IV. ENVIRONMENTAL IMPACT ANALYSIS
E. HYDROLOGY/WATER QUALITY

ENVIRONMENTAL SETTING

Regional Setting

Santa Monica Bay Watershed Management Area (Coastal Plain)

The Bundy Campus is located in the Santa Monica Bay Watershed Management Area (WMA), also known as the Coastal Plain, which encompasses an area of approximately 414 square miles bounded by the Santa Monica Mountains to the north, the Ventura-Los Angeles County Line to the west, downtown Los Angeles to the east, and south along a narrow strip of wetlands between Playa del Rey and Palos Verdes. The largest watersheds in the WMA are Malibu Creek and Ballona Creek.[1] Within this WMA, the Bundy Campus lies approximately 2.5 miles east of the Pacific Ocean, the nearest major water body, and approximately seven miles south of the Santa Monica Mountains. Rainfall in the Coastal Plain area averages approximately 13.71 inches per year.[2]

Local Topography and Hydrology

Topography of Project Site

The Bundy Campus' topographic elevation varies from approximately 170 feet above mean sea level (msl) at the northeast corner of the Bundy Campus at Bundy Drive, and slopes toward the west to approximately 126 feet above msl at the southwest corner of the Bundy Campus at the Stewart gate. The Bundy Campus is underlain by faulted Tertiary and Pleistocene age sediment with recent alluvium composed of fine to medium sands, silt, and clay near the surface soil. Terrace Deposits at the Bundy Campus contains generally fine sand with trace silt, in a dense moist condition. The upper 18 to 24 inches of the Terrace Deposits are typically weathered (slightly moist, porous, and containing roots and rootlets). The soil beneath the Bundy Campus contains varying depths of fill, up to a maximum of five feet below ground surface (bgs), consisting of silty to clayey sand in loose to medium dense and dry to moist conditions.[3]

---

[1] *Los Angeles Regional Water Quality Control Board, Santa Monica Bay Water Management Area (WMA), Summary, website: http://www.waterboards.ca.gov/losangeles/html/programs/regional_program/wmi2004/2.10%20Santa %20 Monica%20Bay%20WMA.doc, October 6, 2005.*

[2] *County of Los Angeles Department of Public Works, 2002-2003 Hydrologic Report, Precipitation, website: http://ladpw.org/wrd/report/0203/precip/indices.cfm, October 6, 2005.*

[3] *Geolabs – Westlake Village, Supplemental Geotechnical Discussion, Renovation of W. Building (Building IV), Bundy Campus, Santa Monica College, Bundy Drive, City of Los Angeles, California, February 26, 2004.*

Groundwater Levels at Project Site

Previous studies conducted in the project area have encountered groundwater approximately 65 feet bgs, and generally flowing in a southeasterly direction.[4] During more recent borings conducted on the Bundy Campus, groundwater was encountered at a depth generally between 67 feet and 68 feet bgs.[5, 6] No open bodies of water or wetlands exist on the Bundy Campus. The nearest open body of water to the Bundy Campus is the Pacific Ocean, which is located approximately 2.5 miles to the west of the Bundy Campus.

Stormwater on the Project Site

The storm drain system within the City of Los Angeles is comprised principally of pipes and channels owned by two separate entities: the City of Los Angeles and the County of Los Angeles. Additionally, there are a few drainage facilities within the right-of-way of Santa Monica Freeway (I-10) that are under Caltrans jurisdiction. Each entity services and maintains their respective facilities.

Runoff from the East Building currently drains into a catch basin in the parking lot on the east side of the East Building, which outlets water on the west side of the East Building. Combined with runoff from the surface parking areas and runoff from the existing West Building, on-site storm water flows in gutters along the north and south property boundaries towards a bio-swale and watershed detention basin at the southwest corner of the Bundy Campus. The bio-swale and watershed detention basin were built by SMC in 2004 to effectively manage stormwater runoff from the Bundy Campus which would otherwise drain via sheet flow in a southwesterly direction across campus and directly into City of Los Angeles storm drains in neighboring streets to the south and west. The bio-swale is an eco-friendly system consisting of seven drywells.

These 36-inch diameter, perforated, gravel filled pipes are equally distributed within the basin. Storm water entering the detention area is directed to the drywells. Gravity allows the water to percolate through the gravel and returns as much water as possible to the groundwater level. Once the soil around the detention area is fully saturated, rainwater flows out to Stewart Avenue via an overflow pipe. As shown in Figure IV.E-1, Stewart Avenue and Dewey Street, which abut the Bundy Campus, both have City of Los Angeles storm drains, which flow south and west towards the Pacific Ocean. In addition, a

---

[4] *Arcadis Geraghty & Miller, Phase I/II Environmental Site Assessment, BAE Systems 3171 Bundy Drive, Los Angeles, California, June 2001.*

[5] *West Coast Environmental and Engineering, Limited Assessment of Soil and Groundwater Conditions BAE Systems - 3171 S. Bundy Drive, Los Angeles, California, December 1, 2001.*

[6] *West Coast Environmental and Engineering, Companion Sampling of Soil and Groundwater BAE Systems - 3171 S. Bundy Drive, Los Angeles, California, January 21, 2002.*

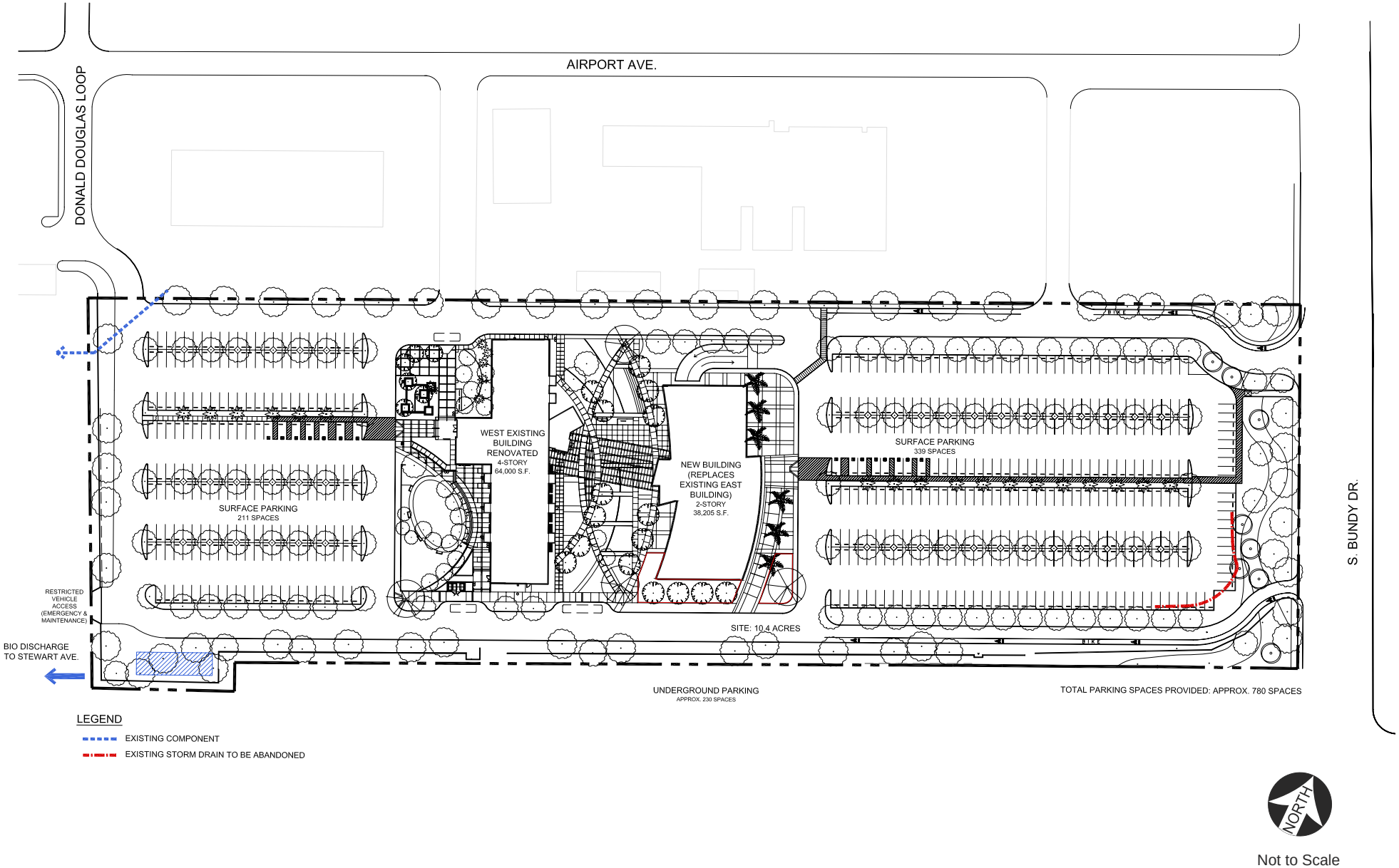
City of Los Angeles storm drain is located in Bundy Drive, which flows south and west in Rose Avenue, towards to Pacific Ocean,[7] however, this storm drain is not currently utilized by the Bundy Campus

During periods of moderate to heavy rainfall, the Bundy Campus receives excess amounts of stormwater from several adjacent properties located north of and upslope of the Bundy Campus. Stormwater from these neighboring properties, in combination with excess stormwater from the Bundy Campus itself, has resulted in incidents in which the Bundy Campus' detention basin has exceeded its design capacity and overflowed directly into the City of Los Angeles' storm drains in Stewart Avenue southwest of the Bundy Campus. As a result, SMC is currently working with the property owners north of the Bundy Campus to establish a curb or other barrier within those neighboring property boundaries such that excess stormwater from such properties does not enter the Bundy Campus property.

Project Site Permeability

Paved areas and building footprints are considered impervious, while exposed earth, landscape, or natural vegetated areas are considered pervious. Permeable surfaces allow rainwater to percolate through the soil and return to the groundwater table. Impermeable surfaces do not allow water passage; as such, rainwater must drain via gutters and curbs to the local storm drain system. The existing 10.4-acre Bundy Campus is largely developed with impervious services including the existing West Building, East Building, and the paved parking lot. It is estimated that the Bundy Campus currently provides approximately 76 percent impermeable surface area. The remaining 24 percent of the total 10.4 acre Bundy Campus consists of pervious surfaces, including trees and bushes planted in the areas surrounding the existing West Building, plantings intermixed in the aisles in the existing surface parking areas, and plantings along the north and south sides of the soundwall that runs approximately 10 feet from the southern boundary of the Bundy Campus.

[7] *City of Los Angeles Bureau of Engineering, Navigate LA, Stormwater Drainage Map Plots, Maps 533 and 534, website: http://navigatela.lacity.org/common/mapgallery/index.htm.pdf, April 26, 2005.*



Source: WWCOT Architects, September 2006.

CHRISTOPHER A. JOSEPH & ASSOCIATES
Environmental Planning and Research

Figure IV.E-1
Existing Stormwater Drainage Infrastructure in Project Vicinity

Flood Zones

The Federal Emergency Management Agency's (FEMA) National Flood Insurance Program publishes maps that identify areas at risk from potential flooding. Flood hazards are identified for areas subject to flooding from 100 and 500-year storm events. FEMA has identified the entire City of Los Angeles to be located in a zone with minimal risk from flooding (Zone C). Furthermore, the Bundy Campus is not listed on a City-designated 100 year or 500 year floor hazard area;[8] therefore this issue is not analyzed further under the "Project Impacts" heading in this Section.

Water Quality

Construction Runoff

Three general sources of potential short-term construction-related stormwater pollution associated with construction projects are: 1) the handling, storage, and disposal of construction materials containing pollutants; 2) the maintenance and operation of construction equipment; and 3) earth moving activities which, when not controlled, may generate soil erosion and transportation, via storm runoff or mechanical equipment.

During construction, soil is generally exposed to natural processes such as precipitation (depending on the time of year) and runoff, which would all be contained on site. Storm water discharges generated during construction activities can compromise the biological, chemical, and physical integrity of a receiving water body (e.g., the Pacific Ocean). The interconnected process of erosion, sediment transport, and delivery is the primary pathway for introducing key pollutants, such as nutrients (particularly phosphorus), metals, and organic compounds into aquatic systems.

Operational Runoff

Paved and developed areas contribute substantially greater quantities of water to the storm drain system than pervious landscaped areas. The quality of storm water is generally affected by the length of time since the last rainfall, the rainfall intensity, the urban uses of the area, and the quantity of transported sediment. The United States Environmental Protection Agency (USEPA) considers street and parking lot surfaces to be the primary source of storm water pollution in urban areas. Storm water runoff from parking lots has the potential to contribute oil and grease, suspended solids, metals, gasoline, pesticides, and pathogens to the storm water conveyance system. As such, new developments are required to be designed so as to reduce to the maximum extent practicable (MEP) the introduction of pollutants of concern that may result in impacts to water quality. The Bundy Campus currently provides a paved surface parking lot and two existing structures. Current land uses suggest that unknown quantities of oil, grease, heavy metals, and dust/sediment are likely currently entering without any filtration system into the

[8] *City of Los Angeles, City of Los Angeles Environmental and Public Facilities Maps: 100 and 500 Year Flood Plains in the City of Los Angeles, September 1996.*

City of Los Angeles' storm drain system from the Bundy Campus and surrounding areas during periods of moderate to heavy rainfall.

Regulatory Overview

Federal Water Pollution Control Act

The 1972 amendments to the Federal Water Pollution Control Act, later referred to as the Clean Water Act (CWA), prohibit the discharge of any pollutant to navigable waters of the United States from a point source unless the discharge is authorized by a National Pollution Discharge Elimination System (NPDES) permit. Phase I and II regulations associated with the NPDES program are discussed in more detail below.

Porter Cologne Water Quality Control Act

In California, the NPDES program is administered by the State Water Resources Control Board (SWRCB) through nine Regional Water Quality Control Boards (RWQCBs). The SWRCB and the RWQCBs were established in 1969 by the Porter-Cologne Water Quality Control Act, the principal law governing water quality regulation in California.

NPDES Permits

The NPDES permit system was established in the CWA to regulate both point-source discharges (a municipal or industrial discharge at a specific location or pipe) and non-point source discharges (diffuse runoff from a wide variety of land uses) to surface waters of the United States. Non-point source pollutants identified by the USEPA include fertilizers, herbicides, and insecticides from agricultural lands and residential areas; oil, grease, and toxic chemicals from urban runoff and energy production; sediment from improperly managed construction sites, crop and forest lands, and eroding streambanks; salt from irrigation practices and acid drainage from abandoned mines; and bacteria and nutrients from livestock, pet wastes, and faulty septic systems.[9]

For point-source discharges, each NPDES permit contains limits on allowable concentrations and mass emissions of pollutants contained in the discharge; however, the Bundy Campus would not be considered a point-source for regulatory purposes.

For non-point source discharges, the NPDES program establishes a comprehensive stormwater quality program to manage urban stormwater and minimize pollution of the environment to the MEP. The reduction of pollutants in urban stormwater discharge to the MEP through the use of Best Management Practices (BMPs) is one of the primary objectives of the water quality regulations. BMPs typically used to manage runoff water quality include controlling roadway and parking lot contaminants by installing oil

[9] *United States Environmental Protection Agency, Polluted Runoff (Non-Point Source Pollution), website: http://www.epa.gov/owow/nps/qa.html, October 7, 2005.*

and grease separators at storm drain inlets, cleaning parking lots on a regular basis, incorporating peak-flow reduction and infiltration features (such as grass swales, infiltration trenches, and grass filter strips) into landscaping, and implementing educational programs.

NPDES Program - Phase I

In 1990, the USEPA promulgated final regulations that established Phase 1 requirements for the NPDES program to address among other discharges, non-point source discharges from large construction activities of five acres or more of land. Under Phase 1 of the NPDES storm water program, storm water discharges have been primarily regulated for (1) 10 categories of specific industrial activities; (2) construction sites disturbing five acres of land or greater; and (3) medium and large municipal separate storm sewer systems (MS4s) generally serving populations greater than 100,000 persons.

With respect to MS4s, in 2001 a permit was issued to the County of Los Angeles and the cities located therein (except Long Beach which has its own permit) for waste discharge requirements for municipal storm water and urban runoff discharges. This permit specifically provides that

> *Federal, state, regional or local entities within the Permittee's boundaries or in jurisdictions outside the Los Angeles County Flood Control District, and not currently named in this Order, may operate storm drain facilities and/or discharge storm water to storm drains and watercourses covered by this Order.*[10]

This permit requires that the municipalities adopt regulatory requirements governing a variety of developments within their jurisdictions. The City of Los Angeles stormwater regulations are set forth in City Ordinance No. 172,176 and Ordinance No. 173,494, which specify Stormwater and Urban Runoff Pollution Control, and Chapter IX, Division 70 of the Los Angeles Municipal Code, which addresses grading, excavations, and fills. These regulations incorporate standards from the Los Angeles Regional Water Quality Control Board (LARWQCB)'s Standard Urban Storm Water Mitigation Plan (SUSMP) to ensure that storm water pollution is addressed by incorporating BMPs in the design phase of development such that pollutants are reduced to the MEP.[11]

For construction activities involving the disturbance of five acres of land or greater, the SWRCB issued one statewide General Construction Activity Stormwater Permit[12] to apply to all construction activities. Landowners are responsible for obtaining and complying with the permit, but may delegate specific duties to developers and contractors by mutual consent. For construction activities, the permit requires

---

[10] *Los Angeles Regional Water Quality Board, Order No. 01-182, effective December 13, 2001.*

[11] *Los Angeles Regional Water Quality Board, Standard Urban Storm Water Mitigation Plan for Los Angeles County and Cities in Los Angeles County, approved by the Regional Board Executive Officer March 8, 2000.*

[12] *State Water Resources Control Board, General Construction Activity Stormwater Permit, August 20, 1992.*

landowners or their designated agent to (a) eliminate or reduce non-stormwater discharges to stormwater systems and other waters of the United States, (b) develop and implement a Storm Water Pollution Prevention Plan (SWPPP), and (c) perform inspections of stormwater control structures and pollution prevention measures. SWPPPs prepared in compliance with an NPDES Phase I Permit describe a site, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of post-construction sediment and erosion control measures and maintenance responsibilities, and non-stormwater management controls. Dischargers are also required to inspect construction sites before and after storms to identify stormwater discharge from construction activity, and to identify and implement controls where necessary.

NPDES Program - Phase II

In 1999 the NPDES program was expanded to include Phase II regulations which address storm water discharges from small MS4s (those serving less than 100,000 persons) and construction sites that disturb one to five acres.[13]

New NPDES Phase II stormwater regulations were finalized and issued by the USEPA in January 2000 in an effort to continue to preserve, protect, and improve the nation's water resources from polluted stormwater runoff. These new regulations are designed to implement programs to control urban stormwater runoff from additional municipal separate storm sewer systems (MS4s) in urbanized areas and the operations of small construction sites that were not already covered by Phase I NPDES permits. The main objective of the Phase II regulations is to further reduce the amount of pollutants being discharged to the MEP and protect the quality of the receiving waters. The SWRCB has not yet adopted requirements for the small MS4s; however, it has adopted regulations to apply the General Construction Permit to projects between one and five acres. The Master Plan would involve the disturbance of between one and five acres of land; as such, the Bundy Campus would be subject to Phase II NPDES permit regulations.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Appendix G to the State CEQA Guidelines, a proposed project would have a significant impact on the environment if it would:

a) Violate any water quality standards or waste discharge requirements;

---

[13] *Part II - Environmental Protection Agency 40 CFR Parts 9, 122, 123, and 124 National Pollutant Discharge Elimination System—Regulations for Revision of the Water Pollution Control Program Addressing Storm Water Discharges; Final Rule Report to Congress on the Phase II Storm Water Regulations, Federal Register Vol. 64, No. 235 / Wednesday, December 8, 1999 / Rules and Regulations.*

b) 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);

c) 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;

d) 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 which would result in flooding on- or off-site;

e) Create or contribute runoff water that would exceed the capacity of existing planned storm water drainage systems or provide substantial additional sources of polluted runoff;

f) Otherwise substantially degrade water quality;

g) Place housing within a 100-year flood plain as mapped on federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;

h) Place within a 100-year floor plain structures which would impede or redirect flood flows;

i) Expose people or structures to a significant risk of loss, inquiry or death involving flooding, including flooding as a result of the failure of a levee or dam; or

j) Expose people or structures to a significant risk of loss, inquiry or death involving inundation by seiche, tsunami, or mudflow.

The Initial Study prepared for the Master Plan determined that the Master Plan would have no impact with respect to Thresholds (a), (f), (g), (h), (i), and (j) listed above (see Appendix A). As such, no further analysis of these topics is required under CEQA (see also Section IV.A of this Draft EIR).

The District has not yet adopted thresholds of significance for assessing whether potential environmental impacts are significant for purposes of CEQA. Consequently, this EIR uses those thresholds of significance set forth by the City of Los Angeles pursuant to Public Resources Code Section 21082. As set forth in the City of Los Angeles' Draft L.A. CEQA Thresholds Guide, a project would normally have a significant impact related to hydrology and water quality if it would:

(a) Cause flooding during the projected 50-year developed storm event which would have the potential to harm people or damage property or sensitive biological resources;

(b) Substantially reduce or increase the amount of surface water in a water body;

(c) Result in a permanent, adverse change in the movement of surface water sufficient to produce a substantial change in the current or direction of water;

(d) Involve or allow an activity or process that would result in a point source discharge to a receiving water body;

(e) Create conditions which may result in soil erosion, sediment runoff or nonpoint sources of contamination;

(f) Change potable water levels sufficiently to:

- Reduce the ability of a water utility to use the groundwater basin for public water supplies, conjunctive use purposes, storage of imported water, summer/winter peaking, or to respond to emergencies in drought;
- Reduce yields of adjacent wells or well fields (public or private);
- Adversely change the rate or direction of flow of groundwater;

(g) Result in demonstrable and sustained reduction of groundwater recharge capacity;

(h) Affect the rate or change the direction of movement of existing contaminants;

(i) Expand the area affected by contaminants;

(j) Result in an increased level of groundwater contamination (including that from direct percolation, injection or salt water intrusion); or

(k) Cause a regulatory water quality standard at an existing production well to be violated, as defined in the California Code of Regulations (CCR), Title 22, Division 4, Chapter 15 and in the Safe Drinking Water Act.

Project Characteristics

Interim Phase

As discussed in Section II (Project Description), the Interim Phase of the Master Plan would involve expanded use of the four-story West Building from 16 to up to 20 classrooms and potential use of the existing two-story East Building for offices, student services, community education, storage or leased for other purposes consistent with current zoning. The Interim Phase would provide a new Northeast Bundy Driveway to accommodate the new traffic signal at the northeast corner of the campus, with a new internal drive that would turn sharply to the south upon entering the Bundy Campus and connect to the existing drive along the south side of the campus. Fourteen onsite parking spaces near Bundy Drive would be eliminated to accommodate the Northeast Bundy Driveway, with 594 parking spaces remaining. Because the Interim Phase would involve the same uses that would ultimately occur under Master Plan

buildout, it is assumed that impacts that would occur in the Interim Phase would be less than or equal to those evaluated for Master Plan buildout. As such, the Interim Phase is not discussed in detail in this Section.

Master Plan Buildout

As discussed in Section II (Project Description), buildout of the Master Plan calls for the retention of the existing four-story (approximately 64,000 square feet (sf)) West Building, and proposes the eventual demolition of the two-story East Building (approximately 33,055 sf) and its replacement with a building of similar size to be located to the immediate east of the West Building. The area where the East Building currently sits would be landscaped and improved as an open space paseo. The total developed floor area envisioned for the Bundy Campus would be approximately 100,000 sf. The proposed Site Plan depicting this vision is provided in Figure II-3 in Section II (Project Description). Additional site improvements included in the Master Plan involve the construction of approximately 230 new subterranean parking spaces within one sub-grade parking level southeast of the existing West Building. A sump pump would drain the subdrains at the underground parking area.

The Master Plan would increase the pervious surface area of the Bundy Campus from approximately 24 percent to approximately 38 percent of the total Bundy Campus area through the provision of perimeter landscaping around the east, south and west property fences; planting of lawn areas between and surrounding the existing West Building and proposed New Building; introduction of a meandering landscaped walkway area along the Bundy Drive frontage; and the use of permeable driveway material where appropriate in new pavement within the Bundy Campus. The number of trees on the Bundy Campus would also increase by approximately 50 trees for a total of 300 trees at project buildout.

Project Impacts

A discussion of the Master Plan's impacts with respect to each of the CEQA Thresholds identified as potentially significant is provided below.

Depletion of Groundwater Supplies

The Master Plan would not involve any pumping of groundwater wells or other activities that could significantly reduce groundwater supplies. Groundwater levels recorded in the immediate project vicinity indicate the historic groundwater table is at least 50 feet bgs. The nearest monitoring wells in the project vicinity have recorded historic groundwater levels at approximately 49 and 58 feet bgs. Past studies in the immediate project area have recorded groundwater levels at approximately 65 feet bgs. Excavation of the one-level subterranean parking structure would extend a maximum of 15 to 20 feet bgs. Therefore, the basement level of the subterranean parking level would not impact the groundwater table and no dewatering or pumping would be required.

Similar to the existing East Building, the proposed New Building would involve hookups to existing City of Los Angeles Department of Water and Power (LADWP) domestic water lines that retrieve water from a variety of local and regional sources (see Section IV.H.2 (Utilities –Water). According to the LADWP

Draft 2005 Urban Water Management Plan, City water supplies are currently derived from the following sources: (1) approximately 51 percent purchased from the Metropolitan Water District (MWD); (2) approximately 34 percent received from the Los Angeles Aqueduct; and (3) approximately 15 percent pumped from regional groundwater basins, including the San Fernando, Sylmar, West Coast, and Central groundwater basins. Therefore, while the Master Plan could, indirectly, increase the demand on regional (i.e., West Coast Basin) groundwater sources, the impact would be minimal as the West Coast Basin composes only a fraction of regional groundwater basin pumping. Therefore, construction and operation of the Master Plan would not be expected to greatly reduce groundwater supplies and impacts would be less than significant.

Alteration of Drainage Pattern Resulting in Erosion or Flooding

As discussed above, the Master Plan would increase the pervious surface area of the Bundy Campus from approximately 24 percent to approximately 38 percent of the total Bundy Campus area, thus reducing the amount of rainwater entering the City of Los Angeles' storm drains. Therefore, the Master Plan would be expected to benefit the existing drainage pattern in the area and reduce impacts associated with substantial on or off-site erosion or flooding, and impacts would be less than significant.

Exceed Storm Drain Capacity

As discussed above, the Master Plan would increase the pervious surface area at the Bundy Campus from approximately 24 percent to approximately 38 percent of the total Bundy Campus area, allowing additional percolation of rainwater into the groundwater system, and reducing the quantity of groundwater entering the City of Los Angeles storm drain system. The amount of runoff generated by the New Building would be expected to be similar to that generated by the existing East Building, which is slated for demolition, as the buildings are similar in footprint. The existing East Building currently drains into a catch basin in the parking lot on the east side of the East Building, which outlets water on the west side of the East Building, flowing via sheet flow to towards the bio-swale and watershed detention basin at the southwest corner of the Bundy Campus. Similarly, the proposed New Building in the center of the Bundy Campus would drain via sheet flow to the existing gutters along the north and south property boundaries, from there flowing towards the existing bio-swale and watershed detention basin located in the southwest corner of the Bundy Campus. The bio-swale and watershed detention basin would continue to direct runoff into a series of dry wells, where the runoff would be absorbed back into the surrounding soil. During periods of excessive rains, the detention basin would retain the first 0.75 inch of rainfall prior to discharging excess water flows to City storm drains in Stewart Avenue. Therefore the amount of runoff from the Bundy Campus entering City storm drains at buildout of the Master Plan would be expected to be the same or reduced as compared to existing conditions.

As discussed previously, during periods of moderate to heavy rainfall, the detention basin on the Bundy Campus has exceeded its design capacity and overflowed directly into the City of Los Angeles' storm drains in Stewart Avenue southwest of the Bundy Campus. As a result, mitigation measures have been included to ensure that SMC works with the property owners north of the Bundy Campus to establish a curb or other barrier within those neighboring property boundaries such that excess stormwater from

those properties does not enter the Bundy Campus property. A mitigation measure has also been included to ensure that SMC expands the capacity of the existing detention basin on the southwest corner of the Bundy Campus such that it can adequately accommodate the maximum amount of stormwater from the campus itself during periods of heavy rainfall. With the implementation of such mitigation measures, the Master Plan would result in the same or less discharge into City of Los Angeles storm drains as compared to existing conditions and the capacity of the existing storm drain system would not be exceeded. Impacts would be reduced to less-than-significant levels.

Produce Polluted Runoff

Urban runoff discharged from municipal storm drains has been identified by local, regional, and national research programs as one of the principal cause of water quality problems in most urban areas. Oil and grease from parking lots, pesticides, cleaning solvents, and other toxic chemicals can contaminate stormwater, which can then contaminate receiving waters downstream and, eventually, the Pacific Ocean. The NPDES Permit issued to the City of Los Angeles (along with 85 other permittee cities) by the LARWQCB requires new development projects to adopt and implement site-specific mitigation measures to control stormwater runoff.

Construction

The Master Plan is anticipated to disturb between one and two acres of land during the demolition of the existing East Building (approximately 15,000 sf footprint), the construction of the New Building (approximately 15,000 sf footprint), and the excavation of the approximately 230-space subterranean parking garage (approximately 86,250 sf footprint)**.** Therefore, construction activities associated with the Master Plan would be required to obtain a NPDES statewide General Construction Activity Permit. In addition, the Project Developer would file a Notice of Intent with the SWRCB and prepare a SWPPP prior to any construction activity. As part of the SWPPP, construction activities for the Master Plan would be required to implement effective BMPs to minimize water pollution to the MEP. In addition, the final drainage plans would be required to provide BMPs to mitigate (infiltrate or treat) storm water runoff. Implementation of the BMPs in the project SWPPP and compliance with the City of Los Angeles' discharge requirements for water entering the City's storm drains would ensure that the project construction would not violate any water quality standards or discharge requirements or otherwise substantially degrade water quality. Mitigation measures are identified to ensure that BMPs are implemented and to reduce impacts related to polluted runoff during construction to less-than-significant levels.

Operation

Buildout and operation of the Master Plan would generate substances that could degrade the quality of water runoff. The Bundy Campus would continue to be classified as a non-point source for water pollution, as the proposed classroom and administrative office uses do not generate wastewater beyond that which is associated with typical domestic plumbing fixtures. The existing parking lot on the Bundy Campus currently generates various chemicals (i.e., metals, oil and grease, solvents, phosphates,

hydrocarbons, and suspended solids) that enter the storm drain system and this would slightly increase with the net increase of approximately 171 parking spaces that would be provided under the Master Plan.[14] However, adverse effects related to additional contaminants would also be offset by the increase in permeable surface area provided throughout the Bundy Campus. Furthermore, as discussed previously, SMC would be required to prepare a SWPPP that would mandate that the subterranean and above-grade parking lot areas include oil and grease separator traps to filter on site contaminants and prevent increased contamination of the City of Los Angeles' storm drain system. Compliance with mitigation measures identified would effectively reduce potential impacts related to polluted runoff during operation to a less-than-significant level.

CUMULATIVE IMPACTS

Development of the Master Plan in conjunction with the related projects identified in Section III (Environmental Setting) would result in further development of the West Los Angeles area in the City of Los Angeles which borders the City of Santa Monica. As discussed throughout this Section, the Master Plan would not substantially deplete groundwater supplies, alter the existing drainage pattern (resulting in substantial erosion or flooding), or exceed storm drain capacities, and would include mitigation measures to reduce impacts related to polluted runoff during construction and operation. As such, the Master Plan would not contribute to a cumulatively significant impact in any of those areas discussed. It is likely that some of the storm drains utilized by the Bundy Campus would also serve some of the related projects. However, the Master Plan would reduce the amount of stormwater entering surrounding storm drains and, thus, would not compromise the ability of the stormwater infrastructure to serve the related projects. In addition, prior to construction of each of the related projects, an analysis of the existing drainage system and any potential individual impacts on site hydrology or the drainage system would be required. Each individual related project would be required to develop and implement mitigation as applicable, similar to the mitigation measures recommended to reduce the Master Plan's impacts. With appropriate project design and compliance with the applicable federal, State and local regulations, Code requirements and permit provisions, cumulative impacts related to hydrology and water quality would be less than significant.

MITIGATION MEASURES

The following mitigation measures are recommended to reduce impacts related to polluted runoff during project construction and operation:

[14] *The Bundy Campus Master Plan involves the removal of some of the existing 609 parking spaces to accommodate the new approximately 230-space subterranean parking garage, for a total of approximately 780 parking spaces provided on the Campus at project buildout (net increase of approximately 171 parking spaces).*

Construction

(E-1) All waste shall be disposed of properly. Appropriately labeled recycling bins shall be used to recycle construction materials including: solvents, water-based paints, vehicle fluids, broken asphalt and concrete, wood, and vegetation. Non recyclable materials/wastes shall be taken to an appropriate landfill. Toxic wastes shall be discarded at a licensed regulated disposal site.

(E-2) Leaks, drips and spills shall be cleaned promptly to prevent contaminated soil on paved surfaces that can be washed away into the storm drains.

(E-3) Hosing down of pavement at material spills shall be prohibited. Dry cleanup methods shall be used whenever possible.

(E-4) Dumpsters shall be covered and maintained. Uncovered dumpsters shall be placed under a roof or covered with tarps or plastic sheeting.

(E-5) Gravel approaches shall be used where truck traffic is frequent to reduce soil compaction and limit the tracking of sediment into streets.

(E-6) All vehicle/equipment maintenance, repair, and washing shall be conducted away from storm drains. All major repairs shall be conducted off-site. Drip pans or drop clothes shall be used to catch drips and spills.

Operation

(E-7) SMC shall implement stormwater BMPs to retain or treat the runoff from a storm event producing 0.75 inch of rainfall in a 24 hour period. The design of structural BMPs shall be in accordance with the Development Best Management Practices Handbook Part B Planning Activities. A signed certificate from a California licensed civil engineer or licensed architect that the proposed BMPs meet this numerical threshold standard shall be required.

(E-8) Post development peak stormwater runoff discharge rates shall not exceed the estimated pre-development rate for developments where the increase peak stormwater discharge rate will result in increased potential for downstream erosion.

(E-9) Appropriate erosion control and drainage devices shall be incorporated, such as interceptor terraces, berms, vee-channels, and inlet and outlet structures, as specified by Section 91.7013 of the City of Los Angeles Building Code. Outlets of culverts, conduits or channels shall be protected from erosion by discharge velocities by installing rock outlet protection. (Rock outlet protection is a physical device composed of rock, grouted riprap, or concrete rubble placed at the outlet of a pipe.) Sediment traps shall be installed below the pipe-outlet. Outlet protection shall be inspected, repaired, and maintained after each significant rain.

(E-10) Materials with the potential to contaminate stormwater shall be: (1) placed in an enclosure such as, but not limited to, a cabinet, shed, or similar stormwater conveyance system; or (2) protected by secondary containment structures such as berms, dikes, or curbs.

(E-11) Storage areas shall be paved and sufficiently impervious to contain leaks and spills.

(E-12) Storage areas shall have a roof or awning to minimize collection of stormwater within the secondary containment area.

(E-13) Runoff shall be treated prior to release into the storm drain. Three types of treatments are available: (1) dynamic flow separator; (2) filtration; or (3) infiltration. Dynamic flow separator uses hydrodynamic force to remove debris, and oil and grease, and is located underground. Filtration involves catch basins with filter inserts. Infiltration methods are typically constructed on-site and are determined by various factors such as soil types and groundwater table. If utilized, filter inserts shall be inspected every six months and after major storms, cleaned at least twice a year.

(E-14) Any new connection to the sanitary sewer shall require authorization from the City of Los Angeles Department of Public Works, Bureau of Sanitation.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of the mitigation measures recommended, impacts to hydrology and water quality would be less than significant.