

## 4.13 PUBLIC SERVICES AND UTILITIES

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### 4.13.1 INTRODUCTION

This section evaluates the potential effects of the proposed New Student Housing Project (proposed project) on public services and utilities, including fire and police protection, schools, park and recreation facilities, emergency services, sewer infrastructure, reclaimed water and stormwater infrastructure, and solid waste disposal. In particular, this section describes the existing setting of the proposed project site, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to these public services and utilities that would be affected as a result of implementation of the proposed project.

### 4.13.2 METHODOLOGY

This section is based on a review of available studies, documents, and communications with local service providers, including staff of the City of San Diego (City) and San Diego State University (SDSU). A brief overview of the methodology applied to assess the proposed project's potential impacts is provided below:

- ***Police and Fire Protection:*** Potential impacts were assessed, in part, through discussions with University Police Department (UPD) and San Diego Fire-Rescue Department staff relative to maintaining appropriate service levels.
- ***Schools:*** Potential impacts were assessed through a review of San Diego Unified School District (SDUSD) facilities and City of San Diego school capacity standards. The analysis assumed that school-age children would not reside in the student housing component of the proposed project.
- ***Parks and Recreation:*** Potential impacts were assessed through a review of the City of San Diego General Plan Recreation Element goals and College Area Community Plan recreation policies. The existing, on-campus inventory of parks and recreation facilities at SDSU also was considered.
- ***Library:*** Potential impacts were analyzed by considering whether the existing and planned on-campus library facilities would be able to accommodate future residents of the proposed project.
- ***Water Supply and Service Systems:*** Existing water, sewer, and stormwater infrastructure was identified through a review of the analysis prepared for the proposed project by

Snipes-Dye Associates, available public records, and contact with water department and wastewater department staff. To assess potential impacts on the existing water infrastructure, the City of San Diego Water Department was contacted for information regarding water service to the proposed project site. The City provided a water model to calculate the adequacy of the existing water infrastructure based on the fire flow requirements for the proposed buildings. Potential impacts to sewer were assessed based on whether the City's wastewater treatment system has adequate capacity to serve the proposed project. To assess potential impacts on the existing stormwater infrastructure, the analysis evaluated whether any additional runoff would occur as a result of the proposed project.

- ***Recycled Water:*** Potential impacts were assessed through research of relevant City of San Diego recycled water planning documents.
- ***Solid Waste Disposal:*** Potential impacts were assessed through discussion with SDSU Physical Plant staff and review of relevant local planning documents and legislative policies.

#### 4.13.3 EXISTING CONDITIONS

##### 4.13.3.1 FIRE PROTECTION

The City of San Diego Fire-Rescue Department (Fire-Rescue Department) is the primary responder to fires on the SDSU campus. When an on-campus fire is reported to the UPD, a campus police officer is dispatched to the scene of the fire to verify the fire. Once the fire is verified, the UPD will call the Fire-Rescue Department (UPD 2017). The campus police officer dispatched to the scene establishes an "Incident Command Post" and manages the incident until relieved by Fire-Rescue Department personnel. If the fire is an imminent threat to life or structure, the SDSU Emergency Operations Center may be activated in a Level II emergency mode. When a fire incident occurs, the president of SDSU will determine if the Emergency Operations Center will be activated and, if activated, which staff positions are needed to respond to the emergency.

Depending on the incident and available resources, the SDSU campus is served by three Fire-Rescue Department fire stations (Stations 10, 17, and 31) located within the general vicinity of the project site. **Table 4.13-1, Fire-Rescue Department Stations Near the Project Area,** summarizes the station location, equipment, and proximity to the proposed project site.

**Table 4.13-1**  
**Fire-Rescue Department Stations Near the Project Area**

Station	Location (Community)	Equipment	Proximity to Project Site
Station 10 (Battalion 4 Headquarters)	4605 62nd Street ( <del>Del Cerro</del> ) <u>Rolando</u>	One Engine Company One Battalion Vehicle One Truck One Brush Rig One Chemical Utility Rig	1.35 mile southeast
Station 17	4206 Chamoune Avenue (City Heights)	One Engine Company	1.92 miles southwest
Station 31	6002 Camino Rico ( <del>Rolando</del> ) <u>Del Cerro</u>	One Engine Company One Medic Company	1.35 miles northeast

**Source:** City of San Diego Fire-Rescue Department 2017

Stations 10 and 31 are both located 1.35 miles from the proposed project site. Station 10 is equipped with both a fire engine and fire truck. According to the Fire-Rescue Department, fire trucks consist of an aerial apparatus or a telescopic ladder tower and a passenger-carrying platform. Station 10 also is equipped with a chemical rig that would respond to fire incidents originating in parking structures or any other locations at which standard fire engines and trucks are unable to access due to height restrictions. Station 31 is equipped with a fire engine and a paramedic unit and would respond to calls requesting medical service. Station 17 is equipped with a fire engine.

The UPD receives all on-campus landline calls requesting 9-1-1 services. Calls requesting fire services (including medical aid) often require assistance from the Fire-Rescue Department. Data provided below in **Table 4.13-2, 2015/2016 Priority 1 Fire Service Calls From On-Campus Residences**, summarizes calls received by the UPD requesting Fire-Rescue Department services. The call data presented below assumes the Fire-Rescue Department would respond to all incidents, including fires, fire alarms, requests for medical aid, and suicide attempts that may require medical aid. According to call data provided by the UPD, on-campus residence halls generated approximately 46 annual fire-related calls per student in 2015 and 39 in 2016 (average of 2015 and 2016 fire-related calls) (UPD 2017).

**Table 4.13-2**  
**2015/2016 Priority 1 Fire Service Calls From On-Campus Residences**

Call Origination	Existing Student Population	Priority 1 Calls received <sup>1</sup>		Priority 1 Calls per student	
		2015	2016	2015	2016
Student Housing	3,536 students <sup>2</sup>	46	39	0.01	0.01

<sup>1</sup> **Source:** UPD 2017

<sup>2</sup> **Source:** SDSU, pers. comm. 2017.

The City of San Diego General Plan’s Public Facilities, Services, and Safety Element includes response time goals for fire and rescue services (City of San Diego 2015a). The General Plan states that response times are evaluated based on compliance with response time guidelines included in the National Fire Protection Association 1710: Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire-Rescue Departments (City of San Diego 2015a, Citygate 2017). The City has adopted the response time guidelines of the National Fire Protection Association, and the guidelines are included in the General Plan. The applicable guidelines for fire suppression are as follows:

- Deployment and arrival of the first-in engine company should be within 7:30 minutes, 90% of the time; and
- Deployment and arrival of the first full alarm assignment (3 engines and 1 truck) should be within 8:10 minutes, 90% of the time.

According to the General Plan, a 2- to 2.5-mile distance between fire stations typically is sufficient to achieve response time goals (City of San Diego 2015a). All three of the nearby fire stations are less than 2 miles from the proposed project. Fire service delivery depends on a number of factors, including the availability of adequate equipment and number of qualified personnel.

A 2010 Regional Fire Services Deployment Study commissioned by the County of San Diego (County) Office of Emergency Services addressed levels of service and identified future facility needs, including additional fire stations (Citygate 2010). The study identified 11 areas within the County’s Southwest Quadrant, which encompasses central portions of the City of San Diego, where additional fire stations are recommended, based on findings that travel times exceeded 5 minutes in those areas. The areas identified for additional fire stations did not include the SDSU campus, generally, nor the site of the proposed project, specifically. (See Maps, San Diego County SOC Urban Coverage Gaps SW Quadrant, and San Diego County SOC Map 18 SW Gap 2, in Citygate 2010.) Additionally, neither the SDSU campus nor the project site is located within any of the service coverage “gaps” identified in the Citygate study.

In the February 2017 Standards of Response Coverage Review, Citygate Associates LLC provided an updated analysis on the adequacy of the current fire station resource deployment system since their original 2010 study (Citygate 2017). The 2017 review concluded that the City’s fire and emergency medical services have not kept pace with population growth and still do not meet best practice outcome response times to all neighborhoods. Citygate recommends the City of San Diego bring online at least 10 more infill gap fire stations plus what is needed for entirely new

growth areas. Despite the addition of six new fire stations included in the current Capital Improvements Program, these stations are not located within the service gaps identified in the 2010 study. Another six large gap infill stations would be needed to increase the percent of coverage of the existing road miles to acceptable levels (Citygate 2017). The following four new stations that are currently in the planning stage are recommended: Black Mountain Ranch, north University City, University of California–San Diego, and Mid-City. Six additional new stations are recommended in northern Pacific Beach, University City, Torrey Pines, southeastern San Diego, northern Rancho Bernardo, and Sabre Springs. Similar to the 2010 study, the 2017 report did not identify a service gap in the College Area Community or on the SDSU campus.

#### 4.13.3.2 POLICE PROTECTION

The UPD provides on-campus police services to SDSU. The UPD operates 24 hours a day, 7 days a week, and includes a staff of 28 sworn personnel and 71 non-sworn support employees (UPD 2017). UPD facilities ensure the safety and security of the on-campus environment via foot, vehicular, and bike patrols. The UPD is located at 55th Street and Remington Road.

UPD is the designated first responder for all incidents on campus and within a one-mile radius of the campus boundary in the College Area Community. Patrol officers are graduates of the California Peace Officers Training Academy with full arrest powers throughout the state. They are sworn and armed and charged with the enforcement of state and local laws, traffic laws, the investigation of accidents and crimes, and response to medical and domestic emergencies. One K-9 is responsible for narcotic detection and interdiction.

UPD police officers are responsible for reporting and responding to crimes, traffic accidents, and medical emergencies. The mission of the UPD consists of four main elements. UPD seeks to “protect the public through proactive law enforcement, address issues that impede or disrupt the orderly operation of the academic process, protect university property by initiating police action (by) enforcing laws and regulations, arresting offenders and educating the public in crime prevention techniques, and mitigate liability and hazards to the university” (UPD 2017).

UPD is organized into three distinct divisions: Patrol Operations, Administrative Operations, and Investigations and Support Operations (UPD 2017). Patrol Operations includes the more visible police detail, including foot, bicycle, and vehicle patrol. Administrative Operations includes services such as communications, records, evidence, property management, and

special operations. The Auxiliary Division provides services such as SDSU employee key card issuance, parking ticket issuance, and operation of the Community Officer Program (UPD 2017).

The UPD has an administrative agreement with the City of San Diego Police Department (SDPD) to provide mutual assistance, as appropriate, at sites in the vicinity of the SDSU campus (UPD 2017, SDSU 2016a). On average, the UPD fields approximately 488 (average for 2015/2016) emergency calls a year.<sup>1</sup> Due to the location of the call, the call must be routed to the City Police Department for response. By state law, the UPD and SDPD have concurrent jurisdiction within a 1-mile radius of the campus boundary. The City and UPD have a positive working relationship and often assist one another when one department is closer to the incident and/or is better equipped to respond. For example, large-scale incidents like protests or demonstrations that could escalate into violence would require collaborative resources and unified command between the UPD and the SDPD (UPD 2017).

The UPD receives all landline 9-1-1, cellular 9-1-1, and duress calls made on-campus and from designated duress telephones. UPD responds and handles all calls for service on SDSU-owned-and-operated property at the main campus.

The UPD is responsible for notifying the City of San Diego Fire-Rescue Department if an on-campus fire is reported. When a call is received by the UPD requesting fire support, the campus police notify the City of San Diego Fire-Rescue Department through a direct phone line (UPD 2017). The UPD is able to monitor the Fire-Rescue Department radio frequency and, when necessary, go on-air and direct Fire-Rescue Department personnel to the on-campus fire site. The UPD personally escorts the Fire-Rescue Department to the incident site (UPD 2017).

The UPD received approximately 39,985 calls for service (including Priority 1, 2, and 3 calls) in 2015 and 32,192 calls for service in 2016 (UPD 2017).<sup>2</sup> According to its 2016 Annual Safety and Security Report, assigned on-campus calls (including residence halls) for services resulted in approximately 99 arrests (including liquor law, drug, and weapons violations) and 306 disciplinary referrals in 2015 (SDSU 2016a). In 2015, burglary was the most prevalent major crime reported on campus, followed by sexual offenses and motor vehicle theft (SDSU 2016a).

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<sup>1</sup> Emergency calls are urgent, require immediate officer assistance, and are considered priority 1 calls (UPD 2017).

<sup>2</sup> Service calls encompass the total number of calls that the UPD Communications Center receives. This varies from inquiries, unlocks, non-urgent, emergency, etc. (UPD 2017).

According to the UPD December 2016 Monthly Report, larceny was the most prevalent major crime reported on campus followed by burglary and assault (SDSU 2016b).

Priority 1 call data provided by the UPD is summarized below in **Table 4.13-3, 2015/2016 Priority 1 Police Service Calls From On-Campus Residences**. According to the data, students housed on-campus generated approximately 0.04 annual calls per student.

**Table 4.13-3**  
**2015/2016 Priority 1 Police Service Calls From On-Campus Residences**

Call Origination	Existing Population/ Square Feet	Priority 1 Calls received <sup>1</sup>		Priority 1 Calls per student	
		2015	2016	2015	2016
Student Housing	3,536 students <sup>2</sup>	121	128	0.03	0.04

**Sources:**

<sup>1</sup> UPD 2017

<sup>2</sup> SDSU, pers. comm. 2017.

The Public Facilities, Services, and Safety Element of the City of San Diego General Plan contains goals and response time objectives for the SDPD. The College Area Community is located within the Eastern Division of SDPD (City of San Diego 2017a). The Eastern Division is headquartered at 9225 Aero Drive, encompasses a 47.1-square-mile area, and serves a population of 155,892 people (City of San Diego 2017a). The following are the SDPD response time goals (City of San Diego 2013a):

- Priority E Calls (imminent threat to life) within 7 minutes
- Priority 1 Calls (serious crimes in progress) within 14 minutes
- Priority 2 Calls (less serious crimes with no threat to life) within 27 minutes
- Priority 3 Calls (minor crimes/requests that are not urgent) within 70 minutes
- Priority 4 Calls (minor requests for police service) within 70 minutes

The UPD does not have official response time goals; however, according to 2016 UPD call data, the average response time for a Priority 1 call from dispatch to on-scene arrival of the UPD was approximately 4:24 minutes, while the average response time for Priority 2 and Priority 3 calls was 4:07 minutes, and 6:37 minutes, respectively (UPD 2017).

### 4.13.3.3 SCHOOLS

The College Area Community is served by the SDUSD. The SDUSD includes more than 226 educational facilities (including 117 elementary schools, 9 K-8 schools, 25 middle schools, 24 high schools, 49 charter schools, and 14 atypical/alternative schools), and serves over 130,000 students (SDUSD 2017). According to the City of San Diego General Plan Public Services, Facilities, and Safety Element (City of San Diego 2015a), the SDUSD applies the following enrollment limits to guide the planning of future school facilities:

- Maximum enrollment at elementary schools: 700
- Maximum enrollment at junior high/middle schools: 1,500
- Maximum enrollment at high schools: 2,000

Several SDUSD schools (including elementary, junior high, and high schools) are located in the general vicinity of the proposed project. Based on the City enrollment limits noted above, with the exception of Patrick Henry High School, none of the schools exceed their maximum enrollment limits. **Table 4.13-4, Project Area Public Schools and Enrollment (2014)**, identifies the schools located in the vicinity of the proposed project and their enrollment in 2014.

**Table 4.13-4**  
**Project Area Public Schools and Enrollment (2014)**

School	Location	Enrollment
<i>Elementary</i>		
Hardy Elementary (K–5)	5420 Montezuma Road	408
Hearst Elementary (K–5)	6230 Del Cerro Boulevard	498
The Language Academy (K–8)	4941 64th Street	1,038
<i>Junior High/Middle School</i>		
Lewis Middle School (6–8)	5170 Greenbriar Drive	1,043
The Mann School Of Excellence (6–8)	4345 54th Street	762
<i>Senior High School</i>		
Patrick Henry High School (9–12)	6702 Wandermere Drive	2,448
Crawford High Educational Complex (9–12)	4191 Colts Way	1,165

Source: SDUSD 2014

### 4.13.3.4 PARKS AND RECREATION

The City of San Diego's Parks and Recreation Department is responsible for the operation and maintenance of approximately 40,000 acres of developed and undeveloped park land and open



space within the City (City of San Diego 2015b). The development of public park space within the City is governed by the population-based park and recreation facilities guidelines provided in the Recreation Element of the City of San Diego General Plan. The guidelines associated with the development of population-based parks “provide a means to measure the degree to which park and recreational facilities are developed and to equitably provide facilities throughout the City” (City of San Diego 2015b).

The General Plan park standard is to “provide population-based parks at a minimum ratio of 2.8 useable acres per 1,000 residents” (City of San Diego 2015b). The General Plan also identifies the following guidelines to direct the development of population-based recreation facilities:

- For every 5,000 residents, a neighborhood park (3 to 13 acres) is recommended within a 1-mile radius. The park should be between approximately 3 to 5 acres in size when located next to an elementary school, and 10 to 13 acres if the park is stand-alone.
- For every 25,000 residents, a community park (13-acre minimum) is recommended within the specific community plan area.
- For every 25,000 residents, a recreation center (minimum 17,000 square feet) is recommended within a 3-mile radius.
- For every 50,000 residents, a swimming pool (minimum standard 25 meters) is recommended within a 6-mile radius.

**Table 4.13-5, Existing SDSU Park and Recreation Facilities**, provides a summary of the park and recreation facilities on the SDSU campus. The table depicts the type of facility, the description of the facility, and the approximate park acreage.

**Table 4.13-5**  
**Existing SDSU Park and Recreation Facilities**

Facility	Description	Acres (approximate)
<i>Community/Neighborhood Facilities (City of San Diego “Population-Based” Park/Recreation Facilities)</i>		
Aztec Green	Open lawn with seating areas and footpaths	1.0
Campanile Walk	Boulevard-style walk with turf parkway and plantings	3.0
Centennial Mall	Boulevard-style walk with turf parkway and plantings	1.1
Viejas Arena Foreground	Mixed paved and turf terrace area	1.0
Cuicacalli Lawn	Residential complex dedicated turf area with seating and shade	0.3
Education Park	Quadrangle park with turf, benches, and shade trees	0.5
Hepner/Hardy Quad	Informal garden with turf lawns, benches, walks, and shade trees	0.7
Individual Building Gardens	Occasional courtyards, gardens, and seating areas with benches and plantings	0.5

**Table 4.13-5**  
**Existing SDSU Park and Recreation Facilities**

<b>Facility</b>	<b>Description</b>	<b>Acres (approximate)</b>
Library Quad	Paved area with bench-lined planters and large shade trees	3.8
Mediterranean Garden	Informal garden with water features, circulation walk, and benches	0.4
Olmecca/Maya Quad	Enclosed dedicated turf lawn with water features and occasional trees and benches	0.8
Scripps Park and Cottage	Hillside garden with water features and small meeting venue	1.7
Hostler Hall Terrace	Furnished outdoor relaxation area	0.3
Aztec Student Union Central Plaza and Terraces	Furnished outdoor lounges and casual study areas; full-time public access	0.02
Aquaplex Swimming Complex	Competition and recreation pools, lounge deck, locker rooms	1.7
Cuicacalli Residence Halls Pool	Recreation pool for residential use	0.1
Cuicacalli Sand Volleyball Court	Beach-style volleyball courts for residential use	0.1
Football Practice Field	Synthetic turf practice field for intercollegiate athletics	1.5
Open Air Theatre	Greek-style outdoor amphitheater	2.5
PG 700 Field	Natural turf multipurpose recreational field	2.0
Recreational Field PG 610	Multi-use natural turf field	1.5
Recreational Field PG 620	Multi-use natural turf field	1.5
Softball Field	National Collegiate Athletic Association-(NCAA-) approved softball field and stadium for practice and intercollegiate use	4.9
Sports Deck Soccer Field PG 660	NCAA-Approved turf soccer field	1.8
Sports Deck Track	Olympic track and field venue with grandstands and support facilities	0.9
Tennis Center	Competition hard court tennis center for intercollegiate and recreational use	3.0
Tenochca Pool	Recreational pool for residents/students use	0.01
Tenochca Sand Volleyball Court	Beach-style volleyball courts for residential/student use	0.02
Tony Gwynn Field	NCAA-approved baseball field and stadium for practice and intercollegiate use	3.8
University Center Children's Play Yards	Secure outdoor multipurpose play yards segregated by age groups	0.02
Aztec Recreation Center	Indoor sports and fitness center	1.7
Aztec Center	Bowling lanes, billiards, table tennis, video games, outdoor patio, indoor lounges	1.1
Aztecs Athletic Center	Fitness and weight training center with meeting venue and athletic offices	1.8
Viejas Arena	Multi-use indoor entertainment and sports venue	3.3
<b>Total</b>		<b>48.37</b>
<i>Scenic or Natural Areas</i>		
A Lot	Preserved and restored wetlands habitat	1.2
C/D Lot	Preserved and restored wetlands habitat	2.5
Mission Trails–Fortuna	Public access hiking and research area	500

**Table 4.13-5**  
**Existing SDSU Park and Recreation Facilities**

Facility	Description	Acres (approximate)
Mountain Research Reserve		
<b>Total</b>		<b>503.7</b>

**Source:** SDSU, pers. comm. 2017.

According to the College Area Community Plan, most of the College Area Community was developed prior to the City’s adoption of the population-based park guidelines included in the General Plan Recreation Element and, as a result, the area is deficient in useable parkland (City of San Diego 1989). The College Area Community Plan also states that only one park, Montezuma Park (1.7 acres), is included in the College Area Community Plan boundary. According to the City of San Diego General Plan park guidelines and 2015 San Diego Association of Governments’ (SANDAG’s) population estimates for the College Area Community, the community should be served by approximately 58 acres of useable parkland (2.8 acres of parkland per 1,000 residents). However, due to the developed nature of the community, the acquisition of property for additional parkland for residential use historically has been problematic for the City (City of San Diego 2015b, SANDAG 2015).

#### **4.13.3.5 LIBRARIES**

The Malcolm A. Love Library (main campus library) is centrally located on the SDSU campus and serves the campus population. The library is a five-story, glass-dome structure, and open to the public. The library hours are Mondays through Thursdays, 7:00 a.m. to 1:00 a.m., Fridays from 7:00 a.m. to 7:00 p.m., Saturdays from 10:00 a.m. to 7:00 p.m., and Sundays from 12:00 p.m. to 1:00 a.m. (SDSU 2017a). Also, two branches of the San Diego Public Library are located within the general vicinity of the proposed project site. The closest City branch library to the project site is the College-Rolando Branch, located at 6600 Montezuma Road, east of the project site. (City of San Diego 2017b) **Table 4.13-6, City of San Diego Libraries in Vicinity of Project Site**, lists the City of San Diego library branches in the proposed project vicinity.

**Table 4.13-6**  
**City of San Diego Libraries in Vicinity of Project Site**

City of San Diego Library Branch	Street Address	Proximity to Project Site
Allied Gardens/Benjamin	5188 Zion Avenue	1.2 miles north

**Table 4.13-6**  
**City of San Diego Libraries in Vicinity of Project Site**

City of San Diego Library Branch	Street Address	Proximity to Project Site
College–Rolando	6600 Montezuma Road	1.4 miles east
Kensington–Normal Heights	4121 Adams Avenue	1.9 miles southwest

**Source:** City of San Diego 2017b.

The General Plan Public Facilities, Services, and Safety Element of the City of San Diego General Plan contains guidelines and standards for City of San Diego branch libraries. According to the guidelines, a library branch should serve a residential population of 30,000 and be located in areas of “intense” human activity. Additionally, the General Plan states that all library branches are required to provide a minimum of 15,000 square feet of dedicated library space.

#### 4.13.3.6 EMERGENCY MEDICAL SERVICES

Emergency medical response may be provided by both the UPD and City of San Diego Fire–Rescue Department. Goals and response time objectives for emergency medical response are included in the Public Facilities, Services, and Safety Element of the City of San Diego General Plan, and response time objectives are discussed above. All on-campus 9-1-1 calls associated with injuries and illness are received by the UPD who are then able to request additional services from the City of San Diego Fire–Rescue Department, if necessary.

The SDSU Student Health Services Department is responsible for on-campus student health and emergency medical needs. The Student Health Services Center, which is located at the 4-story, 69,000-square-foot Calpulli Center, is staffed by fully licensed and certified healthcare professionals who provide healthcare to the SDSU academic community (students, faculty, and staff) (SDSU 2017b).

Basic services (such as outpatient evaluation and treatment of common medical ailments, preventive care, and health counseling) are available by appointment and are paid for through mandatory health fees paid for by registered students, faculty, and staff. Regular check-ups and appointments are accommodated in the 30-exam-room/3-procedure-room clinical wing. Minor surgery can be undertaken (by appointment) in one of the procedure rooms. Other services offered at the Calpulli Center include urgent care, a radiology suite equipped with state-of-the-art imaging equipment, laboratory services, immunization services, and a pharmacy. The

urgent care wing (which includes the radiology suite) includes five treatment bays with gurneys, exam rooms, and two procedure rooms.

In addition to basic services and urgent care, several specialists in the fields of orthopedics, osteopathic medicine, optometry, and dermatology are available for appointments and consultations at various times throughout the week at the Calpulli Center. A newly constructed dentistry suite with seven exam chairs was completed in 2009. Additional fees apply for specialty care services.

Three hospitals, to which the majority of SDSU-related emergencies are referred, are located in the general vicinity of the project area. The closest facility, Alvarado Hospital, is a 306-bed facility located approximately 0.75 mile northeast of the project site at 6655 Alvarado Road. Approximately 300 physicians (representing more than 40 surgical specialties) and 600 registered nurses, technicians, and support staff work at Alvarado Hospital. The hospital employs approximately 1,000 staff members and 400 active volunteers (Alvarado Hospital 2017). The hospital provides health care to approximately 60,000 patients annually, while the emergency room accommodates approximately 22,800 patients annually with nearly 9,500 of those patients arriving by ambulance (Alvarado Hospital 2017).

In addition to Alvarado Hospital, Sharp Grossmont Hospital is located approximately 4 miles east of SDSU at 5555 Grossmont Center Drive in La Mesa. The hospital includes numerous patient programs and services including 24-hour emergency services with a heliport and paramedic base station, ambulatory care services, acute care, and an intensive care unit. (Sharp Grossmont Hospital 2017). Kaiser Permanente San Diego Medical Center/Kaiser Foundation Hospital is located approximately 2 miles northeast of SDSU at 4647 Zion Road. The hospital includes an active emergency services department.

The Public Facilities, Services, and Safety Element of the City of San Diego General Plan contains policies and recommendations related to emergency medical services. The applicable response time goals are as follows:

- Deployment and arrival of first responder or higher-level capability should be within 4 minutes, 90% of the time.
- Deployment and arrival of a unit with advanced life support (ALS) capability should be within 8 minutes, 90% of the time.
- Deployment and arrival of emergency medical service first responder with an automatic external defibrillator should be within 4 minutes, 90% of the time.

#### 4.13.3.7 SEWER

The College Area Community is served by the City of San Diego Metropolitan Wastewater Department. The Department is separated into two separate systems: the Metropolitan Sewerage System and the Municipal Wastewater Collection System.

The Metropolitan Sewerage System treats wastewater from the City of San Diego and 15 other cities and special districts in a 450-square-mile area (City of San Diego 2017c). Approximately 2.2 million residents live in this area.

The Municipal Wastewater Collection System collects and conveys waste from the portion of the City of San Diego not served by the Metropolitan Sewerage System and includes a service area of approximately 450 square miles and a residential population of approximately 2.2 million (City of San Diego 2017c). The Municipal Wastewater Collection System includes approximately 2,894 miles of sewer lines running beneath the service area, resulting in excess of 250,000 City connections to sewer lines and over 55,000 City manholes.

The Metropolitan Sewerage System relies on 9 pump stations, while the Municipal Wastewater Collection System relies on 84 smaller pump stations to convey sewage to the City's main treatment facility in Point Loma (City of San Diego 2017c). At Point Loma, wastewater passes through screens, grit removal tanks, and sedimentation tanks before discharge into the Pacific Ocean via the Point Loma Ocean Outfall. The Point Loma Wastewater Treatment Plant (WWTP) treats approximately 175 million gallons of wastewater per day, but has capacity to treat up to 240 million gallons per day (MGD) (City of San Diego 2017d).

The project area is served by the existing sanitary sewer system located along Hewlett Drive, Remington Road, and 55th Street (Snipes-Dye 2017). Wastewater generated by land uses between Hewlett Drive and 55th Street and north of Montezuma Road is conveyed by one 12-inch and two 8-inch sewer mains (located along the two roads) that gravity flow to a central 8-inch sewer main located in the canyon between the roads. From there, wastewater is conveyed north of the project site toward Interstate 8. Wastewater generated by land uses east of 55th Street is conveyed by the 8-inch east-west sewer main located east of 55th Street to the sewer main located in College Avenue. Existing sewer pipeline capacities are summarized in **Table 4.13-7, Existing Sewer Capacities**.

**Table 4.13-7  
Existing Sewer Capacities**

Location	Diameter	Existing Capacity (cubic feet per second) (Assuming 0.5 depth/diameter ratio)
Remington Road	8-inch @ 0.85%	0.72 cfs
Hewlett Drive	8-inch @ 4.9%	1.72 cfs
Hewlett Drive	12-inch @0.76%	2.02 cfs
55th Street	8-inch @ 2%	1.10 cfs

**Note:** cfs = cubic feet per second

The existing sewer flows were monitored and recorded by ADS Environmental, and the existing metered flow rates are summarized in **Table 4.13-8, Existing Sewer Flows**. The flow meters were placed in the sewer manholes located at the north end cul-de-sac of 55th Street and Hewlett Drive to account for the upstream flows. The analysis was conducted over a period of 12 days, and included a concert event at Viejas Arena.

**Table 4.13-8  
Existing Sewer Flows**

Location	Diameter	Existing Flow(cubic feet per second)*/**
Remington Road	8-inch	0.0417 cfs*
Hewlett Drive	8-inch at 4.9%	0.63 cfs**
Hewlett Drive	12-inch at 0.76%	0.63 cfs**
55th Street	8-inch at 2%	0.57 cfs**

**Note:** cfs = cubic feet per second

\* based upon existing flow from Chapultepec 550 beds x 49 gpd/bed = 26,950 gpd x 0.90 (RTS) = 24,255 gpd which equals 0.0417 cfs

\*\* flow meter data peak average was 15-min flow

**Figure 4.13-1, Existing Utilities**, identifies the location of the existing sewer infrastructure in the project area.

#### 4.13.3.8 POTABLE WATER

The City of San Diego Water Department treats and delivers more than 200,000 acre-feet per year (AFY) of water to more than 1.3 million people residing in a service area of over 330 square miles (City of San Diego 2017e). The City Water Department maintains and operates more than 3,300 miles of water lines, 49 water pump plants, 90-plus pressure zones, and more than 200 million gallons of potable water storage capacity in 32 treated water storage facilities (e.g., standpipes, elevated tanks, concrete and steel reservoirs) (City of San Diego 2017e). The City's

nine raw water storage reservoirs have approximately 415,000 acre-feet of storage capacity and can supply up to 20% of the City's water needs (City of San Diego 2017e).

The City's three water treatment plants (Miramar, Alvarado, and Otay) have a total treated capacity of 298 MGD (City of San Diego 2017e). The Alvarado Water Treatment Plant was expanded in 2011 to increase its capacity to 200 MGD (increasing the total treated capacity for the three water treatment plants to 343 MGD) and included a 1/1-megawatt solar power system (City of San Diego 2017e).

In addition to supplying water to more than 280,000 metered service connections within its own incorporated boundaries, the City Water Department conveys and sells potable water to the City of Del Mar and several local water agencies, and also maintains several emergency connections to and from neighboring water agencies (City of San Diego 2017f).

Potable water is delivered to the project area primarily by three 8-inch diameter water lines in Hewlett Drive, Remington Road, and 55th Street located in the northern portion of the existing campus (Snipes-Dye 2017).

The potable water is delivered to the project area by a well-defined grid of water mains. The primary backbones are 8-inch, 10-inch, and 12-inch water mains lines (Snipes-Dye 2017). The mains are interconnected by 8-inch mains located in Hewlett Drive, Remington Road, and 55th Street (Snipes-Dye 2017). The existing water infrastructure in the project area is shown in **Figure 4.13-1**. The City presently has a job file opened to begin expansion of the existing water distribution system in the proposed project's vicinity. The job file would entail expansion of the water mains located within Hewlett Drive, Remington Road, and 55th Street. City Group Job 807 proposes to upsize the water mains in Hewlett Drive, Remington Road, and 55th Street to 12-inch water mains. Group Job 807 is currently in design, and construction is scheduled to be completed by the year 2021, per the City of San Diego Water Department.

Water delivered to SDSU and the project area is treated at the Alvarado Treatment Plant northeast of the project site and adjacent to Lake Murray.

#### **4.13.3.9 RECYCLED WATER**

##### *Statewide Policy*

On February 3, 2009, the California State Water Resources Control Board (SWRCB) adopted a statewide recycled water policy, with the ultimate goal to increase the use of recycled water



from municipal wastewater sources. Included in the statewide policy is the mandate to increase the use of recycled water in California by 200,000 AFY by 2020, and an additional 300,000 AFY by 2030 (SWRCB 2009). The plan also states that the SWRCB expects to develop other policies to encourage stormwater usage and the use of both surface and groundwater in order to promote water conservation.

#### *City of San Diego Programs*

The City of San Diego maintains an active recycled water program in order to meet current and future water demands and to decrease dependence on imported water.

The City operates two water reclamation plants—the North City Water Reclamation Plant and South Bay Water Reclamation Plant—to treat wastewater that can then be used for landscape irrigation, construction water, toilet and urinal flushing, commercial use, enhancement of wildlife habitat, manufacturing, and other non-potable uses (City of San Diego 2017g). The North City Plant provides reclaimed water to cities in northern San Diego and is capable of treating up to 30 MGD (buildout capacity of the plant is approximately 33 MGD). The South Bay Reclamation Plant provides reclaimed water to south bay communities, has capacity to treat up to 15 MGD (City of San Diego 2017g).

Recycled water currently is available in the Northern Service Area (an area generally north of Highway 52 in the University of California–San Diego, Torrey Pines, Mira Mesa, Scripps Ranch, and Sable Springs areas) and the Southern Service Area (via Otay Water District recycled water pipelines located within the Otay Water District service area in the city of Chula Vista). The City’s recycled water distribution center consists of 83 miles of recycled water pipeline, a 9-million-gallon reservoir, and 2 pump stations (City of San Diego 2017g).

Recycled water currently is *not* available in the project area (i.e., south of Highway 52 and north of Highway 54) (City of San Diego 2017g). There are no current plans to extend recycled water to the College Area Community of the City of San Diego (City of San Diego 2017g).

The Pure Water San Diego Program is the City’s phased, multi-year program that will provide one-third of San Diego’s water supply locally by 2035 (City of San Diego 2017h). The Pure Water Program will use proven water purification technology to clean recycled water to produce safe, high-quality drinking water. The Pure Water facilities will be located throughout the City of San Diego and are grouped into three geographical areas to facilitate implementation: North City, Central Area, and South Bay. Construction on the phase 1 North City projects will start in 2019 and is planned to output 30 MGD of recycled water by 2021 (City of San Diego 2017h). Phases 2

and 3 include construction of the Central Area and South Bay facilities and would output an additional 53 MGD of recycled water by 2035 (City of San Diego 2017h).

#### 4.13.3.10 STORMWATER DRAINAGE

Stormwater from the project site currently drains into one of seven basins as depicted in **Figure 4.13-2, Drainage Area Map**, and described further below. The following stormwater drainage discussion was derived from the Hydrology and Water Quality Technical Report prepared by Dudek (May 2017), included in **Appendix I** of this environmental impact report. Additional drainage calculations and supporting materials are found in Appendix N-9 to this EIR.

Basins ~~A, B, and C~~ 1 through 3 consist of approximately 2.39, 1.44, and 0.72~~0~~ acres respectively and convey a total of 15 cubic feet per second (cfs) of stormwater runoff under existing conditions. These three basins cover a portion of the Sport Complex and Remington Road. Runoff from these areas is collected in curb-inlet and catch basins then discharged to the natural vegetated slope on the north side of Remington Road through a 24-inch Corrugated Metal Pipe (CMP) and a 12-inch CMP, both located west of Chapultepec Hall.

Basin ~~D-5~~ consists of approximately 0.69~~8~~ acres and conveys a total of 15 cfs of stormwater runoff under existing conditions. This basin consists of Chapultepec Hall, the retail building, and the multipurpose building. Runoff from rooftops and courtyard areas is collected and discharged over the same natural vegetated slope, north of Chapultepec Hall through a 12-inch polyvinyl chloride (PVC) pipe.

Basin ~~E-6~~ consists of approximately 4.42 acres and currently conveys a total of 15 cfs of stormwater runoff. A portion of the property boundary is within the western drainage and canyon.

Basins ~~F-4A~~ and ~~G-4B~~ consist of approximately 1.93 and 0.44 acres respectively, and currently convey a total of 8 cfs. These basins consist of Parking Lot 9 (formerly “U” Parking Lot) and the vegetated fill slope immediately bordering the lot to the north. The runoff from this area is discharged over the natural vegetated slope and outfalls into the eastern drainage located on the neighboring property to the north.

#### 4.13.3.11 SOLID WASTE DISPOSAL

Allied Waste & Recycling Services Inc. (Allied Waste) provides solid waste management services to the SDSU campus. Since 2007, SDSU has monitored its waste generation and diversion, as well as implemented programs increasing waste, food waste, and grass waste

diversion programs (SDSU 2009). The campus also implements single-stream recycling, food waste composting, and construction and demolition waste diversion programs (SDSU 2009). During fiscal year (FY) 2015–2016, SDSU reported a 34% waste (non-construction and demolition) diversion rate. Solid waste is collected in dumpsters located throughout the campus and then transported to one of three locations: (1) food and green waste is diverted to the Miramar Greenery located within the Miramar Landfill; (2) nonrecyclable solid waste is diverted to the Miramar Landfill; and (3) the remaining recyclable waste is diverted to the EDCO Recycling Facility in Lemon Grove (City of San Diego 2017i).

The closest landfill to SDSU is the Miramar Landfill, which is located in Kearny Mesa and owned/operated by the City of San Diego Environmental Services Department. Approximately 910,000 tons of trash are disposed of at the landfill annually, although the actual tonnage of buried trash has been decreasing over the past few years due to recycling and diversion programs (City of San Diego 2017i). The approximate 1,500-acre Class III landfill has a maximum permitted capacity of 87,760,000 cubic yards (City of San Diego 2017i). According to the City of San Diego Mayor's office, as of August 2015, the Miramar Landfill had a remaining capacity of approximately 11.6 million tons (City of San Diego Mayor's Office 2015). An improved trash compaction method and implementation of the City's Zero Waste Plan will extend the useful life of the Miramar Landfill to 2030.

When the Miramar Landfill closes, Allied Waste would be responsible for disposing the solid waste generated by the proposed project at a landfill in the region with sufficient permitted capacity. As of July 2015, the Sycamore Canyon landfill (located in Santee) had a remaining capacity of approximately 40 million cubic yards (CalRecycle 2015).

#### **4.13.4 RELEVANT PLANS, POLICIES, AND ORDINANCES**

##### *Federal*

##### Clean Water Act

Section 303 of the Clean Water Act requires states to identify surface waters that have been impaired. Under Section 303(d), states, territories, and authorized tribes are required to develop a list of water quality segments that do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology (33 U.S.C. 1251 et seq.). Section 402 of the Clean Water Act established the National Pollutant Discharge Elimination System (NPDES) to regulate the discharge of pollutants from point sources.

## *State*

### California Fire Code

California Code of Regulations, Title 24, Part 9, incorporates adoption of the 2012 International Fire Code of the International Code Council with necessary California amendments. The California Fire Code establishes minimum requirements consistent with nationally recognized good practices to safeguard the public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises, and to provide safety and assistance to fire fighters and emergency responders during emergency operations. The California Fire Code applies to construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure within the State of California (24 CCR Part 9).

### California Recycled Water Policy

On February 3, 2009, the SWRCB adopted a statewide recycled water policy, with the ultimate goal to increase the use of recycled water from municipal wastewater sources. Included in the statewide policy is the mandate to increase the use of recycled water in California by 200,000 AFY by 2020, and an additional 300,000 AFY by 2030 (SWRCB 2013). The plan also states that the SWRCB expects to develop other policies to encourage stormwater, surface, and groundwater use to promote water conservation. The SWRCB adopted an amendment to the Recycled Water Policy on January 22, 2013, which establishes monitoring requirements for constituents of emerging concern in recycled municipal wastewater.

### Assembly Bill 939

Assembly Bill (AB) 939 established an integrated waste management hierarchy to guide the California Integrated Waste Management Board and local agencies in the implementation of programs geared at source reduction, recycling and composting, and environmentally safe transformation and land disposal. AB 939 also included waste diversion mandates that require all cities and counties to divert 50% of all solid waste through source reduction, recycling, and composting activities (CalRecycle 1997).

### Assembly Bill 75

AB 75 requires all state agencies and large state facilities develop and implement an integrated waste management plan. AB 75 also requires all state agencies and large state facilities to divert

at least 25% of their solid waste from landfills by January 1, 2002, and at least 50% on and after January 1, 2004 (CalRecycle 1997).

#### Assembly Bill 341

AB 341 builds from the goals and requirements of AB 939. AB 341 establishes a statewide policy goal of diverting a minimum of 75% of solid waste from landfills through sources reduction, recycling, or composting by the year 2020. This bill also required the California Department of Resources Recycling and Recovery (CalRecycle) to issue a report by January 1, 2014, that included strategies, methods, and recommendations that would enable the state to reach the 75% waste diversion goal by 2020 (CalRecycle 2015).

#### *Local*

As a state agency, SDSU is not subject to local planning documents, such as the City of San Diego General Plan, although the university does endeavor to comply with such plans when feasible. Therefore, the City of San Diego policies and guidelines are provided for information purposes only.

#### City of San Diego General Plan

The Public Facilities, Services, and Safety Element of the City of San Diego 2008 General Plan (City of San Diego 2008) provides objectives, policies, and programs regarding public services and utilities, including the following:

##### *Fire-Rescue*

- PF-D.3 Adopt, monitor, maintain service delivery objectives based on time standards for all fire, rescue, emergency response, and lifeguard services.
- PF-D.5 Maintain service levels to meet the demands of continued growth and development, tourism, and other events requiring fire-rescue services.
  - a. Provide additional response units, and related capital improvements as necessary, whenever the yearly emergency incident volume of a single unit providing coverage for an area increases to the extent that availability of that unit for additional emergency responses and/or non-emergency

training and maintenance activities is compromised. An excess of 2,500 responses annually requires analysis to determine the need for additional services or facilities.

Police

- PF-E.1 Provide a sufficient level of police services to all areas of the City by enforcing the law, investigating crimes, and working with the community to prevent crime.
- PF-E.7 Maintain service levels to meet demands of continued growth and development, tourism, and other events requiring police services.
- a. Analyze the need for additional resources and related capital improvements when total annual police force out-of-service time incrementally increases by 125,000 hours over the baseline of 740,000 in a given year. Out-of-service time is defined as the time it takes a police unit to resolve a call for service after it has been dispatched to an officer.

Wastewater

- PF-F.5 Construct and maintain facilities to accommodate regional growth projections that are consistent with sustainable development policies.

Storm Water Infrastructure

- PF-G.1 Ensure that all storm water conveyance systems, structures, and maintenance practices are consistent with federal Clean Water Act and California Regional Water Quality Control Board NPDES Permit Standards.
- PF-G.2 Install infrastructure that includes components to capture, minimize, and/or prevent pollutants in urban runoff from reaching receiving water and potable water supplies.

Water Infrastructure

- PF-H.3      Coordinate land use planning and water infrastructure planning with local, state, and regional agencies to provide for future development, maintain adequate service levels, and develop water supply options during emergency situations.
- a. Plan for a water supply and emergency reserves to meet peak load demand during a natural disaster such as a fire or earthquake.
  - b. Plan for water supply and emergency reserves recognizing anticipated Climate Change impacts.
  - c. Recognize the water/energy nexus. Plan and implement water projects after consideration of their energy demands in coordination with energy suppliers to minimize and optimize the energy impacts of a project.

Waste Management

- PF-I.2      Maximize waste reduction and diversion.
- a. Conveniently locate facilities and informational guidelines to encourage waste reduction, diversion, and recycling practices.
  - b. Operate public and private facilities that collect and transport waste and recyclable materials in accordance with the highest environmental standards.
  - c. Support resource recovery programs that produce soil additives, mulch, or compost from yard debris and organic waste.
  - d. Maximize the separation of recyclables and compostable materials.
  - e. Collaborate with public and private entities to support the development of facilities that recycle materials into usable products or that compost organic materials.
  - f. Reduce and recycle Construction and Demolition (C&D) debris. Strive for recycling of 100 percent of inert C&D

materials and a minimum of 50 percent by weight of all other material.

- g. Use recycled, composted, and post-consumer materials in manufacturing, construction, public facilities and in other identified uses whenever appropriate.
- h. Encourage advance disposal fees to prevent the disposal of materials that cause handling problems or hazards at landfills.
- i. Provide sufficient information on the movement of waste and recyclable materials to meet the regulatory requirements at public and private transfer stations and materials recovery facilities to allow adequate planning.
- j. Reduce subsidies to disposal and encourage incentives for waste diversion.
- k. Promote manufacturer and retailer responsibility to divert harmful, reusable, and recyclable products upon expiration from the waste stream.
- l. Encourage the private sector to build a mixed construction and demolition waste materials recycling facility.
- m. Expand and stabilize the economic base for recycling in the local and regional economy by encouraging and purchasing products made from recycled materials.
- n. Continuously assess new technologies for recycling, composting, cogeneration, and disposal to maximize efficient use of City resources and environmental protection.

The Recreation Element of the City of San Diego General Plan (City of San Diego 2008) provides objectives, policies, and programs regarding recreational facilities, including the following:

- RE-A.8 Provide population-based parks at a minimum ratio of 2.8 usable acres per 1,000 residents (see also Table RE-2, Parks Guidelines).
  - a. All park types within the Population-based Park Category could satisfy population-based park requirements (see also Table RE-2, Parks Guidelines).



- b. The allowable amount of usable acres exceeding two percent grade at any given park site would be determined on a case-by-case basis by the City.
- c. Include military family housing populations when calculating population-based park requirements.

#### College Area Community Plan

The College Area Community Plan (City of San Diego 2002) was adopted on May 2, 1989. The plan has since been amended to include an SDSU Element (amendment adopted October 12, 1993) and information regarding the Mission Valley East Trolley Expansion (amendment adopted August 5, 2002).

The College Area Community Plan serves as a guide for the orderly growth of the community. The diversity between the two principal land uses in the College Area Community calls for a plan that will enhance compatibility between single-family neighborhoods and SDSU. Consequently, the plan emphasizes positive relationships between these two land uses as well as among the other land uses in the community. The plan also concentrates on an improved transportation system and the establishment of an urban design program for the community. The College Area Community Plan has established the following goals and policies, related to parks and recreation and public facilities:

#### Parks and Recreation

##### Goal

- Ensure a high level of recreational and social opportunities within the community.

##### Objectives

- Provide a system of public recreational facilities in the community which meet the standards of the Progress Guide and General Plan (General Plan) to the extent feasible.
- Require the provision of private recreational facilities as part of higher density residential projects.
- Require plazas, seating areas, and landscaped areas to provide passive recreational areas as part of mixed or multiple-use commercial projects.

## Public Facilities

### Goal

- Ensure a high level of public services to the community.

### Objectives

- Provide educational facilities which respond to the present and future needs of the community.
- Maintain a level of police and fire protection which conforms to citywide standards.
- Provide library service which adequately serves the community in conformance with standards of the General Plan.
- Maintain public utilities at a level which meets the future needs of the community.

### *Urban Water Management Plans*

In 2016, the City adopted the 2015 Urban Water Management Plan (UWMP), which identifies projected water supplies required to meet future water demands through the year 2035 (City of San Diego 2016). According to the City's 2015 UWMP, no water shortages are forecasted through 2040 because projected potable water demands would be met using a combination of recycled water, local surface supply, groundwater, and purchased water from the San Diego County Water Authority (SDCWA) (City of San Diego 2016).

Also in 2016, the SDCWA adopted its own 2015 UWMP (SDCWA 2016). The SDCWA's UWMP uses SANDAG's most recent regional growth forecast to calculate regional water demands. SANDAG's regional growth forecasts are based on population forecasts, projected housing forecasts, and other growth forecasts provided by the member cities.

California law requires water agencies to update their UWMPs every 5 years. Accordingly, the City and SDCWA updated their UWMPs in 2015 to reflect new development projects and assess any ongoing water supply issues, such as drought.

### City of San Diego Drought Policies

In 2011, the City implemented permanent mandatory restrictions to promote water conservation as a permanent way of life in San Diego. The following measures apply year-round, regardless if the City is in a drought (City of San Diego 2017j):

- City of San Diego water customers must prohibit excessive irrigation and must immediately correct leaks in their private water systems.
- Customers cannot use a running hose to wash down sidewalks, driveways, parking areas, buildings, awnings, windows, tennis courts, patios or other hard surface areas, except to alleviate immediate safety or sanitation hazards.
- Overfilling of swimming pools and spas is strictly prohibited.
- All decorative water fountains must use a recirculating pump.
- Residents washing vehicles (automobiles, trucks, trailers, boats, RVs) must implement procedures to conserve water and prevent excessive runoff, such as:
  - Washing vehicles at a commercial car wash.
  - Washing vehicles on a lawn or pervious surface or directing water flow to a lawn or pervious area.
  - Damming wash water for collection and disposal to a pervious area or to the sanitary sewer.
  - Using a hose with an automatic shutoff nozzle.
  - Using a hand-held water container.
- The City will not provide new water service connections for customers using single pass-through cooling systems.
- All new conveyer car wash and commercial laundry systems connections will be required to employ a recirculating water system.
- Restaurants and other food establishments shall only serve and refill water for patrons upon request.
- Guests in hotels, motels, and other commercial lodging establishments will be provided the option of not laundering towels and linens daily.

Level 1 Drought Alert Conditions

In Level 1 Water Emergencies, San Diegans are asked to reduce, voluntarily, excessive irrigation and restrict landscape irrigation and car washing to before 10 a.m. or after 6 p.m. Level 1 “Drought Watch” conditions also include, but are not limited to, the following voluntary water use restrictions (City of San Diego 2017j):

- Limit watering of landscapes to no more than 3 days per week.
- When watering without an irrigation system, use either a hand-held hose with a shutoff valve or a garden hose sprinkler system on a timer.
- Washing of vehicles is limited to the same seasonal schedule as irrigation: before 10 a.m. or after 6 p.m. in the summer and after 4 p.m. in the winter (except for boats, which may be washed after use; vehicles for health and/or safety issues; or when washing at a commercial carwash that recycles water).
- No watering/irrigating during rain events.
- Recycled water should be used for construction purposes, when available.
- Construction operations may only use water for normal construction activities, consistent with San Diego Municipal Code Section 67.3803 and requirements by regulatory agencies.
- Use of water from fire hydrants will be limited to firefighting, construction, health and safety.

Level 2 Drought Alert Conditions

Conservation rules associated with Level 2 Drought Alert conditions include, but are not limited to, the following mandatory water use restrictions:

- All water use restriction of Level 1 drought water conditions.
- Limit all landscape irrigation to no more than 3 assigned days per week on a schedule established and posted by the city manager.
- Limit lawn watering and landscape irrigation using sprinklers to no more than 10 minutes maximum per watering station per assigned day from June to October (does not apply to water-efficient devices).

- Limit lawn watering and landscape irrigation using sprinklers to no more than 7 minutes maximum per watering station per assigned day from November to May (does not apply to water efficient devices).
- Stop operation of ornamental fountains, except to the extent needed for maintenance purposes.
- Use of water from fire hydrants will be limited to firefighting, meter installation by the Public Utilities Department as part of its Fire Hydrant Meter Program, and related activities necessary to maintain the health, safety, and welfare of the citizens of San Diego.
- Construction operations receiving water from a fire hydrant or water truck will not use water beyond normal activities.
- A Level 2 declaration also allows the city manager (upon resolution of the San Diego City Council) to implement a water allocation per customer account served by the City and a schedule of penalties for exceeding the water allocation (City of San Diego 2017j).

#### *Countywide Integrated Waste Management Plan*

The Countywide Integrated Waste Management Plan consists of a Countywide Siting Element, a Countywide Summary Plan, and three elements (source reduction and recycling, household hazardous waste disposal, and non-disposal facility locations) from each. The Siting Element requires that the County's landfills demonstrate remaining capacity of at least 15 years to serve all jurisdictions. The Summary Plan contains waste management policies and goals, and it summarizes the diversion programs at the County and local level implemented to meet and maintain the 50% diversion mandate required by AB 939 (County of San Diego 2005). The County publishes 5-year review reports for the Countywide Integrated Waste Management Plan that provide updates to goals and relevant jurisdictional information. The most recent County of San Diego Countywide Five-Year Review Report was published in September 2012; it provides jurisdictional demographic changes and waste generation rates through 2010 (County of San Diego 2012).

#### *SDSU Waste Disposal Practices and Programs*

In response to AB 75 and the establishment of the State Agency Buy Recycled Campaign, the California State University (CSU) system initiated its own Buy Recycled Campaign to promote environmentally responsible procurement procedures. SDSU's Business and Financial Affairs Department implements the "SDSU Recycles" campaign on campus, which provides numerous recycling bins for items such as beverage containers, cardboard, and paper throughout the

campus. Other items that can be recycled include appliances, construction debris, green waste, metal scrap, and toner cartridges (SDSU 2009). SDSU also encourages students, faculty and staff to purchase goods containing recycled content and purchase items that can be recycled/reused when discarded.

SDSU is developing a new sustainability program that involves a joint effort of several departments and custodial staff. In addition, SDSU recycles 100% of electronic waste through three different companies: IMS, Happy Recyclers, and CSS (SDSU 2009). The SDSU energy manager and the Student Union's sustainability manager and director are currently establishing programs and practices that would help the campus meet the requirements of AB 341. SDSU is also coordinating with the City to assist in the development of these solid waste diversion programs and practices (SDSU 2009).

Qualified vendors collect and dispose of SDSU's hazardous waste. Hazardous waste disposal is facilitated through the Environmental Health and Safety Department (SDSU 2009).

#### City of San Diego Recycling Programs

The City maintains an active, citywide recycling program governed by the City's Recycling Ordinance. The San Diego City Council initially approved the Ordinance on November 20, 2007, and requires recycling of plastic, glass bottles and jars, paper, newspaper, metal containers, and cardboard (City of San Diego 2016b). The Recycling Ordinance applies to all single-family residences, apartments, and condominium complexes with 50 or more units, commercial buildings with 10,000 square feet or more, and all special events requiring a permit from the City. Effective January 1, 2010, the Recycling Ordinance applies to all apartment and condominium complexes and all commercial facilities (City of San Diego 2016b). In response to AB 341, the City updated the Recycling Ordinance, effective July 2012, requiring all privately serviced multifamily properties, commercial/business facilities, and institutions to recycle if they generate more than 4 cubic yards of waste per week (City of San Diego 2016b). Residential recyclables placed in City-issued blue collection bins are collected by Environmental Services Department staff.

The City's Construction and Demolition Debris Diversion Deposit Program is intended to increase the diversion of construction and demolition debris from landfill disposal and conserve the capacity and expand the life of Miramar Landfill (City of San Diego 2017k). Although not applicable to SDSU, the program requires contractors applying for a building or grading permit to pay a refundable deposit at the issuance of the permit. The contractor can recover the deposit

once it submits satisfactory evidence to the director of the Environmental Services Department showing that at least 75% (by weight) of construction or demolition debris generated by development of the project was diverted to a certified recycling facility (City of San Diego 2017k). The Environmental Services Department maintains a list of certified recycling facilities in the County (City of San Diego 2017k).

#### 4.13.5 THRESHOLDS OF SIGNIFICANCE

Appendix G of the California Environmental Quality Act (CEQA) Guidelines states that a project would result in a potentially significant impact related to public services and utilities if the project would:

1. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
  - a. Fire protection,
  - b. Police protection,
  - c. Schools,
  - d. Parks,
  - e. Other public facilities;
2. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
3. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
4. Require or result in the construction of new stormwater drainage facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects;
5. Have insufficient water supplies available to serve the project from existing entitlements and resources, or require new or expanded entitlements;

6. Result in a determination by the wastewater treatment provider that serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
7. Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs; or
8. Not comply with federal, state, and local statutes and regulations related to solid waste.

#### 4.13.6 IMPACTS ANALYSIS

Following issuance of the Notice of Preparation for the proposed project, SDSU received comments related to public services and utilities concerning potential impacts from the proposed project to sewer, water, and stormwater facilities, as well as police and fire safety services. The analysis presented below addresses each of these topics.

*Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:*

*Fire protection?*

Table 4.13-9, Project Fire-Rescue Department Priority 1 Calls from On-Campus Residences, shows the projected fire-related calls anticipated for the proposed project. Because the Fire-Rescue Department currently responds to calls for service originating from the existing residential uses located on the proposed project site, only the net increase in student resident population (~~-2,566-850~~) was used to calculate projected Priority 1 calls attributable to the proposed student housing. As shown in Table 4.13-9, the proposed project would generate approximately ~~26-8.5~~ additional annual calls from future student residents.

**Table 4.13-9**  
**Projected Fire-Rescue Department Priority 1 Calls From On-Campus Residences**

Call Origination	Average annual calls per student <sup>1</sup>	Project Population	Projected Additional Priority 1 Calls
Student Housing	0.01	<del>2,566-850</del>	<del>268.5</del>

**Note:**

- <sup>1</sup> Source: See Table 4.13-2. To calculate average per student, the arithmetic mean of the 2015 and 2016 Priority 1 calls received were used.



**Table 4.13-10, Fire-Rescue Department Response Times**, lists the current average response times for each station within the vicinity of the proposed project. As shown in the table, Station 17 response times are compliant with the City of San Diego General Plan response time objective to secure the deployment and arrival of first-in engine company within 7:30 minutes 90% of the time (Citygate 2017). This 7:30 minute standard was updated in the 2017 Citygate study from the previous 2010 study. While average response times at Stations 10 and 31 slightly exceed the objectives, according to the General Plan, the proximity of each station to the campus (both 1.35 miles) typically is sufficient to achieve response time goals.

**Table 4.13-10**  
**Fire-Rescue Department Response Times**

Station	Average Response Time (minutes and seconds)
Station 10	7:49
Station 17	7:29
Station 31	8:25

**Source:** Citygate 2017.

The current City of San Diego FY 2014 development impact fee schedule includes a \$476 amount for the “Fire-Rescue” component of the College Area Community fee to fund the design and construction of a new 10,500-square-foot fire station planned to be located near 55th Street and Hardy Avenue. This new fire station would augment existing fire facilities to ensure the levels of service remain adequate to meet the needs of existing and future College Area Community development (City of San Diego 2014). The new College Area fire station was included in the 2017 Capital Improvement Plan, but no funding has been allocated to its construction (Citygate 2017). Additionally, the buildings constructed as part of the proposed project would be fully sprinklered facilities, which would effectively slow the effect of a fire in the initial stages. Therefore, because the proposed project would result in a minimal number of additional calls for fire services, in combination with the fact that the proposed project would not result in the need for new or physically altered government facilities, the proposed project would result in **less-than-significant** impacts related to fire protection, and no mitigation would be necessary.

#### *Police protection?*

The proposed project would generate additional demand for campus police services by adding ~~2,566~~ 850 student residents to the project site. **Table 4.13-11, Projected Priority 1 Calls from On-**

**Campus Residences**, provides a projection of future calls to the UPD. Because the UPD currently responds to calls for service originating from the existing Chapultepec Hall located on the project site, only the net increase in student resident population (~~2,566~~850) was used to calculate projected Priority 1 calls attributable to the proposed student housing. As shown in **Table 4.13-11**, the proposed project would generate approximately ~~403~~34 additional annual calls to the UPD from on-campus residents.

**Table 4.13-11**  
**Projected Priority 1 Calls from On-Campus Residences**

Call Origination	Average annual calls per student <sup>1</sup>	Project Population	Projected Additional Priority 1 Calls
Student Housing	0.04	<del>2,566</del> <u>850</u>	<del>403</del> <u>34</u>

**Note:**

<sup>1</sup> **Source:** See Table 4.13-2. To calculate average per student, the arithmetic mean of the 2015 and 2016 Priority 1 calls received were calculated.

The increased population could generate an additional demand for police services. However, the project site lies within the jurisdiction of the UPD and is already part of the normal patrol and enforcement zone, the proposed project would not generate any new or altered demands on the City's police department. As discussed previously in **Section 4.13.1**, the UPD, which is in close proximity to the project site (less than 1 mile southeast), currently responds to Priority 1 calls on average within 4:24 minutes, Priority 2 calls within 5:07 minutes, and Priority 3 calls within 6:37 minutes. These current response times do not exceed the City of San Diego General Plan response time goals, which as previously noted, are 12 minutes, 30 minutes, and 70 minutes, respectively. Therefore, while the increase in on-campus student housing may result in increased calls and increased response times, based on existing service levels, which are much lower than the response time goals, and the minimal projected increase in Priority 1 calls, response times would continue to be within acceptable service levels at project buildout.

However, even if response times were to exceed acceptable service levels, there is no evidence that new or additional governmental facilities would be required to maintain acceptable levels. In 2008, the UPD moved to their newly renovated campus building near the intersection of Remington Road and Aztec Circle Drive. The nearly \$1-million renovation project created 15,000 gross square feet (GSF) of administrative and public services space, which was designed to accommodate the police protection needs of 35,000 full-time equivalent (FTE) students and related uses through 2025. Because the proposed project would not result in an FTE increase and is below the growth forecast assumptions utilized in the design of the new facility, the new

facility is adequately sized to accommodate the campus-related development that would take place under the proposed project.

Therefore, with the proposed project's forecast effect on existing response times, in combination with the fact that the project would not result in the need for new or physically altered governmental facilities, the proposed project would result in **less-than-significant** impacts related to police services, and no mitigation would be necessary.

#### *Schools?*

Children (other than SDSU students under the age of 18) would not be permitted to live in the proposed student housing units. Therefore, the proposed project would not generate additional demand for elementary and secondary schools in the surrounding community. The proposed project would result in **less-than-significant** impacts associated with maintaining acceptable school service ratios.

#### *Parks?*

According to the City of San Diego General Plan Recreation Element, the City's parks standard is a minimum ratio of 2.8 useable acres per 1,000 residents (City of San Diego 2015b). SDSU currently provides on-campus housing to approximately 3,536 students. The proposed project would add ~~2,566~~ 850 on-campus student residents. Assuming a projected on-campus student population ~~6,102~~ 4,386 ( $3,536 \text{ existing} + 850 \text{ new} = 4,386$ ) and using the City of San Diego General Plan park standards as a guide, SDSU should provide a total of ~~17.1~~ 12.3 useable acres of population-based parks, which would account for all resident students.

As shown in **Table 4.13-12, SDSU Park and Recreation Facilities and General Plan Requirements**, SDSU campus currently has access to 46.27 acres of community/neighborhood park and recreation facilities and 503.7 acres of scenic/natural areas, with approximately 9.9 additional acres of population-based parks, well in excess of the General Plan standard. Therefore, SDSU provides adequate community/neighborhood park and recreation facilities to serve the proposed on-campus resident population.

**Table 4.13-12**  
**SDSU Park and Recreation Facilities and General Plan Requirements**

	On-Campus Resident Population	Total Park Acreage	Acreage Required per City General Plan	Amount of Excess of General Plan Requirement
Existing <sup>1</sup>	3,536	549.8	9.9	539.9
Projected <sup>2</sup>	<u>6,1024,386</u>	549.8	<u>17.112.3</u>	<u>532.7537.5</u>

**Notes:**

<sup>1</sup> Existing on-campus population data provided by SDSU.

<sup>2</sup> Existing on-campus population (3,536) plus proposed student housing capacity (850,2566).

While the proposed project would increase the number of students living on campus, the project would not increase the community population or total permitted enrollment at SDSU. Rather, the proposed project would provide additional on-campus living options for SDSU students. By offering additional on-campus housing for freshman students, ~~Phase I of the proposed project~~ would free up on campus housing suitable for sophomore students, thereby decreasing the student population in the surrounding communities, which would decrease the overall demand in the area for City park and recreation facilities and services. By locating students on campus and closer to SDSU recreation facilities, students are more likely to use SDSU recreation facilities instead of City of San Diego park and recreation facilities in the surrounding College Area Community. Therefore, the proposed project would result in **less-than-significant** impacts related to the maintenance of acceptable park and recreation service ratios.

*Other public facilities?*

Libraries

The residents of the proposed project would be SDSU students. These students would continue to use the on-campus Malcolm A. Love Library for research and other library needs. While residents of the proposed project would have the opportunity to obtain a City library card (by virtue of being City residents) and utilize the resources of a nearby City library branch, due to the proximity of the Malcom A. Love Library, residents of the proposed project would be more likely to utilize on-campus library facilities. Therefore, the proposed project would result in **less-than-significant** impacts related to the maintenance of acceptable library performance objectives.

Emergency Medical Services

The proposed project would not increase the student enrollment at SDSU. Rather, the proposed project would provide additional on-campus housing for freshman students who already utilize

on-campus emergency medical facilities, including the Calpulli Center. Thus, the proposed project is not expected to significantly increase the annual percentage of Calpulli Center patrons or those requiring transport to a local area hospital. Accordingly, existing facilities are adequate to serve future residents of the proposed project, and impacts would be **less than significant**.

***Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?***

The City of San Diego is the NPDES permit holder for the Point Loma WWTP and is responsible for compliance with the wastewater treatment requirements specified in the NPDES permit (No. CA0107409/Order No. 95-106). Therefore, the City controls the type and quality of discharge from the Point Loma WWTP. According to the latest Point Loma WWTP and Ocean Outfall Annual Report, major permit discharge limitations including flows, total suspended solids (TSS), biological oxygen demand (BOD) removals, and mass emission rates of monitored effluent were well within the discharge specifications of the NPDES permit (City of San Diego Public Utilities 2015). The Point Loma WWTP met the required  $\geq 58$  percent BOD removal with 66.9 percent removal and TSS mass emissions no greater than 15,000 metric tons per year with 5,466 metric tons emitted (City of San Diego Public Utilities 2015).

Upon connection to the City's sewer infrastructure, the proposed project would be required to comply with the wastewater treatment requirements of the Regional Water Quality Control Board. As explained above, the Point Loma WWTP demonstrated adequate capacity to accommodate the additional wastewater contributed by the proposed project in compliance with NPDES standards. Therefore, the proposed project would not exceed the wastewater treatment requirements of the applicable Regional Water Quality Control Board, and impacts would be **less than significant**.

***Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?***

*Water Treatment Plants*

As discussed above, the City's three water treatment plants (Miramar, Alvarado, and Otay) have a total treatment capacity of 294 MGD. Water delivered to the project area is treated at the Alvarado Treatment Plant, which is located northeast of the project site adjacent to Lake Murray. The Alvarado Treatment Plant was recently expanded to increase its treatment capacity to 200 MGD. Expansion of the Alvarado Treatment Plant was undertaken in order to meet

current and future water needs of the Alvarado service area. The projected water treatment needs of the Alvarado service area are based primarily on the number of existing and projected water department customers residing in the service area. Existing and projected customer data is based on land uses identified in local planning documents, including general plans and community plans.

SANDAG's population and employment data is based on data included in the General and Community Plans prepared by the 19 jurisdictions located in the San Diego region (SANDAG 2017). The proposed project does not include an FTE increase and, therefore, would not increase the population at SDSU beyond that which SANDAG anticipated. Because the proposed project is consistent with the intensification of land uses outlined for the project site in the City of San Diego General Plan, College Area Community Plan, and College Community Redevelopment Plan, the proposed project would not increase the demand for regional water treatment facilities as these facilities are sized to accommodate densities envisioned by the referenced city planning documents and planned as part of the proposed project. Therefore, impacts related to water treatment plant capacity would be **less than significant**.

#### *Water Distribution Infrastructure*

##### Water Demand

The City of San Diego's Water Capital Improvement Program Guidelines, Book Two, Facility Design Guide (2002) contains water usage demand factors. While commercial and retail land use water demand factors were included, the residential water usage factor (150 gallons/capita/day) was not used to calculate existing or projected water demand because this water usage factor is not representative of the actual water consumption associated with on-campus, student housing. To determine an appropriate water usage factor, SDSU's Physical Plant Department provided actual water usage information for on-campus housing.

Water use rates at Chapultepec Hall were used to determine the proposed project's likely water use. Water use rates at Chapultepec Hall were used because the student housing apartments are located on the project site and would be similar to the proposed project's operational water usage. During February 2017, water usage at Chapultepec Hall was 27,368 gallons, and when divided by the bed count at Chapultepec Hall (550 beds) yields a daily water usage rate of 49 gallons/capita/day.

**Table 4.13-13, Projected Daily Water Demand**, provides a summary of projected water demand. The increased water demand of the proposed project would result in additional demands on the local water infrastructure system.

**Table 4.13-13**  
**Projected Daily Water Demand**

	Population	Water Usage (gal/day/bed)	Total Projected Water Usage (gal/day)
Residential	<u>2,566-850</u>	49	<u>125,73441,650</u>

**Source:** Snipes-Dye 2017.

#### *Capacity of Water Serving Infrastructure*

##### SDSU's Provision of Water Meters and Service Laterals

Water service for the proposed project would be provided by a number of water meters and service laterals. The proposed project would construct new service laterals to the existing water infrastructure in the project area that conform to City of San Diego design standards for new construction. Water meters also would be replaced and calibrated by the City of San Diego Public Utilities Department. SDSU would be required to construct all necessary laterals and water meters to provide water to ~~all~~ both project buildings. Each proposed building would be provided with multiple connections to the potable water system for supply redundancy.

##### Water-Serving Pipelines

When assessing impacts to existing water systems, pipelines must be adequately sized to respond to the highest possible water delivery scenario. The worst-case scenario for water delivery was assumed to be the provision of required fire flow (during a fire) for the duration identified in the California Fire Code. As stated in the California Fire Code, fire flow requirements for individual buildings are determined according to building square footage, number of floors, and construction type. During preparation of the Draft EIR, Snipes-Dye Associates (SDA) conducted a preliminary, planning level analysis regarding the adequacy of the existing water infrastructure to provide the fire flows necessary to serve the project. SDA's preliminary analysis determined the existing infrastructure was inadequate to provide required fire flows to the project, and SDA recommended mitigation (MM-PUB-1) to upgrade the existing facilities consistent with the City's planned infrastructure upgrade. Since preparation and release of the Draft EIR, the project has been modified and additional project details have become available, allowing for a more detailed analysis. Notably, a full sprinkler system would be installed in the buildings developed as part of

the proposed project. With this detail, Michael Baker International (MBI), a member of the Project's design/build team retained to prepare plans and specifications for demolition, grading, wet utilities, and improvements, performed a subsequent analysis to SDA, determined that the existing infrastructure has adequate capacity to serve the projects' fire flow needs (Snipes-Dye Associates 2017b). Specifically, MBI was able to utilize the California Fire Code reductions applicable to buildings containing full sprinkler systems. The adjustment for the sprinkler system resulted in adequate fire flow capacity to the proposed project. This more detailed analysis differs from the determination made in the Draft EIR. The following fire flow analysis has been updated to reflect the results of the most recent MBI-prepared analysis, and further information can be found in Appendix N. ~~Phase I~~The proposed Residence Hall Buildings/~~Wings~~ are ~~is~~ 190,000 ~~175,290~~ GSF and the Food Service Building is ~~815,000~~ GSF. ~~Phase II Building is 188,000 GSF, and Phase III Wing Buildings total at 214,000 GSF.~~ Therefore, according to Table A.III-A-IBB, Table BB105.1, of Appendix III-A of the California Fire Code, the majority of the project buildings have a required fire flow of ~~8,000~~4,500 gallons.

Given the required fire flow to serve the proposed buildings, the existing water infrastructure (to which the proposed project would connect) was analyzed to determine whether the required fire flow could be delivered to the proposed buildings. **Table 4.13-14, Fire Flow Requirements**, summarizes the fire flow requirements of the proposed project and identifies the available fire flow at the hydrant nearest to the proposed buildings. Available fire flow at hydrants was based on a water model calibrated under the assumption that the existing water infrastructure in the project area maintains a pressure of ~~50–65~~20 pounds per square inch during peak hours. As shown in **Table 4.13-14**, the existing project area water infrastructure is ~~unable to deliver the required fire flow to the project buildings. The inability to deliver the required fire flow is a result of inadequately sized water mains in the project area; specifically the mains are currently too small to deliver the volume of water required.~~

**Table 4.13-14**  
**Fire Flow Requirements**

Building	Area (GSF)	Required Fire Flow (gal/min) <sup>1</sup>	Hours	Available Fire Flow at Hydrant (gal/min) <sup>2</sup>
<del>Phase I</del> Residence Hall <del>and Food Service Buildings</del> / <del>Wings</del>	<del>190,000</del> 182,290	<del>3,000</del> 4,500	<del>54</del>	<del>1,300</del> 3,407
<del>Phase I</del> Food Service Building	<del>815,000</del>	<del>4,000</del>	<del>5</del>	<del>1,300</del>
<del>Phase II</del> Buildings	<del>188,000</del>	<del>3,000</del>	<del>5</del>	<del>1,300</del>
<del>Phase III</del> Buildings	<del>214,000</del>	<del>3,000</del>	<del>5</del>	<del>1,300</del>



**Note:** GSF = gross square feet; gal/min = gallons per minute

**Sources:** <sup>1</sup> City of San Diego 2013a; <sup>2</sup> Michael Baker International 2017. <sup>3</sup> Snipes-Dye 2017; Michael Baker International 2017.

The proposed project would fully sprinkler ~~all~~ both buildings, which according to the California Fire Code Division III, Appendix III-A, Section 4.2, may reduce the required fire flow by ~~2550%~~ 25% (24 CCR Part 9 Michael Baker International 2017). **Table 4.13-15, Projected Fire Flow Demand (Assuming 2550% Reduction from Sprinklers)**, identifies the fire flow demand of the proposed project assuming a reduction rate of ~~2550%~~ 25%. Under this scenario, the existing water infrastructure would ~~still be unable~~ to deliver the appropriate fire flow to ~~all~~ both proposed buildings.

**Table 4.13-15**  
**Projected Fire Flow Demand (Assuming 2550% Reduction from Sprinklers)**

Building	Area (GSF)	Required Fire Flow (gal/min)	Available Fire Flow at Hydrant (gal/min) <sup>1</sup>
<del>Phase I Residence Hall and Food Service Buildings/Wings</del>	<del>190,000</del> <u>182,290</u>	2,250	<del>1,300</del> <u>1,407</u>
<del>Phase I Food Service Building</del>	<del>845,000</del>	3,000	1,300
<del>Phase II Building</del>	<del>488,000</del>	2,250	1,300
<del>Phase III Wings 1-4</del>	<del>244,000</del>	2,250	1,300

**Note:** GSF = gross square feet; gal/min = gallons per minute

**Source:** <sup>1</sup> = ~~Snipes-Dye 2017~~ Michael Baker International 2017.

Because the existing water infrastructure is ~~inadequately~~ sized to serve the proposed project and ~~because the proposed project would require additional capacity~~, the proposed project would result in a less than significant impacts to water distribution infrastructure ~~absent mitigation (Impact PUB-1)~~. The above notwithstanding, the City of San Diego Water Department was contacted regarding the water capacity and potential upgrades. A City Group Job 807 is currently planned for the area and will upsize the existing mains. The project is in a location that will be upsized to a 12-inch water main that can provide 4,000 gal/min and 8-inch lines that can provide 2,000 gal/min, effectively doubling the capacity. The City also indicated that the system is also looped so the City could provide service from more than one pipe. ~~However, given the timing of the proposed project, particularly Phase I, the City's proposed improvement may not be constructed in time to ensure that adequate fire water service is provided to the new building. As such, a potential temporary significant impact would occur and, therefore, mitigation MM-PUB-1 is provided.~~

*Sewer*Wastewater Generation

To calculate the wastewater generated by the proposed project, a Return-to-Sewer ratio was used. The Metropolitan Wastewater Department of the City of San Diego establishes the Return-to-Sewer ratio to estimate the portion of potable water usage that is returned to the wastewater system. The department does not meter wastewater flows. A Return-to-Sewer value of 0.90 was used, this is a typical value for high density settings such as a campus. **Table 4.13-16** provides the projected daily wastewater generation totals. As shown, the proposed project would result in ~~243,160~~54,158 gallons of wastewater per day.

**Table 4.13-16**  
**Projected Daily Wastewater Generation**

	Population	Wastewater Generation (total project water usage multiplied by the RTS*)	Total Projected Wastewater Generation (gal/day)
Residential and Food Service	<del>2,566</del> <u>850</u>	0.90	<del>243,160</del> <u>37,485</u>

**Source:** Snipes-Dye 2017. \*RTS = Return-to-Sewer

*Sewer Infrastructure Connections*

The proposed project would be served by existing sewer infrastructure located in area roadways surrounding the project site. However, connections to the nearest available facility through new service laterals would be required to provide sewer collection to the proposed project.

The proposed project would connect to the existing 8-inch sewer main located in Remington Road and 55th Street. As required by the California Department of Health and Services Drinking Water Field Operations Branch, the proposed project would maintain horizontal and vertical separation to ensure that adjacent water lines are not contaminated during the relocation process.

*Sewer Capacity*

In the City of San Diego, the minimum diameter allowed for a sewer main is 8 inches in residential areas (City of San Diego Public Utilities 2015). In addition, sewer mains are sized to convey flow at a rate where depth is not greater than half the inside diameter of the pipe (ratio of depth of flow to pipe diameter) (City of San Diego Public Utilities 2015). **Table 4.13-7,**

**Existing Sewer Capacities**, provides the existing capacities and depth/diameter ratio of the sewer mains that the proposed project would connect. The City of San Diego Sewer Design Guide indicates that the allowable flow loading for sewer pipes is determined by the American Society of Civil Engineers (ASCE) Manuals and Reports on Engineering Practice – No. 60, Gravity Sanitary Sewer Design and Construction (City of San Diego Public Utilities 2015). Per ASCE Manual No. 60, Chapter 6, Section I Flow Velocities and Design Depths of Flow, generally accepted standards dictate that the minimum design velocity should not be less than 2 feet per second (ASCE 1982). Therefore, utilizing the Advanced Engineering Software (AES) for calculating hydraulic capacity in gravity pipelines, an 8-inch circular pipe flowing at half full in Hewlett Drive, with a velocity of 4.55 cubic feet per second, has a slope of 4.9% has a capacity of 1.72 cubic feet per second. The existing flow as metered is 0.63 cubic feet per second. The project will add ~~0.1751~~0.06 cubic feet per second to this line thus having a projected flow rate of ~~0.805~~0.69 cubic feet per second. This projected flow rate is less than the calculated capacity of the line which is 1.72 cubic feet per second. These estimated quantities are summarized in **Table 4.13-8**.

The proposed project likely would utilize the existing sewer mains located in Remington Road and 55th Street. Based upon the existing flow analysis collected by the flow metering (see **Tables 4.13-7** and **4.13-8**, above), examining the flattest sloping sewer main sections, and conservatively viewing the collected data in said mains, the existing mains have adequate capacity. The proposed project would generate 37,485 ~~113,160~~ gallons of wastewater per day, or ~~0.1751~~0.06 cubic feet per second and likely would not exceed the capacity of the existing sewer main located in Remington Road. Therefore, impacts to sewer capacity would be **less than significant**.

#### *Recycled Water*

As discussed previously, recycled water is not available in the College Area Community. In addition, the City of San Diego does not currently have plans to extend recycled water infrastructure from either the northern or southern service area to the College Area Community (City of San Diego 2017h). Therefore, the proposed project would result in **less-than-significant** impacts related to the use or distribution of recycled water.

***Would the project require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?***

Development of the proposed project may increase the amount of impervious surfaces, which decreases runoff travel time and increased runoff volumes. In order to evaluate the proposed

project's impact on the existing stormwater runoff, a hydrologic analysis was prepared. On the project site, existing stormwater drainage is discharged directly to both arms of the canyon, i.e., the eastern drainage and western drainage, without treatment.

In the post-development site, the new storm drain system would replace the existing corrugated metal pipes that currently deliver untreated storm flows from campus development to the slopes above the eastern and western arms of the canyon. The new storm drain system would convey the on-site and off-site runoff for discharge to the western ephemeral drainage creek, where it outfalls downstream at the most northern corner of the site. This discharge location would include velocity dissipation and would be located in an area less likely to cause erosion or rilling compared to existing conditions. The existing discharge locations are on steep slopes, whereas the proposed discharge location is on flatter ground along the existing drainage. Additionally, all runoff from the proposed project as well as off-site areas to the south (i.e., a portion of the Sport Complex and Remington Road) would be passed through water quality treatment prior to discharge. The proposed drainage basins, discharge location, and the locations of biofiltration best management practices are further discussed in **Section 4.9, Hydrology and Water Quality**.

Although the proposed project includes the construction of new stormwater drainage facilities, the installation of these updated facilities, including undergrounding of existing uncovered parking, capture of off-site drainage areas into proposed drainage system, biofiltration best management practices, and the relocation of stormwater outfalls to the canyon bottom, would avoid excessive erosion and result in positive changes from current conditions. The construction of the new stormwater facilities would prevent further environmental impacts from stormwater runoff; therefore, impacts would be less than significant.

***Would the project have insufficient water supplies available to serve the project from existing entitlements and resources, or require new or expanded entitlements?***

#### *Regional Supply and Demand Projections*

According to the City of San Diego's Long-Range Water Resources Plan, SANDAG has projected that the City's service area population will increase to 1.4969 million residents by the year 202035, which is a 529% increase from 20152 (City of San Diego 2012). SANDAG also calculated that the applicable water demand in 2035-2020 would be 302,700273,500 AFY under normal weather conditions (City of San Diego 2012). SANDAG's 2035-2020 water-demand projection assumes that the City would maintain an aggressive water conservation program

throughout the forecasted timetable. ~~Under dry weather conditions, 2035 water demand is projected to be 281,800 AFY (a total reduction of almost 21,000 AFY).~~ In December 2013, the 2012 Long-Range Water Resources Plan (LRWRP) was adopted unanimously by the San Diego City Council. The LRWRP plans to enact additional active water conservation of 20,900 AFY, rainwater harvesting of 420 AFY, and recharge groundwater supply up to 4,000 AFY (City of San Diego 2012). As shown in **Table 4.13-13, Projected Daily Water Demand**, at buildout, the proposed project would result in a projected net increase in water demand over existing uses of approximately ~~123,879~~41,650 gallons per day, or approximately ~~139~~47 AFY, which represents 0.01~~70049~~70049% of the total regional demand at buildout year 2020.

The current UWMPs (2015) prepared by the City of San Diego and SDCWA both conclude that adequate water supplies exist for future planned development within the San Diego region through 2035 (City of San Diego 2016a, SDCWA 2016). Both UWMPs utilized SANDAG's 2050 Regional Growth Forecast for water supply planning purposes; these forecasts are based on the General and Community Plans of each of the San Diego region's 19 jurisdictions, including the City of San Diego (SANDAG 2017). According to the SDCWA UWMP, the use of demographic and economic projection data "ensures a strong linkage between local general plan land use forecasts and water demand projections for the San Diego region" (SDCWA 2016).

The increase in density that would occur under the proposed project is consistent with the increased density envisioned by the City's General Plan, College Area Community Plan, and College Area Redevelopment Plan (See **Section 4.10, Land Use and Planning**). By relying on locally supplied data, including growth accounted for in local general plans and community plans, the UWMPs provide an accurate assessment of water supply in relation to planned development occurring within the various jurisdictions in the San Diego region. Although the SDCWA recently declared an end to drought conditions in San Diego County, the proposed project is consistent with the densities envisioned for this portion of the College Area Community, and there would be sufficient water supplies available to serve the projected water demands of the proposed project from existing entitlements and resources. Therefore, the potential impacts of the proposed project relative to water supply would be **less than significant**.

It also is noted that CSU policy on energy conservation and utilities management requires that all CSU campuses take every necessary step to conserve water resources, including installing controls to optimize irrigation water, reducing water usage in restrooms and showers, and cooperating with state, city, and county governments to the greatest extent possible to effect additional water conservation.

Consistent with CSU policy, SDSU has installed low-flow toilets, flush valve controls, electronic faucets, and low-flow showerheads in all or most of its lavatory facilities. SDSU also has required the installation of energy and water conserving fixtures in all new construction on campus. To conserve water used in landscape irrigation, SDSU utilizes irrigation controllers that are linked to weather service evapotranspiration data to deliver the irrigation water only when needed. Consistent with CSU policy, SDSU will continue to implement conservation measures to reduce the use of water and decrease wastewater flows.

#### *Effect of LEED Silver Rating*

SDSU is committed to obtaining Leadership in Environmental and Energy Design (LEED) Silver rating for the proposed student residential buildings. To obtain a LEED rating, a project is assessed and given points on the basis of environmentally responsible features incorporated into the project design. A project checklist identifying applicable project features and applicable point worth has been established for the LEED for Home Ratings System. Due to multiple stories of construction, the proposed project would be subject to the LEED BD+C New Construction (applicable to multiple-residential units within one building with more than eight stories) (USGBC 2014).

In order to obtain points towards a LEED Silver rating, the proposed project can implement a variety of water-efficiency features into the project design. As identified in the LEED for Homes Rating System, water-efficiency elements include features associated with water reuse, irrigation systems, and indoor water use. Applicable water-reuse features may include installation of a rainwater harvesting system or a graywater reuse system. With regard to irrigation systems, LEED points can be obtained by installation of a high-efficiency irrigation system featuring elements such as drip-irrigation, timer-controlled watering devices, and the use high-efficiency spray nozzles. In addition, a project may obtain LEED points by reducing overall irrigation demand by at least 45%, which usually is achieved by the use of native, drought-tolerant landscaping. Lastly, a project may obtain LEED points by installation of very high-or high-efficiency (low-flow) fixtures and fittings to lavatory faucets, showers, and toilets. Indoor water use points also can be obtained through the installation of efficient water distribution systems and appliances. The commitment to obtaining a LEED Silver rating ensures that the proposed project would be designed, constructed, and operated to maximize water efficiency.

As a result, the proposed project would have sufficient water supplies available to serve the project from existing entitlements and resources, and impacts would be **less than significant**.

***Would the project result in a determination by the wastewater treatment provider that serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?***

Wastewater generated by the proposed project would be conveyed through the City of San Diego Metropolitan Wastewater Department's collection system and eventually treated at the Point Loma WWTP. As stated previously, the Point Loma WWTP currently treats approximately 152 million gallons (5-year average) of wastewater per day and has capacity to treat up to 240 million gallons of wastewater per day (City of San Diego Public Utilities 2015a). The proposed project would generate ~~120,485~~ 54,158 gallons of wastewater per day, representing ~~0.00080~~ 0.0002% of the wastewater currently treated at the Point Loma WWTP. Thus, the proposed project would not significantly impact the treatment plant's ability to serve the project's demand in addition to its existing commitments.

According to the City of San Diego General Plan Public Facilities, Services, and Safety Element, the City's wastewater treatment system (which includes the Point Loma WWTP and two water reclamation plants) has sufficient capacity to meet the projected needs of the San Diego Metropolitan Wastewater Department's service area through at least 2020 (City of San Diego 2015). As stated above, the proposed project's wastewater demand represents ~~0.00080~~ 0.0002% of the Point Loma WWTP's current treatment levels. ~~Although the proposed project's buildout date is 2025, after the General Plan's capacity projections, With the proposed project's buildout date of 2020 and~~ the small proportion of the City's total wastewater generation represented by the proposed project, development of the proposed project would be unlikely to contribute to capacity issues.

The projected wastewater needs of the Metropolitan Wastewater Department's service area are based on land uses identified in local planning documents, including general plans and community plans. Because the proposed project is consistent with the intensification of land uses outlined for the project site in the City of San Diego General Plan, College Area Community Plan, and College Community Redevelopment Plan, the proposed project would not result in a determination by the wastewater treatment provider that serves or may serve the proposed project that it does not have adequate capacity to serve the project demand in addition to the provider's existing commitments. Therefore, impacts would be **less than significant**.

***Would the project be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs?***

***Would the project not comply with federal, state, and local statutes and regulations related to solid waste?***

*Capacity*

The proposed project's solid waste disposal needs would be served by Allied Waste Services Inc. Allied Waste would transport solid waste to a nearby waste disposal facility, possibly the Miramar Landfill or Sycamore Canyon Landfill. The Miramar Landfill is nearing capacity; however, the City's Zero Waste Plan will likely extend the useful life of the landfill to 2030. According to the City of San Diego Mayor's office, as of August 2015, the Miramar Landfill had a remaining capacity of approximately 11.6 million tons (City of San Diego Mayor's Office 2015). When the Miramar Landfill closes, Allied Waste would be responsible for disposing the solid waste generated by the proposed project at a landfill in the region with sufficient permitted capacity. As of July 2015, the Sycamore Canyon landfill (located in Santee) had a remaining capacity of approximately 40 million cubic yards (CalRecycle 2015).

Current estimates of remaining permitted capacity, described above, would suggest sufficient permitted capacity exists to serve the proposed project's solid waste generation of 114,205 ~~343,844~~ annual tons (shown in **Table 4.13-17** below). In support of this available capacity, the current County Five-Year Report (Countywide Integrated Waste Management Plan) states that existing landfills have enough daily permitted disposal capacity for the next 17 years and would therefore meet state requirements that the County maintain 15 years of disposal capacity (County of San Diego 2012). The projected waste disposal needs of the region were developed using General Plan growth data obtained from jurisdictions throughout the County.

The County's Siting Element (California Integrated Waste Management Plan) discusses several strategies for increasing or extending regional landfill capacity, including (i) continuation of diversion programs for recyclable materials, (ii) improvement of landfill technology and space management, (iii) construction of enhanced recycling facilities, (iv) export of waste out of the County, and (v) increase of maximum daily permitted throughput rates at County landfills (County of San Diego 2005). In addition to the recommendations included in the County Siting Element, the County and all jurisdictions in the County, and state agencies (including SDSU) are expected to implement and maintain waste diversion programs to prolong the operation of County landfill facilities.

Demolition of existing buildings, excavation, and other related construction activities associated with the proposed project would generate construction wastes. In addition, operation of the



proposed project would generate an increased demand for solid waste disposal services. **Table 4.13-17, Existing and Projected Annual Solid Waste Generation**, provides a summary of the anticipated solid waste generation of the proposed project.

**Table 4.13-17**  
**Existing and Projected Annual Solid Waste Generation**

Project Component	Projected		
	<i>Square Feet</i>	<i>Dwelling Units</i>	<i>Annual Solid Waste Generation (tons)</i>
Residential and Food Service	<u>N/A</u>	<u>548,182</u>	<u>343,844,114,205</u>
<u>Food Service</u>	<u>N/A</u>	<u>N/A</u>	

Source: SDSU pers. comm. 2017.

As shown in **Table 4.13-17**, the proposed project is projected to generate a net increase of 243,142,114,205 annual tons of solid waste over the existing residential uses located on the project site. Because the regional solid waste disposal landfills currently available are expected to have sufficient permitted capacity to serve the proposed project's solid waste generation through buildout, this increase in solid waste generation would be less than significant. Therefore, the proposed project would be served by landfill(s) with sufficient permitted capacity to accommodate its solid waste disposal needs and would result in a **less than significant impact**.

#### *Compliance with Solid Waste Regulations*

SDSU typically diverts over 50% of their yearly on-campus generated solid waste to a licensed recycling facility. Solid waste generated from construction and operation of the proposed project would be subject to the existing on-campus solid waste diversion program, which historically has been successful at diverting at least 50% of on-campus generated solid waste from a landfill to an appropriate recycling facility. Maintaining the existing diversion rate would ensure compliance with AB 75, which requires all large state facilities to divert at least 50% of solid waste from landfills.

The proposed project would include recycling bins within the on-campus student housing buildings. Recyclable materials would be transported to a certified recycling facility by a certified recyclable materials collector at least once per week. Therefore, the project would not impede the City's ability to implement efforts to promote and enforce recycling. Because the proposed project would comply with federal, state, and local statutes and regulations related to solid waste, impacts would be **less than significant**.

#### 4.13.7 MITIGATION MEASURES

The following Mitigation Measures (MMs) ~~is~~<sup>are</sup> proposed to minimize the identified potential impacts to public utilities and service systems. With the implementation of mitigation, all potential impacts would be reduced to less than significant.

~~**MM-PUB-1** Prior to occupancy of the New Student Housing Project, California State University (CSU)/San Diego State University (SDSU) shall pay applicable City of San Diego water supply infrastructure connection fees and applicable fair-share capital facilities fees consistent with Government Code Section 54999.3, to the extent the payment of such fees is made necessary by the proposed project. In the event CSU/SDSU, in coordination with the City of San Diego, determines that necessary infrastructure upgrades currently programmed as City Group Job 807 will not be in place and operational prior to the time when the increase in supply is necessary, SDSU shall coordinate with the City to advance implementation of the necessary infrastructure upgrades such that they are in place and operational when necessary.~~

**MM-PUB-12** During construction of the New Student Housing Project, CSU/SDSU, or its designee, shall dispose of all recyclable demolition waste products at a construction waste recycling facility. Following occupancy of the proposed project, CSU/SDSU, or its designee, shall maintain an active recycling program to reduce solid waste generated by the project.

#### 4.13.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the proposed mitigation measures would reduce the potentially significant impacts to public services and utilities to a level of below significant.

#### 4.13.9 REFERENCES

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0 300 600 Feet

SOURCES: AERIAL-BING MAPPING SERVICE; HYDROLOGY-SANGIS

→ Flow direction

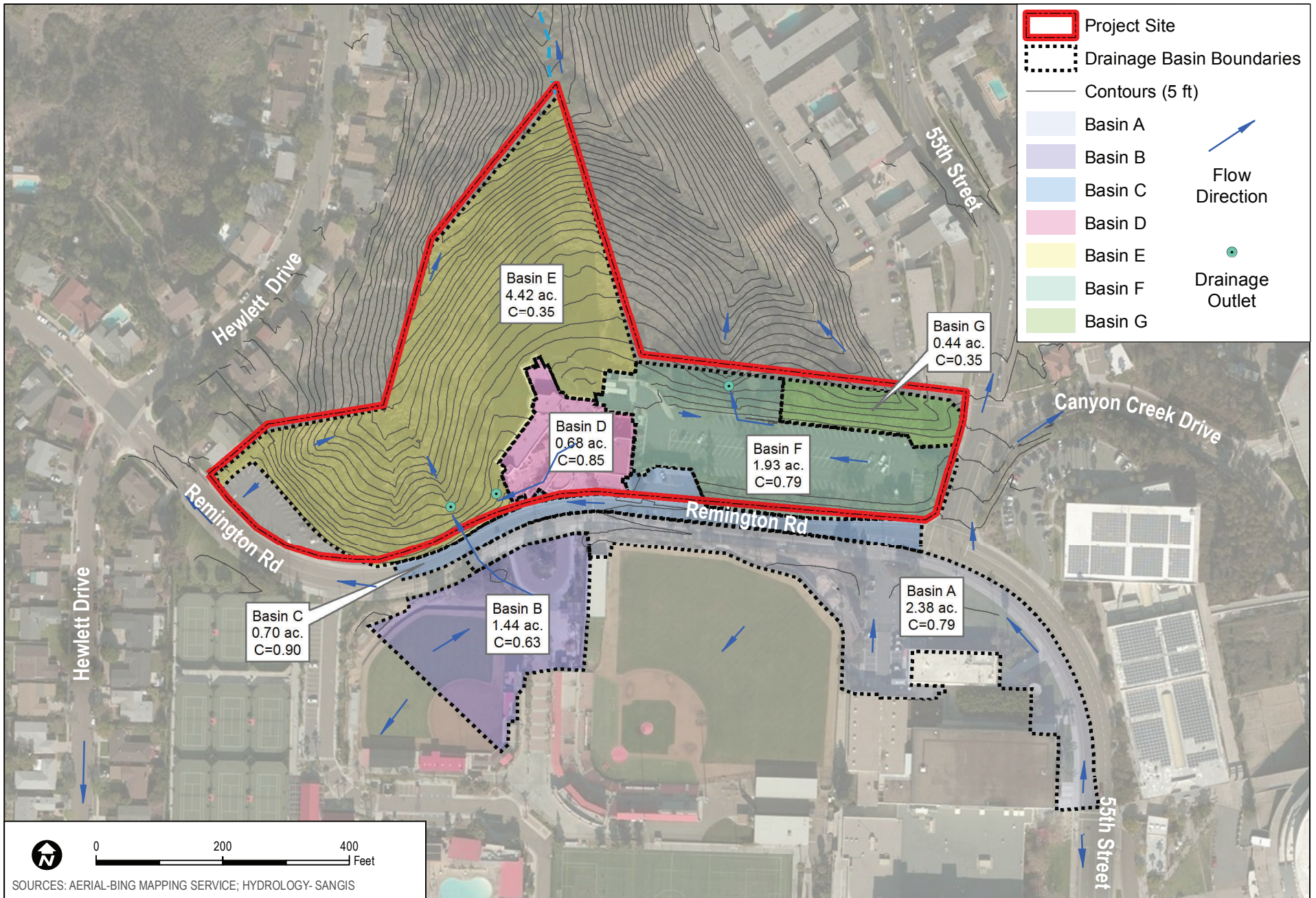
Existing storm drain

Existing city sewer

Existing city water

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