

IV. Environmental Impact Analysis

F. Hydrology and Water Quality

1. Introduction

This section of the Draft EIR describes the existing surface water and groundwater hydrology and quality within the Project Site and vicinity, identifies associated regulatory requirements, and provides an analysis of the proposed Project's potential impacts with regard to these resources. This analysis is based on the *8920 Sunset Hydrology and Water Quality Technical Report* (Water Report) (May 23, 2017) prepared by KPFF Consulting Engineers, which is included as Appendix E of this Draft EIR.

2. Environmental Setting

a. Regulatory Framework

(1) Federal

(a) Clean Water Act

The Clean Water Act (CWA) was first introduced in 1948 as the Water Pollution Control Act. The CWA authorizes federal, state, and local entities to cooperatively create comprehensive programs for eliminating or reducing the pollution of state waters and tributaries. The primary goals of the CWA are to restore and maintain the chemical, physical, and biological integrity of the nation's waters and to make all surface waters fishable and swimmable. As such, the CWA forms the basic national framework for the management of water quality and the control of pollutant discharges. The CWA also sets forth a number of objectives in order to achieve the above-mentioned goals. These objectives include regulating pollutant and toxic pollutant discharges; providing for water quality that protects and fosters the propagation of fish, shellfish, and wildlife; developing waste treatment management plans; and developing and implementing programs for the control of non-point sources of pollution, including the issuance of National Pollutant Discharge Elimination System (NPDES) permits for point source discharges to surface waters.¹

¹ *Non-point sources of pollution are carried through the environment via elements, such as wind, rain, or stormwater, and are generated by diffuse land use activities (such as runoff from streets and sidewalks or agricultural activities) rather than from an identifiable or discrete facility.*

Since its introduction, major amendments to the CWA have been enacted (e.g., 1961, 1966, 1970, 1972, 1977, and 1987). Amendments enacted in 1970 created the United States Environmental Protection Agency (USEPA), while amendments enacted in 1972 deemed the discharge of pollutants into waters of the United States (U.S.) from any point source unlawful unless authorized by a USEPA NPDES permit. Amendments enacted in 1977 mandated development of a best management practices (BMPs) program at the state level. Amendments enacted in 1987 required the USEPA to create specific requirements for discharges.

In response to the 1987 amendments to the CWA and as part of Phase I of its NPDES permit program, the USEPA began requiring NPDES permits for: (1) municipal separate storm sewer systems (MS4) generally serving, or located in, incorporated cities with 100,000 or more people (referred to as municipal permits); (2) 11 specific categories of industrial activity (including landfills); and (3) construction activity that disturbs 5 acres or more of land. Phase II of the USEPA's NPDES permit program, which went into effect in early 2003, extended the requirements for NPDES permits to: (1) numerous small MS4s;² (2) construction sites of 1 to 5 acres; and (3) industrial facilities owned or operated by small MS4s. The NPDES permit program is typically administered by individual authorized states. The City of West Hollywood (City) along with the Los Angeles County Flood Control District, the County of Los Angeles and 84 incorporated cities within the coastal watersheds of Los Angeles County are each permittees under a MS4 municipal permit with exception of the City of Long Beach (Order No. R4-2012-0175, NPDES Permit No. CAS004001) approved by the Los Angeles Regional Water Quality Control Board. This permit is referred to as the "Municipal NPDES Permit" herein.

In California, the NPDES stormwater permitting program is administered by the State Water Resources Control Board (SWRCB). The SWRCB was created by the Legislature in 1967. The joint authority of water distribution and water quality protection allows the SWRCB to provide protection for the state's waters through its nine Regional Water Quality Control Boards (RWQCBs). The RWQCBs develop and enforce water quality objectives and implement plans that will best protect California's waters, acknowledging areas of different climate, topography, geology, and hydrology. The RWQCBs develop "basin plans" for their hydrologic areas, issue waste discharge

² *A small MS4 is any MS4 not already covered by the Phase I program as a medium or large MS4. The Phase II Rule automatically covers, on a nationwide basis, all small MS4s located in "urbanized areas" as defined by the Bureau of the Census (unless waived by the NPDES permitting authority), and on a case-by-case basis, those small MS4s located outside of urbanized areas that the NPDES permitting authority designates.*

requirements, enforce action against stormwater discharge violators, and monitor water quality.³

In addition to regulating non-stormwater discharges, the CWA sets forth water quality standards and criteria based on a water body's designated beneficial uses. Section 305(b) of the CWA requires preparation of a 303(d) list (list of water quality limited or impaired water bodies), which requires identification and listing of water quality limited or "impaired" water bodies where water quality standards and/or receiving water beneficial uses are not met. Once a water body is listed as "impaired," total maximum daily loads (TMDLs) must be established for the pollutants or flows causing the impairment (33 United States Code Section 1313(d)(c)). A TMDL is an estimate of the total load of pollutants from point, non-point, and natural sources that a water body may receive without exceeding applicable water quality standards. In addition to trash and debris, common pollutants of concern that have the potential to affect water quality generally fall into one of the following seven categories: sediments, nutrients, bacteria/viruses, oil/grease, metals, organic compounds, and pesticides. Once established, the TMDL allocates the loads among current and future pollutant sources to the water body. In general, where urban runoff is identified as a substantial source of pollutants causing the impairments and is subject to load allocating, implementation of and compliance with the TMDL requirements are administered through a combination of individual Industrial Stormwater Permits, the General Industrial and General Construction Stormwater Permits, and the County of Los Angeles' municipal stormwater NPDES program, specifically through the MS4 permit, which are described below.

The USEPA delegated the responsibility for administration of portions of the CWA to state and regional agencies, including the State of California. Pursuant to Section 303(d) of the federal CWA, the SWRCB identifies impaired bodies of water that do not meet water quality standards and, together with the RWQCBs, prioritizes and schedules them for development of TMDLs. The SWRCB approved the most recent Section 303(d) list in April 2015.

(b) Federal Antidegradation Policy

The Federal Antidegradation Policy (40 Code of Federal Regulations 131.12) requires states to develop statewide antidegradation policies and identify methods for implementing them. Pursuant to the Code of Federal Regulations (CFR), state antidegradation policies and implementation methods shall, at a minimum, protect and

³ USEPA, *Clean Water Act*, www.epa.gov/laws-regulations/summary-clean-water-act, accessed May 26, 2016.

maintain: (1) existing in-stream water uses; (2) existing water quality, where the quality of the waters exceeds levels necessary to support existing beneficial uses, unless the state finds that allowing lower water quality is necessary to accommodate economic and social development in the area; and (3) water quality in waters considered an outstanding national resource.

(c) *Safe Drinking Water Act*

The Federal Safe Drinking Act, established in 1974, sets drinking water standards throughout the U.S. and is administered by the USEPA. The drinking water standards established in the Safe Drinking Act, as set forth in the CFR, are referred to as the National Primary Drinking Water Regulations (Primary Standards, Title 40, CFR Part 141) and the National Secondary Drinking Water Regulations (Second Standards, 40 CFR Part 143). California passed its own Safe Drinking Water Act in 1986 that authorizes the state's Department of Health Services (DHS) to protect the public from contaminants in drinking water by establishing maximum contaminants levels (MCLs), as set forth in the California Code of Regulations (CCR), Title 22, Division 4, Chapter 15, that are at least as stringent as those developed by the USEPA, as required by the federal Safe Drinking Water Act.

(2) State and Regional

(a) *Porter-Cologne Water Quality Act (California Water Code)*

The Porter-Cologne Water Quality Control Act (embodied in the California Water Code [CWC]) established the principal California legal and regulatory framework for water quality control. The CWC authorizes the SWRCB and the RWQCBs to implement the provisions of the federal CWA. Under the CWC, the State of California is divided into nine regions governed by RWQCBs that, under the guidance and review of the SWRCB, implement and enforce provisions of the CWC and the CWA. The Project Site is located within Region 4, also known as the Los Angeles Region, and governed by the Los Angeles RWQCB (LARWQCB). The SWRCB's principal responsibility is the development and implementation of California water quality policy and development of programmatic water quality control procedures to be followed by the RWQCBs. Accordingly, each RWQCB is required to formulate and adopt a local water quality control plan or Basin Plan for its region, which is ultimately incorporated into the California Water Plan (discussed below). This Plan must adhere to the policies set forth in the CWC and established by the SWRCB. The RWQCB is also given authority to include within its regional plan water discharge prohibitions applicable to particular conditions, areas, or types of waste.

Section 13050 of the CWC defines what is considered pollution, contamination, or nuisance. Briefly defined, pollution means an alteration of water quality, such that it unreasonably affects the beneficial uses of water. Contamination means an impairment of

water quality to the degree that it creates a hazard to the public health. Nuisance is defined as anything that is injurious to health, is offensive to the senses, or is an obstruction to property use, and which affects a considerable number of people.

(b) *Safe Drinking Water and Toxic Enforcement Act*

The California Safe Drinking Water and Toxic Enforcement Act (27 CCR Section 25000 *et seq.*), also known as Proposition 65, was developed to improve public health by reducing the incidence of cancer and adverse reproductive outcomes that might result from exposure to potentially hazardous chemicals. Proposition 65 requires the following:

- The creation of a list of chemicals and substances, and the levels at which they are believed to have the potential to cause cancer or deleterious reproductive effects in humans;
- Restriction of discharges of listed chemicals into known drinking water sources at levels above the regulatory levels of concern;
- Public notification of any unauthorized discharge of hazardous waste;
- A clear and understandable warning given prior to a known and intentional exposure to a listed substance; and
- Establishment of a right of action for private citizens and a separate set of notice requirements for “designated government employees” and counties.

Though Proposition 65 is enforced by the County of Los Angeles Health Officer, the law can also be enforced by state or local government prosecutors (i.e., State Attorney General, County District Attorney, and City Attorney).

(c) *California Antidegradation Policy*

The California Antidegradation Policy, otherwise known as the *Statement of Policy with Respect to Maintaining High Quality Water in California* was adopted by the SWRCB (State Board Resolution No. 68-16) in 1968. Unlike the Federal Antidegradation Policy, the California Antidegradation Policy applies to all waters of the state, not just surface waters. The policy states that whenever the existing quality of a water body is better than the quality established in individual Basin Plans, such high quality shall be maintained, and discharges to that water body shall not unreasonably affect present or anticipated beneficial use of such water resource.

(d) California Toxics Rule

The USEPA has established water quality criteria for certain toxic substances through the California Toxics Rule (CTR). Although the CTR criteria do not apply directly to the discharges of stormwater runoff, the CTR criteria are utilized as benchmarks for toxics in urban runoff. The CTR and other water quality criteria and targets are used as benchmarks to evaluate the potential ecological impacts of stormwater runoff to receiving waters. The California Toxics Rule establishes acute (i.e., short-term) and chronic (i.e., long-term) standards for bodies of water, such as inland surface waters and enclosed bays and estuaries, that are designated by each RWQCB as having beneficial uses protective of aquatic life or human health.

(e) Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties

As required by the CWC, the LARWQCB has adopted a plan entitled *Water Quality Control Plan, Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan). Specifically, the Basin Plan designates beneficial uses for surface waters and groundwater, sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's Antidegradation Policy, and describes implementation programs to protect all waters in the Los Angeles Region.⁴ In addition, the Basin Plan incorporates (by reference) all applicable state and LARWQCB plans and policies and other pertinent water quality policies and regulations. Those of other agencies are referenced in appropriate sections throughout the Basin Plan. The Basin Plan is a resource for the LARWQCB and others who use water and/or discharge wastewater in the Los Angeles Region. Other agencies and organizations involved in environmental permitting and resource management activities also use the Basin Plan. The Basin Plan also provides valuable information to the public about local water quality issues.

(f) Ballona Creek Enhanced Watershed Management Plan

The City is a co-permittee under the "Waste Discharge Requirements for Municipal Separate Storm Sewer System (MS4) Discharges Within the Coastal Watersheds of Los Angeles County, Except Those Discharges Originating from the City of Long Beach" (Order No. R4-2012-0175), NPDES Permit No. CAS00401, dated November 8, 2012, issued by the LARWQCB. The MS4 Permit provides an innovative approach to permit compliance through the development of an Enhanced Watershed Management Program (EWMP). An EWMP for the Ballona Creek Watershed Management Area was developed by the Ballona

⁴ LARWQCB, *LARWQCB Basin Plan*.

Creek Watershed Management Group, comprised of the cities of Los Angeles, Beverly Hills, Culver City, Inglewood, Santa Monica, and West Hollywood, the Los Angeles County Flood Control District, and the County of Los Angeles. The objective of the EWMP is to determine the network of control measures (often referred to as best management practices [BMPs]) that will achieve required pollutant reductions, while also providing multiple benefits to the community and leveraging sustainable green infrastructure practices. The LARWQCB approved the Ballona Creek EWMP on April 20, 2016. The EWMP includes the following elements:

- Identification of Water Quality Priorities, highlighting the pollutants and waterbodies that are potentially not attaining water quality standards.
- Identification of Watershed Control Measures that will be implemented individually or collectively, at watershed-scale to address the Water Quality Priorities.
- Reasonable Assurance Analysis to demonstrate that the EWMP Implementation Strategy will address the Water Quality Priorities.
- Detailed EWMP Implementation Strategy and Compliance Schedule.
- EWMP Implementation Costs and Financial Strategy.

The EWMP utilizes a multi-pollutant approach that maximizes the retention and use of urban runoff as a resource for water reuse, irrigation, and indoor use, while also creating additional benefits for the communities in the Ballona Creek Watershed. The EWMP includes distributed and regional watershed control measures to address applicable stormwater regulations. With regard to all individual development and redevelopment projects, the EWMP calls for implementation of Low Impact Development (LID) control measures both during the construction phase and post construction phase of any project. Through LID, a project site must reduce contaminants in dry weather flows and stormwater flows, and reduce the volume of stormwater flows by capturing and managing on-site 100 percent of the first 0.75 inch of rainfall from a 24-hour storm event. This shall be achieved by implementing on-site infiltration, capture and reuse, and biofiltration/biotreatment BMPs.

(g) National Pollutant Discharge Elimination System Permit Program

The NPDES permit program was first established under authority of the CWA to control the discharge of pollutants from any point source into the waters of the U.S. As discussed above, in California, the NPDES stormwater permitting program is administered by the SWRCB through its nine RWQCBs.

The City is a co-permittee under the “Waste Discharge Requirements for Municipal Separate Storm Sewer System (MS4) Discharges Within the Costal Watersheds of Los Angeles County, Except Those Discharges Originating from the City of Long Beach” (Order No. R4-2012-0175), NPDES Permit No. CAS00401, dated November 8, 2012, issued by the LARWQCB, which also serves as a NPDES permit under the Federal Clean Water Act. As a co-permittee, the City is required to implement procedures with respect to the entry of non-stormwater discharges into the municipal stormwater system.

The LARWQCB issues combined NPDES permits under the CWA and Waste Discharge Requirements (under the CWC) to point dischargers of waste to surface waters. To ensure protection of water quality, NPDES permits may contain effluent limitations for pollutants of concern, pollutant monitoring frequencies, reporting requirements, schedules of compliance (when appropriate), operating conditions, BMPs, and administrative requirements. NPDES permits apply to publicly-owned treatment works discharges; industrial wastewater discharges; and municipal, industrial, and construction site stormwater discharges. Further discussion of the LARWQCB stormwater discharge permitting activities is provided below.

(i) Construction

The CWA requires coverage under a NPDES construction permit for stormwater discharges to surface waters associated with various construction activities, except activities which are not part of a larger common plan of development or sale, that result in disturbance of less than 1 acre of total land area. The SWRCB has issued a statewide NPDES Construction General Permit for stormwater discharges from construction sites (known as the “Construction General Permit” [SWRCB Order No. 2009-0009-DWQ]). Order No. 2009-0009-DWQ was amended by 2010-0014-DWQ.^{5,6} Any project that disturbs an area of one acre of soil or more, as well as linear underground/overhead projects disturbing one acre or more of soil, require a Notice of Intent (NOI) to discharge under the Construction General Permit. The Construction General Permit includes three levels of risk for construction sites based on calculated project sediment and receiving water risk. The Construction General Permit includes measures to eliminate or reduce pollutant discharges through implementation of a Stormwater Pollution Prevention Plan (SWPPP), which describes the implementation and maintenance of BMPs to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the site during construction. Such BMPs include programs, technologies, processes, practices, and devices that control, prevent, or remove or reduce pollution. The Construction General

⁵ SWRCB, *Construction General Permit Fact Sheet*.

⁶ SWRCB, *Order No. 2010-0014-DWQ, NPDES No. CAS000002*.

Permit contains receiving water limitations that require stormwater discharges to not cause or contribute to a violation of any applicable water quality standard. The Construction General Permit also requires implementation of programs for visual inspections and sampling for specified constituents (e.g., non-visible pollutants). The Project Site is less than one acre and would not require coverage under the Construction General Permit or implementation of a SWPPP.

(h) California Green Building Standards Code

The California Green Building Standards Code (CALGreen Code), Part 11 of the California Building Standards Code (Title 24) is designed to improve public health, safety, and general welfare by utilizing design and construction methods that reduce the negative environmental impact of development and encourage sustainable construction practices.

The CALGreen Code provides mandatory direction to developers of all new construction and renovations of residential and non-residential structures with regard to all aspects of design and construction, including, but not limited to, site drainage design, stormwater management, and water use efficiency. Required measures are accompanied by a set of voluntary standards designed to encourage developers and cities to aim for a higher standard of development.

(i) California Water Plan

Required by CWC, Section 10005(a), the California Water Plan is the state government's strategic plan for managing and developing water resources statewide for current and future generations. It provides a framework for water managers, legislators, and the public to consider options and make decisions regarding California's water future. The California Water Plan, which is updated every five years, presents basic data and information on California's water resources, including water supply evaluations and assessments of agricultural, urban, and environmental water uses to quantify the gap between water supplies and uses. The California Water Plan also identifies and evaluates existing and proposed statewide demand management and water supply augmentation programs and projects to address the state's water needs.

The California Water Plan, presents the status and trends of California's water-dependent natural resources; water supplies; and agricultural, urban, and environmental water demands for a range of plausible future scenarios. The California Water Plan also evaluates different combinations of regional and statewide resource management strategies to reduce water demand, increase water supply, reduce flood risk, improve water quality, and enhance environmental and resource stewardship. The evaluations and assessments performed for the plan help identify effective actions and policies for meeting California's resource management objectives in the near term and for several decades to

come. As the California Water Plan Update 2018 is currently underway, California Water Plan Update 2013 is the latest update to the Plan.

(3) Local

(a) County of Los Angeles Department of Public Works Hydrology Manual

The Los Angeles County Department of Public Works (LACDPW) Hydrology Manual requires that new development and redevelopment projects in general, retain, on-site, a specified volume of stormwater runoff (the Stormwater Quality Design Volume) from a design storm event. Areas with sump conditions are required to have a storm drain conveyance system capable of conveying flows from a 50-year storm event. The County also limits the allowable discharge into existing storm drain facilities. The LACDPW Hydrology Manual provides various analysis tools and calculation methodologies required for hydrologic evaluations and is the basis of design for storm drainage facilities in the City.

(b) City of West Hollywood General Plan

Chapter 9 of the City's General Plan 2035, Infrastructure, Resources, and Conservation (IRC) was adopted on September 6, 2011. The following goals and policies under the IRC Chapter of the General Plan are relevant to the proposed Project:

- Goal IRC-9: Provide safe, sanitary, and environmentally sustainable stormwater management.
- Policy IRC-9.6: Reduce the amount and improve the quality of stormwater that leaves the City through best management practices, including stormwater reuse and the use of vegetation and permeable surfaces to capture and filter stormwater.
- Policy IRC-9.7: Encourage development projects to manage stormwater on site in accordance with the City approved Stormwater Pollution Prevention Plan and Standard Urban Stormwater Mitigation Plan.
- Policy IRC-9.9: Require that development projects pay for the cost of stormwater system improvements necessitated by that development.

(c) West Hollywood Municipal Code

Title 15, Article 3, Chapter 15.56 of the West Hollywood Municipal Code (WHMC) was adopted by Ordinance 01-591 and amended in 2015 by Ordinance 15-955 in order to protect and enhance the quality of watercourses, water bodies, and wetlands within the City in a manner consistent with the CWA, the CWC, and the Municipal NPDES Permit, all

of which are discussed above. Section 15.56 of the WHMC preserves the water quality of the receiving waters of the County of Los Angeles and surrounding coastal areas by:

- Reducing pollutants in stormwater discharges to the maximum extent practicable;
- Regulating illicit connections and illicit discharges and thereby reducing the level of contamination of stormwater and urban runoff into the MS4; and
- Regulating non-stormwater discharges to the MS4.

Specifically, Section 15.56.095 of the WHMC sets forth stormwater pollution control requirements for the construction and operation of commercial development, new development, and redevelopment of other projects. These requirements are intended to ensure compliance with the stormwater mitigation measures prescribed in the current version of the Standard Urban Stormwater Mitigation Plan (SUSMP) and the Municipal NPDES Permit. Projects are required to capture and manage on-site the runoff from an 85th percentile 24-hour runoff event determined by the County of Los Angeles or the runoff from a 0.75-inch, 24-hour rain event, whichever is greater. This would be achieved through design and implementation of BMPs and on-site infiltration, evapotranspiration, bioretention, and/or rainfall harvest and use. Prior to issuance of the Certificate of Occupancy, all developments subject to LID requirements must process a recorded maintenance covenant to ensure the LID structures and treatment systems on the project site will be kept operational after construction is completed and in situations where ownership is transferred. The proposed Project is subject to Section 15.56.095 of the WHMC, which sets forth LID requirements for new development and redevelopment projects. As such, the proposed Project would utilize LID requirements, including BMPs for site design, source control, and treatment control. In addition, the City requires a Local Stormwater Pollution Prevention Plan (LSWPPP) and an Erosion Control Plan (ECP) for projects during the construction phase for a development project of one acre or greater.

Furthermore, Section 15.52 of the WHMC regulates irrigation water practices in the City to reduce potable water consumption. Title 19, Article 19-3, Section 19.26 of the WHMC regulates the City's drought tolerance requirements for plant materials and establishes standards for landscape irrigation and conservation and irrigation equipment standards. Finally, Section 19.20.060 of the WHMC (the Green Building Ordinance) describes minimum green building requirements for specific categories of new development, remodel, and tenant improvement projects. The requirements under the Green Building Ordinance include provisions for storm drain management, permeable surfaces and stormwater diversion.

b. Existing Conditions**(1) Surface Water Hydrology****(a) Regional**

The Project Site is located within the Santa Monica Bay Watershed Management Area in the Los Angeles Basin. The Santa Monica Bay Watershed Management Area encompasses an area of 414 square miles. The northern boundary of the Santa Monica Bay Watershed extends from the Pacific Ocean at the crest of the Santa Monica Mountains and the Ventura-Los Angeles County line to downtown Los Angeles. The boundary then extends south and west across the Los Angeles plain to include the area east of Ballona Creek and north of the Baldwin Hills to the Pacific Ocean. The Santa Monica Bay Watershed also includes a narrow strip between Playa del Rey and Palos Verdes south of Ballona Creek.

Surface water flows into the Santa Monica Bay through 28 catchment basins that are further grouped into nine subwatershed areas. These nine subwatershed areas include the North Coast, Malibu Creek, Topanga Creek, Santa Monica Canyon, Pico-Kenter, Ballona Creek, El Segundo–LAX, South Bay, and Palos Verdes. The Project Site is specifically located within the Ballona Creek subwatershed area. The Ballona Creek Subwatershed is located in the northwestern part of the Los Angeles Basin and covers a land area of approximately 130 square miles from the Santa Monica Mountains to the north; Interstate 110 (I-110 or Harbor Freeway) to the east; Baldwin Hills to the south; and Pacific Palisades, the City of Santa Monica, Marina del Rey, and the Pacific Ocean to the west. The watershed is comprised of the following land uses: 64 percent residential, 8 percent commercial, 4 percent industrial, and 17 percent open space.⁷ Ballona Creek flows southwesterly through the City of Culver City to Marina del Rey and the Pacific Ocean. Ballona Creek begins near the middle of the watershed at the intersection of Cologne Street and Cochran Avenue, just south of Venice Boulevard.

(b) Local

Existing stormwater runoff from the Project Site is conveyed via sheet flow and curb drains to the adjacent streets. After entering the City's underground storm drain pipe system, drainage from the Project Site is conveyed through an underground pipe network that flows south and west through various drainage pipes owned by the City of Los Angeles

⁷ Los Angeles County Department of Public Works, Watershed Management Division, Ballona Creek, <http://dpw.lacounty.gov/wmd/watershed/bc>, accessed April 11, 2016.

and subsequently discharging into pipes owned by Los Angeles County before entering Ballona Creek and ultimately discharging into the Pacific Ocean near Marina del Rey.

(c) On-Site

The Project Site is located in a highly urbanized area with no sensitive biological resources and is currently developed with an approximately 19,670-square-foot, two-story commercial building with surface and subterranean parking that is accessed from Hilldale Avenue. Landscaping within the Project Site is limited, with ornamental landscaping along Sunset Boulevard and Hilldale Avenue. As noted above, the Project Site drains to the adjacent streets, sloping towards the south with a 10-percent gradient. The Project Site's peak flow from a 50-year storm event is approximately 1.57 cubic feet per second (cfs). The Project Site currently consists of 99 percent impervious surfaces, including buildings and paved walkways/sidewalks and roads for pedestrian and vehicular circulation. The pervious surfaces of the Project Site consist of landscaped areas. The Project Site's existing drainage flow pattern is shown in Figure IV.F-1 on page IV.F-14.

(2) Surface Water Quality

(a) Regional

The Project Site is located within the Santa Monica Bay Watershed Management Area of the Los Angeles Basin, which includes several subwatershed areas. The Project Site is specifically located within the Ballona Creek Subwatershed area. The Project Site ultimately drains to the Santa Monica Bay via a network of storm drains owned by the City of West Hollywood, City of Los Angeles, and County of Los Angeles within the Ballona Creek Subwatershed. A description of the water quality of the Ballona Creek Subwatershed, including its impairments and TMDLs, is presented below.

The impairments identified on the 2010 303(d) list for Ballona Creek and Ballona Creek Estuary are coliform, trash, polychlorinated biphenyls (PCB), and pesticides of historical origin. Pesticides (e.g., dichlorodiphenyltrichloroethane (DDT), chlordane, and dieldrin), including their effects (e.g., sediment toxicity), and metals (e.g., lead, silver, arsenic, copper, cadmium, and zinc), as well as their effects, are included as impairments to the creek and restrict its beneficial uses.

(b) Local

In general, urban stormwater runoff occurs during and shortly following precipitation events, with the volume of runoff flowing into the drainage system depending on the intensity and duration of the rain event. In addition to sediment, contaminants that may be found in stormwater from developed areas include sediments, trash, bacteria, metals,

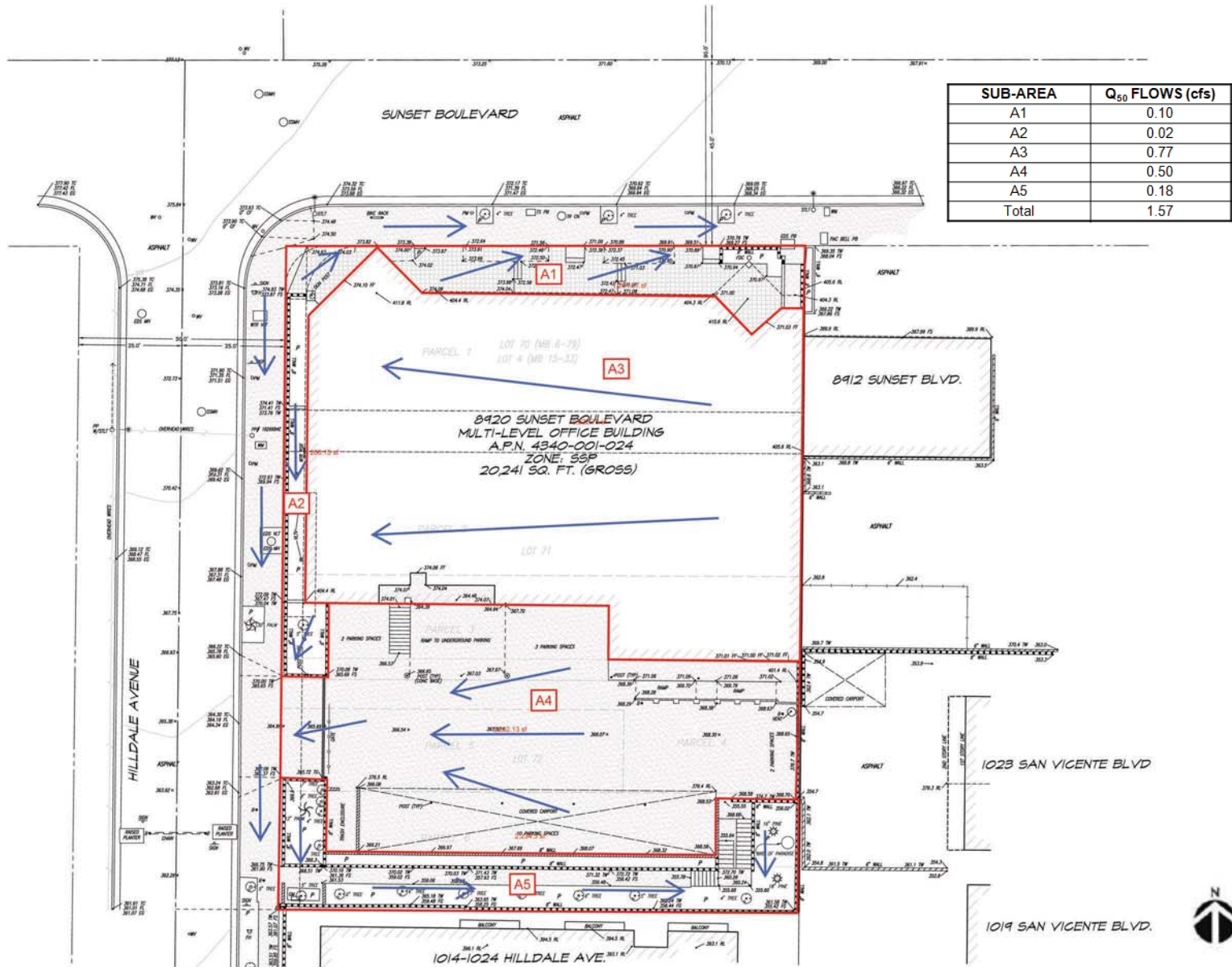


Figure IV.F-1
Existing Project Site Hydrology

nutrients, organics and pesticides. The sources of contaminants include surface areas where precipitation falls, as well as the air through which it falls. Contaminants on surfaces, such as roads, maintenance areas, parking lots, and buildings, which are not usually contained in dry weather conditions, may be carried by rainfall runoff into drainage systems. Catch basins capture debris before it enters the storm drain system. In addition, the City conducts routine street cleaning operations, as well as periodic cleaning and maintenance of catch basins⁸ to reduce stormwater pollution within the City.

(c) On-Site

Based on on-site explorations conducted as part of the Phase I Environmental Site Assessment for the Project Site, no settling ponds, lagoons, wells, or wetlands exist on the Project Site.⁹

Due to the age of the existing buildings, it is assumed that there are no existing BMPs for stormwater treatment. Therefore, the existing stormwater runoff flows into the existing City storm drain system untreated. However, there are non-structural BMPs that are currently utilized at the Project Site to minimize the impact of pollutant sources. These include general housekeeping practices, such as regular trash collection and street sweeping; proper storage of hazardous materials and wastes; and substituting environmentally friendly products for environmentally hazardous products, such as soaps, solvents, and pesticides. In addition, stormwater runoff from existing pervious surfaces, such as the landscaped areas and lawns, is naturally treated to some extent during smaller storm events by existing vegetation and the absorptive properties of the existing soils. Based on the existing operations within the Project Site, the on-site runoff likely contains the following pollutants of concern: sediment, nutrients, pesticides, metals, pathogens, and oil and grease.

(3) Groundwater Hydrology

(a) Regional

Groundwater use for domestic water supply is a major beneficial use of groundwater basins in Los Angeles County. The City overlies the Los Angeles Coastal Plain Groundwater Basin, Hollywood Subbasin. Surface area of the Hollywood Subbasin is 10,500 acres (16.4 square miles), and the total storage capacity is estimated at about

⁸ According to the City of West Hollywood Department of Public Works (Engineering Division), catch basins are cleaned four times per year—three times during the wet season and once during the dry season).

⁹ Citadel Environmental Services, Inc., Phase I Environmental Site Assessment Update Report, May 24, 2016. See Appendix D of this Draft EIR.

200,000 acre-feet.¹⁰ Groundwater flow in the Los Angeles Coastal Plain Groundwater Basin is generally south-southwesterly and may be restricted by natural geological features. Replenishment of groundwater basins occurs mainly by percolation of precipitation throughout the region via permeable surfaces, spreading grounds, and groundwater migration from adjacent basins, as well as injection wells designed to pump freshwater along specific seawater barriers to prevent the intrusion of salt water.

(b) Local

Within the Los Angeles Coastal Plain Groundwater Basin, the Project Site specifically overlies the Hollywood Subbasin, which is located in the northern part of the Los Angeles Coastal Plain Groundwater Basin. The basin consists of alluvium (mostly silty fine to coarse sand) near the surface, in which the groundwater might be perched. Under the alluvium are inter-bedded layers of silty, fine- to medium-grain sand, sandy clay, silty clay, clayey sand, clayey silt, silt, and gravel. The basin is not generally highly transmissive, and groundwater in the basin generally flows from east to west.

(c) On-Site

The Project Site is located above the Hollywood Subbasin of the Coastal Plain of the Los Angeles Groundwater Basin. According to the Geotechnical Investigation, dated July 2, 2015, prepared by Geocon West, Inc., for the Project Site (Geotechnical Report), the historic high groundwater elevation was found to be approximately 22 feet below the existing grade. Groundwater was encountered on-site at a depth of 38 feet. Additional borings completed in May 2016 encountered groundwater at a depth of 36 feet.¹¹

(4) Groundwater Quality

In general, due to historical activities and practices, groundwater quality in the Los Angeles region has been substantially degraded. The degradation of regional groundwater is a result of seepage into the subsurface of fertilizers and pesticides from agricultural uses, nitrogen and pathogenic bacteria from septic tanks, and various hazardous substances from leaking aboveground and underground storage tanks and industrial-type operations.

¹⁰ California Department of Water Resources, *California's Groundwater Bulletin 118, South Coast Hydrologic Region, Coastal Plain of Los Angeles Groundwater Basin, Hollywood Subbasin, last updated February 27, 2004.*

¹¹ Geocon West, Inc., "Response to City of West Hollywood Review Comments, Proposed Mixed-Use Development, 8920 Sunset Boulevard, West Hollywood, California," May 24, 2016.

The Project Site is located within the Hollywood Subbasin of the Coastal Plain of the Los Angeles Groundwater Basin. Specific groundwater quality information for the Subbasin is scarce since most of the public water supply is from imported surface water, and water quality was not measured on a regular basis when production wells were inactive for a 20-year period from the 1970s to 1990s. Private wells for irrigation and industrial uses are known to exist in the basin, but there are no available records on their current usage or quality.¹² The City of Beverly Hills, which provides water service to the Project Site, currently operates four production wells in the basin.¹³

Quality of water from the Hollywood Basin is generally fair and has a total dissolved solid (TDS) concentration ranging from 357 to 970 milligrams per liter (mg/L). Approximately 85 percent of the samples collected at the supply wells operated by the City of Beverly Hills exceeded the secondary standard of 500 mg/L for TDS.¹⁴ Water with TDS greater than 3,000 mg/L is typically considered too salty to drink.¹⁵

(5) Flood Zone

As discussed in Section VII, Effects Found Not to Be Significant, of this Draft EIR, the Project Site is not located within a 100-year flood plain as mapped by the Federal Emergency Management Agency (FEMA) or by the City.^{16,17} As also discussed therein, the Project Site is not mapped within a dam inundation hazard area.¹⁸

3. Project Impacts

a. Methodology

The analysis of potential impacts to surface water hydrology, surface water quality, and groundwater, is based on the Water Report prepared by KPFF Consulting Engineers, which is included as Appendix E of this Draft EIR.

¹² *Los Angeles Department of Water and Power, Feasibility Report for Development of Groundwater Resources in the Santa Monica and Hollywood Basins, December 2011.*

¹³ *The City of Beverly Hills Department of Public Works provides water to the western portion of the City of West Hollywood.*

¹⁴ *City of Beverly Hills, 2010 Urban Water Management Plan, August 2011.*

¹⁵ *Water Replenishment District of Southern California, WRD Technical Bulletin Volume 15, April 2008.*

¹⁶ *Federal Emergency Management Agency, Flood Insurance Rate Map, Panel Number 06037C1585F, September 26, 2008.*

¹⁷ *City of West Hollywood, Final Program Environmental Impact Report City of West Hollywood General Plan and Climate Action Plan, October 2010.*

¹⁸ *West Hollywood General Plan, Safety and Noise Chapter, Figure 10-3, September 6, 2011).*

(1) Surface Water Hydrology

The surface water hydrology analysis evaluates the change in surface water runoff patterns and quantity for the Project Site associated with the proposed Project and the impact of these changes on the existing downstream stormwater system. The LACDPW Hydrology Manual is the basis of design for storm drainage facilities in the City. LACDPW requires that storm drain systems be designed for 25-year storm events and that the combined capacity of the storm drain and street flow systems accommodate a 50-year event. Thus, to determine the ability of the existing storm drain infrastructure to accommodate any changes in runoff flows associated with the proposed Project, potential flows from the Project Site during a 50-year frequency design storm event were evaluated.

(2) Surface Water Quality

The analysis of surface water quality impacts identifies the types of pollutants associated with construction and operation of the proposed Project and evaluates their potential effects on surface water quality considering the proposed BMPs that would be implemented by the proposed Project. Permanent post-construction stormwater mitigation is based on Section 15.56 of the WHMC. Design standards for projects subject to LID requirements must comply with the West Hollywood LID Technical Guidance Manual and the LACDPW Low Impact Development Manual (LID Manual), dated February 14, 2014. The LID Manual prioritizes the selection of BMPs used to comply with stormwater mitigation requirement in the following order of priority:

1. Infiltration Systems
2. Stormwater Capture and Use
3. High Efficient Biofiltration/Bioretenention Systems
4. Combination of Any of the Above

Feasibility screening delineated in the LID Manual was applied to determine which BMP best suits the proposed Project. Based on the screening criteria, infiltration is likely infeasible at the Project Site. Therefore, the proposed Project shall implement a capture and reuse treatment system and/or a biofiltration system.

(3) Groundwater

The analysis of the proposed Project's potential impacts associated with groundwater was based on a review of existing groundwater levels, conditions, and groundwater uses and an evaluation of the potential impacts for construction and operation of the proposed Project to affect those uses and groundwater quality. Construction and

operational activities evaluated include any potential dewatering activities during construction; changes in groundwater recharge based on proposed land use changes; infiltration capacity of the underlying soil; permanent dewatering; potential soil or shallow groundwater exposure to construction materials, wastes, or spilled materials, handling and storage of hazardous materials; and any potential groundwater remediation activities.

b. Thresholds of Significance

Appendix G of the CEQA Guidelines provides a set of sample questions that address impacts with regard to surface water hydrology, water quality, and groundwater. Based on these questions, a significant impact related to hydrology/water quality would occur if the proposed Project would:

- Violate any water quality standards or waste discharge requirements.
- 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).
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site.
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.
- Otherwise substantially degrade water quality.
- Place housing within a 100-year flood hazard area as mapped on federal Flood Hazard Boundary or Flood Insurance Rate Maps or other flood hazard delineation maps.
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows.
- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

- Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow.

With regard to the above thresholds, as evaluated in Section VII, Effects Not Found to Be Significant, of this Draft EIR, and discussed above, the Project Site is not located within a FEMA–defined flood plain or within a dam inundation hazard area. Accordingly, the proposed Project would not place housing within a 100-year flood plain or place structures within a 100-year flood plain that could impede or redirect flood flows and would not expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam or inundation by seiche. Furthermore, based on the Project Site’s distance from the ocean to the west and hillsides to the north, as well as its elevation above sea level and distance from a body of water, the Project Site would not be susceptible to tsunamis, mudflows, and seiches. Therefore, as concluded in Section VII, Effects Not Found to Be Significant, no impacts with regard to these issues would occur, and further analysis of these issues in this Draft EIR is not required.

c. Project Design Features

The following project design features are proposed with regard to hydrology, surface water quality, and groundwater:

Project Design Feature F-1: The Project will implement an on-site stormwater treatment system.

Project Design Feature F-2: The Project will install catch basins to provide runoff contaminant removal/management and/or stormwater planter biofiltration devices to capture and treat runoff.

Project Design Feature F-3: The Project will prepare and implement a Local Stormwater Pollution Prevention Plan (LSWPPP), and Erosion Control Plan (ECP) which will include Best Management Practices (BMPs), to control stormwater runoff and minimize pollutant loading and erosion effects during construction.

Project Design Feature F-4: The Project will prepare and implement a Low Impact Development Plan (LID), which will include Best Management Practices (BMPs), to control stormwater runoff and minimize pollutant loading and erosion effects after construction and during operation of the Project.

d. Analysis of Project Impacts**(1) Construction*****(a) Surface Water Hydrology***

Construction activities for the proposed Project would include demolition and removal of the existing approximately 19,670-square-foot, two-story commercial building, and associated surface and subterranean parking. Construction of the new approximately 132,000-square-foot, mixed-use commercial building would follow demolition. These activities would require grading, excavation, and site preparation that would have the potential to temporarily alter the existing surface drainage patterns and flows within the Project Site by diverting existing surface flows as a result of exposing the underlying soils and making the Project Site temporarily more permeable. However, the proposed Project would be required to comply with all applicable City grading and construction permitting regulations, including, but not limited to, the Green Building Ordinance and other WHMC requirements, that require BMPs and other necessary measures, plans, and inspections to reduce flooding, sedimentation, and erosion. Thus, through implementation of BMPs and compliance with applicable City grading regulations, the proposed Project would not substantially alter the existing Project Site's drainage patterns in a manner that would result in substantial erosion, siltation, flooding on- or off-site. Similarly, adherence to standard compliance measures during construction activities would ensure that the proposed Project would not cause flooding that would have the potential to harm people or damage property or sensitive biological resources, substantially reduce or increase the amount of surface water flow from the Project Site into a water body, result in a permanent, adverse change to the movement of surface water to produce a substantial change in the current or direction of water flow during construction, or result in runoff water that would exceed the capacity of existing or planned stormwater drainage systems. As such, construction-related impacts to surface water hydrology would be less than significant, and no mitigation measures are required.

(b) Surface Water Quality

During construction of the proposed Project, gasoline, diesel fuel, lubricating oils, grease, and solvents may be used on the Project Site. Such chemicals would have the potential to be transported off-site in surface water runoff. Soils loosened during excavation and grading could also degrade water quality if mobilized and transported off-site via water flow. Based on its size (less than 1 acre), the Project Site would not require coverage under the NPDES Construction General Permit. However, a LSWPPP and an ECP would be prepared for the Proposed Project in accordance with Project Design Feature F-3 and County and local code regulations, which must be filed and approved with the City. The LSWPPP and ECP would identify potential pollutant sources that may affect the quality of discharge associated with construction activity, identify non-stormwater

discharges, and recommend means and methods to effectively prohibit the entry of pollutants into the public storm drain system during construction. These methods would be based on a menu of BMPs that may include the following: sandbags; stormdrain inlets protection; stabilized construction entrance/exit; wind erosion control; and stockpile management.

Through implementation of the LSWPPP, ECP, and City grading and construction regulations, including the implementation of BMPs, construction of the proposed Project would not result in discharges that would create: (1) pollution that would alter the quality of the waters of the state (i.e., Santa Monica Bay) to a degree, which unreasonably affects beneficial uses of the waters; (2) contamination of the quality of the waters of the state by waste to a degree, which creates a hazard to the public health through poisoning or through the spread of diseases; or (3) nuisance that would be injurious to health, affect an entire community or neighborhood or any considerable number of persons, and occurs during or as a result of the treatment or disposal of wastes. Furthermore, construction of the proposed Project would not result in discharges that would provide substantial additional sources of polluted runoff, cause regulatory standards to be violated in the Santa Monica Bay, or substantially degrade water quality. As such, construction-related impacts to surface water quality would be less than significant, and no mitigation measures are required.

(c) Groundwater Hydrology

The Project Site currently consists of 99 percent impervious surfaces. As such, no appreciable recharge occurs at the Project Site. In addition, construction activities would not be anticipated to affect any water supply wells as there are no groundwater production wells or public water supply wells within one mile of the Project Site. Similarly, the proposed Project does not include the construction of water supply wells.

Project development includes a partial subterranean level and five subterranean parking levels that would be approximately 72 feet below grade level on Sunset Boulevard at its lowest point. In addition, if implemented, the geothermal system for the proposed Project, which is described in greater detail in Section II, Project Description, of this Draft EIR, would require drilling of up to 24 boreholes approximately 300 to 500 feet below grade level.¹⁹ As noted in Section IV.C, Geology and Soils, of this Draft EIR, the historic high groundwater elevation at the Project Site was found to be approximately 22 feet, and groundwater was encountered in borings at a depth of 36 feet. Consequently, groundwater

¹⁹ *The boreholes required for the proposed geothermal system would not require any dewatering of the Project Site as they would not require the lowering of the water table or removal of groundwater.*

may be encountered during construction of the proposed Project, and temporary dewatering may be required within the Project Site. In the event that temporary dewatering is required, a small amount of groundwater would be removed during excavation, but only until such time as waterproofing is installed up to the groundwater table. Typically, dewatering systems extract groundwater, treat it, and discharge it to the public storm drain system, as authorized by a General NPDES Permit issued by the LARWQCB and a storm drain connection permit issued by the jurisdictional storm drain agency. Any discharge of groundwater during construction of the proposed Project would occur pursuant to, and comply with, the applicable permit requirements of a General NPDES Permit issued by the LARWQCB. Groundwater would be required to be discharged to the storm drain system, not to the City owned sewer system. Therefore, if dewatering is required, operation of the temporary dewatering system would have a minimal effect on local groundwater recharge in the vicinity of the Project Site. Accordingly, the proposed Project is not anticipated to adversely impact the flow rate or direction of groundwater and would not have an adverse effect on any water supply wells. Therefore, construction of the proposed Project would not change potable water levels sufficiently to reduce the ability of a water utility to use the groundwater basin for public water supplies, reduce yields in adjacent wells, deplete groundwater supplies, result in a demonstrable and sustained reduction of groundwater recharge capacity, or interfere with groundwater recharge. As such, impacts would be less than significant, and no mitigation measures are required.

(d) Groundwater Quality

As discussed above, the proposed Project includes excavations up to approximately 79 feet in depth resulting in a net export of existing soil materials. The geothermal system for the proposed Project would be approximately 300 to 500 feet below grade level. According to the Phase I ESA prepared for the proposed Project, the Project Site was not found to have had a history of known hazardous materials spills or contaminated soil.²⁰ Therefore, the potential to encounter hazardous materials or contaminated soil that could affect groundwater during excavation is low.

Surface contaminants also have the potential to adversely impact the quality of groundwater. BMPs included in the LSWPPP and ECP would include spill prevention and cleanup guidelines, dewatering operations guidelines, and stormwater runoff prevention. These BMPs would protect groundwater from contamination by construction activities.

²⁰ *Citadel Environmental Services, Inc., Phase I Environmental Site Assessment Update Report, May 24, 2016. See Appendix D of this Draft EIR.*

Additionally, during on-site grading and building construction, the use of hazardous materials, such as fuels, paints, solvents, and concrete additives, would require proper management and, in some cases, disposal. The management of any resultant hazardous wastes could increase the opportunity for releases of hazardous materials into groundwater. Compliance with all applicable federal, state, and local requirements (including DTSC and RCRA requirements) concerning the handling, storage, and disposal of hazardous waste, as identified in Section IV.E, Hazards and Hazardous Materials, of this Draft EIR, would reduce the potential for the construction of the proposed Project to release contaminants into the groundwater that could affect the rate or direction of movement of existing contaminants, expand the area or increase the level of groundwater contamination, or cause a violation of regulatory water quality standards at an existing production well. In addition, there are no groundwater production wells or public water supply wells within one mile of the Project Site. Therefore, construction activities would not be anticipated to affect existing wells. Accordingly, the proposed Project would not result in any substantial increase in groundwater contamination through hazardous materials releases, and construction impacts on groundwater quality would be less than significant, and no mitigation measures are required.

(2) Operation

(a) Surface Water Hydrology

The Project Site is currently developed with a 19,670 square-foot, two-story commercial building, a surface parking lot, and a subterranean parking structure and consists of 99 percent impervious surfaces. The proposed development would decrease the existing impervious surface area by approximately four percent, by adding planting and landscaping around the site and upper levels. With implementation of the proposed Project's LID features, the percent of impervious surface area would not increase runoff volumes into the existing storm drain system. Stormwater can generally be treated through infiltration, capture and reuse, and/or biofiltration. As concluded by the Water Report, infiltration would be infeasible due to the proposed Project's aboveground and subterranean footprint, while capture and reuse or biofiltration systems would be viable methods to comply with LID requirements. As such, through compliance with the LID requirements under Section 15.56 of the WHMC, the site shall reduce the volume of stormwater flows by capturing and managing on-site 100 percent of the first 0.75 inch of rainfall from a 24-hour storm event. Excess stormwater runoff from the Project Site would be conveyed to the public storm drain infrastructure.

The proposed storm drain design would consist of a capture and re-use and/or a biofiltration system in order to treat stormwater runoff as required by LACDPW and the City. The proposed LID design will be subject to review and approval by the City prior to issuance of building permits. If implemented, the recommended capture and reuse system

would be designed based on the proposed landscape area to be irrigated and the proposed site layout. The system would consist of on-site storage tanks to capture and retain rainwater to be reused to service the proposed Project. If a biofiltration system is implemented, it would consist of pre-cast hard bottom stormwater planter structures with layers of mulch, soil, and gravel, which would filter and treat stormwater, removing pollutants through a variety of physical, biological, and chemical treatment processes, before discharging the stormwater via an underdrain into the public infrastructure. The biofiltration system could be located on the proposed Project's ground floor level, the podium decks, or on the roofdeck.

Based on the reduction of impervious area from 99 percent to 95 percent resulting from the proposed Project, the change in the 24-hour storm event peak flow rate would be negligible and would remain at 1.57 cfs. However, with proper design and implementation of the biofiltration or capture and re-use system to comply with the LID Ordinance, the first 0.75 inch of rainfall from a 24-hour storm event would be retained on-site, thereby reducing the volume of post-construction runoff. Post-development drainage conditions are illustrated in Figure IV.F-2 on page IV.F-26. Based on the above, the proposed Project would not result in any incremental impact on either on-site or off-site flooding during a 50-year storm event, substantially reduce or increase the amount of surface water in a water body, or create or contribute runoff water that would exceed the capacity of the storm drain system. Furthermore, the proposed Project would not substantially alter the existing drainage pattern of the Project Site or the surrounding area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion, siltation, or flooding on- or off-site. As such, operation of the proposed Project would result in a less-than-significant impact on surface water hydrology, and no mitigation measures are required.

(b) Surface Water Quality

Under existing conditions, based on the Water Report, there are currently no stormwater BMPs located on the existing Project Site. Permanent post-construction stormwater management systems for the proposed Project would be designed and implemented subject to a low impact development plan (LID Plan) reviewed and approved by the City prior to issuance of building permits. The LID Plan will be in compliance with Section 15.56 of the WHMC and design standards referenced in the LACDPW LID Manual. Section 15.56 of the WHMC states that infiltration systems are the first priority of BMP improvements, where possible, as they provide for percolation and infiltration of stormwater into the ground, which reduces the volume of runoff and in some cases, contributes to groundwater recharge. As discussed above, based on the aboveground and subterranean footprint of the proposed development, infiltration is considered infeasible. The second and third priority of BMP improvements under the LID Manual are capture and reuse and biofiltration systems, respectively. The proposed Project would comply with the

OVERALL SITE
 AREA = 0.46 ACRES
 % IMPERVIOUS = 95%
 Q50 = 1.57 CFS

Biofiltration
 Vm = 2,352 CF

- One (1) MWS-L-4-19 system
 (Outside Dimension = 5'x20')
 - Volume Storage - 2,352 CF
 -333 LF 36" Pipe (OR)
 -188 LF 48" Pipe (OR)
 -120 LF 60" Pipe

OR

- Two (2) MWS-L-4-8 systems
 (Outside Dimension = 5'x9')
 - Volume Storage - 2,352 CF
 -333 LF 36" Pipe (OR)
 -188 LF 48" Pipe (OR)
 -120 LF 60" Pipe

Capture and Reuse
 Vm = 1,567 CF
 = 11,721 GAL

-222 LF 36" Pipe (OR)
 -125 LF 48" Pipe (OR)
 -80 LF 60" Pipe

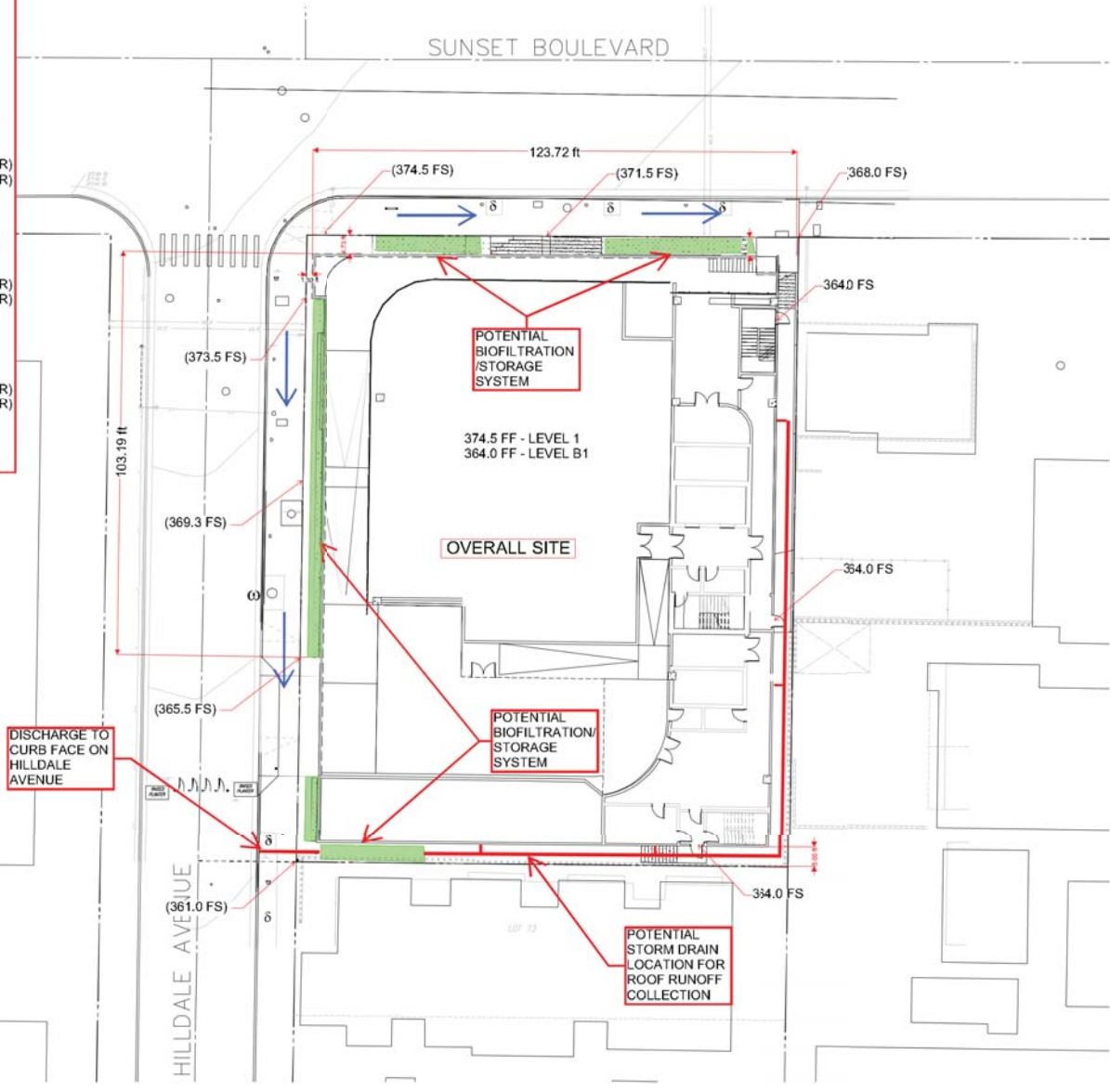


Figure IV.F-2
 Proposed Project Site Hydrology

Source: KPFF Consulting Engineers, 2017.

LID requirements and guidelines for stormwater control and incorporate either or both of these BMP systems. The systems would be further developed during the design phase of the proposed Project and would be designed in accordance with LACDPW and City guidelines.

With the implementation of an approved LID Plan including BMPs related to biofiltration and/or capture and reuse systems, operation of the proposed Project would not provide substantial additional sources of polluted runoff or result in discharges that would cause: (1) an incremental increase in pollution which would alter the quality of the waters of the state (i.e., Ballona Creek and Santa Monica Bay) to a degree which unreasonably affects beneficial uses of the waters; (2) an incremental increase of contamination of the quality of the waters of the state by waste to a degree which creates a hazard to public health through poisoning or through the spread of diseases; or (3) an incremental increase in the nuisance that would be injurious to health; affect an entire community or neighborhood, or any considerable number of persons; and occurs during or as a result of the treatment or disposal of wastes. Furthermore, operation and maintenance of the proposed Project's LID features would not result in discharges that would violate any water quality standards or waste discharge requirements or substantially degrade surface water quality. Therefore, impacts to surface water quality would be less than significant and beneficial in comparison to existing conditions, and no mitigation measures are required.

(c) Groundwater Hydrology

The rate of percolation of precipitation that falls on pervious surfaces varies and is dependent upon the soil type, condition of the soil, vegetative cover, and other factors. No appreciable groundwater recharge currently occurs on-site due to the high percentage of impervious surface area (99 percent) that covers the Project Site. Groundwater depletion as a result of development is caused by increasing the imperviousness of a site. The proposed Project would reduce the impervious surface area of the site to 95 percent, and, as such, the proposed Project would not 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.

Due to the depths of excavation associated with the proposed Project, groundwater may be encountered. In lieu of a permanent dewatering system, the proposed Project's foundations would be designed in a manner as to support the proposed structure in saturated soils conditions. This foundation design would result in only minor impacts to the top of the groundwater table and would not affect any supply wells. Additionally, no water supply wells exist on-site or within one mile of the Project Site; the proposed Project would not include the construction of water supply wells. Therefore, operation of the proposed Project would not change potable water levels sufficiently to reduce the ability of a water utility to use the groundwater basin for public water supplies, reduce yields in adjacent

wells, or result in a demonstrable and sustained reduction of groundwater recharge capacity. Impacts would be less than significant, and no mitigation measures are required.

(d) Groundwater Quality

The proposed Project's capture and reuse and/or biofiltration system would treat stormwater runoff to reduce or eliminate potential impacts to groundwater. Surface contaminants also have the potential to adversely impact the quality of groundwater. As discussed in Section IV.E, Hazards and Hazardous Materials, of this Draft EIR, operation of the proposed Project would involve the limited use of potentially hazardous materials typical of those used in commercial developments, including cleaning agents, paints, pesticides, and other materials used for landscaping. The management of any resultant hazardous wastes could increase the opportunity for hazardous materials to be released into the groundwater. However, all potentially hazardous materials would be used, stored, and disposed of in accordance with manufacturers' specifications and handled in compliance with applicable standards and regulations. Compliance with all applicable federal, state, and local requirements, concerning the handling, storage and disposal of hazardous waste, would reduce or eliminate the potential for operation of the proposed Project to release contaminants into the groundwater that could affect existing contaminants, expand the area or increase the level of groundwater contamination, cause a violation of regulatory water quality standards at an existing production well, or otherwise substantially degrade groundwater quality. Accordingly, Project impacts on groundwater quality would be less than significant, and no mitigation measures are required.

4. Cumulative Impacts

(a) Surface Water Hydrology

The geographic context for the cumulative impact analysis on surface water hydrology is the Santa Monica Bay Watershed. The proposed Project, in conjunction with forecasted growth in the Santa Monica Bay Watershed through 2020 (the proposed Project's buildout year), could cumulatively increase stormwater runoff flows. However, as noted above, the proposed Project would have no net impact on stormwater flows. Also, in accordance with jurisdictional requirements, related projects and other future development projects would be required to implement BMPs to manage stormwater. Furthermore, the City Department of Public Works, the City of Los Angeles Department of Public Works, and the City of Beverly Hills Public Works Department, would each review each future development project on a case-by-case basis to ensure sufficient local and regional infrastructure is available to accommodate stormwater runoff. Similarly, other cities located within the boundaries of the Santa Monica Bay Watershed would require projects to implement BMPs and other project design features to reduce runoff flows and ensure

drainage capacity is available to accommodate stormwater runoff from respective sites. Therefore, cumulative impacts to surface water hydrology would be less than significant.

(b) Surface Water Quality

The geographic context for the cumulative impact analysis on surface water quality is the Santa Monica Bay Watershed. Future growth in the Santa Monica Bay Watershed (inclusive of related projects) through 2020 (the proposed Project's buildout year) would be subject to NPDES requirements relating to water quality for both construction and operation. In addition, since the Project Site is located in a highly urbanized area, future land use changes or development are not likely to cause substantial changes in regional surface water quality. As noted above, the proposed Project would not have an adverse impact on water quality and would instead improve the quality of on-site flows due to the introduction of new BMPs that would collect, treat, and discharge runoff from the Project Site (most of which is not treated before being discharged under existing conditions). Also, it is anticipated that the proposed Project and other future development projects would be subject to project design features, LID, SUSMP, SWPPP, and/or LSWPPP requirements and implementation of measures to comply with TMDL requirements. Increases in regional controls associated with other elements of the MS4 Permit would improve regional water quality over time. Additionally, with implementation of the proposed Project, new BMPs for the treatment of stormwater runoff would be installed, thus improving the surface water quality runoff from the Project Site compared to existing conditions. Therefore, because the proposed Project would not have an adverse impact, and given the proposed Project's and the related projects' compliance with all applicable laws, rules and regulations pertaining to stormwater runoff, cumulative impacts to surface water quality would be less than significant.

(c) Groundwater Hydrology

Cumulative groundwater hydrology impacts could result from the overall utilization of groundwater basins located in proximity to the Project Site and the related projects. In addition, interruptions to existing hydrology flow by dewatering operations would have the potential to affect groundwater levels. As with the proposed Project, any related project would be required to evaluate its individual impacts to groundwater hydrology due to temporary or permanent dewatering operations. However, any calculation of the extent to which the related projects would extract or otherwise directly use groundwater would be speculative. Moreover, as described above, no water supply wells, spreading grounds, or injection wells are located within one mile of the Project Site. In addition, Project development would not involve the temporary or permanent extraction of groundwater from the Project Site or otherwise use the groundwater, and the proposed Project would reduce the amount of impervious surface area on the Project Site, thereby increasing the potential for groundwater recharge.

Since the related projects are located in a highly urbanized area, any reduction in groundwater recharge due to the overall net change in impervious area within the related project sites would be minimal in the context of the regional groundwater basin. Additionally, other related projects within the groundwater basin would likely incorporate structural designs for subterranean levels that are able to withstand hydrostatic forces and incorporate comprehensive waterproofing systems in accordance with current industry standards and construction methods. If any of the related projects require permanent dewatering systems, such systems would be regulated by the SWRCB permit requirements. Should excavation for other related projects extend beneath the groundwater level, temporary groundwater dewatering systems would be designed and implemented in accordance with the applicable General NPDES Permit issued by the LARWQCB and a storm drain Connection Permit issued by the jurisdictional storm drain agency for discharge to the public storm drain system. Based on the above, the cumulative impacts to groundwater hydrology would be less than significant.

(d) Groundwater Quality

As described above, compliance with all applicable existing regulations at the Project Site would prevent the proposed Project from affecting or expanding any potential areas affected by contamination, increasing the level of contamination, or causing regulatory water quality standards at an existing production well to be violated, as defined in the California Code of Regulations, Title 22, Division 4, Chapter 15 and the Safe Drinking Water Act. As with the proposed Project, the related projects would be unlikely to cause or increase groundwater contamination because compliance with existing statutes and regulations would similarly prevent the related projects from affecting or expanding any potential areas affected by contamination, or increasing the level of contamination, or causing regulatory water quality standards at an existing production well to be violated. Therefore, cumulative impacts to groundwater quality would be less than significant.

5. Mitigation Measures

Project-level and cumulative impacts with regard to surface and groundwater hydrology and water quality during construction and operation of the proposed Project would be less than significant. Therefore, no mitigation measures are required.

6. Level of Significance After Mitigation

Project-level and cumulative impacts with regard to surface and groundwater hydrology and water quality would be less than significant without mitigation.