAB is from motor vehicle exhaust. CO is an odorless, colorless gas. CO affects red blood cells in the body by binding to hemoglobin and reducing the amount of oxygen that can be carried to the body’s organs and tissues. CO can cause health effects to those with cardiovascular disease, and can also affect mental alertness and vision.

**Nitrogen Dioxide.** NO<sub>2</sub> is also a by-product of fuel combustion, and is formed both directly as a product of combustion and indirectly in the atmosphere through the reaction of nitrogen oxide (NO) with oxygen. NO<sub>2</sub> is a respiratory irritant and may affect those with existing respiratory

illness, including asthma. NO<sub>2</sub> can also increase the risk of respiratory illness.

**Respirable Particulate Matter and Fine Particulate Matter.** Respirable particulate matter, or PM<sub>10</sub>, refers to particulate matter with an aerodynamic diameter of 10 microns or less. Fine particulate matter, or PM<sub>2.5</sub>, refers to particulate matter with an aerodynamic diameter of 2.5 microns or less. Particulate matter in this size range has been determined to have the potential to lodge in the lungs and contribute to respiratory problems. PM<sub>10</sub> and PM<sub>2.5</sub> arise from a variety of sources, including road dust, diesel exhaust, combustion, tire and brake wear, construction operations, and windblown dust. PM<sub>10</sub> and PM<sub>2.5</sub> can increase susceptibility to respiratory infections and can aggravate existing respiratory diseases such as asthma and chronic bronchitis. PM<sub>2.5</sub> is considered to have the potential to lodge deeper in the lungs.

**Sulfur dioxide.** SO<sub>2</sub> is a colorless, reactive gas that is produced from the burning of sulfur-containing fuels such as coal and oil, and by other industrial processes. Generally, the highest concentrations of SO<sub>2</sub> are found near large industrial sources. SO<sub>2</sub> is a respiratory irritant that can cause narrowing of the airways leading to wheezing and shortness of breath. Long-term exposure to SO<sub>2</sub> can cause respiratory illness and aggravate existing cardiovascular disease.

**Lead.** Pb in the atmosphere occurs as particulate matter. Pb has historically been emitted from vehicles combusting leaded gasoline, as well as from industrial sources. With the phase-out of leaded gasoline, large manufacturing facilities are the sources of the largest amounts of lead emissions. Pb has the potential to cause gastrointestinal, central nervous system, kidney, and blood diseases upon prolonged exposure. Pb is also classified as a probable human carcinogen.

### *State*

**California Clean Air Act.** The California Clean Air Act was signed into law on September 30, 1988, and became effective on January 1, 1989. The Act requires that local air districts implement regulations to reduce emissions from mobile sources through the adoption and enforcement of transportation control measures. The California Clean Air Act required the SDAB to achieve a five percent annual reduction in ozone precursor emissions from 1987 until the standards are attained. If this reduction cannot be achieved, all feasible control measures must be implemented. Furthermore, the California Clean Air Act required local air districts to implement a Best Available Control Technology rule and to require emission offsets for nonattainment pollutants.

The ARB is the State regulatory agency with authority to enforce regulations to both achieve and maintain air quality in California. The ARB is responsible for the development, adoption, and enforcement of the State's motor vehicle emissions program, as well as the adoption of the CAAQS. The ARB also reviews operations and programs of the local air districts, and requires each air district with jurisdiction over a nonattainment area to develop its own strategy for achieving the NAAQS and CAAQS. The CAA allows states to adopt ambient air quality standards and other regulations provided they are at least as stringent as Federal standards. The ARB has established the more stringent CAAQS for the six criteria pollutants through the California Clean Air Act of 1988, and also has established CAAQS for additional pollutants, including sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. The SDAB is currently classified as a nonattainment area under the CAAQS for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. It should be noted that the ARB does not differentiate

between attainment of the 1-hour and 8-hour CAAQS for O<sub>3</sub>; therefore, if an air basin records exceedances of either standard the area is considered a nonattainment area for the CAAQS for O<sub>3</sub>. The SDAB has recorded exceedances of both the 1-hour and 8-hour CAAQS for O<sub>3</sub>. The following specific descriptions of health effects for the additional California criteria air pollutants are based on the ARB.

**Sulfates.** Sulfates are the fully oxidized ionic form of sulfur. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized to sulfur dioxide (SO<sub>2</sub>) during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of SO<sub>2</sub> to sulfates takes place comparatively rapidly and completely in urban areas of California due to regional meteorological features. The ARB's sulfates standard is designed to prevent aggravation of respiratory symptoms. Effects of sulfate exposure at levels above the standard include a decrease in ventilatory function, aggravation of asthmatic symptoms, and an increased risk of cardio-pulmonary disease. Sulfates are particularly effective in degrading visibility, and due to fact that they are usually acidic, can harm ecosystems and damage materials and property.

**Hydrogen Sulfide.** H<sub>2</sub>S is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas, and can be emitted as the result of geothermal energy exploitation. Breathing H<sub>2</sub>S at levels above the standard would result in exposure to a very disagreeable odor. In 1984, an ARB committee concluded that the ambient standard for H<sub>2</sub>S is adequate to protect public health and to significantly reduce odor annoyance.

**Vinyl Chloride.** Vinyl chloride, a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents. Short-term exposure to high levels of vinyl chloride in air causes central nervous system effects, such as dizziness, drowsiness, and headaches. Long-term exposure to vinyl chloride through inhalation and oral exposure causes liver damage. Cancer is a major concern from exposure to vinyl chloride via inhalation. Vinyl chloride exposure has been shown to increase the risk of angiosarcoma, a rare form of liver cancer, in humans.

**Visibility Reducing Particles.** Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that are comprised of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size, and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt. The CAAQS is intended to limit the frequency and severity of visibility impairment due to regional haze. A separate standard for visibility-reducing particles that is applicable only in the Lake Tahoe Air Basin is based on reduction in scenic quality.

Table 5.4-2, *Ambient Air Quality Standards*, presents a summary of the ambient air quality standards adopted by the Federal and California Clean Air Acts.



Table 5.4-2. Ambient Air Quality Standards

POLLUTANT	AVERAGE TIME	CALIFORNIA STANDARDS		NATIONAL STANDARDS		
		Concentration	Method	Primary	Secondary	Method
Ozone (O <sub>3</sub> )	1 hour	0.09 ppm (176 µg/m <sup>3</sup> )	Ultraviolet Photometry	--	--	Ethylene Chemiluminescence
	8 hour	0.070 ppm (137 µg/m <sup>3</sup> )		0.075 ppm (147 µg/m <sup>3</sup> )	0.075 ppm (147 µg/m <sup>3</sup> )	
Carbon Monoxide (CO)	8 hours	9.0 ppm (10 mg/m <sup>3</sup> )	Non-Dispersive Infrared Spectroscopy (NDIR)	9 ppm (10 mg/m <sup>3</sup> )	--	Non-Dispersive Infrared Spectroscopy (NDIR)
	1 hour	20 ppm (23 mg/m <sup>3</sup> )		35 ppm (40 mg/m <sup>3</sup> )		
Nitrogen Dioxide (NO <sub>2</sub> )	Annual Average	0.030 ppm (56 µg/m <sup>3</sup> )	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m <sup>3</sup> )	--	Gas Phase Chemiluminescence
	1 hour	0.18 ppm (338 µg/m <sup>3</sup> )		0.100 ppm (188 µg/m <sup>3</sup> )	--	
Sulfur Dioxide (SO <sub>2</sub> )	24 hours	0.04 ppm (105 µg/m <sup>3</sup> )	Ultraviolet Fluorescence	--	--	Pararosaniline
	3 hours	--		--	0.5 ppm (1300 µg/m <sup>3</sup> )	
	1 hour	0.25 ppm (655 µg/m <sup>3</sup> )		0.075 ppm (196 µg/m <sup>3</sup> )	--	
Respirable Particulate Matter (PM <sub>10</sub> )	24 hours	50 µg/m <sup>3</sup>	Gravimetric or Beta Attenuation	150 µg/m <sup>3</sup>	150 µg/m <sup>3</sup>	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m <sup>3</sup>		--	--	
Fine Particulate Matter (PM <sub>2.5</sub> )	Annual Arithmetic Mean	12 µg/m <sup>3</sup>	Gravimetric or Beta Attenuation	15 µg/m <sup>3</sup>	--	Inertial Separation and Gravimetric Analysis
	24 hours	--		35 µg/m <sup>3</sup>	--	
Sulfates	24 hours	25 µg/m <sup>3</sup>	Ion Chromatography	--	--	--
Lead	30-day Average	1.5 µg/m <sup>3</sup>	Atomic Absorption	--	--	Atomic Absorption
	Calendar Quarter	--		1.5 µg/m <sup>3</sup>	1.5 µg/m <sup>3</sup>	
	3-Month Rolling Average	--		0.15 µg/m <sup>3</sup>	0.15 µg/m <sup>3</sup>	
Hydrogen Sulfide	1 hour	0.03 ppm (42 µg/m <sup>3</sup> )	Ultraviolet Fluorescence	--	--	--
Vinyl Chloride	24 hours	0.010 ppm (26 µg/m <sup>3</sup> )	Gas Chromatography	--	--	--

ppm= parts per million; µg/m<sup>3</sup> = micrograms per cubic meter ; mg/m<sup>3</sup>= milligrams per cubic meter

Source: California Air Resources Board, [www.arb.ca.gov](http://www.arb.ca.gov), 2011, <http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>

**Toxic Air Contaminants.** In 1983, the California Legislature enacted a program to identify the health effects of Toxic Air Contaminants (TACs) and to reduce exposure to these contaminants to protect the public health (Assembly Bill 1807: Health and Safety Code sections 39650-39674). The Legislature established a two-step process to address the potential health effects from TACs. The first step is the risk assessment (or identification) phase. The second step is the risk management (or control) phase of the process.

The State of California has identified diesel particulate matter as a TAC. Diesel particulate matter is emitted from on- and off-road vehicles that utilize diesel as fuel. Following identification of diesel particulate matter as a TAC in 1998, the ARB has worked on developing strategies and regulations

aimed at reducing the emissions and associated risk from diesel particulate matter. The overall strategy for achieving these reductions is found in the *Risk Reduction Plan to Reduce Particulate Matter from Diesel-Fueled Engines and Vehicles* (State of California 2000). A stated goal of the plan is to reduce the cancer risk statewide arising from exposure to diesel particulate matter by 75 percent by 2010 and by 85 percent by 2020. The *Risk Reduction Plan* contains the following three components:

- New regulatory standards for all new on-road, off-road, and stationary diesel-fueled engines and vehicles to reduce diesel particulate matter emissions by about 90 percent overall from current levels;
- New retrofit requirements for existing on-road, off-road, and stationary diesel-fueled engines and vehicles where determined to be technically feasible and cost-effective; and
- New Phase 2 diesel fuel regulations to reduce the sulfur content levels of diesel fuel to no more than 15 ppm to provide the quality of diesel fuel needed by the advanced diesel particulate matter emission controls.

A number of programs and strategies to reduce diesel particulate matter are in place or are in the process of being developed as part of the ARB's Diesel Risk Reduction Program. Some of these programs and strategies include those that would apply to construction and operation of the Watermark Project, including the following:

- In 2001, the ARB adopted new particulate matter and NO<sub>x</sub> emission standards to clean up large diesel engines that power big-rig trucks, trash trucks, delivery vans, and other large vehicles. The new standard for particulate matter takes effect in 2007 and reduces emissions to 0.01 gram of particulate matter per brake horsepower-hour (g/bhp-hr.) This is a 90 percent reduction from the existing particulate matter standard. New engines will meet the 0.01 g/bhp-hr particulate matter standard with the aid of diesel particulate filters that trap the particulate matter before exhaust leaves the vehicle.
- ARB has worked closely with the United States EPA on developing new particulate matter and NO<sub>x</sub> standards for engines used in off-road equipment such as backhoes, graders, and farm equipment. U.S. EPA has proposed new standards that would reduce the emission from off-road engines to similar levels to the on-road engines discussed above by 2010 to 2012. These new engine standards were adopted as part of the Clean Air Nonroad Diesel Final Rule in 2004. Once approved by U.S. EPA, ARB will adopt these as the applicable State standards for new off-road engines. These standards will reduce diesel particulate matter emission by over 90 percent from new off-road engines currently sold in California.
- The ARB has adopted several regulations that will reduce diesel emissions from in-use vehicles and engines throughout California. In some cases, the particulate matter reduction strategies also reduce smog-forming emissions such as NO<sub>x</sub>.

As an ongoing process, the ARB reviews air contaminants and identifies those that are classified as TACs. The ARB also continues to establish new programs and regulations for the control of TACs, including diesel particulate matter, as appropriate.

The local APCD has the primary responsibility for the development and implementation of rules and regulations designed to attain the NAAQS and CAAQS, as well as the permitting of new or modified sources, development of air quality management plans, and adoption and enforcement of

air pollution regulations. The San Diego APCD is the local agency responsible for the administration and enforcement of air quality regulations in San Diego County.

The APCD and SANDAG are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the SDAB. The San Diego County Regional Air Quality Strategy (RAQS) was initially adopted in 1991, and is updated on a triennial basis. The RAQS was updated in 1995, 1998, 2001, 2004, and most recently in 2009. The RAQS outlines APCD's plans and control measures designed to attain the state air quality standards for O<sub>3</sub>. The RAQS does not address the State air quality standards for PM<sub>10</sub> or PM<sub>2.5</sub>.

The APCD has also developed the air basin's input to the State Implementation Plan (SIP), which is required under the Federal Clean Air Act for areas that are out of attainment of air quality standards. The SIP includes the APCD's plans and control measures for attaining the O<sub>3</sub> NAAQS. The SIP is also updated on a triennial basis. The latest SIP update was submitted by the ARB to the EPA in 1998, and the APCD is in the process of updating its SIP to reflect the new 8-hour O<sub>3</sub> NAAQS. To that end, the APCD has developed its *Eight-Hour Ozone Attainment Plan for San Diego County* (hereinafter referred to as the Attainment Plan). The Attainment Plan forms the basis for the SIP update, as it contains documentation on emission inventories and trends, the APCD's emission control strategy, and an attainment demonstration that shows that the SDAB will meet the NAAQS for O<sub>3</sub>. Emission inventories, projections, and trends in the Attainment Plan are based on the latest O<sub>3</sub> SIP planning emission projections compiled and maintained by ARB. Supporting data were developed jointly by stakeholder agencies, including ARB, the APCD, the South Coast Air Quality Management District (SCAQMD), the Southern California Association of Governments (SCAG), and SANDAG. Each agency plays a role in collecting and reviewing data as necessary to generate comprehensive emission inventories. The supporting data include socio-economic projections, industrial and travel activity levels, emission factors, and emission speciation profiles. These projections are based on data submitted by stakeholder agencies including projections in municipal General Plans.

The ARB compiles annual statewide emission inventories in its emission-related information database, the California Emission Inventory Development and Reporting System (CEIDARS). Emission projections for past and future years were generated using the California Emission Forecasting System (CEFS), developed by ARB to project emission trends and track progress towards meeting emission reduction goals and mandates. CEFS utilizes the most current growth and emissions control data available and agreed upon by the stakeholder agencies to provide comprehensive projections of anthropogenic (human activity-related) emissions for any year from 1975 through 2030. Local air districts are responsible for compiling emissions data for all point sources and many stationary area-wide sources. For mobile sources, CEFS integrates emission estimates from ARB's EMFAC2007 and OFFROAD models. SCAG and SANDAG incorporate data regarding highway and transit projects into their Travel Demand Models for estimating and projecting vehicle miles traveled (VMT) and speed. The ARB's on-road emissions inventory in EMFAC2007 relies on these VMT and speed estimates. To complete the inventory, estimates of biogenic (naturally occurring) emissions are developed by ARB using the Biogenic Emissions Inventory Geographic Information System (BEIGIS) model.

Because the ARB mobile source emission projections and SANDAG growth projections are based on population and vehicle trends as well as land use plans developed by the cities and by the County as part of the development of general plans, projects that propose development that is consistent with the growth anticipated by the general plans would be consistent with the RAQS and the Attainment Plan. In the event that a project would propose development which is less dense than anticipated within the general plan, the project would likewise be consistent with the RAQS and the Attainment Plan. If a project proposes development that is greater than that anticipated in the general plan and SANDAG's growth projections, the project might be in conflict with the RAQS and SIP, and might have a potentially significant impact on air quality.

### *Local*

In San Diego County, the SDAPCD is the regulatory agency that is responsible for maintaining air quality, including implementation and enforcement of State and Federal regulations. The project site is located in the City of San Diego. The City of San Diego has adopted its *Significance Determination Thresholds* (City of San Diego 2011) that are based on Appendix G of the State CEQA Guidelines.

## 5.4.2 Impact Analysis

### *Thresholds of Significance*

The Watermark Project would result in both construction and operational impacts. Construction impacts include emissions associated with the construction of the project. Operational impacts include emissions associated with the project, including traffic, at full buildout.

The City of San Diego has adopted its *Significance Determination Thresholds* (City of San Diego 2011) that are based on Appendix G of the State CEQA Guidelines. According to the Significance Determination Thresholds, a project would have a significant environmental impact if it could:

- Conflict with or obstruct the implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- Exposing sensitive receptors to substantial pollutant concentrations;
- Create objectionable odors affecting a substantial number of people; or
- Release substantial quantities of air contaminants beyond the boundaries of the premises upon which the stationary source emitting the contaminants is located.

In their *Significance Determination Thresholds*, the City of San Diego has adopted emission thresholds based on the thresholds for an Air Quality Impact Assessment in the San Diego Air Pollution Control District's Rule 20.2. These thresholds are shown in Table 5.4-3, *Significance Criteria for Air Quality Impacts*.



**Table 5.4-3. Significance Criteria for Air Quality Impacts**

Pollutant	Emission Rate		
	Lbs/Hr	Lbs/Day	Tons/Year
Carbon Monoxide (CO)	100	550	100
Oxides of Nitrogen (NO <sub>x</sub> )	25	250	40
Respirable Particulate Matter (PM <sub>10</sub> )	--	100	15
Oxides of Sulfur (SO <sub>x</sub> )	25	250	40
Lead and Lead Compounds	--	3.2	0.6
Fine Particulate Matter (PM <sub>2.5</sub> )	--	--	--
Volatile Organic Compounds (VOCs)	--	137	15

In addition to impacts from criteria pollutants, project impacts may include emissions of pollutants identified by the State and Federal government as TACs or Hazardous Air Pollutants (HAPs). (See Table 5.4-2, *Ambient Air Quality Standards*.) If a project has the potential to result in emissions of any TAC or HAP that may expose sensitive receptors to substantial pollutant concentrations, the project would be deemed to have a potentially significant impact. With regard to evaluating whether a project would have a significant impact on sensitive receptors, air quality regulators typically define sensitive receptors as schools (Preschool to 12<sup>th</sup> Grade), hospitals, resident care facilities, or day-care centers, or other facilities that may house individuals with health conditions that would be adversely impacted by changes in air quality.

With regard to odor impacts, a project that proposes a use that would produce objectionable odors would be deemed to have a significant odor impact if it would affect a considerable number of offsite receptors.

The impacts associated with construction and operation of the Watermark project were evaluated for significance based on these significance criteria.

### ***Issue 1***

*Would the project conflict with or obstruct implementation of the applicable air quality plan or result in a substantial alteration of air movement in the area of the project?*

### ***Impact Analysis***

As discussed in above, the SIP is the document that sets forth the State's strategies for attaining and maintaining the NAAQS. The APCD is responsible for developing the San Diego portion of the SIP, and has developed an attainment plan for attaining the 8-hour NAAQS for O<sub>3</sub>. The RAQS sets forth the plans and programs designed to meet the State air quality standards. Through the RAQS and SIP planning processes, the APCD adopts rules, regulations, and programs designed to achieve attainment of the ambient air quality standards and maintain air quality in the SDAB.

Conformance with the RAQS and SIP determines whether a project will conflict with or obstruct implementation of the applicable air quality plans. The basis for the RAQS and SIP is the distribution of population in the San Diego region as projected by SANDAG. Growth forecasting is based in part on the land uses established by the City of San Diego General Plan.

The RAQS and SIP address air emissions and impacts from industrial sources, area-wide sources, and mobile sources. The programs also consider transportation control measures and indirect source review. Industrial sources are typically stationary air pollution sources that are subject to

APCD rules and regulations, and over which the APCD has regulatory authority. Area-wide sources include sources such as consumer products use, small utility engines, hot water heaters, and furnaces. Both the ARB and the APCD have authority to regulate these sources and have developed plans and programs to reduce emissions from certain types of area-wide sources. Mobile sources are principally emissions from motor vehicles. The ARB establishes emission standards for motor vehicles and establishes regulations for other mobile source activities including off-road vehicles.

Both the RAQS and SIP address emissions of ozone precursors (ROG and NO<sub>x</sub>), as the SDAB is classified as a basic nonattainment area for the NAAQS and a nonattainment area for the CAAQS. The RAQS and SIP do not address particulate matter. The California CAA requires an air quality strategy to achieve a five percent average annual ozone precursor emission reduction when implemented or, if that is not achievable, an expeditious schedule for adopting every feasible emission control measure under air district purview [California Health and Safety Code (H&SC) Section 40914]. The current RAQS represents an expeditious schedule for adopting feasible control measures, since neither San Diego nor any air district in the State has demonstrated sustained five percent average annual ozone precursor reductions.

Most of the control measures adopted in the RAQS apply to industrial sources and specific source categories. There are no specific rules and regulations that apply to construction or operational sources associated with the Watermark project; however, off-road equipment and on-road vehicles involved in construction would be required to comply with ARB emission standards.

In 1992, SANDAG adopted Transportation Control Measures for the Air Quality Plan which set forth 11 tactics aimed at reducing traffic congestion and motor vehicle emissions within the SDAB. For each of these tactics, the Transportation Control Measures evaluated the potential emissions reductions on a region-wide basis. The tactics include the following:

- Commute travel reduction program
- High school, college, and university travel reduction program
- Goods movement/truck operation program
- Non-commute travel reduction program
- Transit improvements and expansion
- Vanpool program
- High occupancy vehicle lanes
- Park and ride facilities
- Bicycle facilities
- Traffic flow improvements
- Indirect source control program

The tactic that is most applicable to the proposed project is the indirect source control program. The Transportation Control Measures adopted by SANDAG identified job-housing balance, mixed-use, and transit corridor development as criteria for indirect source control. As part of job-housing balance, SANDAG indicated that land use policies and programs shall be established to attract appropriate employers to residential areas and to encourage appropriate housing in and near

industrial and business areas. Mixed-use development should be designed to maximize walking and minimize vehicle use by providing housing, employment, education, shopping, recreation, and any support facilities within convenient proximity.

The Watermark project meets the criteria of the RAQS, SIP, and SANDAG's Transportation Control Measures as it provides commercial uses and employment in an area surrounded by residential uses. The project is located within a short distance to residential uses in the surrounding area. The project is located within a commercial area and will provide the area with retail and office uses.

Accordingly the proposed project is consistent with the applicable air quality plans, and would not result in a significant impact.

### ***Significance of Impacts***

The applicable air quality control plans include the RAQS, the SIP, and SANDAG's Transportation Control Measures. The proposed project is consistent with these air quality plans. No impact would result.

### ***Mitigation Measures***

No significant impacts to the applicable air quality plans would result. No mitigation is required.

### ***Issue 2***

*Would the project cause a violation of any air quality standard or contribute substantially to an existing or projected air quality violation?*

### ***Impact Analysis***

To address this significance threshold, an evaluation of emissions associated with both the construction and operational phases of the project was conducted. A discussion of the impacts relative to construction is included below, under *Air Quality Issue 4*. The discussion that follows addresses the project's operational impacts.

Operational impacts associated with the Watermark project would include impacts associated with vehicular traffic, as well as area sources such as energy use, landscaping, consumer products use, and architectural coatings use for maintenance purposes.

The *Traffic Impact Analysis for Watermark* (Urban Systems 2010) calculated project trip generation rates based on the proposed development. According to the Traffic Impact Analysis, considering pass-by trip reductions and based on SANDAG trip generation rates, the project would generate a net traffic increase of 21,494 ADT. The trip generation rates, considering pass-by trips, were accounted for within the CalEEMod Model runs for vehicular emissions.

Operational impacts associated with vehicular traffic and area sources including energy use, landscaping, consumer products use, hearth emissions, and architectural coatings use for maintenance purposes were estimated using the CalEEMod Model. The CalEEMod Model calculates vehicle emissions based on emission factors from the EMFAC2007 model. It was assumed that the first year of full occupancy would be 2015, as this is the year that all construction is

assumed to be complete, the majority of the commercial space would be occupied, and all uses would be in full operation. Based on the results of the EMFAC2007 model for subsequent years, emissions would decrease on an annual basis from 2015 onward due to phase-out of higher polluting vehicles and implementation of more stringent emission standards that are taken into account in the EMFAC2007 model. Table 5.4-4, *Operational Emissions*, presents the results of the emission calculations, in lbs/day, along with a comparison with the significance criteria.

**Table 5.4-4. Operational Emissions**

	ROG	NOx	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Summer Day, lbs/day						
Area Sources	16.98	--	--	--	--	--
Energy Use	0.47	4.27	3.59	0.03	0.32	0.32
Vehicular Emissions	76.36	149.44	696.89	1.06	34.40	10.10
<b>TOTAL</b>	<b>109.65</b>	<b>179.30</b>	<b>821.59</b>	<b>1.27</b>	<b>42.75</b>	<b>12.10</b>
Significance Screening Criteria	137	250	550	250	100	55
<i>Above Screening Criteria?</i>	<i>No</i>	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>No</i>	<i>No</i>
Winter Day, lbs/day						
Area Sources	16.98	-	--	--	--	--
Energy Use	0.47	4.27	3.59	0.03	0.32	0.32
Vehicular Emissions	81.11	156.84	706.51	0.99	36.47	10.17
<b>TOTAL</b>	<b>115.18</b>	<b>187.91</b>	<b>832.03</b>	<b>1.19</b>	<b>42.84</b>	<b>12.18</b>
Significance Screening Criteria	137	250	550	250	100	55
<i>Above Screening Criteria?</i>	<i>No</i>	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>No</i>	<i>No</i>

Based on the estimates of the emissions associated with project operations, the emissions of CO are above the screening-level thresholds.

Because emissions of CO are above the quantitative significance thresholds, the potential for an exceedance of the CO standard has been evaluated. Projects involving traffic impacts may result in the formation of locally high concentrations of CO, known as CO “hot spots.” To verify that the project would not cause or contribute to a violation of the CO standard, a screening evaluation of the potential for CO “hot spots” was conducted. Project-related traffic would have the potential to result in CO “hot spots” if project-related traffic resulted in a degradation in the level of service at any intersection to LOS E or F. The Traffic Impact Analysis evaluated whether or not there would be a decrease in the level of service at the intersections affected by the project.

Based on the Traffic Impact Analysis, the following intersections would operate at LOS E or F:

#### Near Term with Project

- Mercy Road and I-15 Southbound Ramps, PM peak hour
- Scripps Poway Parkway and I-15 Northbound Ramps, PM peak hour

#### Horizon Year without Project

- Park Village and Black Mountain Road, AM peak hour
- Mercy Road and I-15 Southbound Ramps, PM peak hour
- Scripps Poway Parkway and I-15 Northbound Ramps, PM peak hour



Horizon Year with Project

- Park Village and Black Mountain Road, AM peak hour
- Mercy Road and I-15 Southbound Ramps, PM peak hour
- Scripps Poway Parkway and I-15 Northbound Ramps, AM and PM peak hour

To evaluate the potential for CO hot spots, the procedures in the Caltrans ITS Transportation Project-Level Carbon Monoxide Protocol (Caltrans 1998) were used. As recommended in the Protocol, CALINE4 modeling was conducted for the intersections identified above for the scenarios with and without project traffic. Modeling was conducted based on the guidance in Appendix B of the Protocol to calculate maximum predicted 1-hour CO concentrations. Predicted 1-hour CO concentrations were then scaled to evaluate maximum predicted 8-hour CO concentrations using the recommended scaling factor of 0.7 for urban locations.

Inputs to the CALINE4 model were obtained from the Traffic Impact Analysis. As recommended in the Protocol, receptors were located at locations that were approximately three meters from the mixing zone, and at a height of 1.8 meters. Average approach and departure speeds were assumed to be one mph to account for congestion at the intersection and provide a worst-case estimate of emissions. Emission factors for those speeds were estimated from the EMFAC2007 emissions model using 2015 for Near Term Conditions and 2030 for Build-out Conditions.

In accordance with the Caltrans ITS Transportation Project-Level Carbon Monoxide Protocol, it is also necessary to estimate future background CO concentrations in the project vicinity to determine the potential impact plus background and evaluate the potential for CO hot spots due to the project. As a conservative estimate of background CO concentrations, the existing maximum 1-hour background concentration of CO that was measured at the San Diego monitoring station for the period 2006 to 2010 of 5.3 ppm was used to represent future maximum background 1-hour CO concentrations. This is a conservative assumption, as the monitoring station is located in downtown San Diego where there is more congestion than in the project area. The existing maximum 8-hour background concentration of CO that was measured at the San Diego monitoring station during the period from 2006 to 2010 of 3.27 ppm was also used to provide a conservative estimate of the maximum 8-hour background concentrations in the project vicinity. CO concentrations in the future may be lower as inspection and maintenance programs and more stringent emission controls are placed on vehicles.

Table 5.4-5, *CO Hot Spots Evaluation*, presents a summary of the predicted CO concentrations (impact plus background) for the intersections evaluated.

**Table 5.4-5. CO Hot Spots Evaluation**

(predicted CO concentrations, ppm)

Maximum 1-hour Concentration Plus Background, ppm CAAQS = 20 ppm; NAAQS = 35 ppm; Background 5.3 ppm								
Intersection	Near Term		Near Term Plus Project		Horizon		Horizon Plus Project	
	<i>am</i>	<i>pm</i>	<i>am</i>	<i>pm</i>	<i>am</i>	<i>pm</i>	<i>am</i>	<i>pm</i>
Mercy Road and I-15 SB Ramps	5.8	6.0	5.9	6.1	5.6	5.6	5.6	5.7
Scripps Poway Parkway and I-15 NB Ramps	6.7	6.8	6.8	7.1	6.0	6.0	6.0	6.1
Park Village Road and Black Mountain Road	NA	NA	NA	NA	5.9	5.9	5.9	6.0
Maximum 8-hour Concentration Plus Background, ppm CAAQS = 20 ppm; NAAQS = 35 ppm; Background 3.27 ppm								
Mercy Road and I-15 Ramps	3.76		3.83		3.48		3.55	
Scripps Poway Parkway and I-15 NB Ramps	4.32		4.53		3.76		3.83	
Park Village Road and Black Mountain Road	NA		NA		3.69		3.76	

As shown in Table 5.4-5, the predicted CO concentrations would be substantially below the 1-hour and 8-hour NAAQS and CAAQS for CO shown in Table 5.4-2. Therefore, no exceedances of the CO standard are predicted, and the project would not cause or contribute to a violation of this air quality standard.

The project has incorporated design features such as a mix of uses and provides local-serving retail for residential and business land uses currently located in the project area. There are no additional mitigation measures that would reduce emissions below a level of significance. Future vehicle emissions would decrease due to increasingly stringent air quality standards and phase-out of older vehicles.

### ***Significance of Impacts***

Operational emissions would be below the significance thresholds for all pollutants except CO. However, CO impacts would be less than significant because no CO “hot spots” would result from the project. Therefore, air quality impacts associated with project operations would not be significant.

### ***Mitigation Measures***

Project impacts associated with emissions during project operations are less than significant. No mitigation is required.

### ***Issue 3***

*Would the project expose sensitive receptors to substantial pollutant concentrations?*

### ***Impact Analysis***

This threshold concerns whether the project could expose sensitive receptors to substantial pollutant concentrations of TACs. If a project has the potential to result in emissions of any TAC that results in a cancer risk of greater than ten in one million or substantial non-cancer risk, the project would be deemed to have a potentially significant impact.

Air quality regulators typically define sensitive receptors as schools (Preschool through 12<sup>th</sup> Grade), hospitals, resident care facilities, or day-care centers, or other facilities that may house individuals with health conditions that would be adversely impacted by changes in air quality. Residential land uses may also be considered sensitive receptors. The nearest sensitive receptors to the site are the residents located approximately 0.25 miles east of the project site.

Emissions of TACs are attributable to temporary emissions from construction emissions, and minor emissions associated with diesel truck traffic used for deliveries at the site. Truck traffic may result in emissions of diesel particulate matter, which is characterized by the State of California as a TAC. Certain types of projects are recommended to be evaluated for impacts associated with TACs. In accordance with the SCAQMD's *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis* (SCAQMD 2003), projects that should be evaluated for diesel particulate emissions include truck stops, distribution centers, warehouses, and transit centers which diesel vehicles would utilize and which would be sources of diesel particulate matter from heavy-duty diesel trucks. An office and retail development such as the Watermark project would not attract a disproportionate amount of diesel trucks and would not be considered a source of TAC emissions. Based on the CalEEMod Model, heavy-duty diesel trucks would account for only 0.9 percent of the total trips associated with the project. Impacts to sensitive receptors from TAC emissions would therefore be less than significant.

### ***Significance of Impacts***

For the Watermark project, sensitive receptors (characterized by the residential development located 0.25 mile east of the project site) may be exposed to TACs, a pollutant that can be harmful in substantial concentrations. Diesel trucks are the primary producers of TAC emissions. For this project, heavy-duty diesel truck trips would account for 0.9 percent of the total trips associated with the project. As such, impacts to sensitive receptors would be less than significant.

### ***Mitigation Measures***

Project impacts to sensitive receptors are less than significant. No mitigation is required.

### ***Issue 4***

*Would the project exceed 100 pounds per day of Particulate Matter (dust)?*

### ***Impact Analysis***

Emissions of pollutants such as fugitive dust and heavy equipment exhaust that are generated during construction are generally highest near the construction site. Emissions from the construction of the project were estimated using the CalEEMod Model (ENVIRON 2011). It was assumed that construction would require the following phases: fine grading, utilities installation, building construction, paving, and architectural coatings application.

The CalEEMod Model provides default assumptions regarding horsepower rating, load factors for heavy equipment, and hours of operation per day. Default assumptions within the CalEEMod Model and assumptions for similar projects were used to represent operation of heavy construction equipment. Table 5.4-6, *Construction Equipment Requirements*, provides estimates of construction equipment requirements for the project for each phase of construction.

**Table 5.4-6. Construction Equipment Requirements**

Equipment Description	hp	Load Factor	Hours/Day	Quantity
<i>Fine Grading</i>				
Roller	84	0.56	8	1
Rubber Tired Dozers	358	0.59	8	2
Tractors/Loaders/Backhoes	75	0.55	8	2
<i>Utilities Installation (Trenching)</i>				
Excavators	157	0.57	8	1
Rough Terrain Forklifts	83	0.60	8	2
Trenchers	69	0.75	8	1
<i>Building Construction</i>				
Crane	208	0.43	7	1
Forklifts	149	0.30	8	3
Generator Set	84	0.74	8	1
Tractors/Loaders/Backhoes	75	0.55	7	1
Welders	46	0.45	8	3
<i>Paving</i>				
Pavers	89	0.62	8	2
Paving Equipment	82	0.53	8	2
Rollers	84	0.56	8	2
<i>Architectural Coatings Application</i>				
Air Compressor	78	0.48	6	1

Construction calculations within the CalEEMod Model utilize the number and type of equipment shown in Table 4.5-4 to calculate emissions from heavy construction equipment. The methodology used involves multiplication of the number of pieces of each type of equipment times the equipment horsepower rating, load factor, and OFFROAD emission factor, as shown in the equation below:

$$\text{Emissions, lbs/day} = (\text{Number of pieces of equipment}) \times (\text{equipment horsepower}) \times (\text{load factor}) \times (\text{hours of operation per day}) \times (\text{OFFROAD emission factor, lbs/hp-hr})$$

In addition to calculating emissions from heavy construction equipment, the URBEMIS Model contains calculation modules to estimate emissions of fugitive dust, based on the amount of earthmoving or surface disturbance required; emissions from heavy-duty truck trips or vendor trips during construction activities; emissions from construction worker vehicles during daily commutes; emissions of ROG from paving using asphalt; and emissions of ROG during application of architectural coatings. As part of the project design features, it was assumed that standard dust control measures (watering three times daily, using soil stabilizers on unpaved roads) and architectural coatings that comply with SDAPCD Rule 67.0 [assumed to meet a volatile organic compound (VOC) content of 150 grams per liter (g/l)] would be used during construction.

Table 5.4-7, *Estimated Maximum Daily Construction Emissions*, provides the detailed emission estimates as calculated with the CalEEMod Model for each of the construction phases of the project, without mitigation. As shown in Table 5.4-7, emissions of criteria pollutants during construction would be below the thresholds of significance for all project construction phases for all pollutants. Project criteria pollutant emissions during construction would be temporary.

**Impact 5.4-2: The proposed project may result in significant air quality impacts associated with construction.**



***Significance of Impacts***

Construction impacts would be temporary and for a short duration. Nonetheless, standard mitigation would lessen the potential impact of fugitive dust.

***Mitigation Measures***

**MM 5.4-1.** Standard dust control measures ~~would~~ shall be employed during construction. These standard dust control measures shall include the following:

- Watering active grading sites a minimum of three times daily
- Apply soil stabilizers to inactive construction sites
- Replace ground cover in disturbed areas as soon as possible and in accordance with the City's erosion control standards.
- Control dust during equipment loading/unloading (load moist material, ensure at least 12 inches of freeboard in haul trucks)
- ~~Reduce~~ Limit speeds on unpaved roads to 15 mph or less
- Water unpaved roads a minimum of three times daily

These dust control measures would reduce the amount of fugitive dust generated during construction to below a level of significance.

***Significance of Impacts following Implementation of Mitigation Measures***

The proposed project has incorporated to the extent it can all measures to reduce air quality impacts during construction to a below a level of significance. Impacts would be less than significant.

Table 5.4-7. Estimated Maximum Daily Construction Emissions

<sup>1</sup>Maximum occurs either during simultaneous building construction and architectural coatings application, building construction and paving, or mass grading and trenching/utilities.

Construction Activity/Time	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total
<b>Site Preparation</b>										
Fugitive Dust	-	-	-	-	4.87	-	4.87	2.59	-	2.59
Off-Road Diesel	7.02	55.89	31.60	0.05	-	2.85	2.85	-	2.85	2.85
On-Road Diesel	8.59	101.48	47.56	0.14	45.49	3.76	49.24	0.51	3.76	4.26
Worker Trips	0.06	0.09	0.88	0.00	0.17	0.01	0.18	0.01	0.01	0.01
<b>TOTAL</b>	<b>15.67</b>	<b>157.46</b>	<b>80.04</b>	<b>0.19</b>	<b>50.53</b>	<b>6.62</b>	<b>57.14</b>	<b>3.11</b>	<b>6.62</b>	<b>9.71</b>
<b>Trenching/Utilities</b>										
Trenching Off Road Diesel	3.51	22.98	15.97	0.03	0.00	1.79	1.79	0.00	1.79	1.79
Trenching Worker Trips	0.06	0.07	0.68	0.26	0.26	0.00	0.26	0.01	0.00	0.01
<b>TOTAL</b>	<b>3.68</b>	<b>23.05</b>	<b>16.65</b>	<b>0.29</b>	<b>0.26</b>	<b>1.79</b>	<b>2.05</b>	<b>0.01</b>	<b>1.79</b>	<b>1.80</b>
<b>Building Construction</b>										
Building Off Road Diesel	4.74	32.06	23.20	0.04	0.00	2.02	2.02	0.00	2.02	2.02
Building Vendor Trips	1.55	18.19	10.36	0.03	1.06	0.60	1.06	0.08	0.60	0.68
Building Worker Trips	1.37	1.53	15.44	0.03	3.22	0.11	3.34	0.12	0.11	0.23
<b>TOTAL</b>	<b>7.66</b>	<b>51.78</b>	<b>49.00</b>	<b>0.10</b>	<b>4.28</b>	<b>2.73</b>	<b>6.42</b>	<b>0.20</b>	<b>2.73</b>	<b>2.93</b>
<b>Architectural Coatings</b>										
Architectural Coatings Offgassing	73.68	-	-	-	-	-	-	-	-	-
Architectural Coatings Offroad Diesel	0.37	2.37	1.88	0.00	0.00	0.20	0.20	0.00	0.20	0.20
Worker Trips	0.24	0.26	2.61	0.01	0.64	0.02	0.66	0.02	0.02	0.05
<b>TOTAL</b>	<b>74.29</b>	<b>2.63</b>	<b>4.49</b>	<b>0.01</b>	<b>0.64</b>	<b>0.22</b>	<b>0.86</b>	<b>0.02</b>	<b>0.22</b>	<b>0.25</b>
<b>Paving</b>										
Paving Off-Gas	0.00	-	-	-	-	-	-	-	-	-
Paving Off Road Diesel	4.58	28.21	20.38	0.03	0.00	2.35	2.35	0.00	2.35	2.35
Paving Worker Trips	0.24	0.09	0.94	0.00	0.20	0.01	0.21	0.01	0.01	0.01
<b>TOTAL</b>	<b>4.82</b>	<b>28.30</b>	<b>21.32</b>	<b>0.03</b>	<b>0.20</b>	<b>2.36</b>	<b>2.56</b>	<b>0.01</b>	<b>2.36</b>	<b>2.36</b>
<b>MAXIMUM DAILY EMISSIONS<sup>1</sup></b>	<b>74.29</b>	<b>157.46</b>	<b>80.04</b>	<b>0.20</b>			<b>57.14</b>			<b>9.71</b>
Significance Criteria	137	250	550	250			100			55
Significant?	No	No	No	No			No			No

***Issue 5***

*Would the project create objectionable odors affecting a substantial number of people?*

***Impact Analysis***

Project construction could result in minor amounts of odor compounds associated with diesel heavy equipment exhaust. These compounds would be emitted in various amounts and at various locations during construction. Sensitive receptors located in the vicinity of the construction site include the residences to the east of the site. Odors are highest near the source and would quickly dissipate off-site; any odors associated with construction would be temporary.

The project is an office and retail development and would not include land uses that would be sources of nuisance odors. Thus the potential for odor impacts associated with the project is less than significant.

***Significance of Impacts***

The proposed project does not include land uses that would be sources of nuisance odors. Any odors present during construction would be temporary and likely not affect sensitive receptors (residences), as these receptors are located 0.25 mile east of the project at a higher elevation. Odors are highest near the source and would dissipate before reaching the residences. Project impacts are less than significant.

***Mitigation Measures***

Project impacts related to objectionable or nuisance odors are less than significant. No mitigation is required.





## 5.5 GLOBAL CLIMATE CHANGE

This section of the EIR is based on the *Greenhouse Gas Evaluation* prepared for the proposed project by Scientific Resources Associated, dated July 10, 2012. A copy of the *Greenhouse Gas Evaluation* is included as Appendix E to this EIR. By nature, greenhouse gas and global climate change evaluations are a cumulative study, taking into account the entirety of the immediately surrounding area. As such, the Greenhouse Gas Evaluation analyzes the impacts of the entire project site, *Areas A and B*.

### 5.5.1 Existing Conditions

The Watermark project site is currently undeveloped, but has been graded. The MedImpact corporate headquarters have begun development adjacent to the Watermark under existing entitlements. There is little to no native vegetation on-site. There are no specific sources of GHG emissions at the site.

#### *Background*

Global climate change (GCC) refers to changes in average climatic conditions on Earth as a whole, including temperature, wind patterns, precipitation, and storms. Global temperatures are moderated by naturally occurring atmospheric gases, including water vapor, carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O), which are known as greenhouse gases (GHGs). These gases allow solar radiation (sunlight) into the Earth's atmosphere, but prevent radiative heat from escaping, thus warming the Earth's atmosphere. Gases that trap heat in the atmosphere are often called greenhouse gases, analogous to a greenhouse. GHGs are emitted by both natural processes and human activities. The accumulation of GHGs in the atmosphere regulates the Earth's temperature. Without these natural GHGs, the Earth's temperature would be about 61 degree Fahrenheit (°F) cooler (California Environmental Protection Agency 2006). Emissions from human activities, such as electricity production and vehicle use, have elevated the concentration of these gases in the atmosphere.

~~GHGs have been at the center of a widely contested political, economic, and scientific debate surrounding GCC. Although the conceptual existence of GCC is generally accepted, the extent to which GHGs contribute to it remains a source of debate. The State of California has been at the forefront of developing solutions to address GCC. GCC refers to any significant change in measures of climate, such as average temperature, precipitation, or wind patterns over a period of time. GCC may result from natural factors, natural processes, and/or human activities that change the composition of the atmosphere and alter the surface and features of land.~~

~~Global climate change attributable to anthropogenic (human) emissions of GHGs (mainly CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O) is currently one of the most important and widely debated scientific, economic, and political issues in the United States. Historical records indicate that global climate changes have occurred in the past due to natural phenomena (such as during previous ice ages). Some data indicate that the current global conditions differ from past climate changes in rate and magnitude.~~

The United Nations Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. The IPCC concluded that a stabilization of GHGs at 400 to 450 ppm CO<sub>2</sub> equivalent concentration

is required to keep global mean warming below 3.6° Fahrenheit (2° Celsius), which is assumed to be necessary to avoid dangerous climate change.

State law defines greenhouse gases as any of the following compounds: CO<sub>2</sub>, CH<sub>4</sub>, nitrous oxide N<sub>2</sub>O, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>) [California Health and Safety Code Section 38505(g)]. CO<sub>2</sub>, followed by CH<sub>4</sub> and N<sub>2</sub>O, are the most common GHGs that result from human activity.

#### *Sources and Global Warming Potentials of GHG*

The State of California GHG Inventory performed by CARB compiled statewide anthropogenic GHG emissions and sinks. It includes estimates for CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, SF<sub>6</sub>, HFCs, and PFCs. The current inventory covers the years 1990 to 2004, and is summarized in Table 5.5-1, *State of California GHG Emissions by Sector*. Data sources used to calculate this GHG inventory include California and Federal agencies, international organizations, and industry associations. The calculation methodologies are consistent with guidance from the IPCC. The 1990 emissions level is the sum total of sources and sinks from all sectors and categories in the inventory. The inventory is divided into seven broad sectors and categories in the inventory. These sectors include: Agriculture, Commercial, Electricity Generation, Forestry, Industrial, Residential, and Transportation.

**Table 5.5-1. State of California GHG Emissions by Sector**

Sector	Total 1990 Emissions (MMTCO <sub>2</sub> e)	Percent of Total 1990 Emissions	Total 2008 Emissions (MMTCO <sub>2</sub> e)	Percent of Total 2008 Emissions
Agriculture	23.4	5%	28.06	6%
Commercial	14.4	3%	14.68	3%
Electricity Generation	110.6	26%	116.35	25%
Forestry (excluding sinks)	0.2	<1%	0.19	<1%
Industrial	103.0	24%	92.66	20%
Residential	29.7	7%	28.45	6%
Transportation	150.7	35%	174.99	37%
Recycling and Waste			6.71	1%
High GWP Gases			15.65	3%
Forestry Sinks	(6.7)		(3.98)	

When accounting for GHGs, all types of GHG emissions are expressed in terms of CO<sub>2</sub> equivalents (CO<sub>2</sub>e) and are typically quantified in metric tons (MT) or millions of metric tons (MMT).

GHGs have varying global warming potential (GWP). The GWP is the potential of a gas or aerosol to trap heat in the atmosphere; it is the “cumulative radiative forcing effect of a gas over a specified time horizon resulting from the emission of a unit mass of gas relative to a reference gas” (USEPA 2006). The reference gas for GWP is CO<sub>2</sub>; therefore, CO<sub>2</sub> has a GWP of 1. The other main greenhouse gases that have been attributed to human activity include CH<sub>4</sub>, which has a GWP of 21, and N<sub>2</sub>O, which has a GWP of 310. Table 5.5-2, *Global Warming Potentials and Atmospheric Lifetimes of GHGs*, presents the GWP and atmospheric lifetimes of common GHGs.

**Table 5.5-2. Global Warming Potentials and Atmospheric Lifetimes of GHGs**

GHG	Formula	100-Year Global Warming Potential	Atmospheric Lifetime (Years)
Carbon Dioxide	CO <sub>2</sub>	1	Variable
Methane	CH <sub>4</sub>	21	12 ± 3
Nitrous Oxide	N <sub>2</sub> O	310	120
Sulfur Hexafluoride	SF <sub>6</sub>	23,900	3,200

Human-caused sources of CO<sub>2</sub> include combustion of fossil fuels (coal, oil, natural gas, gasoline, and wood). Data from ice cores indicate that CO<sub>2</sub> concentrations remained steady prior to the current period for approximately 10,000 years. Concentrations of CO<sub>2</sub> have increased in the atmosphere since the industrial revolution.

CH<sub>4</sub> is the main component of natural gas and also arises naturally from anaerobic decay of organic matter. Human-caused sources of natural gas include landfills, fermentation of manure, and cattle farming. Human-caused sources of N<sub>2</sub>O include combustion of fossil fuels and industrial processes such as nylon production and production of nitric acid. Other GHGs are present in trace amounts in the atmosphere and are generated from various industrial or other uses.

In addition to the State of California GHG Inventory, a more specific regional GHG inventory was prepared by the University of San Diego School of Law Energy Policy Initiative Center. This San Diego County Greenhouse Gas Inventory (SDCGHGI) is a detailed catalog that takes into account the unique characteristics of the region in calculating emissions. The SDCGHGI calculated GHG emissions for 1990, 2006, and projected 2020 emissions. Based on this inventory and the emission projections for the region, the study found that emissions of GHGs must be reduced by 33 percent below business as usual in order for San Diego County to achieve 1990 emission levels by the year 2020. “Business as usual” (BAU), or forecasted emissions, is defined as the emissions that would occur in the absence of Assembly Bill 32’s mandated reductions. Construction of buildings using Title 24 building standards or San Diego County’s 2006 building code would create “business as usual” emissions.

Areas where feasible reductions can occur and the strategies for achieving those reductions are outlined in the SDCGHGI. A summary of the various sectors that contribute GHG emissions in San Diego County for the year 2006 is provided in Table 5.5-3, *San Diego County 2006 GHG Emissions by Category*. Total GHGs in San Diego County are estimated at 34 MMTCO<sub>2</sub>e.

**Table 5.5-3. San Diego County 2006 GHG Emissions by Category**

Sector	Total Emissions (MMTCO <sub>2</sub> e)	Percent of Total Emissions
On-Road Transportation	16	46%
Electricity	9	25%
Natural Gas Consumption	3	9%
Civil Aviation	1.7	5%
Industrial Processes & Products	1.6	5%
Other Fuels/Other	1.1	4%
Off-Road Equipment & Vehicles	1.3	4%
Waste	0.7	2%
Agriculture/Forestry/Land Use	0.7	2%
Rail	0.3	1%
Water-Born Navigation	0.13	0.4%

The sources of GHG emissions, GWP, and atmospheric lifetime of GHGs are all important variables to be considered in the process of calculating CO<sub>2</sub>e for discretionary land use projects that require a climate change analysis.

#### *Typical Adverse Effects*

The Climate Scenarios Report (CCCC 2006), uses a range of emissions scenarios developed by the IPCC to project a series of potential warming ranges (i.e., temperature increases) that may occur in California during the 21<sup>st</sup> century. Three warming ranges were identified: lower warming range (3.0 to 5.5 degrees Fahrenheit (°F)); medium warming range (5.5 to 8.0 °F); and higher warming range (8.0 to 10.5 °F). The Climate Scenarios Report then presents an analysis of the future projected climate changes in California under each warming range scenario.

According to the report, substantial temperature increases would result in a variety of impacts to the people, economy, and environment of California. These impacts would result from a projected increase in extreme conditions, with the severity of the impacts depending upon actual future emissions of GHGs and associated warming. These impacts are described below.

**Public Health.** Higher temperatures are expected to increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to O<sub>3</sub> formation are projected to increase by 25 to 35 percent under the lower warming range and 75 to 85 percent under the medium warming range. In addition, if global background O<sub>3</sub> levels increase as is predicted in some scenarios, it may become impossible to meet local air quality standards. An increase in wildfires could also occur, and the corresponding increase in the release of pollutants including PM<sub>2.5</sub> could further compromise air quality. The Climate Scenarios Report indicates that large wildfires could become up to 55 percent more frequent of GHG emissions are not significantly reduced.

Potential health effects from GCC may arise from temperature increases, climate-sensitive diseases, extreme events, and air quality. There may be direct temperature effects through increases in average temperature leading to more extreme heat waves and less extreme cold spells. Those living in warmer climates are likely to experience more stress and heat-related problems (e.g., heat rash and heat stroke). In addition, climate sensitive diseases (such as malaria, dengue fever, yellow fever, and encephalitis) may increase, such as those spread by mosquitoes and other disease-carrying insects.

**Water Resources.** A vast network of reservoirs and aqueducts capture and transport water throughout the State from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada mountain snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages. In addition, if temperatures continue to rise more precipitation would fall as rain instead of snow, further reducing the Sierra Nevada spring snowpack by as much as 70 to 90 percent. The State's water resources are also at risk from rising sea levels. An influx of seawater would degrade California's estuaries, wetlands, and groundwater aquifers.

**Agriculture.** Increased GHG and associated increases in temperature are expected to cause widespread changes to the agricultural industry, reducing the quantity and quality of agricultural products statewide. Significant reductions in available water supply to support agriculture would also impact production. Crop growth and development will change as will the intensity and frequency of pests and diseases.

**Ecosystems/Habitats.** Continued global warming will likely shift the ranges of existing invasive plants and weeds, thus altering competition patterns with native plants. Range expansion is expected in many species while range contractions are less likely in rapidly evolving species with significant populations already established. Continued global warming is also likely to increase the populations of and types of pests. Continued global warming would also affect natural ecosystems and biological habitats throughout the State.

**Wildland Fires.** Global warming is expected to increase the risk of wildfire and alter the distribution and character of natural vegetation. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55 percent, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors including precipitation, winds, temperature, and landscape and vegetation conditions, future risks will not be uniform throughout the State.

**Rising Sea Levels.** Rising sea levels, more intense coastal storms, and warmer water temperatures will increasingly threaten the State's coastal regions. Under the high warming scenario, sea level is anticipated to rise 22 to 35 inches by 2100. A sea level risk of this magnitude would inundate coastal areas with salt water, accelerate coastal erosion, threaten levees and inland water systems, and disrupt wetlands and natural habitats.

### **Regulatory Setting**

All levels of government have some responsibility for the protection of air quality, and each level (Federal, State, and regional/local) has specific responsibilities relating to air quality regulation. GHG emissions and the regulation of GHGs is a relatively new component of air quality.

### ***Federal***

GCC is being addressed at both the international and Federal levels. In 1988, the United Nations and the World Meteorological Organization established the IPCC to assess the scientific, technical, and socioeconomic information relevant to understanding the scientific basis for human-induced climate change, its potential impacts, and options for adaptation and mitigation. The most recent



reports of the IPCC have emphasized the scientific consensus that real and measurable changes to the climate are occurring, that they are caused by human activity, and that significant adverse impacts on the environment, the economy, and human health and welfare are unavoidable.

In October 1993, President Clinton announced his Climate Change Action Plan (CCAP), which had a goal of returning GHG emissions to 1990 levels by the year 2000. This was to be accomplished through 50 initiatives that relied on innovative voluntary partnerships between the private sector and government aimed at producing cost-effective reductions in GHG emissions. On March 21, 1994, the United States joined a number of countries around the world in signing the United Nations Framework Convention on Climate Change (UNFCCC). Under the Convention, governments agreed to gather and share information on GHG emissions, national policies, and best practices; launch national strategies for addressing GHG emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of GCC. Recently, the United States Supreme Court declared in the court case of *Massachusetts et al. vs. the Environmental Protection Agency et al.*, 549 U.S. 497 (2007), that the EPA does have the ability to regulate GHG emissions. In addition to the national and international efforts described above, many local jurisdictions have adopted climate change policies and programs.

**Endangerment Finding.** On April 17, 2009, EPA issued its proposed endangerment finding for GHG emissions. On December 7, 2009, the EPA Administrator signed two distinct findings regarding greenhouse gases under section 202(a) of the Clean Air Act:

**Endangerment Finding:** The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases –CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, and SF<sub>6</sub> – in the atmosphere threaten the public health and welfare of current and future generations.

**Cause or Contribute Finding:** The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution that threatens public health and welfare.

These findings do not themselves impose any requirements on industry or other entities. However, this action is a prerequisite to finalizing the EPA's proposed greenhouse gas emission standards for light-duty vehicles, which were jointly proposed by EPA and the Department of Transportation's National Highway Traffic Safety Administration on September 15, 2009.

**Mandatory GHG Reporting Rule.** On March 10, 2009, in response to the FY2008 Consolidated Appropriations Act (H.R. 2764; Public Law 110-161), the EPA proposed a rule that requires mandatory reporting of GHG emissions from large sources in the United States. On September 22, 2009, the Final Mandatory Reporting of Greenhouse Gases Rule was signed, and was published in the Federal Register on October 30, 2009. The rule became effective on December 29, 2009. The rule will collect accurate and comprehensive emissions data to inform future policy decisions.

EPA is requiring suppliers of fossil fuels or industrial greenhouse gases, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of GHG emissions to

submit annual reports to EPA. The gases covered by the proposed rule are CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFC, PFC, SF<sub>6</sub>, and other fluorinated gases including nitrogen trifluoride (NF<sub>3</sub>) and hydrofluorinated ethers (HFE).

**Corporate Average Fuel Economy Standards.** The Federal Corporate Average Fuel Economy (CAFE) standard determines the fuel efficiency of certain vehicle classes in the United States. In 2007, as part of the Energy and Security Act of 2007, CAFE standards were increased for new light-duty vehicles to 35 miles per gallon by 2020. In May 2009, President Obama announced plans to increase CAFE standards to require light-duty vehicles to meet an average fuel economy of 35.5 miles per gallon by 2016.

### *State*

The following subsections describe regulations and standards that have been adopted by the State of California to address GCC issues.

**Assembly Bill 32, the California Global Warming Solutions Act of 2006.** In September 2006, Governor Schwarzenegger signed California AB 32, the global warming bill, into law. AB 32 directs the ARB to do the following:

- Make publicly available a list of discrete early action GHG emission reduction measures that can be implemented prior to the adoption of the statewide GHG limit and the measures required to achieve compliance with the statewide limit.
- Make publicly available a GHG inventory for the year 1990 and determine target levels for 2020.
- On or before January 1, 2010, adopt regulations to implement the early action GHG emission reduction measures.
- On or before January 1, 2011, adopt quantifiable, verifiable, and enforceable emission reduction measures by regulation that will achieve the statewide GHG emissions limit by 2020, to become operative on January 1, 2012, at the latest. The emission reduction measures may include direct emission reduction measures, alternative compliance mechanisms, and potential monetary and non-monetary incentives that reduce GHG emissions from any sources or categories of sources that ARB finds necessary to achieve the statewide GHG emissions limit.
- Monitor compliance with and enforce any emission reduction measure adopted pursuant to AB 32.

AB 32 required that by January 1, 2008, ARB determine what the statewide GHG emissions level was in 1990, and approve a statewide GHG emissions limit that is equivalent to that level, to be achieved by 2020. ARB adopted its Scoping Plan in December 2008, which provided estimates of the 1990 GHG emissions level and identified sectors for the reduction of GHG emissions. The ARB has estimated that the 1990 GHG emissions level was 427 MMT net CO<sub>2</sub>e. The ARB estimates that a reduction of 173 MMT net CO<sub>2</sub>e emissions below BAU would be required by 2020 to meet the 1990 levels. This amounts to a 15 percent reduction from today's levels, and a 30 percent reduction from projected BAU levels in 2020.

**Senate Bill 97.** Senate Bill 97, enacted in 2007, amends the CEQA statute to clearly establish that GHG emissions and the effects of GHG emissions are appropriate subjects for CEQA analysis. It directs OPR to develop draft CEQA guidelines “for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions” by July 1, 2009, and directs the Resources Agency to certify and adopt the CEQA guidelines by January 1, 2010.

The Governor’s Office of Planning and Research (OPR) published a technical advisory on CEQA and Climate Change on June 19, 2008. The guidance did not include a suggested threshold. The OPR does recommend that CEQA analyses include the following components:

- Identify greenhouse gas emissions
- Determine significance
- Mitigate impacts

In April 2009, the OPR published its proposed revisions to CEQA to address GHG emissions. The amendments to CEQA indicate the following:

- Climate action plans and other greenhouse gas reduction plans can be used to determine whether a project has significant impacts, based upon its compliance with the plan.
- Local governments are encouraged to quantify the greenhouse gas emissions of proposed projects, noting that they have the freedom to select the models and methodologies that best meet their needs and circumstances. The section also recommends consideration of several qualitative factors that may be used in the determination of significance, such as the extent to which the given project complies with State, regional, or local GHG reduction plans and policies. OPR does not set or dictate specific thresholds of significance. Consistent with existing CEQA Guidelines, OPR encourages local governments to develop and publish their own thresholds of significance for GHG impacts assessment.
- When creating their own thresholds of significance, local governments may consider the thresholds of significance adopted or recommended by other public agencies, or recommended by experts.
- New amendments include guidelines for determining methods to mitigate the effects of greenhouse gas emissions in Appendix F of the CEQA Guidelines.
- OPR is clear to state that “to qualify as mitigation, specific measures from an existing plan must be identified and incorporated into the project; general compliance with a plan, by itself, is not mitigation.”
- OPR’s emphasizes the advantages of analyzing GHG impacts on an institutional, programmatic level. OPR therefore approves tiering of environmental analyses and highlights some benefits of such an approach.
- EIRs must specifically consider a project's energy use and energy efficiency potential.

On July 3, 2009, the California Natural Resources Agency published proposed amendment of regulations based on OPR’s proposed revisions to CEQA to address GHG emissions. On that date, the Natural Resources Agency commenced the Administrative Procedure Act rulemaking process for certifying and adopting these amendments pursuant to Public Resources Code section 21083.05. Having reviewed and considered all comments received, on December 30, 2009, the Natural

Resources Agency adopted the proposed amendments to the State CEQA guidelines in the California Code of Regulations. These amendments became final on March 18, 2010.

**Executive Order S-3-05.** Executive Order S-3-05, signed by Governor Schwarzenegger on June 1, 2005, calls for a reduction in GHG emissions to 1990 levels by 2020 and for an 80 percent reduction in GHG emissions by 2050. Executive Order S-3-05 also calls for the California EPA (CalEPA) to prepare biennial science reports on the potential impact of continued GCC on certain sectors of the California economy. The first of these reports, *Our Changing Climate: Assessing Risks to California*, and its supporting document *Scenarios of Climate Change in California: An Overview* were published by the California Climate Change Center in 2006.

**Executive Order S-21-09.** Executive Order S-21-09 was enacted by Governor Schwarzenegger on September 15, 2009. Executive Order S-21-09 requires that the ARB, under its AB 32 authority, adopt a regulation by July 31, 2010, that sets a 33-percent renewable energy target as established in Executive Order S-14-08. Under Executive Order S-21-09, the ARB will work with the Public Utilities Commission and California Energy Commission to encourage the creation and use of renewable energy sources, and will regulate all California utilities. The ARB will also consult with the Independent System Operator and other load balancing authorities on the impacts on reliability, renewable integration requirements, and interactions with wholesale power markets in carrying out the provisions of the Executive Order. The order requires the ARB to establish highest priority for those resources that provide the greatest environmental benefits with the least environmental costs and impacts on public health.

**California Code of Regulations Title 24.** Although not originally intended to reduce greenhouse gas emissions, California Code of Regulations Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The GHG emission inventory was based on Title 24 standards as of October 2005; however, Title 24 has been updated as of 2008 and standards are set to be phased in beginning in January 2010. The new Title 24 standards are anticipated to increase energy efficiency by 15 percent, thereby reducing GHG emissions from energy use by 15 percent. Energy efficient buildings require less electricity, natural gas, and other fuels. Electricity production from fossil fuels and on-site fuel combustion (typically for water heating) results in greenhouse gas emissions. Therefore, increased energy efficiency results in decreased greenhouse gas emissions.

**State Standards Addressing Vehicular Emissions.** California Assembly Bill 1493 (Pavley) enacted on July 22, 2002, required the ARB to develop and adopt regulations that reduce greenhouse gases emitted by passenger vehicles and light duty trucks. Regulations adopted by ARB would apply to 2009 and later model year vehicles. ARB estimated that the regulation would reduce climate change emissions from light duty passenger vehicle fleet by an estimated 18 percent in 2020 and by 27 percent in 2030. Once implemented, emissions from new light-duty vehicles are expected to be reduced in San Diego County by 21 percent by 2020. The ARB has adopted amendments to the "Pavley" regulations that GHG emissions in new passenger vehicles from 2009 through 2016. The amendments, approved by the Board on September 24, 2009, are part of California's commitment toward a nation-wide program to reduce new passenger vehicle GHGs from 2012 through 2016.

ARB's September amendments will cement California's enforcement of the Pavley rule starting in 2009 while providing vehicle manufacturers with new compliance flexibility. The amendments will also prepare California to harmonize its rules with the federal rules for passenger vehicles.

**Executive Order S-01-07.** Governor Schwarzenegger enacted Executive Order S-01-07 on January 18, 2007. Essentially, the order mandates the following: 1) that a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least ten percent by 2020; and 2) that a Low Carbon Fuel Standard (LCFS) for transportation fuels be established for California. It is assumed that the effects of the LCFS would be a ten percent reduction in GHG emissions from fuel use by 2020. On April 23, 2009, ARB adopted regulations to implement the LCFS.

**Senate Bill 375.** Senate Bill 375 requires that regions within the state which have a metropolitan planning organization must adopt a sustainable communities strategy (SCS) as part of their regional transportation plans. The strategy must be designed to achieve certain goals for the reduction of GHG emissions. The bill finds that GHG from autos and light trucks can be substantially reduced by new vehicle technology, but even so *"it will be necessary to achieve significant additional greenhouse gas reductions from changed land use patterns and improved transportation. Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32."* SB 375 provides that new CEQA provisions be enacted to *"encourage developers to submit applications and local governments to make land use decisions that will help the state achieve its goals under AB 32,"* and that *"current planning models and analytical techniques used for making transportation infrastructure decisions and for air quality planning should be able to assess the effects of policy choices, such as residential development patterns, expanded transit service and accessibility, the walkability of communities, and the use of economic incentives and disincentives."*

### **Local**

The City of San Diego has adopted policies in their Conservation Element (City of San Diego 2008) that address state and federal efforts to reduce GHG emissions. The policies that are applicable to the project include the following:

Policy CE-A.5      Employ sustainable or "green" building techniques for the construction and operation of buildings.

(a) Develop and implement sustainable building standards for new and significant remodels of residential and commercial buildings to maximize energy efficiency, and to achieve overall net zero energy consumption by 2020 for new residential buildings and 2030 for new commercial buildings. This can be accomplished through factors including, but not limited to:

- Designing mechanical and electrical systems that achieve greater energy efficiency with currently available technology;
- Minimizing energy use through innovative site design and building orientation that addresses factors such as sun-shade patterns, prevailing winds, landscape, and sun-screens;



- Employing self generation of energy using renewable technologies;
- Combining energy efficient measures that have longer payback periods with measures that have shorter payback periods;
- Reducing levels of non-essential lighting, heating and cooling; and
- Using energy efficient appliances and lighting.

(b) Provide technical services for “green” buildings in partnership with other agencies and organizations.

Policy CE-A-7 Construct and operate buildings using materials, methods, and mechanical and electrical systems that ensure a healthful indoor air quality. Avoid contamination by carcinogens, volatile organic compounds, fungi, molds, bacteria, and other known toxins.

- (a) Eliminate the use of chlorofluorocarbon-based refrigerants in newly constructed facilities and major building renovations and retrofits for all heating, ventilation, air conditioning, and refrigerant-based building systems.
- (b) Reduce the quantity of indoor air contaminants that are odorous or potentially irritating to protect installers and occupants’ health and comfort. Where feasible, select low-emitting adhesives, paints, coatings, carpet systems, composite wood, agri-fiber products, and others.

Policy CE-A.8 Reduce construction and demolition waste in accordance with Public Facilities Element, Policy PF-I.2, or be renovating or adding on to existing buildings, rather than constructing new buildings.

Policy CE-A.9 Reuse building materials, use materials that have recycled content, or use materials that are derived from sustainable or rapidly renewable sources to the extent possible, through factors including:

- Scheduling time for deconstruction and recycling activities to take place during project demolition and construction phases;
- Using life cycle costing in decision making for materials and construction techniques. Life cycle costing analyzes the costs and benefits over the life of a particular product, technology, or system;
- Removing code obstacles to using recycled materials and for construction; and
- Implementing effective economic incentives to recycle construction and demolition debris.

- Policy CE-A.10     Include features in buildings to facilitate recycling of waste generated by building occupants and associated refuse storage areas.
- Provide permanent, adequate, and convenient space for individual building occupants to collect refuse and recyclable material.
  - Provide a recyclables collection area that serves the entire building or project. The space should allow for the separation, collection and storage of paper, glass, plastic, metals, yard waste, and other materials as needed.
- Policy CE-A.11     Implement sustainable landscape design and maintenance.
- (a) Use integrated pest management techniques, where feasible, to delay, reduce, or eliminate dependence on the use of pesticides, herbicides, and synthetic fertilizers.
  - (b) Encourage composting efforts through education, incentives, and other activities.
  - (c) Decrease the amount of impervious surfaces in developments, especially where public places, plazas and amenities are proposed to serve as recreation opportunities.
  - (d) Strategically plant deciduous shade trees, evergreen trees, and drought tolerant native vegetation, as appropriate, to contribute to sustainable development goals.
  - (e) Reduce use of lawn types that require high levels of irrigation.
  - (f) Strive to incorporate existing mature trees and native vegetation into site designs.
  - (g) Minimize the use of landscape equipment powered by fossil fuels.
  - (h) Implement water conservation measures in site/building design and landscaping.
  - (i) Encourage the use of high efficiency irrigation technology, and recycled site water to reduce the use of potable water for irrigation. Use recycled water to meet the needs of development projects to the maximum extent feasible.

GHG emissions associated with the Watermark Project were estimated separately for five categories of emissions: (1) construction; (2) energy use, including electricity and natural gas usage; (3) water consumption; (4) solid waste handling; and (5) transportation. The analysis includes an evaluation of the existing conditions, as well as proposed project conditions. The analysis includes a baseline estimate assuming Title 24-compliant buildings, which is considered business as usual for the Project. Emissions were estimated based on emission factors from the California Climate Action Registry General Reporting Protocol. This inventory presents emissions based on “business as

usual” assumptions. The complete emissions inventory is summarized below and included in the appendix of the Greenhouse Gas Evaluation.

### *Existing Greenhouse Gas Emissions*

The site is approved for development with 350,743 square feet of office space on the site. The site is a source of GHG emissions associated with energy use, water consumption, solid waste handling, and vehicles from its existing operations. Baseline energy use was calculated as a function of kWh per square foot based on average performance for southern California commercial buildings, according to the *California Commercial End-Use Survey*. The energy use figures in these reports represent current state-wide average uses for all land uses, including those that are compliant with 2005 Title 24 standards. The baseline energy use provides a conservative estimate of current energy requirements relative to future energy requirements, because it assumes the buildings will meet Title 24 as of 2005, which was the baseline for the ARB’s Scoping Plan. Title 24 has been revised twice since 2005 and requires more energy efficiency measures to be adopted.

#### **Energy Usage**

Electricity usage rates for the office space were calculated based on estimated annual rates of 13.10 kilowatt-hours (kWh) per square foot from the *California Commercial End-Use Survey* for office space. Emissions were calculated based on emission factors in the California Climate Action Registry General Reporting Protocol, Version 3.1, which assumes that for California, energy use (electricity) would have emissions of 724.12 lbs/MWh of CO<sub>2</sub>, 0.0302 lbs/MWh of CH<sub>4</sub>, and 0.0081 lbs/MWh of N<sub>2</sub>O. Natural gas usage rates were calculated based on estimated annual rates of 10.54 kiloBTUs/square foot/year for office space. For natural gas usage, the Protocol assumes that natural gas would have emissions of 53.06 kg/MMBTU of CO<sub>2</sub>, 0.0059 kg/MMBTU of CH<sub>4</sub>, and 0.0001 kg/MMBTU of N<sub>2</sub>O.

#### **Water Usage**

GHG emissions were calculated on the basis of the embodied energy of water, assuming that in southern California, water has an embodied energy of 12,700 kWh/million gallons. Water usage was estimated based on the water use for office buildings (indoor and outdoor) calculated by the CalEEMod Model for indoor and outdoor water use based on the land use categories. Total water usage would therefore be 100,547,192 gallons per year.

#### **Vehicle Emissions**

Mobile source greenhouse gas emissions were estimated based on a trip generation rate of 10 trips per 1,000 square feet (City of San Diego 2003). Emissions from vehicles were estimated using the EMFAC2007 model emission factors, assuming an average trip length of 5.8 miles based on data for average trip lengths within San Diego County estimated by SANDAG.

#### **Solid Waste**

The disposal of solid waste produces GHG emissions from anaerobic decomposition in landfills, incineration, transportation of waste, and disposal. Solid waste generation was estimated based on the solid waste generation rates calculated by the CalEEMod Model (ENVIRON 2011), and was estimated at 326.18 tons per year. GHG emissions from solid waste management were estimated using the EPA’s Waste Reduction Model (WARM, assuming landfilling of solid waste with flaring,

for a total of 101 metric tons of CO<sub>2</sub>e annually.

### 5.5.2 Impact Analysis

The Watermark project would result in both construction and operational impacts. Construction impacts include emissions associated with the construction of the project. Operational impacts include emissions associated with the project, including traffic, at full buildout.

#### *Thresholds of Significance*

According to the California Natural Resources Agency, “due to the global nature of GHG emissions and their potential effects, GHG emissions will typically be addressed in a cumulative impacts analysis.” According to Appendix G of the CEQA Guidelines, a project may be considered to have a significant GCC impact if the proposed project would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

As discussed in Section 15064.4 of the CEQA Guidelines, the determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency, consistent with the provisions in Section 15064. Section 15064.4 further provides that a lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate, or estimate the amount of GHG emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:

- (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model or methodology it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; and/or
- (2) Rely on a qualitative analysis or performance-based standards.

Section 15064.4 also advises a lead agency to consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment:

- (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;
- (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and
- (3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions.

The City of San Diego, in their 2010 memorandum entitled *Addressing Greenhouse Gas Emissions from Projects Subject to CEQA*, utilizes a screening threshold of 900 metric tons of CO<sub>2</sub>e to evaluate

whether a project requires further analysis. Projects with emissions above the 900 metric ton threshold are required to evaluate whether emissions can be reduced below BAU levels.

Based on the ARB's analysis that statewide 2020 BAU GHG emissions would be 596 MMTCO<sub>2</sub>e and that 1990 emissions were 427 MMTCO<sub>2</sub>e, local lead agencies have estimated that a reduction of 28.3 percent below BAU is required to achieve the AB 32 reduction mandate. The City of San Diego has proposed a threshold of 28.3 percent below business as usual to evaluate the significance of GHG emissions attributable to a project. According to the ARB, "ARB staff estimated 2020 business-as-usual GHG emissions, which represent the emissions that would be expected to occur in the absence of any GHG reductions actions. ARB staff estimates the statewide 2020 business-as-usual greenhouse gas emissions will be 596 MMTCO<sub>2</sub>E. Emission reductions from the recommended measures in the Scoping Plan total 169 MMTCO<sub>2</sub>E, allowing California to attain the 2020 emissions limit of 427 MMTCO<sub>2</sub>E. The 2020 BAU emissions estimate was derived by projecting emissions from a past baseline year using growth factors specific to each of the different economic sectors. For the purposes of the Scoping Plan, ARB used three-year average emissions, by sector, for 2002 to 2004 to forecast emissions to 2020. At the time the Scoping Plan process was initiated, 2004 was the most recent year for which actual data were available."

According to the ARB, "growth factors are sector-specific and are derived from several sources, including the energy demand models generated by California Energy Commission (CEC) for their 2007 Integrated Energy Policy Report (IEPR), business economic growth data developed for ARB's criteria pollutant forecast system (CEFS), population growth data from the California Department of Finance, and projections of vehicle miles traveled from ARB's on-road mobile source emissions model, EMFAC2007. For the electricity and other energy sectors, ARB consulted with CEC to select the most appropriate growth factor."

Based on guidance from the City of San Diego, BAU is defined as the equivalent of Title 24 as of 2004, based on the ARB's Scoping Plan baseline.

### ***Issue 1***

*Would the project generate greenhouse gas emission, either directly or indirectly, that may have a significant impact on the environment?*

### ***Impact Analysis***

GHG emissions associated with the Watermark project were estimated separately for five categories of emissions: (1) construction; (2) energy use, including electricity and natural gas usage; (3) water consumption; (4) solid waste handling; and (5) transportation. The analysis includes a baseline estimate assuming Title 24-compliant buildings, which is considered BAU for the project. Emissions were estimated based on emission factors from the California Climate Action Registry General Reporting Protocol. This inventory presents emissions based on BAU assumptions.

### ***Construction Greenhouse Gas Emissions***

Construction GHG emissions include emissions from heavy construction equipment, truck traffic, and worker trips. Emissions were calculated using the CalEEMod Model. The CalEEMod Model contains emission factors from the OFFROAD2007 model for heavy construction equipment, and



from the EMFAC2007 model for on-road vehicles. Table 5.5-4, *Construction GHG Emissions*, presents a summary of construction GHG emissions.

**Table 5.5-4. Construction GHG Emissions**

Construction Phase	CO <sub>2</sub> e Emissions (metric tons/yr)
2013	519
2014	435
2015	1,126
2016	223
<b>TOTAL</b>	<b>2,303</b>

In accordance with recommendations made by the Association of Environmental Professional (AEP), total construction emissions have been amortized over a 30-year period and added to the operational emissions of the project. ~~In accordance with City of San Diego guidance, construction GHG emissions are amortized over a 30-year period to account for their contribution to emissions over the lifetime of the project.~~ Amortized construction emissions would therefore be 77 metric tons per year.

### *Operational Greenhouse Gas Emissions*

#### Energy Use

Baseline energy use was calculated as a function of kilowatt hour (kWh) per square foot based on average performance for southern California commercial buildings, according to the *California Commercial End-Use Survey*. The energy use figures in this report represent current state-wide average uses for all land uses, including those that are compliant with 2005 Title 24 standards. The baseline energy use provides a conservative estimate of current energy requirements relative to future energy requirements, because it assumes the buildings will meet Title 24 as of 2005, which was the baseline for the ARB's Scoping Plan. Title 24 has been revised twice since 2005 and requires more energy efficiency measures to be adopted.

Electricity usage rates for the office space were calculated based on estimated annual rates of 13.10 kWh per square foot from the *California Commercial End-Use Survey* for office space. For the retail space, electricity usage rates were estimated at 14.06 kWh per square foot. For the hotel and movie theater, electricity usage rates of 13.63 kWh per square foot, which represent average rates for commercial uses, were used to calculate emissions. Emissions were calculated based on emission factors in the California Climate Action Registry General Reporting Protocol, Version 3.1, which assumes that for California, energy use (electricity) would have emissions of 724.12 lbs/megawatt hour (MWh) of CO<sub>2</sub>, 0.0302 lbs/MWh of CH<sub>4</sub>, and 0.0081 lbs/MWh of N<sub>2</sub>O. Natural gas usage rates were calculated based on estimated annual rates of 10.54 kiloBTUs/square foot/year for office space, 4.62 kiloBTUs/square foot/year for retail space, and 25.99 kiloBTUs/square foot/year for the hotel and movie theater. For natural gas usage, the Protocol assumes that natural gas would have emissions of 53.06 kg/MMBTU of CO<sub>2</sub>, 0.0059 kg/MMBTU of CH<sub>4</sub>, and 0.0001 kg/MMBTU of N<sub>2</sub>O.

#### Water Usage

GHG emissions were calculated on the basis of the embodied energy of water, assuming that in southern California, water has an embodied energy of 12,700 kWh/million gallons. Water usage was

estimated based on the water use calculated by the CalEEMod Model for indoor and outdoor water use based on the land use categories. Total water usage would therefore be 103,574,170 gallons per year.

#### Vehicle Emissions

Mobile source greenhouse gas emissions were estimated based on the projected ADTs from the Traffic Impact Analysis for Watermark (Urban Systems Associated 2010), which estimated the total trip generation for the project of 18,467 ADT. Emissions from vehicles were estimated using the EMFAC2007 model emission factors, assuming an average trip length of 5.8 miles based on data for average trip lengths within San Diego County estimated by SANDAG.

#### Solid Waste

The disposal of solid waste produces GHG emissions from anaerobic decomposition in landfills, incineration, transportation of waste, and disposal. Solid waste generation was estimated based on the water use calculated by the CalEEMod Model, and was estimated at 777.78 tons per year. GHG emissions from solid waste management were estimated using the EPA's Waste Reduction Model (WARM), assuming landfilling of solid waste with flaring, for a total of 241 metric tons of CO<sub>2</sub>e annually.

#### ***Operational Emissions Summary***

The results of the inventory for operational emissions for BAU are presented in Table 5.5-5, *Summary of Estimated Operational Greenhouse Gas Emissions – Business as Usual Scenario*. These include GHG emissions associated with buildings (natural gas, purchased electricity), water consumption (energy embodied in potable water), solid waste management (including transport and landfill gas generation), and vehicles. Table 5.5-5 summarizes projected emissions using the methodologies noted above.

**Table 5.5-5. Summary of Estimated Operational Greenhouse Gas Emissions – Business as Usual Scenario**

Emission Source	Annual Emissions (Metric tons/year)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
<b>Operational Emissions</b>				
Electricity Use	3,648	0.152	0.041	3,664
Natural Gas Use	316	0.0351	0.0006	317
Water Use	434	0.018	0.005	434
Solid Waste Management	241	--	--	241
Vehicle Emissions	17,281	0.90	1.64	17,891
Amortized Construction Emissions	77	--	-	77
<b>Total</b>	<b>22,977</b>	<b>1.11</b>	<b>1.69</b>	<b>22,624</b>
Global Warming Potential Factor	1	21	310	--
CO <sub>2</sub> Equivalent Emissions	<b>22,977</b>	<b>23</b>	<b>523</b>	<b>22,624</b>
<b>TOTAL CO<sub>2</sub> Equivalent Emissions</b>	<b>22,624</b>			

As shown in Table 5.5-5, the emissions associated with the Watermark are above the 900 metric ton screening threshold. The project was therefore evaluated to assess the GHG emission reductions that would be achieved through state and federal programs and through project design features.

As discussed above, a significance threshold of 28.3 percent below BAU levels is considered to demonstrate that a project would be consistent with the goals of AB 32. As shown in Table 5.5-6, *Summary of Estimated Operational Greenhouse Gas Emissions with GHG Reduction Measures*, and as discussed in the ARB's *Staff Report, California 1990 Greenhouse Gas Emissions Level and 2020 Emissions Limit*, vehicular emissions are the greatest contributor to GHG emissions. Because the applicant does not have direct control over the types of vehicles or emission/fuel standards, the effect of California programs to reduce GHG emissions from vehicles was evaluated.

**Table 5.5-6. Summary of Estimated Operational Greenhouse Gas Emissions with GHG Reduction Measures**

Emission Source	Annual Emissions (Metric tons/year)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
<b>Operational Emissions</b>				
Electricity Use	2,433	0.103	0.027	2,445
Natural Gas Use	294	0.032	0.0006	295
Water Use	315	0.013	0.0035	317
Solid Waste Management	241	--	--	241
Vehicle Emissions	11,717	0.61	1.28	12,181
Amortized Construction Emissions	77	--	--	77
<b>Total</b>	<b>15,077</b>	<b>0.76</b>	<b>1.31</b>	<b>15,556</b>
Global Warming Potential Factor	1	21	310	-
CO <sub>2</sub> Equivalent Emissions	15,077	16	406	15,556
<b>TOTAL CO<sub>2</sub> Equivalent Emissions</b>	<b>15,556</b>			
<b>BAU CO<sub>2</sub> Equivalent Emissions</b>	<b>22,624</b>			
<b>Percent Reduction from BAU</b>	<b>31.24%</b>			

Based on the SDCGHGI, the percent reductions in GHG emissions anticipated through implementation of the Federal CAFE standards, LCFS, and Pavley fuel efficiency standard (analogous to the Federal CAFE standard), as well as the effect of light/heavy vehicle efficiency/hybridization programs can be estimated. Based on that study, emissions from vehicles would be reduced by 20 percent through implementation of the Federal CAFE standard/Pavley standard and 10 percent through implementation of the LCFS.<sup>1</sup> Emissions from vehicles would therefore be reduced by as much as 30 percent from State and Federal programs by the year 2020.

<sup>1</sup> The GHG Emission Evaluation prepared for the Watermark project relies on the Low Carbon Fuel Standard (LCFS) as a method of reducing emissions. The LCFS has been challenged in court. The District Court for the Eastern District of California enjoined enforcement of the LCFS in December 2011. *Rocky Mountain Farmers Union v. Goldstene*, 843 F.Supp.2d 1071 (2011). That decision was appealed to the Ninth Circuit Court of Appeals, which has stayed the District Court's injunction pending resolution of the appeal. The LCFS remains in effect pending the resolution of the appeal, and CARB is enforcing the LCFS. It is the City's position that the LCFS may be relied on as a GHG reduction measure so long as the District Court's injunction remains stayed and CARB is enforcing the LCFS. Conversely, if the Ninth Circuit invalidates the LCFS or reinstates the District Court's injunction, the LCFS may no longer be relied on in a GHG analysis as a reduction measure. If the LCFS is struck down, then the project would not be able to meet the City's threshold. If that becomes the case, then the project would result in significant and unmitigated impacts associated with global climate change. ~~Should the decision maker chose to approve the project, the decision maker would need to adopt a Statement of Overriding Considerations identifying why the project can be approved despite this significant and unmitigated impact.~~

In addition to the Pavley fuel efficiency standards and the LCFS, included in the ARB's Scoping Plan are strategies to reduce emissions by increasing efficiency, optimizing aerodynamics, and converting combustion-only vehicles to hybrids. According to the SDCGHGI, although these on-road emissions reduction measures are intended for implementation at the State level, several on-road transportation strategies were scaled down to San Diego County using data related to CO<sub>2</sub>e emissions, vehicle population, and vehicle type. When scaled down, the ARB's transportation efficiency, aerodynamics, and hybrid conversion strategies translate to an emissions reduction of 0.6 MMT CO<sub>2</sub>e for San Diego County by 2020, which amounts to a reduction in vehicle emissions of approximately three percent. The Scoping Plan measures apply to both light-duty vehicles (Measure T-4) and medium and heavy-duty vehicles (Measures T-7 and T-8). Measure T-4 includes such vehicle efficiency measures as implementation of a properly inflated tire program, use of low-friction engine oils, requiring solar-reflective automotive paints and window glazing, and implementing a tire tread program that develops and adopts tire rolling resistance standards. Measure T-7 would require existing trucks and trailers to be retrofitted with the best available technology and/or ARB approved technology. The retrofits would improve fuel efficiency of trucks by including devices that reduce aerodynamic drag and rolling resistance. Measure T-8 will require medium and heavy-duty vehicles to be converted to hybrid vehicles; these vehicles include parcel delivery trucks and vans, utility trucks, garbage trucks, buses, and other vocational work trucks.

According to the Scoping Plan, Measure T-4 would result in a reduction in GHG emissions from light-duty vehicles of 4.5 MMT CO<sub>2</sub>e by 2020 (a reduction of two percent from BAU emissions); Measure T-7 would result in a reduction in GHG emissions from heavy-duty vehicles of 0.93 MMT CO<sub>2</sub>e by 2020 (a reduction of 0.4 percent from BAU emissions); and Measure T-8 would result in a reduction in GHG emissions from medium- and heavy-duty vehicles of 0.5 MMT CO<sub>2</sub>e by 2020 (a reduction of 0.2 percent from BAU emissions). Because the project would not generate substantial heavy-duty truck traffic, it is appropriate to include the reductions in GHG emissions associated with Measures T-4 and T-8, but not with Measure T-7. The associated GHG emission reductions would be 2.2 percent from business as usual.

In addition to the energy efficiency and mobile source emissions reductions discussed above, reductions attributable to California's Renewable Portfolio Standard (RPS) were included in the emission calculations for electricity use. SB 1078 initially set a target of 20 percent of energy to be sold from renewable sources by the year 2017. The schedule for implementation of the RPS was accelerated in 2006 with Governor Schwarzenegger's signing of SB 107, which accelerated the 20 percent RPS goal from 2017 to 2010. On November 17, 2008, the Governor signed Executive Order S-14-08, which requires all retail sellers of electricity to serve 33 percent of their load with renewable energy by 2020. The Governor signed Executive Order S-21-09 on September 15, 2009, which directs ARB to implement a regulation consistent with the 2020 33 percent renewable energy target by July 31, 2010. As of September 23, 2010, the ARB has adopted the regulation that implements the 33 percent renewable energy standard.

According to the SDCGHGI, implementation of the 20 percent RPS goal by 2010 would reduce GHG emissions by a further 14 percent from 2006 levels; the inventory estimated that San Diego Gas and Electric was providing six percent of its electricity from renewable resource in 2006. To account for the implementation of the 20 percent RPS, a 14 percent reduction in GHG emissions was assumed. Implementation of Executive Order S-21-09 (i.e., the 33 percent RPS) will result in

additional GHG reductions of 27 percent below 2006 levels.

Based on information regarding Title 24 standards as of 2008, it is anticipated that for the San Diego climate zone, estimated electricity savings for nonresidential buildings are 8.596 percent and natural gas savings are 8.633 percent. These reductions were considered in calculating emissions with GHG reduction measures.

Table 5.5-6 presents the estimated GHG emissions for the project, with implementation of the GHG reduction measures summarized. As shown in Table 5.5-6, emissions from the Watermark project, considering GHG reduction measures discussed above, would be more than 28.3 percent below business as usual. Accordingly, the Watermark project would meet the goals of AB 32 and would not result in cumulatively considerable significant global climate impacts.

The Watermark project has developed a list of project design features that have been included in the project design. These project design features would reduce emissions of GHG by implementing energy efficiency measures, water conservation measures, and programs to reduce VMT.

Project Design Features (PDFs) and potential GHG reduction measures proposed are listed below. As shown below, a wide range of PDFs and GHG reduction measures are incorporated in the project ranging from water use efficiency to building energy efficiency and landscaping, to smart growth land use patterns, solid waste diversion and education. These include measures that are listed in the CAPCOA document, as well as other measures that are proposed as part of the project.

#### **SITE DESIGN**

- At least one principal participant of the project team is a Leadership in Energy and Environmental Design (LEED) Accredited Professional.
- Located within one-quarter-mile of one or more transit stops.
- Provide secure bicycle racks and/or storage.
- Use of materials with recycled content.

#### **GRADING and CONSTRUCTION**

- Create and implement an erosion and sediment control plan for all construction.
- Protect stored on-site or installed absorptive materials from moisture damage.
- Composite wood and agrifiber products will contain no added urea-formaldehyde resins.
- Individual lighting controls will be provided for a minimum of 90 percent of building occupants.

#### **PARKING**

- ~~• Size parking capacity to meet but not exceed minimum parking requirements.~~
- Provide preferred parking for carpools or vanpools.
- Place a minimum of 50 percent of parking spaces under cover.



**EXTERIOR LIGHTING**

- Design exterior lighting so that all site and building mounted luminaries produce a maximum initial luminance value no greater than 0.20 horizontal and vertical foot-candles at the site boundary and no greater than 0.01 horizontal foot-candles 15 feet beyond the site.

**BUILDING DESIGN FEATURES**

- Use water-conserving fixtures.
- Buildings designed to comply with Title 24 requirements.
- Zero use of chlorofluorocarbons (CFC)-based refrigerants.
- Select refrigerants and heating, ventilation, air conditioning, and refrigerating (HVAC&R) that minimize or eliminate the emission of compounds that contribute to ozone depletion and global warming.
- Will not use fire suppression systems that contain ozone-depleting substances [CFCs, hydrochlorofluorocarbons (HCFCs), or Halons].

**SOLID WASTE MANAGEMENT/RECYCLING**

- Provide easily accessible areas to serve buildings that are dedicated to the collection and storage of non-hazardous materials for recycling.

**LANDSCAPE – IRRIGATION**

- State of the art equipment that distributes water in controlled amounts and at controlled times to maximize water efficiency and optimize plant growth.
- Irrigation systems control to allow water to be distributed to plant material with similar watering needs to avoid over/underwatering.
- Use of weather and rain sensors to monitor current conditions and control the system accordingly.
- Utilization of reclaimed water (when available) for irrigation minimizing the need for potable water in the landscape.

**LANDSCAPE - PLANTING**

- Grouping of plant material based on the water demands for the specific plant material while still achieving the overall design intent.
- Selection of plant material its adaptability to the region and climate.
- Careful and selective use of enhanced planting (lusher material and seasonal color requiring more water and maintenance) where they have the most impact on the user.
- Use of native or low water/low maintenance material in outlying areas away from the general user.
- Limited use of turf. Where use, selection of turf varieties for their durability, maintenance needs and low water consumption.
- Use of trees throughout the project to provide shading to users and reduce heat gains on buildings and the heat island effect throughout the site.
- Selection of mix of deciduous trees to allow shade in the summer and sun penetration in the cooler winter months.

**LANDSCAPE – MATERIALS**

- Use of recycled materials, where appropriate.
- Use of precast concrete pavers, decomposed granite and post consumer products.
- All planting areas include a two-inch layer of a recycled organic mulch to maintain soil moisture, soil temperature and reduce weeding.
- Selection of lighter colored hardscape materials to reduce the heat island effect.

While these PDFs would be implemented for the Watermark project, because it is difficult to quantify GHG reductions from the measures, no credit was taken in this analysis.

Table 5.5-7, *Summary of Emission Reductions*, provides a summary of the emission reductions achieved for each measure considered in the analysis. Emission reductions for project design features have not been estimated; however, given the project's location as an infill project, and its proximity to existing residential and commercial land uses, emissions would be further reduced through reductions in vehicle miles traveled.

**Table 5.5-7. Summary of Emission Reductions**

Transportation Emissions		
BAU, CO <sub>2</sub> e		17,891
Reductions due to Statewide Measures		
Measure	Percent Reduction	Emissions Reduction
Pavley Motor Vehicle Standards	20%	3,578
Low Carbon Fuel Standard	10% (CO <sub>2</sub> and CH <sub>4</sub> )	1,730
Improved Vehicle Efficiency/Hybridization	2.20%	392
Total Reductions		5,700
Net Transportation Emissions		12,191
Operational Emissions		
BAU, CO <sub>2</sub> e		4,655
Reductions due to Project Design Features and Statewide Measures		
Measure	Percent Reduction	Emissions Reduction
Meet Title 24 Energy Efficiency Standards as of 2008	8.596% electricity and 8.633% natural gas	340
Renewable Portfolio Standard (33% renewables)	27% (electricity and embodied energy of water)	1,027
Total Reductions		1,367
Net Operational Emissions		3,288

**Significance of Impacts**

The proposed project would result in the generation of emissions. However, these emissions would be 31.25 percent below BAU emissions, which demonstrates greater efficiency than the 28.3 percent below BAU emissions established as the threshold. Therefore, project impacts would be less than significant.

**Mitigation Measures**

The project results in less than significant emissions impacts. No mitigation is required.

***Issue 2***

*Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of greenhouse gases?*

***Impact Analysis***

As concluded above, the proposed project is in compliance with applicable emissions reductions regulations. In addition, to demonstrate consistency with the adopted Conservation Element of the City of San Diego's General Plan, which addresses GHG emissions, the Watermark project would comply with the Conservation Element policies that are applicable to the project, including:

Policy CE-A.5      Employ sustainable or "green" building techniques for the construction and operation of buildings.

The project would be constructed to Title 24 standards as of 2008, and would employ energy efficiency measures and sustainable building techniques where feasible. Accordingly, the project would meet green building techniques and standards, such as LEED, as feasible.

Policy CE-A-7      Construct and operate buildings using materials, methods, and mechanical and electrical systems that ensure a healthful indoor air quality. Avoid contamination by carcinogens, volatile organic compounds, fungi, molds, bacteria, and other known toxins.

The project would comply with this policy and maintain healthful indoor air. The project would eliminate the use of GHGs such as chlorofluorocarbons where practicable. The project is not anticipated to result in contamination by carcinogens, volatile organic compounds, fungi, molds, bacteria, or other known toxins due to its operation as office/retail/entertainment space.

Policy CE-A.8      Reduce construction and demolition waste in accordance with Public Facilities Element, Policy PF-I.2, or be renovating or adding on to existing buildings, rather than constructing new buildings.

While the Watermark project is not renovating existing buildings, and does not involve demolition activities, the project would reduce construction waste to the extent feasible.

Policy CE-A.9      Reuse building materials, use materials that have recycled content, or use materials that are derived from sustainable or rapidly renewable sources to the extent possible.

The project would be constructed using recycled materials to the extent feasible.

Policy CE-A.10      Include features in buildings to facilitate recycling of waste generated by building occupants and associated refuse storage areas.

The project would employ recycling of waste where feasible. In accordance with City requirements, the project would provide receptacles for recyclable wastes.

Policy CE-A.11 Implement sustainable landscape design and maintenance.

The project would utilize landscape design that will employ sustainable practices, including minimizing water use and utilizing appropriate landscaping.

Consistency with these policies would ensure that the project will be consistent with the City of San Diego's General Plan goals of reducing the emissions of greenhouse gases.

### ***Significance of Impacts***

Emissions of GHGs were quantified for both construction and operation of the Watermark Project. Operational emissions were calculated assuming a "business as usual" operational scenario as well as an operational scenario with GHG reduction measures employed. Based on the analysis, quantifiable emission reductions that will be implemented through state and local requirements demonstrate that emissions will be reduced by more than 28.3% below "business as usual" levels. The Watermark Project would therefore be consistent with the goals of AB 32. Additionally, the project is consistent with the goal and policies of the City of San Diego General Plan. The proposed project would not result in a significant impact relative to plans, policies, or regulations aimed at reducing GHG emissions.

### ***Mitigation Measures***

The project does not result in a conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of greenhouse gases. No mitigation is required.

## 5.6 ENERGY

In the City of San Diego, energy, in the form of electricity and gas, is provided by San Diego Gas and Electric (SDG&E). Information contained in this section is based on information obtained from SDG&E. Please see Appendix M, *Letters/Responses to Service Providers*, for detailed information provided by SDG&E for the proposed project.

### 5.6.1 Existing Conditions

Energy is regulated by Title 24, Part 6, of California's Energy Efficiency Standards for Residential and Nonresidential Buildings. The Energy Efficiency Standards for Residential and Nonresidential Buildings were established in 1978 in response to a legislative mandate to reduce California's energy consumption. New standards went into effect in October 2005.

SDG&E, a subsidiary of Sempra Energy, provides natural gas and electricity service to the project site and the City of San Diego as a whole. SDG&E forecasts future natural gas and power consumption demand on a continual basis, primarily for installation of transmission and distribution lines. In situations where projects with large power loads are planned, this is considered together with other loads in the project vicinity, and electrical substations are upgraded as necessary. Direct impacts to electrical and natural gas facilities are addressed and mitigated by SDG&E at the time incoming development projects occur.

Appendix F of the CEQA Guidelines requires that EIRs include a discussion of the potential energy impacts of a proposed project, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. According to Appendix F, the means of achieving energy conservation corresponds to decreasing overall per capita energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources.

**Electricity.** The State of California produces approximately 82 percent of its electricity and imports the remaining 18 percent. The California Independent System Operator (ISO) governs the transmission of electricity from power plants to utilities. Electricity to San Diego County is transferred via 138 kilo volts (kV) lines at Camp Pendleton, and a 500 kV line near Jacumba. Additionally, there are four power plants within San Diego County: South Bay (Duke Energy) - 693 mega watts (MW), Encina (Cabrillo Power) - 965 MW, San Onofre Nuclear Generation Station (SCE) - 2,150 MW, and the Palomar Energy Power Plant, Escondido (SDG&E) - 550 MW that began operating in the summer 2006.

Electricity distribution lines in the project area are located underground. Each year, SDG&E allocates capital funds for the purposes of converting overhead electric distribution lines. Under provisions of Rule 20A established by the California Public Utilities commission, the City may designate major streets for undergrounding the overhead lines. In general, all new commercial, industrial, and residential developments are required to accept the underground service.



SDG&E has the capacity to meet the present demand for electrical service, and there are no service deficiencies in the existing distribution system (see Appendix M). In addition, a variety of energy conservation programs are provided by SDG&E to City residents and businesses. These programs include:

- Conducting surveys to determine energy use and recommending energy efficiency measures to reduce energy use
- Providing discounts for retrofitting lighting, refrigeration, and mechanical equipment with energy efficient technologies
- Incentives for using energy during non-peak hours to reduce peak-hours demand

Title 24 of the California Administrative Code sets efficiency standards for new construction, regulating energy consumed for heating, cooling, ventilations, water heating, and lighting. These building efficiency standards are enforced through the City's building permit process.

~~The City of San Diego Council Policy 900-14 encourages private sector developers to voluntarily participate in a program to conserve energy. Projects which meet the criteria of the Community Energy Partnership Program, such as compliance with the EPA Energy Star for Buildings Program, and which exceed minimum Title 24 requirements by a certain percentage can receive expedited review of ministerial plan checks as an incentive. Title 24 has mandatory measures for insulation, exterior doors, infiltration and moisture control, space conditioning, water heating and plumbing, and lighting.~~

SDG&E facilities surround the project site within public streets. There are existing electric lines undergrounded in Scripps Poway Parkway, Scripps Highlands Drive, and Scripps Gateway Court.

**Natural Gas.** Natural gas sources for the California include in-state sources (16 percent), Canada (28 percent), the Rockies (10 percent), and the Southwest (46 percent). Gas from outside sources enter the state through large high-pressure gas lines. These transmission lines feed natural gas storage areas located in Orange and northern Los Angeles counties, which serve all of southern California. From these storage facilities, high pressure gas transmission lines enter San Diego County from the north inland area (Rainbow area). A 30-inch transmission line veers to the coast, and a 16-inch line continues inland.

According to SDG&E, the current natural gas distribution system is in good operating condition and is adequate to meet the current demand. No improvements are planned at this time.

## 5.6.2 Impact Analysis

### *Thresholds of Significance*

The City of San Diego does not have significant thresholds for Energy, and CEQA Guidelines Appendix "G" does not contain a specific threshold relative to Energy. However, CEQA Guidelines Appendix "F" does provide some guidance in evaluating impacts associated with Energy. Based on the guidance provided in CEQA Guidelines Appendix F, for the evaluation of the project's potential impacts on energy, the following threshold will apply:

A project has the potential to have a significant effect on energy if it would generate a demand for energy (electricity and natural gas) that would exceed the planned capacity of energy suppliers.

### ***Issue 1***

*Would the construction and operation of the proposed project result in the use of excessive amounts of electrical power?*

### ***Issue 2***

*Would the proposed project result in the use of excessive amounts of fuel or other forms of energy (including natural gas, oil, etc.)?*

### ***Impact Analysis***

The project site has been graded in anticipation of build-out under the approved MedImpact project, and a portion of the MedImpact project has been constructed. Therefore, electricity and natural gas facilities exist at the project site to serve the proposed uses.

SDG&E has indicated that the current energy system would be sufficient to service the project, and that SDG&E will serve the project. A letter from SDG&E received on August 2, 2011 states SDG&E gas and electric services can be made available for the Watermark project (see Appendix M). No adverse effects to non-renewable energy resources are anticipated with development of the project site as proposed by the Watermark project. Furthermore, the project would not result in the use of excessive amounts of fuel or electricity and would not result in the need to develop additional sources of energy.

While energy use at the Watermark project would not be excessive, the project would incorporate several measures directed at minimizing energy use. The project's sustainable design features are presented in Table 5.6-1, *Watermark Project Sustainable Design Features*, below.

**Table 5.6-1. *Watermark Project Sustainable Design Features***

<b>SITE DESIGN</b> <ul style="list-style-type: none"> <li>At least one principal participant of the project team is a LEED Accredited Professional.</li> <li>Located within one-quarter-mile of one or more transit stops.</li> <li>Provide secure bicycle racks and/or storage.</li> <li>Use of materials with recycled content.</li> </ul>
<b>GRADING and CONSTRUCTION</b> <ul style="list-style-type: none"> <li>Create and implement an erosion and sediment control plan for all construction.</li> <li>Protect stored on-site or installed absorptive materials from moisture damage.</li> <li>Composite wood and agrifiber products will contain no added urea-formaldehyde resins.</li> <li>Individual lighting controls will be provided for a minimum of 90 percent of building occupants.</li> </ul>
<b>PARKING</b> <ul style="list-style-type: none"> <li><del>Size parking capacity to meet but not exceed minimum parking requirements.</del></li> <li>Provide preferred parking for carpools or vanpools.</li> <li>Place a minimum of 50 percent of parking spaces under cover.</li> </ul>
<b>EXTERIOR LIGHTING</b> <ul style="list-style-type: none"> <li>Design exterior lighting so that all site and building mounted luminaries produce a maximum initial luminance value no greater than 0.20 horizontal and vertical foot-candles at the site boundary and no greater than 0.01 horizontal foot-candles 15 feet beyond the site.</li> </ul>
<b>BUILDING DESIGN FEATURES</b> <ul style="list-style-type: none"> <li>Use water-conserving fixtures.</li> <li>Buildings designed to comply with Title 24 requirements.</li> </ul>

<ul style="list-style-type: none"> <li>• Zero use of CFC-based refrigerants.</li> <li>• Select refrigerants and HVAC&amp;R that minimize or eliminate the emission of compounds that contribute to ozone depletion and global warming.</li> <li>• Does not use fire suppression systems that contain ozone-depleting substances (CFCs, HCFCs, or Halons).</li> </ul>
<b>SOLID WASTE MANAGEMENT/RECYCLING</b> <ul style="list-style-type: none"> <li>• Provide easily accessible areas to serve buildings that are dedicated to the collection and storage of non-hazardous materials for recycling.</li> </ul>
<b>LANDSCAPE</b> <u>Irrigation</u> <ul style="list-style-type: none"> <li>• State of the art equipment that distributes water in controlled amounts and at controlled times to maximize water efficiency and optimize plant growth.</li> <li>• Irrigation systems control to allow water to be distributed to plant material with similar watering needs to avoid over/underwatering.</li> <li>• Use of weather and rain sensors to monitor current conditions and control the system accordingly.</li> <li>• Utilization of reclaimed water (when available) for irrigation minimizing the need for potable water in the landscape.</li> </ul>
<u>Planting</u> <ul style="list-style-type: none"> <li>• Grouping of plant material based on the water demands for the specific plant material while still achieving the overall design intent.</li> <li>• Selection of plant material its adaptability to the region and climate.</li> <li>• Careful and selective use of enhanced planting (lusher material and seasonal color requiring more water and maintenance) where they have the most impact on the user.</li> <li>• Use of native or low water/low maintenance material in outlying areas away from the general user.</li> <li>• Limited use of turf. Where use, selection of turf varieties for their durability, maintenance needs and low water consumption.</li> <li>• Use of trees throughout the project to provide shading to users and reduce heat gains on buildings and the heat island effect throughout the site.</li> <li>• Selection of mix of deciduous trees to allow shade in the summer and sun penetration in the cooler winter months.</li> </ul>
<u>Materials</u> <ul style="list-style-type: none"> <li>• Use of recycled materials, where appropriate.</li> <li>• Use of precast concrete pavers, decomposed granite and post consumer products.</li> <li>• All planting areas include a two-inch layer of a recycled organic mulch to maintain soil moisture, soil temperature and reduce weeding.</li> <li>• Selection of lighter colored hardscape materials to reduce the heat island effect.</li> </ul>

In addition to the energy efficient components provided in Table 5.6-1, the project would comply with the Uniform Building Code (UBC) and Title 24 requirements for building materials and insulation in order to reduce unnecessary loss of energy.

The project incorporates a selection of vertical landscape elements such as trees, large shrubs, and climbing vines to shade southern and western building façades to reduce heating in summer and increase solar heat gain in winter months.

### ***Significance of Impacts***

The project would increase demand for energy in the project area and SDG&E's service area. However, no adverse effects on non-renewable resources are anticipated. The project would follow UBC and Title 24 requirements for energy efficiency and would incorporate sustainable design features directed at reducing energy consumption.

### ***Mitigation Measures***

No significant impacts associated with energy would occur. Therefore, no mitigation measures are required.

## 5.7 NOISE

Ldn Consulting prepared a *Noise Analysis* (March 2, 2012), which examines the potential for noise effects of the Watermark project. The *Noise Analysis* focuses on the potential noise impacts associated with proposed development of Area A. A previous noise study was prepared for Area B, where the MedImpact facilities occur, as part of the Scripps Gateway EIR (LDR No. 92-0466; SCH No. 92101036). The previously prepared noise study and Scripps Gateway EIR are herein incorporated by reference. The noise analysis conducted for Area A of the Watermark project is summarized in this section, and the entire report is included as Appendix F to this EIR.

### 5.7.1 Existing Conditions

#### Acoustical Fundamentals

Noise is defined as unwanted or annoying sound which interferes with or disrupts normal activities. Exposure to high noise levels has been demonstrated to cause hearing loss. The individual human response to environmental noise is based on the sensitivity of that individual, the type of noise that occurs, and when the noise occurs.

Sound is measured on a logarithmic scale consisting of sound pressure levels known as a decibel (dB). The sounds heard by humans typically do not consist of a single frequency but of a broadband of frequencies having different sound pressure levels. The method for evaluating all the frequencies of the sound is to apply an A-weighting to reflect how the human ear responds to the different sound levels at different frequencies. The A-weighted sound level (dBA) adequately describes the instantaneous noise, whereas the equivalent sound level depicted as equivalent continuous sound level (Leq) represents a steady sound level containing the same total acoustical energy as the actual fluctuating sound level over a given time interval.

The CNEL is the 24 hour A-weighted average for sound, with corrections for evening and nighttime hours. The corrections require an addition of five decibels to sound levels in the evening hours between 7 PM and 10 PM and an addition of 10 decibels to sound levels at nighttime hours between 10 PM and 7 AM. These additions are made to account for the increased sensitivity during the evening and nighttime hours when sound appears louder.

A vehicle's noise level is derived from a combination of the noise produced by the engine, exhaust, and tires. The cumulative traffic noise levels along a roadway segment are based on three primary factors: the amount of traffic, the travel speed of the traffic, and the vehicle mix ratio or number of medium and heavy trucks. The intensity of traffic noise is increased by higher traffic volumes, greater speeds, and increased number of trucks.

Because mobile/traffic noise levels are calculated on a logarithmic scale, a doubling of the traffic noise or acoustical energy results in a noise level increase of 3 dBA. Therefore the doubling of the traffic volume, without changing the vehicle speeds or mix ratio, results in a noise increase of 3 dBA. Mobile noise levels radiate in an almost oblique fashion from the source and drop off at a rate of 3 dBA for each doubling of distance under hard site conditions and at a rate of 4.5 dBA for soft site conditions. Hard site conditions consist of concrete, asphalt and hard pack dirt while soft site conditions exist in areas having slight grade changes, landscaped areas and vegetation. On the other

hand, fixed/point sources radiate outward uniformly as it travels away from the source. Their sound levels attenuate or drop off at a rate of 6 dBA for each doubling of distance.

The most effective noise reduction methods consist of controlling the noise at the source, blocking the noise transmission with barriers. To be effective, a noise barrier must have enough mass to prevent significant noise transmission through it and be high enough and long enough to shield the receiver from the noise source. A safe minimum surface weight for a noise barrier is 3.5 pounds/square foot (equivalent to three-quarter-inch plywood), and the barrier must be carefully constructed so that there are no cracks or openings.

Barriers constructed of wood or as a wooden fence must have minimum design considerations as follows: the boards must be three-quarter-inch thick and free of any gaps or knot holes. The design must also incorporate either overlapping the boards at least one inch or utilize a tongue-and-groove design for this to be achieved.

#### ***On-Site Noise Impacts (Land Use Compatibility)***

Noise is one factor to be considered in determining whether a land use is compatible. Land use compatibility noise factors are presented in Table 5.7-1, *City of San Diego Noise Land Use Compatibility Chart*, which is referred to as Table K-4 within the *California Environmental Quality Act Significance Determination Thresholds for the City of San Diego*, January 2011. Compatible land uses are shaded, and incompatible land uses are unshaded. The transition zone between compatible and incompatible should be evaluated by the environmental planner to determine whether the use would be acceptable based on all available information and the extent to which the noise from the proposed project would affect the surrounding uses.

Additionally, if the project is proposed within the Airport Environs Overlay Zone (AEOZ) as defined in Chapter 13, Article 2, Division 3 of the San Diego Municipal Code, the potential exterior noise impacts from aircraft noise would not constitute a significant environmental impact. However, the City's *Significance Determination Thresholds* recommends that structures within an AEOZ must also follow the requirements as shown in Table 5.7-1.

#### ***Traffic Noise Increases (Off-Site)***

In accordance with CEQA, a project should not have a noticeable adverse impact on the surrounding environment. Community noise level changes greater than 3 dBA, or a doubling of the acoustic energy, are often identified as audible and considered potentially significant, while changes less than 1 dBA will not be discernible to local residents. In the range of one to 3 dBA, humans who are very sensitive to noise may perceive a slight change. For the purposes for this analysis, direct and cumulative roadway noise impacts would be considered significant if the project increases noise levels for a noise sensitive land use by 3 dBA CNEL and if the project increases noise levels above an unacceptable noise level per the City's General Plan along a roadway segment.



Table 5.7-1. City of San Diego Noise Land Use Compatibility Chart

Land Use Category	Exterior Noise Exposure (dBA CNEL)			
	60	65	70	75
<i>Open Space and Parks and Recreational</i>				
Community & Neighborhood Parks; Passive Recreation				
Regional Parks; Outdoor Spectator Sports, Golf Courses; Athletic Fields; Outdoor Spectator Sports; Water Recreational Facilities; Horse Stables; Park Maint. Facilities				
<i>Agricultural</i>				
Crop Raising & Farming; Aquaculture, Dairies; Horticulture Nurseries & Greenhouses; Animal Raising, Maintain & Keeping; Commercial Stables				
<i>Residential</i>				
Single Units; Mobile Homes; Senior Housing		45		
Multiple Units; Mixed-Use Commercial/Residential; Live Work; Group Living Accommodations <i>*For uses affected by aircraft noise, refer to Policies NE-D.2. &amp; NE-D.3.</i>		45	45*	
<i>Institutional</i>				
Hospitals; Nursing Facilities; Intermediate Care Facilities; Kindergarten through Grade 12 Educational Facilities; Libraries; Museums; Places of Worship; Child Care Facilities		45		
Vocational or Professional Educational Facilities; Higher Education Institution Facilities (Community or Junior Colleges, Colleges, or Universities)		45	45	
Cemeteries				
<i>Sales</i>				
Building Supplies/Equipment; Food, Beverages & Groceries; Pets & Pet Supplies; Sundries, Pharmaceutical, & Convenience Sales; Wearing Apparel & Accessories			50	50
<i>Commercial Services</i>				
Building Services; Business Support; Eating & Drinking; Financial Institutions; Assembly & Entertainment; Radio & Television Studios; Golf Course Support			50	50
Visitor Accommodations		45	45	45
<i>Offices</i>				
Business & Professional; Government; Medical, Dental & Health Practitioner; Regional & Corporate Headquarters			50	50

***Existing Noise Environment On-Site***

Noise measurements were taken June 30, 2011, in the afternoon hours using a Larson-Davis Model LxT Type 1 precision sound level meter, programmed, in "slow" mode, to record noise levels in A-weighted form. The sound level meter and microphone were mounted on a tripod, five feet above the ground, and equipped with a windscreen during all measurements. The sound level meter was calibrated before and after the monitoring using a Larson-Davis calibrator, Model CAL 150.

Monitoring location 1 (M1) was located roughly 705 feet from I-15 in the northern portion of the site where the existing upper pad exists. Monitoring location 2 (M2) was located in the center of the site at the lower pad area approximately 420 feet from I-15. The noise monitoring locations are shown graphically below.



The results of the noise level measurements are presented in Table 5.7-2, *Measured Ambient Noise Levels*. The noise measurements were monitored for a time period of one hour during heavy traffic conditions. The existing noise levels in the project area consisted primarily of traffic from I-15 with and two aircraft over flights during each measurement. The ambient Leq noise levels measured in the area of the project during the afternoon hours were found to be 67 to 68 dBA Leq. The statistical indicators Lmax, Lmin, L10, L50, and L90 are given for the monitoring location. As can be seen from the L90 data, 90 percent of the time the noise level is approximately 65 dBA from I-15.

Table 5.7-2. *Measured Ambient Noise Levels*

Measurement Identification	Description	Time	Noise Levels (dBA)					
			Leq	Lmax	Lmin	L10	L50	L90
M1	Upper Pad	3:50-4:50 p.m.	67.8	74.9	62.8	69.4	67.8	65.2
M2	Lower Pad	5:00-6:00 p.m.	67.0	72.2	62.6	68.5	66.7	64.9

Source: Ldn Consulting, Inc. June 30, 2011

#### ***Existing Site with Respect to MCAS Miramar Noise Contours***

The proposed project is located approximately 4.5 miles from MCAS Miramar and is located within the Air Station's Airport Influence Area. The project site is not within any of the noise contours due to infrequent aircraft over flights and the altitude the aircraft are operating at when passing near

the site. The project site location along with the noise contours from MCAS Miramar is shown in Figure 5.1-3, *MCAS Miramar Compatibility Map - Noise*. Noise from MCAS Miramar would not be expected to exceed 60 dBA CNEL.

### 5.7.2 Impact Analysis

#### *Thresholds of Significance*

The City of San Diego *Development Services Department Significance Determination Guidelines* (City of San Diego 2011) is used to determine whether project noise could have a significant impact. Thresholds are provided for traffic-generated noise, Federal Department of Housing and Urban Development (HUD)-funded projects and noise, airport noise, noise from adjacent stationary uses, impacts to sensitive wildlife, construction noise, and noise/land use compatibility. The relevant noise thresholds for the project are as provided below.

#### *Construction Noise*

~~Chapter 5, Article 9.5, Division 4 of Article 9.5~~ of the City of San Diego Municipal Code addresses the limits of disturbing or offensive construction noise. The Municipal Code states that with the exception of an emergency, it ~~should be~~ is unlawful to conduct any construction activity so as to cause, at or beyond the property lines of any property zoned residential, an average sound level greater than 75 decibels during the 12-hour period from 7 AM to 7 PM.

#### *Operational Noise*

The generation of noise for certain types of land uses could cause potential land use incompatibility. A project which would generate noise levels at the property line which exceed section 59.5.0401 of the City's Municipal Code is considered potentially significant, as identified in Table 5.7-3, *Sound Level Limits in Decibels (dBA)*.

**Table 5.7-3. Sound Level Limits in Decibels (dBA)**

Land Use	Time of Day	One-Hour Average Sound Level (decibels)
1. Single Family Residential	7 a.m. to 7 p.m.	50
	7 p.m. to 10 p.m.	45
	10 p.m. to 7 a.m.	40
2. Multi-Family Residential (Up to a maximum density of 1/2000)	7 a.m. to 7 p.m.	55
	7 p.m. to 10 p.m.	50
	10 p.m. to 7 a.m.	45
3. All other Residential	7 a.m. to 7 p.m.	60
	7 p.m. to 10 p.m.	55
	10 p.m. to 7 a.m.	50
4. Commercial	7 a.m. to 7 p.m.	65
	7 p.m. to 10 p.m.	60
	10 p.m. to 7 a.m.	60
5. Industrial or Agricultural	any time	75

The City's Significance Thresholds for determining interior and exterior noise impacts from traffic-generated noise are presented in table K-2 of the City's CEQA Significance Determination Thresholds. That table is presented below.

**Traffic Noise Significance Thresholds (dB(A) CNEL)**

Structure or Proposed Use that would be impacted by Traffic Noise	Interior Space	Exterior Useable Space <sup>1</sup>	General Indication of Potential Significance
Single-family detached	45 dB	65 Db	Structure or outdoor useable area <sup>2</sup> is < 50 feet from the center of the closest (outside) lane on a street with existing or future ADTs > 7500 <sup>3</sup>
Multi-family, schools, libraries, hospitals, day care, hotels, motels, parks, convalescent homes.	Development Services Department (DSD) ensures 45 dB pursuant to Title 24.	65 dB	
Offices, Churches, Business, Professional Uses	n/a	70 dB	Structure or outdoor usable area is < 50 feet from the center of the closest lane on a street with existing or future ADTs > 20,000
Commercial, Retail, Industrial, Outdoor Spectator Sports Uses.	n/a	75 dB.	Structure or outdoor usable area is < 50 feet from the center of the closest lane on a street with existing or future ADTs > 40,000.

<sup>1</sup> If a project is currently at or exceeds the significance thresholds for traffic noise described above and noise levels would result in less than a 3 dB increase, then the impact is not considered significant.

<sup>2</sup> Exterior usable areas do not include residential front yards or balconies, unless the areas such as balconies are part of the required usable open space calculation for multi-family units.

<sup>3</sup> Traffic counts are available from: San Diego Regional Association of Governments (SANDAG) Regional Economic Development Information System (REDI): <http://cart.sandag.cog.ca.us/REDI/> SANDAG Traffic Forecast Information Center: <http://pele.sandag.org/trfic.html>

Section 59.5.0401 of the Noise Ordinance sets a more restrictive operational exterior noise limit for the commercial uses of 65 dBA Leq for daytime hours of 7 a.m. to 7 p.m. and 60 dBA Leq during the noise sensitive nighttime hours of 7 p.m. to 7 a.m. Most of the project components will only operate during the daytime hours. However, a few may operate during nighttime or early morning hours and, therefore, the most restrictive and conservative approach is to apply the 60 dBA Leq nighttime standard at the property lines.

***Issue 1***

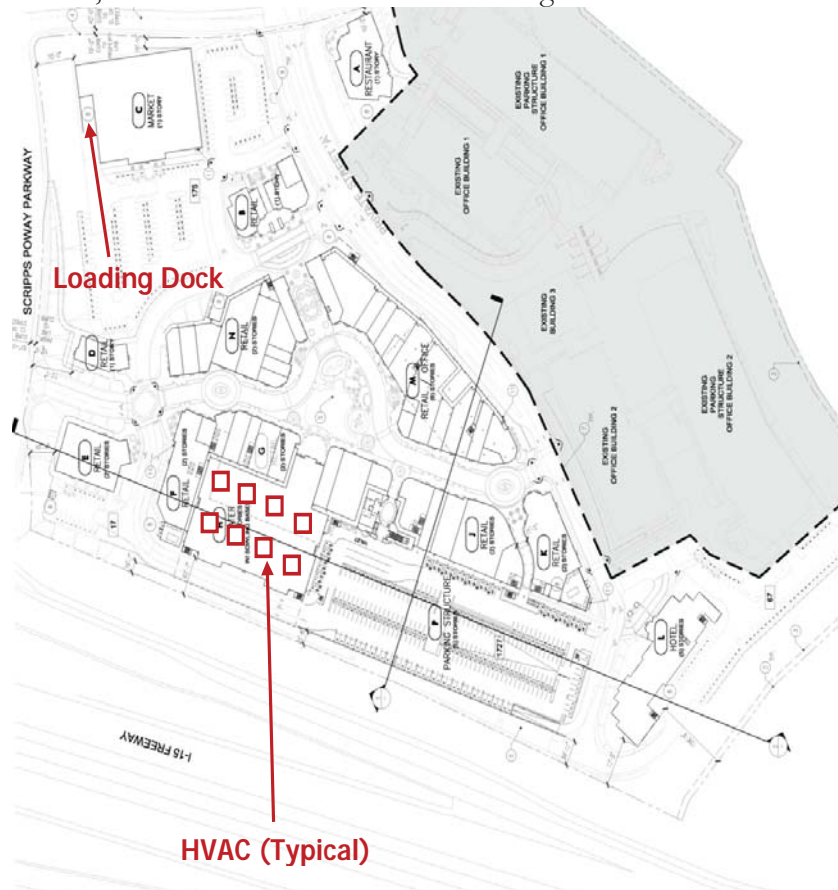
*Would the project result in or create a significant increase in the existing ambient noise levels?*

***Impact Analysis***

A significant increase in the existing ambient noise environment can be associated with temporary noise levels (i.e., construction), stationary noise sources (i.e., HVAC systems), and vehicular noise levels. For the Watermark project, vehicular noise would be generated by traffic accessing the project, as well as truck deliveries. The analysis of noise impacts under this issue question addresses operational noise – both from vehicles accessing the site as well as from stationary sources. For a discussion of temporary noise impacts (i.e., construction noise), please see the analysis under *Noise Issue 4*, below.

***Stationary Noise***

The proposed project would result in new stationary noise and noise associated with delivery operations. Noise from a fixed or point source drops off at a rate of 6 dBA for each doubling of distance. Which means a noise level of 70 dBA at five feet would be 64 dBA at ten feet and 58 dBA at 20 feet. A review of the proposed project indicates that noise sources such as large delivery trucks at the potential Market “Building C,” occasional small box truck deliveries at the other uses, and the roof mounted HVAC are the primary sources of stationary noise. The location of the noise sources including the loading dock and a typical HVAC layout are depicted in the graphic below. (See Figure 3-4, *Watermark Site Plan*, for the locations of various buildings referenced in this section.)





Each building within the Watermark project would have a series of HVAC units for temperature control and are discussed in more detail below. All project property lines surrounding the project site are considered commercial and would therefore be subject to the 65 dBA hourly noise standard during the daytime hours between 7 AM and 7 PM and a 60 dBA standard during the evening hours at the adjacent commercial property lines as shown in Table 5.7-2, above.

This section provides a detailed description of the reference noise level measurement results. It is important to note that the following projected noise levels assume the worst-case noise environment with the delivery trucks, drive-thru activities, and roof-top mounted HVAC all occurring at the same time. In reality, these noise levels would vary throughout the day. The mechanical ventilation may operate during nighttime hours and the delivery trucks may arrive during early evening or morning hours.

Each anticipated noise source is provided in more detail below to determine if direct noise impacts would occur. A cumulative noise level analysis with associated distances, noise reductions, and calculations of the proposed sources is provided at the end of this section along with a table showing the individual noise sources and their associated property line noise levels.

#### *Delivery Trucks – Off-Site*

In order to evaluate the truck delivery noise impacts, the analysis utilized reference noise level measurements taken at an Albertson's Shopping Center in San Diego, California, in 2011. The measurements include truck drive-by noise, truck loading/unloading, and truck engine noise. The unmitigated exterior noise levels for truck drive-by noise and truck engine noise were measured at 68.5 dBA Leq at a distance of 25 feet from the loading dock.

The on-site maneuvering associated with the delivery trucks consists of the truck entering the site, must likely from Scripps Highlands Drive, turning into the Market parking lot near Building B passing the front of the Market Building then backing into the loading dock. The truck is anticipated to leave the site in the same fashion exiting Scripps Highlands Drive onto Scripps Poway Parkway.

There is one loading dock proposed at the Market Building approximately 200 feet from the northern and eastern property lines. A truck would take approximately five minutes to drive in the site and position itself into a bay, 30 to 45 minutes to be unloaded or loaded, and another five minutes to exit the bay, secure doors, complete necessary paperwork, and drive out of the site. This equates to 40 to 55 minutes it would take for one truck to complete a delivery or pickup; therefore, only one truck at the most could deliver to this facility in one hour, assuming one loading bay. During the loading/unloading of the truck, the engine can only idle for five (5) minutes in compliance with State air quality requirements. Noise levels drop three decibels each time the duration of the source is reduced in half. Therefore, hourly truck noise level over a 15-minute period (five minutes at arrival, five minutes of idle, and five minutes at departure) would be reduced six decibels to 62.5 dBA at a distance of 25 feet based on the limited time of operation.

To be conservative, it was assumed the truck could be operating for the entire hour, even though in reality it would be closer to 15 minutes of the total time required during the delivery process; and a noise level of 68.5 dBA Leq was utilized. The loading dock is slightly over 200 feet from the nearest

property lines to the north and east, and the noise level reduction due to distance would be -18.1 dBA. This would result in an unshielded noise level of 50.4 dBA Leq which is below the 60 dBA Leq property line standard. The southern property line is located more than 430 feet from the loading dock the noise levels would be well below the City's standards. The western property line is located farther from proposed development; therefore no impacts are anticipated due to the increased distances. The noise level reductions due to distance to the nearest property lines are provided in Table 5.7-4, *Delivery Truck Noise Levels*.

**Table 5.7-4. Delivery Truck Noise Levels (Nearest Property Lines)**

<i>Property Line</i>	<i>Distance To Observer Location (Feet)</i>	<i>Hourly Reference Noise Level (dBA)</i>	<i>Noise Source Reference Distance (Feet)</i>	<i>Noise Reduction Due To Distance (dBA)</i>	<i>Noise Level At Property Line (dBA)</i>	<i>Quantity per hour</i>	<i>Property Line Cumulative Noise Level (dBA)*</i>
North	200	68.5	25	-18.1	50.4	1	50.4
South	430	68.5	25	-24.7	43.8	1	43.8
East	200	68.5	25	-18.1	50.4	1	50.4

\*Complies with the nighttime Noise Standard of 60 dBA.

No direct impacts are anticipated. Additionally, the remainder of the buildings on-site would have small (step side or box trucks) arriving during normal business hours to bring deliveries. Therefore, truck noise is anticipated to be lower than the City's noise standards and no impacts ~~were found~~ would occur.

#### ***Delivery Trucks – On-Site***

In order to evaluate the truck delivery noise impacts to the proposed on-site uses, the analysis used the same reference noise levels as stated above from the Albertson's Shopping Center in San Diego, California, in 2011. The on-site maneuvering associated with the delivery trucks would remain the same and the nearest affected proposed Building would be Building D to the west.

Using the same methodology above on the off-site analysis, it was assumed the truck could be operating for the entire hour even though in reality it would be closer to 15 minutes of the total time required during the delivery process and a noise level of 68.5 dBA Leq was utilized. The loading dock is located slightly over 280 feet from the nearest on-site use, Building B, to the west and there is a noise level reduction of -21.0 dBA due to distance. This would result in an unshielded noise level of 47.5 dBA Leq, which is below the most restrictive 60 dBA Leq standard. It should be noted: no outdoor usable areas are proposed near the delivery truck operations. Therefore, no impacts are anticipated on-site due to the delivery truck operations and no mitigation measures are required.

#### ***Air Conditioning Units – Off-Site***

Rooftop mechanical ventilation units (HVAC) would be installed on the proposed buildings. In order to evaluate the HVAC noise impacts, the analysis utilized reference noise level measurements taken at a shopping center in Encinitas, California, in 2010 for Buildings A, B, D through G, and I through N. The unshielded noise levels for these smaller HVAC units were measured to be 65.9 dBA Leq at a distance of six feet. The Market and Theater (Buildings C and H) are anticipated to have larger 18-ton units having a reference noise level as high as 76 dBA at three feet.

To predict the worst-case future noise environment, a continuous reference noise level of 65.9 dBA Leq at six feet was used to represent the roof-top mechanical ventilation system for Buildings A, B, D through G, and I through N; and a reference noise level of 76.0 dBA at three feet (or 70 dBA Leq at six feet) for the Market and Theater Buildings (C and H). Even though the mechanical ventilation system would cycle on and off throughout the day, this approach presents the worst-case noise condition. In addition, these units are designed to provide cooling during the peak summer daytime periods, and it is unlikely that all the units would be operating continuously.

The noise levels associated with the roof-top mechanical ventilation system would be limited with the proposed parapet walls on each building that would vary in height but would be roughly one foot higher than the HVAC units to shield them both visually and acoustically based upon the architectural plans. Hence, the parapet wall would block the line-of-sight and reduce the noise levels at the adjacent property lines. To be conservative, no noise level reductions from the parapet walls that are planned were accounted for in this noise analysis. The number of HVAC units that are proposed for each building is also provided below.

The noise level reductions due to distance from the property lines to the north, south, and east are provided in Tables 5.7-5, 5.7-6, and 5.7-7, respectively. The western property line is located farther from proposed development, along I-15; therefore no impacts are anticipated due to the increased distances.

**Table 5.7-5. Project HVAC Noise Levels (Northern Property Line)**

<i>Building</i>	<i>Distance To Observer Location (Feet)</i>	<i>Hourly Reference Noise Level (dBA Leq)</i>	<i>Noise Source Reference Distance (Feet)</i>	<i>Noise Reduction Due To Distance (dBA)</i>	<i>Noise Level At Property Line Single Unit (dBA Leq)</i>	<i>Quantity</i>	<i>Property Line Cumulative Noise Level (dBA Leq)*</i>
A	678	65.9	6	-41.1	24.8	6	32.6
B	470	65.9	6	-37.9	28.0	4	34.0
C	240	70.0	6	-32.0	38.0	6	45.7
D	200	65.9	6	-30.5	35.4	4	41.5
E	190	65.9	6	-30.0	35.9	6	43.7
F	380	65.9	6	-36.0	29.9	4	35.9
G	465	65.9	6	-37.8	28.1	4	34.1
H	460	70.0	6	-37.7	32.3	10	42.3
I	700	65.9	6	-41.3	24.6	4	30.6
J	870	65.9	6	-43.2	22.7	4	28.7
K	1,095	65.9	6	-45.2	20.7	4	26.7
L	1,300	65.9	6	-46.7	19.2	14	30.6
M	680	65.9	6	-41.1	24.8	10	34.8
N	355	65.9	6	-35.4	30.5	6	38.2
<b>Cumulative Noise Level from ALL HVAC Units</b>							<b>50.8</b>

\*Complies with the nighttime Noise Standard of 60 dBA.

**Table 5.7-6. Project HVAC Noise Levels (Southern Property Line)**

<i>Building</i>	<i>Distance To Observer Location (Feet)</i>	<i>Hourly Reference Noise Level (dBA Leq)</i>	<i>Noise Source Reference Distance (Feet)</i>	<i>Noise Reduction Due To Distance (dBA)</i>	<i>Noise Level At Property Line Single Unit (dBA Leq)</i>	<i>Quantity</i>	<i>Property Line Cumulative Noise Level (dBA Leq)*</i>
A	80	65.9	6	-22.5	43.4	6	51.2
B	370	65.9	6	-35.8	30.1	4	36.1
C	170	70.0	6	-29.0	41.0	6	48.7
D	560	65.9	6	-39.4	26.5	4	32.5
E	740	65.9	6	-41.8	24.1	6	31.9
F	750	65.9	6	-41.9	24.0	4	30.0
G	700	65.9	6	-41.3	24.6	4	30.6
H	790	70.0	6	-42.4	27.6	10	37.6
I	805	65.9	6	-42.6	23.3	4	29.4
J	850	65.9	6	-43.0	22.9	4	28.9
K	970	65.9	6	-44.2	21.7	4	27.7
L	1,100	65.9	6	-45.3	20.6	14	32.1
M	500	65.9	6	-38.4	27.5	10	37.5
N	555	65.9	6	-39.3	26.6	6	34.4
<b>Cumulative Noise Level from ALL HVAC Units</b>							<b>53.8</b>

\*Complies with the nighttime Noise Standard of 60 dBA.

**Table 5.7-7. Project HVAC Noise Levels (Eastern Property Line)**

<i>Building</i>	<i>Distance To Observer Location (Feet)</i>	<i>Hourly Reference Noise Level (dBA Leq)</i>	<i>Noise Source Reference Distance (Feet)</i>	<i>Noise Reduction Due To Distance (dBA)</i>	<i>Noise Level At Property Line Single Unit (dBA Leq)</i>	<i>Quantity</i>	<i>Property Line Cumulative Noise Level (dBA Leq)*</i>
A	125	65.9	6	-26.4	39.5	6	47.3
B	105	65.9	6	-24.9	41.0	4	47.1
C	240	70.0	6	-32.0	38.0	6	45.7
D	520	65.9	6	-38.8	27.1	4	33.2
E	610	65.9	6	-40.1	25.8	6	33.5
F	520	65.9	6	-38.8	27.1	4	33.2
G	455	65.9	6	-37.6	28.3	4	34.3
H	395	70.0	6	-36.4	33.6	10	43.6
I	320	65.9	6	-34.5	31.4	4	37.4
J	240	65.9	6	-32.0	33.9	4	39.9
K	60	65.9	6	-20.0	45.9	4	51.9
L	115	65.9	6	-25.7	40.2	14	51.7
M	110	65.9	6	-25.3	40.6	10	50.6
N	250	65.9	6	-32.4	33.5	6	41.3
<b>Cumulative Noise Level from ALL HVAC Units</b>							<b>58.7</b>

\*Complies with the nighttime Noise Standard of 60 dBA.

The proposed HVAC operational noise levels are in compliance with the City's daytime 65 dBA Leq property line standard and would also meet the most restrictive nighttime standard of 60 dBA Leq. No impacts are anticipated, and no mitigation is required. Additionally, most of the HVAC units

would be located farther from the southern property line as part of the proposed project. Therefore, the HVAC noise is anticipated to be lower than what is currently experienced at the residences to the south.

#### *Air Conditioning Units – On-Site*

In order to evaluate the HVAC noise impacts to the proposed on-site uses, the analysis used the same reference noise levels as stated above from the Shopping Center in Encinitas, California, in 2010. The unshielded noise levels for these smaller HVAC units were measured to be 65.9 dBA Leq at a distance of six feet. The Market and Theater (Buildings C and H) are anticipated to have larger 18-ton units having a reference noise level as high as 76 dBA at three feet.

To predict the worst-case future noise environment, a continuous reference noise level of 65.9 dBA Leq at six feet was used to represent the roof-top mechanical ventilation system for Buildings A, B, D-G, and I-N, and a reference noise level of 76.0 dBA at three feet (or 70 dBA Leq at six feet) for the Market and Theater Buildings (C and H). Even though the mechanical ventilation system will cycle on and off throughout the day, this approach presents the worst-case noise condition of continuous operation. In addition, these units are designed to provide cooling during the peak summer daytime periods, and it is unlikely that all the units will be operating continuously.

The noise levels associated with the roof-top mechanical ventilation system will be limited with the proposed parapet walls on each building that will vary in height but will be roughly one foot higher than the HVAC units to shield them both visually and acoustically based upon the architectural plans. Hence, the parapet wall will block the line-of-sight and reduce the noise levels at the adjacent property lines. To be conservative, no noise level reductions from the parapet walls that are planned were accounted for in this noise analysis.

It is possible to calculate the cumulative noise levels from the proposed project along the southern property line from each of the proposed noise sources. Although not all the noise sources are close enough to each other in distance or sound level to create a cumulative effect this method is considered ultra conservative in determining impact potential. The cumulative noise levels are calculated separately at the three nearest property lines and provided below in Table 5.7-8, *Cumulative Noise Levels*. These projections include the delivery truck noise and noise from the HVAC systems of all buildings.

**Table 5.7-8. Cumulative Noise Levels (Nearest Property Lines)**

Property Line	Delivery Truck Noise Level (dBA Leq)	HVAC Noise Levels (dBA Leq)	Property Line Cumulative Noise Level (dBA Leq)*
North	50.4	50.8	53.6
South	43.8	53.8	54.2
East	50.4	58.7	59.3

\*Complies with the nighttime Noise Standard of 60 dBA.



Based upon the property line noise levels determined above, none of the proposed noise sources directly or cumulatively exceeds the property line standards at the property lines. Therefore, the proposed development related operational noise levels comply with the daytime and nighttime noise standards at the residences. No impacts are anticipated, and no mitigation is required.

The worst-case on-site noise levels from the proposed HVAC units would occur at the ground level area between Buildings G, M, and N near the center of the site (please refer to Figure 3-4, *Watermark Site Plan*, for more details). The noise level reductions due to distance at the worst-case on-site location, near these buildings, are provided in Table 6-5. As can be seen in Table 5.7-9, *On-Site HVAC Noise Levels (Worst Case)*, the anticipated noise is 53.1 dBA, which is below the most restrictive 60 dBA Leq standard. Therefore, no impacts are anticipated and no mitigation is required. Because the building would be constructed to Title 24 standards, roof-mounted HVAC would have no impact on interior noise levels.

**Table 5.7-9. On-Site HVAC Noise Levels (Worst Case)**

<i>Building</i>	<i>Distance To Observer Location (Feet)</i>	<i>Hourly Reference Noise Level (dBA Leq)</i>	<i>Noise Source Reference Distance (Feet)</i>	<i>Noise Reduction Due To Distance (dBA)</i>	<i>Noise Level At Property Line Single Unit (dBA Leq)</i>	<i>Quantity</i>	<i>Property Line Cumulative Noise Level (dBA Leq)*</i>
G	135	65.9	6	-27.0	38.9	4	44.9
M	145	65.9	6	-27.7	38.2	10	44.2
N	145	65.9	6	-27.7	38.2	6	46.0
<b>Cumulative Noise Level from ALL HVAC Units</b>							<b>53.1</b>

\*Complies with the nighttime Noise Standard of 60 dBA.

The worst-case operational noise levels on-site occur at the ground level area between Buildings G, M, and N as identified above in the HVAC assessment. The addition of the delivery trucks to this area, which are located more than 580 feet away, would only cumulatively add less than 1 dBA to the HVAC noise levels. This would equate to a cumulative noise level of approximately 54 dBA, which is below the most restrictive 60 dBA threshold, and no impacts would occur.

### **Transportation Noise Levels**

#### ***On-Site Transportation Related Noise Levels***

The Federal Highway Administration's (FHWA) Traffic Noise Model (TNM), version 2.5, was used to predict existing and future peak hour traffic noise levels at specific receptor locations within the project site. Inputs to TNM include the three-dimensional coordinates of the roadways, noise receptors, topographic features, existing or planned barriers that would affect noise propagation, and vehicle volumes and speeds, by type of vehicle.

For purposes of evaluating future land use compatibility, peak hour traffic volumes were developed based on the maximum hourly traffic volume LOS C traffic conditions. The traffic mix used in the modeling was developed from Caltrans truck traffic data. Traffic speeds were taken from SANDAG's 2011 Transportation Forecast Information Center web site and were assumed to be actual traffic speeds for purposes of modeling.

Table 5.7-10, *Traffic Parameters*, presents the roadway parameters used in the analysis, including the average daily traffic volumes, vehicle speeds, and the hourly traffic flow distribution (vehicle mix) for the future conditions. The vehicle mix provides the hourly distribution percentages of automobiles, medium trucks, and heavy trucks for input into the noise model.

**Table 5.7-10. *Traffic Parameters***

Source	Roadway Type	Average Daily Traffic (ADT) <sup>1</sup>	Peak Hour Volume	Vehicle Speeds (MPH)	Vehicle Mix %		
					Auto	Medium Trucks	Heavy Trucks
Interstate 15	Freeway	387,000	19,000 <sup>2</sup>	65	95	3	2
Scripps Poway Parkway	Major	56,420	5,642	45	95	3	2
Scripps Highlands Drive	Local	22,700	2,270	35	95	3	2

<sup>1</sup> Source: SANDAG Traffic Prediction Model and Project Traffic Study, 2011.

<sup>2</sup> Caltrans 1,900 Peak Hour Vehicles per Lane at LOC C x 10 Lanes.

To predict the future noise levels, the preliminary site plans were used to identify pad elevations, roadway elevations, and the relationship between the noise source(s) and the receptor areas. Traffic was consolidated into a single lane for each directional flow of the roadways, and the roadway segments were extended beyond the observer locations. The build-out analysis was modeled utilizing the roadway parameters described in Table 5.7-9.

The only potential outdoor use areas at the project site are located at the proposed hotel use on the southern portion of the site and the pedestrian plaza in the central portion of Area A. Receptors were modeled five feet above grade level and coincide with potential exterior use areas associated with proposed hotel and pedestrian plaza of the proposed project. Second and third floor building façades were also modeled to determine potential interior noise impacts per Title 24 of the California Code of Regulations (CCR) and City requirements.

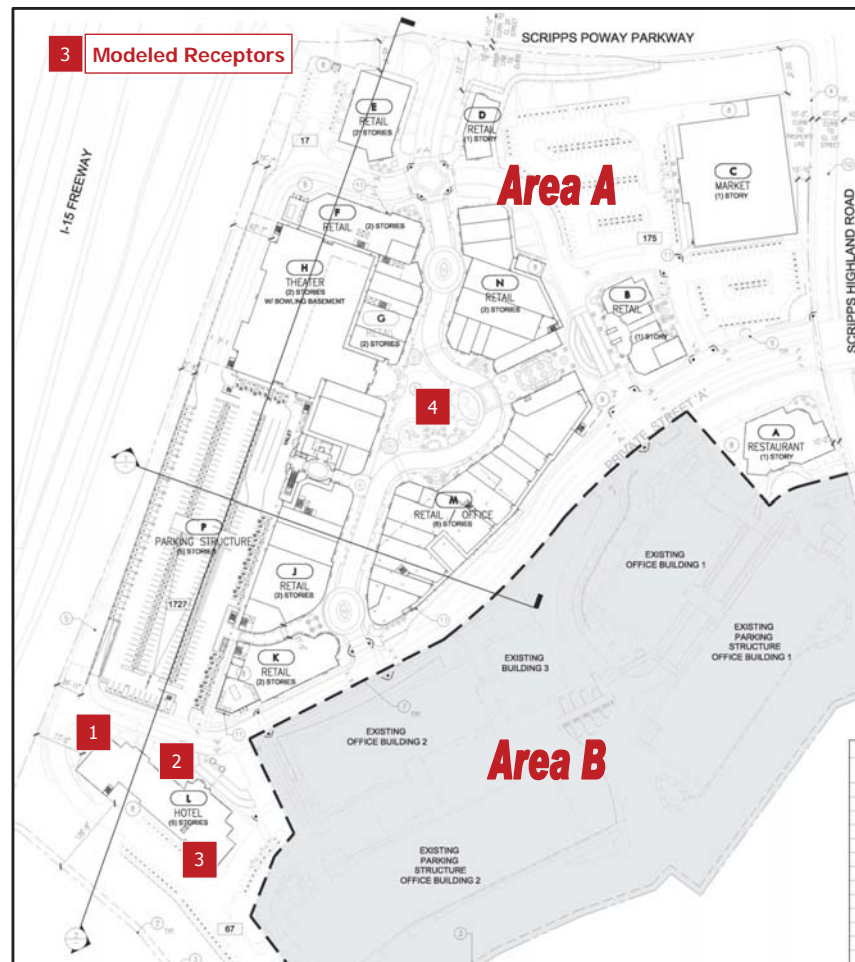
The modeling results are quantitatively shown in Table 5.7-11, *Future Exterior Noise Levels*. Receptor locations used for the hotel in the model are shown in the graphic below.

**Table 5.7-11. *Future Exterior Noise Levels***

Receptor Number	Receptor Location	Unmitigated Outdoor Noise Level (dBA CNEL)	Exterior Noise Thresholds (dBA CNEL)*	Mitigation Required (Feet)	Second Floor Façade Noise Levels (dBA Ldn)	Third Floor Façade Noise Levels (dBA Ldn)
1	West Side	63.5	65	0	69.1	74.0
2	North Side	64.6	65	0	67.0	70.9
3	Southeast Side	59.8	65	0	66.6	68.2
4	Pedestrian Plaza	59.0	75	0	n/a	n/a

<sup>1</sup> Interior Noise Study required per City Guidelines if building façade is above 60 dBA CNEL.

\* Exterior Mitigation required if noise levels are above City thresholds.



Modeled Sensitive Receptor Locations

Based upon these findings, the future noise levels at the ground level outdoor areas of the proposed hotel and pedestrian plaza are below the City of San Diego 65 dBA CNEL exterior noise level standard for transient housing and are below the City's 75 dBA CNEL standards for commercial retail uses. Therefore, and no impacts are anticipated, and no mitigation is required.

As is noted in Table 5.7-11, the exterior noise levels on the second and third floor façades of the proposed hotel would exceed the exterior noise threshold. This does not represent a significant impact, as no outdoor amenity space is required for hotel use by the Land Development Code and no outdoor space (such as balconies) is proposed. The hotel would be constructed such that interior noise levels meet City standards. Therefore, receptors would not be exposed to the significant noise levels.

The proposed project is near the MCAS Miramar overflight areas but is not within any of the noise contours, due to infrequent aircraft over flights and the altitude the aircraft are operating at when passing near the site. Noise from MCAS Miramar would not be expected to exceed 60 dBA CNEL and therefore no mitigation to any structures or sensitive land uses due to aircraft is required.

*Off-Site Project Related Transportation Noise Levels*

The off-site project related roadway segment noise levels projected in this report were calculated using the methods in the Highway Noise Model published by the Federal Highway Administration (FHWA Highway Traffic Noise Prediction Model, FHWA-RD-77-108, December, 1978). The FHWA Model uses the traffic volume, vehicle mix, speed, and roadway geometry to compute the equivalent noise level. A spreadsheet calculation was used which computes equivalent noise levels for each of the time periods used in the calculation of CNEL. Weighting these equivalent noise levels and summing them gives the CNEL for the traffic projections. The noise contours are then established by iterating the equivalent noise level over many distances until the distance to the desired noise contour(s) are found.

Because mobile/traffic noise levels are calculated on a logarithmic scale, a doubling of the traffic noise or acoustical energy results in a noise level increase of 3 dBA. Therefore, the doubling of the traffic volume, without changing the vehicle speeds or mix ratio, results in a noise increase of 3 dBA. Mobile noise levels radiate in an almost oblique fashion from the source and drop off at a rate of 3 dBA for each doubling of distance under hard site conditions and at a rate of 4.5 dBA for soft site conditions. Hard site conditions consist of concrete, asphalt, and hard pack dirt; while soft site conditions exist in areas having slight grade changes, landscaped areas, and vegetation.

Hard site conditions, to be conservative, were used to develop the noise contours and analyze noise impacts along all roadway segments. The future traffic noise model utilizes a typical, conservative vehicle mix of 95 percent autos, three percent medium trucks, and two percent heavy trucks for all analyzed roadway segments. The vehicle mix provides the hourly distribution percentages of automobile, medium trucks, and heavy trucks for input into the FHWA Model.

Community noise level changes greater than 3 dBA are often identified as audible and considered potentially significant, while changes less than 1 dBA will not be discernible to local residents. In the range of one to 3 dBA, residents who are very sensitive to noise may perceive a slight change. There is no scientific evidence available to support the use of 3 dBA as the significance threshold. Community noise exposures are typically over a long time period rather than the immediate comparison made in a laboratory situation. Therefore, the level at which changes in community noise levels become discernible is likely greater than 1 dBA; and 3 dBA appears to be appropriate for most people. For the purposes for this analysis, direct roadway noise impacts would be considered significant if the project increases noise levels for a noise sensitive land use by 3 dBA CNEL and if the project increases noise levels above an unacceptable noise level per the City's General Plan in the area adjacent to the roadway segment.

*Direct Traffic Noise Impacts*

To determine if direct off-site noise level increases associated with the development of the project would create noise impacts, the noise levels for the near term conditions were compared with the noise level increase projected for when the project is fully built. Utilizing the project's traffic assessment, noise contours were developed for the following traffic scenarios:

- Near Term: Traffic projections at the time the proposed project would open without project traffic.
- Near Term Plus Project: Projected Near Term conditions plus the added noise from the proposed project related traffic.

- Near Term vs. Near Term Plus Project: Comparison between the Near Term conditions without the project and Near Term traffic with the project

The noise levels and reference distances to the 65 dBA CNEL contours for the roadways in the vicinity of the project site are given in Table 5.7-12, *Near Term Noise Levels without Project*, for the Near Term Scenario and in Table 5.7-13, *Near Term + Project Noise Levels*, for the Near Term Plus Project Scenario.

**Table 5.7-12. Near Term Noise Levels without Project**

<i>Roadway Segment</i>	<i>ADT<sup>1</sup></i>	<i>Vehicle Speeds (MPH)<sup>1</sup></i>	<i>Noise Level at 50 Feet (dBA CNEL)</i>	<i>65 dBA CNEL Contour Distance (Feet)</i>
<b>Black Mountain Road</b>				
Mercy Road/Park Village Drive	31,737	45	74.4	437
Westview Parkway/Mercy Road	31,884	45	74.4	439
Capricorn Way/Westview Parkway	25,793	45	73.5	355
<b>Mercy Road</b>				
Black Mountain Road/Kika Court	16,662	45	71.6	230
Kika Court/Alemania Road	18,472	45	72.1	255
Alemania Road/I-15 SB Ramps	21,764	45	72.8	300
<b>Scripps Poway Parkway</b>				
I-15 NB Ramps/Scripps Highlands Drive	59,591	45	77.2	821
Scripps Highlands Drive/Scripps Summit Drive	50,628	45	76.4	698
Scripps Summit Drive/Spring Canyon Road	42,253	45	75.7	582
Spring Canyon Road/Scripps Creek Drive	39,284	45	75.3	541
Scripps Creek Drive/Cypress Canyon Road	35,805	45	74.9	493
Cypress Canyon Road/Vail Court	34,720	45	74.8	478
Angelique Street/Pomerado Road	36,008	45	75.0	496
Pomerado Road/Kirkham Road	41,405	45	75.6	571

<sup>1</sup> Source: Project Traffic study prepared by Urban Systems Associates, Inc. 5/11



Table 5.7-13. *Near Term + Project Noise Levels*

<i>Roadway Segment</i>	<i>ADT<sup>1</sup></i>	<i>Vehicle Speeds (MPH)<sup>1</sup></i>	<i>Noise Level @ 50- Feet (dBA CNEL)</i>	<i>65 dBA CNEL Contour Distance (Feet)</i>
<b>Black Mountain Road</b>				
Mercy Road/Park Village Drive	31,737	45	74.4	450
Westview Parkway/Mercy Road	31,884	45	74.4	457
Capricorn Way/Westview Parkway	25,793	45	73.5	371
<b>Mercy Road</b>				
Black Mountain Road/Kika Court	16,662	45	71.6	260
Kika Court/Alemania Road	18,472	45	72.1	287
Alemania Road/I-15 SB Ramps	21,764	45	72.8	338
<b>Scripps Poway Parkway</b>				
I-15 NB Ramps/Scripps Highlands Drive	70,716	45	77.9	974
Scripps Highlands Drive/Scripps Summit Drive	55,917	45	76.9	771
Scripps Summit Drive/Spring Canyon Road	44,624	45	75.9	615
Spring Canyon Road/Scripps Creek Drive	40,925	45	75.5	564
Scripps Creek Drive/Cypress Canyon Road	35,805	45	74.9	493
Cypress Canyon Road/Vail Court	34,720	45	74.8	478
Angelique Street/Pomerado Road	36,008	45	75.0	496
Pomerado Road/Kirkham Road	41,405	45	75.6	571

<sup>1</sup> Source: Project Traffic study prepared by Urban Systems Associates, Inc. 5/11

Table 5.7-14, *Near Term vs. Near Term + Project Noise Levels*, presents the comparison of the Near Term with and without project related noise levels.

Table 5.7-14. *Near Term vs. Near Term + Project Noise Levels*

<i>Roadway Segment</i>	<i>Existing Noise Level at 50 Feet (dBA CNEL)</i>	<i>Existing Plus Project Noise Level at 50 Feet (dBA CNEL)</i>	<i>Project Related Direct Noise Level Increase (dBA CNEL)</i>
<b>Black Mountain Road</b>			
Mercy Road/Park Village Drive	74.4	74.5	0.1
Westview Parkway/Mercy Road	74.4	74.6	0.2
Capricorn Way/Westview Parkway	73.5	73.7	0.2
<b>Mercy Road</b>			
Black Mountain Road/Kika Court	71.6	72.2	0.5
Kika Court/Alemania Road	72.1	72.6	0.5
Alemania Road/I-15 SB Ramps	72.8	73.3	0.5
<b>Scripps Poway Parkway</b>			
I-15 NB Ramps/Scripps Highlands Drive	77.2	77.9	0.7
Scripps Highlands Drive/Scripps Summit Drive	76.4	76.9	0.4
Scripps Summit Drive/Spring Canyon Road	75.7	75.9	0.2
Spring Canyon Road/Scripps Creek Drive	75.3	75.5	0.2
Scripps Creek Drive/Cypress Canyon Road	74.9	74.9	0.0
Cypress Canyon Road/Vail Court	74.8	74.8	0.0
Angelique Street/Pomerado Road	75.0	75.0	0.0
Pomerado Road/Kirkham Road	75.6	75.6	0.0

NOTE: Sound levels provided are worst-case and do not take into account topography or shielding from barriers.

The overall roadway segment noise levels would increase from 0.0 dBA CNEL to 0.7 dBA CNEL with the development of the project. The project does not create a direct noise increase of more than 3 dBA CNEL on any roadway segment. Therefore, the project's direct contributions to off-site roadway noise increases would not cause any significant impacts to any existing or future noise sensitive land uses.

### ***Significance of Impacts***

The future noise levels at the outdoor areas of the proposed hotel and pedestrian plaza are below the City of San Diego 65 dBA CNEL exterior noise level standard for transient housing and below the City's 75 dBA CNEL standards for commercial retail uses. Therefore, and no impacts are anticipated and no mitigation is required.

The proposed project is near the MCAS Miramar overflight area but is not within any of the noise contours due to infrequent aircraft over flights and the altitude the aircraft are operating at when passing near the site. Noise from MCAS Miramar would not be expected to exceed 60 dBA CNEL and therefore no mitigation to any structures or sensitive land uses due to aircraft.

The project does not create a direct impact of more than 3 dBA CNEL on any roadway segment. Therefore, the project's direct contributions to off-site roadway noise increases would not cause any significant impacts to any existing or future noise sensitive land uses.

### ***Mitigation Measures***

The proposed project would not result in significant operational noise impacts. No mitigation measures are required.

### ***Issue 2***

*Would the project result in the exposure of people to noise levels which exceed the City's adopted noise ordinance or are incompatible with the City's Land Use-Noise Compatibility guidelines?*

### ***Impact Analysis***

As evaluated under *Noise Issue 1*, the proposed project would not result in the exposure of people to noise levels that exceed the City's adopted noise ordinance or are incompatible with the City's noise guidelines. The future noise levels at the outdoor areas of the proposed hotel are below the City of San Diego 65 dBA CNEL exterior noise level standard for transient housing and below the City's 75 dBA CNEL standards for commercial retail uses. The proposed project is near MCAS Miramar overflight area, but is not within any of the noise contours due to infrequent aircraft over flights and the altitude the aircraft are operating at when passing near the site. Noise from MCAS Miramar would not be expected to exceed 60 dBA CNEL and therefore no mitigation to any structures or sensitive land uses due to aircraft. The project does not create a direct impact of more than 3 dBA CNEL on any roadway segment. Therefore, no significant noise impacts would result.

### ***Significance of Impacts***

The proposed project would not result in the exposure of people to noise levels that exceed the City's adopted noise ordinance or are incompatible with the City's noise guidelines. No significant noise impacts would occur.

***Mitigation Measures***

The proposed project would not result in significant noise impacts. No mitigation measures are required.

***Issue 3***

*Would the project cause exposure of people to current or future transportation noise levels which exceed standards established in the Transportation Element of the General Plan or an adopted airport Comprehensive Land Use Plan (CLUP)?*

***Impact Analysis***

As evaluated under *Noise Issue 1*, the project does not create a direct impact of more than 3 dBA CNEL on any roadway segment. The project would not cause exposure of people to current or future transportation noise levels which exceed standards established in the Transportation Element of the General Plan. Therefore, no significant noise impacts would result.

***Significance of Impacts***

The project would not cause exposure of people to current or future transportation noise levels which exceed standards established in the Transportation Element of the General Plan. Therefore, no significant noise impacts would result.

***Mitigation Measures***

The proposed project would not result in significant noise impacts. No mitigation measures are required.

***Issue 4***

*Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above existing without the project?*

***Impact Analysis***

Relative to the proposed project, a *potential or periodic increase in ambient noise levels* would be associated with construction that would occur with the project. Construction noise represents a short-term impact on the ambient noise levels. Noise generated by construction equipment includes haul trucks, water trucks, graders, dozers, loaders, and scrapers and can reach relatively high levels. Grading activities typically represent one of the highest potential sources for noise impacts. The most effective method of controlling construction noise is through local control of construction hours and by limiting the hours of construction to normal weekday working hours.

Division 4 of Article 9.5 of the City of San Diego Municipal Code addresses the limits of disturbing or offensive construction noise. The Municipal Code states that with the exception of an emergency, it should be unlawful to conduct any construction activity so as to cause, at or beyond the property lines of any property zoned residential, an average sound level greater than 75 decibels during the 12-hour period from 7 AM to 7 PM.

The U.S. EPA has compiled data regarding the noise generating characteristics of specific types of construction equipment. Noise levels generated by heavy construction equipment can range from 60 dBA to in excess of 100 dBA when measured at 50 feet. However, these noise levels diminish rapidly

with distance from the construction site at a rate of approximately 6 dBA per doubling of distance. For example, a noise level of 75 dBA measured at 50 feet from the noise source to the receptor would be reduced to 69 dBA at 100 feet from the source to the receptor, and reduced to 63 dBA at 200 feet from the source.

Using a point-source noise prediction model, calculations of the expected construction noise levels were completed. The essential model input data for these performance equations include the source levels of the equipment, source to receiver horizontal and vertical separations, the amount of time the equipment is operating in a given day (also referred to as the duty-cycle), and any transmission loss from topography or barriers.

Based on the EPA noise emissions, empirical data, and the amount of equipment needed, worst-case noise levels from the construction equipment operations that would occur during the base operations (grading/site preparation). The construction schedule identifies that grading activities would occur in a single phase all at the same time, with anticipated equipment including two dozers, two backhoes, several haul trucks, a roller compactor, and a water truck. Due to physical constraints and normal site preparation operations, most of the equipment would be spread out over the site. Based upon the proposed Site Plan, the majority of the grading operations would occur more than 300 feet from the nearest property lines, with the exception of the minor grading needed for the proposed southern portions of the site where grading would occur at an average distance as close as 110 to 180 feet from the existing uses to the south.

Therefore, the worst-case noise condition would occur when the construction equipment is working in close proximity to each other at an average distance of approximately 100 feet from the southern property line.

The noise levels utilized in this analysis are shown in Table 5.7-15, *Construction Noise Levels*. The amount of time the equipment would be utilized over an eight-hour period at this distance from the property line is also given and factored into the average noise level calculations. This is referred to as the duty-cycle.

**Table 5.7-15. Construction Noise Levels**

Construction Equipment	Quantity	Source Level @ 50-Feet (dBA)*	Duty Cycle (Hours/Day)	Cumulative Noise Level @ Property Line (dBA)
Haul Truck	4	75	4	78.0
Dozer	2	72	6	73.8
Backhoe	2	74	6	75.8
Roller Compactor	1	73	6	71.8
Water Truck	1	70	6	68.8
Cumulative Noise Levels @ 50-Feet (dBA)				81.7
Nearest Average Distance (Feet)				110
Anticipated Property Line Noise Level @ 110-Feet (dBA)				74.8

\*Source: U.S. Environmental Protection Agency (U.S. EPA), 1971 and Empirical Data

The construction equipment would be spread out over the project site from average distances of more than 300-feet from the nearest property lines with the exception of the minor grading needed for the proposed southern portions of the site where grading would occur at an average distance as close as 110 to 180 feet from the existing uses to the south. As can be seen in Table 5.7-14, with the equipment working closely together, the cumulative noise levels at an average distance of 110 feet would be 74.8 dBA at the nearest property line. Therefore, the average noise level would be below the 75 dBA threshold and no impacts are anticipated.

### ***Significance of Impacts***

The construction equipment would be spread out over the project site from average distances of more than 300 feet from the nearest property lines with the exception of the minor grading needed for the proposed southern portions of the site where grading would occur at an average distance as close as 110 to 180 feet from the existing uses to the south. Based upon the calculations of the noise levels when construction equipment is located near the property line, the average noise levels are anticipated not to exceed the 75-dBA standard; no impacts would occur. No mitigation measures are required.

### ***Mitigation Measures***

The proposed project would not result in substantial temporary or periodic increase in ambient noise levels in the project vicinity above existing without the project. No mitigation measures are required.



### 5.8 BIOLOGICAL RESOURCES

The project site has been graded in accordance with the approved Scripps Gateway project, leaving the project site essentially void of native habitats and sensitive species. Biological resources occurring on the project site were addressed as part of the EIR for the original Scripps Gateway project; and required mitigation measures have been implemented, fully mitigating impacts to biological resources that occurred on the project site (Scripps Gateway EIR, July, 16, 1998; LDR No. 92-0466; SCH No. 92101036).

As a follow-up to the biological report prepared as part of the original Scripps Gateway project, REC Consultants, Inc., prepared a *Biological Resources Report* (June 25, 2012), which evaluates the potential for impacts to biological resources associated with the Watermark project. The *Watermark Biological Resources Report* is summarized in this section, and the entire report is included as Appendix G to this EIR.

The Watermark project site was surveyed on September 13, 2011, by REC biologists between 10:00 a.m. and 3:00 p.m. Weather conditions were favorable, and all portions of the site were visited. All plant and animal species observed were noted, and all habitats were mapped. Special attention was paid to determining if any areas are supporting sensitive species or have reverted to sensitive habitat since the time the site was grading in accordance with existing project approvals.

#### 5.8.1 Existing Conditions

The proposed Watermark project site consists of approximately 35 acres of land that was previously analyzed as part of the Scripps Gateway EIR (see Table 5.8-1, *Summary of Existing Habitats*). As part of that project, impacts were identified, and mitigation has been implemented to fully mitigate those impacts.

The project site has subsequently been graded in accordance with existing project approvals, leaving the site as large graded pads essentially void of vegetation. Within Area B, previously approved Lot 1 has been developed as the first phase of the MedImpact campus, and previously approved Lot 2 is awaiting construction of other buildings approved as part of the MedImpact facilities. The proposed Watermark project would develop in Area A within the same grading envelope previously identified within the Scripps Gateway EIR.

The proposed project site consists of an existing paved cul-de-sac road (Scripps Gateway Court), graded pads, manufactured slopes and construction trailers, as well as an office building and parking structure existing on previously approved Lot 1. I-15 borders the western edge of the project, and commercial development is to the north and east. Open space occurs south of the project site.

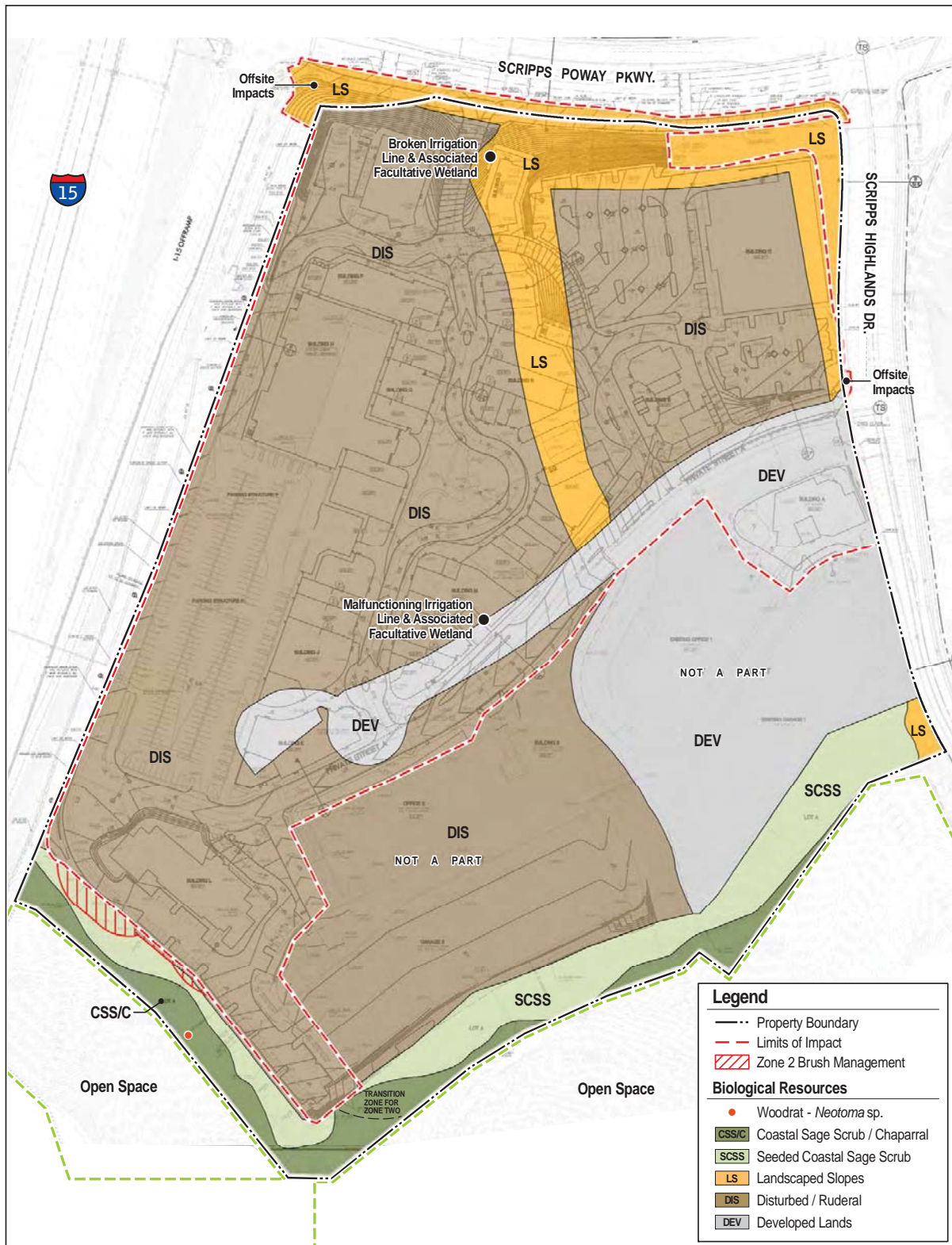


Figure 5.8-1. Existing Vegetation and Project Impacts

Since the site has been previously graded in accordance with existing approvals, a majority of the on-site and off-site conditions consists of non-native habitat, landscaped slopes, disturbed/ruderal areas, and developed lands. Additionally, impacts to biological resources that occurred on the project site have been mitigated as part of the original Scripps Gateway approvals. Within the southern portion of the project site (open space Lot A), seeded coastal sage scrub slopes and undisturbed coastal sage scrub/chaparral habitat exists. Within the disturbed and landscaped portion of the site, there are areas where post-disturbance colonizing native plants have germinated, but these do not occur in the numbers necessary to provide habitat nor do they serve the function of providing habitat. The property currently supports Developed, Landscaped, and disturbed/ruderal. Figure 5.8-1, *Existing Vegetation and Project Impacts*, shows the existing vegetation occurring on the project site.

### **Flora**

The project site supports developed lands, landscaped slopes, disturbed/ruderal areas, seeded coastal sage scrub slopes and undisturbed coastal sage scrub/chaparral. Table 5.8-1, *Summary of Existing Habitats*, summarizes acreages of existing habitats surveyed on-site and off-site.

**Table 5.8-1. Summary of Existing Habitats**

Habitat	Existing (acres)	
	Onsite	Offsite
Coastal Sage Scrub / Chaparral (CSS/C)	1.26	-
Seeded Coastal Sage Scrub (SCSS)	2.07	-
Landscaped Slopes (LS)	2.79	0.56
Disturbed / Ruderal (DIS)	21.63	-
Developed Lands (DEV)	6.64	0.01
TOTAL	34.39	0.57
	34.96	

The developed lands on-site include Lots 1 and 2 (Area B) of the existing MedImpact development and comprise of 6.64 acres of the project site. These areas include buildings, hardscape improvements, construction staging areas, and recently planted ornamental vegetation installed in conjunction with corresponding building permits. No vegetation grows in these areas.

The disturbed areas within Area A on-site would be considered ruderal and comprise 21.63 acres. These areas have been left fallow since the time original grading occurred in 2002 and are now sparsely vegetated, due to compaction of the soil. More than 50 percent of these areas are non-native broadleaf species and exotics, such as mustard, variety of clovers, and tocalote. The exotic species previously noted were not individually mapped, because they were found through-out the

disturbed/ruderal habitat area. While non-native grasses (such as brome grasses) and native post disturbance colonizing plants (such as deerweed and tarweed) occur in this area as well, they do not occur in such a large enough number to be considered a non-native grassland nor native habitat. Additionally, as stated above, all impacts to biological resources that occurred on the site prior to grading have been mitigated as part of the original Scripps Gateway project. It should also be noted, that although willow and mulefat were observed onsite, these individual specimens were observed near malfunctioning irrigation lines, shown on Figure 5.8-1, or areas of over irrigation and do not constitute a jurisdictional wetland (i.e. if irrigation were turned off these few individuals would not be able to sustain themselves). The malfunctioning irrigation lines were found on-site.

The previously graded/manufactured landscaped slopes, located both onsite and offsite (labeled "LS" on Figure 5.8-1), are currently irrigated and comprise of 3.35 of the project area. While a few native species have germinated on the landscaped slopes a majority of the habitat consists of non-native ornamentals, such as acacia, ice plant, pine trees and rock rose.

The southern portion of the property, within open space Lot A, consist of previously graded/manufactured slopes that have been seeded with coastal sage scrub (2.7 acres), as well as natural areas of coastal sage scrub/chaparral (1.3 acres). The slopes of seeded coastal sage scrub have germinated; however, not to a degree that would constitute as a high value habitat. The manufactured slopes of seeded coastal sage scrub consist of the following species: California sage brush, buckwheat, California bush sunflower, laurel sumac, sugar bush, pepper tree, acacia, iceplant, fennel and pampas grass. The natural areas of coastal sage scrub/chaparral are dominated by California sage brush, laurel sumac and buckwheat. Portions of these habitats are within the Brush Management Zone 2 (BMZ-2), previously approved in the Scripps Gateway EIR (LDR 92-9466) per TM Figure 3-2. The BMZ-2 is within Lot A.

Table 5.8-2, *Plant Species Observed On-Site*, includes a list of the plants found on the project site.

**Table 5.8-2. *Plant Species Observed On-Site***

Species Name	Common Name	Habitat
<i>Acacia sp.*</i>	Acacia	Landscaped Slopes
<i>Artemisia californica</i>	coastal sagebrush	CSS/Chaparral
<i>Avena fatua*</i>	wild oat	Disturbed/Ruderal
<i>Baccharis salicifolia</i>	mulefat, seep-willow	Disturbed/Ruderal
<i>Baccharis sarothroides</i>	broom Baccharis	Disturbed/Ruderal
<i>Brassica nigra*</i>	black mustard	Disturbed/Ruderal
<i>Bromus diandrus*</i>	ripgut grass	Disturbed/Ruderal
<i>Bromus hordeaceus*</i>	soft chess	Disturbed/Ruderal
<i>Bromus madritensis ssp. rubens*</i>	foxtail chess	Disturbed/Ruderal
<i>Carpobrotus edulis*</i>	iceplant	Landscaped Slopes
<i>Centaurea melitensis*</i>	tocalote	Disturbed/Ruderal
<i>Cistus creticus*</i>	pink rock rose	Landscaped Slopes
<i>Conyza sp.</i>	horseweed	Disturbed/Ruderal
<i>Cortaderia selloana*</i>	pampas grass	Disturbed/Ruderal and Landscaped
<i>Cynara cardunculus*</i>	artichoke thistle, cardoon	Disturbed/Ruderal
<i>Daucus pusillus</i>	rattlesnake weed	Disturbed/Ruderal

Table 5.8-2. *Plant Species Observed On-Site*

Species Name	Common Name	Habitat
<i>Deinandra fasciculata</i>	fascicled tarweed	Disturbed/Ruderal
<i>Erimocarpus setigerus</i>	doveweed	Disturbed/Ruderal
<i>Eriogonum fasciculatum</i> var. <i>fasciculatum</i>	California buckwheat	CSS/Chaparral
<i>Eschscholzia californica</i>	California poppy	Disturbed/Ruderal
<i>Eucalyptus</i> sp. *	Eucalyptus sp.	Landscaped slope
<i>Foeniculum vulgare</i> *	sweet fennel	Disturbed/Ruderal
<i>Gnaphalium californicum</i>	California everlasting	Disturbed/Ruderal
<i>Gutierrezia californica</i>	California matchweed	Disturbed/Ruderal
<i>Helianthus gracilentus</i>	slender sunflower	CSS/Chaparral
<i>Heteromeles arbutifolia</i>	toyon, Christmas berry	CSS/Chaparral
<i>Lactuca serriola</i> *	Prickly lettuce	Ruderal
<i>Lepidium densiflorum</i>	peppergrass	Disturbed/Ruderal
<i>Lessingia filaginifolia</i>	California aster	Disturbed/Ruderal
<i>Lotus purshianus</i> *	Spanish clover	Disturbed/Ruderal
<i>Lotus scoparius</i>	deer weed	Disturbed/Ruderal
<i>Malosma laurina</i>	laurel sumac	CSS/Chaparral
<i>Medicago polymorpha</i> *	Bur-clover	Disturbed/Ruderal
<i>Melinis repens</i> *	natal grass	Disturbed/Ruderal
<i>Nicotiana glauca</i> *	tree tobacco	Disturbed/Ruderal
<i>Platanus racemosa</i> (planted)	western sycamore	Landscaped Slopes
<i>Pinus</i> sp. *	Ornamental pine	Landscaped Slopes
<i>Rhus ovata</i>	sugar bush	CSS/Chaparral
<i>Salix gooddingii</i>	Goodding's black willow	Disturbed/Ruderal
<i>Salsola tragus</i> *	Russian thistle, tumbleweed	Disturbed/Ruderal
<i>Salvia mellifera</i>	black sage	CSS/Chaparral
<i>Senna spectabilis</i> *	Crown of gold tree	Landscaped Slopes
<i>Schinus molle</i> *	Peruvian pepper tree	Disturbed/Ruderal
<i>Tamarix</i> sp. *	tamarisk, salt-cedar	Disturbed/Ruderal
<i>Trifolium</i> sp. *	Clover	Disturbed/Ruderal

\* non-native species

***Fauna***

Wildlife use of the property is limited as would be expected from a previously graded parcel. Little diversity, shelter, or food is available for use by wildlife. Species observed are typical of urbanized or ruderal areas and lack the typical diversity observed in native habitats or non-native grasslands. Table 5.8-, *Wildlife Species Observed On-Site*, includes a list of the wildlife found on the project site.



Table 5.8-3. *Wildlife Species Observed On-Site*

Common Name	Species Name
<b>Invertebrates</b>	
Acmon blue	<i>Plebejus acmon</i>
Ant	Family Formicidae
Beefly	Family Bombyliidae
Behr's metalmark	<i>Apodemia mormo virgulti</i>
Bumble bee	<i>Bombus</i> sp.
Cabbage white	<i>Pieris rapae</i>
Cricket	Family Gryllidae
Dragonfly	Suborder Anisoptera
Funnel web weaver spider	<i>Family Agelenidae</i>
Grasshopper	Family Acrididae
Green bottle fly	<i>Phaenicia</i> sp.
Harford's sulfur	<i>Colias harfordi</i>
Honey bee**	<i>Apis mellifera</i>
Jumping spider	Salticidae
Snail	Class Gastropoda
Southern blue	<i>Glaucopsyche lygdamus australis</i>
Wasp	Order Hymenoptera
<b>Reptiles</b>	
Common side-blotched lizard	<i>Uta stansburiana</i>
Granite spiny lizard	<i>Sceloporus orcutti</i>
Western rattlesnake	<i>Crotalus viridis</i>
<b>Birds</b>	
American crow	<i>Corvus brachyrhynchos</i>
Anna's hummingbird	<i>Calypte anna</i>
European starling	<i>Sturnus vulgaris</i>
House finch	<i>Carpodacus mexicanus</i>
Mourning Dove	<i>Zenaida macroura</i>
Western scrub jay	<i>Aphelocoma californica</i>
<b>Mammals</b>	
California ground squirrel	<i>Spermophilus beecheyi</i>
Woodrat*	<i>Neotoma</i> sp.
* This species could potentially be the sensitive desert rat, according to their range description. See Figure 5.8-1, <i>Existing Vegetation and Project Impacts</i> , for location of woodrat observation. The woodrat was observed in an area outside the development footprint in the Coastal Sage Scrub habitat.	

### **Sensitive Resources**

The Scripps Gateway EIR identified several sensitive plant species on the original 242.1-acre site associated with that previously approved project. These included California adolphia (*Adolphia californica*), San Diego sagewort (*Artemisia palmeri*), prostrate spineflower (*Chorizanthe procumbens* var. *albiflora*), western dichondra (*Dichondra occidentalis*), San Diego barrel cactus (*Ferocactus viridescens*), coast scrub oak (*Quercus dumosa*), and ashy spike-moss (*Selaginella cinerascens*). None of these species or any

other sensitive plant species were observed on the Watermark project site, nor would any be expected to occur due to the alteration of the landform, landscaping, and compaction of soil.

The Scripps Gateway EIR also identified several wildlife species on the original 242.1-acre site. These included San Diego horned lizard (*Phrynosoma coronatum blainvillii*), California rufous crowned sparrow (*Aimophila ruficeps canescens*), California gnatcatcher (*Poliophtila californica*), mountain lion (*Felix concolor*), turkey vulture (*Cathartes aura*), and red-diamond rattlesnake (*Crotalus ruber*). None of these species or any sensitive wildlife species were observed on the Watermark project site. A rattlesnake was observed on-site; however, this was determined to be a western rattlesnake and not the red diamond rattlesnake. The likelihood of sensitive wildlife species occurring onsite is low due to the extreme nature of past disturbance and lack of native habitat. Additionally, as stated above, all impacts to biological resources that occurred on the site prior to grading have been mitigated as part of the original Scripps Gateway project. Due to the compaction of the soil, the site is not a conducive habitat for burrowing owl (*Athene cunicularia*).

Table 5.8-4, *Sensitive Species with the Potential to Occur On-Site*, includes a list of all the sensitive species with the potential to occur on-site.

**Table 5.8-4. Sensitive Species with the Potential to Occur On-site\***

Common Name	Species Name	Potential to Occur
Aphanisma	<i>Aphanisma blitoides</i>	Low; preferable habitat is not located onsite.
Coastal dunes milk vetch	<i>Astragalus tener var. titi</i>	Low; preferable habitat is not located onsite.
Encinitas baccharis	<i>Baccharis vanessae</i>	Low; shrub is conspicuous, not observed onsite.
Orcutt grass	<i>Orcuttia californica</i>	Low; no vernal pools onsite.
Otay Mesa mint	<i>Pogogyne nudiuscula</i>	Low; no vernal pools onsite.
Otay tarplant	<i>Hemizonia conjugens</i>	Low; preferable habitat is not located onsite.
San Diego ambrosia	<i>Ambrosia pumila</i>	Low; no vernal pools onsite.
San Diego mesa mint	<i>Pogogyne abramsii</i>	Low; no vernal pools onsite.
San Diego thornmint	<i>Acanthomintha ilicifolia</i>	Low; site appears to have been disturbed in the past, no vernal pools.
Shaw's agave	<i>Agave shawii</i>	Low; preferable habitat is not located onsite.
Short-leave live-forever	<i>Dudleya blochmaniae ssp. brevifolia</i>	Low; site appears to have been disturbed in the past and even though the site is close to Carmel Mountain, it was not observed in the survey.
Snake cholla	<i>Opuntia parryi var. serpentine</i>	Low; preferable habitat is not located onsite.
Variegated dudleya	<i>Dudleya variegata</i>	Low, site appears to have been disturbed in the past, no vernal pools.
*Includes all Narrow Endemic Species per ESL guidelines required by the City of San Diego.		

### 5.8.2 Impact Analysis

#### *Thresholds of Significance*

The City of San Diego *Development Services Department Significance Determination Thresholds* (City of San Diego 2011) is used to determine whether the project could have a significant impact on biological resources. A project could result in significant biological impacts if it would result in:

- A substantial adverse impact, either directly or through habitat modifications, 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 the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS);
- A substantial adverse impact on any Tier I Habitats, Tier II Habitats, Tier IIIA Habitats, or Tier IIIB Habitats as identified in the Biology Guidelines of the Land Development Manual or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS;
- A substantial adverse impact on wetlands (including, but not limited to, marsh, vernal pool, riparian, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfering substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, including linkages identified in the MSCP Plan, or impede the use of native wildlife nursery sites;
- A conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or State habitat conservation plan, either within the MSCP plan area or in the surrounding region;
- Introducing land use within an area adjacent to the MHPA that would result in adverse edge effects;
- A conflict with any local policies or ordinances protecting biological resources; or
- An introduction of invasive species of plants into a natural open space area.

#### *Issue 1*

*Would the project directly or indirectly impact any species identified as a candidate, sensitive, or special status species in the MSCP or other regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS)?*

#### *Impact Analysis*

The proposed project is the construction of buildings and associated roadways, parking lots, driveways and landscaping on the previously graded lots. All impacts to biological resources that occurred on the site prior to grading have been mitigated as part of the original Scripps Gateway project. The proposed project impacts, due to on-site and off-site grading and limits of work, would impact a total of 22.17 acres. The on-site impacts are 21.60 acres and off-site impacts are 0.57 acres. Table 5.8-3, *Summary of Impacts*, summarizes the project's impacts to biological resources occurring on the project site.

Table 5.8-5. *Summary of Impacts to Existing Habitats*

Habitat	Existing (acres)		Impacts (acres)		Brush Management Zone 2 (Impact Neutral) (acres)
	On-site	Off-site	On-site	Off-site	
Coastal Sage Scrub / Chaparral	1.26	-	-	-	-
Seeded Coastal Sage Scrub	2.07	-	-	-	0.11
Landscaped Slopes	2.79	0.56	2.26	0.56	-
Disturbed	21.63	-	16.76	-	0.03
Developed Lands	6.64	0.01	2.58	0.01	-
TOTAL	34.39	0.57	21.60	0.57	0.14
	34.98		22.17		

No sensitive native habitat or any sensitive plant or animal species were observed within areas that would be impacted by the proposed project. Coastal sage scrub/chaparral mix occurs within the southern portion of the project site, within open space Lot A, and BMZ-2. Brush management for the Watermark Project would extend over 0.14 acre of disturbed and seeded coastal sage scrub and would be considered impact-neutral based on the City's Biology Guidelines. Therefore, no significant direct impact to biological resources is expected to occur.

### ***Significance of Impacts***

The proposed project would not result in direct significant impacts to biological resources, as the proposed project would not impact native habitat or sensitive plant or wildlife species. Additionally, all impacts to biological resources that occurred on the site prior to grading have been mitigated as part of the original Scripps Gateway project.

### ***Mitigation Measures***

No significant impacts to sensitive biological resources are expected to occur from the proposed project. Therefore, no mitigation is required.

### ***Issue 2***

*Would the project result in a conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan, either within the MSCP plan area or in the surrounding region?*

### ***Impact Analysis***

The proposed project is not within or adjacent to the Multi Habitat Planning Area (MHPA), as part of the Multiple Species Conservation Plan (MSCP). The project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan, either within the MSCP plan area or in the surrounding region.

### ***Significance of Impacts***

The project would not conflict with the provisions of the ESL, MSCP, or other approved local, regional, or State habitat conservation plan.

### ***Mitigation Measures***

The project would not conflict with the provisions of the ESL, MSCP, or other approved local, regional, or State habitat conservation plan. No mitigation measures are required.



## 5.9 HISTORICAL RESOURCES (ARCHEOLOGICAL RESOURCES)

The project site has been graded in accordance with the approved Scripps Gateway project. Archaeological resources were addressed as part of the EIR for that project (Scripps Gateway EIR, July, 16, 1998; LDR No. 92-0466; SCH No. 92101036). Information contained in this section is based on the analysis conducted for the Scripps Gateway project and presented in Section F, *Archaeological Resources*, of the Scripps Gateway EIR.

### 5.9.1 Existing Conditions

The project area, including the project site, has been subject to a number of archaeological and historic site surveys conducted in 1979, 1987, 1989, and 1990. As part of the 1987 survey, site CA-SDI-10,780 was first recorded within the boundaries of the Scripps Gateway project site. CA-SDI-10,780 was initially described as two milling stations and possibly an associated temporary camp. In 1989, additional testing of site CA-SDI-10,780 was conducted. As a result of the testing, it was found that CA-SDI-10,780 represented a significant cultural resources as defined by CEQA Section 21083.2. Data recovery excavations were completed at the site as complete mitigation.

Additionally in 1989, a complete field survey of the Scripps Gateway project site was conducted. That survey resulted in the identification of one additional prehistoric site CA-SDI-13,186 and one additional prehistoric isolate (a mano).

Record searches have been conducted for the Scripps Gateway project at the San Diego Museum of Man Archaeological Research Center and at the San Diego State University South Coastal Information Center. The literature review and record check revealed that a total of 37 prehistoric and historic site areas (including separate loci and isolates) were previously identified within a one-mile radius of the Scripps Gateway project site. The site attributes indicated that, in the region, prehistoric settlement and subsistence activities were patterned and, therefore, predictable. The prehistoric sites include lithic artifact, temporary campsites, and specialized activity sites such as vegetable resources gathering and processing locations. Additionally, the records check revealed that one of the permanent use areas (CA-SDI-10,780) was located just within the eastern property boundary for Scripps Gateway – well outside the Watermark project site. No historic sites were recorded within the proposed project boundaries.

The Watermark project site is a completely graded site. Grading has occurred in accordance with approvals associated with the original Scripps Gateway project. Compacted Fill and Santiago Peak Volcanics form the geologic substructure for the site. (See Section 5.10, *Geologic Conditions*, for a discussion of the project site's geology.) Based on the graded conditions of the project site and the evidence provided by previous analyses conducted for the Scripps Gateway project, no historical resources occur within the Watermark site.

### 5.9.2 Impact Analysis

#### *Thresholds of Significance*

Federal, State, and local criteria have been established for the determination of historical resource significance. These criteria are used by the City of San Diego to determine significance under CEQA, as provided below.

#### *National Register of Historic Places*

The National Register criteria, contained in National Register Bulletin 16 (U.S. Department of the Interior 1986:1), state that:

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and

- A. that are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. that are associated with the lives of persons significant in our past; or
- C. that embody the distinctive characteristics of a type, period, or method of construction; or that represent the work of a master; or that possess high artistic values; or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. that has yielded, or may be likely to yield, information important in prehistory or history.

Criteria Considerations Exceptions: Ordinarily cemeteries, birthplaces, or graves of historical figures; properties owned by religious institutions or used for religious purposes; structures that have been moved from their original locations; reconstructed historic buildings; properties primarily commemorative in nature; and properties that have achieved significance within the past 50 years will not be considered eligible for the National Register. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within the following categories:

- A. A religious property deriving primary significance from architectural or artistic distinction or historical importance; or
- B. A building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or
- C. A birthplace or grave of a historical figure of outstanding importance, if there is no other appropriate site or building directly associated with his or her productive life; or
- D. A cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or
- E. A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or

- F. A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own historical significance; or
- G. A property achieving significance within the past 50 years, if it is of exceptional importance.

#### *California Environmental Quality Act*

For the purposes of CEQA, a significant historic resource is one which qualifies for the California Register of Historical Resources or is listed in a local historic register or deemed significant in a historical resource survey, as provided under Section 5024.1(g) of the Public Resources Code. A resource that is not listed in, or determined to be eligible for listing in, the California Register of Historical Resources, not included in a local register of historic resources, or not deemed significant in a historical resource survey may nonetheless be historically significant for purposes of CEQA. The City's determination of significance of impacts on historical and unique archaeological resources is based on the criteria found in Section 15064.5 of the State CEQA Guidelines.

#### *City of San Diego General Plan*

Significance criteria as outlined in the General Plan reflect a broad definition of historical, architectural, and cultural importance; a perspective of local, rather than state or national significance; and the belief that all aspects of history are potentially of equal importance.

#### *City of San Diego Historical Resources Register*

Any improvement, building, structure, sign, interior element and fixture, site, place, district, area, or object may be designated as historic by the City of San Diego Historical Resources Board if it meets any of the following criteria:

- A. Exemplifies or reflects special elements of the City's, a community's or a neighborhood's historical, archaeological, cultural, social, economic, political, aesthetic, engineering, landscaping, or architectural development;
- B. Is identified with persons or events significant in local, State, or national history;
- C. Embodies distinctive characteristics of a style, type, period, or method of construction or is a valuable example of the use of indigenous materials or craftsmanship;
- D. Is representative of the notable work of a master builder, designer, architect, engineer, landscape architect, interior designer, artist, or craftsman;
- E. Is listed on or has been determined eligible by the National Park Service for listing on the National Register of Historic Places or is listed or has been determined eligible by the California Office of Historic Preservation (OHP) for listing on the State Register of Historical Resources; or
- F. Is a finite group of resources related to one another in a clearly distinguishable way; or is a geographically definable area or neighborhood containing improvements which have a special character, historical interest, or aesthetic value; or which represent one or more architectural periods or styles in the history and development of the City.

*City of San Diego CEQA Significance*

As stated above, if a resource is not listed in, or determined eligible for listing in, the California Register, is not included in a local register, or is not deemed significant in a historical resource survey, it may nonetheless be historically significant. The significance of a historical resource is based on the potential for the resource to meet one or more of the criteria presented above, including the potential to address important research questions as documented in a site-specific technical report prepared as part of the environmental review process. Research priorities for the prehistoric, ethnohistoric, and historic periods of San Diego history are discussed in Appendix A (San Diego History) to the City's *Historical Resources Guidelines* and should be used in the determination of historical significance. As a baseline, the City of San Diego has established the following criteria to be used in the determination of significance under CEQA.

An archaeological site must consist of at least three associated artifacts/ecofacts (within a 40-square-meter area) or a single feature. Archaeological sites containing only a surface component are generally considered not significant, unless demonstrated otherwise. (Testing is required to document the absence of subsurface deposit.) Such site types may include isolated finds, bedrock milling stations, sparse lithic scatters, and shellfish processing stations. All other archaeological sites are considered potentially significant. The determination of significance is based on a number of factors specific to a particular site, including site size, type, and integrity; presence or absence of a subsurface deposit, soil stratigraphy, features, diagnostics, and datable material; artifact and ecofact density; assemblage complexity; cultural affiliation; association with an important person or event; and ethnic importance. The determination of significance for historic buildings, structures, objects, and landscapes is based on age, location, context, association with an important person or event, uniqueness, and integrity. A site will be considered to possess ethnic significance if it is associated with a burial or cemetery; religious, social, or traditional activities of a discrete ethnic population; an important person or event as defined by a discrete ethnic population; or the belief system of a discrete ethnic population.

*Non-Significant Resource Types*

Isolates consist of less than three artifacts/ecofacts within a 40-square-meter area. Sparse Lithic Scatters are identified and evaluated based on criteria from the OHP's California Archaeological Resource Identification and Data Acquisition Program; Sparse Lithic Scatters (February 1988). Isolated Bedrock Milling Stations are defined as having no associated site within a 40-meter radius and lacking a subsurface component. Shellfish Processing Sites are defined as containing a minimal amount of lithics (i.e. less than five or six) and no subsurface deposit. Historic buildings, structures, objects, and landscapes are generally not significant if they are less than 45 years old. A non-significant building or structure located within a historic district is by definition not significant. Resources found to be non-significant as the result of a survey and assessment will require no further work beyond documentation of the resources (including site records) and inclusion in the survey and assessment report.

***Issue***

*Would the project result in an alteration, including adverse physical or aesthetic effects, and/or the destruction of a prehistoric or historic building (including an architecturally significant building, structure, object, or site)?*

***Impact Analysis***

No historic or prehistoric resources have been encountered on the Watermark project site. The records searches conducted for the original Scripps Gateway project did not reveal any resources on the project site, and cultural resources that occurred in the project area have been adequately mitigated with the original Scripps Gateway project. Additionally, the project site has been graded in accordance with previous Scripps Gateway approvals, leaving the project site in a completely altered and not natural condition. Therefore, significant impacts associated with historical resources (archeological resources and historic resources) would not occur.

***Significance of Impacts***

No cultural resources have been identified on the project site. Additionally, the project site has been graded in accordance with previous project approvals associated with the Scripps Gateway project, leaving the Watermark project site in a completely altered state. The Watermark project would not result in significant impacts to historical resources.

***Mitigation Measures***

No impacts to historical resources would occur as a result of the Watermark project. No mitigation measures are recommended.





## 5.10 GEOLOGIC CONDITIONS

GEOCON Inc. conducted a *Geotechnical Investigation* for the Watermark project. The results of that investigation are presented in this section. The complete *Update Geotechnical Investigation*, dated February 27, 2009, is included in Appendix I to this EIR.

### 5.10.1 Existing Conditions

The project site has been graded in accordance with the approvals for the Scripps Gateway project. As shown in Figure 5.3-1, *Current Conditions Aerial*, the previous grading operation consisted of cuts and fills to create the current, sheet-graded conditions across the development pads on the site. The western half of the site consists of a northwest sloping sheet-graded pad. Two elevated sheet graded pads have been constructed along the eastern portion of the site. Cut and fill slopes are constructed along the perimeter and interior of the site with a maximum height of approximately 65 feet and 50 feet, respectively. A cut/fill slope occurs in the western portion of existing previously approved Lot 6 that consists of approximately 25 feet of fill over 20 feet of formational bedrock. Grading along the western property line consists of a fill to create a relatively level surface against a Caltrans right-of-way for the Scripps Poway Parkway off-ramp. Previous grading on previously approved Lots 2 through 6 resulted in large sheet graded pads underlain by soil, soil-rock fill, and rock fill to depths ranging from zero feet at the cut/fill contact to approximately 52 feet near the northwest corner of the property.

Additional grading has occurred on previously approved Lot 1 for the construction of the MedImpact office building and parking structures. Previously approved Lot 1 is underlain by compacted fills with maximum depth of approximately 20 feet. Grading on previously approved Lot 1 consisted of minor cuts and fills to achieve pad grade.

### Soil and Geologic Conditions

The project site is underlain by compacted fill and Santiago Peak Volcanics. A description of each of these units is provided below. The approximate extent of each of the soil and geologic units is shown in Figure 5.10-1, *Geologic Map*.

#### *Compacted Fill*

Compacted fill placed during the previous grading activities exists throughout the site. Fill thickness across the site ranges from zero feet at the cut/fill contact to approximately 52 feet below existing grade. The fill generally consist of silty to clayey sand, frequently with gravel, cobble, and boulders generated from blasting operation the metavolcanic rock. The near-surface soils (material within approximately three feet of existing grade) generally consists of very low to low expansive materials. According to the *Update Geotechnical Investigation*, the compacted fills are suitable for support of development proposed by the Watermark project in their present condition.

#### *Santiago Peak Volcanics (Jsp)*

Jurassic-age metavolcanic Santiago Peak Volcanics formation is exposed at-grade in the central portion of previously approved Lot 6, at the toe of the existing slope on the west side of previously approved Lot 6, and along the southern portion of previously approved Lots 2 and 3. This unit varies greatly in degree of weathering from highly weathered rippable materials to fresh, hard, non-rippable rock.

Zones of hydrothermally altered rock were noted during previous grading activities. Grading to the current site configuration required blasting where deep cuts were made. The highly weathered portions of the Santiago Peak Volcanics consists generally of low expansive, silty, coarse-grained sand and/or gravel with angular to subangular cobble or boulders.

The more recent grading of previously approved Lot 1 for the MedImpact office building and parking structure encountered hard rock requiring blasting at depths of one to four feet. Some rock could be excavated to depths of approximately ten feet. Hard rock requiring blasting or specialized rock breaking techniques should be expected in the Santiago Peak Volcanics. According to the *Update Geotechnical Investigation*, the Santiago Peak Volcanics is considered suitable for support of additional structural fill or proposed structures associated with development of the Watermark project.

### **Seismic and Geologic Conditions**

#### ***Faulting and Seismicity***

According to the *City of San Diego Seismic Safety Study, Geologic Hazards and Faults*, the Watermark project site is categorized as Zone 53: *level or sloping terrain, unfavorable geologic structure, and low to moderate risk*. Previous mass grading of the project site has alleviated any unfavorable conditions, resulting in stable slopes and suitable conditions for the construction and support of the proposed development.

There are no active faults crossing the site. Eight known active faults are located within a radius of 50 miles from the project site. The nearest known active fault is the Rose Canyon Fault, located approximately ten miles east of the project site and is the dominant source of potential ground motion for the area. Earthquakes that might occur on the Rose Canyon Fault Zone or other faults within the southern California and northern Baja California areas are potential generators of significant ground motion at the site. The estimated deterministic maximum earthquake and peak ground acceleration for the Rose Canyon Fault are 7.2 and 0.24 g, respectively.

The California Geologic Survey (CGS) provides a computer program that calculates the ground motion for a ten percent of probability or exceedence in 50 years based on the average value of several attenuation relationships. Table 5.10-1, *Probabilistic Site Parameters for Selected Faults (California Geologic Survey)*, presents the calculated results for ground motion in the region based on substructure type.

**Table 5.10-1. Probabilistic Site Parameters for Selected Faults**  
(California Geologic Survey)

Calculated Acceleration (g) Firm Rock	Calculated Acceleration (g) Soft Rock	Calculated Acceleration (g) Alluvium
0.23	0.26	0.30

Source: *Probabilistic seismic hazards mapping ground Motion page, CGS website.*

While listing peak accelerations is useful for comparison of potential effects of fault activity in a region, other considerations are important in seismic design, including the frequency and duration of motion and the soil conditions underlying the site. Seismic design of the structure should be evaluated in accordance with the California Building Code (CBC) guidelines.



Figure 5.10-1. Geologic Map





***Liquefaction***

Soil liquefaction is limited to granular soil deposits located below the water table, which are in a relatively loose, unconsolidated condition at the time of a large earthquake. Since the fill on the project site is relative dense and above the permanent groundwater table, the potential for liquefaction of the site is very low.

***Ground Rupture***

The potential for ground rupture is considered to be very low, due to the absence of active faulting at the project site.

***Seiches and Tsunamis***

The potential of seiches to occur is very low, due to the absence of a nearby body of water. The potential for tsunamis to occur at the site is also very low, due to the elevation of the site and the distance from the coastline.

**5.10.2 Impact Analysis*****Thresholds of Significance***

Based on the City of San Diego's *Significance Determination Guidelines under the California Environmental Quality Act* for impacts to geology, significance of impacts associated with geologic conditions would be determined on a case-by-case basis. Therefore, for purposes of this EIR, criteria contained in CEQA Guidelines Appendix G – *Environmental Checklist Form* – was used to determine significance of impacts associated with the Watermark project.

Based on CEQA Guidelines Appendix G, a project may result in a significant impact if it meets one or more of the following criteria:

- If the project would expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault.
  - Strong seismic ground shaking.
  - Seismic-related ground failure, including liquefaction.
  - Landslides.
- If the project would result in substantial soil erosion or the loss of topsoil.
- If the project is located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.
- If the project would be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.
- If the project would have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

***Issue 1***

*Would the proposed project expose people or structures to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards?*

***Impact Analysis***

The project proposes to develop a mixed-use retail commercial and office development on a project site that has been graded in accordance with an approved subdivision map. Previous grading on previously approved Lots 2 through 6 resulted in large sheet graded pads underlain by soil, soil-rock fill, and rock fill to depths ranging from zero feet at the cut/fill contact to approximately 52 feet near the northwest corner of the property. Additional grading has occurred on previously approved Lot 1 for the construction of the MedImpact office building and parking structures.

Compacted fill placed during the previous grading activities exists throughout the site. Fill thickness across the site ranges from zero feet at the cut/fill contact to approximately 52 feet below existing grade. The fill generally consist of silty to clayey sand, frequently with gravel, cobble, and boulders generated from blasting operation the metavolcanic rock. The near-surface soils (material within approximately three feet of existing grade) generally consists of very low to low expansive materials. According to the *Update Geotechnical Investigation*, the compacted fills are suitable for support of development proposed by the Watermark project in their present condition. No significant impacts associated with the site's geology would occur.

***Significance of Impacts***

The proposed project would not expose people or property to potentially substantial effects including the risk of life, injury, or death due to hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazard. However, with implementation of recommendations included within the *Update Geotechnical Investigation* conducted for the Watermark project, as well as adherence with appropriate engineering design and construction measures to meet CBC standards, impacts to people or structure would not result. No significant environmental impacts would occur.

***Mitigation Measures***

No significant impacts would occur. Therefore, no mitigation measures are required.

***Issue 2***

*Would the project result in a substantial increase in wind or water erosion of soils, either on or off the site?*

***Impact Analysis***

The project proposes development of the approximately 34.39-acre site (with 22.42 acres being rezoned and developed as a mix of office and commercial and 11.97 acres remaining as the MedImpact office complex) with structures, hardscape, driveways, parking lots and parking structures, and extensive landscaping. As presented in Section 5.12, *Hydrology/Water Quality*, drainage for the site would be adequately controlled such that substantial runoff would not occur, and storm drains have been sized to handle storm water runoff. The project would not result in a substantial increase in wind or water erosion. No significant impacts would occur.

***Significance of Impacts***

The proposed project would not result in a substantial increase in wind or water erosion of soils, either on or off the site. Adherence to erosion control standards in the City's grading ordinance, as well as implementation of BMPs required by the project's SWPPP, would ensure that impacts would not occur. No significant environmental impacts would occur.

***Mitigation Measures***

No significant impacts would occur. Therefore, no mitigation measures are required.

***Issue 3***

*Would the project be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in an on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?*

***Impact Analysis***

According to the *City of San Diego Seismic Safety Study, Geologic Hazards and Faults*, the Watermark project site is categorized as Zone 53: *level or sloping terrain, unfavorable geologic structure, and low to moderate risk*. Previous mass grading of the project site has alleviated any unfavorable conditions, resulting in stable slopes and suitable conditions for the construction and support of the proposed development. There are no active faults crossing the site. The project is not located on a geologic unit or soil that is unstable. Significant impacts would not result.

***Significance of Impacts***

The project would not result in significant impacts to geology or soils, and would not be subject to seismic conditions that are unlike other areas of the region. Implementation of appropriate building design measures per CBC standards would ensure that impacts would not result. No significant impacts associated with the site's geologic conditions would result.

***Mitigation Measures***

No significant impacts associated with the site's geologic conditions would result. No mitigation measures are required.



### 5.11 PALEONTOLOGICAL RESOURCES

The analysis presented in this section evaluates the potential for impacts to paleontological resources based on existing geologic formations that underlay the project site. Refer to Section 5.10, *Geologic Conditions*, for a discussion of the geologic formations that could be affected by the project, and Figure 5.10-1, *Geologic Map*, for the location of geologic formations. A Final Paleontological Mitigation Report was prepared for the Scripps Gateway EIR; this report did not identify any resource potential from the Watermark project site. The *Final Paleontological Mitigation Report – Scripps Gateway* is included in Appendix S of this EIR.

#### 5.11.1 Existing Conditions

Paleontological resources, or fossils, are the remains and/or traces of prehistoric plant and animal life. Fossils provide direct evidence of ancient organisms and document the patterns of organic evolution and extinction that have characterized the history of life. Fossil remains, such as bones, teeth, shells, and wood, are found in the geologic deposits (sedimentary rock formations) within which they were originally buried in deep bedrock layers of sandstone, mudstone, or shale. Paleontological resources contain not only the actual fossil remains, but also the localities where those fossils are collected and the geologic formations containing the localities.

The potential for fossil remains at a location can be predicted through previous correlations that have been established between the fossil occurrence and the geologic formations within which they are buried. For this reason, knowledge of the geology of a particular area and the paleontological resource sensitivity of particular rock formations make it possible to predict where fossils will or will not be encountered.

Paleontological resource sensitivity is typically rated from high to zero depending upon the impacted formations. The sensitivity of the paleontological resource determines the significance of a paleontological impact. The specific criteria applied for each sensitivity category are summarized below.

- **High Sensitivity** - High sensitivity is assigned to geologic formations known to contain paleontological localities with rare, well-preserved, critical fossil materials for stratigraphic or paleoenvironmental interpretation, and fossils providing important information about the paleobiology and evolutionary history (phylogeny) of animal and plant groups. Generally speaking, highly sensitive formations produce vertebrate fossil remains or are considered to have the potential to produce such remains.
- **Moderate Sensitivity** - Moderate sensitivity is assigned to geologic formations known to contain paleontological localities with poorly preserved, common elsewhere, or stratigraphically unimportant fossil material. The moderate sensitivity category is also applied to geologic formations that are judged to have a strong, but unproven potential for producing important fossil remains (Bay Point Formation).
- **Low Sensitivity** - Low sensitivity is assigned to geologic formations that, based on their relatively youthful age and/or high-energy depositional history, are judged unlikely to



produce important fossil remains. Typically, low sensitivity formations produce poorly-preserved invertebrate fossil remains in low abundance (Quaternary Alluvium).

- **Zero Sensitivity** - Zero sensitivity is assigned to geologic formations that are entirely igneous in origin and therefore have no potential for producing fossil remains. Artificial fill materials are also placed in this category.

As described in Section 5.10, *Geologic Conditions*, of this EIR, the project area is underlain by Compacted Fill and Santiago Peak Volcanics Formation. The sensitivity for each of these geologic formations that may contain important paleontological resources is described below.

### ***Compacted Fill***

Compacted Fill is fill material that was placed on the project site during previous grading activities. Fill thickness across the site ranges from zero feet at the cut/fill contact to approximately 52 feet below existing grade. The fill generally consists of silty to clayey sand, frequently with gravel, cobble, and boulders generated from blasting operations in the metavolcanic rock. Compacted Fill is not native material that would exhibit any paleontological resources. Therefore, there is no potential for areas of the site underlain by Compacted Fill to contain fossil remains.

### ***Santiago Peak Volcanics Formation***

The Santiago Peak Volcanics are comprised of Metasedimentary and Metavolcanic formations. Only the Metasedimentary formation has the potential to contain fossil remains. These formations can be found in the Black Mountain Ranch, La Jolla Valley, Fairbanks Ranch, Mira Mesa, and Rancho Peñasquitos areas of San Diego. Santiago Peak Volcanics found in these areas are assigned moderate resource sensitivity. The Metavolcanic formations found in other areas of the County – including the project site – have no potential to contain fossil remains and are assigned a zero resource sensitivity. Relative to the project site, the Santiago Peak Volcanics Formation is comprised of metavolcanic-type rock.

## **5.11.2 Impact Analysis**

### ***Impact Threshold***

The City of San Diego's *California Environmental Quality Act Significance Thresholds* provides guidance to determine potential significance to paleontological resources. Based on the City's *California Environmental Quality Act Significance Thresholds*, a project could result in significant impacts to paleontological resources if it requires:

1. Over 1,000 cubic yards of excavation in a high resource potential geologic deposit/formation/rock unit.
2. Over 2,000 cubic yards of excavation in a moderate resource potential geologic deposit/formation/rock unit.

The City of San Diego has compiled the *Paleontological Determination Matrix* (Table 5.11-1, below) to support the City's Significance Thresholds. Additionally, the Significance Thresholds provide the following two guidelines to assist in determining significance:

## 5.0 ENVIRONMENTAL ANALYSIS 5.11 Paleontological Resources

1. If there are sedimentary rocks such as those found in the coastal areas, they usually contain fossils.
2. If there are granitic or volcanic rocks such as those found in the inland areas, they usually will not contain fossils

**Table 5.11-1. Paleontological Determination Matrix**

<i>Geological Deposit/Formation/ Rock Unit</i>	<i>Potential Fossil Localities</i>	<i>Sensitivity Rating</i>
Alluvium (Qsw, Qal, or Qls)	All communities where unit occurs	Low
Ardath Shale (Ta)	All communities where unit occurs	High
Bay Point/Marine Terrace (Qbp) <sup>1</sup>	All communities where unit occurs	High
Cabrillo Formation (Kcs)	All communities where unit occurs	Moderate
Delmar Formation (Td)	All communities where unit occurs	High
Friars Formation (Tf)	All communities where unit occurs	High
Granite/Plutonic (Kg)	All communities where unit occurs	Zero
Lindavista Formation (Qln, Qlb) <sup>2</sup>	Mira Mesa/Tierrasanta	High
	All other areas	Moderate
Lusardi Formation (Kl)	Black Mountain Ranch/Lusardi Canyon Poway/Rancho Santa Fe	High
	All other areas	Moderate
Mission Valley Formation (Tmv)	All communities where unit occurs	High
Mt. Soledad Formation (Tmv)	Rose Canyon	High
	All other areas where unit occurs	Moderate
Otay Formation (To)	All communities where unit occurs	High
Point Loma Formation (Kp)	All communities where unit occurs	High
Pomerado Conglomerate (Tp)	Scripps Ranch/Tierrasanta	High
	All other areas	
River/Steam Terrace Deposits (Qt)	South Eastern/Chollas Valleys/ Fairbanks Ranch/Skyline/Paradise Hills/Otay Mesa, Nestor/San Ysidro	Moderate
	All other areas	Low
San Diego Formation (Qsd)	All communities where unit occurs	High
Santiago Peak Volcanics (Jsp) Metasedimentay	Black Mountain Ranch/La Jolla Valley, Fairbanks Ranch/Mira Mesa/Peñasquitos	Moderate
Santiago Peak Volcanics (Jsp) Metavolcanic	All other areas	Zero
Scripps Formation (Tsd)	All communities where unit occurs	High
Stadium Conglomerate (Tst)	All communities where unit occurs	High
Sweetwater Formation	All communities where unit occurs	High
Torrey Sandstone (Tf)	Black Mountain Ranch/Carmel Valley	High
	All other areas	Low

Sensitivity Rating      Grading Thresholds for Required Monitoring  
 High                      =      >1,000 cubic yards and 10 feet+ deep  
 Moderate                =      >2,000 cubic yards and 10 feet+ deep  
 Zero-Low                =      Monitoring not required

Baypoint<sup>1</sup> – Broadly correlative with Qop 1-8 of Kennedy and Tan (2008) new mapping nomenclature.

Lindavista<sup>2</sup> – Broadly correlative with Qvop 1-13 of Kennedy and Tan (2008) new mapping nomenclature.

Notes:      \*Monitoring is always required when grading on a fossil recovery site or near a fossil recovery site in the same geologic deposit/formation/rock unit as the project site as indicated on the Kennedy Maps.

             \*\*Monitoring may be required for shallow grading (i.e., <10ft) when a site has previously been graded and/or unweathered geologic deposits/formations/rock units are present at the surface.

             \*\*\*Monitoring is not required when grading documented or undocumented artificial fill.

### **Issue**

*Would the project:*

- *Require over 1,000 cubic yards of excavation in a high resource potential geologic deposit/formation/rock unit?*
- *Require over 2,000 cubic yards of excavation in a moderate resource potential geologic deposit/formation/rock unit?*

### ***Impact Analysis***

The proposed Watermark project would result in approximately 140,000 cubic yards of cut and 75,000 cubic yards of fill. The maximum depth of cut would be 25 feet, and the maximum fill depth would be 17 feet.

According to the City of San Diego's *California Environmental Quality Act Significance Thresholds*, implementation of a proposed project would have the potential to significantly impact paleontological resources, if grading of geologic formations exceeds 1,000 cubic yards and occurs at depths of 10 feet or greater in undisturbed areas of the site. The proposed project would meet this threshold.

The proposed project site is underlain by the Compacted Fill and Santiago Peak Volcanics formation, which is comprised of metavolcanic-type rock. Both of these formations have a zero potential to produce paleontological resources.

The majority of the project would require grading of areas previous fill constructed as part of the Scripps Gateway project. However, in two locations, grading into native materials would occur. As shown in Figure 5.11-1, *Grading into Native Soils*, grading of native soils would occur within areas identified as Santiago Peak Volcanics and Compacted Fill. The Santiago Peak Volcanic Formation on the project site is comprised of metavolcanic type rock. This formation has no potential to exhibit paleontological materials. Therefore, there is no potential for significant impacts to paleontological resources to occur. Therefore, implementation of the proposed project would not have the potential to significantly impact paleontological resources

### ***Significance of Impacts***

Development of the Watermark project does not have the potential to impact paleontological resources. Therefore, potential impacts to paleontological resources would not occur.

### ***Mitigation Measures***

No mitigation measures would be required



Figure 5.11-1. *Grading into Native Soils*





## 5.12 HYDROLOGY AND WATER QUALITY

A *Drainage Study* (dated June 25, 2012) and a *Preliminary Water Quality Technical Report* (dated June 21, 2012) have been prepared for the project by Fuscoe Engineering, Inc. Copies of those reports are included in Appendix H and K, respectively. The evaluation of impacts associated with hydrology and water quality presented in this section is based on the results of the *Drainage Study* and the *Preliminary Water Quality Technical Report*. The *Drainage Study* is an update to the drainage study previously conducted and approved for the Scripps Gateway project. As such, the report analyzes drainage for the entire project site, *Areas A and B*. Because Lot 1 of Area B is constructed with approved MedImpact facilities and Lot 2 can develop in accordance with existing approvals for MedImpact, the Preliminary Water Quality Technical Report addresses water quality impacts relative to *Area A* only.

Additionally, the proposed project is subject to Hydromodification Management Plan (HMP) requirements, per the City's Stormwater Standard Manual. Therefore, a *Preliminary Hydromodification Management Study* (June 2012) has been prepared for the project by Fuscoe Engineering, Inc. the Preliminary Hydromodification Management Study assumes the approvals in place for Lots 1 and 2 (Area B) and the proposed development of the Watermark project in Area A. A copy of that study is included in *Appendix R* to this EIR.

### 5.12.1 Existing Conditions

#### Hydrology

The Watermark project site is located within the Poway Hydraulic Area, within the Los Peñasquitos Hydrologic Unit. The Los Peñasquitos Hydrologic Unit is comprised of the Los Peñasquitos Creek Watershed, coastal tributaries, and the Mission Bay Watershed. These watersheds drain a highly urbanized region located almost entirely west of I-15 in coastal San Diego County. Collectively and individually, the watersheds support a variety of water supply, economic, recreational, and habitat-related beneficial uses. The major receiving waters, Los Peñasquitos Lagoon and Mission Bay, are both fragile systems that support diverse native fauna and flora. Both water bodies are especially sensitive to the effects of pollutants due to restricted or intermittent tidal flushing.

Los Peñasquitos Creek watershed encompasses a land area of approximately 100 square miles, including portions of the cities of San Diego, Poway, and Del Mar. The watershed is highly urbanized with a population of approximately 400,000 residents. The creek discharges to the 0.6-square mile Los Peñasquitos Lagoon.

#### Water Quality

Los Peñasquitos Canyon Creek and Los Peñasquitos Lagoon both have 303(d) listed impacts. There are no Total Maximum Daily Loads (TMDLs) for any of the receiving waters from the project site. (A Total Maximum Daily Load, or TMDL, is a calculation of the maximum amount of a pollutant that a water body can receive and still safely meet water quality standards.) According to the California 2006 303(d) list published by the State Water Resources Control Board (SWRCB), Los Peñasquitos Canyon Creek and Los Peñasquitos Lagoon are beneficial impaired water bodies. Los

Peñasquitos Canyon Creek is impaired for Phosphate and Total Dissolved Solids. Los Peñasquitos Lagoon is impaired for Sedimentation/Siltation.

### **Drainage**

Due to site topography, flows from the project area drain toward inlets leading to the storm drain system constructed on-site as part of the Scripps Gateway project, away from MHPA and open space areas. All stormwater would be treated by filtrate and dispatch devices before leaving the site. These flows discharge directly west of the site, then enter a 60-inch reinforced concrete pipe (RCP) storm drain line conveying flow north under Scripps Poway Parkway. The flows are then discharged west of Cara Way, east of the I-15 on-ramps. From there, the flows are conveyed via surface ditch/channel into Cypress Canyon, located east of I-15 and approximately 600 feet north of Scripps Poway Parkway. Cypress Canyon converges with Los Peñasquitos Canyon Creek directly east of I-15. Project runoff continues flowing east in Los Peñasquitos Canyon Creek for 7.5 miles before turning north immediately after crossing under I-5 near Sorrento Valley Boulevard. Los Peñasquitos Canyon Creek then enters Torrey Pines State Reserve and converges with Soledad Creek to form Los Peñasquitos Lagoon. Los Peñasquitos Canyon Creek outlets to the Pacific Ocean on the north side of Torrey Pines State Beach.

### **Project Site Conditions**

As described in Section 2.0, *Environmental Setting*, of this EIR, the approximately 34.39-acre Watermark project site is located west of Scripps Highlands Drive at Scripps Gateway Court in San Diego, California. The site is bordered by vegetated slopes and the I-15 freeway on the west, vegetated slopes on the south, Scripps Poway Parkway on the north, and Scripps Highlands Drive on the east. The site consists of 24 acres of predominately rough-graded pads sloping to the northwest at approximately three percent. The upper pad located in the northeast portion of the site is bordered by slopes that range in height from 35 feet on the western site to 50 feet on the northern side.

Approximately 10 acres of the project site (Area B) are the location of the MedImpact facilities. Previously approved Lot 1 of the project site has been developed as the first phase of MedImpact, with an office building and parking structure constructed. Approved construction on previously approved Lot 2 will include development of additional facilities to serve MedImpact. Public utilities, including storm drains, are located within easements throughout the site.

The 34.39-acre project site is part of Watershed Basin 1 of the approved 242-acre Scripps Gateway project. (See Section 2.3, *Project History*, for a discussion of the original Scripps Gateway project.) Basin 1 is comprised of 124.6 acres that drain to a 60-inch RCP line near the northwest corner of the project site and located within Caltrans right-of-way. The basin can be divided into two sub-basins: Basin 1A, which includes the entire site, the slope areas to the south, and a small portion of Scripps Highlands Drive to the east; and Basin 1B, which include portions of I-15 and other off-site areas west of the project site.

The rough-graded development pads constructed on the project site sheet flow to desilting basins located throughout the site. Two desilting basins occupy the low points of the site in the western

portion of the site, and one desilting basin is located at the low point of the upper graded pad area. Smaller perimeter concrete channels located on-site function to convey flow toward the basin in the upper area; while in the lower western area, flows are directed via earthen ditches to the desilting basin in the northwest.

The desilting basins drain to an existing public storm drain system, which conveys off-site and on-site runoff produced by the 100-year storm event to the northwest corner of the site. The existing public storm drain system includes two separate main lines, which roughly divide the on-site draining into eastern and western halves. The eastern line runs through the middle of the property, while the western line runs adjacent to the westerly property line. The two lines merge with other immediately before they discharge off-site and confluence Basin 1B.

### 5.12.2 Impact Analysis

#### *Thresholds of Significance*

The City of San Diego's *California Environmental Quality Act Significance Thresholds* provides guidance to determine potential significance associated with hydrology and water quality. Based on the City's thresholds, for impacts to hydrology, a project may result in a significant impact if it meets one or more of the following criteria:

- If a project would result in increased flooding on- or off-site there may be significant impacts on upstream or downstream properties and to environmental resources.
- If a project would result in decreased aquifer recharge there may be significant impacts on hydrologic conditions and well-water supplies because the area available for aquifer recharge is reduced. When a subsurface water source fails to be recharged by rainfall, its volume will be reduced. Reduced groundwater elevation can affect landholders who are dependent on well water, vegetation, and surface water replenishment. In addition, if a project would result in extraction of water from an aquifer, impacts on hydrologic conditions would be significant if there would be a net deficit in the aquifer volume or a reduction in the local groundwater table.
- If a project would grade, clear, or grub more than 1.0 acre of land, especially into slopes over a 25 percent grade, and would drain into a sensitive water body or stream there may be significant impacts on stream hydrology if uncontrolled runoff results in erosion and subsequent sedimentation of downstream water bodies.
- If a project would result in modifications to existing drainage patterns there may be significant impacts on environmental resources such as biological communities and archaeological resources.

Relative to water quality, compliance with the Water Quality Standards is assured through permit conditions. Adherence to the City's Storm water Standards, therefore, is the Water Quality threshold.

***Issue 1***

*Would the project result in a substantial increase in impervious surfaces and associated increased in runoff?*

***Impact Analysis***

The proposed project involves the development of a mixed-use commercial center with a walkable street and pedestrian plaza. A parking structure is proposed in the western portion of the site, with surface parking areas on the periphery of the site. The project also includes a hotel and restaurants to be located in the northeast and southwest portions of the site, respectively, landscaping, and hardscape areas. Development has begun on the project site in Area B with the construction of the first of two office buildings on previously approved Lot 1 to serve MedImpact. A parking structure has also been constructed on previously approved Lot 1. The second office building and accessory uses is under construction on previously approved Lot 2.

The proposed project would result in an increase in impervious surfaces over what currently exists on the project site. Development of the project site has been anticipated under existing project approvals. Storm drain facilities and storm water control are currently existing on the project site. The project would not add additional runoff beyond that anticipated under approvals in place for the project site. Furthermore, the project has been designed so that run-off rates and durations are controlled to maintain or reduce pre-project downstream erosion conditions and protect stream habitat by use of Hydromodification Controls. As addressed in the Preliminary Hydromodification Management Study, the drainage management strategy for the project utilizes underground detention vaults located on the private storm drain system. Underground detention vaults have been chosen to provide hydromodification flow attenuation. The underground vaults would be fully lined with concrete or an impermeable membrane in order to prevent seepage that could potentially damage adjacent structures or slopes. An outlet structure with orifice will be provided to regulate the discharge from each underground vault.

Only minor modifications to the existing storm drain system would be required, as described under *Hydrology and Water Quality Issue 2*, below. Significant impacts would not occur.

***Significance of Impacts***

The proposed project would introduce impervious surfaces to a previously graded site. A substantial increase in runoff beyond that which has been anticipated under existing project approvals would not occur. The storm drain system installed for the approved Scripps Gateway project would be adequate to handle runoff generated by the proposed project, with minor modifications, as described under *Hydrology and Water Quality Issue 2*. No significant impacts would result.

**Mitigation Measures**

No significant impacts associated with storm water runoff would occur. Therefore, no mitigation measures are required.

**Issue 2**

*Would the project result in substantial alteration to on- and off-site drainage patterns due to changes in runoff flow rates or volumes?*

**Impact Analysis**

City of San Diego requirements state that post-construction peak runoff flow rates and velocities from the project site shall be maintained at levels that will not cause a significant increase in downstream erosion. The creation of hydrologic conditions of concern on a downstream channel is prohibited. Meeting existing hydrologic flow rates will be achieved because project does not add any additional runoff from existing conditions.

On-site, the graded pad areas flow toward the existing sediment basins which feed eastern and western storm drain lines flowing north under the site. The storms drains confluence west of the proposed Watermark site, at a splash pad adjacent to a 60-inch storm drain inlet carrying flow north. This storm drain, located directly northwest of the project site, crosses under Scripps Poway Parkway, mixes with other flows, and discharges to an unnamed channel flowing towards Cypress Canyon.

The proposed site consists of new storm drain facilities with an extremely similar drainage condition as the existing condition. The on-site storm drain system is designed to reflect the existing boundary and acreage of Basin 1. The northerly Basin 1 boundary would be slightly altered by the proposed project, decreasing the basin by approximately 0.1 acres. This change in area would not result in significant impacts to hydrology.

The existing storm drain in the middle of the site is proposed to be relocated to street corridors in order to avoid conflicts with proposed building footprints. The westerly storm drain would remain in place. The proposed relocation of the on-site storm drain would result in reducing the peak discharge for Basin 1 by approximately 5.9 cubic feet per second (CFS) as shown in Table 5.12-1, *Summary of Peak Discharges for Basin 1*.

**Table 5.12-1. Summary of Peak Discharges for Basin 1**

Basin	EXISTING CONDITIONS		PROPOSED CONDITIONS	
	Area (ac)	100-Year Discharge (CFS)	Area (ac)	100-year Discharge (CFS)
Basin 1A	94.2	175.2	93.9	170.3
Basin 1B	30.4	92.8	30.6	91.8
Basin 1 Total	124.6	268.0	124.5	262.1

Under existing conditions, the two on-site storm drains arrive at the confluence point with the same time of concentration. Under proposed conditions, relocation of the eastern storm drain reduces the overall travel length, which results in a decrease in the time of concentration, and the peak



discharge is reduced. Proposed modification to the storm drain system would not result in significant impacts to hydrology.

The capacity of the existing Caltrans 60-inch pipe at the Basin 1 confluence was also analyzed to ensure that adequate capacity was available to project runoff. The capacity was found to be approximately 297 CFS, which is adequate to convey the proposed 100-year discharge. No impacts would result.

### ***Significance of Impacts***

The proposed project would introduce impervious surfaces to a previously graded site. However, the storm drain system installed for the approved Scripps Gateway project would be adequate to handle runoff generated by the proposed project, with minor modifications. The proposed project would not result in a substantial alteration to on- and off-site drainage, runoff flow rates, or volumes. No significant impacts associated with hydrology would occur.

### ***Mitigation Measures***

No significant impacts associated with hydrology would occur. Therefore, no mitigation measures are required.

### ***Issue 3***

*Would the project result in an increase in pollutant discharge to receiving waters during construction or operation?*

### ***Impact Analysis***

The proposed project site does not contain any areas that are recognized as currently contaminated, or pose any threat to safety. The following constituents are commonly found on similar developments and could affect water quality:

- Sediment discharge due to construction activities and post-construction areas left bare
- Nutrients from fertilizers used in landscaping
- Organic compounds found in pesticides, solvents, and hydrocarbons
- Trash and debris deposited in drain inlets
- Hydrocarbons such as oil and grease from paved areas

Receiving waters have 303(d) beneficial use impairments consisting of Phosphate, Total Dissolved Solids, and Sedimentation/Siltation. Therefore, the following pollutants are designated as anticipated or potential for the proposed site, as well as have 303(d) impairments downstream are considered primary pollutants of concern.

PRIMARY POLLUTANTS OF CONCERN	SPECIFIC 303(D) IMPAIRMENT
SEDIMENT	Total Dissolved Solids, Sedimentation/Siltation
NUTRIENTS	Phosphates

The project proposes to utilize portions of areas which are designated for landscaping or other softscape for Low Impact Development (LID) storm water treatment. In addition, landscaped islands within ~~to~~ the private roadway/driveways would be used in the treatment of runoff prior to entering the storm drain system. These LID BMPs would also function to slow down site runoff, increase times of concentration, improve downstream hydrologic conditions, and treat storm water as compared to the existing condition. These BMPs are extremely effective in creating a low impact site design concerning storm water management.

Additionally, pervious concrete/asphalt is proposed for applicable areas on-site, including overflow parking and pavement areas that are not anticipated to carry a high traffic volume. Pervious pavement allows for storm water to filter down through the pavement surface rather than running off into storm drain inlets. The drainage would eventually be conveyed via a perforated pipe system, flowing treatment through the subsurface medium.

As a result of the ~~recommended~~ proposed site design, source control measures, and treatment control measures, water quality exceedances are not anticipated, and pollutants are not expected within project runoff that would adversely affect beneficial uses in downstream receiving waters. The project would implement controls designed to limit discharges to the appropriate standard. The project complies with the requirements of the State Regional Water Quality Control Board concerning coverage under the General Construction Permit.

### ***Significance of Impacts***

As a result of the ~~recommended~~ proposed site design, source control measures, and treatment control measures, water quality exceedances are not anticipated, and pollutants are not expected within project runoff that would adversely affect beneficial uses in downstream receiving waters. The project complies with the requirements of the State Regional Water Quality Control Board concerning coverage under the General Construction Permit. No significant impacts are anticipated.

### ***Mitigation Measures***

The proposed project includes design features that would ensure that an increase in pollutant discharge to receiving waters during construction or operation would not occur. No mitigation measures beyond those required for the project are necessary.

### ***Issue 4***

*Would the project violate any water quality standards or waste discharge requirements?*

### ***Impact Analysis***

As a result of the ~~recommended~~ proposed site design, source control measures, and treatment control measures, water quality exceedances are not anticipated, and pollutants are not expected within project runoff that would adversely affect beneficial uses in downstream receiving waters. The project plans to institute controls designed to limit discharges to the appropriate standard. The project would comply with the requirements of the State Regional Water Quality Control Board concerning coverage under the General Construction Permit. The following analysis describes the project's various water quality control features that would be implemented to ensure that the project

is in compliance with all water quality standards and waste discharge requirements. With implementation of these measures, significant impacts would be avoided.

### *Sediment*

#### Construction Phase

As a result of grading and other activities, construction sites can contribute large amounts of sediment to downstream channels unless properly managed. These construction activities associated with the proposed project could impact water quality due to sheet erosion of exposed soils and subsequent deposition of particles and pollutants in drainage ways or introduction of construction-related pollutants. Grading activities and sediment stockpiles, in particular, can lead to exposed areas of loose soil that are susceptible to uncontrolled sheet flow. The use of materials such as fuels, solvents, and paints during the development of the sector areas also present a risk to surface water quality due to an increased potential for pollutants entering the storm drain system.

Under the Statewide General Construction NPDES Permit (Order 99-08-DWQ), the Project proponents would submit a Notice of Intent (NOI) to the SWRCB prior to commencement of construction activities. In addition, a SWPPP would be prepared and implemented at the project site, and revised as necessary as administrative or physical conditions change. The SWPPP will describe BMPs meeting the Best Available Technology Economically Achievable and Best Conventional Pollutant Control Technology (BAT/BCT) standards required by the Construction Permit and that address pollutant source reduction and will ensure that water quality standards are not exceeded in the receiving waters. These include, but are not limited to, erosion controls, sediment controls, tracking controls, non-storm water management, materials and waste management, and good housekeeping practices. The SWPPP shall be developed in accordance with the construction plans. The SWPPP shall provide BMPs that are to be maintained for the duration of the construction as well as measures that are specific to each phase of construction.

As a result of the selected BMPs and source control measures, it is expected that sediments in runoff would not be increased, that water quality standards would not be exceeded, and that beneficial uses would not be adversely affected. In order to reduce the amount of sediment discharged off-site due to construction activities to a level less than significant, the project would implement an effective combination of erosion and sediment control BMPs in conformance with the General Construction Permit (GCP).

#### Post Construction Phase

The proposed project would result in a reduced likelihood for sediment-laden runoff when compared with existing conditions. The existing rough-graded project site contains large stabilized dirt areas which flow toward the sediment basins located on-site. Due to the fact that significant areas are to be developed and stabilized, the potential for sediment-laden runoff in the post construction condition is reduced. Additionally, site flows would be conveyed through the LID and Treatment Control BMPs prior to discharge to the storm drain.

### *Heavy Metals*

Heavy metals in paint and industrial use compounds are to be minimized through appropriate source control measures such as limiting material storage in exposed areas, and proper delivery and

disposal practices. Also, any heavy metals deposited onto the surface via vehicle exhaust, brake dust, etc., would be conveyed to the LID and Treatment Control BMPs which are proposed on-site. This condition would result in significant pollutant removal, creating a condition where heavy metals would not be contained in project runoff at levels that could adversely affect water quality or beneficial uses in downstream waters.

#### *Oxygen Demanding Substances*

Oxygen-demanding substances on-site include biodegradable organic material that may come from animals, food waste, or pet waste. If allowed to reach receiving waters, this material creates a situation where dissolved oxygen levels may plummet, resulting in poor water quality. Source controls including proper clean up of the park area, and placement of waste receptacles would reduce the amount of these substances contained in the on-site runoff. In addition to source controls, storm water runoff would be treated through LID site design as well as Treatment Control BMPs designed to remove pollutants prior to discharge to the offsite storm drain.

#### *Organic Compounds*

Organic compounds are carbon-based, and are typically found in pesticides, solvents, and hydrocarbons. Organic compounds can also adhere to sediments, creating a situation where pollutants are mobilized through sediment transport. The project site would feature source control BMPs which are designed to limit the availability of pollutant discharge to downstream waters. Integrated Pest Management methods would be used to limit pesticide application, resulting in a minimal amount of pollutants reaching the downstream waters. Maintenance staff would be trained in ways to minimally use pesticides, as well as policies concerning storage and spill clean up.

#### *Trash and Debris*

Commercial development can generate moderate/large amounts of trash and debris if not properly managed. Trash and debris can contribute to the degradation of receiving waters by disruption of physical habitats, attracting pests and increasing the mobilization of nutrients, pathogens, metals and other pollutants that may be attached to the surface.

Due to the commercial nature of the project, the site may have the potential to generate an increased amount of trash and debris as compared to similar sized industrial or residential developments. Maintenance staff employed on-site would be responsible for monitoring any patterns of waste/litter on-site and take corrective action. Trash receptacles would be emptied frequently, and any litter left by patrons would be removed by maintenance staff. As the proposed development would have a goal of attracting customers, unsightly litter would not be tolerated. Additionally, any trash or debris carried by storm flows on-site would be captured by the LID and Treatment Control BMPs planned for installation on-site.

#### *Oil and Grease*

Oil and grease limits are defined as a qualitative standard (e.g., no film on surface waters) due to the difficulties in setting single limit or composite sampling water quality standards. However, national monitoring data collected from communities around southern California demonstrated that the majority (more than 80 percent) of samples taken from open space contain non-detect levels of oil

and grease and that hydrocarbons were intermittently observed in runoff from developed areas and when observed, the levels are relatively low.

Source control measures such as a limitation on automobile maintenance as well as a prohibition on dumping would serve to limit some sources. A significant majority of vehicles would be parked within the parking structure, which would not be exposed to storm water runoff. Additionally, the LID site design and Treatment Control BMPs will function to contain those pollutants which reach the storm drain system.

### ***Pesticides***

Pesticides can be a pollutant of concern based on past uses of the site. As with any agricultural site in the United States, pesticides may be present. It is not known if the site was formally used for agriculture, however significant tracts of land in the area were used as agricultural lands decades ago.

The use of pesticides for pest control would be discouraged, in favor of IPM (Integrated Pest Management) practices. Care would be taken during the construction phase to limit the discharge of sediments which may be bound to persistent pesticide molecules. This would be accomplished by adhering to proper SWPPP protocols. It is anticipated that water quality standards would not be exceeded. Pesticides would not be contained in project runoff at levels that could adversely affect water quality or beneficial uses in downstream waters.

### ***Nutrients***

Nutrients, particularly nitrogen and phosphorous found within common fertilizers, are a storm water pollution concern. Similar to the source control measures for pesticides, limiting sediment discharge during the construction phase through proper SWPPP protocols would limit the amount of nutrients reaching offsite waters. Also, low phosphorus fertilizers would be utilized on-site due to the phosphate problem on the downstream waters. Source controls regarding fertilizers shall limit the amount of irrigation following application. In addition the LID BMPs would function to uptake nutrients within vegetative material prior to discharge to downstream waters.

Therefore, it is anticipated that the project would not cause water quality standards to be exceeded. Nutrients would not be contained in project runoff at levels that could adversely affect water quality or beneficial uses in downstream receiving waters.

### ***Dry Weather Flow***

Although the previous discussions have focused on wet weather flows, dry weather flows are also important. Dry weather flows due to anthropogenic sources have the potential to impact local receiving water bodies. Dry weather flows are typically low in coarse sediment due to the low flow rates but pollutants associated with suspended solids (such as phosphorous, trace metals, pesticides) are typically found in low concentrations in dry weather flows. Dry weather flows can also transport constituents such as bacteria and some pesticides.

The Watermark is not expected to generate significant dry weather flows due to the controlled nature of the irrigation. As opposed to a residential development, a commercial development has centralized maintenance and is less likely to produce consistent dry weather flows. When dry



weather flows do occur, they would be conveyed toward the LID and Treatment BMPs for water quality treatment.

***Significance of Impacts***

The proposed project would not violate any water quality standards or waste discharge requirements. The project would implement LIDs and BMPs to control and treat urban runoff. No significant impacts relative to water quality would occur.

***Mitigation Measures***

With implementation of the project's proposed water quality control measures, the proposed project would not result in significant impacts to water quality. No mitigation measures are required.

***Issue 5***

*Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level(e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?*

***Impact Analysis***

Groundwater recharge in the area would not be significantly affected due to the fact that the existing rough graded project site consists of soil with low permeability and shallow bedrock. In the post construction condition, no pumping of groundwater is anticipated. During the construction phase, a very low/no amount of construction dewatering is expected to be required. Therefore, the proposed project would not have a substantial impact on groundwater.

***Significance of Impacts***

The proposed project would not have a substantial impact on groundwater.

***Mitigation Measures***

The proposed project would not have a substantial impact on groundwater. No mitigation measures are required.



### 5.13 HEALTH AND SAFETY

The analysis in this section evaluates the potential for human health/public safety/hazardous materials impacts associated with the proposed project. Relative to hazardous materials and toxic soils, an EnviroFacts search was conducted on November 9, 2010, during the preparation of the *Collocation/Conversion Suitability Factors Analysis*, and is included as Appendix P of this EIR.

#### 5.13.1 Existing Conditions

The Watermark project site is characterized by mostly undeveloped, graded pads. Under existing entitlements, development has begun on the MedImpact corporate headquarters; one Class A office building and supporting parking structure have been constructed. Construction has not yet begun on the additional Class A office building, parking structure, and ancillary building. The primary source of air quality degradation on-site comes from vehicle trips to the MedImpact building, as well as occasional heavy trucks for deliveries.

#### Regulations

The City of San Diego reviews the location of sensitive receptors, such as housing, proximate to light industrial uses. Because the project includes employment base uses allowed in the IP-2-1-zone, which can include light industrial uses, the various local, County, State, and Federal regulations in place to avoid potential health risks associated with existing housing located in proximity to light industrial uses would apply.

#### *State Regulations*

Obnoxious uses are regulated under Section 41700 of the State Health and Safety Code, under the “Nuisance Rule.” For the project site, this would be enforced by the County Department of Environmental Health. The regulation states that “*a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property.*”

The number of people in the area that are affected is not limited to a specific distance from the source of the nuisance, as long as it can be proven that the business is the true source. In other words, there is no direct distance relationship between an obnoxious source and its impact on a sensitive receptor.

Hazardous materials regulation is discussed under Section 25532(g) of the State Health and Safety Code. The regulation states that facilities that store, handle, or use regulated substances as defined in the California Health and Safety Code Section 25532(g) in excess of threshold quantities shall prepare a risk management plan for determination of risk to the community. As identified in the California Health and Safety Code, Section 25532(g), the term, “regulated substances” is defined as any substance that is comprised of the following:

1. A regulated substance that is listed in Section 68.130 of Title 40 of the Code of Federal Regulations pursuant to paragraph (3) of subsection (r) of Section 112 of the Clean Air Act (42 U.S.C. Sec. 7412(r)(3)).
2. An extremely hazardous substance listed in Appendix A of Part 355 of Subchapter J of Chapter I of Title 40 of the Code of Federal Regulations that is any of the following:

- a. A gas at standard temperature and pressure
  - b. A liquid with a vapor pressure at standard temperature and pressure equal to or greater than ten millimeters mercury
  - c. A solid that is (a) in solution or in molten form, (b) in powder form with a particle size less than 100 microns, or (c) reactive with a National Fire Protection Association rating of 2, 3, or 4.
3. On or before June 30, 1997, the office shall, in consultation with the Office of Environmental Health Hazard Assessment, determine which of the extremely hazardous substances listed in Appendix A of Part 355 of Subchapter J of Chapter I of Title 40 of the Code of Federal Regulations do either of the following:
    - a. May pose a regulated substances accident risk, with consideration of the factors specified in subdivision (g) of Section 25543.1, and should remain on the list of regulated substances until completion of the review conducted pursuant to subdivision (a) of Section 25543.3.
    - b. The office shall adopt, by regulation, a list of the extremely hazardous substances identified pursuant to clause (i). Extremely hazardous substances placed on the list are regulated substances for the purpose of this article.

Facilities which handle, store, or use any quantity of toxic or highly toxic gas as defined by the most recent Uniform Fire Code (UFC), which are also regulated substances as defined in the California Health and Safety Code Section 25532(g), shall prepare an off-site consequence analysis (OCA). This analysis shall be performed in accordance with Title 19 of the California Code of Regulations Section 2750.2 and Section 2750.3. If the OCA demonstrates that toxic release could potentially impact the residential community, the facility will not store, handle, or use the material in those quantities. If a decrease in quantity of material reduces the distance to toxic endpoint to where the community is not impacted, the facility shall be able to utilize the material in that specified quantity.

Facilities that handle, store, or use any quantity of toxic or highly toxic gas need to prepare an OCA. According to Section 2750.2, the OCA parameters consist of assessing toxic endpoints stated in Section 2770.5, Table 1 and Table 3, which include, but are not limited to the following hazardous materials: Acrolein, Acrylonitrile, Ammonia, Arsine, Boron-Tetrachloride, Boron-Tetrafluoride, Bromine, Carbon-Disulfide, Chlorine, Chloroform, Diborane, Fluorine, Formaldehyde, Furan, Hydrazine, Hydrochloric Acid, Hydrogen-Chlorine, Methyl-Chlorine, Methyl-Hydrazine, Nickel-Carbonyl, Nitric-Acid, Nitric Oxide, Oleum, Phosphine, Phosphorus, Piperidine, Sulfur-Dioxide, Sulfur-Tetrafluoride, and Vinyl Acetate. Regulated flammable substances are stated in Table 2 of Section 2770.5, and include, but are not limited to the following flammable materials: Butane, 1-Butene, 2-Butene, Carbon Oxysulfide, Chlorine Monoxide, Cyanogen, Cyclopropane, Ethane, Hydrogen, Methane, Propane, Silane, Tetramethylsilane, Vinyl Acetate, and Vinyl Fluoride. Flammable endpoints vary according to the following issues: (a) explosion, (b) radiant heat/exposure time, (c) lower flammability limit, (d) wind/speed/atmospheric stability class, (e) ambient temperature/humidity, (f) height of release, (g) surface roughness, (h) dense or neutrally buoyant gases, and (h) temperature of released substances.

Section 2750.3 of the California Code of Regulations identifies the worst-case release scenario analysis. Based on the consequences of hypothetical toxic and hazardous release, worst-case scenarios comprise toxic gas release, toxic liquids, and flammables. Worst-case scenarios regarding

toxic gases include temperature conditions and the potential source of the toxic gases as well as release rates. Worst-case scenarios pertaining to toxic liquids involve temperature, liquid source, area of potential contamination, and release rate. Worst-case scenarios pertaining to flammable materials include vaporization, determination of distance to endpoints as stated in Section 2750.2, potential passive mitigation, pressure and temperature as well as potential source of flammable material.

#### ***County Department of Environmental Health (DEH)***

The County DEH, Hazardous Materials Management Division (HMMD) administers the above State program and issues Unified Facility Program Permits to regulate businesses that may impact public health and safety. These include businesses that use hazardous materials, dispose of hazardous wastes, have underground storage tanks, and/or generate medical waste. The goal of the HMMD is to protect human health and the environment by ensuring hazardous materials, hazardous waste, medical waste and underground storage tanks are properly managed. This is determined on a project specific basis.

All applications for businesses which use, handle, or store hazardous materials, including hazardous waste, must be reviewed by DEH, HMMD. The purpose of this review is to determine if a Hazardous Materials Business Plan or a Risk Management and Prevention Plan (RMPP) is required to be submitted or updated by the business, and if a DEH permit is required. If a business meets any of the following, a Hazardous Materials Business Plan will be required to be completed prior to final occupancy:

1. The quantity of hazardous materials at any one time is equal to or greater than a total weight of 500 pounds, or a total volume of 55 gallons, or 200 cubic feet at standard temperature and pressure for a compressed gas; or
2. The quantity of any Acutely Hazardous Material (AHM) will be equal or greater than its Threshold Planning Quantity (TPQ); or
3. Any amount of the material is a carcinogen, reproductive toxin, a hazardous gas with a Threshold Limit Value-Time Weighted Average (TLV-TWA) or Threshold Limit Value-Short Term Exposure Limit (TLV-STEL) of 110 ppm or less.

In addition, if the business handles any quantity of an AHM, the business must submit an AHM Registration Form to the Department of Environmental Health prior to issuance of the construction permit. If the business will use or store any AHMs in excess of specified quantities (TPQs), the DEH is required to conduct a site-specific computer screening prior to issuance of the construction permit. The purpose of this screening is to determine if an off-site consequence would likely result from the sudden release of the Acutely Hazardous Materials. If the probability of a release exists, the business must prepare a Risk Management and Prevention Plan.

#### ***San Diego Air Pollution Control District***

Per the California Air Toxics “Hot Spots” Information and Assessment Act (AB 2588), toxic air emissions in the region are regulated by the San Diego Air Pollution Control District (SDAPCD). A toxic air contaminant is defined as an “air pollutant that may increase a person’s risk of developing cancer and/or other serious health effects.” Approximately 800 chemical compounds have been



identified as having potential adverse health effects. It is estimated that industrial facilities produce approximately 27 percent of toxic air contaminants.

Hazardous air polluters in San Diego include the following types of businesses: chromium electroplating and anodizing; dry cleaning; aerospace manufacturing and rework facilities; shipbuilding and repair operations; halogenated solvent cleaning; ethylene oxide sterilizing; and miscellaneous organic chemicals process. Other types of businesses are considered hazardous air polluters; however, they are not expected to be major contributors in San Diego. These include: gasoline distribution (bulk terminals), wood furniture manufacturing, boat manufacturing, printing and publishing, research and development facilities, and off-site waste and recovery operations.

The SDAPCD requires a review of businesses which may emit air contaminants from non-vehicular sources. The purpose of this review is to determine whether an Authority to Construct and Permit to Operate are required for certain equipment at the business. In addition, the review will determine whether notification is required for demolition and renovation projects involving asbestos. Permits and notifications help San Diego County protect the public health by attaining and maintaining ambient air quality standards and preventing public nuisance.

There are no set initial limitations or prohibited types of business in relation to closeness to sensitive receptors; however, during the permitting process some issues may arise that would need to be addressed or changed in order for standards to be met, though these are on a case specific basis. The only exception to this rule is, should the business dealing with hazardous materials be in the vicinity of a school (K-12), it must be a minimum distance of 1,000 feet away from the school. Notification of such use to the parents of each child in the school is also required.

#### *City of San Diego*

At the local level, the San Diego Fire Department screens inventories of substances and inspects sites. All businesses applying for a permit which use, handle, or store any quantity of hazardous materials shall be reviewed by the San Diego Fire Department through the completion and submittal of the Fire Department's Hazardous Materials Information form. The purpose of this review is to classify the building occupancy in accordance with the California Building Code.

### **5.13.2 Impact Analysis**

#### *Thresholds of Significance*

The City of San Diego has adopted its *Significance Determination Thresholds* (City of San Diego 2011). According to the Significance Determination Thresholds, a project would have a significant environmental impact if the project would:

- Project sites on or near known contamination sources may result in a significant impact.
- Project sites that meet one or more of the following criteria may result in a significant impact.
  - Located within 1,000 feet of a known contamination site.
  - Located within 2,000 feet of a known “border zone property” (also known as a “Superfund” site) or a hazardous waste property subject to corrective action pursuant to

- the Health and Safety Code.
- DEH site file closed.
- Located in Centre City San Diego, Barrio Logan or other areas known or suspected to contain contamination sites.
- Located on or near an active or former landfill. Hazards associated with methane gas migration and leachates should be considered.
- Properties historically developed with industrial or commercial uses which involved dewatering (the removal of groundwater during excavation), in conjunction with major excavation in an area with high groundwater (such as downtown).
- Projects located in a designated airport influence area and where the Federal Aviation Administration (FAA) has reached a determination of "hazard" through FAA Form 7460- 1, "Notice of Proposed Construction or Alteration" as required by FAA regulations in the Code of Federal Regulations (CFR) Title 14 §77.13.
- Located on a site presently or previously used for agricultural purposes.
- 

**Issue 1**

*Would the project result in hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within a quarter-mile of an existing or proposed school?*

**Impact Analysis**

No schools exist or are currently proposed within one-quarter mile of the Watermark project site. The nearest school is Dingeman Elementary School, located over one mile east of the project site. Furthermore, the project proposes a mix of office, commercial, and entertainment uses. These uses are not anticipated to result in hazardous emissions or handle hazardous or acutely hazardous materials. Any hazardous or acutely hazardous materials would be regulated by County DEH.

**Significance of Impacts**

The proposed project does not include uses that would handle hazardous materials or result in hazardous emissions. Current and approved MedImpact development provides for corporate office use; the proposed project would likewise provide for office and would not result in hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste. No schools are located or proposed to be located within one-quarter mile of the project site. No significant impacts would result.

**Mitigation Measures**

No significant impacts to schools would result. No mitigation is required.

**Issue 2**

*Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or environment and would the project expose people to potential hazards?*

**Impact Analysis**

The project site is not located on a list of hazardous materials site. There are no sources of toxic or hazardous air contaminants, or toxic or hazardous substances within one-quarter mile of the project

site. An EnviroFacts search conducted on November 9, 2010, yielded no facilities with toxic substances or radiation within one-mile. There are four facilities that have reported hazardous waste activities (three of which are gas stations), the closest being the Tesoro gas station located approximately one-quarter mile northeast of the project site in the adjacent commercial development. None of these facilities pose a risk to visitors or employees of the Watermark project.

### ***Significance of Impacts***

The project site is not listed on a hazardous materials sites list, nor are there hazardous materials within one-quarter mile of the project site. There are no impacts relative to hazardous materials.

### ***Mitigation Measures***

The project has no significant hazardous materials impacts. No mitigation is required.

### ***Issue 3***

*Would the project expose people to toxic substances?*

### ***Impact Analysis***

The project has potential to emit TACs. Emissions of TACs are attributable to temporary emissions from construction emissions, and minor emissions associated with diesel truck traffic used for deliveries at the site. Truck traffic may result in emissions of diesel particulate matter, which is characterized by the State of California as a TAC. Certain types of projects are recommended to be evaluated for impacts associated with TACs. An office and retail development such as the Watermark project would not attract a disproportionate amount of diesel trucks and would not be considered a source of TAC emissions. Based on CalEEMod (see Section 5.5, *Global Climate Change*, for a discussion of this model), heavy-duty diesel trucks would account for only 0.9 percent of the total trips associated with the project. Impacts to people from TAC emissions would therefore be less than significant.

### ***Significance of Impacts***

The project has the potential to expose people to toxic substances through the emission of TACs. However, this exposure would be minimal and would result in a less than significant impact.

### ***Mitigation Measures***

Project impacts to people are less than significant. No mitigation is required.

### ***Issue 4***

*Would the project impair implementation of, or physically interfere with, an adopted emergency response plan?*

### ***Impact Analysis***

The proposed project is located within the developed community of Miramar Ranch North. The circulation network is in place, as is a City-wide emergency response plan. The project site has existing access to the circulation network and emergency services. The proposed project does not recommend revisions to the existing circulation network. As such, the project would not impair implementation or an adopted emergency response plan, nor would the project interfere with such a plan.

***Significance of Impacts***

Project impacts on the adopted emergency response plan would not be significant.

***Mitigation Measures***

Project impacts to people are less than significant. No mitigation is required.

***Issue 5***

*Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including when wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

***Impact Analysis***

The project site is bordered on the south by existing open space area. Two brush management zones (one of 65 feet and one of 35 feet) buffer the open space area from project development. The requirements for these brush management zones are in addition to those mandated by California Public Resources Code in Section 4291 of the City of San Diego Landscape Technical Manual.

Zone 1 – 35 feet – is to be planted immediately adjacent to the project's southern boundary. This zone limits the use of highly flammable plant materials. For irrigated plantings on slopes with a gradient of 4:1 or steeper, new plantings shall have an average maximum mature height of 24 inches or less. Slope planting also requires a range of 30 to 50 percent of the area be planted with groundcovers with moderate to high fire retardance. In addition, 50 to 70 percent of the area shall be planted with deep rooting spreading vines and shrubs with low fuel volume and low to moderate fire retardance. Irrigation is to be provided and maintained for all landscaped areas. Trees should not be located any closer to a structure than a distance equal to the tree's mature spread and should be maintained in a succulent condition. Individual non-irrigated plant groupings over six inches in height may be retained provided they do not exceed 100 square feet in area and their combined coverage does not exceed ten percent of the total Zone 1 area.

Zone 2 – 65 feet – is to be located between Zone 1 and the open space area south of the project site. This zone requires that new non-irrigated plantings have a low growing spreading habit and are self regenerating, drought resistant, and effective in erosion control and slope stabilization. Non-irrigated plant groupings over 18 inches in height shall be retained provided they do not exceed 400 square feet in area and their combined coverage does not exceed 30 percent of the total Zone 2 area. Shrubs in new plantings shall have an average maximum mature height of 24 inches or less. For irrigated plantings on slopes with a gradient of 4:1 or steeper, 30 to 50 percent of the area be planted with groundcovers with moderate to high fire retardance. In addition, 50 to 70 percent of the area shall be planted with deep rooting spreading vines and shrubs with low fuel volume and low to moderate fire retardance.

These brush management zones would minimize the risk of exposure of people or buildings to potential wildland fires that may occur in surrounding open space areas.

### ***Significance of Impacts***

Brush management zones incorporated into project design features will effectively minimize exposure to wildland fire risk. Project impacts are less than significant.

### ***Mitigation Measures***

Project impacts related to risk of wildland fires are less than significant. No mitigation is required.



## 5.14 PUBLIC SERVICES AND FACILITIES

Public services and facilities are those functions that serve development on a community-wide basis. These functions include police, fire and emergency response services, parks and recreation, schools, and libraries. For the Watermark project, which involves commercial and office uses, police and fire and emergency response services are necessary to serve future tenants, employees, and patrons. Other public services, such as parks and recreation, schools, and libraries, would serve tenants, employees, and patrons in the communities in which they reside. Therefore, the discussion in this section focuses on police protection and fire and emergency services.

The following discussion is based on correspondence and telephone conversations with service providers (see Appendix M) and evaluates the potential impacts the proposed project would have upon existing services. Figure 5.14-1, *Location of Public Services*, shows the location of the fire station and police stations that serve the project site.

### 5.14.1 Existing Conditions

#### **Police Protection**

Police protection for the Watermark project is provided by the San Diego Police Department (SDPD). The SDPD is divided into nine divisions. The project site is serviced by the Northeastern Division. The Northeastern Division, located at 13396 Salmon River Road, serves the neighborhoods of Carmel Mountain, Miramar, Miramar Ranch North, Mira Mesa, Rancho Bernardo, Rancho Encantada, Rancho Peñasquitos, Sabre Springs and Scripps Ranch. The Northeastern Division serves a population of 227,590 people and encompasses 103.9 square miles. This police station is located approximately 3.5 miles from the project site.

#### **Fire Protection and Emergency Services**

Fire protection and emergency services are provided by the San Diego Fire-Rescue Department (SDFD). SDFD is a multi-faceted organization that provides City residents with fire and life-saving services including fire protection, emergency medical services, and lifeguard protection at San Diego beaches. Two fire stations serve the project site. Station Number 37 is located at 10750 Scripps Lake Drive, approximately three miles southeast of the project site. Station 37 is equipped with an engine, brush rig, and paramedic unit. Station Number 44 is located at 10011 Black Mountain Road, approximately three miles southwest of the project site. Station 44 is equipped with an engine, truck, battalion chief rig, and two hazmat rigs.

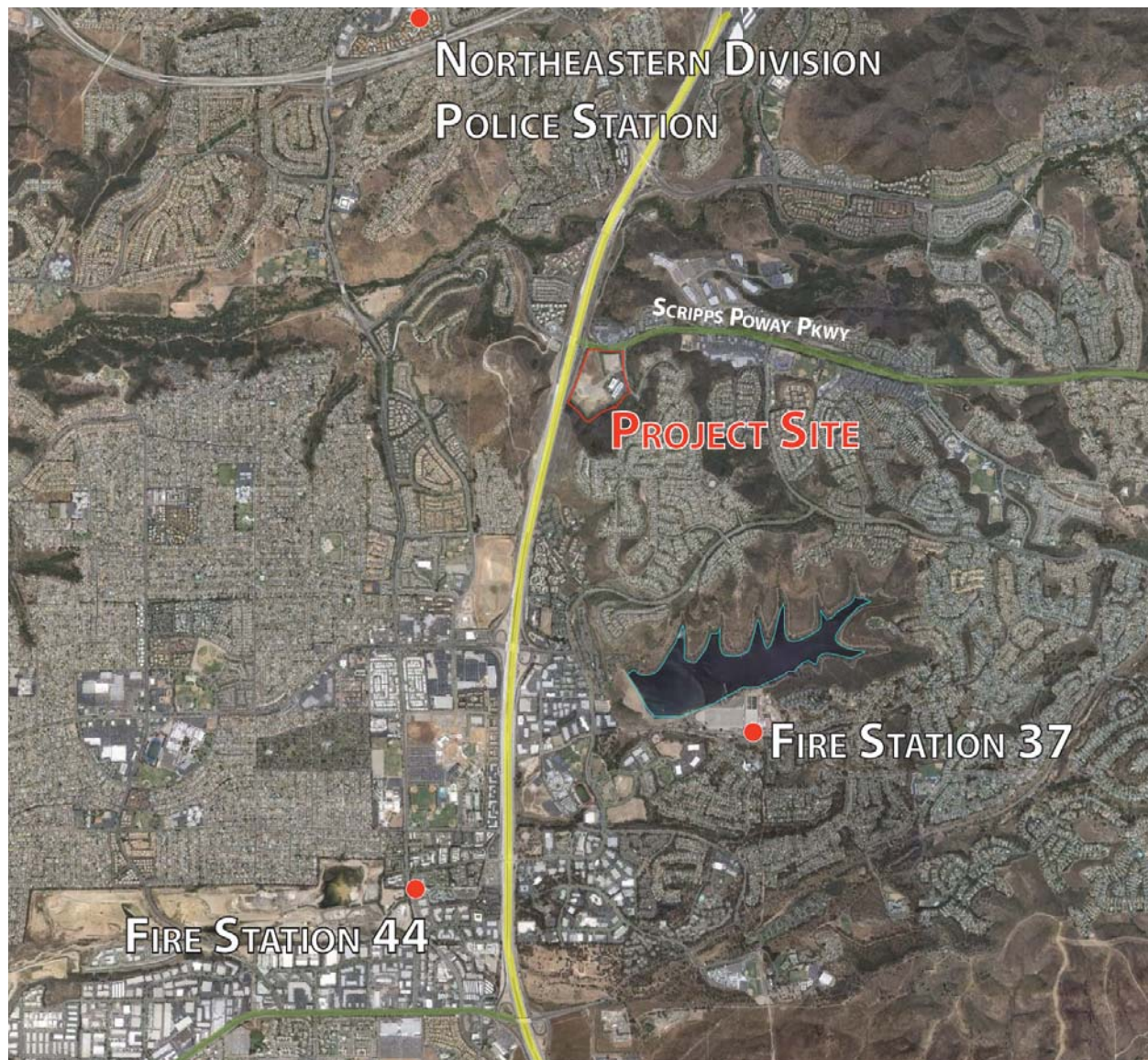


Figure 5.14-1. Location of Public Services

### 5.14.2 Impact Analysis

#### *Thresholds of Significance*

The City of San Diego's *California Environmental Quality Act Significance Thresholds* (January 2011) provides guidance to determine potential significance associated with public services and facilities. Based on the City's thresholds, for impacts to public services and facilities, a project may result in a significant impact if the proposed project would:

- Result in the need for new or expanded public facilities, including fire protection, police protection, health, social services, emergency medical, libraries, schools, and parks;
- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or
- Include recreational facilities or require the construction or expansion of recreation facilities, which might have an adverse physical effect on the environment.

***Issue 1***

*Would the project have an effect upon, or result in altered governmental services in any of the following areas: police protection; fire/life safety protection; libraries; parks or other recreational facilities; the maintenance of public facilities, including road; or schools? If so, what physical impacts would result from the construction of these facilities?*

***Impact Analysis***

Police protection for the Watermark would be provided by the San Diego Police Department. The Miramar Ranch North community is served by the Northeastern Division police facility, on beat 233, located at 13396 Salmon River Road. The Northeastern Division provides police services the communities of San Pasqual, Rancho Bernardo, Carmel Mountain, Rancho Peñasquitos, Sabre Springs, Mira Mesa, Miramar Ranch North, Rancho Encantada, Scripps Ranch, and Miramar.

According to May 17, 2012, correspondence with Police Lieutenant Ken Hubbs of the SDPD (see Appendix M), the Northeastern Division is currently staffed with 96 sworn personnel and one civilian employee. The current patrol strength is 73 uniformed patrol officers. Officers work ten-hour shifts. Staffing is comprised of three shifts which operate from 6:00 a.m. to 4:00 p.m. (First Watch), 2:00 p.m. to midnight (Second Watch), and from 9:00 p.m. to 7:00 a.m. (Third Watch). Using the Department's recommended staffing guidelines, Northeastern Division currently deploys a minimum of nine patrol officers on First Watch, 11 patrol officers on Second Watch, and seven patrol officers on Third Watch. The goal citywide is to maintain 1.45 officers per 1,000 population ratio.

The project site is located in the City of San Diego within the boundaries of police beat 246. The 2011 average response times for beat 246 are 7.7 minutes for Priority E calls, 15.2 minutes for Priority 1 calls, 21.2 minutes for Priority 2 calls, 44.8 minutes for Priority 3 calls, and 51.7 minutes for Priority 4 calls. The department's response time goals are:

- Priority E Calls (imminent threat to life) within seven minutes.
- Priority 1 Calls (serious crimes in progress) within 14 minutes.
- Priority 2 Calls (less serious crimes with no threat to life) within 27 minutes.
- Priority 3 Calls (minor crimes/requests that are not urgent) within 70 minutes.
- Priority 4 Calls (minor requests for police service) within 70 minutes.

The citywide average response times, for the same period, were 6.3 minutes for Priority calls, 11.1 minutes for Priority 1 calls, 22.8 minutes for Priority 2 calls, 62 minutes for Priority 3 calls, and 67.8 minutes for Priority 4 calls – all within the Department's response time goals. The Department strives to maintain the response time goals as one of various other measures used to assess the level



of service to the community.

The Police Department has not identified any impacts associated with the Watermark project. Police response times in this community will continue to increase with the build-out of community plans and the increase of traffic generated by new growth. However, there are no current plans for additional police sub-stations in the immediate project area; and the proposed project would not result in the need to construct new facilities. Impacts associated with police protection would not be significant.

Relative to fire protection services, two City of San Diego Fire-Rescue stations located near the Miramar Ranch North community would serve the proposed project: Station Number 37 located at 10750 Scripps Lake Drive, and Station Number 44 located at 10011 Black Mountain Road. In order to best serve the community, San Diego Fire-Rescue has established the response time objectives based on national standards. According to May 31, 2012, correspondence with Assistant Fire Marshal Lawrence Trame (see Appendix M), to treat medical patients and control small fires, the first-due unit should arrive within 7.5 minutes, 90 percent of the time from the receipt of the 911-call in fire dispatch. This equates to one-minute dispatch time, 1.5 minutes/seconds company turnout time, and five minutes drive time in the most populated areas. To confine fires near the room of origin, to stop wildland fires to under three acres when noticed promptly, and to treat up to five medical patients at once, a multiple-unit response of at least 17 personnel should arrive within 10.5 minutes/seconds from the time of 911-call receipt in fire dispatch, 90 percent of the time. This equates to one-minute dispatch time, 1.5 minutes/seconds company turnout time, and eight minutes drive time spacing for multiple units in the most populated areas.

Brush management is considered an integral, key component of an overall Fire Preparedness and Management Plan. For the Watermark project, brush management is addressed in Section 5.13, *Health and Safety*.

San Diego Fire-Rescue has not identified any impacts associated with the Watermark project. Existing facilities would serve Watermark, and the construction of new facilities is not required. Therefore, the project's impacts on fire protection would not be significant.

The Watermark project proposes development of a mixed-use locally-serving commercial center. Uses include office building, commercial retail, entertainment, and hotel. Community gathering space will be provided in the form of open landscaped plazas. Additionally, development under existing entitlements for the MedImpact corporate headquarters includes the provision of a fitness facility for employees. The project does not propose any residential units.

It is not likely that employees of the proposed development or the adjoining MedImpact facility would use neighborhood and regional parks or other recreational facilities in such a manner that would cause a substantial acceleration in physical deterioration of the facility. Furthermore, the provision of community gathering space within the project may lessen existing deterioration of public facilities. The adjacent MedImpact site is expected to construct a fitness center on-site for employee use as part of existing entitlements. The proposed project does not include the provision of residential units. As a result, the project would not require the construction or expansion of recreational facilities.

The project will not impact population-based public facilities, such as health, social services, libraries, schools, and parks.

#### ***Significance of Impacts***

The project would not result in significant impacts to facilities.

#### ***Mitigation Measures***

No significant impacts associated with public facilities would occur. Therefore, no mitigation measures are required.





## 5.15 PUBLIC UTILITIES

Public utilities include water, sewer, storm water drainage, and solid waste services on a community-wide basis. These services would be provided to future employees and visitors to the Watermark project. (NOTE: Public utilities also include the provision of electricity and natural gas resources which would provide energy to the proposed project. SDG&E will provide electricity and natural gas service to the project. Please see Section 5.6, *Energy*, for a discussion of SDG&E's ability to serve the project and the project's potential impact on energy resources.)

Fusco Engineering prepared a *Sewer Study Amendment* (December 2011) for the project. The study was prepared as an amendment to the approved Scripps Gateway sewer study prepared March 30, 1999, by Rick Engineering. The purpose of the Sewer Study Amendment was to address the proposed change in land use from Industrial/Office to Office and Commercial and evaluate any changes in on-site runoff from what was previously approved for the existing MedImpact project (PID No. 99-1027). The Watermark project would conform to an approved sewer study. The Watermark project has been designed and would be constructed per the City of San Diego Sewer Design Guide standards, as well as the Uniform Plumbing Code. The *Sewer Study Amendment* is contained in Appendix J to this EIR.

In compliance with the requirements of Senate Bill (SB) 610 and using the City's and Water Authority's 2010 Urban Water Management Plan (UWMP), the City of San Diego Public Utilities Department prepared the *Water Supply Assessment Report* (March 5, 2012) to determine if sufficient water supplies would be available to meet the water demand of the proposed project, in addition to current and expected future demand. The Water Supply Assessment relied upon the Metropolitan Water District of Southern California's (MWD) Regional Urban Water Management Plan (2010) (RUWMP) and the San Diego County Water Authority's Urban Water Management Plan. The *Water Supply Assessment Report* evaluated water supplies that are or will be available during normal, single-dry year, and multiple-dry water years during a 20-year period to meet the projected demands of the project, in addition to existing and planned future water demands of the Public Utilities Department. The *Water Supply Assessment Report* is included in Appendix L to this EIR.

Additionally, public utilities providers were contacted during preparation of this EIR to identify potential impacts Watermark would have on utilities. All correspondence with utilities providers is contained in Appendix M.

A *Preliminary Waste Management Plan* was prepared for the project by KLR Planning (November 2012). The purpose of this Waste Management Plan (WMP) was to provide analysis of the solid waste impacts anticipated for the Watermark project and how these impacts would be mitigated. The WMP identifies sufficient mitigation to reduce the potential impacts of the Watermark project on solid waste generation. In accordance with Council Policy 900-16, this goal would be met by striving for recycling of 100 percent of inert construction materials and striving for recycling a minimum 50 percent by weight all other materials. The *Preliminary Waste Management Plan* has been included as Appendix Q of this EIR. The Preliminary Waste Management Plan pertains to the entire Watermark site (*Areas A and B*).

The following discussion is based on the various studies listed above and correspondence with utility company providers.

### 5.15.2 Existing Conditions

#### Water

**Public Utilities Department.** The Watermark project is located within the service area of the City's Public Utilities Department. The Public Utilities Department treats and delivers more than 200,000 acre-feet per year (AFY) of water to more than 1.3 million residents. The water system extends over 404 square miles, including 342 square miles within the City of San Diego. The Public Utilities Department's potable water system serves the City of San Diego and certain surrounding areas, including both retail and wholesale customers. In addition to delivering potable water, the City has a recycled water program. The City's objectives relative to the water system are to optimize the use of local water supplies, lessen the reliance on imported water, and free up capacity in the potable water system. Recycled water provides the City with a dependable, year-round, locally produced and controlled water resource.

The Public Utilities Department relies on imported water as its major water supply source and is a member public agency of the San Diego County Water Authority (SDCWA). The SDCWA is a member agency of the Metropolitan Water District (MWD). The statutory relationships between the SDCWA and its member agencies, and MWD and its member agencies, respectively, establish the scope of the Public Utilities Department's entitlements to water from these two agencies. The Public Utilities Department currently purchases approximately 85 to 90 percent of its water from the SDCWA, which supplies the water (raw and treated) through two aqueducts consisting of five pipelines. While the Public Utilities Department imports a majority of its water, it uses three local supply sources to meet or offset potable demands: local surface water, conservation, and recycled water.

**Metropolitan Water District.** The MWD was formed in 1928 to develop, store, and distribute supplemental water in southern California for domestic and municipal purposes. The MWD is a wholesale supplier of water to its member agencies. It obtains supplies from local sources as well as the Colorado River via the Colorado River Aqueduct, which it owns and operates, and the Sacramento-San Joaquin Delta via the State Water Project. Planning documents such as the RUWMP and Integrated Water Resources Plan (IWRP) help ensure the reliability of water supplies and the infrastructure necessary to provide water to southern California. MWD's 2010 RUWMP documents the availability of these existing supplies and additional supplies necessary to meet future demands. The 2010 RUWMP includes the resource targets included in the IWRP and contains a water supply reliability assessment that includes a detailed evaluation of the supplies necessary to meet demands over a 25-year period in average, single-dry year and multiple-dry year periods. As part of this process, MWD also uses SANDAG's regional growth forecast in calculating regional water demands. In accordance with state law, the RUWMP is updated every five years.

MWD's IWRP identifies a mix of resources (imported and local) that, when implemented, will provide 100 percent reliability for full-service demands through the attainment of regional targets set for conservation, local supplies, State Water Project supplies, Colorado River supplies, groundwater banking and water transfers. The latest IWRP (2010) includes a planning buffer to mitigate against the risks associated with implementation of local and imported supply programs. The planning buffer identifies an additional increment of water that could potentially be developed if other supplies are not implemented as planned. The planning buffer is intended to ensure that the southern California region, including the City of San Diego, will have adequate water supplies to meet future demands.

**San Diego County Water Authority.** The SDCWA purchases water from the MWD that is delivered to the region through two aqueducts. Of the MWD's 24 member agencies, the SDCWA is the largest member agency in terms of deliveries and purchases about 25 percent of all the water the MWD delivered in fiscal year 2007. As a retail member agency of the SDCWA, the Public Utilities Department purchases water from the SDCWA for retail distribution within its service area.

The SDCWA's 2010 Urban Water Management Plan, in accordance with State law and the RUWMP, contains a water supply reliability assessment that identified a diverse mix of imported and local supplies necessary to meet demands over the next 25 years in average, single-dry year and multiple-dry year periods. The UWMP is based on SANDAG's 2050 Regional Growth Forecast, which has been refined to include an economic outlook that factors in the current recession and local jurisdictions' general/specific plan updates. The UWMP documents that no shortages are anticipated within its service area. The SDCWA also prepared an annual water supply report for use by its members that provides updated documentation on existing and projected water supplies.

The SDWCA's 2010 UWMP provides for a comprehensive planning analysis at a regional level and includes water use associated with accelerated forecasted residential development as part of its municipal and industrial sector demand projections. These housing units were identified by SANDAG in the course of its regional housing needs assessment, but are not yet included in existing general land use plans of local jurisdictions. The demand associated with accelerated forecasted residential development is intended to account for SANDAG's land use development currently projected to occur between 2035 and 2050, but has the likely potential to occur on an accelerated schedule. SANDAG estimates that this accelerated forecasted residential development could occur within the planning horizon (2010 to 2035) of the 2010 UWMP. These units are not yet included in local jurisdiction's general plans, so their project demands are incorporated at a regional level. When necessary, this additional demand increment, termed Accelerated Forecasted Growth, can be used by member agencies to meet demands of development projects not identified in the general land use plans.

The SANDAG Series 12 2050 Regional Growth Forecast (SANDAG Series 12 Forecast) did not include the level of development of the proposed project in the 20-year planning horizon required by SB 610 and SB 221. The difference between the planned and projected water demands of the project can be accounted for in the SDCWA's 2010 UWMP accelerated forecasted growth demand increment. As documented in the SDCWA's 2010 UWMP, SDCWA is planning to meet future and existing demands which include the demand increment associated with the accelerated forecasted growth. SDCWA will also assist its member agencies in tracking the certified EIRs provided by the

agencies that include water supply assessment which utilize the accelerated forecasted growth demand increment to demonstrate adequate supplies for the development. In addition, the next update of the demand forecast for the SDCWA 2015 UWMP will be based on SANDAG's most recently updated forecast, which will include the proposed Watermark project.

**Challenges to Regional Water Supply.** Water supply for southern California faces many short-term and long-term challenges, including restrictions for endangered species and other environmental protections, droughts, funding shortfalls for new projects, climate change, and others. The Public Utilities Department, SDCWA, and MWD prepare and revise their water supply and management plans as needed to ensure their continuing ability to serve the water supply needs of the region. These agencies continue to adopt measures and develop new programs, policies, and projects to provide a greater degree of certainty during periods of prolonged drought or to offset possible reductions in other sources of supply.

Operation of the State Water Project along with the Central Valley Project in the San Joaquin Valley were challenged in 2007 in efforts to protect endangered species and habitat, resulting in reduction in the water delivery capacity of both projects. In efforts to ensure reliability of the Sacramento–San Joaquin Delta water supply, the MWD adopted a Delta Action Plan as a framework to address water supply risks in the Sacramento–San Joaquin Delta both for the near-, mid-, and long-term. In the near-term, MWD will continue to rely on plans and policies outlined in its RUWMP and IWRP to address water supply shortages and interruptions to meet water demands. Campaigns for voluntary water conservation, curtailment of replenishment water, and agricultural water delivery are some of the actions outlined in the RUWMP. If necessary, reduction in municipal and industrial water use and mandatory water allocation could also be implemented. MWD also entered into a series of agreements to ensure the stability of its Colorado River supplies and to gain substantial storage capacity in years with surplus supplies. As a result, MWD's water supply is anticipated to be restored to previous levels in the future.

At the local level, the SDCWA is in the process of minimizing the amount of water it purchases from MWD by diversifying its water supply portfolio. The SDCWA intends to increase its local water supplies to 40 percent of the region's water supplies by 2020 through conservation programs, recycling, and groundwater development projects.

In addition, the Public Utilities Department emphasizes the importance of water conservation to minimize water demand and avoid excessive water use. In accordance with Municipal Code Section 147.04, all residential, commercial, and industrial buildings, prior to a change in ownership, are required to be certified as having water-conserving plumbing fixtures in place.

Also, in accordance with the Conservation Element of the City's General Plan (Policy CE-A.11), development projects shall implement sustainable landscape design such as planting "deciduous shade trees, evergreen trees, and drought-tolerant native vegetation, as appropriate, to contribute to sustainable development goals" and using "recycled water to meet the needs of development projects to the maximum extent feasible" to aid in water conservation.

The Public Utilities Department's Water Conservation Program, established in 1985, accounts for approximately 32,000 AF of potable water savings per year. These savings have been achieved



through creation of a water conservation ethic, and implementation of programs, policies, and ordinances designed to promote water conservation practices, including irrigation management. These programs undergo periodic reevaluation to ensure realization of forecasted savings. The Public Utilities Department also examines new water saving technologies and annually checks progress toward conservation goals, working collaboratively with the MWD and SDCWA to formulate new conservation initiatives.

**Global Climate Change.** The MWD's sources of water supply could be negatively impacted by global climate change and associated challenges, including, but not limited to: reduction in the average annual snow pack; changes in the timing, intensity, location and amount, and variability in precipitation; long-term changes in watershed vegetation and increased incidence of wildfires; rise in sea level; increased water temperatures; and changes in urban and agricultural water demand.

While the impacts of global climate change on MWD's water supply cannot be meaningfully quantified at this time, MWD has taken actions to decrease potential impacts of climate change on the reliability of its water supplies, which are reflected in its IWRP and RUWMP. In addition to policies emphasizing diversification and adaptability of supply sources to manage uncertainties, current MWD water supply planning stresses the importance of local water supplies such as conservation, water reclamation, and groundwater recharge which would be less affected by global climate change. MWD has also entered into agreements to store water in groundwater reservoirs within and outside southern California.

The SDCWA is currently in the planning phase for projects to obtain potable water from ocean desalinization plants, which would relieve pressure on imported water sources and expand the local water supply.

**Water Supply Assessment and Verification.** California State SB 221 and SB 610 went into effect January 2002 with the intention of linking water supply availability to land use decisions made by cities and counties. SB 610 requires water suppliers to prepare a WSA report for inclusion by land use agencies within the CEQA process for new developments subject to SB 221. SB 221 requires water suppliers to prepare written verification that sufficient water supplies are planned to be available prior to approval of large-scale subdivisions. As defined in SB 221 and SB 610, large-scale projects include residential development projects of more than 500 residential units and/or shopping centers or businesses employing more than 1,000 people or having more than 500,000 square feet of floor space.

### Sewer

Wastewater treatment service is provided by the San Diego Metropolitan Wastewater Department (MWWDD), which operates the Metropolitan Sewerage System. Facilities in the Metro System include the Point Loma Wastewater Treatment Facility, ocean outfall pipes, pump stations, interconnecting interceptor sewers, and the North City and South Bay Water Reclamation Plants.

The Metropolitan Sewerage System provides wastewater transportation, treatment, and disposal services to the San Diego region. The system serves a population of 2.0 million from 16 cities and districts generating approximately 190 million gallons of wastewater per day (mgd). Planned improvements to the existing facilities will increase wastewater treatment capacity to serve an

estimated population of 2.9 million through the year 2050. Nearly 340 mgd of wastewater will be generated by that year.

The MWWD treats the wastewater generated in a 450 square mile area stretching from Del Mar and Poway to the north, Alpine and Lakeside to the east, and south to the Mexican border. The Point Loma Wastewater Treatment Facility currently treats approximately 175 mgd, with a capacity of 240 mgd.

Sewer facilities have been built at the project site to serve the existing approvals for the MedImpact facilities. The existing public sewer system would be abandoned and vacated in lieu of new private facilities that would be shared between lots.

### **Storm Drainage**

Flows from the project area drain toward inlets leading to the storm drain system constructed on-site as part of the Scripps Gateway project. These flows discharge directly west of the site, then enter a 60-inch reinforced concrete pipe (RCP) storm drain line conveying flow north under Scripps Poway Parkway. The flows are then discharged west of Cara Way, east of the I-15 on-ramps. From there, the flows are conveyed via surface ditch/channel into Cypress Canyon, located east of I-15 and approximately 600 feet north of Scripps Poway Parkway. Cypress Canyon converges with Los Peñasquitos Canyon Creek directly east of I-15. Project runoff continues flowing east in Los Peñasquitos Canyon Creek for 7.5 miles before turning north immediately after crossing under I-5 near Sorrento Valley Boulevard. Los Peñasquitos Canyon Creek then enters Torrey Pines State Reserve and converges with Soledad Creek to form Los Peñasquitos Lagoon. Los Peñasquitos Canyon Creek outlets to the Pacific Ocean on the north side of Torrey Pines State Beach. (See Section 5.12, *Hydrology/Water Quality*, for a detailed discussion of the project's impacts relative to hydrology and water quality.)

The existing public storm drain system includes two separate main lines, which roughly divide the on-site draining into eastern and western halves. The eastern line runs through the middle of the property, while the western line runs adjacent to the westerly property line. The two lines confluence with each other immediately before they discharge off-site.

### **Solid Waste Services**

Solid waste services in the project area is provided by the combined service of the City of San Diego Environmental Services Department (ESD) and private collectors. The City provides refuse collection for single-family and multi-family residences located on public streets that meet City safe storage and access requirements; collection services for all other developments must be contracted-out by franchised private hauling companies.

ESD pursues waste management strategies that emphasize waste reduction and recycling, composting, and environmentally-sound landfill management to meet the City's long-term management needs. ESD ensures that all Federal, State, and local mandates relating to waste management are met in an efficient and financially sound manner. The State of California mandated (AB 939/PRC 41730 et seq.) in 1989 that all cities reduce waste disposed of in landfills by 25 percent by 1995 and 50 percent by the year 2000 (using 1990 as a base year for waste generation data). Recently signed Assembly Bill 341 has set a new target of 75 percent minimum diversion rate. ESD developed a Source Reduction and Recycling Element (SRRE), as required by the PRC, to

reduce wastes deposited of in landfills by 50 percent compared to 1990 base year tonnages. The SRRE describes the programs, activities, and strategies the City plans to carry out to achieve the mandated waste reduction and is updated each year in annual reports to CalRecycle. The City of San Diego has achieved a 68 percent diversion rate as of reporting year 2010.

Solid waste generated by the project during the occupancy phase would be hauled away by private collection services from franchised haulers for the City of San Diego. The waste would be taken to either the City of San Diego's West Miramar Landfill, which is located north of Highway 52 at 5180 Convoy Street in San Diego; the Sycamore Sanitary Landfill, located at 8514 Mast Boulevard in San Diego; or the Otay Landfill, located at 1700 Maxwell Road in Chula Vista.

Waste generated by the project that cannot be reduced, recycled, or otherwise diverted to beneficial use is expected to be transported to and disposed of at the West Miramar Landfill. In 2010, that landfill disposed of 929,849 tons of waste. The landfill is projected to reach capacity in 2022.

Currently, only two other landfills provide disposal capacity within the urbanized region of San Diego: the Sycamore and Otay Landfills. These landfills are disposal options after the year 2022 (when West Miramar Landfill is anticipated to reach capacity) or if the City of San Diego decides to reserve capacity at the West Miramar Landfill for City-collected tonnages. The Sycamore Landfill contains 324 disposal acres on a 491-acre site and is located to the east of Miramar, within the City of San Diego's boundaries. The Sycamore Landfill is permitted to receive a maximum of 3,965 tons per day. The permitted capacity of the Sycamore landfill is 48,124,462 cubic yards, and its remaining capacity as of September 30, 2006, was 47,388,428 cubic yards. This landfill is projected to cease operation on December 31, 2031. The Otay Landfill contains 230 disposal acres on a 410-acre site and is located within an unincorporated island of County land in the City of Chula Vista. The Otay Landfill is permitted to receive 5,830 tons per day. Its permitted capacity is 61,154,000 cubic yards, with a remaining capacity on March 31, 2012 of 24,514,904 cubic yards. It is estimated that the Otay Landfill will cease operation on February 28, 2028. The Sycamore and Otay Landfills are privately owned by Allied Waste Industries, Inc.

The solid waste management system infrastructure provides an essential public service to the citizens of California. There are three basic components in the solid waste management system: collection; processing to remove recyclable and compostable materials; and disposal of waste that cannot be recycled. These three components, coupled with the implementation of waste reduction and recycled material market development programs, ensure that the integrity of the solid waste management system is well maintained for the citizens of California.

**Collection Facilities.** Timely and adequate collection of solid waste protects public health and safety, and the environment. An effective collection system prevents unsightly, vector-propagating, and odorous waste accumulation outside residences and businesses. This also results in minimizing illegal disposal, discharge of waste to surface water bodies, and impacts to ecologically sensitive habitats. The effectiveness of California's recycling efforts begins at the source of generation, at the households and businesses, where many collection companies provide multiple bins that allow source separation of recyclables and green waste from the waste stream. Public education and outreach programs are essential elements of the solid waste management system, which brings awareness to the public in their recycling efforts and the positive outcomes achieved.

**Materials Recovery, Composting, and Processing Facilities.** Processing of waste involves the systematic separation and recovery of valuable recyclable materials and removal of illegally disposed hazardous waste from the waste stream at Materials Recovery Facilities (MRFs), composting facilities, and conventional recycling centers prior to landfilling of residual waste. Processing also includes recovery of energy from the waste streams using waste-to-energy and a variety of conversion technologies, such as anaerobic digestion, gasification, and other technologies.

**Disposal Facilities.** California's landfills are considered among the best in the nation with respect to innovation, technology, and effectiveness in protecting the environment. Due to potential environmental impacts of landfills, the state's disposal system is heavily regulated by a multitude of regulatory agencies. As a result, landfill operators are required to implement best management practices and abide by permit conditions that ensure environmentally safe and sound operation of their landfills now and into the future.

**Policies and Programs.** User fees have been the primary funding source for development of California's solid waste management system infrastructure, for implementation of waste reduction programs, and educational campaigns. The sluggish economy, however, has significantly reduced waste disposal volumes over the last five years, thereby reducing revenues. Lowered revenues, in turn, limits the ability of many local governments and solid waste facility owners to expand operations and implement new recycling programs; and in some cases, has made maintaining existing operations difficult. Moreover, volatile worldwide recycling markets will continue to contribute to financial uncertainty and operational difficulty in local recycling programs. In addition, the solid waste infrastructure continues to be challenged with new regulations and mandates, making it even more costly and difficult to see positive growth. These fiscal constraints, coupled with reduced public acceptance of new solid waste management facilities, will require decision makers to continue finding creative solutions to meet solid waste management needs.

A Waste Management Plan (WMP) has been prepared for the proposed project. The purpose of the WMP for the Watermark project in the City of San Diego is to provide analysis of the solid waste impacts anticipated for the Watermark project and how these impacts would be mitigated. The goal of the WMP is to identify sufficient mitigation to reduce the potential impacts of the Watermark project on solid waste generation. In accordance with Council Policy 900-16, this goal would be met by striving for recycling of 100 percent of inert construction materials and striving for recycling a minimum 75 percent by weight all other materials. The Watermark WMP has been approved as part of the project entitlements.

### 5.15.2 Impact Analysis

#### *Thresholds of Significance*

The City of San Diego's *California Environmental Quality Act Significance Thresholds* (January 2011) provides guidance to determine potential significance associated with hydrology and water quality. Based on the City's *California Environmental Quality Act Significance Thresholds*, for impacts to public utilities, a project may result in a significant impact if it meets one or more of the following criteria:

*Water*

- If a project would use excessive amounts of potable water.
- If a project proposes predominantly non-drought resistant landscaping and excessive water usage for irrigation and other purposes.
- If a project would result in a need for new systems, or require substantial alterations to existing water utilities which would create physical impacts.

*Water Supply*

For certain types of large projects, SB 610 requires that the environmental document prepared for each project contain a discussion regarding the availability of water to meet the projected water demands of the project for a 20-year planning horizon, including single and multiple dry years. Prior to approving a project, SB 221 requires the decision-maker to make a finding that the project's water demands for the planning horizon will be met.

The types of projects subject to SB 610 and SB 221 are the following:

- Residential developments of more than 500 units;
- Shopping centers or businesses employing more than 1,000 people or having more than 500,000 square feet of floor space;
- Commercial office buildings employing more than 1,000 people or having more than 250,000 square feet of floor space;
- Hotels or motels having more than 500 rooms;
- Industrial, manufacturing, or processing plants or industrial parks planned to house more than 1,000 people, occupy more than 40 acres of land, or have more than 650,000 square feet of floor space;
- Mixed use projects that include one or more of the above types of projects;
- Projects that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

The City has determined that the Watermark project meets one or more of the above thresholds. Therefore, a Water Supply Assessment has been prepared for the project and is included in Appendix L.

*Sewer*

- If a project would result in a need for new systems, or require substantial alterations to existing sewer utilities which would create physical impacts.

*Storm Drains*

- If a project would result in a need for new systems, or require substantial alterations to existing storm drain facilities which would create physical impacts.

*Solid Waste*

- Projects that include the construction, demolition, or renovation of 1,000,000 square feet or more of building space may generate approximately 1,500 tons of waste or more and are considered to have direct impacts on solid waste facilities.
- Projects that include the construction, demolition, and/or renovation of 40,000 square feet or more of building space may generate approximately 60 tons of waste or more,



and are considered to have cumulative impacts on solid waste facilities.

***Issue 1***

*Would the proposed project result in the need for new systems or require substantial alterations to existing utilities including those necessary for water, sewer, storm drains, and solid waste disposal? If so, what physical impacts would result from the construction of these facilities?*

***Impact Analysis******Water***

The Watermark project is proposed for a graded site within the Miramar Ranch North community. The site has been graded in accordance with existing approvals for the MedImpact project, which is a part of the larger Scripps Gateway project. As such, water facilities have been installed to serve the project and adjacent areas. Specifically, public water facilities are located in the Scripps Highlands Drive and Scripps Poway Parkway. The size and capacity of these existing utilities would be adequate to serve the proposed Watermark project. No new systems or alterations to the existing utilities would be required. Impacts to existing water facilities would not occur.

***Water Supply***

The City's Public Utilities Department prepared a WSA Report for the project. The Report identifies the water demand projections for the project and concludes that the project is consistent with the water demand assumptions in the regional water resource planning documents of the City of San Diego, the County Water Authority, and the Metropolitan Water District and demonstrates that there are sufficient water supplies over a 20-year planning horizon to meet the projected demands of the project, as well as existing and other planned development project within the City's Public Utilities Department service areas in normal, dry year, and multiple dry year forecasts. Table 5.15-1, *Watermark Water Demand Analysis*, presents the projected water usage for the project by use.

Table 5.15-1. *Watermark Water Demand Analysis*

Planned Water Demands for the Watermark Project Site per the 2010 UWMP		
Category	Quantity	Estimated Potable Water Use in Gallons per Day
<i>Employees</i>	<i>1,610</i>	<i>96,600</i>
<i>Total</i>		<i>96,600 or 108 acre feet per year (AFY)</i>
Projected Water Demands for the Watermark Project <sup>6</sup>		
<i>Commercial-Office (sq. ft.)<sup>2</sup></i>	<i>597,300</i>	<i>51,637</i>
<i>Commercial-Retail (sq. ft.)</i>	<i>391,200</i>	<i>33,819</i>
<i>Theater (seats)<sup>3</sup></i>	<i>1,750</i>	<i>6,650</i>
<i>Hotel (rooms)<sup>4</sup></i>	<i>130</i>	<i>12,350</i>
<i>Total<sup>5</sup></i>		<i>104,456 or 117 AFY</i>
Net Water Demands		
<i>Projected</i>		<i>117 AFY</i>
<i>City of San Diego 2010 UWMP – Planned</i>		<i>108 AFY</i>
<i>Planned from Water Authority's Accelerated Forecasted Growth</i>		<i>9 AFY</i>
<i>Net Unanticipated Demands</i>		<i>0</i>
<ol style="list-style-type: none"> <li>1. The utilization of 60 gallons per person per day is the City's acceptable standard for employment water use.</li> <li>2. Commercial (Retail and Office) water use is estimated at 91 gallons per day per 1,000 square feet of space.</li> <li>3. Theater water use is estimated at 4 gallons per seat per day.</li> <li>4. Hotel water use is estimated at 100 gallons per room per day.</li> <li>5. The applicant is proposing high efficiency plumbing fixtures and appliances. Based on this information, the City's Public Utilities Department accepted a water demand reduction of 5% for non-residential uses.</li> <li>6. The WSA Report is conservative in its analysis and assumes a greater development intensity than the proposed project evaluated in this EIR. Actual development of Watermark may vary and is controlled by the TIA. Development intensities cannot exceed the assumptions in the TIA relative to peak hour traffic at studied intersections during the AM and PM.</li> </ol>		
Source: <i>Watermark Water Supply Assessment Report</i> , March 5, 2012		

The City's UWMP estimates water demands for the project site at 96,600 gallons per day or 108 acre feet per year. The remaining portion of the estimated 7,856 gallons per day or 9 acre feet per year is accounted for through the Accelerated Forecasted Growth demand increment of the Water Authority's 2010 UWMP. Therefore, based on the findings from the City's 2010 UWMP and the Water Authority's 2010 UWMP, the project would result in no unanticipated demands and will not result in significant impacts associated with water supply.

### *Sewer*

The City of San Diego requested that the Sewer Study prepared for the existing project approvals (PID No. 99-1027) be amended to determine if additional sewer needs would be generated by the proposed project beyond that estimated for the existing approvals. Accordingly, a *Sewer Study Amendment* was prepared by Fuscoe Engineering (November 2009).

Based on the City of San Diego Sewer Design Guide (2004), the existing project approvals generate sewer equivalent to 1,295 dwelling units (EDUs). The proposed Watermark project would generate sewer equivalent to 895 dwelling units. Therefore, the proposed project would result in a decrease in on-site generated sewer effluent. Because sewer utilities on-site were constructed based on previous approvals projecting higher EDU amounts, on-site sewer utilities are adequate to handle sewerage generated by the project (400 EDUs less than the approved entitlements), and no new facilities would be required. The proposed project would not result in significant impacts associated with sewer.

### *Storm Drains*

As previously stated, the project site has been graded in accordance with existing approvals. The graded pad areas flow toward existing sediment basins which feed the existing eastern and western storm drain lines flowing north under the site. The storm drains confluence west of the proposed Watermark site, at a splash pad adjacent to a 60-inch storm drain inlet carrying flow north. This storm drain, located directly northwest of the project site, crosses under Scripps Poway Parkway, mixes with other flows, and discharges to an unnamed channel flowing towards Cypress Canyon.

The proposed site consists of new storm drain facilities with an extremely similar drainage condition as the existing condition. The on-site storm drain system is designed to reflect the existing boundary and acreage of Basin 1. The northerly Basin 1 boundary would be slightly altered by the proposed project, decreasing the basin by approximately 0.1 acres. This change in area would not result in significant impacts.

The existing storm drain in the middle of the site is proposed to be relocated to street corridors in order to avoid conflicts with proposed building footprints. The westerly storm drain would remain in place. The proposed relocation of the on-site storm drain would result in reducing the peak discharge for Basin 1 by approximately 5.9 CFS as shown in Table 5.12-1, *Summary of Peak Discharges for Basin 1*.

Under existing conditions, the two on-site storm drains arrive at the confluence point with the same time of concentration ( $T_c$ ) ( $T_c$  is used to measure the response of a watershed to a rain event). Under proposed conditions, relocation of the eastern storm drain reduces the overall travel length, which results in a decrease in the  $T_c$ , and the peak discharge is reduced. Proposed modification to the storm drain system would not result in significant impacts.

The capacity of the existing Caltrans 60-inch pipe at the Basin 1 confluence was also analyzed to ensure that adequate capacity was available to project runoff. The capacity was found to be approximately 297 CFS, which is adequate to convey the proposed 100-year discharge. No impacts to storm drains would result from the Watermark project.

### *Solid Waste*

As described in Section 3.0, *Project Description*, the proposed project is comprised of a mix of urban uses, including commercial retail, office, hotel, restaurants, and a movie theater and bowling alley. In order to allow flexibility in the mix of regional commercial office and/or retail uses in a manner that is reflective of market conditions for employment and retail serving uses, the project's development intensity includes a development range.

In order to determine the amount of solid waste that could be generated by the project, the target development intensity is used. The target development intensity represents a typical development scenario. Depending on the needs of the marketplace at the time development occurs, other mixes of office and retail development could occur and may result in more or less than the "target development intensity". However, as described in Section 3.0, *Project Description*, due to controls placed on the project for traffic purposes, the target development intensity is limited by both total traffic generated and the amount of peak-hour trips.

The resultant estimate of solid waste to be generated by the project is approximately 2,425 tons per year, as shown in Table 5.15-2, *Estimated Solid Waste Generation from the Watermark Project – Occupancy Phase*. (Because the MedImpact facilities are being developed under existing approvals, the approved square footage for MedImpact is not included in this estimate. As a result, the analysis pertains to Area A only.)

**Table 5.15-2. Estimated Solid Waste Generation from the Watermark Project – Occupancy Phase (Area A)**

Use	Intensity (square feet)	Waste Generation Rate (tons/year/sq.ft.)	Estimated Waste Generated (tons/year)
Commercial - Office	502,112	0.0028	1,406
Commercial - Retail	316,000	0.0017	537
Hotel	90,540	0.0045	407
Theater	43,917	0.0017	75
<b>TOTAL</b>			<b>2,425</b>

The City's threshold for determining if a project would have a significant direct impact associated with solid waste generation is a project that includes the construction, demolition, or renovation of 1,000,000 square feet or more of building space that may generate approximately 1,500 tons of waste or more per year. The proposed project would not generate more than 1,500 tons of solid waste per year and is under 1,000,000 square feet of building space; therefore, is below the City's threshold of significance for direct impacts on solid waste. Significant direct impacts associated with solid waste would not occur.

The City's threshold for determining if a project would have a significant cumulative impact associated with solid waste generation is a project that includes the construction, demolition, and/or renovation of 40,000 square feet or more of building space that may generate approximately 60 tons of waste or more per year. The project would exceed the City's threshold for cumulative impacts as it would generate more than 60 tons per year of waste with building space in excess of 40,000 square feet and would, therefore, contribute to a significant cumulative impact associated with solid waste.

The proposed project meets the City's 40,000-square foot threshold. A WMP has been prepared for the project (see Appendix R) and has been approved by the City's Environmental Services Department. Implementation of the WMP would ensure that the project would reduce waste by a minimum of 75 percent of construction-related waste and would implement waste reduction measures during the occupancy phase of the project. Measures identified in the WMP, when implemented, would ensure that potential impacts to solid waste management facilities, including landfills, materials recovery facilities, and transfer stations, as well as services, including collection, would be below a level of significance.

### ***Significance of Impacts***

The project would not result in significant impacts to water, sewer, and storm water drainage. Additionally, the project would not result in significant direct impacts associated with solid waste. The project would exceed the City's threshold for cumulative solid waste impacts, contributing to cumulatively significant impacts associated with solid waste.

### ***Mitigation Measures***

No significant impacts associated with water, sewer, and storm water drainage and direct impacts to solid waste would occur. Therefore, no mitigation measures are required.



## 6.0 CUMULATIVE EFFECTS

Section 15355 of the State CEQA Guidelines describes “*cumulative impacts*” as two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. These individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from a project is the change in the environment which 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.

The discussion of cumulative impacts for the Watermark project considers both existing and future projects in the Watermark project vicinity. For this analysis, the project vicinity is defined as the Miramar Ranch North community. Existing and future projects are based on the following information sources:

- A summary of projections contained in the City’s General Plan and the Miramar Ranch North Community Plan; and
- Past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the City of San Diego. These projects include those which result in or contribute to regional or area-wide conditions.

According to Section 15130 of the CEQA Guidelines, the discussion of cumulative effects “...*need not be provided as great a detail as is provided the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness.*” The evaluation of cumulative impacts is required by Section 15130 to be based on either: “(A) *a list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or (B) a summary of projections contained in an adopted general plan or related planning document, on in a prior environmental document which had been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative effect. Any such planning document shall be referenced and made available to the public at a location specified by the Lead Agency.*”

The basis and geographic area for the analysis of cumulative impacts is dependent on the nature of the issue and the project. For analysis of cumulative impacts which are localized (e.g., traffic and public services), a list of past, approved and pending projects was identified. The location of these projects is illustrated in Figure 6-1, *General Location of Cumulative Projects*.

Provided below is a description of the planning documents used in this analysis of cumulative effects, as well as the development projects which have been individually evaluated for their contribution to cumulative effects.



Figure 6-1. General Location of Cumulative Projects

### 6.1 PLANS CONSIDERED FOR CUMULATIVE EFFECTS ANALYSIS

#### 6.1.1 General Plan

The proposed project is located within the City of San Diego. The City of San Diego's General Plan sets forth a comprehensive, long-term plan for development within the City of San Diego. As such, the plan and development guidelines it identifies pertain to the project site. The current General Plan was adopted in March 2008 and represents a comprehensive update and replacement of the City's 1979 *Progress Guide and General Plan*. The City's General Plan includes incorporation of a Strategic Framework Element replaces the previous chapter entitled "Guidelines for Future Development."

San Diego comprises 219,241 acres (approximately 342 square miles), and less than four percent of this land remains vacant and developable. The City expects to reach an estimated population of 1,514,336 by the year 2020 and 1,656,257 by the end of 2030. Future development will require the City to reinvest in existing communities to plan for greater urbanization of infill sites. The project site is designated as Industrial land use in the General Plan and identified as Prime Industrial Lands. The project requires a General Plan Amendment to change the land use designation to Regional Commercial for a portion of the site (Area A) and to remove Area A from the Prime Industrial Lands identification.

Included within the City's General Plan is the Economic Prosperity Element. The element identifies areas within the City where industrial uses should be preserved and identifies those areas as Prime Industrial Lands. The project site has been identified as Prime Industrial Land. The project proposes that the Prime Industrial Lands identification be removed from Area A of the project site, which requires an amendment to the General Plan. (See Section 3.0, *Project Description*, and Section 5.1, *Land Use*.)

#### 6.1.2 Miramar Ranch North Community Plan

The project site is governed by the Miramar Ranch North Community Plan, which was adopted by the San Diego City Council on March 4, 1980, and was subsequently amended in 1987, 1991, 1995, and 1998. The Community Plan is intended to serve as a comprehensive guide for residential, industrial, and commercial developments; open space preservation; and development of a transportation network within the plan area.

The project site is identified as the Mercy Site and is designated for Industrial Development in the Miramar Ranch North Community Plan. The project requires an amendment to the Community Plan to change the site's land use designation from Industrial/Business Park to Regional Commercial.

### 6.2 PROJECTS CONSIDERED FOR CUMULATIVE EFFECTS ANALYSIS

As stated above, the past, present, and probable future projects considered in this cumulative analysis would produce related or cumulative impacts when evaluated in relation to the potential impacts of the proposed Watermark project. Descriptions of development projects that have been individually evaluated for their contribution to cumulative effects are provided below.



For the Watermark project, cumulative impacts could be associated with traffic and with concomitant cumulative impacts to air quality and greenhouse gas emissions. For this reason, three of the projects listed below – MedImpact, Sharp Health, and Casa Mira View – are included in the cumulative impacts analysis due to their contribution to cumulative traffic, air quality, and greenhouse gas emissions.

### 6.2.1 MedImpact

For purposes of the Watermark TIA, the TIA includes the approved MedImpact facilities as an “other project” and, therefore, part of the cumulative effects analysis for traffic. MedImpact is located in Area B of the Watermark project. The existing approvals for MedImpact allow for the construction of two Class A office buildings, totaling 350,743 square feet, as the new corporate headquarters for MedImpact Healthcare Systems, Inc. The first of the two buildings (approximately 155,000 square feet) and parking structure have been constructed on the project site. The MedImpact facilities would generate approximately 3,243 ADT when fully occupied.

The MedImpact project is part of the larger Scripps Gateway project. Approved in 1998, the Scripps Gateway project resulted in the subdivision of the original 242.1-acre property and zoning the property for residential, commercial retail, and industrial park uses through the approval of a General Plan/Community Plan Amendment, Tentative Map, Planned Development Permits, and associated actions. A Final EIR for the Scripps Gateway project (dated July 16, 1998) was certified for the existing approvals/previous project (LDR No. 92-0466; SCH No. 92101036). That EIR concluded that the Scripps Gateway project could result in significant impacts associated with Land Use, Landform Alteration/Visual Quality, Biological Resources, Noise, Archaeological Resources, Hydrology/Water Quality, Traffic Circulation, Public Services/Facilities, Traffic, Air Quality, and Paleontological Resources. Mitigation measures incorporated into the Scripps Gateway project reduce all significant impacts to below a level of significance, with the exception of Land Use (MSCP) (direct and cumulative), Landform Alteration/Visual Quality (direct and cumulative), Biological Resources (cumulative), Hydrology/Water Quality (cumulative), Traffic Circulation (cumulative), and Air Quality (cumulative).

### 6.2.2 Sharp Health

The Sharp Health project involves development of 45,000 square feet of medical office uses located north of Scripps Poway Parkway at Scripps Summit Drive. This project is also included in the cumulative effects analysis for traffic. It is anticipated to generate 900 ADT when fully occupied.

### 6.2.3 Casa Mira View

The Casa Mira View project (Project No. 91647) is a large multi-family residential project located southwest of Watermark, on Westview Parkway north of Mira Mesa Boulevard and adjacent to I-15. The project consists of 1,848 multi-family residential units expected to generate 11,088 ADT.

An EIR has been certified for the Casa Mira View project (SCH No. 2007111095). The EIR addresses the following issue areas: Land Use; Traffic Circulation; Air Quality; Public Facilities and Services; Noise; Paleontology; Biological Resources; Aesthetics, Neighborhood Character, and Visual Quality; Hydrology/Water Quality; Geologic Conditions; and Energy Conservation. The first phases of the project are currently under construction. The EIR required incorporation of mitigation measures which reduced impacts to all project impacts to below a level of significance,

with the exception of Traffic and Circulation (direct and cumulative), Air Quality (direct and cumulative), Public Services (Solid Waste) (cumulative), and Noise (short-term direct).

While this project has been included in the cumulative effects analysis for traffic, it is located a relative distance from the Watermark project site and has limited impacts on study area intersections and segments focused on Black Mountain Road and Mercy Road.

### 6.3 CUMULATIVE EFFECTS ANALYSIS

The project's potential to make a considerable contribution to cumulative effects associated with the various environmental issue areas addressed in this EIR is evaluated below.

#### 6.3.1 Land Use

The proposed project would require an amendment to the Miramar Ranch North Community Plan to change the land use designation for the project site from Industrial to Retail Commercial. As analyzed in Section 5.1, *Land Use*, of this EIR, while the existing development (Corporate Office) on a portion of the project site (Area B) implements the recommendations of the Community Plan, the proposed project requires a Community Plan Amendment to change the land use designation from Industrial to Regional Commercial on Area A. Additionally, the proposed project is inconsistent with the Prime Industrial Land indication in the General Plan and requires a General Plan and Community Plan Amendment. The project's proposal to remove the Prime Industrial Land identification would not result in significant environmental impacts associated with land use.

The proposed project would not result in significant cumulative land use impacts. In the City of San Diego, each proposal to amend a Community Plan or the General Plan is reviewed separately and on its own merits. The proposed project would not result in significant environmental effects due the proposed land use amendments, and there are no environmental impacts that have been identified which, when considered on a cumulative basis, would result in significantly cumulative impacts. The project's proposal to remove the General Plan's identification of Prime Industrial Lands has been analyzed and determined that no environmental impacts would result from that change.

Therefore, the proposed project would not result in cumulatively significant land use impacts.

#### 6.3.2 Transportation/Traffic Circulation/Parking

The Traffic Impact Analysis, prepared for the project and included in the discussion of *Transportation/Traffic Circulation/Parking* impacts presented in Section 5.2, includes an evaluation of cumulative impacts in the near-term and in Year 2030. That analysis includes anticipated build-out of the Miramar Ranch North Community Plan area and SANDAG's Series 11 growth projections, as well as other foreseeable projects that could affect traffic in the project area. The other foreseeable projects include the existing MedImpact facilities, Sharp Health, and Casa Mira View projects, which are summarized in Section 6.2, *Projects Considered for Cumulative Effects Analysis*, above.



As evaluated in Section 5.2, *Transportation/Traffic Circulation/Parking*, the project would result in cumulatively significant impacts at six roadway segments and one arterial segment location. Segments where cumulatively significant impacts would occur:

- Scripps Poway Parkway - I-15 Northbound Ramps / Scripps Highlands Drive
- Scripps Poway Parkway - Scripps Highlands Drive / Scripps Summit Drive
- Scripps Poway Parkway – Scripps Summit Drive / Spring Canyon Road
- Scripps Poway Parkway – Spring Canyon Road / Scripps Creek Drive
- Scripps Poway Parkway – Scripps Creek Drive / Cypress Canyon Road
- Scripps Poway Parkway – Cypress Canyon Road / Angelique
- Scripps Poway Parkway – Angelique Street / Pomerado Road

The project would result in significant cumulative impacts at the following two intersections:

- Scripps Poway Parkway / Scripps Highlands Drive
- Mercy Road / I-15 Southbound Ramps

MM 5.2-1 and MM 5.2-2 would be implemented to partially mitigate the project's impacts on traffic. However, these mitigation measures would not fully mitigate street segment impacts, and impacts would remain significant and unmitigated, requiring that the decision-makers adopt a project alternative which reduces or avoids cumulatively significant impacts or adopt a Statement Overriding Considerations which finds the impact to be acceptable.

### 6.3.3 Visual Effects and Neighborhood Character

According to the City of San Diego *CEQA Significance Determination Thresholds*, a project would have a cumulative effect on visual quality by opening up a new area for development, which will ultimately cause extensive view blockage. View blockage would be considered extensive when the overall scenic quality of a visual resource is changed; for example, from an essentially natural view to a largely manufactured appearance. As presented in Section 5.3, *Visual Quality/Neighborhood Character*, there are no scenic views or vistas identified in the project area. The proposed project would not obstruct views or have a negative impact on viewsheds. Therefore, no significant cumulative impacts to visual quality would result.

Relative to neighborhood character, according to the City of San Diego *CEQA Significance Determination Thresholds*, a project would have a cumulative impact to neighborhood character if the area opened for new development results in a change in the overall character of the area. Relative to neighborhood character, the project would develop a site that is slated for development in the Community Plan. The proposed project would not open up an area for new development and would not result in a substantial change to the overall community character. The Watermark is located in an area where surrounding land is fully developed, and the project's impacts on neighborhood character are limited to the immediate project area. The proposed project has been designed to be compatible and consistent with the development in the immediate vicinity and with the existing MedImpact facilities. Cumulatively significant impacts to neighborhood character would not occur.

### 6.3.4 Air Quality

The SDAB is considered a nonattainment area for the 8-hour NAAQS for O<sub>3</sub>, and is considered a nonattainment area for the CAAQS for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. An evaluation of emissions of nonattainment pollutants was conducted and it was determined that emissions of all nonattainment pollutants would be below the screening-level thresholds.

The region surrounding the Watermark project is already developed; the project provides infill development. Because the project provides infill development, it would not be anticipated to increase vehicle trips in the region; rather, the project would serve existing needs by providing local retail to the community. The project would therefore not result in a cumulatively considerable increase emissions of ozone precursors (NO<sub>x</sub> and VOCs).

The Traffic Impact Analysis identified three cumulative projects that were included in traffic projections for the area. For purposes of the Watermark Traffic Impact Analysis (TIA), the TIA includes the approved MedImpact facilities as part of the cumulative effects analysis for traffic and are therefore analyzed in this section as part of the cumulative effects analysis for air quality. The three projects include the following:

- The MedImpact Project (two single-tenant office buildings)
- The Sharp Health Project (medical office uses)
- Casa Mira View (1,848 multi-family dwelling units)

The closest project to the Watermark project is the MedImpact project. It is unlikely that both projects would be under construction simultaneously; however, should construction occur simultaneously, because the Watermark project's emissions are below the significance threshold, impacts would not have the potential to be cumulatively considerable. The MedImpact project, which is adjacent to the Watermark project, is likely to provide patrons for the hotel and retail development, thus reducing some cumulative emissions.

The proposed project would not result in contributions to cumulatively significant air quality impacts during construction. Standard mitigation would be required to reduce the amount of fugitive dust generated during construction. The dust control measures listed under MM 5.4-1 would reduce the amount of fugitive dust generated during construction. No further mitigation would be required.

### 6.3.5 Global Climate Change

Global climate change is itself a cumulative topic. Therefore, the analysis contained in Section 5.5, *Global Climate Change*, is an evaluation of the projects cumulative impacts relative to GHG emissions and global climate change.

As presented in Section 5.5, emissions of GHGs for the proposed project were quantified for both construction and operations. Operational emissions were calculated assuming a “business as usual” operational scenario as well as an operational scenario with GHG reduction measures employed. Based on the analysis, quantifiable emission reductions that will be implemented through State and local requirements demonstrate that emissions will be reduced by more than 28.3 percent below “business as usual” levels. The Watermark project would therefore be consistent with the goals of

AB 32. Additionally, the project is consistent with the goals and policies of the City of San Diego General Plan. The proposed project would not result in a significant impact relative to plans, policies, or regulations aimed at reducing GHG emissions.

### 6.3.6 Energy

The project proposes a mixed-use commercial retail and office development on a site in the Miramar Ranch North community that has been previously approved for development as a part of the Scripps Gateway project. SDG&E provides gas and electricity service to the project site, and infrastructure is in place to serve the project.

While the project proposes a change in use from what has been approved on the site, the proposed project would not result in significant cumulative impacts associated with energy use. The project would not use power in excess of that anticipated for the proposed uses. Once developed, the project would use energy for street and parking lot lighting and landscape accent light and sign illumination. Electricity and gas would also be used by tenants, employees, and visitors. Additionally, sustainable design would be incorporated into the project to reduce the project's overall demand for energy.

### 6.3.7 Noise

The proposed project would not result in significant impacts associated with noise. Construction noise would be temporary and for a short duration. There are no near-by sensitive receptors that would be affected by vehicular noise levels.

The *Noise Analysis* prepared for the project by Ldn Consulting (July 29, 2011) calculated the cumulative noise levels from the proposed project based on noise generation sources of the proposed project. These projections include the delivery truck noise, and noise from the HVAC systems of all buildings. Although not all the noise sources are close enough to each other in distance or sound level to create a cumulative effect, this method is considered ultra conservative in determining impact potential. The cumulative noise levels are calculated separately at the three nearest property lines and provided below in Table 6-1, *Cumulative Noise Levels*.

**Table 6-1. Cumulative Noise Levels (Nearest Property Lines)**

Property Line	Delivery Truck Noise Level (dBA Leg)	HVAC Noise Levels (dBA Leq)	Property Line Cumulative Noise Level (dBA Leq)
North	50.4	50.8	53.6
South	43.8	53.8	54.2
East	50.4	58.7	59.3

\*Complies with nighttime City Noise Standards of 60 dBA.

As shown in Table 6-1, none of the proposed noise sources would cumulatively exceed the property line standards at the property lines. Therefore, the proposed development related operational noise levels comply with the daytime and nighttime noise standards at the residences. No impacts are anticipated and no mitigation is required.

### 6.3.8 Biological Resources

The proposed project would not result in direct impacts to biological resources. The site has been previously disturbed as a result of grading activities and construction that has occurred in

accordance with existing approvals. The project would not contribute to cumulatively significant direct impacts associated with biological resources.

### 6.3.9 Historical Resources (Archaeological Resources and Historic Resources)

As addressed in Section 5.9, *Historical Resources (Archaeological Resources and Historic Resources)*, of this EIR, no cultural resources have been identified on the project site. Additionally, the project site was graded and monitored in accordance with previous project approvals associated with the Scripps Gateway project, leaving the Watermark project site in a completely altered state. The Watermark project would not result in significant impacts to historical resources. Because the project would contribute to the loss of historical resources, cumulative impacts would not occur.

### 6.3.10 Geologic Conditions

As presented in Section 5.10, *Geologic Conditions*, of the EIR, no geologic hazards occur on-site which would result in significant impacts to people at the project site. Additionally, the proposed Watermark project would follow standard construction practices to ensure no geologic impacts would result from project development. The proposed project would not contribute to cumulatively significant impacts related to geologic hazards or soils.

### 6.3.11 Paleontological Conditions

As addressed in Section 5.11, *Paleontological Resources*, of this EIR, the proposed project site is underlain by the Compacted Fill and Santiago Peak Volcanics formation, compose of metavolcanic-type rock. Both of these formations have a zero potential to produce paleontological resources. Furthermore, the Final Paleontological Mitigation Report prepared for the Scripps Gateway EIR did not identify any resource potential from the Watermark project site. Additionally, finishing grading would occur in areas of the site that have been graded in accordance with previous approvals. Therefore, implementation of the proposed project would not have the potential to significantly impact paleontological resources. Cumulative impacts associated with paleontological resources would not occur.

### 6.3.12 Hydrology/Water Quality

As addressed by Section 5.12, *Hydrology/Water Quality*, of this EIR, the project would not extract water from an aquifer, increase runoff, and increase flooding. Nor would the proposed project impact drainage patterns or impact downstream water bodies as a result of altered drainage patterns. Therefore, the project would not contribute to any cumulative hydrologic impact. The project would control drainage and runoff in accordance with City requirements. Therefore, no cumulative impacts associated with hydrology would be expected.

Additionally, as discussed in Section 5.12, development of the Watermark project would involve preparation of a SWPPP that sets forth BMPs to minimize water quality impacts during construction, and preparation of a Water Quality Technical Report that identifies permanent post-construction BMPs for the project. With implementation of Best Management Practices, the proposed project would avoid significant impacts to water quality would not contribute to a cumulatively significant impact to water quality.

### 6.3.13 Health and Safety

The proposed project would not result in a significant impact to health and safety. The project does not propose uses that may include hazardous or toxic emissions. There are no hazardous or contaminated soils on-site. Uses proposed would not likely require the use of hazardous materials as they are corporate office and headquarters and not medical offices per approved entitlement permits, and there are no sensitive receptors within one-quarter mile of the project site. Any hazardous materials would be regulated by County DEH, as applicable.

### 6.3.14 Public Services and Facilities

Public services and facilities include many population-based uses, including schools, libraries, and parks, as well as police and fire protection. The project does not propose residential uses, thus eliminating any potential impacts to residential facilities (schools and libraries). The developing MedImpact project proposes its own fitness facility, and the proposed project includes community gathering space; impacts to parks and recreation would not be significant. The project is located within an area of Miramar Ranch North that is developed and contains the necessary Police and Fire-Rescue infrastructure. The proposed project would not result in a significant impact to these services' ability to serve the community.

### 6.3.15 Public Utilities

The proposed project would not result in significant impact to public utilities, except solid waste. The Watermark project would generate solid waste through construction and operation of the proposed mixed-use retail commercial and office development.

According to the City of San Diego's CEQA Significance Determination Thresholds, cumulative impacts to solid waste facilities would be considered significant if the project includes the construction, demolition, and/or renovation of 40,000 square feet or more of building space. Additionally, "cumulative project impacts are mitigated by the implementation of a project-specific Waste Management Plan (WMP), which reduces solid waste impacts to below a level of significance."

The proposed project meets the City's 40,000-square foot threshold. A WMP has been prepared for the project (see Appendix R) and has been approved by the City's Environmental Services Department. Implementation of the WMP would ensure that the project would reduce waste by a minimum of 75 percent of construction-related waste and would implement waste reduction measures during the occupancy phase of the project. Measures identified in the WMP, when implemented, would ensure that potential impacts to solid waste management facilities, including landfills, materials recovery facilities, and transfer stations, as well as services, including collection, would be below a level of significance.

Many of the projects included in this cumulative effects analysis, as well as future projects that could occur during build-out of the community plan, would also be required to prepare a WMP which, when implemented, would avoid significant cumulative impacts to solid waste. Therefore, the project would not contribute to a cumulatively significant solid waste impact, and impacts would be less than significant.